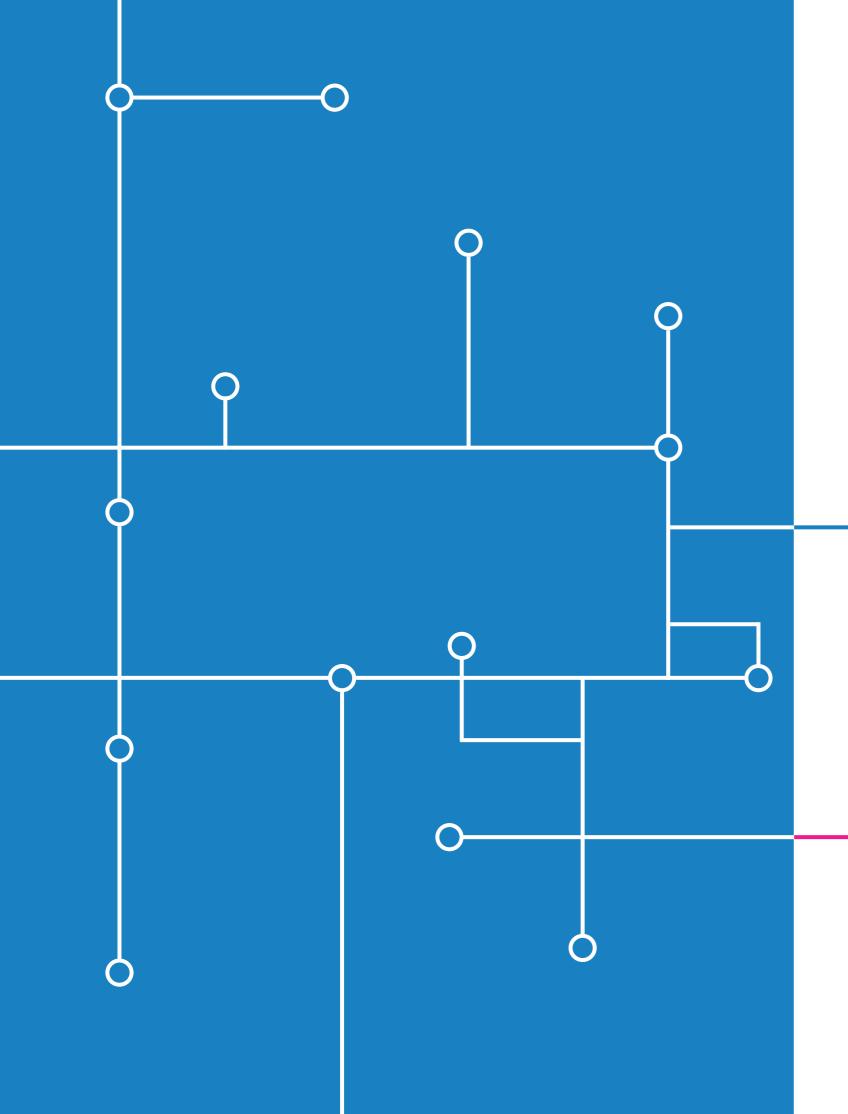


### GENERAL CATALOGUE









# FOR ALL THERMAL MANAGEMENT REQUIREMENTS

AIR CONDITIONING RANGE



REFRIGERATION RANGE



All efforts have been made to provide accurate data and descriptions. However, due to our continuous development and improvement of our products, all information in this catalogue is subject to change without notice.

#### **AIR CONDITIONING**

RANGE



#### SKY

Door- or wall-mount air conditioners

#### **FLY**

Door- or wall-mount air conditioners

#### **EGO**

Door- or wall-mount air conditioners

#### **DEK**

Roof-mount air conditioners

#### **EMO**

Wall-mount air conditioners for outdoor applications

#### **BLU-BIT**

Air-water heat exchangers

#### MIX

Air-air heat exchangers

#### **FAN**

Ventilation units with filter

#### DLK

Roof-mount fans

#### **WID**

Anti-condensation heaters





#### **TCW**

Industrial water chillers

#### **LCW**

Negative temperature liquid chillers (216)

#### **TCO**

Industrial oil chillers

#### **TCU**

Industrial chillers for contaminated or dirty fluids

#### TCI

Immersion coil chillers

#### **SAW**

Water-air heat exchangers

#### **TTW**

Temperature controllers

(266)

#### AIR CONDITIONING ACCESSORIES

REFRIGERATION ACCESSORIES (TEXA FLUID)

272







YESTERDAY - A 50-year history

# Pavarini Components

The TEXA Division industrial project was born from over half a century of experience in Pavarini Components S.p.A., a **leading Italian company in the mechanical/hydraulic components sector.** 

The TEXA Division took shape and developed during the 2000s, designing and manufacturing air conditioning and refrigeration systems for industrial applications entirely within Italy.

TODAY - Side by side with your company

### texa industries

Today we are writing a new chapter as we head into the future with our new company, **texa industries** s.r.l. .This catalogue has come about in part thanks to your special applications, from the passion of our engineers who worked to create them and of all those who work alongside **texa industries**, proposing **and implementing technologically advanced**, **high-performance solutions for all your industrial cooling needs**.

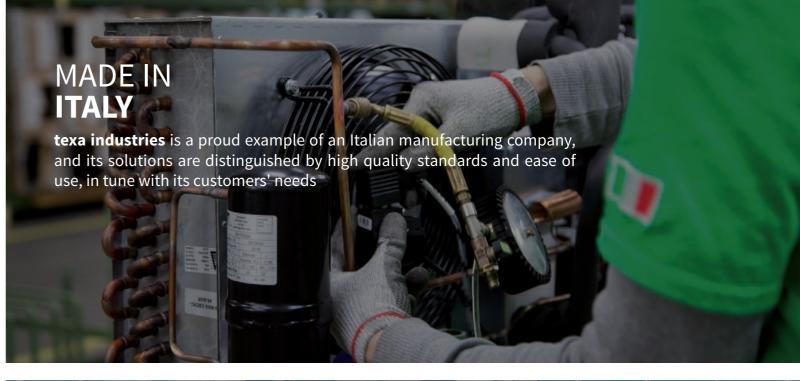
Our heartfelt thanks go out to all of you for the wonderful opportunity allowing us to create the huge range of products contained in this new catalogue.

The texa industries Team

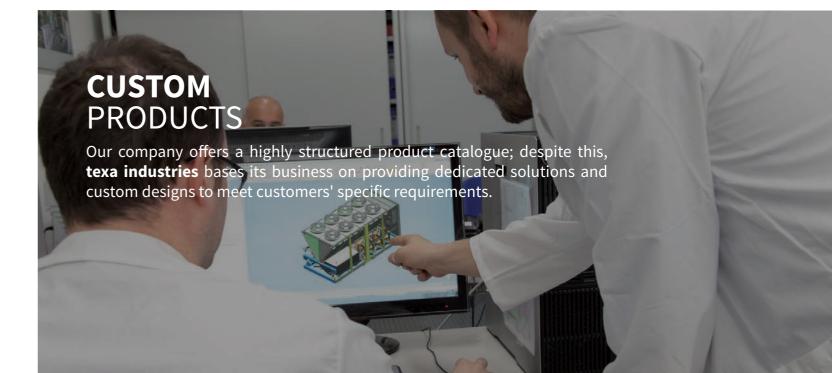
### A GLOBAL PARTNER

For all industrial cooling requirements

Our company is one of the few in Europe able to design and manufacture, using entirely Italian technology, **a complete range of air conditioning and industrial refrigeration solutions**, thus being for its customers a unique and complete partner for all thermal management requirements.





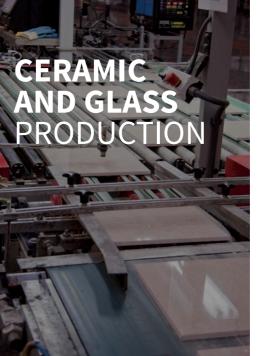


### MARKET AREAS

A solution for all industrial cooling needs

Thanks to the wide range and quality of its products, texa industries has long-standing experience with a diverse range of leaders in many industrial sectors.





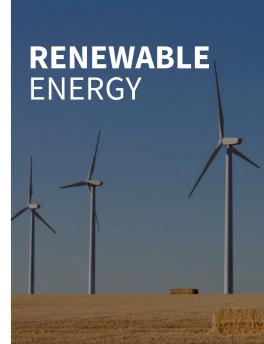










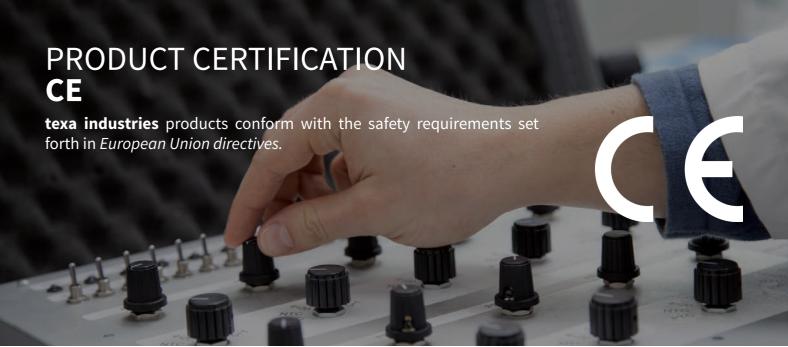


# COMPANY CERTIFICATION ISO 9001 - TÜV The company is certified according to the stringent standards of organisational efficiency and product quality, minimising waste, avoiding errors and increasing productivity.

### **CERTIFICATIONS**

Quality guarantee

The reliability and safety of **texa industries**' products are guaranteed by international certifications. The other quality standards and strict checks throughout the production chain make **texa industries**' products easy to use and widely recognised in all international markets.

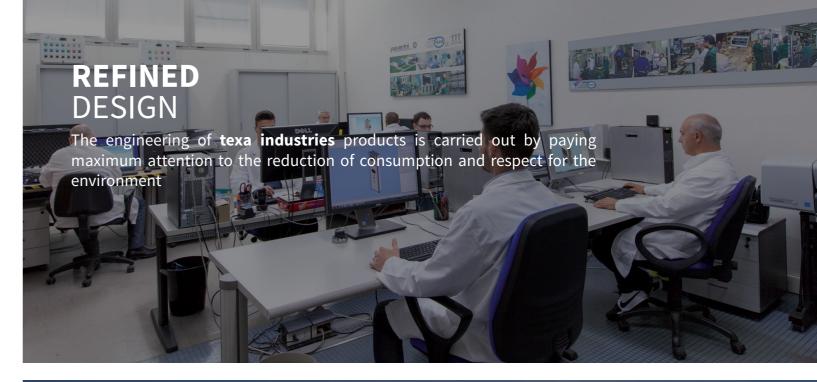




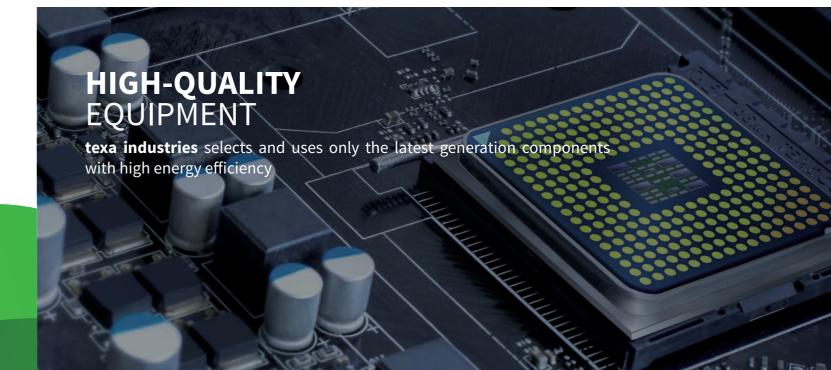
# **ENERGY SAVINGS**

An important commitment to the environment and your company

Saving energy and protecting the environment have always been key goals for **texa industries**. This philosophy starts out with our attentive and responsible design, and includes the search for increasingly efficient production systems right through to the choice of and use of the very latest components.











# **AIR CONDITIONING** RANGE



### AT THE HEART OF TECHNOLOGY

There are numerous reasons to choose a **texa industries** cooling system

Listening to our customers, in addition to our extensive experience in the industrial sector, has allowed us to create a complete range of air conditioning systems suitable for all types of indoor and outdoor applications. Our strong product engineering has allowed us to standardise and include many previously optional extras as standard equipment throughout the range.



A range of specific air conditioning units for outdoor applications, the cataphoresis treatment of the condensing coil and the IP54-rated protection of all electrical components make this product reliable in all atmospheric conditions.

### EASE OF INSTALLATION FILTER

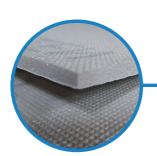
The simple and ergonomic design of our air conditioning units allows installation and filter maintenance through a simple side housing, without the need to remove mechanical components.

#### **DIE-CUT** SEALS

The die-cut seal supplied as standard provides an easy and precise coupling between the air conditioner and the cabinet, also providing an IP55 rating inside the cabinet, one of the highest available on the market.









### **FLEXIBLE** INSTALLATION

Unique in their field, designed specifically to meet standardisation requirements, a single drilling template, five cooling power ratings available and freedom of cabinet installation – external, semi-recessed or recessed installation – without the use of additional accessories.

### **REDUCED** MAINTENANCE COSTS

All our air conditioning units feature a hydrophilic treatment on the condensing coil. This particular production process guarantees a longer life for the product and doubled effectiveness against fouling by dust or oil in suspension, significantly reducing scheduled maintenance requirements.

### THERMOSTAT WITH **DIGITAL DISPLAY**

Powerful, reliable and standard on all ranges (with the exception of the Outdoor range), it provides an easy-to-read view of the set temperature, and allows multiple safety alarms to be managed. It also allows Master-Slave operation of two air conditioning units in the same cabinet simply by setting a parameter.

### **ANTI-CONDENSATION** EVAPORATION SYSTEM

Standard on all vertical air conditioning units above 600W, this dissipation system saves energy as it draws no power, eliminating condensate without the need to channel it externally.

### **CONDENSATE**DRAIN

Safety first! All air conditioners are equipped with an external condensate drain, ensuring the safety of the systems in any and all situations.











#### ITEM CODE FORMATION

POSITION	1-3	4-5	6	7	8	9	10-14
AIR CONDITIONER CODING	EGO	10	В	Т	1	В	00000

1	2	3	Machine type
S	К	Υ	Door- or wall-mount air conditioners
F	L	Υ	Door- or wall-mount air conditioners
Е	G	0	Door- or wall-mount air conditioners
D	Е	K	Roof-mount air conditioners
E	М	0	Wall-mount air conditioners for outdoor applications
В	L	U	Air-water heat exchangers for door or wall installation
В	- 1	Т	Air-water heat exchangers for roof installation
М	- 1	Х	Air-air heat exchangers
F	Α	N	Ventilation units with filter
F	- 1	L	Grilles with filter
D	L	K	Roof-mount fans
D	L	R	Roof-mount natural ventilation units
W	1	D	Anti-condensation heaters

POSITION 1-3 **Product Name** 

4	5	Unit Size
-	-	

POSITION 4-5

6	Standard voltage		
	Nominal voltage	Voltage range	
В	230 V 1~ 50-60 Hz	[210-250 V 1~ 50-60 Hz]	
С	115 V 1~ 50-60 Hz	[105-125 V 1~ 50-60 Hz]	
G	400/440 V 2~ 50-60 Hz	[380-420 V 50-60 Hz/420-460 V 50-60 Hz]	
Н	400 V 3~ 50 Hz/460 V 3~ 60 Hz	[380-420 V 3~ 50 Hz/440-480 V 3~60 Hz]	
К	400/460 V 2~ 50-60 Hz	[380-420 V 50-60 Hz/440-480 V 50-60 Hz]	
L	400 V 3~ 50-60 Hz	[380-420 V 3~ 50 Hz/400-440 V 3~60 Hz]	
М	400 V 3~ 50 Hz	[380-420 V 3~ 50 Hz]	
N	460 V 3~ 60 Hz	[440-480 V 3~ 60 Hz]	
U	24 V DC	[20-28 V DC]	
V	48 V DC	[40-56 V DC]	
Х	Special voltage or lack of power supply		
Z	110-250 V AC/DC		

POSITION 6

7	Control and regulation
М	Electromechanical thermostat (SKY-FLY-EGO-DEK-EMO)
Т	Electronic thermostat (SKY-FLY-EGO-DEK)
Х	No regulation device (SKY-FLY-EGO-DEK-MIX-DLK-DLR-BLU-BIT)
V	Model fitted with thermostat and solenoid valve (BLU-BIT)
L	Model fitted with level switch and solenoid valve (BLU-BIT)
F	Model fitted with thermostat, level switch and solenoid valve (BLU-BIT)

POSITION 7 SKY-FLY-EGO-DEK-EMO-MIX-DLK-DLR-BLU-BIT models

7	Ventilation and filtration			
Н	High-filtration filter + reversible cabinet ext int. flow fan (FAN)			
N	Standard filter + reversible cabinet ext int. flow fan (FAN)			
L	With fan (WID)			
Х	No ventilation device (WID)			

POSITION 7 FAN-FIL-WID models

8		Certification, filtration and installation
0	C€	Flexible installation (SKY-FLY-EGO-MIX)
1	(€	External installation (EGO-EMO)
F	(€	Flexible installation + PU filter (SKY-FLY-EGO)
Е	C€	External installation + PU filter (EGO-EMO)
М	C€	Flexible installation + metal filter (SKY-FLY-EGO)
N	C€	External installation + metal filter (EGO-EMO)
U	c <b>71</b> 2 us	Flexible installation (FLY-EGO)
V	c <b>71</b> 2 us	External installation (EGO)
K	c <b>91</b> 1 us	Flexible installation + PU filter (FLY-EGO)
J	c <b>91</b> 1 us	External installation + PU filter (EGO)
W	<b>₽¥</b> Us	Flexible installation + metal filter (FLY-EGO)
Υ	c <b>91</b> us	External installation + metal filter (EGO)

POSITION 8 SKY-FLY-EGO-EMO-MIX models

8		Certification, filtration and installation
0	(€	External installation (DEK-BIT-BLU)
F	(€	External installation + PU filter (DEK)
М	(€	External installation + metal filter (DEK)
U	c <b>91</b> 1'us	External installation (DEK-BLU)
K	c <b>91</b> 2 us	External installation + PU filter (DEK)
W	c <b>91</b> 1'us	External installation + metal filter (DEK)

POSITION 8 **DEK-BIT-BLU** models

8		Certification
0	C€	
U	c <b>91</b> 1 us	

POSITION 8 FAN-FIL-DLK-DLR-WID models

9	Colour
Α	RAL 7032 embossed effect
В	RAL 7035 embossed effect
D	RAL 6011 embossed effect
F	RAL 7032 gloss
L	RAL 6011 gloss
Q	RAL 7035 gloss
9	Stainless steel Stainless steel
	9 A B D F L Q

**POSITION 9** 

9	Size and regulation
Х	Standard size without thermostat
С	Compact size without thermostat
Т	Standard size with thermostat
Р	Standard size with protected surfaces

POSITION 9 WID models

POSITION 10-14 Progressive numbering only for special versions

# **SKY**Door- or wall-mount air conditioners

Maximum flexibility of installation combined with excellent aesthetic integration makes SKY the **texa industries** solution which meets the needs of even the most demanding users.





#### **POWER OUTPUTS**

The available power outputs range from 1050 to 2050 W.

#### FLEXIBILITY OF INSTALLATION

The units can be installed outside the cabinet (external) or integrated (recessed or semi recessed), without the need for additional installation accessories. This feature, made possible by the modular structure of the units, leaves users free to choose the installation type without any restrictions.

#### ATTRACTIVE APPEARANCE

The grille is made of extremely tough, self-extinguishing impact-resistant ABS, which meets UL94 V0 requirements. The attractive design of the grille provides a positive aesthetic impact which supplements and improves the look of the cabinet.

#### **ELECTRONIC THERMOSTAT**

All texa industries air conditioning systems are equipped with electronic thermostat as standard.

#### **OUICK INSTALLATION**

Installation is very quick by simply drilling the cabinet panel and fastening systems which are included in the air conditioner package. This features provisions for the electrical connections to be made quickly and safely using fast connectors inserted in the rear of the unit.

#### IDEAL COOLING FOR THE UNIT

The air inside the cabinet is taken in from the upper part of the cabinet, cooled inside the air conditioner and directed back into the cabinet with a high-speed flow directed towards the bottom. This ensures both optimum cooling of the entire cabinet and the prevention of hot points in the electronic components.

#### REDUCED MAINTENANCE

All units are equipped with heat exchange surfaces designed to prevent clogging by solid contaminants present in the ambient air. They maintain high levels of efficiency even in demanding environmental conditions, drastically reducing maintenance requirements and thus allowing the air conditioner to operate without an external air filter.

#### OPTIMISED PROTECTION OF THE CABINET

Thanks to the special internal configuration, which separates the external and internal air flows in a sealed manner, and the self-adhesive coupling gasket, SKY air conditioners allow the cabinet to retain an IP54 rating.

#### **ENVIRONMENTAL PROTECTION**

Reduction of noise levels is a precise criterion aimed for when developing SKY air conditioners. They have been designed to minimise disturbance from noise and thus help provide quiet working environments. To help protect the environment, all our air conditioners use R134a CFC-free refrigerant, which does not damage the ozone layer.

#### SUPPLY VOLTAGE

SKY air conditioners are available for the most common AC voltages: 230V single phase, 400-440V two phase (for concatenated voltage power supply when neutral is not present), 115V single phase, 400V three phase, all in 50-60 Hz dual frequency. On request, versions for voltages not present in the catalogue can be produced for orders of sufficient quantities.

#### PAINT/COATING

The standard colour is RAL 7035 textured. The coating is epoxy powder coating. Non-standard colours and stainless-steel versions are available on request.



Three installation options: **A** External - **B** Semi-recessed - **C** Internal



#### **Application tips**

- When choosing an air conditioner, keep a margin of safety of at least 10% for the power output, taking the most demanding conditions of operation into account.
- Seal the cabinet well. Any cracks or other openings would significantly reduce the efficiency of the air conditioner and produce excessive amounts of condensate.
- The air conditioner may be installed on the door or the wall, but always in the highest possible position in order to ensure that air is taken in from the top part of the cabinet, where there is a high temperature area.
- The air conditioner is factory set to 35°C, the optimum temperature for most applications. Unless strictly necessary, avoiding lowering this temperature because it would reduce the efficiency of the air conditioner and cause excessive condensate production.

- Try to facilitate the air flow inside the electrical cabinet when designing the layout of the components. Avoid blocking the air inlet or outlet with components installed too close together. Any components with internal ventilation of their own must have their air flow arranged so as to not impede the air flow of the air conditioner.
- Disable the air conditioner if the cabinet doors are opened to prevent excessive condensate production. Install a limit switch on the door for this purpose.
- The air conditioner power supply line must be protected with a time delay fuse or circuit breaker of suitable size on the basis of the unit's technical data.





### SKY10 Door- or wall-mount air conditioners

#### **COOLING CAPACITY**

#### 1050 W



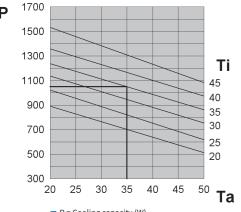
Accessories	
Pack of 5 fabric air filters	C15000181
Pack of 1 metal air filter	C15000182
External stainless-steel framework	
Coating in non-standard	

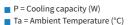
**Performance** 

Features	UoM	SKY10BT0B	SKY10CT0B	SKY10GT0E
Cooling capacity EN14511 - A35A35	W	1050	1050	1050
Cooling capacity EN14511 - A35A50	W	860	860	860
Power supply	V ~ Hz	230 1~ 50-60	115 1~ 50-60	400/440 2~ 50-60
Width	mm	400	400	400
Height	mm	950	950	950
Depth	mm	233	233	233
Max current	A	3.1	6.3	1.9
Inrush current	A	10.5	23	8
T Fuse	A	6	10	4
Power draw EN14511 - A35A35	W	570	590	590
Power draw EN14511 -A35A50	W	650	670	670
Operating cycle	-	100%	100%	100%
Electrical connection	-	4-pin plug	4-pin plug	4-pin plug
R134a Refrigerant	kg	0.3	0.3	0.3
Max refrigeration circuit pressure	bar	25	25	25
External air fan capacity	m³/h	860	860	860
Cabinet air fan capacity	m³/h	570	570	570
Internal temperature range	°C	20-46	20-46	20-46
Temperature regulation	-	Elec	tronic thermostat, fac set to 35°C	ctory
External temperature range	°C	20-55*	20-50	20-50
EN60529 ingress protection - cabinet side	-	IP54	IP54	IP54
EN60529 ingress protection - ambient side	-	IP34	IP34	IP34
Noise level	dB (A)	65	65	65
Weight	kg	37	39	39
Colour	-	RA	L 7035 embossed eff	ect
Conformity	-	C€	C€	CE

\* 50 °C at 60 Hz

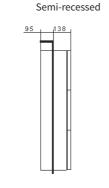
#### **Dimensions**

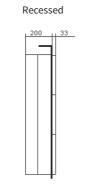




Ta = Ambient Temperature (°C)
Ti = Internal cabinet temperature (°C)

	I	External
400		233
096		





### SKY15 Door- or wall-mount air conditioners

#### **COOLING CAPACITY**

#### 1550 W

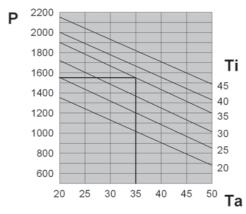


Accessories	
Pack of 5 fabric air filters	C15000181
Pack of 1 metal air filter	C15000182
External stainless-steel framework	
Coating in non-standard colour	

Features	UoM	SKY15BT0B	SKY15CT0B	SKY15GT0B
Cooling capacity EN14511 - A35A35	w	1550	1550	1550
Cooling capacity EN14511 - A35A50	W	1200	1200	1200
Power supply	V ~ Hz	230 1~ 50-60	115 1~ 50-60	400/440 2~50-60
Width	mm	400	400	400
Height	mm	950	950	950
Depth	mm	233	233	233
Max current	А	5.3	12.9	2.9
Inrush current	А	18	39	11
T Fuse	А	10	20	6
Power draw EN14511 - A35A35	W	880	900	900
Power draw EN14511 -A35A50	W	980	1000	1000
Operating cycle	-	100%	100%	100%
Electrical connection	-	4-pin plug	4-pin plug	4-pin plug
R134a Refrigerant	kg	0.44	0.44	0.44
Max refrigeration circuit pressure	bar	25	25	25
External air fan capacity	m³/h	1050	1050	1050
Cabinet air fan capacity	m³/h	570	570	570
Internal temperature range	°C	20-46	20-46	20-46
Temperature regulation	-	Elec	tronic thermostat, fac set to 35°C	tory
External temperature range	°C	20-55*	20-50	20-50
EN60529 ingress protection - cabinet side	-	IP54	IP54	IP54
EN60529 ingress protection - ambient side	-	IP34	IP34	IP34
Noise level	dB (A)	65	65	65
Weight	kg	38	40	40
Colour	-	R/	AL 7035 embossed effe	ect
Conformity	-	C€	C€	C€

\* 50 °C at 60 Hz

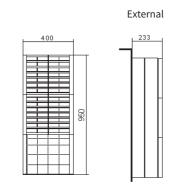
#### **Performance**

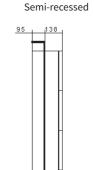


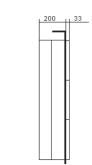
- P = Cooling capacity (W)
- Ti = Internal cabinet temperature (°C)

#### ■ Ta = Ambient Temperature (°C)

#### **Dimensions**







Recessed



### **SKY20** Door- or wall-mount air conditioners

#### **COOLING CAPACITY**

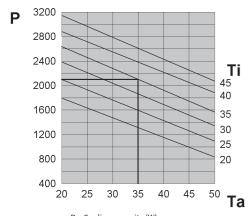
#### 2050 W



Accessories	
Pack of 5 fabric air filters	C15000181
Pack of 1 metal air filter	C15000182
External stainless-steel framework	
Coating in non-standard colour	

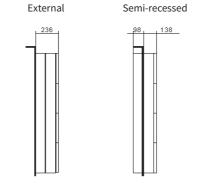
Features	UoM	SKY20BT0B	SKY20CT0B	SKY20LT0B
Cooling capacity EN14511 - A35A35	W	2050	2050	2050
Cooling capacity EN14511 - A35A50	W	1560	1560	1560
Power supply	V ~ Hz	230 1~ 50-60	115 1~ 50-60	400 3~ 50-60
Width	mm	400	400	400
Height	mm	1265	1265	1265
Depth	mm	236	236	236
Max current	A	6.5	13.3	2.5
Inrush current	A	24	48	10
T Fuse	A	10	20	6
Power draw EN14511 - A35A35	W	1080	1110	970
Power draw EN14511 -A35A50	W	1290	1310	1150
Operating cycle	-	100%	100%	100%
Electrical connection	-	4-pin plug	4-pin plug	4-pin plug
R134a Refrigerant	kg	0.60	0.60	0.75
Max refrigeration circuit pressure	bar	25	25	25
External air fan capacity	m³/h	1050	1050	1050
Cabinet air fan capacity	m³/h	860	860	860
Internal temperature range	°C	20-46	20-46	20-46
Temperature regulation	-	Elec	tronic thermostat, fac set to 35°C	ctory
External temperature range	°C	20-55*	20-50	20-50
EN60529 ingress protection - cabinet side	-	IP54	IP54	IP54
EN60529 ingress protection - ambient side	-	IP34	IP34	IP34
Noise level	dB (A)	65	65	65
Weight	kg	60	67	62
Colour	-	RA	L 7035 embossed effe	ect
Conformity	-	CE	C€	CE

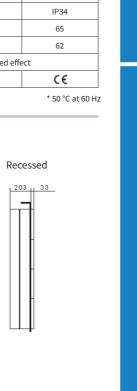
#### **Performance**



- P = Cooling capacity (W)

#### ■ Ta = Ambient Temperature (°C) Ti = Internal cabinet temperature (°C)









A revolutionary installation system combined with an attractive design with significantly reduced depth make FLY air conditioners perfect for any automation panels.



# **FLY**Door- or wall-mount air conditioners

#### WIDE RANGE OF POWER OUTPUTS

The available power outputs range from 1100 to 3200 W, covering most electrical cabinet cooling requirements in an extremely compact size.

#### **FLEXIBILITY OF INSTALLATION**

The units can be installed outside the cabinet (external) or integrated (recessed or semi recessed), without the need for additional installation accessories. This feature, made possible by the modular structure of the units, leaves users free to choose the installation type without any restrictions. A SINGLE DRILLING TEMPLATE FOR THE WHOLE RANGE

#### ATTRACTIVE APPEARANCE

The attractive design of the grille provides a positive aesthetic impact which supplements and improves the look of the cabinet.

#### **ELECTRONIC THERMOSTAT**

All texa industries air conditioning systems are equipped with electronic thermostat as standard.

#### **QUICK INSTALLATION**

Installation is very quick by simply drilling the cabinet panel and fastening systems which are included in the air conditioner package. This features provisions for the electrical connections to be made quickly and safely using fast connectors inserted in the rear of the unit.

#### IDEAL COOLING FOR THE UNIT

The air inside the cabinet is taken in from the upper part of the cabinet, cooled inside the air conditioner and directed back into the cabinet with a high-speed flow directed towards the bottom. This ensures both optimum cooling of the entire cabinet and the prevention of hot points in the electronic components.

#### REDUCED MAINTENANCE

All units are equipped with heat exchange surfaces designed to prevent clogging by solid contaminants present in the ambient air. The condensing coils are protected by a HYDROPHILIC TREATMENT which prevents dirt and corrosion. They maintain high levels of efficiency even in demanding environmental conditions, drastically reducing maintenance requirements and thus allowing the air conditioner to operate without an external air filter.

#### **IP55 CABINET INGRESS PROTECTION**

Thanks to the special internal configuration, which separates the external and internal air flows in a sealed manner, and the new self-adhesive coupling gasket, FLY air conditioners allow the cabinet to retain an IP55 rating.

#### ANTI-CONDENSATION EVAPORATION SYSTEM

FLY air conditioners are equipped with an INTEGRATED CONDENSATE RECOVERY SYSTEM which allows installation costs to be further reduced.

#### **ENVIRONMENTAL PROTECTION**

Reduction of noise levels is a precise criterion aimed for when developing FLY air conditioners. They have been designed to minimise disturbance from noise and thus help provide quiet working environments. To help protect the environment, these air conditioners use R134a CFC-free refrigerant, which does not damage the ozone layer.

#### SUPPLY VOLTAGE

FLY air conditioners are available for the most common AC voltages: 230V single phase, 400-460V two phase (for concatenated voltage power supply when neutral is not present). 400V three phase 50 Hz and 460 V three phase 60 Hz. On request, versions for voltages not present in the catalogue can be produced for orders of sufficient quantities.

#### PAINT/COATING

The standard colour is RAL 7035 textured. The coating is epoxy powder coating. Non-standard colours and stainless-steel versions are available on request.

#### **CERTIFICATIONS**

All FLY models are CE and UL certified in the standard supply voltages.

Three installation options: **A** External - **B** Semi-recessed - **C** Internal



#### **Application tips**

- When choosing an air conditioner, keep a margin of safety of at least 10% for the power output, taking the most demanding conditions of operation into account.
- Seal the cabinet well. Any cracks or other openings would significantly reduce the efficiency of the air conditioner and produce excessive amounts of condensate.
- The air conditioner may be installed on the door or the wall, but always in the highest possible position in order to ensure that air is taken in from the top part of the cabinet, where there is a high temperature area.
- The air conditioner is factory set to 35°C, the optimum temperature for most applications. Unless strictly necessary, avoiding lowering this temperature because it would reduce the efficiency of the air conditioner and cause excessive condensate production.

В

- Try to facilitate the air flow inside the electrical cabinet when designing the layout of the components. Avoid blocking the air inlet or outlet with components installed too close together. Any components with internal ventilation of their own must have their air flow arranged so as to not impede the air flow of the air conditioner.
- Disable the air conditioner if the cabinet doors are opened to prevent excessive condensate production. Install a limit switch on the door for this purpose.
- The air conditioner power supply line must be protected with a time delay fuse or circuit breaker of suitable size on the basis of the unit's technical data.



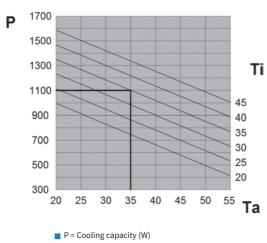


### FLY11 Door- or wall-mount air conditioners

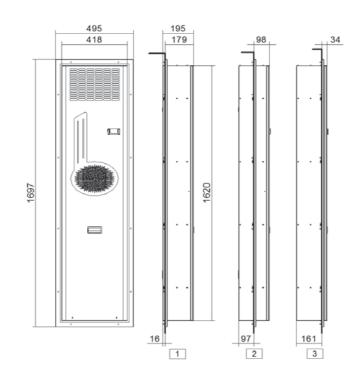
COOLING CAPACITY

1100 W

#### **Performance**



- Ta = Ambient Temperature (°C)
- Ti = Internal cabinet temperature (°C)



		FINALDEAD	ELVALDELID	FLYGGETAR	FINALITUS
Features	UoM	FLY11BT0B	FLY11BTUB	FLY11KT0B	FLY11KTUB
Cooling capacity EN14511 - A35A35	W	1100	1100	1100	1100
Cooling capacity EN14511 - A35A50	W	860	860	860	860
Power supply	V ∼ Hz	230 1~ 50-60	230 1~ 50-60	400/460 2~ 50-60	400/460 2~ 50-60
Width	mm	495	495	495	495
Height	mm	1697	1697	1697	1697
Depth	mm	195	195	195	195
Max current	A	6	6	3	3
Inrush current	A	21	21	8.5	8.5
T Fuse	A	10	10	5	5
Power draw EN14511 - A35A35	w	850	850	850	850
Power draw EN14511 -A35A50	w	980	980	980	980
Operating cycle	-	100%	100%	100%	100%
Electrical connection	-	4-pin plug	4-pin plug	4-pin plug	4-pin plug
R134a Refrigerant	kg	0.36	0.36	0.36	0.36
Max refrigeration circuit pressure	bar	28	28	28	28
External air fan capacity	m³/h	860	860	860	860
Cabinet air fan capacity	m³/h	860	860	860	860
Internal temperature range	°C	20-50	20-50	20-50	20-50
Temperature regulation	-		Electronic thermosta	at, factory set to 35°C	
External temperature range	°C	20-55	20-55	20-55	20-55
EN60529 ingress protection - cabinet side	-	IP55	IP55	IP55	IP55
EN60529 ingress protection - ambient side	-	IP34	IP34	IP34	IP34
Noise level	dB (A)	64	64	64	64
Weight	kg	57	57	59	59
Colour	-		RAL 7035 em	bossed effect	
Conformity	-	C€	(€ : <b>91</b> 7 <sub>us</sub>	C€	(€ : <b>91</b> / <sub>Us</sub>

Accessories	
Pack of 5 fabric air filters	C15000181
Pack of 1 metal air filter	C15000182
External stainless-steel framework	
Coating in non-standard colour	



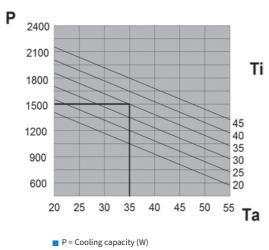


### FLY15 Door- or wall-mount air conditioners

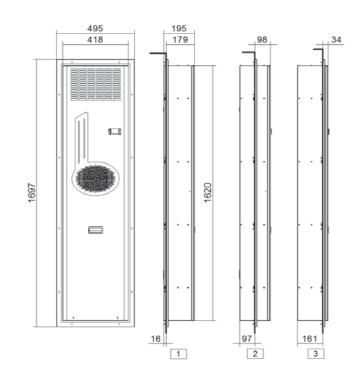
COOLING CAPACITY

1500 W

#### **Performance**



- Ta = Ambient Temperature (°C)
- Ti = Internal cabinet temperature (°C)



_					
Features	UoM	FLY15BT0B	FLY15BTUB	FLY15KT0B	FLY15KTUB
Cooling capacity EN14511 - A35A35	W	1500	1500	1500	1500
Cooling capacity EN14511 - A35A50	W	1150	1150	1150	1150
Power supply	V ~ Hz	230 1~ 50-60	230 1~ 50-60	400/460 2~ 50-60	400/460 2~ 50-60
Width	mm	495	495	495	495
Height	mm	1697	1697	1697	1697
Depth	mm	195	195	195	195
Max current	A	6.3	6.3	3.5	3.5
Inrush current	A	24	24	10.5	10.5
T Fuse	A	10	10	6	6
Power draw EN14511 - A35A35	w	1020	1020	1020	1020
Power draw EN14511 -A35A50	W	1290	1290	1290	1290
Operating cycle	-	100%	100%	100%	100%
Electrical connection	-	4-pin plug	4-pin plug	4-pin plug	4-pin plug
R134a Refrigerant	kg	0.41	0.41	0.41	0.41
Max refrigeration circuit pressure	bar	28	28	28	28
External air fan capacity	m³/h	1050	1050	1050	1050
Cabinet air fan capacity	m³/h	860	860	860	860
Internal temperature range	°C	20-50	20-50	20-50	20-50
Temperature regulation	-		Electronic thermost	at, factory set to 35°C	
External temperature range	°C	20-55	20-55	20-55	20-55
EN60529 ingress protection - cabinet side	-	IP55	IP55	IP55	IP55
EN60529 ingress protection - ambient side	-	IP34	IP34	IP34	IP34
Noise level	dB (A)	66	66	66	66
Weight	kg	59	59	61	61
Colour	-		RAL 7035 em	bossed effect	
Conformity	-	C€	(€ : <b>%)</b> us	C€	(€ : <b>91</b> / <sub>us</sub>

Accessories	
Pack of 5 fabric air filters	C15000181
Pack of 1 metal air filter	C15000182
External stainless-steel framework	
Coating in non-standard colour	



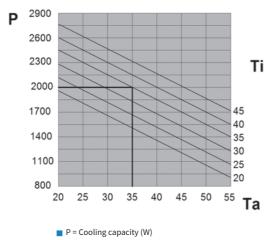


### FLY20 Door- or wall-mount air conditioners

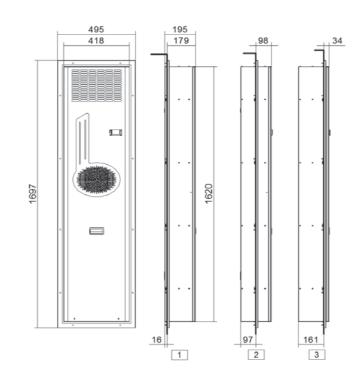
COOLING CAPACITY

2000 W

#### **Performance**



- Ta = Ambient Temperature (°C)
- Ti = Internal cabinet temperature (°C)



Features	UoM	FLY20BT0B	FLY20BTUB	FLY20HT0B	FLY20HTUB
Cooling capacity EN14511 - A35A35	W	2000	2000	2000	2000
Cooling capacity EN14511 - A35A50	W	1550	1550	1550	1550
Power supply	V ~ Hz	230 1~ 50-60	230 1~ 50-60	400 3~ 50/460 3~ 60	400 3~ 50/460 3~ 60
Width	mm	495	495	495	495
Height	mm	1697	1697	1697	1697
Depth	mm	195	195	195	195
Max current	A	6.5	6.5	3	3
Inrush current	A	27	27	10	10
T Fuse	A	11	11	6	6
Power draw EN14511 - A35A35	W	1290	1290	1410	1410
Power draw EN14511 -A35A50	W	1520	1520	1620	1620
Operating cycle	-	100%	100%	100%	100%
Electrical connection	-	4-pin plug	4-pin plug	4-pin plug	4-pin plug
R134a Refrigerant	kg	0.49	0.53	0.57	0.56
Max refrigeration circuit pressure	bar	28	28	28	28
External air fan capacity	m³/h	1050	1050	1050	1050
Cabinet air fan capacity	m³/h	860	860	860	860
Internal temperature range	°C	20-50	20-50	20-50	20-50
Temperature regulation	-		Electronic thermosta	at, factory set to 35°C	
External temperature range	°C	20-55	20-55	20-55	20-55
EN60529 ingress protection - cabinet side	-	IP55	IP55	IP55	IP55
EN60529 ingress protection - ambient side	-	IP34	IP34	IP34	IP34
Noise level	dB (A)	67	67	67	67
Weight	kg	67	67	69	69
Colour	-		RAL 7035 em	bossed effect	
Conformity	-	C€	(€ : <b>91</b> 7 <sub>us</sub>	C€	(£ 2 <b>%</b> )

Accessories	
Pack of 5 fabric air filters	C15000181
Pack of 1 metal air filter	C15000182
External stainless-steel framework	
Coating in non-standard colour	





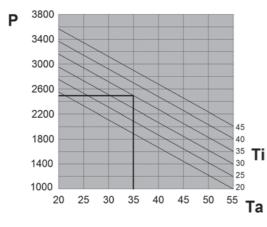
# FLY25 Door- or wall-mount air conditioners

COOLING CAPACITY

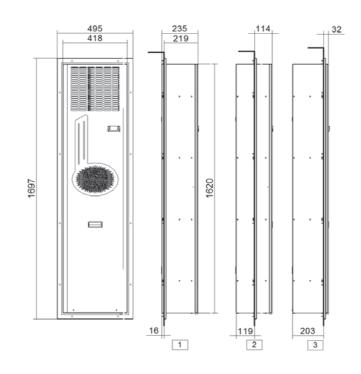
2500 W



#### Performance



- P = Cooling capacity (W)
- Ta = Ambient Temperature (°C)
- Ti = Internal cabinet temperature (°C)



Features	UoM	FLY25BT0B	FLY25BTUB	FLY25HT0B	FLY25HTUB
Cooling capacity EN14511 - A35A35	w	2500	2500	2500	2500
Cooling capacity EN14511 - A35A50	w	1850	1850	1850	1850
Power supply	V ~ Hz	230 1~ 50-60	230 1~ 50-60	400 3~ 50/460 3~ 60	400 3~ 50/460 3~ (
Width	mm	495	495	495	495
Height	mm	1697	1697	1697	1697
Depth	mm	235	235	235	235
Max current	А	10.5	10.5	3.5	3.5
Inrush current	А	35	35	14	14
T Fuse	А	13	13	7	7
Power draw EN14511 - A35A35	w	1640	1640	1690	1690
Power draw EN14511 -A35A50	w	1830	1830	1860	1860
Operating cycle	-	100%	100%	100%	100%
Electrical connection	-	4-pin plug	4-pin plug	4-pin plug	4-pin plug
R134a Refrigerant	kg	0.9	0.7	0.65	0.8
Max refrigeration circuit pressure	bar	28	28	28	28
External air fan capacity	m³/h	1450	1450	1450	1450
Cabinet air fan capacity	m³/h	1450	1450	1450	1450
Internal temperature range	°C	20-50	20-50	20-50	20-50
Temperature regulation	-		Electronic thermost	at, factory set to 35°C	
External temperature range	°C	20-55	20-55	20-55	20-55
EN60529 ingress protection - cabinet side	-	IP55	IP55	IP55	IP55
EN60529 ingress protection - ambient side	-	IP34	IP34	IP34	IP34
Noise level	dB (A)	69	69	69	69
Weight	kg	80	80	82	82
Colour	-		RAL 7035 em	bossed effect	
Conformity	-	CE	(E : <b>91</b> ) <sub>US</sub>	CE	(€ <b>:\$\!</b> us

Accessories	
Pack of 5 fabric air filters	C15000181
Pack of 1 metal air filter	C15000182
External stainless-steel framework	
Coating in non-standard colour	





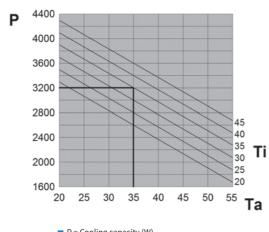
### FLY32 Door- or wall-mount air conditioners

COOLING CAPACITY

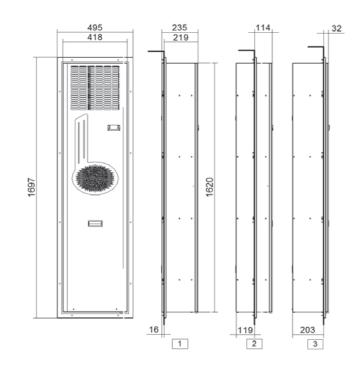
3200 W



#### **Performance**



- P = Cooling capacity (W)
- Ta = Ambient Temperature (°C)
- Ti = Internal cabinet temperature (°C)



Features	UoM	FLY32BT0B	FLY32BTUB	FLY32HT0B	FLY32HTUB
Cooling capacity EN14511 - A35A35	W	3200	3200	3200	3200
Cooling capacity EN14511 - A35A50	W	2500	2500	2500	2500
Power supply	V ∼ Hz	230 1~ 50-60	230 1~ 50-60	400 3~ 50/460 3~ 60	400 3~ 50/460 3~ 60
Width	mm	495	495	495	495
Height	mm	1697	1697	1697	1697
Depth	mm	235	235	235	235
Max current	A	12	12	4.5	4.5
Inrush current	A	39	39	18	18
T Fuse	A	15	15	8	8
Power draw EN14511 - A35A35	W	1920	1920	1980	1980
Power draw EN14511 -A35A50	W	2240	2240	2290	2290
Operating cycle	-	100%	100%	100%	100%
Electrical connection	-	4-pin plug	4-pin plug	4-pin plug	4-pin plug
R134a Refrigerant	kg	0.8	0.72	0.7	0.9
Max refrigeration circuit pressure	bar	28	28	28	28
External air fan capacity	m³/h	1450	1450	1450	1450
Cabinet air fan capacity	m³/h	1450	1450	1450	1450
Internal temperature range	°C	20-50	20-50	20-50	20-50
Temperature regulation	-		Electronic thermost	at, factory set to 35°C	
External temperature range	°C	20-55	20-55	20-55	20-55
EN60529 ingress protection - cabinet side	-	IP55	IP55	IP55	IP55
EN60529 ingress protection - ambient side	-	IP34	IP34	IP34	IP34
Noise level	dB (A)	69	69	69	69
Weight	kg	81	81	83	83
Colour	-		RAL 7035 em	bossed effect	
Conformity	-	CE	( <b>6 .71/</b> us	C€	(E : <b>91</b> )

Accessories	
Pack of 5 fabric air filters	C15000181
Pack of 1 metal air filter	C15000182
External stainless-steel framework	
Coating in non-standard colour	



**EGO** 

Door- or wall-mount air conditioners

High reliability, reduced maintenance and a wide range of available power outputs makes the EGO range **texa industries**' answer to the most varied air conditioning requirements.



# Door- or wall-mount air conditioners

#### WIDE RANGE OF POWER OUTPUTS

The available power outputs range from 300 to 14800 W, covering most electrical cabinet cooling requirements in an extremely compact size.

#### **ELECTRONIC THERMOSTAT**

All texa industries air conditioning systems are equipped with electronic thermostat as standard.

#### **OUICK INSTALLATION**

 $In stall at ion is very \ quick \ by \ simply \ drilling \ the \ cabinet \ panel \ and \ fastening \ systems \ which \ are \ included \ in \ the \ air \ conditioner$ package. This features provisions for the electrical connections to be made quickly and safely using fast connectors inserted in the rear of the unit.

#### IDEAL COOLING FOR THE UNIT

The air inside the cabinet is taken in from the upper part of the cabinet, cooled inside the air conditioner and directed back into the cabinet with a high-speed flow directed towards the bottom. This ensures both optimum cooling of the entire cabinet and the prevention of hot points in the electronic components.

#### REDUCED MAINTENANCE

All units are equipped with heat exchange surfaces designed to prevent clogging by solid contaminants present in the ambient air. The condensing coils are protected by a hydrophilic treatment which prevents dirt and corrosion. They maintain high levels of efficiency even in demanding environmental conditions, drastically reducing maintenance requirements and thus allowing the air conditioner to operate without an external air filter.

#### **IP55 CABINET INGRESS PROTECTION**

Thanks to the special internal configuration, which separates the external and internal air flows in a sealed manner, and the new self-adhesive coupling gasket, EGO air conditioners (from the EGO S3 model to the EGO 40 model) allow the cabinet to retain an IP55 rating.

#### ANTI-CONDENSATION EVAPORATION SYSTEM

EGO air conditioners (starting with the EGO08 model) are equipped with an integrated condensate recovery system which allows installation costs to be further reduced.

#### **ENVIRONMENTAL PROTECTION**

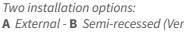
Reduction of noise levels is a precise criterion aimed at when developing EGO air conditioners. They have been designed to minimise disturbance from noise and thus help provide quiet working environments. To help protect the environment, these air conditioners use R134a or R407C CFC-free refrigerant, which do not damage the ozone layer.

#### **SUPPLY VOLTAGE**

EGO air conditioners are available for the most common AC voltages: 230V single phase, 400-440V two phase (for concatenated voltage power supply when neutral is not present), 115V single phase, 400V three phase, all in 50-60 Hz dual frequency versions, and 400V and 460V three phase single frequency (50 or 60 Hz) versions. On request, versions for voltages not present in the catalogue can be produced for orders of sufficient quantities.

#### PAINT/COATING

The standard colour is RAL 7035 textured. The coating is epoxy powder coating. Non-standard colours and stainless-steel versions are available on request.



A External - B Semi-recessed (Version "0" available on request - dimensional drawings on page 180-181)



#### **Application tips**

- When choosing an air conditioner, keep a margin of safety of at least 10% for the power output, taking the most demanding conditions of operation into account.
- Seal the cabinet well. Any cracks or other openings would significantly reduce the efficiency of the air conditioner and produce excessive amounts of condensate.
- The air conditioner may be installed on the door or the wall, but always in the highest possible position in order to ensure that air is taken in from the top part of the cabinet, where there is a high temperature area.
- The air conditioner is factory set to 35°C, the optimum temperature for most applications. Unless strictly necessary, avoiding lowering this temperature because it would reduce the efficiency of the air conditioner and cause excessive condensate production.

- Try to facilitate the air flow inside the electrical cabinet when designing the layout of the components. Avoid blocking the air inlet or outlet with components installed too close together. Any components with internal ventilation of their own must have their air flow arranged so as to not impede the air flow of the air conditioner.
- Disable the air conditioner if the cabinet doors are opened to prevent excessive condensate production. Install a limit switch on the door for this purpose.
- The air conditioner power supply line must be protected with a time delay fuse or circuit breaker of suitable size on the basis of the unit's technical data.





### EGOS3 Door- or wall-mount air conditioners

**COOLING CAPACITY** 

300 W



Features	UoM	EGOS3BT1B
Cooling capacity EN14511 - A35A35	w	300
Cooling capacity EN14511 - A35A50	w	150
Power supply	V ~ Hz	230 1~ 50-60
Width	mm	525
Height	mm	345
Depth	mm	136
Max current	А	1.5
Inrush current	А	4.2
T Fuse	А	4
Power draw EN14511 - A35A35	w	270
Power draw EN14511 -A35A50	w	310
Operating cycle	-	100%
Electrical connection	-	4-pin plug
R134a Refrigerant	kg	0.12
Max refrigeration circuit pressure	bar	25
External air fan capacity	m³/h	280
Cabinet air fan capacity	m³/h	280
Internal temperature range	°C	20-46
Temperature regulation	-	Electronic thermostat, factory set to 35°C
External temperature range	°C	20-55*
EN60529 ingress protection - cabinet side	-	IP55
EN60529 ingress protection - ambient side	-	IP34
Noise level	dB (A)	61
Weight	kg	14
Colour	-	RAL 7035 embossed effect
Conformity	-	C€

Accessories	
External stainless-steel framework	
Coating in non-standard	

**Performance** 

500

400

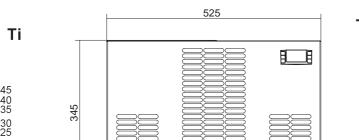
300

200

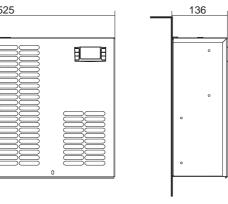
100

20

		* 50 °C at 60 Hz



**Dimensions** 



# **EGO04**

#### **COOLING CAPACITY**

#### 380 W

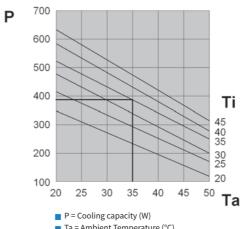


Accessories	
Pack of 5 fabric air filters	AAEFP04
Pack of 1 metal air filter	AAEFM04
Version "0", semi-recessed installation	
External stainless-steel framework	
Coating in non-standard colour	

Features	UoM	EGO04BT1B	EGO04BTVBX0000	EGO04CT1B
Cooling capacity EN14511 - A35A35	W	380	380	380
Cooling capacity EN14511 - A35A50	W	240	240	240
Power supply	V ~ Hz	230 1~ 50-60	230 1~ 50-60	115 1~ 50-60
Width	mm	285	285	285
Height	mm	460	460	460
Depth	mm	180	180	180+35**
Max current	А	1.6	1.7	3.2
Inrush current	А	6	6	11
T Fuse	А	4	4	6
Power draw EN14511 - A35A35	W	230	280	240
Power draw EN14511 -A35A50	W	260	330	270
Operating cycle	-	100%	100%	100%
Electrical connection	-	4-pin plug	4-pin plug	4-pin plug
R134a Refrigerant	kg	0.13	0.16	0.13
Max refrigeration circuit pressure	bar	26	28	26
External air fan capacity	m³/h	280	280	280
Cabinet air fan capacity	m³/h	280	280	280
Internal temperature range	°C	20-50	20-50	20-50
Temperature regulation	-	Ele	ctronic thermostat, facto set to 35°C	ory
External temperature range	°C	20-55*	20-55*	20-50
EN60529 ingress protection - cabinet side	-	IP55	IP55	IP55
EN60529 ingress protection - ambient side	-	IP34	IP34	IP34
Noise level	dB (A)	60	65	60
Weight	kg	17	17	18
Colour	-	R	AL 7035 embossed effect	t
Conformity	-	C€	(€ <b>;\$1/</b> us	C€
		** *		* 50.00 -1.00 11

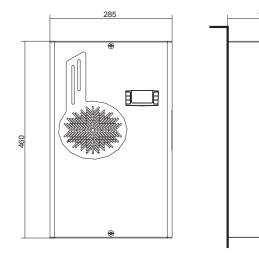
#### 

#### **Performance**



#### ■ Ta = Ambient Temperature (°C) ■ Ti = Internal cabinet temperature (°C)

#### **Dimensions**





■ P = Cooling capacity (W)

■ Ta = Ambient Temperature (°C)

■ Ti = Internal cabinet temperature (°C)

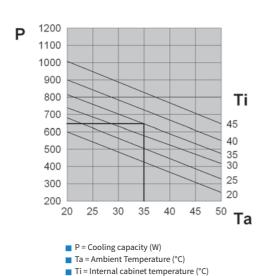
25 30 35 40 45 50 **Ta** 

# EGO06 Door- or wall-mount air conditioners

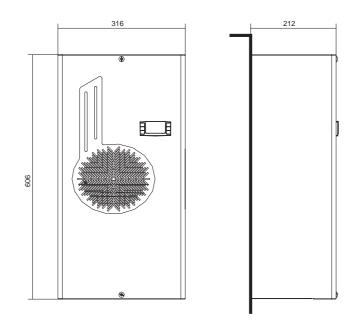
**COOLING CAPACITY** 

640 W

#### **Performance**



#### **Dimensions**



Features	UoM	EGO06BT1B	EGO06BTVBX0000	EGO06CT1B	EGO06GT1B
Cooling capacity EN14511 - A35A35	w	640	640	640	640
Cooling capacity EN14511 - A35A50	W	470	470	470	470
Power supply	V ~ Hz	230 1~ 50-60	230 1~ 50-60	115 1~ 50-60	400/440 2~ 50-60
Width	mm	316	316	316	316
Height	mm	606	606	606	606
Depth	mm	212	212	212+42**	212+58**
Max current	A	2.1	2.6	4.4	1.2
Inrush current	A	8.1	8.1	16	5
T Fuse	A	6	6	8	2
Power draw EN14511 - A35A35	W	380	400	390	390
Power draw EN14511 -A35A50	W	420	470	430	430
Operating cycle	-	100%	100%	100%	100%
Electrical connection	-	4-pin plug	4-pin plug	4-pin plug	4-pin plug
R134a Refrigerant	kg	0.19	0.23	0.19	0.19
Max refrigeration circuit pressure	bar	25	28	25	25
External air fan capacity	m³/h	570	570	570	570
Cabinet air fan capacity	m³/h	330	330	330	330
Internal temperature range	°C	20-50	20-50	20-50	20-50
Temperature regulation	-		Electronic thermos	tat factory set to 35°C	
External temperature range	°C	20-55*	20-55*	20-50	20-50
EN60529 ingress protection - cabinet side	-	IP55	IP55	IP55	IP55
EN60529 ingress protection - ambient side	-	IP34	IP34	IP34	IP34
Noise level	dB (A)	65	65	65	65
Weight	kg	21	21	22	22
Colour	-		RAL 7035 en	bossed effect	
Conformity	-	CE	(E : <b>91</b> )	CE	CE

\* 50 °C at 60 Hz

\*\* for external autotransformer dimensions

Accessories	
Pack of 5 fabric air filters	AAEFP06
Pack of 1 metal air filter	AAEFM06
Version "0", semi-recessed installation	
External stainless-steel framework	
Coating in non-standard colour	





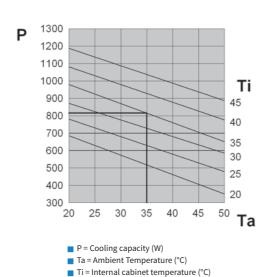
# EGO08 Door- or wall-mount air conditioners

**COOLING CAPACITY** 

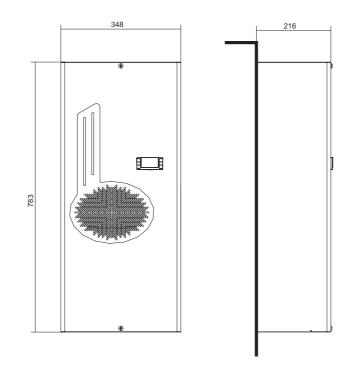
820 W



#### **Performance**



#### **Dimensions**



Features	UoM	EGO08BT1B	EGO08BTVBX0000	EGO08CT1B	EGO08GT1B
Cooling capacity EN14511 - A35A35	W	820	820	820	820
Cooling capacity EN14511 - A35A50	W	680	680	680	680
Power supply	V ~ Hz	230 1~ 50-60	230 1~ 50-60	115 1~ 50-60	400/440 2~ 50-60
Width	mm	348	348	348	348
Height	mm	783	783	783	783
Depth	mm	216	216	216+42**	216+58**
Max current	A	2.6	3.1	5.3	1.7
Inrush current	A	10.8	10.8	21.5	6.1
T Fuse	A	6	6	10	6
Power draw EN14511 - A35A35	W	410	440	420	420
Power draw EN14511 -A35A50	w	490	490	500	500
Operating cycle	-	100%	100%	100%	100%
Electrical connection	-	4-pin plug	4-pin plug	4-pin plug	4-pin plug
R134a Refrigerant	kg	0.21	0.21	0.21	0.21
Max refrigeration circuit pressure	bar	25	28	25	25
External air fan capacity	m³/h	570	570	570	570
Cabinet air fan capacity	m³/h	330	330	330	330
Internal temperature range	°C	20-50	20-50	20-50	20-50
Temperature regulation	-		Electronic thermost	at factory set to 35°C	
External temperature range	°C	20-55*	20-55*	20-50	20-50
EN60529 ingress protection - cabinet side	-	IP55	IP55	IP55	IP55
EN60529 ingress protection - ambient side	-	IP34	IP34	IP34	IP34
Noise level	dB (A)	65	65	65	65
Weight	kg	27	27	28	28
Colour	-		RAL 7035 em	bossed effect	
Conformity	-	C€	(€ : <b>%)</b> '' <sub>18</sub>	CE	C€

\* 50 °C at 60 Hz

\*\* for external autotransformer dimensions

Accessories	
Pack of 5 fabric air filters	AAEFP10
Pack of 1 metal air filter	AAEFM10
Version "0", semi-recessed installation	
External stainless-steel framework	
Coating in non-standard colour	





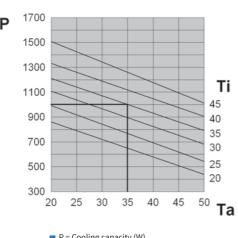
### **EGO10** Door- or wall-mount air conditioners

COOLING CAPACITY

1000 W

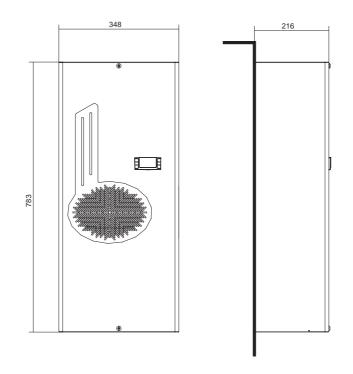


#### **Performance**



- P = Cooling capacity (W)
- Ta = Ambient Temperature (°C)
- Ti = Internal cabinet temperature (°C)

#### **Dimensions**



Features	UoM	EGO10BT1B	EGO10BTVBX0000	EGO10CT1B	EGO10GT1B	EGO10KTVBX000
Cooling capacity EN14511 - A35A35	w	1000	1000	1000	1000	1000
Cooling capacity EN14511 - A35A50	w	790	790	790	790	790
Power supply	V ~ Hz	230 1~ 50-60	230 1~ 50-60	115 1~ 50-60	400/440 2~ 50-60	400/460 2~ 50-60
Width	mm	348	348	348	348	348
Height	mm	783	783	783	783	783
Depth	mm	216	216	216+42**	216+58**	216+58**
Max current	А	3	3.1	6.7	2	2
Inrush current	A	10.5	10.5	23	8	8
T Fuse	A	6	6	10	4	4
Power draw EN14511 - A35A35	w	470	590	490	490	620
Power draw EN14511 -A35A50	w	560	670	580	580	710
Operating cycle	-	100%	100%	100%	100%	100%
Electrical connection	-	4-pin plug	4-pin plug	4-pin plug	4-pin plug	4-pin plug
R134a Refrigerant	kg	0.2	0.24	0.2	0.2	0.24
Max refrigeration circuit pressure	bar	25	28	25	25	28
External air fan capacity	m³/h	570	570	570	570	570
Cabinet air fan capacity	m³/h	330	330	330	330	330
Internal temperature range	°C	20-50	20-50	20-50	20-50	20-50
Temperature regulation	-		Electron	nic thermostat factory set	to 35°C	
External temperature range	°C	20-55*	20-50	20-50	20-50	20-50
EN60529 ingress protection - cabinet side	-	IP55	IP55	IP55	IP55	IP55
EN60529 ingress protection - ambient side	-	IP34	IP34	IP34	IP34	IP34
Noise level	dB (A)	65	65	65	65	65
Weight	kg	28	28	29	29	29
Colour	-		ı	RAL 7035 embossed effec	t	
Conformity	-	CE	(E : <b>91</b> )	CE	C€	(€ c <b>91</b> 2us

\* 50 °C at 60 Hz

\*\* for external autotransformer dimensions

Accessories	
Pack of 5 fabric air filters	AAEFP10
Pack of 1 metal air filter	AAEFM10
Version "0", semi-recessed installation	
External stainless-steel framework	
Coating in non-standard colour	





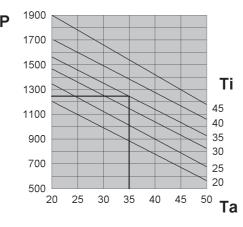
# EGO12 Door- or wall-mount air conditioners

COOLING CAPACITY

1250 W

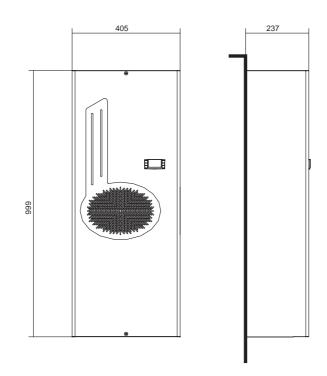


#### **Performance**



- P = Cooling capacity (W)
- Ta = Ambient Temperature (°C)
- Ti = Internal cabinet temperature (°C)

#### **Dimensions**



Features	UoM	EGO12BT1B	EGO12BTVBX0000	EGO12CT1B	EGO12GT1B
Cooling capacity EN14511 - A35A35	w	1250	1250	1250	1250
Cooling capacity EN14511 - A35A50	w	910	910	910	910
Power supply	V ~ Hz	230 1~ 50-60	230 1~ 50-60	115 1~ 50-60	400/440 2~ 50-60
Width	mm	405	405	405	405
Height	mm	999	999	999	999
Depth	mm	237	237	237	237
Max current	A	3.8	5	7.6	2.2
Inrush current	A	11	11	24	8.5
T Fuse	A	6	8	10	4
Power draw EN14511 - A35A35	W	680	710	690	690
Power draw EN14511 -A35A50	W	790	820	800	800
Operating cycle	-	100%	100%	100%	100%
Electrical connection	-	4-pin plug	4-pin plug	4-pin plug	4-pin plug
R134a Refrigerant	kg	0.26	0.29	0.26	0.26
Max refrigeration circuit pressure	bar	25	28	25	25
External air fan capacity	m³/h	860	860	860	860
Cabinet air fan capacity	m³/h	570	570	570	570
Internal temperature range	°C	20-50	20-50	20-50	20-50
Temperature regulation	-		Electronic thermos	tat factory set to 35°C	
External temperature range	°C	20-55*	20-50	20-50	20-50
EN60529 ingress protection - cabinet side	-	IP55	IP55	IP55	IP55
EN60529 ingress protection - ambient side	-	IP34	IP34	IP34	IP34
Noise level	dB (A)	65	65	65	65
Weight	kg	38	38	40	40
Colour	-		RAL 7035 en	nbossed effect	
Conformity		C€	(€ : <b>%\</b> us	CE	CE

\* 50 °C at 60 Hz

Accessories	
Pack of 5 fabric air filters	C15000163
Pack of 1 metal air filter	C15000164
Version "0", semi-recessed installation	
External stainless-steel framework	
Coating in non-standard colour	



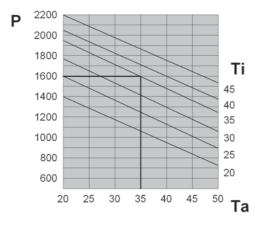
# EGO 16 Door- or wall-mount air conditioners

COOLING CAPACITY

1600 W

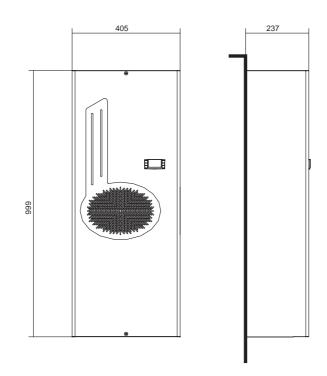


#### **Performance**



- P = Cooling capacity (W)
- Ta = Ambient Temperature (°C)
- Ti = Internal cabinet temperature (°C)

#### **Dimensions**



Features	UoM	EGO16BT1B	EGO16BTVBX0000	EGO16CT1B	EGO16GT1B	EGO16KTVBX000
Cooling capacity EN14511 - A35A35	W	1600	1600	1600	1600	1600
Cooling capacity EN14511 - A35A50	W	1230	1230	1230	1230	1230
Power supply	V ~ Hz	230 1~ 50-60	230 1~ 50-60	115 1~ 50-60	400/440 2~ 50-60	400/460 2~ 50-60
Width	mm	405	405	405	405	405
Height	mm	999	999	999	999	999
Depth	mm	237	237	237	237	237
Max current	A	5.3	6	12.9	2.9	3
Inrush current	A	18	18	39	11	11
T Fuse	A	10	10	20	6	5
Power draw EN14511 - A35A35	W	820	850	840	840	960
Power draw EN14511 -A35A50	W	940	970	960	960	1170
Operating cycle	-	100%	100%	100%	100%	100%
Electrical connection	-	4-pin plug	4-pin plug	4-pin plug	4-pin plug	4-pin plug
R134a Refrigerant	kg	0.33	0.43	0.33	0.33	0.43
Max refrigeration circuit pressure	bar	25	28	25	25	28
External air fan capacity	m³/h	1050	1050	1050	1050	1050
Cabinet air fan capacity	m³/h	570	570	570	570	570
Internal temperature range	°C	20-50	20-50	20-50	20-50	20-50
Temperature regulation	-		Electron	ic thermostat factory se	t to 35°C	
External temperature range	°C	20-55*	20-50	20-50	20-50	20-50
EN60529 ingress protection - cabinet side	-	IP55	IP55	IP55	IP55	IP55
EN60529 ingress protection - ambient side	-	IP34	IP34	IP34	IP34	IP34
Noise level	dB (A)	65	65	65	65	65
Weight	kg	40	40	42	42	42
Colour	-		R	AL 7035 embossed effec	t	
Conformity	-	C€	(E : <b>91</b> )	CE	C€	(€ : <b>%)</b> us

\* 50 °C at 60 Hz

C15000163
C15000164





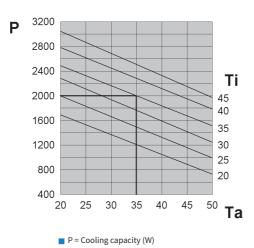
### **EGO20** Door- or wall-mount air conditioners

COOLING CAPACITY

2000 W

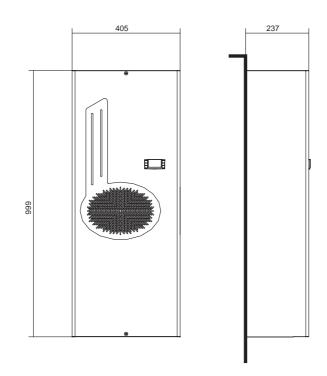


#### **Performance**



- Ta = Ambient Temperature (°C)
- Ti = Internal cabinet temperature (°C)

#### **Dimensions**



Features	UoM	EGO20BT1B	EGO20BTVBX0000	EGO20CT1B	EGO20LT1B	EGO20NTVBX000
Cooling capacity EN14511 - A35A35	W	2000	2000	2000	2000	2000
Cooling capacity EN14511 - A35A50	W	1510	1510	1510	1510	1510
Power supply	V ~ Hz	230 1~ 50-60	230 1~ 50-60	115 1~50-60	400 3~ 50-60	460 3~ 60
Width	mm	405	405	405	405	405
Height	mm	999	999	999	999	999
Depth	mm	237	237	237	237	237
Max current	A	6.5	7	13.3	2.5	2.7
Inrush current	A	24	24	48	10	14
T Fuse	A	10	10	20	6	5
Power draw EN14511 - A35A35	W	1080	1100	1070	970	1220
Power draw EN14511 -A35A50	W	1290	1300	1210	1150	1440
Operating cycle	-	100%	100%	100%	100%	100%
Electrical connection	-	4-pin plug	4-pin plug	4-pin plug	4-pin plug	4-pin plug
R134a Refrigerant	kg	0.43	0.54	0.43	0.45	0.61
Max refrigeration circuit pressure	bar	25	28	25	25	28
External air fan capacity	m³/h	1050	1050	1050	1050	1050
Cabinet air fan capacity	m³/h	860	860	860	860	860
Internal temperature range	°C	20-50	20-50	20-50	20-50	20-50
Temperature regulation	-		Electron	ic thermostat factory se	t to 35°C	
External temperature range	°C	20-55*	20-50	20-50	20-50	20-50
EN60529 ingress protection - cabinet side	-	IP55	IP55	IP55	IP55	IP55
EN60529 ingress protection - ambient side	-	IP34	IP34	IP34	IP34	IP34
Noise level	dB (A)	65	65	65	65	65
Weight	kg	52	52	54	54	54
Colour	-		F	RAL 7035 embossed effec	t	
Conformity	-	C€	21 <b>/R</b> 2 3)	C€	CE	(€ <b>;%\</b> ′ <sub>us</sub>

\* 50 °C at 60 Hz

Accessories	
Pack of 5 fabric air filters	C15000163
Pack of 1 metal air filter	C15000164
Version "0", semi-recessed installation	
External stainless-steel framework	
Coating in non-standard colour	







# **EGO30**

**COOLING CAPACITY** 

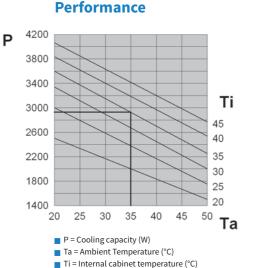
2900 W

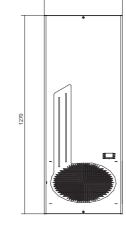


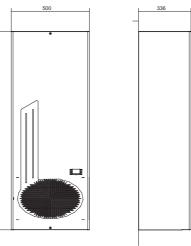
Accessories	
Pack of 5 fabric air filters	C15000183
Pack of 1 metal air filter	C15000185
Version "0", semi-recessed installation	
External stainless-steel framework	
Coating in non-standard	

Features	UoM	EGO30BT1B	EGO30LT1B	EGO30NTVBX0000
Cooling capacity EN14511 - A35A35	W	2900	2900	2900
Cooling capacity EN14511 - A35A50	W	2250	2250	2250
Power supply	V ~ Hz	230 1~ 50-60	400 3~ 50-60	460 3~60
Width	mm	500	500	500
Height	mm	1270	1270	1270
Depth	mm	336	336	336
Max current	А	8.2	2.6	3.7
Inrush current	А	37.4	14	15
T Fuse	А	16	6	6
Power draw EN14511 - A35A35	W	1340	1220	1810
Power draw EN14511 -A35A50	W	1560	1440	2020
Operating cycle	-	100%	100%	100%
Electrical connection	-	4-pin plug	4-pin plug	4-pin plug
R134a Refrigerant	kg	0.57	0.62	0.84
Max refrigeration circuit pressure	bar	25	25	28
External air fan capacity	m³/h	1450	1450	1450
Cabinet air fan capacity	m³/h	1450	1450	1450
Internal temperature range	°C	20-50	20-50	20-50
Temperature regulation	-	Ele	ctronic thermostat, set to 35°C	factory
External temperature range	°C	20-50	20-50	20-50
EN60529 ingress protection - cabinet side	-	IP55	IP55	IP55
EN60529 ingress protection - ambient side	-	IP34	IP34	IP34
Noise level	dB (A)	70	70	70
Weight	kg	80	84	84
Colour	-	R	AL 7035 embossed	effect
Conformity	-	CE	CE	su <b>∠P</b> 3 ∋)

#### **Dimensions**







# **EGO40**

#### **COOLING CAPACITY**

#### 3850 W

Colour

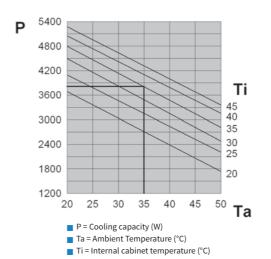
Conformity



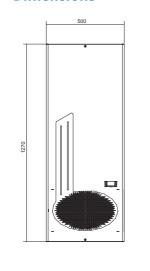
Accessories	
Pack of 5 fabric air filters	C15000183
Pack of 1 metal air filter	C15000185
Version "0", semi-recessed installation	
External stainless-steel framework	
Coating in non-standard colour	

#### Cooling capacity EN14511 - A35A35 W 3850 3850 3850 Cooling capacity EN14511 - A35A50 V ~ Hz 230 1~ 50-60 400 3~ 50-60 460 3~ 60 Power supply Width mm 500 500 Height mm 1270 1270 1270 Depth mm 336 336 336 Max current Α 9.5 3.6 4.2 Α 35.2 18 18 Inrush current T Fuse Α Power draw EN14511 - A35A35 W 1710 1780 2040 Power draw EN14511 -A35A50 W 100% 100% Operating cycle 100% Electrical connection plug plug R134a Refrigerant 0.69 kg 0.69 1.14 Max refrigeration circuit pressure bar m³/h External air fan capacity 1450 1450 1450 Cabinet air fan capacity m<sup>3</sup>/h 1450 1450 1450 Internal temperature range °C 20-50 Electronic thermostat, factory Temperature regulation set to 35°C External temperature range °C 20-50 20-50 EN60529 ingress protection - cabinet side IP55 IP55 EN60529 ingress protection - ambient side IP34 IP34 Noise level dB (A) 70 70 70 Weight kg 82 85 85

#### **Performance**



#### **Dimensions**



 $\epsilon$ 

RAL 7035 embossed effect

(**€ 5%**)

 $\epsilon$ 





# EGO60 Door- or wall-mount air conditioners

**COOLING CAPACITY** 

5800 - 6050 W



Accessories	
Pack of 5 fabric air filters	C15000175
Pack of 1 metal air filter	C15000176
External stainless-steel framework	
Coating in non-standard	

Performance (EGO60MTEB)

<sup>0</sup> 20 25 30 35 40 45 <sup>50</sup> **Ta** 

■ P = Cooling capacity (W)

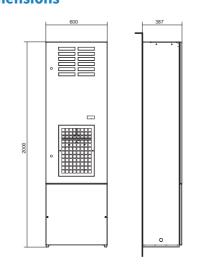
■ Ta = Ambient Temperature (°C)

■ Ti = Internal cabinet temperature (°C)

Τi

Features	UoM	EGO60MTEB	EGO60NTEB
Cooling capacity EN14511 - A35A35	W	5800	6050
Cooling capacity EN14511 - A35A50	W	4350	4530
Power supply	V ~ Hz	400 3~ 50	460 3~ 60
Width	mm	600	600
Height	mm	2000	2000
Depth	mm	387	387
Max current	А	5.9	6.8
Inrush current	A	21.7	23.5
T Fuse	A	8	8
Power draw EN14511 - A35A35	w	2340	2920
Power draw EN14511 -A35A50	W	3880	4520
Operating cycle	-	100%	100%
Electrical connection	-	Cable L = 3 m	Cable L = 3 m
R407C Refrigerant	kg	1.8	1.8
Max refrigeration circuit pressure	bar	27	27
External air fan capacity	m³/h	2900	2900
Cabinet air fan capacity	m³/h	1450	1450
Internal temperature range	°C	20-46	20-46
Temperature regulation	-	Electronic thermostat, factory set to 35°C	
External temperature range	°C	20-50	20-50
EN60529 ingress protection - cabinet side	-	IP54	IP54
EN60529 ingress protection - ambient side	-	IP34	IP34
Noise level	dB (A)	72	72
Weight	kg	150	150
Colour	-	RAL 7035 embossed effect	
Conformity	-	C€	C€

#### **Dimensions**



# EGO80

#### COOLING CAPACITY

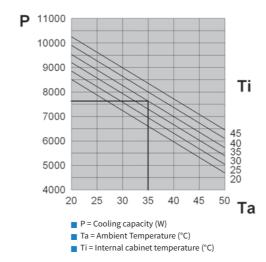
#### 7600 - 7950 W



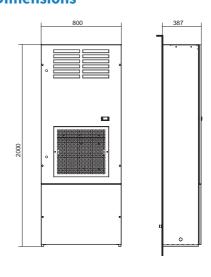
Accessories	
Pack of 5 fabric air filters	C15000188
Pack of 1 metal air filter	C15000189
External stainless-steel framework	
Coating in non-standard colour	

Features	UoM	EGO80MTEB	EGO80NTEB
Cooling capacity EN14511 - A35A35	W	7600	7950
Cooling capacity EN14511 - A35A50	W	5700	5930
Power supply	V ~ Hz	400 3~ 50	460 3~ 60
Width	mm	800	800
Height	mm	2000	2000
Depth	mm	387	387
Max current	A	8.1	9.3
Inrush current	A	30.7	32.5
T Fuse	А	16	16
Power draw EN14511 - A35A35	W	3300	4035
Power draw EN14511 -A35A50	W	4910	5845
Operating cycle	-	100%	100%
Electrical connection	-	Cable L = 3 m	Cable L = 3 m
R134a Refrigerant	kg	2.8	2.8
Max refrigeration circuit pressure	bar	27	27
External air fan capacity	m³/h	2900	2900
Cabinet air fan capacity	m³/h	2900	2900
Internal temperature range	°C	20-46	20-46
Temperature regulation	-	Electronic thermostat, factory set to 35°C	
External temperature range	°C	20-50	20-50
EN60529 ingress protection - cabinet side	-	IP54	IP54
EN60529 ingress protection - ambient side	-	IP34	IP34
Noise level	dB (A)	75	75
Weight	kg	160	160
Colour	-	RAL 7035 embossed effect	
Conformity	-	CE	C€

#### Performance (EGO80MTEB)



#### **Dimensions**





P 8000

7250

6500

5750

5000

4250

3500

2750



### EGOA0 Door- or wall-mount air conditioners

**COOLING CAPACITY** 

9400 - 9850 W

Τi



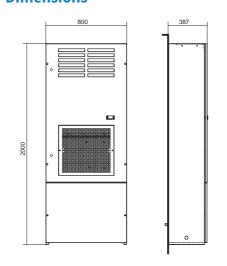
Accessories	
Pack of 5 fabric air filters	C15000188
Pack of 1 metal air filter	C15000189
External stainless-steel framework	
Coating in non-standard	

Performance (EGOAOMTEB)

20 25 30 35 40 45 50 **Ta** 

Features	UoM	EGOA0MTEB	EGOA0NTEB
Cooling capacity EN14511 - A35A35	W	9400	9850
Cooling capacity EN14511 - A35A50	W	7000	7350
Power supply	V ~ Hz	400 3~ 50	460 3~ 60
Width	mm	800	800
Height	mm	2000	2000
Depth	mm	387	387
Max current	A	9.1	10.3
Inrush current	A	30.7	32.5
T Fuse	A	18	18
Power draw EN14511 - A35A35	W	3650	4380
Power draw EN14511 -A35A50	w	5400	6340
Operating cycle	-	100%	100%
Electrical connection	-	Cable L = 3 m	Cable L = 3 m
R134a Refrigerant	kg	2.3	2.3
Max refrigeration circuit pressure	bar	27	27
External air fan capacity	m³/h	2900	2900
Cabinet air fan capacity	m³/h	2900	2900
Internal temperature range	°C	20-46	20-46
Temperature regulation	-		mostat, factory 35°C
External temperature range	°C	20-50	20-50
EN60529 ingress protection - cabinet side	-	IP54	IP54
EN60529 ingress protection - ambient side	-	IP34	IP34
Noise level	dB (A)	77	77
Weight	kg	180	180
Colour	-	RAL 7035 embossed effect	
Conformity	-	CE	C€

#### **Dimensions**



# EGOA5

**COOLING CAPACITY** 

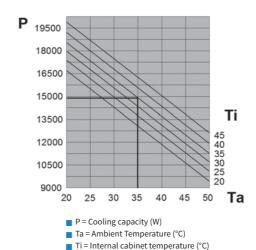
14800 - 15150 W

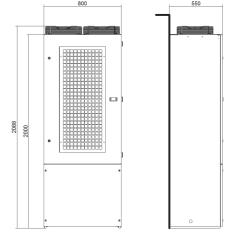


Accessories	
Pack of 5 fabric air filters	C15002900
Pack of 1 metal air filter	C15002497
External stainless-steel framework	
Coating in non-standard colour	

Features	UoM	EGOA5MTEB	EGOA5NTEB
Cooling capacity EN14511 - A35A35	W	14800	15150
Cooling capacity EN14511 - A35A50	W	11300	11600
Power supply	V ~ Hz	400 3~ 50	460 3~ 60
Width	mm	800	800
Height	mm	2000	2000
Depth	mm	550	550
Max current	А	11	11.8
Inrush current	А	49	51
T Fuse	А	20	20
Power draw EN14511 - A35A35	W	5750	6580
Power draw EN14511 -A35A50	W	6900	7760
Operating cycle	-	100%	100%
Electrical connection	-	Cable L = 3 m	Cable L = 3 m
R410A Refrigerant	kg	3.5	3.5
Max refrigeration circuit pressure	bar	39	39
External air fan capacity	m³/h	5800	5800
Cabinet air fan capacity	m³/h	4300	4300
Internal temperature range	°C	20-46	20-46
Temperature regulation	-	Electronic thermostat, factory set to 35°C	
External temperature range	°C	20-50	20-50
EN60529 ingress protection - cabinet side	-	IP54	IP54
EN60529 ingress protection - ambient side	-	IP34	IP34
Noise level	dB (A)	67	67
Weight	kg	240	240
Colour	-	RAL 7035 embossed effect	
Conformity	-	CE	(€

#### Performance (EGOA5MTEB)





**Dimensions** 



**P** 14500 13000

11500

10000

8500

7000

5500

4000



■ P = Cooling capacity (W)

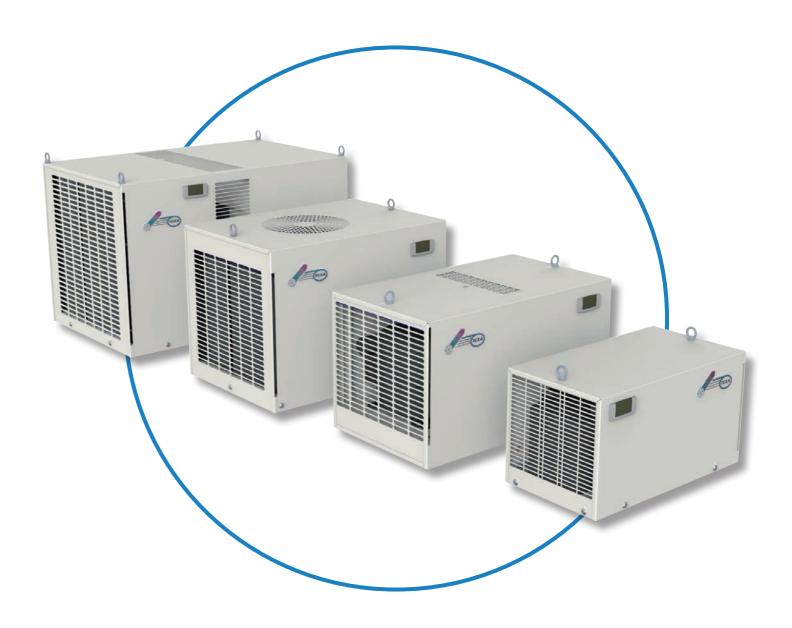
■ Ta = Ambient Temperature (°C)

■ Ti = Internal cabinet temperature (°C)





Compact size and robust design, combined with the best condensate management on the market, make the DEK series the ideal solution for roof installation.





#### WIDE RANGE OF POWER OUTPUTS

The available power outputs range from 410 to 3850 W, covering most electrical cabinet cooling requirements in an extremely compact size.

#### PROTECTION FROM CONDENSATE

Great attention has been paid to protecting the cabinet from condensate. Inside the air conditioner is a stainless-steel tray in which the condensate is collected, before being drained off through a service hose and second safety hose.

#### **ELECTRONIC THERMOSTAT**

All texa industries air conditioning systems are equipped with electronic thermostat as standard.

#### **QUICK INSTALLATION**

Installation is very quick by simply drilling the cabinet panel and fastening systems which are included in the air conditioner package. This features provisions for the electrical connections to be made quickly and safely using fast connectors inserted in the base of the unit.

#### REDUCED MAINTENANCE

All units are equipped with heat exchange surfaces designed to prevent clogging by solid contaminants present in the ambient air. They maintain high levels of efficiency even in demanding environmental conditions, drastically reducing maintenance requirements and thus allowing the air conditioner to operate without an external air filter.

#### OPTIMISED PROTECTION OF THE CABINET

Thanks to the special internal configuration, which separates the external and internal air flows in a sealed manner, and the self-adhesive coupling gasket, DEK air conditioners allow the cabinet to retain an IP54 rating.

#### **ENVIRONMENTAL PROTECTION**

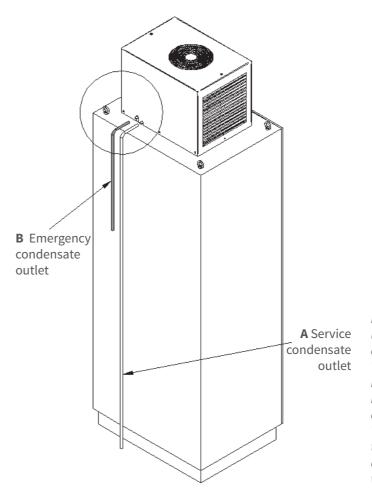
Reduction of noise levels is a precise criterion aimed for when developing DEK air conditioners. They have been designed to minimise disturbance from noise and thus help provide quiet working environments. To help protect the environment, all our air conditioners use R134a CFC-free refrigerant, which does not damage the ozone layer.

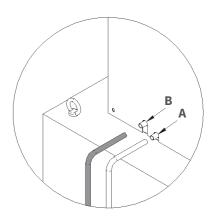
#### SUPPLY VOLTAGE

DEK air conditioners are available for the most common AC voltages: 230V single phase, 400-440V two phase (for concatenated voltage power supply when neutral is not present), 115V single phase, 400V three phase, all in 50-60 Hz dual frequency. On request, versions for voltages not present in the catalogue can be produced for orders of sufficient quantities.

#### PAINT/COATING

The standard colour is RAL 7035 textured. The coating is epoxy powder coating. Non-standard colours and stainless-steel versions are available on request.





For maximum protection of the electrical components, DEK units are equipped with dual condensate outlets in the electrical cabinet.

The service outlet **A** allows condensate to drain off under normal operating conditions. In the event that the service hose or the internal path for the condensate is blocked, the condensate will drain out through the emergency outlet **B**. The service hose is transparent and runs along the base of the cabinet. The emergency hose is coloured and terminates at a short distance from the edge of the cabinet, in such a way as to remain visible.



#### **Application tips**

- When choosing an air conditioner, keep a margin of safety of at least 10% for the power output, taking the most demanding conditions of operation into account.
- Seal the cabinet well. Any cracks or other openings would significantly reduce the efficiency of the air conditioner and produce excessive amounts of condensate.
- Regularly inspect the condensate collection tray in order to remove any impurities.
- The air conditioner is factory set to 35°C, the optimum temperature for most applications. Unless strictly necessary, avoiding lowering this temperature because it would reduce the efficiency of the air conditioner and cause excessive condensate production.
- Try to facilitate the air flow inside the electrical cabinet when designing the layout of the components. Avoid blocking the air inlet or outlet with components installed too close together. Any components with internal ventilation of their own must have their air flow arranged so as to not impede the air flow of the air conditioner.
- Disable the air conditioner if the cabinet doors are opened to prevent excessive condensate production. Install a limit switch on the door for this purpose.
- The air conditioner power supply line must be protected with a time delay fuse or circuit breaker of suitable size on the basis of the unit's technical data.





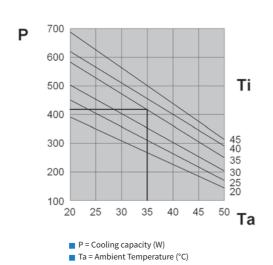
### DEK04 Roof-mount air conditioners

COOLING CAPACITY

410 W

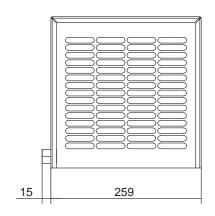
#### **Performance**

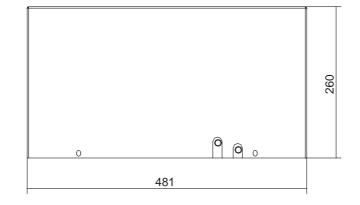




■ Ti = Internal cabinet temperature (°C)

#### **Dimensions**





Features	UoM	DEK04BT0B	DEK04BTUB	DEK04CT0B
Cooling capacity EN14511 - A35A35	w	410	410	410
Cooling capacity EN14511 - A35A50	W	240	240	240
Power supply	V ~ Hz	230 1~ 50-60	230 1~ 50-60	115 1~ 60
Width	mm	259	259	259
Height	mm	260	260	260
Depth	mm	481	481	481
Max current	A	1.5	1.5	2.9
Inrush current	A	4	4	10
T Fuse	A	4	4	6
Power draw EN14511 - A35A35	w	270	230	280
Power draw EN14511 -A35A50	W	315	290	325
Operating cycle	-	100%	100%	100%
Electrical connection	-	4-pin plug	4-pin plug	4-pin plug
R134a Refrigerant	kg	0.17	0.29	0.17
Max refrigeration circuit pressure	bar	26	28	26
External air fan capacity	m³/h	330	330	330
Cabinet air fan capacity	m³/h	235	235	235
Internal temperature range	°C	20-50	20-50	20-50
Temperature regulation	-		Electronic thermostat, factory set to 35°C	
External temperature range	°C	20-55*	20-55*	20-50
EN60529 ingress protection - cabinet side	-	IP54	IP54	IP54
EN60529 ingress protection - ambient side	-	IP34	IP34	IP34
Noise level	dB (A)	60	65	60
Weight	kg	18	18	19
Colour	-		RAL 7035 embossed effect	
Conformity	-	C€	(€ : <b>%)</b> us	CE

Accessories	
Pack of 5 fabric air filters	C15000171
Pack of 1 metal air filter	C15000172
Condensate level indicator	C16000140
External stainless-steel framework	
Coating in non-standard colour	



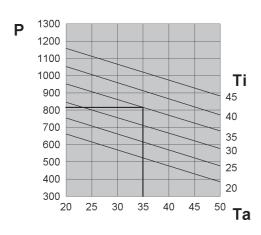
### DEK08 Roof-mount air conditioners

COOLING CAPACITY

820 W

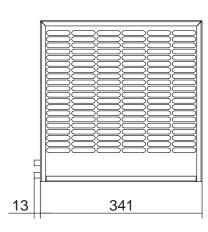
#### **Performance**

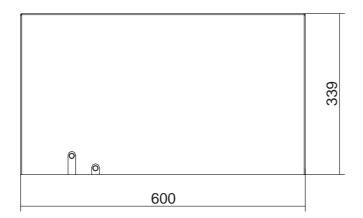




- P = Cooling capacity (W)
   Ta = Ambient Temperature (°C)
- Ti = Internal cabinet temperature (°C)

#### **Dimensions**





Features	UoM	DEK08BT0B	DEK08BTUB	DEK08CT0B	DEK08GT0B
Cooling capacity EN14511 - A35A35	W	820	820	820	820
Cooling capacity EN14511 - A35A50	W	680	680	680	680
Power supply	V ~ Hz	230 1~ 50-60	230 1~ 50-60	115 1~ 50-60	400/440 2~ 50-60
Width	mm	341	341	341	341
Height	mm	339	339	339	339
Depth	mm	600	600	600	600
Max current	A	2.9	3.5	5.7	1.7
Inrush current	A	12	12	19	7
T Fuse	A	6	6	10	4
Power draw EN14511 - A35A35	w	510	520	520	520
Power draw EN14511 -A35A50	w	560	590	570	570
Operating cycle	-	100%	100%	100%	100%
Electrical connection	-	4-pin plug	4-pin plug	4-pin plug	4-pin plug
R134a Refrigerant	kg	0.31	0.31	0.31	0.31
Max refrigeration circuit pressure	bar	25	28	25	25
External air fan capacity	m³/h	860	860	860	860
Cabinet air fan capacity	m³/h	570	570	570	570
Internal temperature range	°C	20-50	20-50	20-50	20-50
Temperature regulation	-		Electronic thermost	at factory set to 35°C	
External temperature range	°C	20-55*	20-55*	20-50	20-50
EN60529 ingress protection - cabinet side	-	IP54	IP54	IP54	IP54
EN60529 ingress protection - ambient side	-	IP34	IP34	IP34	IP34
Noise level	dB (A)	62	65	62	62
Weight	kg	23	23	24	24
Colour	-		RAL 7035 em	bossed effect	
Conformity	-	C€	(€ <b>;\$\!</b> 'us	C€	C€

Accessories	
Pack of 5 fabric air filters	C15000173
Pack of 1 metal air filter	C15000174
Condensate level indicator	C16000140
External stainless-steel framework	
Coating in non-standard colour	

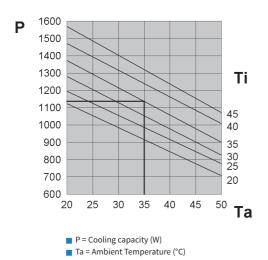


# DEK12 Roof-mount air conditioners

COOLING CAPACITY

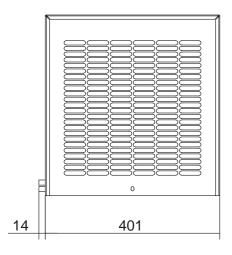
1150 W

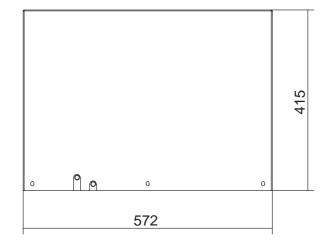
#### **Performance**



■ Ti = Internal cabinet temperature (°C)

#### **Dimensions**





Features	UoM	DEK12BT0B	DEK12BTUB	DEK12CT0B	DEK12GT0B
Cooling capacity EN14511 - A35A35	W	1150	1150	1150	1150
Cooling capacity EN14511 - A35A50	W	900	900	900	900
Power supply	V ∼ Hz	230 1~ 50-60	230 1~ 50-60	115 1~ 50-60	400/440 2~ 50-60
Width	mm	401	401	401	401
Height	mm	415	415	415	415
Depth	mm	572	572	572	572
Max current	А	3.2	4	6.4	2.2
Inrush current	A	11	11	22	8
T Fuse	А	6	6	12	6
Power draw EN14511 - A35A35	W	550	570	560	560
Power draw EN14511 -A35A50	W	660	690	670	670
Operating cycle	-	100%	100%	100%	100%
Electrical connection	-	4-pin plug	4-pin plug	4-pin plug	4-pin plug
R134a Refrigerant	kg	0.63	0.44	0.63	0.63
Max refrigeration circuit pressure	bar	25	28	25	25
External air fan capacity	m³/h	1010	1010	1010	1010
Cabinet air fan capacity	m³/h	570	570	570	570
Internal temperature range	°C	20-50	20-50	20-50	20-50
Temperature regulation	-		Electronic thermost	at factory set to 35°C	
External temperature range	°C	20-55*	20-50	20-50	20-50
EN60529 ingress protection - cabinet side	-	IP54	IP54	IP54	IP54
EN60529 ingress protection - ambient side	-	IP34	IP34	IP34	IP34
Noise level	dB (A)	65	65	65	65
Weight	kg	40	40	42	42
Colour	-		RAL 7035 em	bossed effect	
Conformity	-	C€	(€ : <b>91</b> / <sub>Us</sub>	C€	C€

Accessories	
Pack of 5 fabric air filters	AADFP12
Pack of 1 metal air filter	AADFM12
Condensate level indicator	C16000140
External stainless-steel framework	
Coating in non-standard colour	

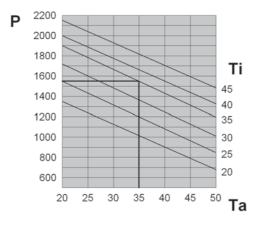


### DEK15 Roof-mount air conditioners

COOLING CAPACITY

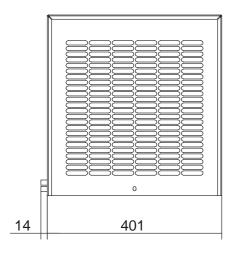
1550 W

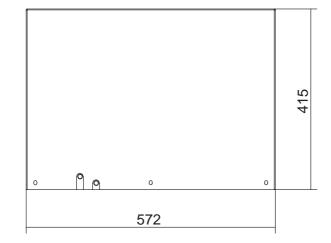
#### **Performance**



- P = Cooling capacity (W)
   Ta = Ambient Temperature (°C)
- Ti = Internal cabinet temperature (°C)

#### **Dimensions**





Features	UoM	DEK15BT0B	DEK15BTUB	DEK15CT0B	DEK15GT0B
Cooling capacity EN14511 - A35A35	W	1550	1550	1550	1550
Cooling capacity EN14511 - A35A50	W	1200	1200	1200	1200
Power supply	V ~ Hz	230 1~ 50-60	230 1~ 50-60	115 1~ 50-60	400/440 2~ 50-60
Width	mm	401	401	401	401
Height	mm	415	415	415	415
Depth	mm	572	572	572	572
Max current	A	4.5	5.5	10	2.8
Inrush current	A	18	18	39	9.6
T Fuse	A	8	10	16	4
Power draw EN14511 - A35A35	W	810	830	820	820
Power draw EN14511 -A35A50	W	930	960	940	940
Operating cycle	-	100%	100%	100%	100%
Electrical connection	-	4-pin plug	4-pin plug	4-pin plug	4-pin plug
R134a Refrigerant	kg	0.54	0.41	0.54	0.54
Max refrigeration circuit pressure	bar	25	28	25	25
External air fan capacity	m³/h	1820	1820	1820	1820
Cabinet air fan capacity	m³/h	860	860	860	860
Internal temperature range	°C	20-50	20-50	20-50	20-50
Temperature regulation	-		Electronic thermost	at factory set to 35°C	
External temperature range	°C	20-55*	20-50	20-50	20-50
EN60529 ingress protection - cabinet side	-	IP54	IP54	IP54	IP54
EN60529 ingress protection - ambient side	-	IP34	IP34	IP34	IP34
Noise level	dB (A)	65	65	65	65
Weight	kg	44	44	46	46
Colour	-		RAL 7035 em	bossed effect	•
Conformity	-	CE	(€ : <b>%)</b> us	CE	C€

 $^{\star}$  50 °C at 60 Hz

Accessories	
Pack of 5 fabric air filters	AADFP12
Pack of 1 metal air filter	AADFM12
Condensate level indicator	C16000140
External stainless-steel framework	
Coating in non-standard colour	



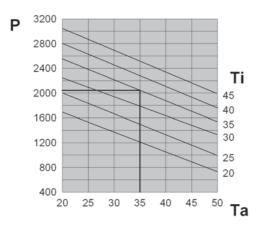




COOLING CAPACITY

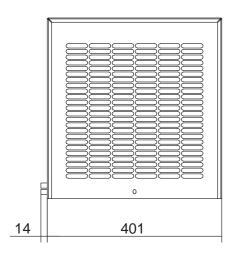
2050 W

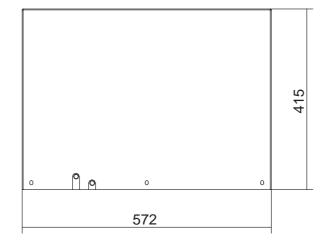
#### **Performance**



- P = Cooling capacity (W)
   Ta = Ambient Temperature (°C)
- Ti = Internal cabinet temperature (°C)

#### **Dimensions**





Features	UoM	DEK20BT0B	DEK20CT0B	DEK20LT0B	DEK20NTUB
Cooling capacity EN14511 - A35A35	w	2050	2050	2050	2050
Cooling capacity EN14511 - A35A50	w	1560	1560	1560	1560
Power supply	V ∼ Hz	230 1~ 50-60	115 1~ 50-60	400 3~ 50-60	460 3~ 60
Width	mm	401	401	401	401
Height	mm	415	415	415	415
Depth	mm	572	572	572	572
Max current	A	6	13.2	1.9	2.1
Inrush current	A	24	48	10	10
T Fuse	A	10	20	4	6
Power draw EN14511 - A35A35	w	1190	1220	990	1060
Power draw EN14511 -A35A50	w	1300	1320	1190	1290
Operating cycle	-	100%	100%	100%	100%
Electrical connection	-	4-pin plug	4-pin plug	4-pin plug	4-pin plug
R134a Refrigerant	kg	0.55	0.55	0.55	0.70
Max refrigeration circuit pressure	bar	25	25	25	28
External air fan capacity	m³/h	1820	1820	1820	1820
Cabinet air fan capacity	m³/h	1050	1050	1050	1050
Internal temperature range	°C	20-50	20-50	20-50	20-50
Temperature regulation	-		Electronic thermost	at factory set to 35°C	
External temperature range	°C	20-55*	20-50	20-50	20-50
EN60529 ingress protection - cabinet side	-	IP54	IP54	IP54	IP54
EN60529 ingress protection - ambient side	-	IP34	IP34	IP34	IP34
Noise level	dB (A)	65	65	65	65
Weight	kg	50	56	52	52
Colour	-		RAL 7035 em	bossed effect	
Conformity	-	CE	C€	C€	(€ c <b>FU</b> us

Accessories	
Pack of 5 fabric air filters	AADFP12
Pack of 1 metal air filter	AADFM12
Condensate level indicator	C16000140
External stainless-steel framework	
Coating in non-standard colour	







### DEK30 Roof-mount air conditioners

#### **COOLING CAPACITY**

#### 2900 W

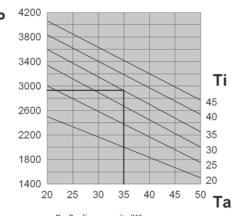


Accessories	
Pack of 5 fabric air filters	AADFP30
Pack of 1 metal air filter	AADFM30
Condensate level indicator	C16000140
External stainless-steel framework	
Coating in non-standard	

**Performance** 

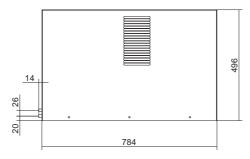
Features	UoM	DEK30BT0B	DEK30LT0B	DEK30NTUB
Cooling capacity EN14511 - A35A35	w	2900	2900	2900
Cooling capacity EN14511 - A35A50	w	2250	2250	2250
Power supply	V ~ Hz	230 1~ 50-60	400 3~ 50-60	460 3~ 60
Width	mm	492	492	492
Height	mm	496	496	496
Depth	mm	784	784	784
Max current	А	8.2	2.5	3.3
Inrush current	А	38.4	15.7	15.7
T Fuse	А	16	6	6
Power draw EN14511 - A35A35	w	1350	1210	1310
Power draw EN14511 -A35A50	w	1610	1450	1750
Operating cycle	-	100%	100%	100%
Electrical connection	-	4-pin plug	4-pin plug	4-pin plug
R134a Refrigerant	kg	1.26	1.2	1.2
Max refrigeration circuit pressure	bar	25	25	28
External air fan capacity	m³/h	3410	3410	3410
Cabinet air fan capacity	m³/h	860	860	860
Internal temperature range	°C	20-50	20-50	20-50
Temperature regulation	-	Elect	tronic thermostat, fa	ctory
External temperature range	°C	20-50	20-50	20-50
EN60529 ingress protection - cabinet side	-	IP54	IP54	IP54
EN60529 ingress protection - ambient side	-	IP34	IP34	IP34
Noise level	dB (A)	75	75	75
Weight	kg	80	83	83
Colour	-	RA	L 7035 embossed eff	ect
Conformity	-	C€	C€	(E : <b>%</b> )

#### **Dimensions**





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### DEK40 Roof-mount air conditioners

#### **COOLING CAPACITY**

#### 3850 W



	Int
	Te
	Ex
AADFP30	ΕN
AADFM30	ΕN
	No
C16000140	We
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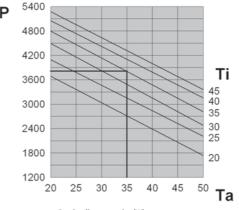
Features	UoM	DEK40BT0B	DEK40LT0B	DEK40NTUB
Cooling capacity EN14511 - A35A35	W	3850	3850	3850
Cooling capacity EN14511 - A35A50	W	2870	2870	2870
Power supply	V ~ Hz	230 1~ 50-60	400 3~ 50-60	460 3~ 60
Width	mm	492	492	492
Height	mm	496	496	496
Depth	mm	784	784	784
Max current	A	9	3.4	4.3
Inrush current	A	38.2	17	17
T Fuse	A	18	6	6
Power draw EN14511 - A35A35	W	1690	1630	1950
Power draw EN14511 -A35A50	W	1950	1890	2160
Operating cycle	-	100%	100%	100%
Electrical connection	-	4-pin plug	4-pin plug	4-pin plug
R134a Refrigerant	kg	1.8	2	2
Max refrigeration circuit pressure	bar	25	25	25
External air fan capacity	m³/h	3410	3410	3410
Cabinet air fan capacity	m³/h	1450	1450	1450
Internal temperature range	°C	20-50	20-50	20-50
Temperature regulation	-	Electronic thermostat, factory set to 35°C		
External temperature range	°C	20-50	20-50	20-50
EN60529 ingress protection - cabinet side	-	IP54	IP54	IP54
EN60529 ingress protection - ambient side	-	IP34	IP34	IP34
Noise level	dB (A)	75	75	75
Weight	kg	83	86	86
Colour	-	R/	AL 7035 embossed effe	ect
Conformity	-	C€	C€	(£ : <b>91</b> )

#### **Performance**

Pack of 5 fabric air filters Pack of 1 metal air

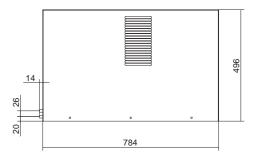
Condensate level indicator External stainless-steel framework Coating in non-standard

colour



- P = Cooling capacity (W)
- Ti = Internal cabinet temperature (°C)

492



- Ta = Ambient Temperature (°C)





## **EMO**

Wall-mount air conditioners for outdoor applications

texa industries' solution for outdoor installations; a coupling system to the electrical cabinet which guarantees maximum protection even under the most demanding environmental conditions.



## **EMO**Wall-mount air conditioners for outdoor applications

#### WIDE RANGE OF POWER OUTPUTS

The available power outputs range from 400 to 9400 W, covering most electrical cabinet cooling requirements in an extremely compact size.

#### REGULATION AND SAFETY DEVICES

EMO air conditioning systems are equipped with electromechanical thermostatic regulation which guarantees maximum reliability even in extreme conditions. The refrigeration circuit is protected by low- and high-pressure safety pressure switches with automatic rearming. A fixed calibration pressure switch with ON/OFF contact manages the condensing fan.

#### **OUICK INSTALLATION**

Installation is very quick by simply drilling the cabinet panel and fastening systems which are included in the air conditioner package. This features provisions for the electrical connections to be made quickly and safely using fast connectors inserted in the rear of the unit.

#### IDEAL COOLING FOR THE UNIT

The air inside the cabinet is taken in from the upper part of the cabinet, cooled inside the air conditioner and directed back into the cabinet with a high-speed flow directed towards the bottom. This ensures both optimum cooling of the entire cabinet and the prevention of hot points in the electronic components.

#### REDUCED MAINTENANCE

All units are equipped with heat exchange surfaces designed to prevent clogging by solid contaminants present in the ambient air. The condensing coils are protected by a cataphoresis treatment which prevents fouling and corrosion. They maintain high levels of efficiency even in demanding environmental conditions, drastically reducing maintenance requirements and thus allowing the air conditioner to operate without an external air filter.

#### **IP55 CABINET INGRESS PROTECTION**

Thanks to the special internal configuration, which separates the external and internal air flows in a sealed manner, and the new self-adhesive coupling gasket, EMO air conditioners (from the EMO 04 model to the EMO 40 model) allow the cabinet to retain an IP55 rating.

#### RESPECT FOR THE ENVIRONMENT

Reduction of noise levels is a precise criterion aimed for when developing EMO air conditioners. They have been designed to minimise disturbance from noise. To help protect the environment, these air conditioners use R134a or R407C CFC-free refrigerant, which do not damage the ozone layer.

#### SUPPLY VOLTAGE

EMO air conditioners are available for the most common AC voltages: 230V single phase, 400-440V two phase (for concatenated voltage power supply when neutral is not present), 115V single phase, 400V three phase, all in 50-60 Hz dual frequency versions, and 400V and 460V three phase single frequency (50 or 60 Hz) versions. On request, versions for voltages not present in the catalogue can be produced for orders of sufficient quantities.

#### FRAMEWORK AND COATING

The framework is made of coated steel sheet. The coating is epoxy powder coating. The standard colour is RAL 7035 textured. Non-standard colours and stainless-steel versions are available on request. Rubber grommets and heatshrink sleeves protect the external electrical connections, making them suitable for outdoor use. The exterior electrical connections all have an IP54 rating.

#### **OPERATING TEMPERATURE**

The possible operating temperatures range from -20 to +55 $^{\circ}$ C. The temperature inside the cabinet can be adjusted from +20 to +46 $^{\circ}$ C (the air conditioner is factory set to +35 $^{\circ}$ C).

#### **OPTIONAL ACCESSORIES**

EMO air conditioners offer various optional accessories:

- Stainless-steel framework
- Evaporating fan with separate 48VDC power supply
- Tamper-resistant screw kit for front casing closure
- High temperature alarm warning
- Common high/low pressure alarm





#### **Application tips**

- When choosing an air conditioner, keep a margin of safety of at least 10% for the power output, taking the most demanding conditions of operation into account.
- Seal the cabinet well. Any cracks or other openings would significantly reduce the efficiency of the air conditioner and produce excessive amounts of condensate.
- The air conditioner may be installed on the door or the wall, but always in the highest possible position in order to ensure that air is taken in from the top part of the cabinet, where there is a high temperature area.
- The air conditioner is factory set to 35°C, the optimum temperature for most applications. Unless strictly necessary, avoiding lowering this temperature because it would reduce the efficiency of the air conditioner and cause excessive condensate production.

- Try to facilitate the air flow inside the electrical cabinet when designing the layout of the components. Avoid blocking the air inlet or outlet with components installed too close together. Any components with internal ventilation of their own must have their air flow arranged so as to not impede the air flow of the air conditioner.
- Disable the air conditioner if the cabinet doors are opened to prevent excessive condensate production. Install a limit switch on the door for this purpose.
- The air conditioner power supply line must be protected with a time delay fuse or circuit breaker of suitable size on the basis of the unit's technical data.





## **EMO04**

Wall-mount air conditioners for outdoor applications

#### **COOLING CAPACITY**

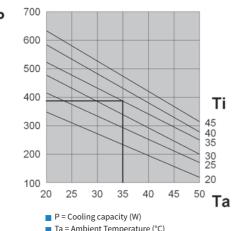
#### 380 W



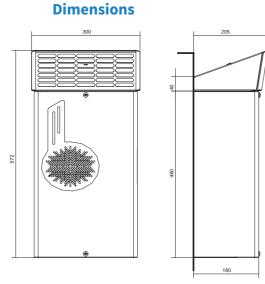
Accessories	
Pack of 5 fabric air filters	AAEFP04
Pack of 1 metal air filter	AAEFM04
External stainless-steel framework	
Coating in non-standard colour	
48VDC evaporator fan	
Anti-tamper screw kit	
High temperature alarm	
Pressure alarms (low, high)	

Features	UoM	EMO04BM1B	EMO04CM1B	
Cooling capacity EN14511 - A35A35	W	380	380	
Cooling capacity EN14511 - A35A50	W	240	240	
Power supply	V ~ Hz	230 1~ 50-60	115 1~ 50-60	
Width	mm	300	300	
Height	mm	572	572	
Depth	mm	205	205+35***	
Max current	А	1.6	3.2	
Inrush current	А	6	11	
T Fuse	A	4	6	
Power draw EN14511 - A35A35	W	230	240	
Power draw EN14511 -A35A50	W	260	270	
Operating cycle	-	100%	100%	
Electrical connection	-	4-pin plug	4-pin plug	
R134a Refrigerant	kg	0.13	0.13	
Max refrigeration circuit pressure	bar	26	26	
External air fan capacity	m³/h	280	280	
Cabinet air fan capacity	m³/h	280	280	
Internal temperature range	°C	+20 - +46	+20 - +46	
Temperature regulation	-	Electromechanical thermostat, factory set to 35°C		
External temperature range	°C	-20 - +55**	-20 - +50	
EN60529 ingress protection - cabinet side	-	IP55	IP55	
EN60529 ingress protection - ambient side	-	IP34*	IP34*	
Noise level	dB (A)	60	60	
Weight	kg	17	18	
Colour	-	RAL 7035 em	bossed effect	
Conformity	-	C€	C€	

#### **Performance**



■ Ta = Ambient Temperature (°C) ■ Ti = Internal cabinet temperature (°C)







<sup>\*</sup> IP54 rated exterior electrical connections

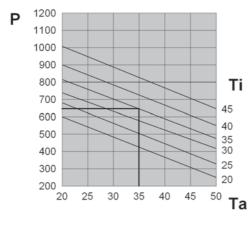
Wall-mount air conditioners for outdoor applications

**COOLING CAPACITY** 

640 W

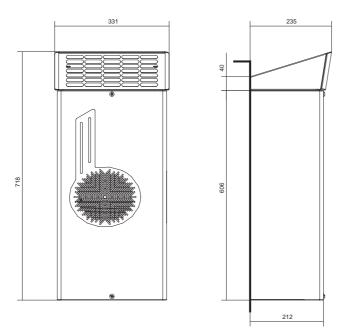


#### **Performance**



- P = Cooling capacity (W)
- Ta = Ambient Temperature (°C)
- Ti = Internal cabinet temperature (°C)

#### **Dimensions**



Features	UoM	EMO06BM1B	EMO06CM1B	EMO06GM1B	EMO06VM1B
Cooling capacity EN14511 - A35A35	W	640	640	640	500
Cooling capacity EN14511 - A35A50	W	470	470	470	340
Power supply	V ~ Hz	230 1~ 50-60	115 1~ 50-60	400/440 2~ 50-60	48 V DC
Width	mm	331	331	331	331
Height	mm	718	718	718	718
Depth	mm	235	235+42***	235+58***	235
Max current	A	2.1	4.4	1.2	5.8
Inrush current	A	8.1	16	5	-
T Fuse	A	6	8	2	10
Power draw EN14511 - A35A35	W	380	390	390	280
Power draw EN14511 -A35A50	W	420	430	430	310
Operating cycle	-	100%	100%	100%	100%
Electrical connection	-	4-pin plug	4-pin plug	4-pin plug	4-pin plug
R134a Refrigerant	kg	0.19	0.19	0.19	0.23
Max refrigeration circuit pressure	bar	25	25	25	25
External air fan capacity	m³/h	570	570	570	570
Cabinet air fan capacity	m³/h	330	330	330	370
Internal temperature range	°C	+20 - +46	+20 - +46	+20 - +46	+20 - +46
Temperature regulation	-	Electromechanical thermostat, factory set to 35°C			
External temperature range	°C	-20 - +55**	-20 - +50	-20 - +50	-20 - +50
EN60529 ingress protection - cabinet side	-	IP55	IP55	IP55	IP55
EN60529 ingress protection - ambient side	-	IP34*	IP34*	IP34*	IP34*
Noise level	dB (A)	65	65	65	65
Weight	kg	21	22	22	21
Colour	-		RAL 7035 em	bossed effect	
Conformity	-	C€	CE	CE	C€

\* IP54 rated exterior electrical connections \*\* 50 °C at 60 Hz

\*\*\* Due to external autotransformer dimensions

Accessories					
Pack of 5 fabric air filters	AAEFP06				
Pack of 1 metal air filter	AAEFM06				
External stainless-steel framework					
Coating in non-standard colour					
48VDC evaporator fan					
Anti-tamper screw kit					
High temperature alarm					
Pressure alarms (low, high)					





Wall-mount air conditioners for outdoor applications

#### **COOLING CAPACITY**

#### 820 W



Accessories	
Pack of 5 fabric air filters	AAEFP10
Pack of 1 metal air filter	AAEFM10
External stainless-steel framework	
Coating in non-standard colour	
48VDC evaporator fan	
Anti-tamper screw kit	
High temperature alarm	
Pressure alarms (low, high)	

Features	UoM	EMO08BM1B	EMO08CM1B	EMO08GM1B
Cooling capacity EN14511 - A35A35	W	820	820	820
Cooling capacity EN14511 - A35A50	W	680	680	680
Power supply	V ~ Hz	230 1~ 50-60	115 1~ 50-60	400/440 2~ 50-60
Width	mm	363	363	363
Height	mm	895	895	895
Depth	mm	239	239+42***	239+58***
Max current	A	2.6	5.3	1.7
Inrush current	A	10.8	21.5	6.1
T Fuse	A	6	10	6
Power draw EN14511 - A35A35	W	410	420	420
Power draw EN14511 -A35A50	W	490	500	500
Operating cycle	-	100%	100%	100%
Electrical connection	-	4-pin plug	4-pin plug	4-pin plug
R134a Refrigerant	kg	0.21	0.21	0.21
Max refrigeration circuit pressure	bar	25	25	25
External air fan capacity	m³/h	570	570	570
Cabinet air fan capacity	m³/h	330	330	330
Internal temperature range	°C	+20 - +46	+20 - +46	+20 - +46
Temperature regulation	-	Electromechanical thermostat, factory set to 35°C		
External temperature range	°C	-20 - +55**	-20 - +50	-20 - +50
EN60529 ingress protection - cabinet side	-	IP55	IP55	IP55
EN60529 ingress protection - ambient side	-	IP34*	IP34*	IP34*
Noise level	dB (A)	65	65	65
Weight	kg	27	28	28
Colour	-	RA	L 7035 embossed eff	ect
Conformity	-	(6 (6 (6		

<sup>\*\*\*</sup> Due to external autotransformer dimensions  $\,$  \*\* 50 °C at 60 Hz

### **EMO10**

Wall-mount air conditioners for outdoor applications

#### **COOLING CAPACITY**



Accessories	
Pack of 5 fabric air filters	AAEFP10
Pack of 1 metal air filter	AAEFM10
External stainless-steel framework	
Coating in non-standard colour	
48VDC evaporator fan	
Anti-tamper screw kit	
High temperature alarm	
Pressure alarms (low, high)	

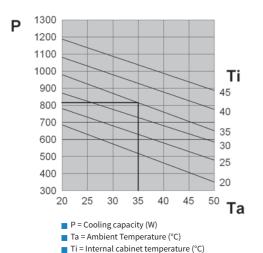
#### 1000 W

Features	UoM	EMO10BM1B	EMO10CM1B	EMO10GM1B
Cooling capacity EN14511 - A35A35	W	1000	1000	1000
Cooling capacity EN14511 - A35A50	W	790	790	790
Power supply	V ~ Hz	230 1~ 50-60	115 1~ 50-60	400/440 2~ 50-60
Width	mm	363	363	363
Height	mm	895	895	895
Depth	mm	239	239+42***	239+58***
Max current	А	3	6.7	2
Inrush current	A	10.5	23	8
T Fuse	А	6	10	4
Power draw EN14511 - A35A35	W	470	490	490
Power draw EN14511 -A35A50	W	560	580	580
Operating cycle	-	100%	100%	100%
Electrical connection	-	4-pin plug	4-pin plug	4-pin plug
R134a Refrigerant	kg	0.2	0.2	0.2
Max refrigeration circuit pressure	bar	25	25	25
External air fan capacity	m³/h	570	570	570
Cabinet air fan capacity	m³/h	330	330	330
Internal temperature range	°C	+20 - +46	+20 - +46	+20 - +46
Temperature regulation	-	Electromechanical thermostat, factory set to 35°C		
External temperature range	°C	-20 - +55**	-20 - +50	-20 - +50
EN60529 ingress protection - cabinet side	-	IP55	IP55	IP55
EN60529 ingress protection - ambient side	-	IP34*	IP34*	IP34*
Noise level	dB (A)	65	65	65
Weight	kg	28	29	29
Colour	-	R	AL 7035 embossed effe	ct
Conformity	-	CE	C€	C€

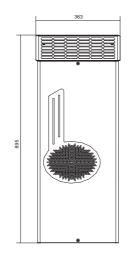
\*\*\* Due to external autotransformer dimensions  $\,$  \*\* 50 °C at 60 Hz

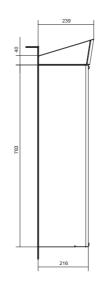
\* IP54 rated exterior electrical connections

#### **Performance**

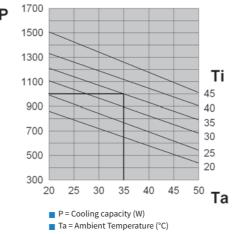


#### **Dimensions**

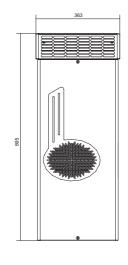


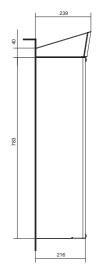


#### **Performance**



■ Ti = Internal cabinet temperature (°C)









<sup>\*</sup> IP54 rated exterior electrical connections

Wall-mount air conditioners for outdoor applications

#### **COOLING CAPACITY**

#### 1250 W



Accessories	
Pack of 5 fabric air filters	C15000163
Pack of 1 metal air filter	C15000164
External stainless-steel framework	
Coating in non-standard colour	
48VDC evaporator fan	
Anti-tamper screw kit	
High temperature alarm	
Pressure alarms (low, high)	

Features	UoM	EMO12BM1B	EMO12CM1B	EMO12GM1B
Cooling capacity EN14511 - A35A35	W	1250	1250	1250
Cooling capacity EN14511 - A35A50	W	910	910	910
Power supply	V ~ Hz	230 1~ 50-60	115 1~ 50-60	400/440 2~ 50-60
Width	mm	415	415	415
Height	mm	1109	1109	1109
Depth	mm	261	261	261
Max current	Α	3.8	7.6	2.2
Inrush current	Α	11	24	8.5
T Fuse	А	6	10	4
Power draw EN14511 - A35A35	W	680	690	690
Power draw EN14511 -A35A50	W	790	800	800
Operating cycle	-	100%	100%	100%
Electrical connection	-	4-pin plug	4-pin plug	4-pin plug
R134a Refrigerant	kg	0.26	0.26	0.26
Max refrigeration circuit pressure	bar	25	25	25
External air fan capacity	m³/h	860	860	860
Cabinet air fan capacity	m³/h	570	570	570
Internal temperature range	°C	+20 - +46	+20 - +46	+20 - +46
Temperature regulation	-	Electromechanical thermostat, factory set to 35°C		
External temperature range	°C	-20 - +55**	-20 - +50	-20 - +50
EN60529 ingress protection - cabinet side	-	IP55	IP55	IP55
EN60529 ingress protection - ambient side	-	IP34*	IP34*	IP34*
Noise level	dB (A)	65	65	65
Weight	kg	38	40	40
Colour	-	RAL 7035 embossed effect		
Conformity	-	C€	C€	C€

\*\* 50 °C at 60 Hz

\* IP54 rated exterior electrical connections

## **EM016**

Wall-mount air conditioners for outdoor applications

#### **COOLING CAPACITY**





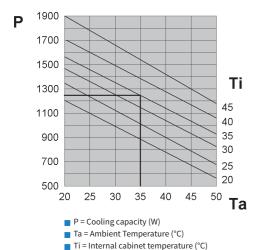
Accessories	
Pack of 5 fabric air filters	C15000163
Pack of 1 metal air filter	C15000164
External stainless-steel framework	
Coating in non-standard colour	
48VDC evaporator fan	
Anti-tamper screw kit	
High temperature alarm	
Pressure alarms (low, high)	

Features	UoM	EMO16BM1B	EMO16CM1B	EMO16GM1B	
Cooling capacity EN14511 - A35A35	W	1600	1600	1600	
Cooling capacity EN14511 - A35A50	w	1230	1230	1230	
Power supply	V ~ Hz	230 1~ 50-60	115 1~ 50-60	400/440 2~ 50-60	
Width	mm	415	415	415	
Height	mm	1109	1109	1109	
Depth	mm	261	261	261	
Max current	А	5.3	12.9	2.9	
Inrush current	А	18	39	11	
T Fuse	А	10	20	6	
Power draw EN14511 - A35A35	W	820	840	840	
Power draw EN14511 -A35A50	W	940	960	960	
Operating cycle	-	100%	100%	100%	
Electrical connection	-	4-pin plug	4-pin plug	4-pin plug	
R134a Refrigerant	kg	0.33	0.33	0.33	
Max refrigeration circuit pressure	bar	25	25	25	
External air fan capacity	m³/h	1050	1050	1050	
Cabinet air fan capacity	m³/h	570	570	570	
Internal temperature range	°C	+20 - +46	+20 - +46	+20 - +46	
Temperature regulation	-	Electron	Electromechanical thermostat, factory set to 35°C		
External temperature range	°C	-20 - +55**	-20 - +50	-20 - +50	
EN60529 ingress protection - cabinet side	-	IP55	IP55	IP55	
EN60529 ingress protection - ambient side	-	IP34*	IP34*	IP34*	
Noise level	dB (A)	65	65	65	
Weight	kg	40	42	42	
Colour	-	RA	AL 7035 embossed effe	ct	
Conformity	-	C€	C€	C€	

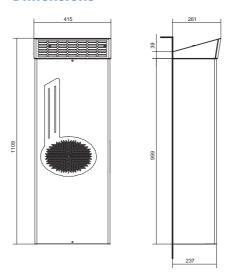
\*\* 50 °C at 60 Hz

\* IP54 rated exterior electrical connections

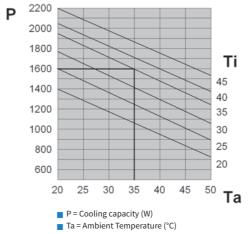
#### **Performance**



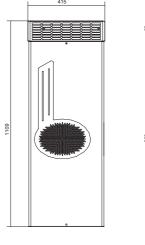
#### **Dimensions**



#### **Performance**



#### ■ Ti = Internal cabinet temperature (°C)









## **EMO20**

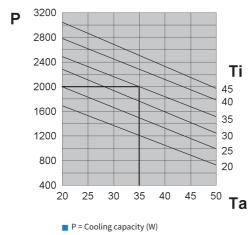
Wall-mount air conditioners for outdoor applications

COOLING CAPACITY

2000 W

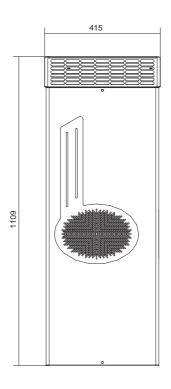


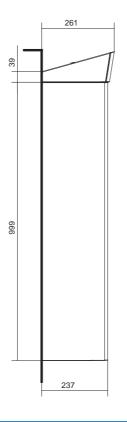
#### **Performance**



- Ta = Ambient Temperature (°C)
- Ti = Internal cabinet temperature (°C)

#### **Dimensions**





Features	UoM	EMO20BM1B	EMO20CM1B	EMO20LM1B	EMO20VM1B
Cooling capacity EN14511 - A35A35	W	2000	2000	2000	2000
Cooling capacity EN14511 - A35A50	w	1510	1510	1510	1510
Power supply	V ~ Hz	230 1~ 50-60	115 1~ 50-60	400 3~ 50-60	48 V DC
Width	mm	415	415	415	415
Height	mm	1109	1109	1109	1109
Depth	mm	261	261	261	261
Max current	A	6.5	13.3	2.5	21.6
Inrush current	A	24	48	10	-
T Fuse	A	10	20	6	26
Power draw EN14511 - A35A35	W	1030	1070	1070	986
Power draw EN14511 -A35A50	W	1180	1210	1210	1037
Operating cycle	-	100%	100%	100%	100%
Electrical connection	-	4-pin plug	4-pin plug	4-pin plug	4-pin plug
R134a Refrigerant	kg	0.43	0.43	0.45	0.42
Max refrigeration circuit pressure	bar	25	25	25	25
External air fan capacity	m³/h	1050	1050	1050	1050
Cabinet air fan capacity	m³/h	860	860	860	860
Internal temperature range	°C	+20 - +46	+20 - +46	+20 - +46	+20 - +46
Temperature regulation	-		Electromechanical thern	nostat, factory set to 35°C	
External temperature range	°C	-20 - +55**	-20 - +50	-20 - +50	-20 - +50
EN60529 ingress protection - cabinet side	-	IP55	IP55	IP55	IP55
EN60529 ingress protection - ambient side	-	IP34*	IP34*	IP34*	IP34*
Noise level	dB (A)	65	65	65	74
Weight	kg	52	54	54	21
Colour	-		RAL 7035 em	bossed effect	
Conformity	-	CE	CE	CE	CE

\* IP54 rated exterior electrical connections \*\* 50 °C at 60 Hz

Accessories	
Pack of 5 fabric air filters	C15000163
Pack of 1 metal air filter	C15000164
External stainless-steel framework	
Coating in non-standard colour	
48VDC evaporator fan	
Anti-tamper screw kit	
High temperature alarm	
Pressure alarms (low, high)	





### **EMO30**

Wall-mount air conditioners for outdoor applications

#### **COOLING CAPACITY**

#### 2900 W



Accessories	
Pack of 5 fabric air filters	C15000183
Pack of 1 metal air filter	C15000185
External stainless-steel framework	
Coating in non-standard colour	
48VDC evaporator fan	
Anti-tamper screw kit	
High temperature alarm	
Pressure alarms (low, high)	

Features	UoM	EMO30BM1B	EMO30LM1B	
Cooling capacity EN14511 - A35A35	W	2900	2900	
Cooling capacity EN14511 - A35A50	W	2250	2250	
Power supply	V ~ Hz	230 1~ 50-60	400 3~ 50-60	
Width	mm	512	512	
Height	mm	1417	1417	
Depth	mm	365	365	
Max current	A	8.2	2.6	
Inrush current	A	37.4	14	
T Fuse	A	16	6	
Power draw EN14511 - A35A35	W	1340	1220	
Power draw EN14511 -A35A50	W	1560	1440	
Operating cycle	-	100%	100%	
Electrical connection	-	4-pin plug	4-pin plug	
R134a Refrigerant	kg	0.57	0.62	
Max refrigeration circuit pressure	bar	25	25	
External air fan capacity	m³/h	1450	1450	
Cabinet air fan capacity	m³/h	1450	1450	
Internal temperature range	°C	+20 - +46	+20 - +46	
Temperature regulation	-	Electromechanical thermostat, factory set to 35°C		
External temperature range	°C	-20 - +50	-20 - +50	
EN60529 ingress protection - cabinet side	-	IP55	IP55	
EN60529 ingress protection - ambient side	-	IP34*	IP34*	
Noise level	dB (A)	70	70	
Weight	kg	80	84	
Colour	-	RAL 7035 embossed effect		
Conformity	-	C€	C€	

\* IP54 rated exterior electrical connections

### **EMO40**

Wall-mount air conditioners for outdoor applications

#### **COOLING CAPACITY**



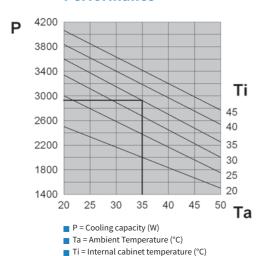


Accessories	
Pack of 5 fabric air filters	C15000183
Pack of 1 metal air filter	C15000185
External stainless-steel framework	
Coating in non-standard colour	
48VDC evaporator fan	
Anti-tamper screw kit	
High temperature alarm	
Pressure alarms (low, high)	

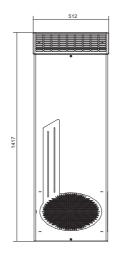
UoM	EMO40BM1B	EMO40LM1B
W	3850	3850
W	2870	2870
V ~ Hz	230 1~ 50-60	400 3~ 50-60
mm	512	512
mm	1417	1417
mm	365	365
А	9.5	3.6
А	35.2	18
А	16	8
W	1710	1780
W	1990	2050
-	100%	100%
-	4-pin plug	4-pin plug
kg	0.69	0.69
bar	25	25
m³/h	1450	1450
m³/h	1450	1450
°C	+20 - +46	+20 - +46
-		
°C	-20 - +50	-20 - +50
-	IP55	IP55
-	IP34*	IP34*
dB (A)	70	70
kg	82	85
-	RAL 7035 em	bossed effect
-	CE	CE
	W V~Hz mm mm A A A W W kg bar m³/h c°C dB (A) kg	W 2870  V ~ Hz 230 1~ 50-60  mm 512  mm 1417  mm 365  A 9.5  A 35.2  A 16  W 1710  W 1990  - 100%  - 4-pin plug  kg 0.69  bar 25  m³/h 1450  m³/h 1450  c +20 - +46  - Electromechanical set to  °C -20 - +50  - IP55  - IP55  - IP55  - IP55  - RAL 7035 emi

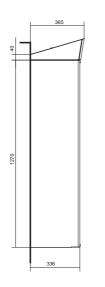
\* IP54 rated exterior electrical connections

#### **Performance**

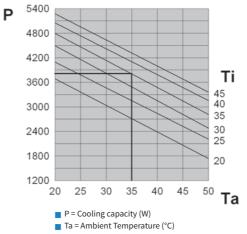


#### **Dimensions**

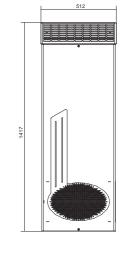


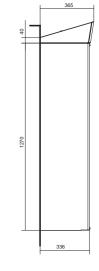


#### **Performance**



#### ■ Ti = Internal cabinet temperature (°C)







Wall-mount air conditioners for outdoor applications

#### **COOLING CAPACITY**

#### 5800 - 6050 W



Accessories	
Pack of 5 fabric air filters	C15000175
Pack of 1 metal air filter	C15000176
External stainless-steel framework	
Coating in non-standard colour	
48VDC evaporator fan	
Anti-tamper screw kit	
High temperature alarm	
Pressure alarms (low, high)	

Features	UoM	EMO60MMEB	EMO60NMEB
Cooling capacity EN14511 - A35A35	W	5800	6050
Cooling capacity EN14511 - A35A50	W	4350	4530
Power supply	V ~ Hz	400 3~ 50	460 3~ 60
Width	mm	600	600
Height	mm	2000	2000
Depth	mm	387	387
Max current	А	5.9	6.8
Inrush current	А	21.7	23.5
T Fuse	А	8	8
Power draw EN14511 - A35A35	W	2340	2920
Power draw EN14511 -A35A50	W	3880	4520
Operating cycle	-	100%	100%
Electrical connection	-	Cable L = 3 m	Cable L = 3 m
R407C Refrigerant	kg	1.8	1.8
Max refrigeration circuit pressure	bar	27	27
External air fan capacity	m³/h	2900	2900
Cabinet air fan capacity	m³/h	1450	1450
Internal temperature range	°C	+20 - +46	+20 - +46
Temperature regulation	-	Electromechanical thermostat, factory set to 35°C	
External temperature range	°C	-20 - +50	-20 - +50
EN60529 ingress protection - cabinet side	-	IP54	IP54
EN60529 ingress protection - ambient side	-	IP34*	IP34*
Noise level	dB (A)	72	72
Weight	kg	150	150
Colour	-	RAL 7035 em	bossed effect
Conformity	-	C€	C€

\* IP54 rated exterior electrical connections

**COOLING CAPACITY** 



**EM080** 

Wall-mount air conditioners for outdoor applications

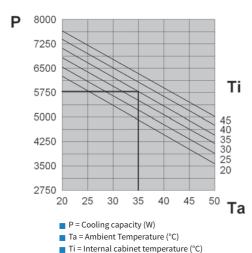
Accessories	
Pack of 5 fabric air filters	C15000188
Pack of 1 metal air filter	C15000189
External stainless-steel framework	
Coating in non-standard colour	
48VDC evaporator fan	
Anti-tamper screw kit	
High temperature alarm	
Pressure alarms (low, high)	

#### 7600 - 7950 W

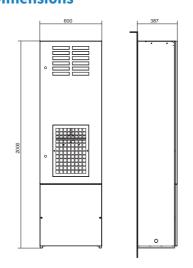
Features	UoM	EMO80MMEB	EMO80NMEB
Cooling capacity EN14511 - A35A35	W	7600	7950
Cooling capacity EN14511 - A35A50	W	5700	5930
Power supply	V ~ Hz	400 3~ 50	460 3~ 60
Width	mm	800	800
Height	mm	2000	2000
Depth	mm	387	387
Max current	А	8.1	9.3
Inrush current	А	30.7	32.5
T Fuse	А	16	16
Power draw EN14511 - A35A35	W	3300	4035
Power draw EN14511 -A35A50	W	4910	5845
Operating cycle	-	100%	100%
Electrical connection	-	Cable L = 3 m	Cable L = 3 m
R134a Refrigerant	kg	2.8	2.8
Max refrigeration circuit pressure	bar	27	27
External air fan capacity	m³/h	2900	2900
Cabinet air fan capacity	m³/h	2900	2900
Internal temperature range	°C	+20 - +46	+20 - +46
Temperature regulation	-	Electromechanical thermostat, factory set to 35°C	
External temperature range	°C	-20 - +50	-20 - +50
EN60529 ingress protection - cabinet side	-	IP54	IP54
EN60529 ingress protection - ambient side	-	IP34*	IP34*
Noise level	dB (A)	75	75
Weight	kg	160	160
Colour	-	RAL 7035 em	bossed effect
Conformity	-	CE	CE

 $^{\star}$  IP54 rated exterior electrical connections

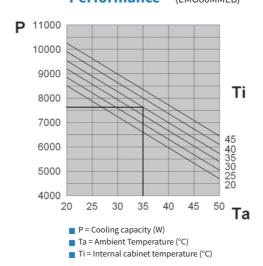
#### Performance (EMO60MMEB)

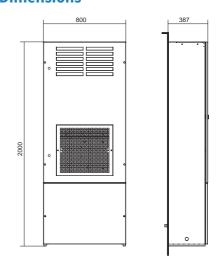


#### **Dimensions**



#### Performance (EMO80MMEB)









## **EMOA0**

Wall-mount air conditioners for outdoor applications

#### **COOLING CAPACITY**

#### 9400 - 9850 W

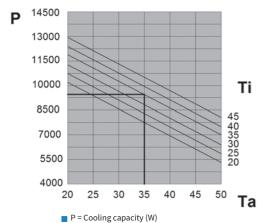


Accessories	
Pack of 5 fabric air filters	C15000188
Pack of 1 metal air filter	C15000189
External stainless-steel framework	
Coating in non-standard colour	
48VDC evaporator fan	
Anti-tamper screw kit	
High temperature alarm	
Pressure alarms (low, high)	

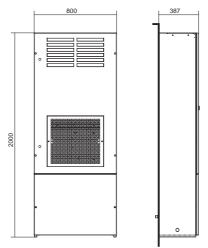
Features	UoM	EMOA0MMEB	EMOA0NMEB
Cooling capacity EN14511 - A35A35	W	9400	9850
Cooling capacity EN14511 - A35A50	W	7000	7350
Power supply	V ~ Hz	400 3~ 50	460 3~ 60
Width	mm	800	800
Height	mm	2000	2000
Depth	mm	387	387
Max current	А	9.1	10.3
Inrush current	А	30.7	32.5
T Fuse	А	18	18
Power draw EN14511 - A35A35	W	3650	4380
Power draw EN14511 -A35A50	W	5400	6340
Operating cycle	-	100%	100%
Electrical connection	-	Cable L = 3 m	Cable L = 3 m
R134a Refrigerant	kg	2.3	2.3
Max refrigeration circuit pressure	bar	27	27
External air fan capacity	m³/h	2900	2900
Cabinet air fan capacity	m³/h	2900	2900
Internal temperature range	°C	+20 - +46	+20 - +46
Temperature regulation	-	Electromechanical thermostat, factory set to 35°C	
External temperature range	°C	-20 - +50	-20 - +50
EN60529 ingress protection - cabinet side	-	IP54	IP54
EN60529 ingress protection - ambient side	-	IP34*	IP34*
Noise level	dB (A)	77	77
Weight	kg	180	180
Colour	-	RAL 7035 em	bossed effect
Conformity	-	C€	C€

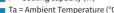
<sup>\*</sup> IP54 rated exterior electrical connections

#### Performance (EMOA0MMEB)





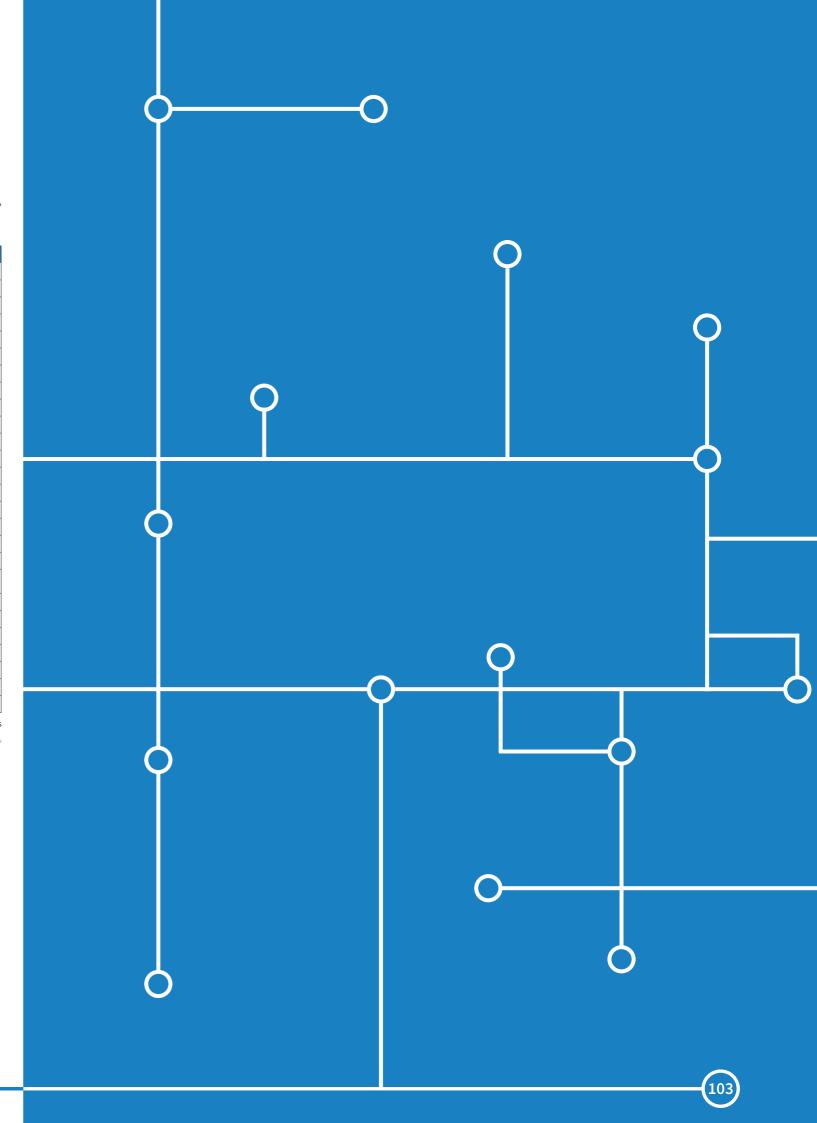




■ Ta = Ambient Temperature (°C)

Ti = Internal cabinet temperature (°C)





### **BLU-BIT**

Air-water heat exchangers for door or wall and roof installation

High cooling power capacities with reduced unit sizes, completely free from scheduled maintenance. These are the main features of the BLU-BIT range, the best choice of air conditioner when working in extreme temperature environments with dust and oil contamination.



### **BLU-BIT**

Air-water heat exchangers for door or wall and roof installation

#### WIDE RANGE OF POWER OUTPUTS

The range of cooling power outputs ranges from 1000 to 25000 W for the vertical range, while the roof range is represented by a 2500 W model.

#### NO SCHEDULED MAINTENANCE

The special layout of these machines means they do not require regular/scheduled maintenance (replacement of filters or cleaning of the heat exchanger) to guarantee full operation.

#### OPTIMISED PROTECTION OF THE CABINET

BLU/BIT heat exchangers, thanks to their innovative design combined with the correct application of the self-adhesive sealing gasket, guarantees IP55 ingress protection (EN 60529), meaning they are ideal for particularly contaminated outdoor environments.

#### **ENVIRONMENTAL PROTECTION**

BLU/BIT heat exchangers use water as the heat transfer medium. As this is a natural product, the environmental impact is guaranteed to be permanently low. Moreover, these machines are extremely quiet, contributing to help keep the noise level of the environments where they are installed low.

#### **SUPPLY VOLTAGES**

The supply voltages for cooling capacities up to 4500 W are 230V single phase and 115V single phase, both in 50-60Hz dual frequency. For higher power models, the available voltages are 230V single phase and 400/440V dual phase, both in 50-60Hz dual frequency.

#### PAINT/COATING

The standard colour is RAL 7035 textured. The coating is epoxy powder coating. On request, non-standard colours are also available. Stainless-steel versions are also available on request.

#### **ACCESSORIES**

In order to optimise the heat exchange on the basis of the temperature required inside the enclosure, avoid using water unnecessarily and allow correct condensate management, thermostats and/or level indicators can be incorporated to control an ON/OFF solenoid valve which will allow or inhibit the water flow.





#### **Application tips**

- These machines allow the relationship between cooling power and volume to be maximised.
- The air-water heat exchangers are ideal for particularly dirty environments thanks to their IP rating.
- In order to allow correct operation, it must be possible to connect to an existing water supply or else it must be possible to connect these machines to water chillers.
- BLU/BIT heat exchangers allow cooling of the cabinet interior to below the ambient temperature, which can be up to 70°C·
- When choosing the heat exchanger, keep a 10% margin over and above the most demanding operating conditions foreseen.

- Seal the cabinet well. The presence of any cracks would lead to excessive condensate production and would lower the protective effect of the heat exchanger when operating in particularly dirty environments.
- Always install the heat exchanger in the highest possible position of the cabinet in order to allow the air intake to draw in air of the highest possible temperature, optimising the heat exchange.
- When arranging the electrical/electronic layout, try to avoid blocking the air flow in order to prevent compromising the heat exchange.
- The heat exchanger power supply line must be protected with a time delay fuse or circuit breaker of suitable size on the basis of the unit's technical data.





### BIT25

Air-water heat exchangers for roof installation

**COOLING CAPACITY** 

2500 W

Conformity



Accessories	
Thermostat 20-46°C, gas bulb 15A	C16000002
Solenoid valve, NC	C15000119
Level indicator, NO	C16000140
External stainless-steel framework	
Coating in non-standard	

Features	UoM	BIT25BX0B	BIT25CX0B	
Cooling capacity - W10A35	W	2500	2500	
Water flow rate	l/h	500	500	
Power supply	V ~ Hz	230 1~ 50-60	115 1~ 50-60	
Width	mm	400	400	
Height	mm	270	270	
Depth	mm	540	540	
Max current	A	0.30	0.62	
T Fuse	A	2	2	
Power draw - W10A35	W	65	67	
Operating cycle	-	100%	100%	
Electrical connection	-	Cable L = 3 m	Cable L = 3 m	
Type of Refrigerant	-	Water	Water	
Max refrigeration circuit pressure	bar	10	10	
Water connection	-	1/2"G	1/2"G	
Air flow rate	m³/h	750	750	
Internal temperature range	°C	20-60	20-60	
External temperature range	°C	1-70	1-70	
IP rating EN60529	-	IP55	IP55	
Noise level	dB (A)	58	58	
Weight	kg	19	19	
Colour	-	RAL 7035 embossed effect		

### **BLU10**

Air-water heat exchangers for door or wall installation

#### COOLING CAPACITY

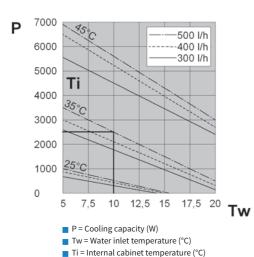
1000 W



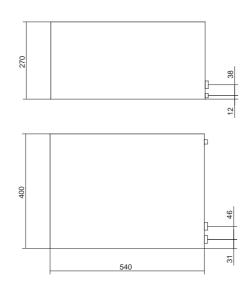
Accessories	
Thermostat 20-46°C, gas bulb 15A	C16000002
Solenoid valve, NC	C15000777
Level indicator, NO	C16000140
External stainless-steel framework	
Coating in non-standard colour	

Features	UoM	BLU10BX0B	BLU10BXUB	BLU10CX0B
Cooling capacity - W10A35	W	1000	1000	1000
Water flow rate	l/h	150	150	150
Power supply	V ~ Hz	230 1~ 50-60	230 1~ 50-60	115 1~ 50-60
Width	mm	311	311	311
Height	mm	453	453	453
Depth	mm	115	115	115
Max current	A	0.17	0.20	0.38
T Fuse	A	2	2	2
Power draw - W10A35	W	29	34	25
Operating cycle	-	100%	100%	100%
Electrical connection		Cable L = 3 m	Cable L = 3 m	Cable L = 3 m
Type of Refrigerant	-	Water	Water	Water
Max refrigeration circuit pressure	bar	10	10	10
Water connection	-	3/8"G	3/8"G	3/8"G
Air flow rate	m³/h	330	330	330
Internal temperature range	°C	20-60	20-60	20-60
External temperature range	°C	1-70	1-60	1-70
IP rating EN60529	-	IP55	IP55	IP55
Noise level	dB (A)	55	55	55
Weight	kg	12	12	12
Colour	-	RAL 7035 embossed effect		
Conformity	-	C€	(€ <b>;%)</b> ∪s	C€

#### **Performance**



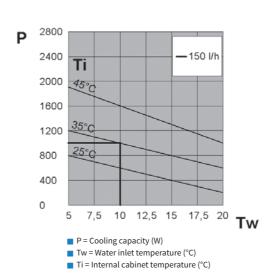
#### **Dimensions**

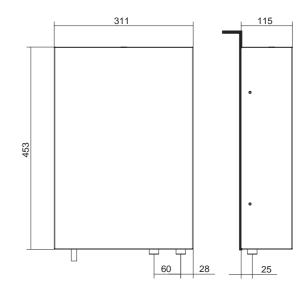


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#### **Performance**







### BLU18

Air-water heat exchangers for door or wall installation

#### **COOLING CAPACITY**

1750 W



Accessories	
Thermostat 20-46°C, gas bulb 15A	C16000002
Solenoid valve, NC	C15000119
Level indicator, NO	C16000140
External stainless-steel framework	
Coating in non-standard colour	

Features	UoM	BLU18BX0B	BLU18BXUB	BLU18CX0B
Cooling capacity - W10A35	W	1750	1750	1750
Water flow rate	l/h	150	150	150
Power supply	V ~ Hz	230 1~ 50-60	230 1~ 50-60	115 1~ 50-60
Width	mm	398	398	398
Height	mm	901	901	901
Depth	mm	137	137	137
Max current	A	0.36	0.30	0.76
T Fuse	А	2	2	2
Power draw - W10A35	W	75	60	77
Operating cycle	-	100%	100%	100%
Electrical connection	-	Cable L = 3 m	Cable L = 3 m	Cable L = 3 m
Type of Refrigerant	-	Water	Water	Water
Max water circuit pressure	bar	10	10	10
Water connection	-	1/2"G	1/2"G	1/2"G
Air flow rate	m³/h	570	570	570
Internal temperature range	°C	20-60	20-60	20-60
External temperature range	°C	1-70	1-60	1-70
IP rating EN60529	-	IP55	IP55	IP55
Noise level	dB (A)	58	58	58
Weight	kg	18	18	18
Colour	-	RAL 7035 embossed effect		
Conformity	-	C€	(€ <b>;\$1</b> ′us	C€

### **BLU25**

Air-water heat exchangers for door or wall installation

#### **COOLING CAPACITY**

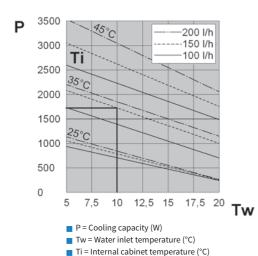
2500 W



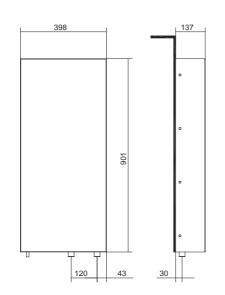
Accessories	
Thermostat 20-46°C, gas bulb 15A	C16000002
Solenoid valve, NC	C15000119
Level indicator, NO	C16000140
External stainless-steel framework	
Coating in non-standard colour	

Features	UoM	BLU25BX0B	BLU25BXUB	BLU25CX0B
Cooling capacity - W10A35	W	2500	2500	2500
Water flow rate	l/h	500	500	500
Power supply	V ~ Hz	230 1~ 50-60	230 1~ 50-60	115 1~ 50-60
Width	mm	398	398	398
Height	mm	901	901	901
Depth	mm	137	137	137
Max current	A	0.33	0.60	0.74
T Fuse	A	2	2	2
Power draw - W10A35	W	80	100	82
Operating cycle	-	100%	100%	100%
Electrical connection		Cable L = 3 m	Cable L = 3 m	Cable L = 3 m
Type of Refrigerant	-	Water	Water	Water
Max refrigeration circuit pressure	bar	10	10	10
Water connection	-	1/2"G	1/2"G	1/2"G
Air flow rate	m³/h	860	860	860
Internal temperature range	°C	20-60	20-60	20-60
External temperature range	°C	1-70	1-60	1-70
IP rating EN60529	-	IP55	IP55	IP55
Noise level	dB (A)	58	58	58
Weight	kg	19	19	19
Colour	-	RAL 7035 embossed effect		
Conformity	-	CE	CE : <b>91</b> 1us	C€

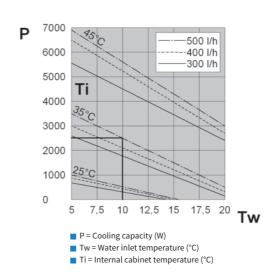
#### **Performance**

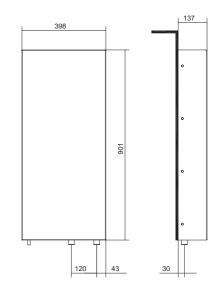


#### **Dimensions**



#### **Performance**











## BLU35

Air-water heat exchangers for door or wall installation

#### **COOLING CAPACITY**

#### 3500 W



Accessories	
Thermostat 20-46°C, gas bulb 15A	C16000002
Solenoid valve, NC	C15000119
Level indicator, NO	C16000140
External stainless-steel framework	
Coating in non-standard colour	

Features	UoM	BLU35BX0B	BLU35BXUB	BLU35CX0B
Cooling capacity - W10A35	W	3500	3500	3500
Water flow rate	l/h	500	500	500
Power supply	V ~ Hz	230 1~ 50-60	230 1~ 50-60	115 1~ 50-60
Width	mm	398	398	398
Height	mm	1148	1148	1148
Depth	mm	163	163	163
Max current	A	0.55	0.80	1.12
T Fuse	А	2	2	2
Power draw - W10A35	W	130	140	135
Operating cycle	-	100%	100%	100%
Electrical connection	-	Cable L = 3 m	Cable L = 3 m	Cable L = 3 m
Type of Refrigerant	-	Water	Water	Water
Max liquid circuit pressure	bar	10	10	10
Water connection	-	1/2"G	1/2"G	1/2"G
Air flow rate	m³/h	1050	1050	1050
Internal temperature range	°C	20-60	20-60	20-60
External temperature range	°C	1-70	1-60	1-70
IP rating EN60529	-	IP55	IP55	IP55
Noise level	dB (A)	64	64	64
Weight	kg	29	29	29
Colour	-	R/	AL 7035 embossed effe	ct
Conformity	-	C€	(€ <b>:\$1</b> 1′us	C€

### BLU45

Air-water heat exchangers for door or wall installation

#### **COOLING CAPACITY**

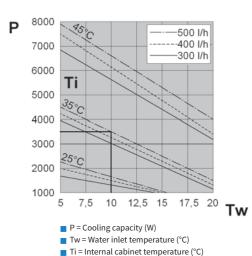
#### 4500 W



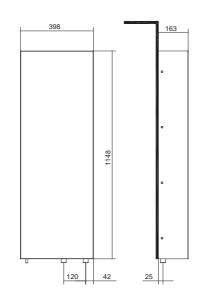
Accessories	
Thermostat 20-46°C, gas bulb 15A	C16000002
Solenoid valve, NC	C15000119
Level indicator, NO	C16000140
External stainless-steel framework	
Coating in non-standard colour	

Fortuna		DILLATOVOD	DILLASDAND	DILLAFOVOD
Features	UoM	BLU45BX0B	BLU45BXUB	BLU45CX0B
Cooling capacity - W10A35	W	4500	4500	4500
Water flow rate	l/h	500	500	500
Power supply	V ∼ Hz	230 1~ 50-60	230 1~ 50-60	115 1~ 50-60
Width	mm	398	398	398
Height	mm	1148	1148	1148
Depth	mm	163	163	163
Max current	A	0.71	1.20	1.50
T Fuse	A	2	4	4
Power draw - W10A35	W	160	220	170
Operating cycle	-	100%	100%	100%
Electrical connection		Cable L = 3 m	Cable L = 3 m	Cable L = 3 m
Type of Refrigerant	-	Water	Water	Water
Max refrigeration circuit pressure	bar	10	10	10
Water connection	-	1/2"G	1/2"G	1/2"G
Air flow rate	m³/h	1450	1450	1450
Internal temperature range	°C	20-60	20-60	20-60
External temperature range	°C	1-70	1-60	1-70
IP rating EN60529	-	IP55	IP55	IP55
Noise level	dB (A)	69	69	69
Weight	kg	30	30	30
Colour	-	I	RAL 7035 embossed effec	t
Conformity	-	CE	(€ ₽ <b>У</b> ∪s	C€

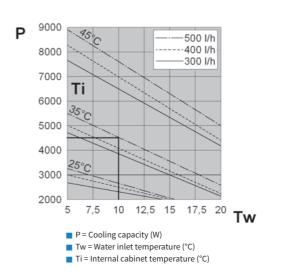
#### **Performance**

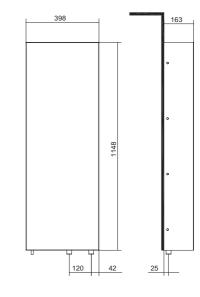


#### **Dimensions**



#### **Performance**







## BLU60

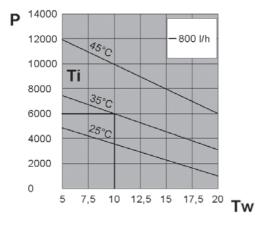
Air-water heat exchangers for door or wall installation

COOLING CAPACITY

6000 W

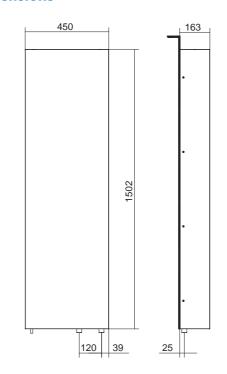


#### **Performance**



- P = Cooling capacity (W)
- Tw = Water inlet temperature (°C)
- Ti = Internal cabinet temperature (°C)

_				•			
Di	m		n	21		n	C
$\boldsymbol{\omega}$		_		31	u		-



Features	UoM	BLU60BX0B	BLU60BXUB	BLU60CX0B	BLU60GX0B
Cooling capacity - W10A35	W	6000	6000	6000	6000
Water flow rate					
	l/h	800	800	800	800
Power supply	V ~ Hz	230 1~ 50-60	230 1~ 50-60	115 1~ 50-60	400/440 2~ 50-60
Width	mm	450	450	450	450
Height	mm	1502	1502	1502	1502
Depth	mm	163	163	163	163
Max current	A	0.71	1.20	1.50	0.40
T Fuse	A	2	4	4	1
Power draw - W10A35	w	160	220	170	170
Operating cycle	-	100%	100%	100%	100%
Electrical connection		Cable L = 3 m	Cable L = 3 m	Cable L = 3 m	Cable L = 3 m
Type of Refrigerant	-	Water	Water	Water	Water
Max liquid circuit pressure	bar	10	10	10	10
Water connection	m³/h	1/2"G	1/2"G	1/2"G	1/2"G
Air flow rate	-	1450	1450	1450	1450
Internal temperature range	°C	20-60	20-60	20-60	20-60
External temperature range	°C	1-70	1-60	1-70	1-70
EN60529 ingress protection - cabinet side	-	IP55	IP55	IP55	IP55
Noise level	dB (A)	69	69	69	69
Weight	kg	40	40	40	42
Colour	-		RAL 7035 en	bossed effect	•
Conformity	-	C€	(E : <b>91</b> /us	(E	CE

Accessories	
Thermostat 20-46°C, gas bulb 15A	C16000002
Solenoid valve, NC	C15000119
Level indicator, NO	C16000140
External stainless-steel framework	
Coating in non-standard colour	





### **BLUA0**

Air-water heat exchangers for door or wall installation

#### **COOLING CAPACITY**

#### 10000 W



Accessories	
Thermostat 20-46°C, gas bulb 15A	C16000002
Solenoid valve, NC	C15000120
Level indicator, NO	C16000140
External stainless-steel framework	
Coating in non-standard	

Features	UoM	BLUAOBXOB	BLUA0GX0B
Cooling capacity - W10A35	W	10000	10000
Water flow rate	l/h	2000	2000
Power supply	V ~ Hz	230 1~ 50-60	400/440 2~ 50-60
Width	mm	797	797
Height	mm	1935	1935
Depth	mm	206	206
Max current	A	1.90	1.10
T Fuse	A	4	2
Power draw - W10A35	W	420	440
Operating cycle	-	100%	100%
Electrical connection	-	Cable L = 3 m	Cable L = 3 m
Type of Refrigerant	-	Water	Water
Max liquid circuit pressure	bar	10	10
Water connection	-	3/4"G	3/4"G
Air flow rate	m³/h	2900	2900
Internal temperature range	°C	20-60	20-60
External temperature range	°C	1-70	1-70
IP rating EN60529	-	IP55	IP55
Noise level	dB (A)	70	70
Weight	kg	90	90
Colour	-	RAL 7035 em	bossed effect
Conformity	-	C€	C€

### **BLUA5**

Air-water heat exchangers for door or wall installation

#### **COOLING CAPACITY**

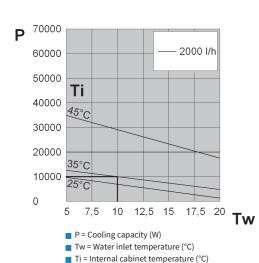
#### 15000 W



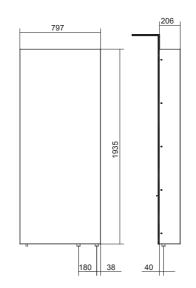
Accessories	
Thermostat 20-46°C, gas bulb 15A	C16000002
Solenoid valve, NC	C15000120
Level indicator, NO	C16000140
External stainless-steel framework	
Coating in non-standard colour	

Features	UoM	BLUA5BX0B	BLUA5GX0B
Cooling capacity - W10A35	W	15000	15000
Water capacity	l/h	2000	2000
Power supply	V ~ Hz	230 1~ 50-60	400/440 2~ 50-60
Width	mm	797	797
Height	mm	1935	1935
Depth	mm	206	206
Max current	A	1.90	1.10
T Fuse	A	4	2
Power draw - W10A35	W	420	440
Operating cycle	-	100%	100%
Electrical connection	-	Cable L = 3 m	Cable L = 3 m
Type of Refrigerant	-	Water	Water
Max liquid circuit pressure	bar	10	10
Water connection	-	3/4"G	3/4"G
Air flow rate	m³/h	2900	2900
Internal temperature range	°C	20-60	20-60
External temperature range	°C	1-70	1-70
IP rating EN60529	-	IP55	IP55
Noise level	dB (A)	72	70
Weight	kg	92	92
Colour	-	RAL 7035 en	nbossed effect
Conformity	-	CE	CE

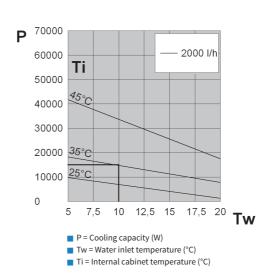
#### **Performance**

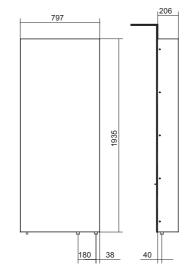


#### **Dimensions**



#### **Performance**







## **BLUB5**

Air-water heat exchangers for door or wall installation

#### COOLING CAPACITY

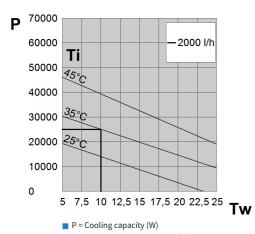
#### 25000 W



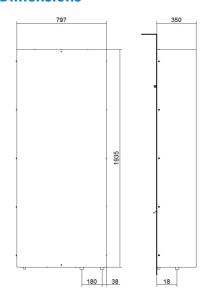
Accessories	
Thermostat 20-46°C, gas bulb 15A	C16000002
Solenoid valve, NC	C15000120
Level indicator, NO	C16000140
External stainless-steel framework	
Coating in non-standard colour	

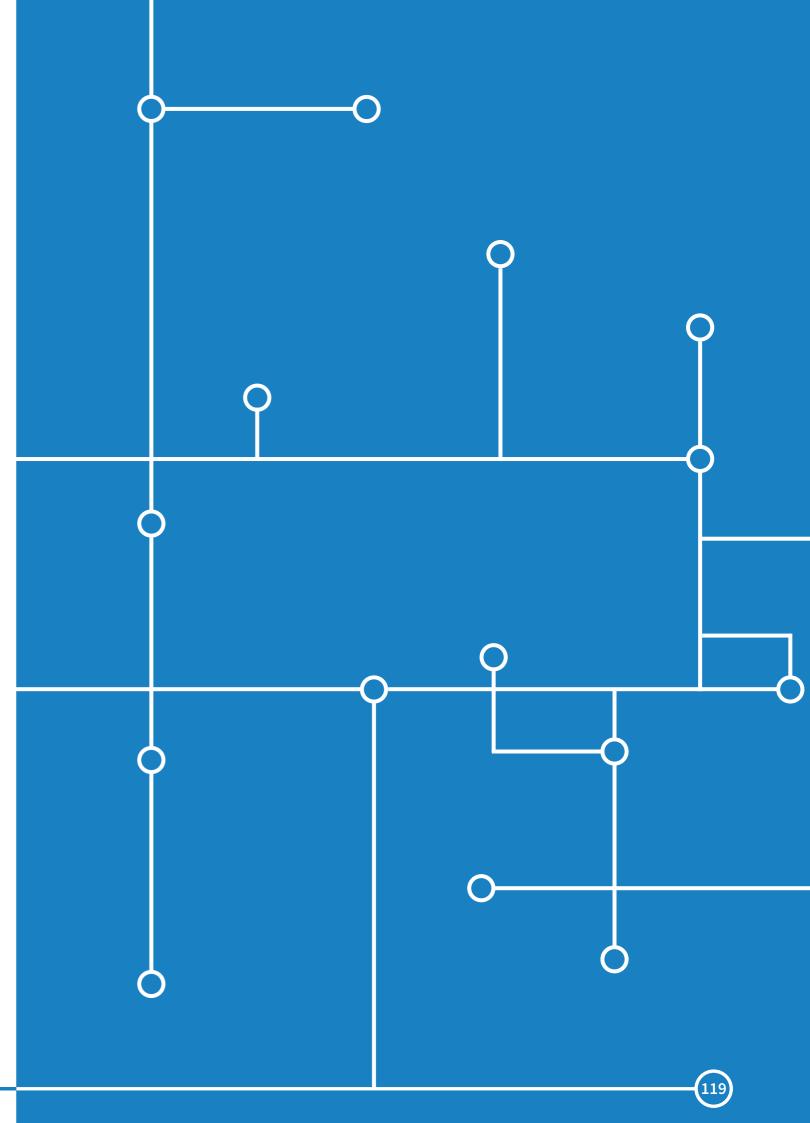
Features	UoM	BLUB5BX0B	BLUB5KX0B
Cooling capacity - W10A35	W	25000	25000
Water flow rate	l/h	2000	2000
Power supply	V ~ Hz	230 1~ 50-60	400/460 2~ 50-60
Width	mm	797	797
Height	mm	1935	1935
Depth	mm	350	350
Max current	А	2.20	1.30
T Fuse	А	4	2
Power draw - W10A35	W	500	530
Operating cycle	-	100%	100%
Electrical connection	-	Cable L = 3 m	Cable L = 3 m
Type of Refrigerant	-	Water	Water
Max liquid circuit pressure	bar	10	10
Water connection	-	3/4"G	3/4"G
Air flow rate	m³/h	5200	5200
Internal temperature range	°C	20-60	20-60
External temperature range	°C	1-70	1-70
IP rating EN60529	-	IP55	IP55
Noise level	dB (A)	75	75
Weight	kg	120	120
Colour	-	RAL 7035 em	bossed effect
Conformity	-	CE	CE

#### **Performance**



■ Tw = Water inlet temperature (°C)
■ Ti = Internal cabinet temperature (°C)









High heat exchange efficiency and compact size. The MIX range is the most cost-effective solution for cooling cabinets in favourable ambient conditions.









#### WIDE RANGE OF SPECIFIC POWER OUTPUTS

The specific thermal power outputs range from 22 to 80 W/K, covering most requirements for these products.

#### FLEXIBILITY AND SPEED OF INSTALLATION

All heat exchangers in the MIX range can be installed both inside and outside the cabinet as both a rear exit and a side exit for electrical connections is provided for. The simple drilling to be performed on the panel allows for a quick installation with the supplied accessory kit.

#### FAST, REDUCED MAINTENANCE

MIX heat exchangers are equipped with heat exchange coils which prevent clogging by solid contaminants present in the air and which maintain high thermal exchange efficiency even in demanding environmental conditions, minimising maintenance requirements. The remaining maintenance required has been designed to allow easy removal both of the fans and the heat exchanger coil to ensure quick and safe operations.

#### MAXIMUM HEAT REMOVAL

Air intake from the upper part of the cabinet, countercurrent flows and high-efficiency heat exchanger surfaces determine the most rational implementation for these products which result in the removal of the maximum amount of heat.

#### OPTIMISED PROTECTION OF THE CABINET

The monobloc implementation of the heat exchanger surfaces and the application of suitable seals ensures that the cabinet retains IP54 ingress protection.

#### RATIONAL DESIGN

All MIX heat exchangers are designed to minimise operating costs by optimising the heat exchange. Overload protection is also guaranteed by appropriate devices.

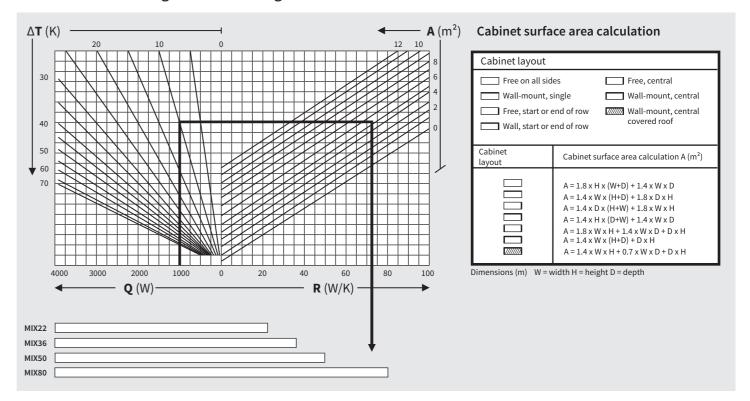
#### **SUPPLY VOLTAGES**

All versions are available with 230V single phase or 115V single phase power supply as standard, both in 50-60 Hz dual frequency. DC versions or two-phase AC versions are available on request.

#### PAINT/COATING

The standard colour is RAL 7035 textured. The coating is epoxy powder coating. Non-standard colours and stainless-steel versions are available on request.

#### Air-air heat exchanger selection diagram



Q = Heat output to dissipate

R = Specific cooling power

 $\Delta T$  = Temperature differential

A = Cabinet surface area

#### **Example:**

Dissipated power 1000 W
Temperature differential 10 K
Cabinet surface area 5 m<sup>2</sup>

Unit chosen MIX80



#### **Application tips**

- If the outside air temperatures are much lower than the internal temperature required for the cabinet, air-air heat exchangers from the MIX range are advisable, particularly if the air outside the cabinet contains contaminants such as emulsions, powders or chemical substances which must not enter the cabinet under any circumstances.
- When choosing a heat exchanger, keep a margin of safety of at least 10%, taking the most demanding conditions of operation into account.
- Seal the cabinet thoroughly as any cracks or other openings would reduce the level of protection offered by the heat exchanger.
- Install the heat exchanger on the door or the wall, but always in the highest possible position in order to ensure that air is taken in from the top part of the cabinet, where a high temperature area is created. This solution is essential to obtain the maximum performance from the heat exchanger.

- Always try to facilitate the air flow inside the electrical cabinet when designing the layout of the components by preventing any obstructions in the air inlet-outlet areas. Moreover, components with internal ventilation of their own must have their air flow arranged so as to not impede the air flow of the air conditioner.
- The standard version of the heat exchanger has no equipment for controlling the interior cabinet temperature: if your equipment must work within a specific temperature range, or you simply wish to save energy, choose the version with adjustable thermostat.





# MIX22 Air-air heat exchangers

**SPECIFIC COOLING POWER** 

22 W/K



Accessories	
Thermostat 0-60°C, normally open, 10A	AAFTO12
Thermostat 5-60°C, change-over contact, 10A	AAWTS10
External stainless-steel framework	
Coating in non-standard	

Features	UoM	MIX22BX0B	MIX22CX0B	
Specific cooling power	W/K	22	22	
Power supply	V ∼ Hz	230 1~ 50-60	115 1~ 50-60	
Width	mm	189	189	
Height	mm	413	413	
Depth	mm	149	0.96 2	
Max current	A	0.5		
T Fuse	A	1		
Power draw	W	72	80	
Operating cycle	-	100%	100%	
Electrical connection	-	Cable L = 3 m	Cable L = 3 m	
External air fan capacity	m³/h	280	280	
Cabinet air fan capacity	m³/h	280	280	
Temperature limits	°C	-5+55	-5+55	
EN60529 ingress protection - cabinet side	-	IP54	IP54	
Noise level	dB (A)	59	60	
Weight	kg	7	7	
Colour	-	RAL 7035 embossed effect		
Conformity		CF	CE	

# MIX36 Air-air heat exchangers

#### **SPECIFIC COOLING POWER**

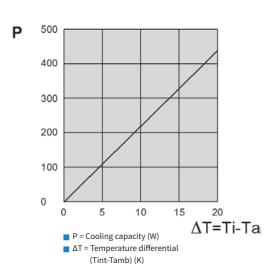
36 W/K



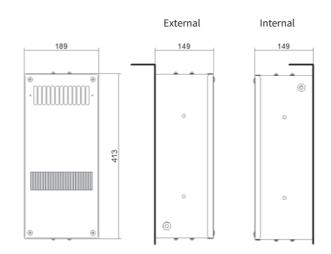
Accessories	
Thermostat 0-60°C, normally open, 10A	AAFTO12
Thermostat 5-60°C, change-over contact, 10A	AAWTS10
External stainless-steel framework	
Coating in non-standard colour	

Features	UoM	MIX36BX0B	MIX36CX0B	
Specific cooling power	W/K	36	36	
Power supply	V ~ Hz	230 1~ 50-60	115 1~ 50-60	
Width	mm	316	316	
Height	mm	771	771	
Depth	mm	103	103	
Max current	А	0.64	1.12	
T Fuse	А	1	2	
Power draw	W	140	150	
Operating cycle	-	100%	100%	
Electrical connection	-	Cable L = 3 m	Cable L = 3 m	
External air fan capacity	m³/h	570	570	
Cabinet air fan capacity	m³/h	570	570	
Temperature limits	°C	-5+55	-5+55	
EN60529 ingress protection - cabinet side	-	IP54	IP54	
Noise level	dB (A)	67	67	
Weight	kg	10	10	
Colour	-	RAL 7035 embossed effect		
Conformity	-	C€	C€	

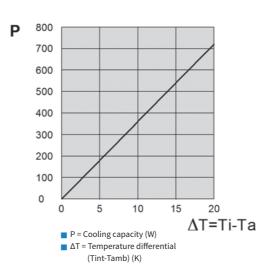
#### **Performance**

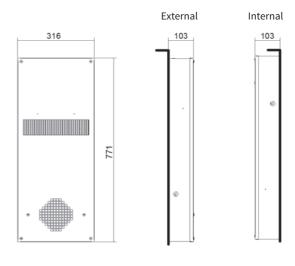


#### **Dimensions**



#### **Performance**







# MIX50 Air-air heat exchangers

**SPECIFIC COOLING POWER** 

50 W/K



Accessories	
Thermostat 0-60°C, normally open, 10A	AAFTO12
Thermostat 5-60°C, change-over contact, 10A	AAWTS10
External stainless-steel framework	
Coating in non-standard colour	

Features	UoM	MIX50BX0B	MIX50CX0B
Specific cooling power	W/K	50	50
Power supply Width		230 1~ 50-60	115 1~ 50-60
		316	316
Height	mm	771	771
Depth	mm	103	103
Max current	A	0.64	1.12
T Fuse	A	1	2
Power draw	w	140	150
Operating cycle	-	100%	100%
Electrical connection	-	Cable L = 3 m	Cable L = 3 m
External air fan capacity	m³/h	600	600
Cabinet air fan capacity	m³/h	600	600
Temperature limits	°C	-5+55	-5+55
EN60529 ingress protection - cabinet side	-	IP54	IP54
Noise level	dB (A)	67	67
Weight	kg	10	10
Colour	-	RAL 7035 em	bossed effect
Conformity	-	CE	CE

# MX80 Air-air heat exchangers

#### **SPECIFIC COOLING POWER**

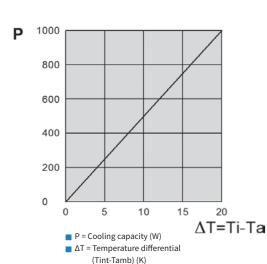
80 W/K



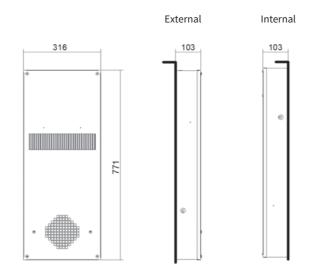
Accessories	
Thermostat 0-60°C, normally open, 10A	AAFTO12
Thermostat 5-60°C, change-over contact, 10A	AAWTS10
External stainless-steel framework	
Coating in non-standard colour	

Features	UoM	MIX80BX0B	MIX80CX0B	
Specific cooling power	W/K	80	80	
Power supply		230 1~ 50-60	115 1~ 50-60	
Width	mm	317	317	
Height	mm	1260	1260	
Depth	mm	148	148	
Max current	А	1.06	2.1	
T Fuse	А	2	4	
Power draw	W	240	255 100%	
Operating cycle	-	100%		
Electrical connection		Cable L = 3 m	Cable L = 3 m	
External air fan capacity	m³/h	1050	1050	
Cabinet air fan capacity	m³/h	1050	1050	
Temperature limits	°C	-5+55	-5+55	
EN60529 ingress protection - cabinet side	-	IP54	IP54	
Noise level	dB (A)	75	75	
Weight	kg	17 17		
Colour	-	RAL 7035 embossed effect		
Conformity	-	C€	C€	

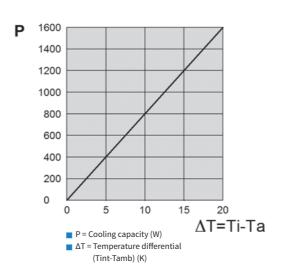
#### **Performance**

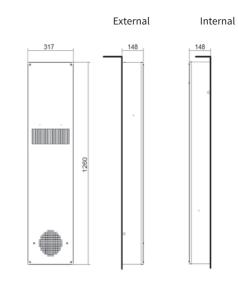


#### **Dimensions**



#### **Performance**



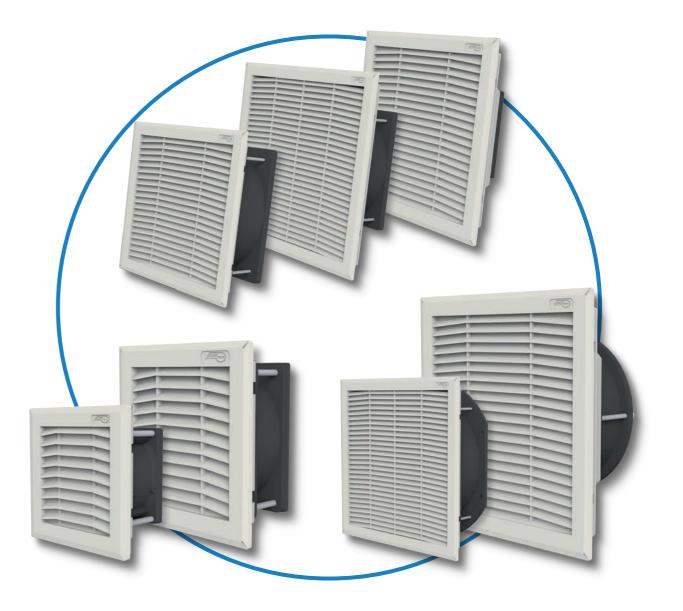






# **FAN**Ventilation units with filter

Quick installation and simple maintenance: the FAN range is **texa industries**' product range for electrical cabinet ventilation.





#### WIDE RANGE OF AIR FLOW RATES

Air flow rates range from 36 to 920 m<sup>3</sup>/h. The standard air flow direction is from the exterior to the interior of the cabinet for all ventilation units. The user can easily invert this by simply removing and reinstalling the fan in the reverse direction.

#### REDUCED EXTERNAL SIZE

The external projection is just 5 mm, in order to eliminate operational problems during transport and use of the cabinet due to excessive external dimensions.

#### **REFINED DESIGN**

As well as the attractive design of the grille, the minimal external protrusion ensures a positive aesthetic impact which supplements and improves the look of the cabinet. The grille and fan support system are made of extremely tough, self-extinguishing impact-resistant ABS, which meets UL94 V0 requirements. The standard colour is RAL 7035. On request, non-standard colours are possible for orders of sufficient quantities.

#### **OUICK INSTALLATION**

Installation is made simple and fast by making a square cut-out in the cabinet panel and by the snap fastening system which does not require fastening screws. The snap fastening system can be used on panels between 1.2 mm and 2.4 mm thick, which is virtually all. For thicknesses outside these limits, fastening can still be performed using the pack of screws included in all packs for this eventuality.

#### HIGH RELIABILITY

The fans used all feature motor shafts with bearings. High quality and with high volumetric efficiency, they have an expected lifetime of 30,000 hours at an ambient temperature of 55 °C. They all feature provision for making easy and safe electrical connections.

#### OPTIMISED PROTECTION OF THE CABINET

The special configuration of the watertight grille, the self-adhesive seal for coupling to the enclosure and the EU4 filter allow FAN units to achieve an IP54 rating. IP55 rated ingress protection can be achieved with optional accessories.

#### **SUPPLY VOLTAGE**

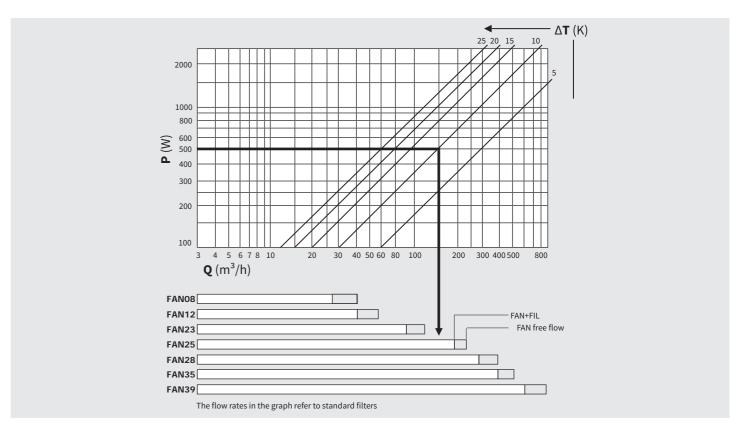
The FAN units are available for the most common supply voltages: 230V single phase, 115V single phase and 400V two phase, all 50-60Hz dual frequency; also available in 24V DC and 48V DC versions up to 230 m<sup>3</sup>/h. On request, versions for voltages not present in the catalogue can be produced for orders of sufficient quantities.

#### **FILTER UNIT**

FAN units can be used together with FIL filter meshes for expulsion of the air from the cabinet. Available in four sizes and created as the external part of the FAN unit, they allow the hot air to be expelled from the cabinet while maintaining its ingress protection rating.

### TEX

#### Selection diagram for ventilation units with filter



Q = Air flow rate

P = Power dissipated in the cabinet

 $\Delta T$  = Temperature differential

**Example:** 

Dissipated power 500 W
Temperature differential 10 K
Necessary flow rate 160 m³/h

Unit chosen FAN25



#### **Application tips**

- When choosing the FAN unit, retain a safety margin of at least 10% to take into account the decrease in flow rate caused when the fabric filter gets dirty.
- If possible, always favour the use of units with the air flow from the exterior of the cabinet to the interior. The resulting slight increase in pressure inside the cabinet prevents the ingress of dust through any unsealed cracks.
- If using a high-efficiency filter fabric, bear in mind that the air flow will be reduced.
- The use of DC powered FAN units can be the best way to prevent disturbances in monitors or other sensitive equipment inside the cabinet.

The FAN unit can be installed in conjunction with a N/O thermostat (AAFTO12) which provides power to it only when the temperature exceeds a set threshold (e.g. 35°C). The Fan operates only when it is required to provide cooling, saving energy, extending the life of the fabric filter and reducing maintenance.



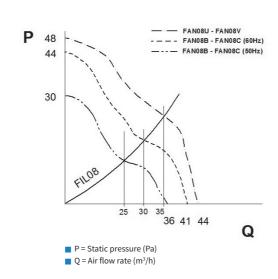
# FANO8 Ventilation units with filter

AIR FLOW RATE

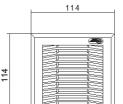
36/41 - 44 m³/h

#### **Performance**



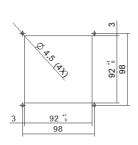


EΛ	N	1	0
ГΑ	IN	u	0



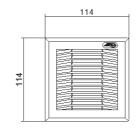


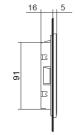
**Dimensions** 

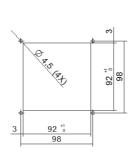


Drilling templates

FIL08







N.B.: The drilling templates are only approximate.
For any requirements, contact our technical/sales office.

Max current	А	-	0.14 - 0.13	0.07 - 0.06	0.18	0.12
Overcurrent protection	-	-	Internal motor	Internal motor	Internal motor	Internal motor
Electrical connection	-	-	Faston	Faston	Faston	Faston
Operating cycle	-	-	100%	100%	100%	100%
Temperature limits	°C	-30+75	-10+50	-10+50	-10+50	-10+50
IP rating EN60529	-	IP54	IP54	IP54	IP54	IP54
Noise level	dB (A)	-	30 - 32	30 - 32	36	36
FAN + FIL air flow rate	m³/h	-	1xFIL08XN0B: 25 - 30 1xFIL12XN0B: 28 - 33		1xFIL08XN0B: 35 1xFIL12XN0B: 38	
Air flow direction	-	-	Ext to int. Reversible	Ext to int. Reversible	Ext to int. Reversible	Ext to int. Reversible
Filter (Eurovent)	-	EU4	EU4	EU4	EU4	EU4
Motor support	-	-	Bearings	Bearings	Bearings	Bearings
Lifetime L <sub>10</sub>	h	-	45000	45000	60000	60000
Weight	kg	0.1	0.5	0.5	0.5	0.5

FAN08BN0B

36 - 41

230 1~ 50-60

114x114x64

15 - 13

 $\epsilon$ 

FAN08CN0B

36 - 41

115 1~ 50-60

114x114x64

15 - 12

RAL 7035 embossed effect

 $\epsilon$ 

FAN08UN0B

44

24 V DC

114x114x64

 $\epsilon$ 

44

48 V DC

114x114x64

CE

FIL08XN0B

114x114x21

CE

m³/h

V ~ Hz

mm

W

Accessories	
Pack of 10 fabric filters for FAN08	AAFFN08
Pack of 10 high-efficiency fabric filters for FAN08	AAFFH08
0-60°C thermostat, normally open 10A	AAFTO12
5-60°C thermostat, change-over contact 10A	AAWTS10
Bellows kit for IP55 ingress protection	C12Z01045

Features

Air flow rate

Power supply

Power draw

Colour

Conformity

Dimensions HxWxD



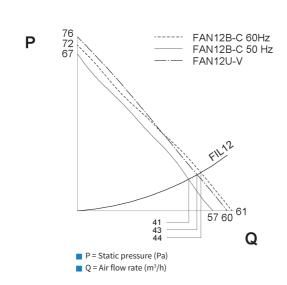
# FAN12 Ventilation units with filter

AIR FLOW RATE

57/61 - 60 m<sup>3</sup>/h

#### **Performance**





FAN12			Dimensio	ons		
	150	150	62 5 021 B	3 125 °: 131	125 " 3	
FIL12		150	19 <sub></sub> _5			Drilling templates
	150		124	3 125 °: 131	125 131	

Features	UoM	FIL12XN0B	FAN12BN0B	FAN12CN0B	FAN12UN0B	FAN12VN0B
Air flow rate	m³/h	-	57 - 61	57 - 61	60	60
Power supply	V ~ Hz	-	230 1~ 50-60	115 1~ 50-60	24 V DC	48 V DC
Dimensions HxWxD	mm	150x150x24	150x150x67	150x150x67	150x150x67	150x150x67
Power draw	W	-	21 - 18	21 - 18	7	9
Max current	А	-	0.13 - 0.11	0.28 - 0.22	0.26	0.18
Overcurrent protection	-	-	Internal motor	Internal motor	Internal motor	Internal motor
Electrical connection	-	-	Faston	Faston	Faston	Faston
Operating cycle	-	-	100%	100%	100%	100%
Temperature limits	°C	-30+75	-10+50	-10+50	-10+50	-10+55
IP rating EN60529	-	IP54	IP54	IP54	IP54	IP54
Noise level	dB (A)	-	43 - 48	43 - 48	43	43
FAN + FIL air flow rate	m³/h	-	1xFIL12XN0B: 41 - 44 1xFIL25XN0B: 47 - 51		1xFIL12XN0B: 43 1xFIL25XN0B: 49	
Air flow direction	-	-	Ext to int. Reversible	Ext to int. Reversible	Ext to int. Reversible	Ext to int. Reversible
Filter (Eurovent)	-	EU4	EU4	EU4	EU4	EU4
Motor support	-	-	Bearings	Bearings	Bearings	Bearings
Lifetime L <sub>10</sub>	h	-	45000	45000	60000	60000
Weight	kg	0.1	0.7	0.7	0.7	0.7
Colour	-	RAL 7035 embossed effect				
Conformity	-	C€	CE	C€	C€	CE

Accessories	
Pack of 10 fabric filters for FAN12	AAFFN12
Pack of 10 high-efficiency fabric filters for FAN12	AAFFH12
0-60°C thermostat, normally open 10A	AAFTO12
5-60°C thermostat, change-over contact 10A	AAWTS10
Bellows kit for IP55 ingress protection	C12Z01045

N.B.: The drilling templates are only approximate. For any requirements, contact our technical/sales office.



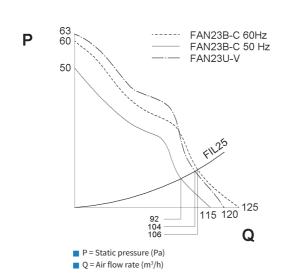
### FAN23 Ventilation units with filter

AIR FLOW RATE

115/125 - 120 m³/h

#### **Performance**

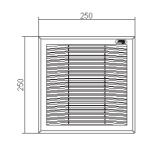


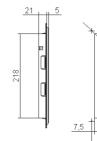


	250	97	<u>5</u>	
250		218	7.5 219 % 234	7.5 219 <sup>41</sup> 234

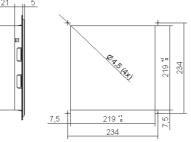
FIL25

FAN23





**Dimensions** 



Drilling templates

Features	UoM	FIL25XN0B	FAN23BN0B	FAN23CN0B	FAN23UN0B	FAN23VN0B
Air flow rate	m³/h	-	115 - 125	115 - 125	120	120
Power supply	V ~ Hz	-	230 1~ 50-60	115 1~ 50-60	24 V DC	48 V DC
Dimensions HxWxD	mm	250x250x26	250x250x102	250x250x102	250x250x102	250x250x102
Power draw	W	-	21 - 18	21 - 18	7	9
Max current	А	-	0.13 - 0.11	0.28 - 0.22	0.26	0.18
Overcurrent protection	-	-	Internal motor	Internal motor	Internal motor	Internal motor
Electrical connection	-	-	Faston	Faston	Faston	Faston
Operating cycle	-	-	100%	100%	100%	100%
Temperature limits	°C	-30+75	-10+50	-10+50	-10+50	-10+55
IP rating EN60529	-	IP54	IP54	IP54	IP54	IP54
Noise level	dB (A)	-	43 - 48	43 - 48	43	43
FAN + FIL air flow rate	m³/h	-	1xFIL25XN0B: 92 - 106 1xFIL35XN0B: 101 - 111		1xFIL25XN0B: 104 1xFIL35XN0B: 111	
Air flow direction	-	-	Ext to int. Reversible	Ext to int. Reversible	Ext to int. Reversible	Ext to int. Reversible
Filter (Eurovent)	-	EU4	EU4	EU4	EU4	EU4
Motor support	-	-	Bearings	Bearings	Bearings	Bearings
Lifetime L <sub>10</sub>	h	-	45000	45000	60000	60000
Weight	kg	0.4	1.1	1.1	1.1	1.1
Colour	-		F	RAL 7035 embossed effec	t	
Conformity	-	CE	C€	C€	CE	C€

Accessories	
Pack of 10 fabric filters for FAN23-25	AAFFN25
Pack of 10 high-efficiency fabric filters for FAN23-25	AAFFH25
0-60°C thermostat, normally open 10A	AAFTO12
5-60°C thermostat, change-over contact 10A	AAWTS10
Bellows kit for IP55 ingress protection	C12Z01049

N.B.: The drilling templates are only approximate. For any requirements, contact our technical/sales office.





### FAN25 Ventilation units with filter

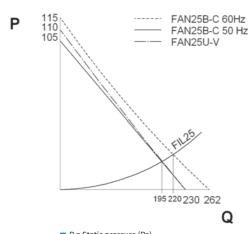
**AIR FLOW RATE** 

230/262 - 230 m<sup>3</sup>/h

#### **Performance**



FAN25



■ P = Static pressure (Pa) Q = Air flow rate (m<sup>3</sup>/h)

**Dimensions** 

1				
-	-	Faston	Faston	Faston
-	-	100%	100%	100%
°C	-30+75	-10+50	-10+50	-10+50
-	IP54	IP54	IP54	IP54
dB (A)	-	56 - 58	56 - 58	50
m³/h	-	2xFIL25XN0	)B: 215 - 233	1xF 2xF 1xF
-	-	Ext to int. Reversible	Ext to int. Reversible	Ext to int. Reversible
-	EU4	EU4	EU4	EU4
-	-	Bearings	Bearings	Bearings
h	-	45000	45000	60000
kg	0.4	1.4	1.4	1.4
-			RAL 7035 embossed effec	t
-	CE	C€	C€	C€
AAF	FN25			
	- °C - dB (A) m³/h h kg		100%  °C -30+75 -10+50  - IP54 IP54  dB (A) - 56 - 58  m³/h - 2xFIL25XNC 1xFIL35XNC EXt to int. Reversible  - EU4 EU4  Bearings h - 45000  kg 0.4 1.4  - C €	- 100% 100% 100%  °C -30+75 -10+50 -10+50  - IP54 IP54 IP54 IP54  dB (A) - 56 - 58 56 - 58  m³/h - 1xFIL25XNOB: 195 - 220 2xFIL25XNOB: 215 - 233 1xFIL35XNOB: 205 - 228  EU4 EU4 EU4  - Bearings Bearings  h - 45000 45000  kg 0.4 1.4 1.4  - RAL 7035 embossed effect

UoM

m³/h

V ∼ Hz

mm

W

Α

FIL25XN0B

250x250x26

FAN25BN0B

230 - 262

230 1~ 50-60

250x250x114

45 - 40

0.35 - 0.28

Internal motor

FAN25CN0B

230 - 262

115 1~ 50-60

250x250x114

45 - 40

0.65 - 0.55

Internal motor

FAN25UN0B

230

24 V DC

250x250x114

23

0.95

Internal motor

FAN25VN0B

230

48 V DC

250x250x114

20

0.42

Internal motor

Faston 100%

-10+55

IP54

50

Reversible

EU4

Bearings

60000

1.4

CE

1xFIL25XN0B: 195 2xFIL25XN0B: 215 1xFIL35XN0B: 205

	250	7.5 219 ° 234	234
FIL25			Drilling templates
N.B.: The drilling templates are only appro For any requirements, contact our technica	250  250  87  Simate.  Weales office	7.5 219 'i Sp. 234	234

Accessories	
Pack of 10 fabric filters for FAN23-25	AAFFN25
Pack of 10 high-efficiency fabric filters for FAN23-25	AAFFH25
0-60°C thermostat, normally open 10A	AAFTO12
5-60°C thermostat, change-over contact 10A	AAWTS10
Bellows kit for IP55 ingress protection	C12Z01049

Features

Air flow rate

Power supply

Power draw

Max current

Dimensions HxWxD

Overcurrent protection



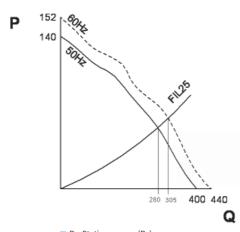
### FAN28 Ventilation units with filter

AIR FLOW RATE

400 - 440 m³/h

#### **Performance**



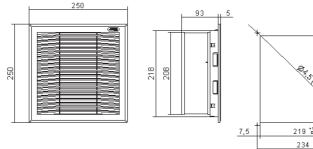


■ P = Static pressure (Pa) Q = Air flow rate (m<sup>3</sup>/h)

Features	UoM	FIL25XN0B	FAN28BN0B	FAN28CN0B	FAN28LN0B
Air flow rate	m³/h	-	400 - 440	400 - 440	400 - 440
Power supply	V ~ Hz	-	230 1~ 50-60	115 1~ 50-60	400 3~ 50-60
Dimensions HxWxD	mm	250x250x26	250x250x98	250x250x98	250x250x98
Power draw	W	-	85 - 115	85 - 115	85 - 115
Max current	А	-	0.38 - 0.50	0.70 - 0.90	0.18 - 0.18
Overcurrent protection	-	-	Internal motor	Internal motor	Internal motor
Electrical connection	-	-	Faston	Faston	Terminal board
Operating cycle	-	-	100%	100%	100%
Temperature limits	°C	-30+75	-10+50	-10+50	-10+50
IP rating EN60529	-	IP54	IP54	IP54	IP54
Noise level	dB (A)	-	61 - 63	61 - 63	61 - 63
FAN + FIL air flow rate	m³/h	-		1xFIL25XN0B: 280 - 305 2xFIL25XN0B: 297 - 318 1xFIL35XN0B: 308 - 332	
Air flow direction	-	-	Ext to int. Reversible	Ext to int. Reversible	Ext to int. Reversible
Filter (Eurovent)	-	EU4	EU4	EU4	EU4
Motor support	-	-	Bearings	Bearings	Bearings
Lifetime L <sub>10</sub>	h	-	45000	45000	45000
Weight	kg	0.4	2.7	2.7	2.7
Colour	-		RAL 7035 em	bossed effect	
Conformity	-	CE	C€	CE	C€

FAN28

#### **Dimensions**



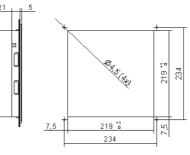
219 1

Drilling templates

FIL25

	250
250	





N.B.: The drilling templates are only approximate. For any requirements, contact our technical/sales office.

Accessories	
Pack of 10 fabric filters for FAN23-25	AAFFN25
Pack of 10 high-efficiency fabric filters for FAN23-25	AAFFH25
0-60°C thermostat, normally open 10A	AAFTO12
5-60°C thermostat, change-over contact 10A	AAWTS10
Bellows kit for IP55 ingress protection	C12Z01049



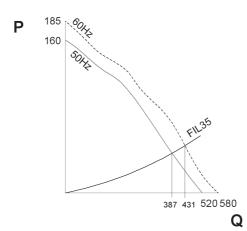
# FAN35 Ventilation units with filter

AIR FLOW RATE

520 - 580 m³/h

#### **Performance**





P = Static pressure (Pa)
 Q = Air flow rate (m³/h)

Features	UoM	FIL35XN0B	FAN35BN0B	FAN35CN0B	FAN35LN0B	
Air flow rate	m³/h	-	520 - 580	520 - 580	520 - 580	
Power supply	V ~ Hz	-	230 1~ 50-60	115 1~ 50-60	400 3~ 50-60	
Dimensions HxWxD	mm	325x325x28	325x325x153	325x325x153	325x325x153	
Power draw	w	-	85 - 115	85 - 115	85 - 115	
Max current	А	-	0.38 - 0.50	0.70 - 0.90	0.18 - 0.18	
Overcurrent protection	-	-	Internal motor	Internal motor	Internal motor	
Electrical connection	-	-	Faston	Faston	Terminal board	
Operating cycle	-	-	100%	100%	100%	
Temperature limits	°C	-30+75	-10+50	-10+50	-10+50	
IP rating EN60529	-	IP54	IP54	IP54	IP54	
Noise level	dB (A)	-	61 - 63	61 - 63	61 - 63	
FAN + FIL air flow rate	m³/h	-	1xFIL35XN0B: 387 - 431	1xFIL35XN0B: 387 - 431	1xFIL35XN0B: 387 - 431	
Air flow direction	-	-	Ext to int. Reversible	Ext to int. Reversible	Ext to int. Reversible	
Filter (Eurovent)	-	EU4	EU4	EU4	EU4	
Motor support	-	-	Bearings	Bearings	Bearings	
Lifetime L <sub>10</sub>	h	-	45000	45000	45000	
Weight	kg	0.6	3.1	3.1	3.1	
Colour	-	RAL 7035 embossed effect				
Conformity	-	CE	CE	CE	C€	

AAFFN35

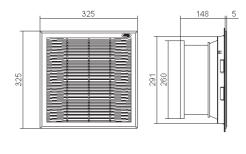
AAFTO12

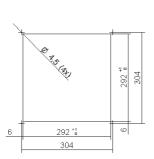
AAWTS10

C12Z01052

FAN35

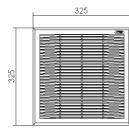
#### **Dimensions**

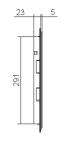




FIL35

Drilling templates





£3.4		
	292	304
292 1	9	
304		

N.B.: The drilling templates are only approximate.
For any requirements, contact our technical/sales office.



Pack of 10 fabric filters for FAN35

0-60°C thermostat, normally open 10A

5-60°C thermostat, change-over contact 10A

Bellows kit for IP55 ingress protection

Pack of 10 high-efficiency fabric filters for FAN35

# FAN39 Ventilation units with filter

AIR FLOW RATE

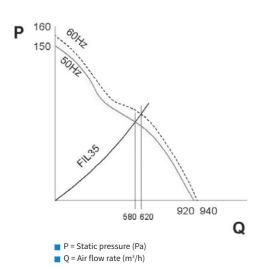
920 - 940 m³/h



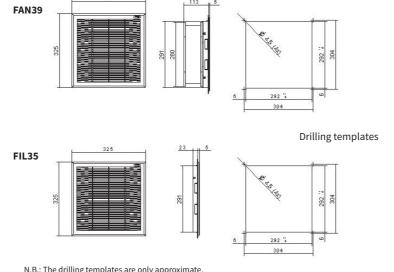
Accessories	
Pack of 10 fabric filters for FAN35	AAFFN35
Pack of 10 high efficiency fabric filters for FAN35	AAFFH35
0-60°C thermostat, normally open 10A	AAFTO12
5-60°C thermostat, change-over contact 10A	AAWTS10
Bellows kit for IP55 ingress protection	C12Z01052

Features	UoM	FIL35XN0B	FAN39BN0B	FAN39CN0B
Air flow rate	m³/h	-	920 - 940	920 - 940
Power supply	V ~ Hz	-	230 1~ 50-60	115 1~ 50-60
Dimensions HxWxD	mm	325x325x28	325x325x118	325x325x118
Power draw	W	-	105 - 140	110 - 136
Max current	A	-	0.48 - 0.62	1.10 - 1.20
Overcurrent protection	-	-	Internal motor	Internal motor
Electrical connection	-	-	Terminal board	Terminal board
Operating cycle	-	-	100%	100%
Temperature limits	°C	-30+75	-10+50	-10+50
IP rating EN60529	-	IP54	IP54	IP54
Noise level	dB (A)	-	65 - 68	65 - 68
FAN + FIL air flow rate	m³/h	-	1xFIL35XNOB: 580-620	1XFIL35XNOB 580-620
Air flow direction	-	-	Ext to int. Reversible	Ext to int. Reversible
Filter (Eurovent)	-	EU4	EU4	EU4
Motor support	-	-	Bearings	Bearings
Lifetime L <sub>10</sub>	h	-	50000	50000
Weight	kg	0.6	4.8	4.8
Colour	-	F	AL 7035 embossed effe	ect
Conformity	_	CE	CE	C€

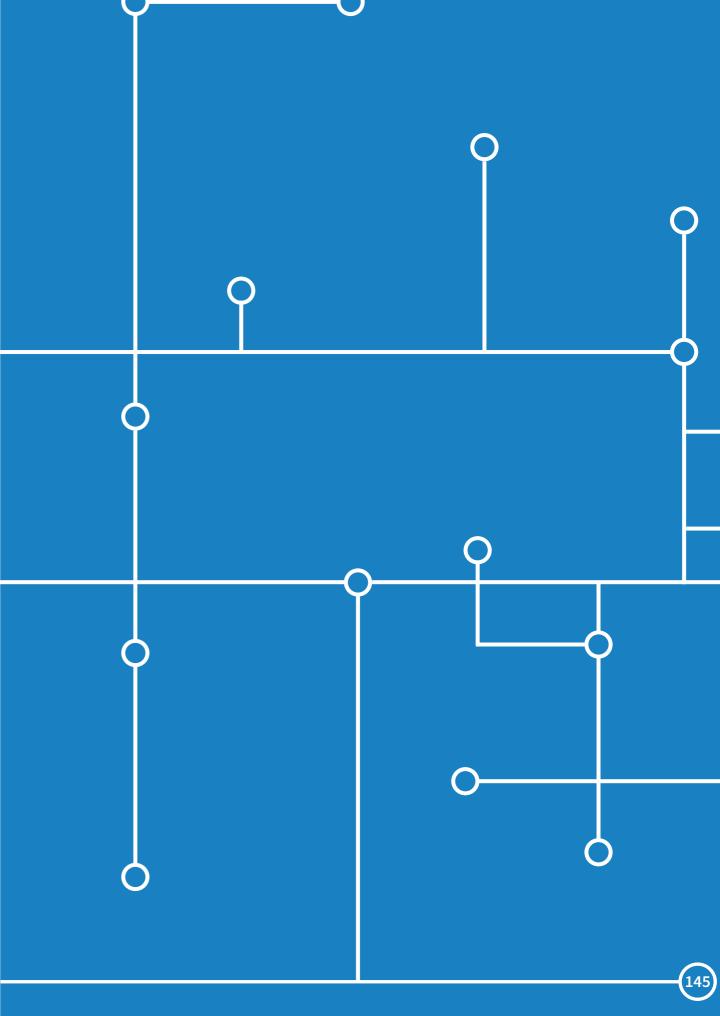
# **Performance**



# **Dimensions**



N.B.: The drilling templates are only approximate. For any requirements, contact our technical/sales office.







A tough frame combined with an attractive design sets the DLK range of roof ventilators apart.





# **APPLICATION**

Featuring easy installation and an attractive, innovative design, the DLK range of roof-mount fans are the ideal solution when there is no space on the cabinet walls, or the air flow is higher than that available with the FAN range of ventilated grilles.

# **AVAILABLE AIR FLOW RATES**

Available in 6 sizes: from 600 to 4000 m<sup>3</sup>/h. The fans used are centrifugal models with motor shafts with bearings. High quality and with high volumetric efficiency, they have an expected lifetime of 50,000 hours at an ambient temperature of 40 °C.

# HIGH IP RATING

The special configuration of the covering structure and the self-adhesive seal for coupling to the enclosure allow DLK/DLR units to achieve an IP44 rating. On request, a filter kit is available which allows an IP54 rating to be achieved.

# NATURAL VENTILATION UNIT

A version without fan is also available: DLR19XX0B. This is used when natural ventilation is sufficient to cool the cabinet and you wish to maintain a high IP rating for the cabinet.

# **AVAILABLE POWER SUPPLIES**

DLK roof-mount fans are available for 230V and 115V single-phase power supplies. On request, versions for supply voltages not present in the catalogue can be produced for orders of sufficient quantities.

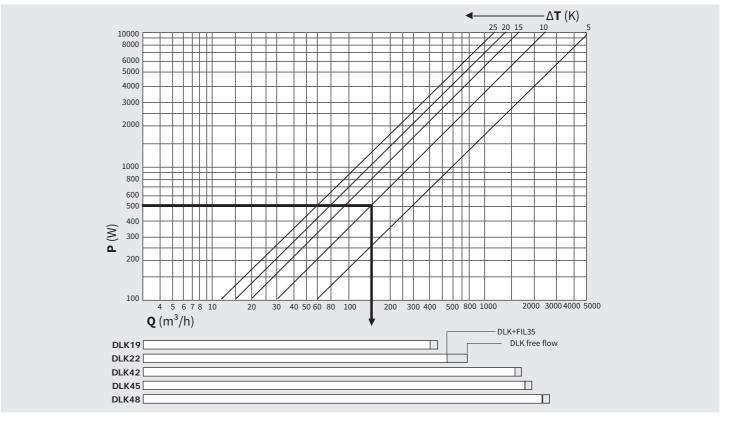
# LOW NOISE LEVEL

Reduction of noise levels is a precise criteria aimed for when developing the DLK units. They have been designed to minimise disturbance from noise and thus help provide quiet working environments.

# FILTER UNIT

DLK roof-mount fans can be used together with the FIL35XN0B filter grille for intake of air in the cabinet.

# Selection diagram for roof-mount fans



Q = Air flow rate

P = Power dissipated in the cabinet

 $\Delta T$  = Temperature differential

Example:

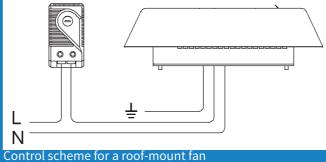
Dissipated power 500 W
Temperature differential 10 K
Necessary flow rate 160 m³/h

Unit chosen
DLK19



# **Application tips**

- When choosing the DLK roof-mount fan, retain a safety margin of at least 10% to take into account the decrease in flow rate caused when the fabric filter gets dirty.
- If using a high-efficiency filter fabric, bear in mind that the air flow will be reduced.
- The DLK roof-mount fan can be installed via a thermostat which provides power to it only when the temperature exceeds a set threshold (e.g. 35°C). In this way the fan operates only when it is needed to provide cooling, saving energy, extending the life of the fabric filter and reducing maintenance.



using AAFTO12 thermostat





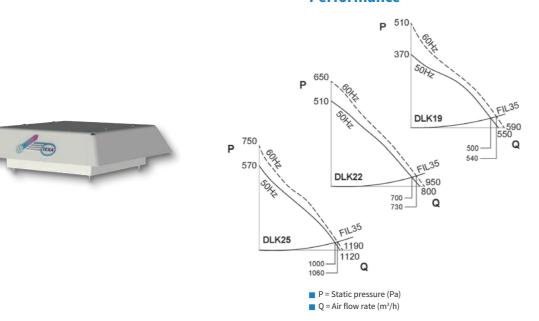


# DLK19-22-25

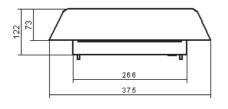
**AIR FLOW RATE** 

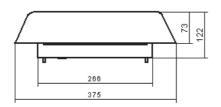
600-625 - 1050-1085 - 1380-1460 m<sup>3</sup>/h

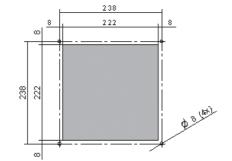
# **Performance**



# **Dimensions**







Drilling templates

N.B.: The drilling templates are only approximate. For any requirements, contact our technical/sales office.

Features	UoM	DLR19XX0B	DLK19BX0B	DLK19CX0B	DLK22BX0B	DLK22CX0B	DLK25BX0B
Air flow rate	m³/h	-	600 - 625	600 - 625	1050 - 1085	1050 - 1085	1380 - 1460
Fan+tower air flow capacity	m³/h	-	550 - 590	550 - 590	800 - 950	800 - 950	1120 - 1190
Power supply	V ~ Hz	-	230 1~ 50-60	115 1~ 50-60	230 1~ 50-60	115 1~ 50-60	230 1~ 50-60
Dimensions HxWxD	mm	122x375x375	122x375x375	122x375x375	122x375x375	122x375x375	122x375x375
Power draw	w	-	78 - 106	58 - 77	123 - 168	143 - 200	135 - 200
Max current	A	-	0.32 - 0.4	0.58 - 0.73	0.52 - 0.65	1.13 - 1.42	0.6 - 0.88
Overcurrent protection	-	-	Internal motor				
Electrical connection	-	-	Cable	Cable	Cable	Cable	Cable
Operating cycle	-	-	100%	100%	100%	100%	100%
Temperature limits	°C	-20+60	-20+60	-20+60	-20+60	-20+60	-20+60
IP rating EN60529	-	IP44	IP44	IP44	IP44	IP44	IP44
Noise level	dB (A)	-	62 - 64	62 - 64	72 - 71	72 - 71	70 - 72
DLK + FIL35XN0B air flow capacity	m³/h	-	500 - 540	500 - 540	700 - 730	700 - 730	1000 - 1060
Air flow direction	-	-	Interior to exterior				
Motor support	-	-	Bearings	Bearings	Bearings	Bearings	Bearings
Weight	kg	4	6	6	7	7	7
Colour	-	RAL 7035 embossed effect					
Conformity	-	CE	C€	C€	C€	C€	C€

Accessories	
Grille with filter 325x325 mm	FIL35XN0B
Pack of 10 fabric filters for FAN35	AAFFN35
0-60°C thermostat, normally open 10A	AAFTO12
5-60°C thermostat, change-over contact 10A	AAWTS10
Filter kit for IP54 ingress protection	C15000376





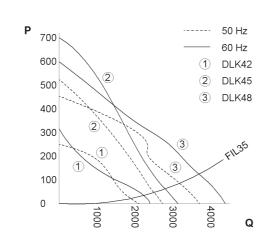
# DLK42-45-48

**AIR FLOW RATE** 

2300-2530 - 3000-3370 - 4000-4520 m<sup>3</sup>/h

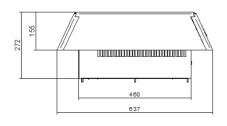
# **Performance**

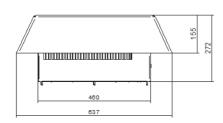


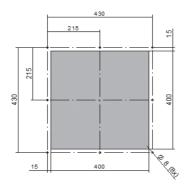


- P = Static pressure (Pa)
- Q = Air flow rate (m³/h)

# **Dimensions**







Drilling templates

Features	UoM	DLR42XX0B	DLK42BX0B	DLK45BX0B	DLK48BX0B
Fan air flow capacity	m³/h	-	2300 - 2530	3000 - 3370	4000 - 4520
Fan+tower air flow capacity	m³/h	-	2110 - 2390	2750 - 3180	3670 - 4270
Power supply	V ~ Hz	-	230 1~ 50-60	230 1~ 50-60	230 1~ 50-60
Dimensions HxWxD	mm	272x637x637	272x637x637	272x637x637	272x637x637
Power draw	w	-	240 - 340	290 - 390	340 - 420
Max current	A	-	0.9 - 1.1	1.2 - 1.4	1.7 - 1.8
Overcurrent protection	-	-	Internal motor	Internal motor	Internal motor
Electrical connection	-	-	Cable	Cable	Cable
Operating cycle	-	-	100%	100%	100%
Temperature limits	°C	-20+60	-20+60	-20+60	-20+60
IP rating EN60529	-	IP44	IP44	IP44	IP44
Noise level	dB (A)	-	62 - 64	72 - 74	71 - 74
DLK + 6 FIL35XN0B air flow capacity	m³/h	-	1920 - 2200	2520 - 2930	3340 - 3930
Air flow direction	-	-	Interior to exterior	Interior to exterior	Interior to exterior
Motor support	-	-	Bearings	Bearings	Bearings
Weight	kg	17	27	27	27
Colour	-		RAL 7035 em	bossed effect	
Conformity	-	CE	CE	CE	CE

Accessories	
Grille with filter 325x325 mm	FIL35XN0B
Pack of 10 fabric filters for FAN35	AAFFN35
0-60°C thermostat, normally open 10A	AAFTO12
5-60°C thermostat, change-over contact 10A	AAWTS10
Filter kit for IP54 ingress protection	C15X00000

N.B.: The drilling templates are only approximate. For any requirements, contact our technical/sales office.









Compatible, reliable and safe. The WID range offers a huge range of solutions for electrical cabinet heating.





# **APPLICATION**

Heaters are required to prevent faults or corrosion due to excessively low temperatures or high humidity levels inside the cabinet. These conditions can occur when the ambient temperature is low and the equipment inside the cabinet is not powered or does not dissipate sufficient heat to keep the internal temperature above a minimum threshold. Outdoor cabinets are almost always found in these conditions.

# **SAFETY**

The surface temperature is limited via PTC. This allows for safe operation and self-regulated heating power. All heaters are Class I except for the WID..ZXOP and WID..BLOT range of heaters, which are Class II.

# SPEED OF INSTALLATION

Installation is quick and easy. All units have provision for snap-on installation onto 35 mm EN 50022 DIN rail.

# **LONG LIFE**

The fan heaters are equipped with fans with shaft bearing. High quality and with high volumetric efficiency, they have an expected lifetime of 50,000 hours at an ambient temperature of 25 °C.

# FLEXIBLE POWER SUPPLY

The WID range of heaters in the catalogue have the following power supplies:

WIDZX0X	110-250 V AC/DC
WID ZX0P	110-250 V AC/DC
WIDBL0C	230 V 50/60 Hz
WIDBL0T	230 V 50/60 Hz

# **WIDE RANGE**

Compact, reliable and high performance, WID series heaters cover a range of heating outputs from 10 to 550 W and are available in four types:

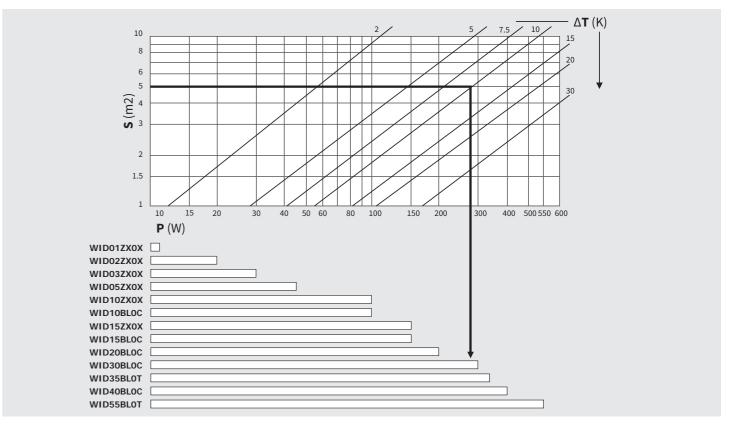
WIDZX0X	Standard
WIDZX0P	Protected surface
WIDBL0C	Compact fan

■ WID..BLOT Fan with integrated thermostat

# SPECIAL PRODUCTS

On request, versions for voltages not present in the catalogue can be produced for orders of sufficient quantities.

# Heater selection diagram



P = Heating power S = Cabinet surface area ΔT = Temperature differential

# Example:

Cabinet surface area 5 m²
Temperature differential 10 K
Heating power 280W

Unit chosen
WID30BL0C or
WID35BL0T



# **Application tips**

- In order to achieve optimum temperature control, the heaters must be controlled by a thermostat or humidistat (see Accessories)
- In order to achieve maximum efficiency, the heaters must be installed in the lower part of the cabinet with the air flow towards the top and the fan and the electrical connection at the bottom. A free space of 50 mm must be left above and below the heater.
- Thermoplastic electrical components must be kept at least 50 mm from the heater. For large cabinets, it is preferable to install multiple spread out heaters rather than one large, high-power heater. The heat will thus be better distributed.





# WID01 - 03ZX0X

Anti-condensation heaters

**HEATING POWER** 

10 - 20 - 30 W



Accessories	
Thermostat 0-60°C, normally closed, 10A	AAWTC10
Thermostat 10-60°C, change-over contact, 10A	AAWTS10
Humidistat, RH 35-95% change-over contact, 5A	AAWHS10

Features	UoM	WID01ZX0X	WID02ZX0X	WID03ZX0X
Heating power*	W	10	20	30
Power supply	V ~ Hz	110-250 V AC/DC	110-250 V AC/DC	110-250 V AC/DC
Dimensions HxWxD	mm	61x50x25	71x50x25	81x50x25
Max current	A	1	2.5	3
Heating element	-	self-regulated PTC	self-regulated PTC	self-regulated PTC
Electrical connection	-	Cable L = 0.3 m	Cable L = 0.3 m	Cable L = 0.3 m
IEC protection class	-	I	I	I
IP rating EN60529	-	IP54	IP54	IP54
Radiator	-	Extruded alu- minium profile	Extruded alu- minium profile	Extruded alu- minium profile
Clip installation for DIN rail	mm	35	35	35
Weight	kg	0.1	0.2	0.2
Conformity	-	CE	CE	CE

\* At 20 °C ambient temperature

# WID05 - 15ZX0X

**HEATING POWER** 

45 - 100 - 150 W

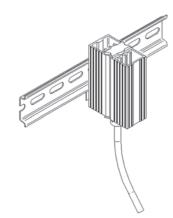


Accessories	
Thermostat 0-60°C, normally closed, 10A	AAWTC10
Thermostat 10-60°C, change-over contact, 10A	AAWTS10
Humidistat, RH 35-95% change-over contact, 5A	AAWHS10

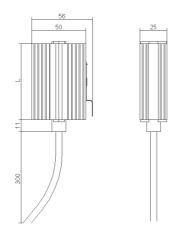
Features	UoM	WID05ZX0X	WID10ZX0X	WID15ZX0X
Heating power*	W	45	100	150
Power supply	V ~ Hz	110-250 V AC/DC	110-250 V AC/DC	110-250 V AC/DC
Dimensions HxWxD	mm	109x70x50	184x70x50	264x70x50
Max current	А	3.5	4.5	9
Heating element	-	self-regulated PTC	self-regulated PTC	self-regulated PTC
Electrical connection	-	3 pole Terminal board	3-pole Terminal board	3-pole Terminal board
IEC protection class	-	I	I	I
IP rating EN60529	-	IP20	IP20	IP20
Radiator	-	Extruded alumin- ium profile	Extruded alumin- ium profile	Extruded alumin- ium profile
Clip installation for DIN rail	mm	35	35	35
Weight	kg	0.3	0.5	0.7
Conformity	-	CE	(€	(€

\* At 20 °C ambient temperature

# **Dimensions**



W mm	
WID01ZX0X	
WID02ZX0X	
WID03ZX0X	



Facilitated installation with quick-connection terminals

# **Dimensions**

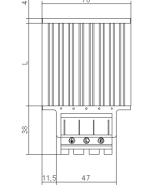
65

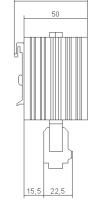
140

220

WID05ZX0X

WID10ZX0X





# WID05 - 15ZX0P

Anti-condensate heaters with protected surface

**HEATING POWER** 

50 - 100 - 150 W



Accessories	
Thermostat 0-60°C, normally closed, 10A	AAWTC10
Thermostat 10-60°C, change-over contact, 10A	AAWTS10
Humidistat, RH 35-95% change-over contact, 5A	AAWHS10

Features	UoM	WID05ZX0P	WID10ZX0P	WID15ZX0P
Heating power*	W	50	100	150
Power supply	V ~ Hz	110-250 V AC/DC	110-250 V AC/DC	110-250 V AC/DC
Dimensions HxWxD	mm	110x60x90	150x60x90	150x60x90
Max current	A	2.5	4.5	8
T Fuse	A	4	8	8
Heating element	-	self-regulated PTC	self-regulated PTC	self-regulated PTC
Electrical connection	-	4-pole Terminal board	4-pole Terminal board	4-pole Terminal board
IEC protection class	-	II	II	II
IP rating EN60529	-	IP20	IP20	IP20
Casing	-	Plastic UL94 V-0	Plastic UL94 V-0	Plastic UL94 V-0
Clip installation for DIN rail	mm	35	35	35
Weight	kg	0.3	0.4	0.4
Conformity	_	CF	CF	CF

\* At 20 °C ambient temperature

# WID..BLOT

Anti-condensate fan heaters with thermostat

**HEATING POWER** 

350 - 550 W

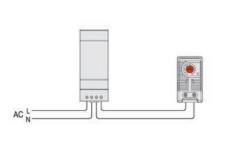


Accessories	
Thermostat 10-60°C, change-over contact, 10A	AAWTS10
Humidistat, RH 35-95% change-over contact, 5A	AAWHS10

Features		UoM	WID35BL0T	WID55BL0T
Heating power*		W	350	550
Power supply		V ~ Hz	230 1~ 50-60	230 1~ 50-60
Max current		А	11.0	13.0
Dimensions HxWxD		mm	165x100x128	165x100x128
Heating element		-	self-regulated PTC	self-regulated PTC
	Capacity	m³/h	35	35
Fan	Support	-	Bearings	Bearings
	Lifetime at 25°C	h	50,000	50,000
Electrical protection		-	For fault on fan	For fault on fan
Temperature limits		°C	0-60	0-60
Electrical connection		-	2-pole terminal board	2-pole terminal board
IEC protection class		-	II	II
IP rating EN60529		-	IP20	IP20
Clip installation for DIN rail		mm	35	35
Weight		kg	0.9	1.1
Conformity		-	C€	C€

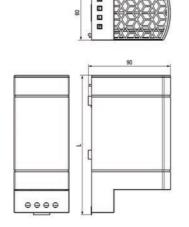
\* At 20 °C ambient temperature

# **Dimensions**

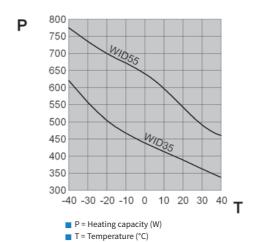


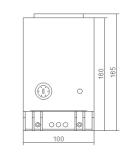
Connection example

W mm	
WID05ZX0P	110
WID10ZX0P	150
WID15ZX0P	150

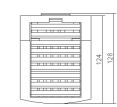


# **Dimensions**









# WID.BLOC Compact anti-condensate fan heaters

**HEATING POWER** 

100 - 150 - 200 - 300 - 400 W



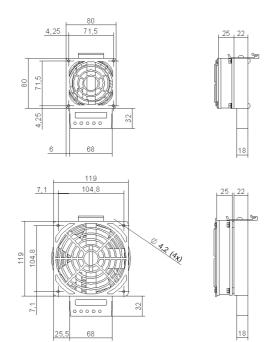


Composition of the heater-fan assembly

# **Dimensions**

WID10BL0C WID15BL0C

WID20BL0C WID30BL0C WID40BL0C



Features	UoM	WID10BL0C	WID15BL0C	WID20BL0C	WID30BL0C	WID40BL0C
Heating power	W	100	150	200	300	400
Power supply	V ∼ Hz	230 1~ 50-60	230 1~ 50-60	230 1~ 50-60	230 1~ 50-60	230 1~ 50-60
Dimensions HxWxD	mm	112x80x47	112x80x47	151x119x47	151x119x47	151x119x47
Heating element	-	High-efficiency heater cartridge	High-efficiency heater cartridge	High-efficiency heater cartridge	High-efficiency heater cartridge	High-efficiency heater cartridge
Сарас	ty m³/h	35	35	108	108	108
Fan Suppo	rt -	Bearings	Bearings	Bearings	Bearings	Bearings
Lifetime at 25	°C h	50,000	50,000	50,000	50,000	50,000
Electrical protection	-	For fault on fan	For fault on fan			
Outlet air temperature*	°C	45	45	45	45	45
Heating element electrical connection	-	3-pole terminal board				
Fan electrical connection	-	2-pole terminal board				
IEC protection class	-	1	1	1	1	I
IP rating EN60529	-	IP20	IP20	IP20	IP20	IP20
Radiator	-	Die-cast aluminium	Die-cast aluminium	Die-cast aluminium	Die-cast aluminium	Die-cast aluminium
Clip installation for DIN rail	mm	35	35	35	35	35
Weight	kg	0.6	0.6	0.9	0.9	0.9
Conformity	-	C€	C€	C€	C€	C€

\* 50 mm above element

Accessories	
0-60°C thermostat, normally closed 10A	AAWTC10
10-60°C thermostat, change-over contact 10A	AAWTS10
Humidistat RH 35-95%, change-over contact 5A	AAWHS10



# **ACCESSORIES**

**FILTERS** 



Models	Item code	Quantity per pack	Models	Item code	Quantity per pack
EGO04	AAEFP04	5	EGOA5	C15002900	5
EGO06	AAEFP06	5	DEK04	C15000171	5
EGO08-10	AAEFP10	5	DEK08	C15000173	5
EGO12-16-20	C15000163	5	DEK12-15-20	AADFP12	5
EGO30-40	C15000183	5	DEK30-40	AADFP30	5
EGO60	C15000175	5	SKY10-15-20	C15000181	5
EGO80-A0	C15000188	5			

## FILTERS



Models	Item code	Quantity per pack	Models	Item code	Quantity per pack
EGO04	AAEFM04	1	EGOA5	C15002497	1
EGO06	AAEFM06	5	DEK04	C15000172	1
EG008-10	AAEFM10	1	DEK08	C15000174	1
EGO12-16-20	C15000164	1	DEK12-15-20	AADFM12	1
EGO30-40	C15000185	1	DEK30-40	AADFM30	1
EGO60	C15000176	1	SKY10-15-20	C15000182	1
EGO80-A0	C15000189	1			

# AAEFP/AADFP

# PU foam filter for air conditioners

**texa industries** air conditioners are designed not to require maintenance and are supplied without filters for the external air intake. However, when the ambient air is particularly contaminated by oily aerosols or particles, users can choose to insert a filter in the space provided at the rear of the intake grille. These filters are made from an alveolar polyurethane foam with highly stable mechanical and chemical properties.

# AAEFM/AADFM

# Reusable air filters for air conditioners

In extreme environmental conditions, the air conditioners can be fitted with metal air filters. They provide less efficient filtration than the PU foam filters, but have the advantage that they are regenerable. They can be cleaned with degreaser and reused as many times as the user wishes. They are made from an aluminium mesh.





# **ACCESSORIES**

**FILTERS** 



Models	Item code	Quantity per pack
FAN08-FIL08	AAFFN08	10
FAN12-FIL12	AAFFN12	10
FAN23-FAN25-FAN28-FIL25	AAFFN25	10
FAN35-FAN39-FIL35	AAFFN35	10

**FILTERS** 



Models	Item code	Quantity per pack
FAN08-FIL08	AAFFH08	10
FAN12-FIL12	AAFFH12	10
FAN23-FAN25-FAN28-FIL25	AAFFH25	10
FAN35-FAN39-FIL35	AAFFH35	10

# **AAFFN**

# Replacement fabric filters for FAN units

These are the standard fabric filters for the FAN units. To keep the performance of these fan units as high as possible, it is necessary to regularly check the level of clogging of the fabric filters, replacing them with new ones when necessary. The fabric filters are made from self-extinguishing synthetic fibres, with a tight weave and with progressive filtration power. The filtration efficiency can reach 91%. Level of filtration EU4.

# **AAFFH**

# **High-efficiency fabric filters**

These high-efficiency fabric filters are used for environments with fine dust. Using these fabric filters increases the degree of protection of the fan units, however the air flow rate is reduced from the nominal capacity. The filtration efficiency can reach 97%. Level of filtration EU5.







# **ACCESSORIES**

# **THERMOSTAT**



Accessories		
Pack of 5 x device installation accessories for cabinets	-	AAWFT10

Features	UoM	AAWTC10
Field of regulation	°C	0-60
Activation differential	К	7
Contact	-	NC
Contact capacity with resistive load	A	10
Max voltage	V	250 AC
Dimensions HxWxD	mm	60x33x35
Sensitive element	-	Bimetallic
Electrical connection	-	2-pole terminal board (2.5 mm²)
Operating temperature limit	°C	-45+80
IP rating EN60529	-	IP20
Clip installation for DIN rail	mm	35
Weight	g	40
Conformity	-	CE

# **THERMOSTAT**



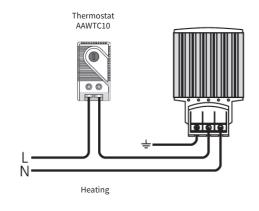
	Electrical cor
	Operating te
	IP rating EN6
	Clip installat
AAWFT10	Weight
AAWFIIU	

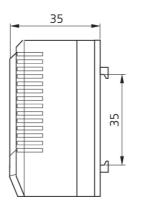
Features	UoM	AAFTO12
Field of regulation	°C	0-60
Activation differential	К	7
Contact	-	NO
Contact capacity with resistive load	А	10
Max voltage	V	250 AC
Dimensions HxWxD	mm	60x33x35
Sensitive element	-	Bimetallic
Electrical connection	-	2-pole terminal board (2.5 mm²)
Operating temperature limit	°C	-45+80
IP rating EN60529	-	IP20
Clip installation for DIN rail	mm	35
Weight	g	40
Conformity	_	CF

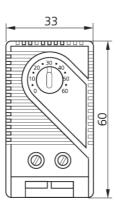
# **AAWTC10**

Compact thermostat, fast snap-on installation, with a wide field of regulation.

It has a normally closed contact and is used primarily for controlling anti-condensate heaters.





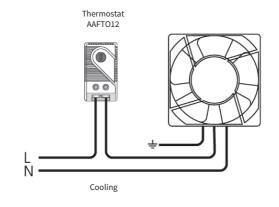


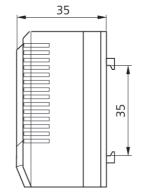
# AAFTO12

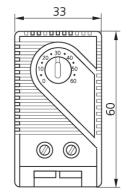
Pack of 5 x device installation accessories

Compact thermostat, fast snap-on installation, with a wide field of regulation.

It has a normally open contact and is used primarily for controlling fans, heat exchangers or as a maximum temperature signal.







# **ACCESSORIES**

# **THERMOSTAT**



Accessories		
Pack of 5 x device		
installation accessories	-	AAWFT10
for cabinets		

Features	UoM	AAWTS10
Field of regulation	°C	0-60
Activation differential	К	4.0
Contact	-	Change-over
Contact capacity with resistive load	A	10
Max voltage	V	240 AC
Dimensions HxWxD	mm	64x38x51
Sensitive element	-	Bimetallic
Electrical connection	-	3-pole terminal board (2.5 mm²)
Operating temperature limit	°C	-20+80
IP rating EN60529	-	IP20
Clip installation for DIN rail	mm	35
Weight	g	50
Conformity	-	CE

# HUMIDISTAT



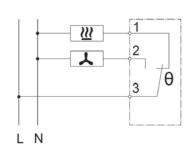
Operating temperature	°C	0-60
Field of regulation	%RH	35-95
Activation differential	%RH	4
Contact	-	Change-over
Contact capacity with resistive load	A	5
Max voltage	V	250 AC
Dimensions HxWxD	mm	67x50x38
Max permissible air speed	m/s	15
Electrical connection	-	3-pole terminal board (2.5 mm²)
Operating temperature limit	°C	0+60
IP rating EN60529	-	IP20
Clip installation for DIN rail	mm	35
Weight	g	60
Conformity	-	CE

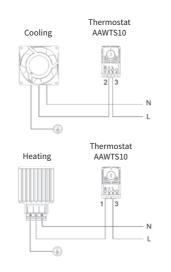
Accessories		
Pack of 5 x device		
installation accessories	-	AAWFT10
for cabinets		

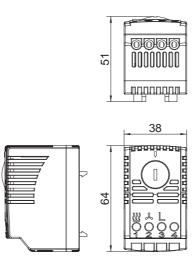
# **AAWTS10**

## **Thermostat**

Thermostat with high current capacity change-over contact



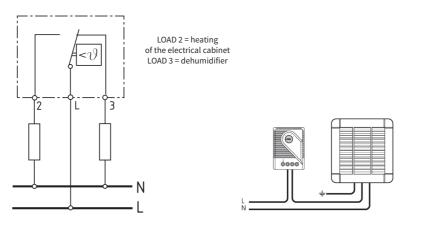


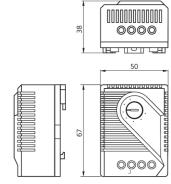


# AAWHS10

# Humidistat

Humidistat which allows the formation of condensation to be prevented, protecting the inside of the cabinet from the resulting inevitable damage. Used to control anti-condensate heaters or dehumidifiers. Features a change-over contact with high switching power.







# **TWINNED THERMOSTAT**



Field of regulation	°C	0+60/0+60
Contact	-	NC/NO
Contact capacity with resistive load	A	7
Max voltage	V	250 AC
Dimensions HxWxD	mm	67x50x46
Sensitive element	-	Bimetallic
Electrical connection	-	4-pole terminal board (2.5 mm²)
Operating temperature limit	°C	-45+80
IP rating EN60529	-	IP20
Clip installation for DIN rail	mm	35
Weight	g	90
Conformity	_	CE

Accessories		
Pack of 5 x device		
installation accessories	-	AAWFT10
for cabinets		

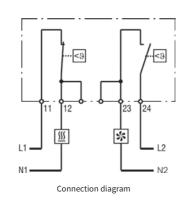
# C16000385

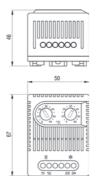
# **Twinned thermostat**

Two thermostats in a single housing:

- A thermostat with normally closed contact for regulating heating devices.
- A thermostat with normally open contact for regulating fans with filter or heat exchangers.

A version with two normally open contacts is also available









# **ACCESSORIES**

**SUPPORT** 



Features	UoM	AAWFT10
Dimensions HxWxD	mm	38x43x14
Temperature limits	°C	-45+70
Weight	g	12
Quantity per pack	-	5

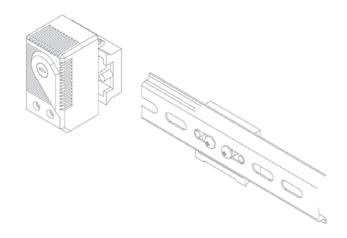


Features	UoM	C16000002
Field of regulation	°C	20-46
Activation differential	К	4.5
Contact capacity with resistive load	A	2.5 - 250V
Dimensions HxWxD	mm	43.5x38x34
Sensitive element	-	Gas bulb
Electrical connection	-	6.3x0.8mm Fastons

# **AAWFT10**

# **Device installation accessory for panels**

Plastic accessory for installing thermostats or other small devices inside electrical cabinets. It is easily applied using the adhesive strip with strong anti-ageing properties, which is able to support a continuous load of up to 500 g. It can also be used to install DIN rails.



# C16000002

**THERMOSTAT** 

# **Thermostat**

Thermostat for temperature regulation, with adjustable range of operation between 20 and 46°C. The temperature is read using a gas bulb.







# **ACCESSORIES**

**SOLENOID VALVES** 



Features	UoM	C15000119	C15000120	C15000777
Operating temperature (fluid)	°C	1-60	1-60	1-60
Water flow rate (Δp 1 bar)*	l/min	90	400	90
Max pressure	bar	15	15	15
Connection type	"	G 1/2	G 3/4	G 3/8

<sup>\*</sup> Δp = differential pressure value

# C15000119/120/777

# Solenoid Valves

Two-way servo-actuated solenoid valves with NBR membrane seal and brass body. Normally closed, they regulate the passage of water.

**LEVEL INDICATOR** 



Features	UoM	C16000140
Max temperature	°C	105
Max pressure	bar	6
Contact	-	NO
Contact rating	A	0.5
Max voltage	V	300
Dimensions	mm	L50 Ø25
Thread	11	G 1/8
Electrical connection	-	Cable L = 1m
IP rating EN60529	-	IP65

# C16000140

# **Level Indicator**

Indicator for checking the level of liquids. As the float rises, it magnetically moves an NO contact hermetically sealed inside the guide rod. The magnet is located inside the float and does not come into contact with the liquid.







**LED LIGHT** 



E. dame.	11.14	ANCTIO
Features	UoM	AALGT10
Power supply	V - Hz	100-240 V AC, 50/60Hz (min. 90 V AC, max. 265 V AC)
Power draw	w	Max. 5
Luminous flux	Lm	290 Lm at 120° (corresponding to 870 Lm at 360° or 75W for an incandescent bulb)
Light bulb	-	LED, angle of irradiation 120°
Lifetime	h	60,000 h at +20°C (+68 °F)
Connection	-	Two-pin locking plug AC: max. 2,5 A/240 V AC, colour: white
Fastening	-	Magnetic fastening
Housing	-	Plastic, transparent
Dimensions	mm	351x34x32
Weight	g	200
Ambient operating temperature	°C - °F	-30°C - +60°C (-22°F - +140°F)
Ambient storage temperature	°C - °F	-40°C - +85°C (-40°F - +185°F)
Ambient operating/ storage humidity	%RH	max. 90% RH (non-condensing)
Protection class/ IP	rating	IP20/II (double insulated)

# AALGT10

# LED light with magnetic fastening

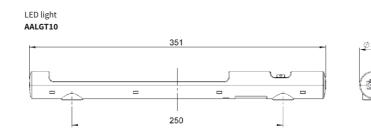
The AALGT10 range of lights can be used in all types of cabinets or panels, even where space is extremely limited. The magnetic fastening, the integrated power supply and the locking input and output plugs make installation quick, flexible and safe. Up to 10 lights can be connected in series.

LED technology guarantees a very long lamp lifetime.





series (max 10).



# PLANT 2





**HEADQUARTERS AND PLANT 1** 

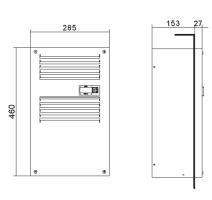
EGO version "0" range for semi-recessed installation

# **ACCESSORIES**

EGO version "0" range for semi-recessed installation

# **EGO04**

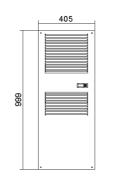
**Dimensions** 

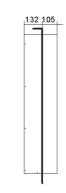




# EGO12-16-20

**Dimensions** 

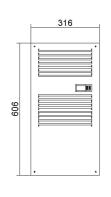






# **EGO06**

**Dimensions** 

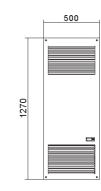


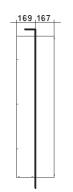


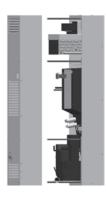


# **EGO30-40**

**Dimensions** 

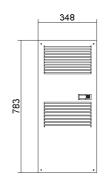






# **EGO08-10**

**Dimensions** 











**REFRIGERATION**RANGE





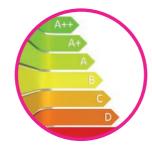
# AT THE HEART OF INNOVATION

There are numerous reasons to choose a **texa industries** cooling system

An attention to detail, a huge range of optional accessories and impressive reliability are the key characteristics which set **texa industries** industrial chillers apart.

# **ENERGY**EFFICIENCY

A polished design for the thermodynamic system and the liquid circuit, combined with the use of next-generation components make our products extremely efficient, with low energy consumption.



# **CATAPHORESIS** TREATMENT

In all particularly demanding industrial applications, in which the maximum protection is required for the components most subject to wear, we offer specific treatments able to offer extended lifetimes.



# **COOLING** PRECISION

Very high precision of the coolant temperature, with setpoint precision down to +/- 0.5 °C.





# OUTDOOR KIT

There are various kits available as standard which allow chillers to perform even in outdoor conditions with negative ambient temperatures down to -20  $^{\circ}$ C.





Higher performance fans, insulation of the liquid circuit, the highest quality electrical components and wiring covered in neoprene rubber make texa industries industrial chillers able to operate at ambient temperatures of up to +55 C°.

# **NEGATIVE** TEMPERATURES



Where temperatures of the cooling medium of as low as -30 C° are required (with 50% glycol), we offer a specific range of chillers borne from our experience in the food and industrial sectors.

# PRE-HEATING ELEMENTS



Available on all models, pre-heating elements offer maximum coolant efficiency, ensuring it is always at the correct temperature to guarantee the safety of the system.

# LIQUID CIRCUITS (STAINLESS STEEL AND BRASS)



All the liquid circuits of our industrial chillers are equipped as standard with pumps, unions and collection tanks in materials not subject to corrosion, primarily stainless steel and brass. This allows us to guarantee the maximum cleanliness and protection of your cooling circuits.





# **RECOGNISED COMPONENTS**



The possibility to design and manufacture chillers equipped with the best components which meet the safety requirements of the North American market.



# **MODBUS** COMMUNICATION

Remote management via Modbus offered as an option on our entire range of industrial chillers.

From simple application to Industry 4.0.







# SIMPLE AND COMPACT **LAYOUT**

Our experience in the field in contact with our customers allows us to create chillers with a simple yet compact layout, with easy access to all main components via removable side panels.





Special chillers for any type of process fluid (water-Oil) with redundant Multi-Compressor and Multi-Circuit technology for cooling different machines at different temperatures, all enclosed inside a single chiller.

# SAVE THE **OZONE LAYER**



Our company philosophy requires us to design and manufacture refrigeration systems in full compliance with international regulations, and most importantly with respect for the environment in which we live - Save The Ozone Layer!



Putting people at the centre of our products. We make all components requiring an interface with the operator/customer easy to use.







# ITEM CODE FORMATION

POSITION	1-3	4-5	6	7	8	9	10	11-15
CHILLER CODING	TCW	08	N	В	S	В	С	00000

1	2	3	Machine type
Т	С	W	Air-cooled water chillers
С	С	W	Water chillers with centrifugal fans
Т	W	W	Water-cooled water chillers
L	С	W	Low-temperature fluid chillers
С	L	W	Low-temperature fluid chillers with centrifugal fans
L	W	W	Water-cooled low-temperature fluid chillers
Т	С	0	Air-cooled oil chillers
С	С	0	Oil chillers with centrifugal fans
Т	W	0	Water-cooled oil chillers
Т	С	U	Air-cooled dirty fluid chillers
С	С	U	Dirty fluid chillers with centrifugal fans
Т	W	U	Water-cooled dirty fluid chillers
Т	С	1	Air-cooled immersion coil chillers
С	С	- 1	Immersion coil chillers with centrifugal fans
Т	W	ı	Water-cooled immersion coil chillers
S	W	W	Water-water heat exchangers
S	W	0	Water-oil heat exchangers
S	Α	W	Water-air heat exchanger
S	Α	0	Oil-air heat exchanger

Specific versions
TCW machine version
TCW machine version
LCW machine version
LCW machine version
TCO machine version
TCO machine version
TCU machine version
TCU machine version
TCI machine version
TCI machine version
Not present in catalogue / on request
Not present in catalogue / on request
SAW machine version

POSITION 1-3

4	5	Cooling capacity			
-	-				
DOSIT	OSITION 4-5				

6	Liquid or dimensional configuration					
N	With tank and pump					
С	With CLOSED PRESSURISED CIRCUIT tank and pump					
Р	Without tank, with pump					
D	Without tank, without pump					
F	Chiller - Without tank, with TUBE EVAPORATOR with pump					
G	Chiller - Without tank, with TUBE EVAPORATOR and without pump					
0	Horizontal (only SAW-SAO)					
R	Vertical (only SAW-SAO)					

POSITION 6

7	Power supply
Α	480V 3~ 60Hz
В	230 V 1~ 50-60 Hz
С	115 V 1~ 50-60 Hz
D	230 V 1~ 50 Hz
Е	230 V 1~ 60 Hz
F	230 V 3~ 50-60 Hz
G	400/440 V 2~ 50-60 Hz
Н	400/460 V 3~ 50-60 Hz
- 1	200 V 3~ 60 Hz
J	380 V 3~ 50 Hz
K	400/440 V 3~ 50-60 Hz
L	400 V 3~ 50-60 Hz
М	400 V 3~ 50 Hz
N	460 V 3~ 60 Hz
Р	440 V 3~ 60 Hz
Q	230 V 3~ 50 Hz
R	230 V 3~ 60 Hz
S	400 V 3+N~ 50 Hz
T	12V DC
U	24V DC
V	48V DC
Υ	380 V 3~ 60 Hz
Z	110/125V AC/DC

POSITION 7

8	Electric pump
S	Standard water pump (3 bar)
Н	HIGH-pressure water pump (5 bar)
R	MAXIMUM-pressure water pump (7 bar)
- 1	Gear oil pump
V	Screw oil pump

POSITION 8

9	Paint/coating
Α	RAL 7032 embossed effect
В	RAL 7035 embossed effect (STANDARD)
С	RAL 5015 embossed effect
D	RAL 6011 embossed effect
Е	RAL 9005 embossed effect
F	RAL 7032 gloss
G	RAL 1014 gloss
Н	RAL 5010 embossed effect
L	RAL 6011 gloss
М	RAL 6027 gloss
N	RAL 9010 gloss
Р	RAL 7037 gloss
Q	RAL 7035 gloss
R	RAL 9006 embossed effect
S	RAL 5012 gloss
Т	RAL 5012 embossed effect
V	RAL 5019 gloss
Х	Special paint/coating
9	Satin stainless-steel framework

POSITION 9

10	Availability
С	Standard catalogue item
Х	Non-standard – special order

POSITION 10

11   12   13   14   15		Optional accessories
-	IFP	Liquid circuit insulation + 2 metres of power supply cable + FP
0		No optional accessories
1	BA	Automatic bypass
2	BGP	Heat bypass with PID regulat. for Temp. precis. +/- 0.5 K
3	BGC	Heat bypass for temperature precision +/- 1 K
4	BM	Manual bypass
5	HS	Harting connector for signals
6	HP	Harting connector for power
7	RCA	Remote control contact with 230V relay
8	RCB	Remote control contact with 24V AC/DC relay
9	CNA	Additional liquid inlet/outlet
A	FW	Mechanical water/oil filter
В	FA	Metal mesh air filter
С	FL	Fluid flow switch
D	TD	Differential fluid temperature management
E	LTW	Low fluid temperature operation to -10°C
F	LTA	Low ambient temperature operation to -10°C
G	HR	Electrical preheating element
Н	LE	Electrical level indicator
I	FWS	Mechanical water/oil filter fouled signal
J	RU	Castors (2 with brakes)
K	TPR	Tropicalised version to +55°C
L	FAS	Metal mesh air filter fouled alarm signal
М	ОМ	Unit built for outdoor operation down to -10 °C ambient temp.
N	VO	External in/out machine cut-off valves
0	AV	Vibration damper supports
Р	LS	Hydraulic circuit for Laser (deionised water)
R	AR	Electrical automatic tank filling
S	ISB	Machine submerged installation kit (only with tank)
Т	LP	Low pressure switch
U	UL	Parts compliant with UL standards (unit not certified)
V	СТН	Refrigerant circuit CATAPHORESIS treatment
w	OML	Unit built for outdoor operation down to -20 °C ambient temp.
X	FP	Polyurethane air filter
Y	TS	Secondary power supply voltage - 24V DC
Z	TV	Additional temperature or remote display
POSITION 11-15		

POSITION 11-15

# ITEM CODE FORMATION

POSITION	1-3	4-5	6	7	8	9	10	11	12-15
TEMPERATURE CONTROLLER CODING	TTW	90	D	М	N	S	В	С	0000

	1	2	3	Machine type				
	Т	Т	W	Temperature controller for water				
D.C	POSITION 1-2							

4	5	Model
9	0	
9	5	

**POSITION 4-5** 

6	Liquid configuration
D	Direct
- 1	Indirect

POSITION 6

7	Power supply
Α	480V 3~ 60Hz
В	230 V 1∼ 50-60 Hz
С	115 V 1∼ 50-60 Hz
D	230 V 1~50 Hz
E	230 V 1~ 60 Hz
F	230 V 3~ 50-60 Hz
G	400/440 V 2~ 50-60 Hz
Н	400/460 V 3~ 50-60 Hz
- 1	200 V 3~ 60 Hz
J	380 V 3~ 50 Hz
K	400/440 V 3~ 50-60 Hz
L	400 V 3~ 50-60 Hz
М	400 V 3~ 50 Hz
N	460 V 3~ 60 Hz
Р	440 V 3~ 60 Hz
Q	230 V 3~ 50 Hz
R	230 V 3~ 60 Hz
S	400 V 3+N~ 50 Hz
Т	12V DC
U	24V DC
V	48V DC
Υ	380 V 3~ 60 Hz
Z	110/125V AC/DC

POSITION 7

8	Heating power
N	Without heating element
3	3 kW heating element
6	6 kW heating element
9	9 kW heating element
Α	12 kW heating element
В	Dual temperature controller, 6 kW + 12 kW
С	18 kW heating element
D	24 kW heating element
Е	36 kW heating element
F	Triple temperature controller, 18 kW + 9 kW
G	Triple temperature controller, 6 kW + 6 kW + 3 kW
Н	Triple temperature controller, 6 kW + 6 kW + 3 kW
I	Dual temperature controller, 6 kW + 3 kW
L	Dual temperature controller, 9 kW + 9 kW

# POSITION 8

9	Number of temperature controllers
S	Single
D	Double
Т	Triple
Q	Quadruple

POSITION 9

10	Paint/coating
Α	RAL 7032 embossed effect
В	RAL 7035 embossed effect (STANDARD)
С	RAL 5015 embossed effect
D	RAL 6011 embossed effect
Е	RAL 9005 embossed effect
F	RAL 7032 gloss
G	RAL 1014 gloss
Н	RAL 5010 embossed effect
L	RAL 6011 gloss
М	RAL 6027 gloss
N	RAL 9010 gloss
Р	RAL 7037 gloss
Q	RAL 7035 gloss
R	RAL 9006 embossed effect
S	RAL 5012 gloss
Т	RAL 5012 embossed effect
V	RAL 5019 gloss
Х	Special paint/coating
9	Stainless-steel framework

POSITION 10

11	Availability
С	Standard catalogue item
Х	Non-catalogue - Special

POSITION 11

12	13	14	15		Optional accessories
0					No optional accessories
J				RU	Castors (two with brakes)
N				VO	External in/out machine cut-off valves ( 4 pcs.)

POSITION 12-15





The largest range of water chillers: precise, reliable and compact. **texa industries**' answer to the main industrial process cooling requirements.



# TCW08-19 Minichiller

# **COOLING CAPACITY**

# 900-1100 - 1600-1900 - 2200-2550 W

Axial fan, complete with electrical protection and safety grille.

# LIQUID CIRCUIT

Liquid circuit composed entirely of non-ferrous material in contact with the liquid to prevent contamination. Standard liquid circuit with open reservoir and pump, protective flow switch, pressure gauge, regulation sensor. Peripheral electric pump with 4.5 bar available head. Plastic storage tank complete with drain valve and visual level indicator.

## **ELECTRICAL PANEL**

With main breaker, fused motor protection with LED visual fault indicator, voltage presence light.

## MANAGEMENT AND CONTROL

The TX110 control unit manages the chiller's operation, providing warnings including high/low temperature alarms and a general serious fault alarm, with the display indicating if this refers to the refrigeration or liquid circuit. An on-off contact allows the machine to be switched on remotely. Control disconnect switch for switching on the

## PAINT/COATING

Standard colour: RAL 7035 textured.

## MAIN ACCESSORIES (ref. page 189)

BA - Mechanical bypass valve protecting the pump

BM - Manual bypass valve protecting the pump

LE - Level indicator

LTA - Operation at low ambient temperatures

FP - Polyurethane air filter

TD - Differential fluid temperature management (two sensors)

BGC - Hot gas bypass for +/- 1 K temperature precision

LS - Liquid circuit for laser application

- HIGH-pressure pump

- Satin AISI 304 stainless steel framework

# STRUCTURE

In powder-coated steel sheet, RAL 7035 textured finish. Easily removed panel

# COMPRESSOR

Hermetic reciprocating compressor, cooled by the refrigerant, complete with thermal cut-out.

# REFRIGERATION CIRCUIT

Complete with charging port, drier filter, expansion valve, high- and low-pressure safety pressure switch, R134a refrigerant.

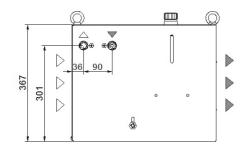
## **EVAPORATOR**

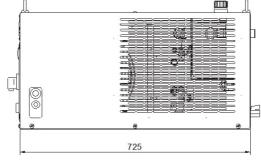
Brazed stainless-steel plate model.

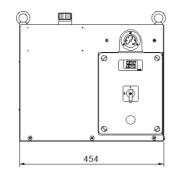
# AIR CONDENSER

Finned high-efficiency copper tube condensing coil, complete with safety grille.

# **Dimensions**







Model		TCW08		TCW12		TCW19		
		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	
Rated Cooling Capacity*	W	900	1100	1600	1900	2200	2550	
Ambient temperature operating limits	°C			+15	- +45			
Settable fluid temperature range	°C	+8 - +25						
Fluid type		Water						
Temperature precision	К			-	+/-2			
Refrigerant gas	R13	34a						
Power supply								
Supply voltage	V ph Hz			230V (+/-10%)	) 1ph 50/60Hz			
Secondary supply voltage	V			23	30			
Digital thermostat				TX	110			
Compressor								
Compressor type				Recipro	ocating			
Quantity - Number of circuits	no.			1.	- 1			
Max. power draw	kW	0.5	0.6	0.7	1.1	1	1.15	
Max. current draw	A	2.8	3.1	4.1	4.3	6	6.5	
Axial Fan								
Fan type				Ax	ial			
Quantity	no.		1	1		1		
Air flow rate	m₃/h	10	000	1000		1000		
Max. power draw	W	150	190	150	190	150	190	
Max. current draw	A	0.66	0.85	0.66	0.85	0.66	0.85	
Standard Pump								
Pump type		Peripheral						
Quantity	no.		1	1	1		1	
Nominal/max fluid flow rate	l/min	3.0 - 20.0		5.0 - 20.0		6.5 - 20.0		
Nominal available head	bar	5.4	7.6	5.2	6.7	4.6	6	
Available power draw	kW	0.75	0.75	0.75	0.75	0.75	0.75	
Max. current draw	A	2.8	3.7	2.8	3.7	2.8	3.7	
High-Pressure Pump (optional)								
Pump type			Peripheral					
Quantity	no.		1	1			1	
Nominal available head	bar	6.5	8.4	6	7.9	5.8	7.6	
Max. power draw	kW	1.29	1.29	1.29	1.29	1.29	1.29	
Max. current draw	A	5	6	5	6	5	6	
Storage tank capacity		10						
IN/OUT liquid connections		1/2"						
Net weight (approximate)***		52 54 55					i5	
Width		725						
Depth	mm	454						
Height	mm	367						
Sound pressure level**	dB(A)	į	56	5		5	56	
IP rating	IP			4	4			

- \* Data relating to operation under the following conditions: intake/outlet temperature 20/15°C, water without glycol, ambient temperature 32°C. Cooling power refers to the evaporator
  - \*\* Sound pressure level at 50Hz, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.
- \*\*\* Weight includes pallets and packaging (where provided for), with refrigerant charge, storage tank empty, axial fans.
- \*\*\*\* The electrical data refer to  $\cos \varphi = 0.8$ .

Correction factors for calculating the cooling power													
Meter cutlet town customs	Fw	°C					8	10	15	20	25		
Water outlet temperature	FW	factor					0.86	0.92	1	1.05	1.12		
Ambient Temperature	F	°C					15	20	25	32	35	40	45
Ambient Temperature	Fa	factor					1.16	1.1	1.05	1	0.97	0.91	0.84
Davisanta an alvest by weight	-	%	0	10	15	20	25	30	35	40			
Percentage glycol by weight	Fg	factor	1	0.99	0.98	0.97	0.96	0.94	0.92	0.89			



# TCW31-41 Minichiller HP

# **COOLING CAPACITY**

# 3000-3450 - 3900-4450 W



Axial fan, complete with electrical thermal protection and safety grille.

Liquid circuit composed entirely of non-ferrous material in contact with the liquid to prevent contamination. Standard liquid circuit with open reservoir and pump, protective flow switch, pressure gauge, regulation sensor. Peripheral electric pump with 4.5 bar available head. Plastic storage tank complete with drain valve and visual level indicator.

## ELECTRICAL PANEL

With main breaker, fused motor protection with LED visual fault indicator, voltage presence light.

## MANAGEMENT AND CONTROL

The TX110 control unit manages the chiller's operation, providing warnings including high/low temperature alarms and a general serious fault alarm, with the display indicating if this refers to the refrigeration or liquid circuit. An on-off contact allows the machine to be switched on remotely. Control disconnect switch for switching on the

## PAINT/COATING

Standard colour: RAL 7035 textured.

# MAIN ACCESSORIES (ref. page 189)

BA - Mechanical bypass valve protecting the pump

BM - Manual bypass valve protecting the pump LE - Electrical level indicator

LTA - Operation at low ambient temperatures

FP - Polyurethane air filter

TD - Differential fluid temperature management (two sensors)

BGC - Hot gas bypass for +/- 1 K temperature precision

- HIGH-pressure pump
- Non-standard paint/coating
- Satin AISI 304 stainless steel framework

Complete with charging port, drier filter, expansion valve, high- and low-pressure safety pressure switch, thermostatic valve. R134a refrigerant.

In powder-coated steel sheet, RAL 7035 textured

Hermetic reciprocating compressor, cooled by

the refrigerant, complete with thermal cut-out.

## **EVAPORATOR**

STRUCTURE

COMPRESSOR

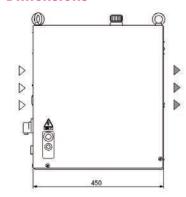
finish. Easily removed panel

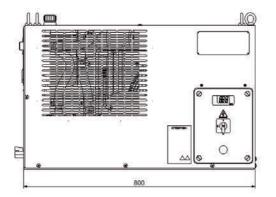
REFRIGERATION CIRCUIT

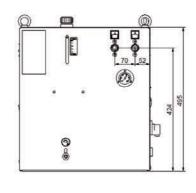
Brazed stainless-steel plate model.

Finned high-efficiency copper tube condensing coil, complete with safety grille.

# **Dimensions**







Model		TC	W31	TCI	N41					
		50Hz	60Hz	50Hz	60Hz					
Rated Cooling Capacity*	w	3000	3450	3900	4450					
Ambient temperature operating limits	°C		+15 -	+45						
Settable fluid temperature range	°C		+8 -	+25						
Fluid type			Wa	ter						
Temperature precision	K		4	<del>-</del> /-2						
Refrigerant gas	HFC		R13	34a						
Power supply										
Supply voltage	V ph Hz		230V (+/-10%)	1ph 50/60Hz						
Secondary supply voltage	V		23	30						
Digital thermostat			TX110							
Compressor										
Compressor type		Reciprocating								
Quantity - Number of circuits	no.	1-1								
Max. power draw	kW	1.15	1.5	1.6	1.92					
Max. current draw	A	6.1	8.1	7.2	8.4					
Axial Fan										
Compressor type			Ax	ial						
Quantity	no.		1		1					
Air flow rate	m₃/h	2300	2650	2300	2650					
Max. power draw	W	180	250	180	250					
Max. current draw	A	0.81	1.1	0.81	1.1					
Standard Pump										
Pump type			Perip	heral						
Quantity	no.		1		1					
Nominal/max fluid flow rate	l/min	6.5	- 20	11	- 20					
Nominal available head	bar	3.7	5.1	2.8	4.0					
Available power draw	kW	0.75	0.75	0.75	0.75					
Max. current draw	A	2.8	3.7	2.8	3.7					
High-Pressure Pump (optional)										
Pump type			Perip	heral						
Quantity	no.		1		1					
Nominal available head	bar	4.6	7.2	4.9	6.6					
Max. power draw	kW	1.29	1.29	1.29	1.29					
Max. current draw	A	5	6	5	6					
Storage tank capacity	l		1	)						
IN/OUT liquid connections	mm		1/2	2"						
Net weight (approximate)***	kg	7	74	75						
Width	mm		80	800						
Depth	mm		45	50						
Height	mm		49	95						
Sound pressure level**	dB(A)	57	60	57	60					
10.00	- 15									

- \* Data relating to operation under the following conditions: intake/outlet temperature 20/15°C, water without glycol, ambient temperature 32°C. Cooling power refers to the evaporator
- \*\* Sound pressure level at 50Hz, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.
- \*\*\* Weight includes pallets and packaging (where provided for), with refrigerant charge, storage tank empty, axial fans.
- \*\*\*\* The electrical data refer to  $\cos \varphi = 0.8$ .

Correction factors for calculating the cooling power													
Water cutlet terminature	F	°C					8	10	15	20	25		
Water outlet temperature	Fw	factor					0.86	0.92	1	1.05	1.12		
Ambient Temperature	Fa	°C					15	20	25	32	35	40	45
Ambient Temperature	га	factor					1.16	1.1	1.05	1	0.97	0.91	0.84
Davisanta as alvest by weight		%	0	10	15	20	25	30	35	40			
Percentage glycol by weight	Fg	factor	1	0.99	0.98	0.97	0.96	0.94	0.92	0.89			
Cooling power = Nominal cooling power x Fw x Fa x Fg													



# TCW15-36<sub>Size 1</sub>

# **COOLING CAPACITY**

# 1600-1900 - 2200-2550 - 3300-3900 W



Axial fan, complete with thermal cut-out and safety grille.

Liquid circuit composed entirely of non-ferrous material in contact with the liquid to prevent contamination. Peripheral electric pump, stainless-steel storage tank complete with drain valve and visual level indicator, 0-10 bar pressure gauge, protective flow switch, regulation sensor.

## **ELECTRICAL PANEL**

With main disconnect switch, fused motor protection.

# MANAGEMENT AND CONTROL

 $The TX110\ control\ unit\ manages\ the\ chiller's\ operation,\ providing\ warnings\ including\ high/low\ temperature\ alarms$ and a general serious fault alarm, with the display indicating if this refers to the refrigeration or liquid circuit. An on-off contact allows the machine to be switched on remotely. Control disconnect switch for switching on the machine.

## PAINT/COATING

Standard colour: RAL 7035 textured.

# MAIN ACCESSORIES (ref. page 189)

BA - Mechanical bypass valve protecting the pump

HR - Fluid heating element

LE - Electrical level indicator

LTA - Operation at low ambient temperatures

FP - Polyurethane air filter

RU - Castors

TD - Differential fluid temperature management (two sensors)

BGC - Hot gas bypass for +/- 1 K temperature precision

LS - Liquid circuit for laser application

 $\label{lem:complete} \begin{tabular}{lll} Complete & with & charging & port, & drier & filter, & -HIGH-pressure pump version "H" - 5 bar, version "R" - 7 bar. \\ \end{tabular}$ 

- Non-standard paint/coating

- Satin AISI 304 stainless steel framework.

# REFRIGERATION CIRCUIT

finish. Easily removed panels

thermostatic valve, high- and low-pressure pressure switch, R134a refrigerant.

In powder-coated steel sheet, RAL 7035 textured

Hermetic reciprocating compressor, cooled

by the refrigerant, complete with electrical

## **EVAPORATOR**

STRUCTURE

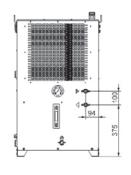
COMPRESSOR

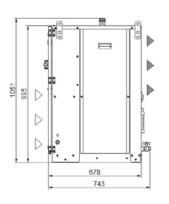
Brazed stainless-steel plate model.

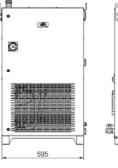
## AIR CONDENSER

Finned high-efficiency copper tube condensing coil, complete with safety grille.

# **Dimensions**







	#	*	
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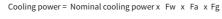
Model		TCW15 TCW22 TCW36						
		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	
Rated Cooling Capacity*	W	1600	1900	2200	2550	3300	3900	
Ambient temperature operating limits	°C		1	+15	- +45	1	1	
Settable fluid temperature range	°C			+8 -	+25			
Fluid type				Wa	iter			
Temperature precision	K			-	+/-2			
Refrigerant gas	HFC			R1	34a			
Power supply								
Supply voltage	V ph Hz			230V (+/-10%	) 1ph 50/60Hz			
Secondary supply voltage	V			23	30			
Digital thermostat				TX	110			
Compressor								
Compressor type				Recipro	ocating			
Quantity - Number of circuits	no.			1	- 1			
Max. power draw	kW	1.03	1.06	1.15	1.5	1.73	2.2	
Max. current draw	А	5.6	5.8	6.1	8.1	9.4	12	
Axial Fan								
Fan type				Ax		1	-	
Quantity	no.		1		1		1	
Air flow rate	m₃/h		- 2650		- 2650	1	- 2650	
Max. power draw	kW	0.18	0.25	0.18	0.25	0.18	0.25	
Max. current draw	A	0.81	1.1	0.81	1.1	0.81	1.1	
Centrifugal Fan (optional)					.,			
Fan type					ifugal			
Quantity	no.		2400		2400		2400	
Air flow rate	m₃/h	2100	- 2400		- 2400	2100	- 2400	
Available head	Pa				50			
Max. power draw	kW	0.15	0.21	0.15	0.21	0.15	0.21	
Max. current draw	A	0.35	0.37	0.35	0.37	0.35	0.37	
Standard Pump								
Pump type					heral			
Quantity	no.		1	:	1		1	
Nominal/max fluid flow rate	l/min	5.0	- 35	7 -	35	9 -	35	
Nominal available head	bar	3.8	4	3.7	4	3.6	4	
Max. power draw	kW	1.	.23	1.	23	1.	23	
Max. current draw	A	5	6	5	6	5	6	
High-Pressure Pump (optional)								
Pump type				Perip	heral			
Quantity	no.		1		1		1	
Nominal available head	bar	5 -	6.4	4.8	- 6	4.7	- 5.6	
Max. power draw	kW	1.	.29	1.	29	1.	29	
Max. current draw	A	5.5	6.5	5.5	6.5	5.5	6.5	
Storage tank capacity	ı			3	0			
IN/OUT liquid connections	inch				4"			
Net weight (approximate)***	kg	1	30	1		1	32	
		1		132 132 595				
Width	mm							
Depth	mm				78			
Height County Locality	mm				95	T		
Sound pressure level**	dB(A)	57	- 60	57	- 60	57	- 60	

\* Data relating to operation under the following conditions: intake/outlet temperature 20/15°C, water without glycol, ambient temperature 32°C. Cooling power refers to the evaporator

ΙP

- \*\* Sound pressure level at 50Hz, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.
- \*\*\* Weight includes pallets and packaging (where provided for), with refrigerant charge, storage tank empty, axial fans.
- \*\*\*\* The electrical data refer to  $\cos \varphi = 0.8$ .

Correction factors for calculating the cooling power													
Mater entlet terminenture	F	°C					8	10	15	20	25		
Water outlet temperature	Fw	factor					0.86	0.92	1	1.05	1.12		
Ambient Temperature	-	°C					15	20	25	32	35	40	45
Ambient Temperature	Fa	factor					1.16	1.1	1.05	1	0.97	0.91	0.84
Davantaga alwad bu waisht		%	0	10	15	20	25	30	35	40			
Percentage glycol by weight	Fg	factor	1	0.99	0.98	0.97	0.96	0.94	0.92	0.89			
Carlina and Marian Laulina and Sun San San San													





# TCW22-55 Size 1 Three Phase

# **COOLING CAPACITY**

# 2200 - 3300 - 4400 - 5300 W



Axial fan, complete with thermal cut-out and safety grille.

## LIQUID CIRCUIT

Liquid circuit composed entirely of non-ferrous material in contact with the liquid to prevent contamination. Peripheral electric pump with 3 bar available head, stainless-steel storage tank complete with drain valve and  $visual\ level\ indicator, 0\text{-}10\ bar\ pressure\ gauge, protective\ flow\ switch, regulation\ sensor.$ 

With main disconnect switch, relay motor protection, phase sequence relays.

## MANAGEMENT AND CONTROL

 $The TX110\ control\ unit\ manages\ the\ chiller's\ operation,\ providing\ warnings\ including\ high/low\ temperature\ alarms$ and a general serious fault alarm, with the display indicating if this refers to the refrigeration or liquid circuit. An on-off contact allows the machine to be switched on remotely. Control disconnect switch for switching on the machine.

## PAINT/COATING

Standard colour: RAL 7035 textured.

## MAIN ACCESSORIES (ref. page 189)

BA - Mechanical bypass valve protecting the pump

HR - Fluid heating element

LE - Electrical level indicator

LTA - Operation at low ambient temperatures

FP - Polyurethane air filter

RU - Castors

TD - Differential fluid temperature management (two sensors)

BGC - Hot gas bypass for +/- 1 K temperature precision

LS - Liquid circuit for laser application

- HIGH-pressure pump version "H" - 5 bar, version "R" - 7 bar.

- Non-standard paint/coating

- Satin AISI 304 stainless steel framework

# STRUCTURE

In powder-coated steel sheet, RAL 7035 textured finish. Easily removed panels

# COMPRESSOR

Hermetic reciprocating compressor, cooled by the refrigerant, complete with thermal cut-out.

## REFRIGERATION CIRCUIT

Complete with charging port, drier filter, thermostatic valve, high- and low-pressure pressure switch, R134a refrigerant.

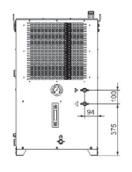
# **EVAPORATOR**

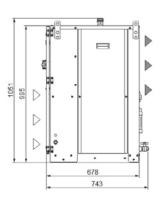
Brazed stainless-steel plate model.

## AIR CONDENSER

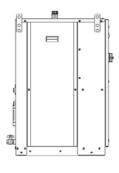
Finned high-efficiency copper tube condensing coil, complete with safety grille.

# **Dimensions**









Model		TCW22	TCW36	TCW44	TCW55				
Rated Cooling Capacity*	w	2200	3300	4400	5300				
Ambient temperature operating limits	°C		+15 -	· +45					
Settable fluid temperature range	°C		+8 -						
Fluid type			Wa						
Temperature precision	К			+/-2					
Refrigerant gas	HFC		R13						
Power supply									
Supply voltage	V ph Hz		400V (+/-109	%) 3ph 50Hz					
Secondary supply voltage	V		230						
Digital thermostat			TX1	110					
Compressor									
Compressor type			Recipro	Reciprocating					
Quantity - Number of circuits	no.		1-						
Max. power draw	kW	1.5	1.72	2.32	2.61				
Max. current draw	A	2.7	3.1	4.2	4.7				
Axial Fan									
Fan type			Ax	ial					
Quantity	no.	1	1	1	1				
Air flow rate	m₃/h	2300	2300	2050	2050				
Max. power draw	kW	0.18	0.18	0.18	0.18				
Max. current draw	A	0.81	0.81	0.81	0.81				
Centrifugal Fan (optional)									
Fan type			Centr	ifugal					
Quantity	no.	1	1	1	1				
Air flow rate	m₃/h	2100 - 2400	2100 - 2400	2100 - 2400	2100 - 2400				
Available head	Pa		50	23					
Max. power draw	W	145 - 205	145 - 205	145 - 205	145 - 205				
Max. current draw	A	0.35 - 0.37	0.35 - 0.37	0.35 - 0.37	0.35 - 0.37				
Standard Pump									
Pump type			Perip						
Quantity	no.	1	1	1	1				
Nominal/max fluid flow rate	l/min	7 - 40	9 - 40	12 - 40	15 - 40				
Nominal available head	bar	3.1	3	2.9	2.7				
Max. power draw	kW	0.47	0.47	0.47	0.47				
Max. current draw	A	1.12	1.12	1.12	1.12				
High-Pressure Pump (optional)									
Pump type			Perip						
Quantity	no.	1	1	1	1				
Nominal available head	bar	5.2	5	4.8	4.6				
Max. power draw	kW	0.68	0.68	0.68	0.68				
Max. current draw	А	1.52	1.52	1.52	1.52				
Storage tank capacity	l		3	0					
IN/OUT liquid connections	inch		3/-	4"					
Net weight (approximate)***	kg	132	132	134	135				
Width	mm		59	95					
Depth	mm		67						
Height	mm		99						
Sound pressure level**	dB(A)	57	57	57	57				
IP rating	IP		4	4					

- \* Data relating to operation under the following conditions: intake/outlet temperature 20/15°C, water without glycol, ambient temperature 32°C. Cooling power refers to the evaporator
- \*\* Sound pressure level, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.
- \*\*\* Weight includes pallets and packaging (where provided for), with refrigerant charge, storage tank empty, axial fans.
- \*\*\*\* The electrical data refer to  $\cos \phi = 0.8$ .

Correction factors for calculating the cooling power													
Mater autlet term ereture	F	°C					8	10	15	20	25		
Water outlet temperature	Fw	factor					0.86	0.92	1	1.05	1.12		
Ambient Temperature	F	°C					15	20	25	32	35	40	45
Ambient Temperature	Fa	factor					1.16	1.1	1.05	1	0.97	0.91	0.84
Davasatasa alivad huvusiaht		%	0	10	15	20	25	30	35	40			
Percentage glycol by weight	Fg	factor	1	0.99	0.98	0.97	0.96	0.94	0.92	0.89			





# TCW56-A0<sub>Size 2</sub>

# **COOLING CAPACITY**

# 6000 - 8100 - 9200 - 10900 W



In powder-coated steel sheet, RAL 7035 textured

Hermetic scroll compressor, cooled by the

Complete with charging port, liquid receiver, drier

filter, thermostatic valve, high- and low-pressure

refrigerant, complete with thermal cut-out.

# AIR CONDENSER

Finned high-efficiency copper tube condensing coil, complete with safety grille.

Axial fan, complete with thermal cut-out and safety grille.

Liquid circuit composed entirely of non-ferrous material in contact with the liquid to prevent contamination. Stainless-steel centrifugal pump with 3 bar available head. Stainless-steel storage tank complete with drain valve, electrical level and visual level indicator, 0-10 bar pressure gauge, protective flow switch, regulation sensor.

## **ELECTRICAL PANEL**

With main disconnect switch, relay motor protection, phase sequence relays.

# MANAGEMENT AND CONTROL

The TX200 control unit manages the operation of the chiller and provides complete operator alarm diagnostics. An on-off contact allows the machine to be switched on remotely. Illuminated control selector. Possibility of remote display for machine regulation.

# PAINT/COATING

Standard colour: RAL 7035 textured.

# MAIN ACCESSORIES (ref. page 189)

HR - Fluid heating element

LTA - Operation at low ambient temperatures

FP - Polyurethane air filter

RU - Castors

TD - Differential fluid temperature management (two sensors)

BGC - Hot gas bypass for +/- 1 K temperature precision

LS - Liquid circuit for laser application

- HIGH-pressure pump version "H" - 5 bar, version "R" - 7 bar.

- Non-standard paint/coating

# pressure switch, R134a refrigerant. **EVAPORATOR**

STRUCTURE

COMPRESSOR

finish. Easily removed panels

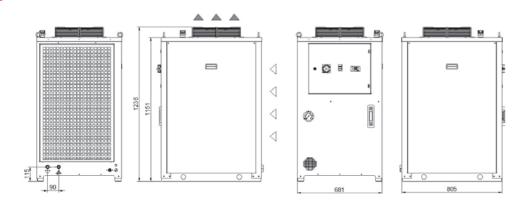
REFRIGERATION CIRCUIT

With brazed stainless-steel plates and temperature sensor for protection against

BA - Mechanical bypass valve protecting the pump

- Satin AISI 304 stainless steel framework

# **Dimensions**



Model		TCW56	TCW70	TCW91	TCWA0		
Rated Cooling Capacity*	W	6000	8100	9200	10900		
Ambient temperature operating limits	°C		+15 -	- +45			
Settable fluid temperature range	°C		+8 -	+25			
Fluid type			Wa				
Temperature precision	К			+/-2			
Refrigerant gas	HFC		R13	34a			
Power supply							
Supply voltage	V ph Hz		400V (+/-109	%) 3ph 50Hz			
Secondary supply voltage	V		230-24	4 V AC			
Digital thermostat			TX2	200			
Compressor							
Compressor type			Scr	roll			
Quantity - Number of circuits	no.		1-	- 1			
Max. power draw	kW	3.7	3.9	4.4	4.6		
Max. current draw	A	5.4	6.7	7.2	7.5		
Axial Fan							
Fan type			Ax	ial			
Quantity	no.	1	1	1	1		
Air flow rate	m₃/h	2800	2800	2800	2800		
Max. power draw	W	130	130	130	130		
Max. current draw	A	0.6	0.6	0.6	0.6		
Centrifugal Fan (optional)	7.	0.0	0.0	0.0	0.0		
-			Centr	ifugal			
Fan type Quantity	no.	1	1	1	1		
Air flow rate	m <sub>3</sub> /h	2800	2800	2800	2800		
Available head	Pa		50		30		
Max. power draw	kW	0.6	0.6	0.6	0.6		
Max. current draw	A	2.3	2.3	2.3	2.3		
Standard Pump	7.	2.10	2.0	2.10	2.0		
Pump type			Centr	ifugal			
Quantity	no.	1	1	1	1		
Nominal/max fluid flow rate	l/min	17.0 - 50.0	23.0 - 50.0	26.0 - 50.0	32.0 - 50.0		
Nominal available head	bar	3.0	2.8	2.5	2.3		
Max. power draw	kW	0.7	0.7	0.7	0.7		
Max. current draw	A	1.5	1.5	1.5	1.5		
High-Pressure Pump (optional)			-10				
Pump type			Centr	ifugal			
Quantity	no.	1	1	1	1		
Nominal available head	bar	4.8	4.5	4.3	4.1		
Max. power draw	kW	1.1	1.1	1.1	1.1		
Max. current draw	A	2.2	2.2	2.2	2.2		
The desired and the desired an		2.2	2.2	2.2	2.12		
Storage tank capacity	l l		6	0			
IN/OUT liquid connections	inch		3/-				
-		160			200		
Net weight (approximate)***	kg	160	170	190	200		
Width	mm			581			
Depth	mm			305			
Height	mm			36			
Sound pressure level**	dB(A)	60	60	60	60		
IP rating	IP		4	4			

- \* Data relating to operation under the following conditions: intake/outlet temperature 20/15°C, water without glycol, ambient temperature 32°C. Cooling power refers to the evaporator
- \*\* Sound pressure level, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.
- \*\*\* Weight includes pallets and packaging (where provided for), with refrigerant charge, storage tank empty, axial fans.
- \*\*\*\* The electrical data refer to  $\cos \varphi = 0.8$ .

Correction factors for calculating the cooling power													
Weter outlet town outline	F	°C					8	10	15	20	25		
Water outlet temperature	Fw	factor					0.86	0.92	1	1.05	1.12		
Ambient Terroreture	F	°C					15	20	25	32	35	40	45
Ambient Temperature	Fa	factor					1.16	1.1	1.05	1	0.97	0.91	0.84
Davisantana alivas I bu uusiinkt	F-	%	0	10	15	20	25	30	35	40			
Percentage glycol by weight	Fg	factor	1	0.99	0.98	0.97	0.96	0.94	0.92	0.89			





# TCWA2-A9 Size 3

Industrial water chillers

# **COOLING CAPACITY**

# 12300 - 16400 - 17800 - 20700 W



# AIR CONDENSER

Finned high-efficiency copper tube condensing coil, complete with safety grille.

### ΔΧΙΔΙ ΕΔΝ

Axial fan, complete with thermal cut-out and safety grille.

### LIQUID CIRCUI

Liquid circuit composed entirely of non-ferrous material in contact with the liquid to prevent contamination. Stainless-steel centrifugal pump with 3 bar available head. Stainless-steel storage tank complete with drain valve, electrical level and visual level indicator, 0-10 bar pressure gauge, differential pressure switch protecting the water flow, regulation sensor.

## **ELECTRICAL PANEL**

With main disconnect switch, relay motor protection, phase sequence relays.

## MANAGEMENT AND CONTROL

The TX200 control unit manages the operation of the chiller and provides complete operator alarm diagnostics. An on-off contact allows the machine to be switched on remotely. Illuminated control selector. Possibility of remote display for machine regulation.

# STRUCTURE

In powder-coated steel sheet, RAL 7035 textured finish. Easily removed panels

# COMPRESSOR

Hermetic scroll compressor, cooled by the refrigerant, complete with thermal cut-out.

## REFRIGERATION CIRCUIT

Complete with charging port, safety valve, liquid receiver, drier filter, liquid inspection port, solenoid valve, thermostatic valve, high- and low-pressure pressure switch, R410A refrigerant.

# **EVAPORATOR**

With brazed stainless-steel plates and temperature sensor for protection against freezing.

## PAINT/COATING

Standard colour: RAL 7035 textured.

# MAIN ACCESSORIES (ref. page 189)

BA - Mechanical bypass valve protecting the pump

HR - Fluid heating element

LTA - Operation at low ambient temperatures

FP - Polyurethane air filter

RU - Castors

TD - Differential fluid temperature management (two sensors)

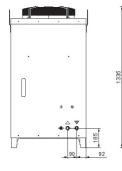
LS - Liquid circuit for laser application

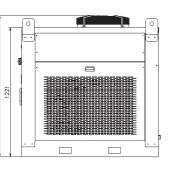
- HIGH-pressure pump version "H" - 5 bar, version "R" - 7 bar.

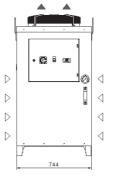
- Non-standard paint/coating

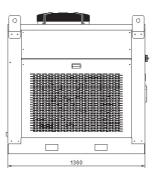
Satin AISI 304 stainless steel framework
 Temperature Precision +/- 1 K

# **Dimensions**









Model		TCWA2	TCWA4	TCWA7	TCWA9
Rated Cooling Capacity*	w	12300	16400	17800	20700
Ambient temperature operating limits	°C		+15 -	· +45	
Settable fluid temperature range	°C		+8 -	+25	
Fluid type			Wa	ter	
Temperature precision	К		-	+/-2	
Refrigerant gas	HFC			10A	
Power supply					
Supply voltage	V ph Hz		400V (+/-10°	%) 3ph 50Hz	
Secondary supply voltage	V		24 \		
Digital thermostat	•		TX2		
			1/2	200	
Compressor					
Compressor type			Scr		
Quantity - Number of circuits	no.		1-		
Max. power draw	kW	4.7	6.4	6.6	7.4
Max. current draw	A	9.8	12.1	12.5	14.8
Axial Fan					
Fan type  Ouantity		1	Ax	ial 1	1
Air flow rate	no. m₃/h	1 5700	1 5700	5700	1 5700
Max. power draw	kW	0.7	0.7	0.7	0.7
Max. current draw	A	1.4	1.4	1.4	1.4
Centrifugal Fan (optional)	, A	1.4	1,4	1.7	1.7
Fan type			Centr	ifugal	
Quantity	no.	1	1	1	1
Air flow rate	m₃/h	5700	5700	5700	5700
Available head	Pa	250	250	220	220
Max. power draw	kW	1.5	1.5	1.5	1.5
Max. current draw	A	3.0	3.0	3.0	3.0
Standard Pump					
Pump type			Centr	ifugal	
Quantity	no.	1	1	1	1
Nominal/max fluid flow rate	l/min	35.0 - 80.0	46.0 - 80.0	50.0 - 80.0	58.0 - 80.0
Nominal available head	bar	2.9	2.7	2.6	2.5
Max. power draw	kW	0.9	0.9	0.9	0.9
Max. current draw	A	1.7	1.7	1.7	1.7
High Pressure Pump					
Pump type			Centr	ifugal	
Quantity	no.	1	1	1	1
Nominal available head	bar	5.3	5.1	4.9	4.7
Max. power draw	kW	1.7	1.7	1.7	1.7
Max. current draw	A	3.0	3.0	3.0	3.0
Max. Cullett diaw	A	3.0	3.0	3.0	3.0
Storage tank canacity					
Storage tank capacity  IN/OUT liquid connections	l		15	."	
Net weight (approximate)***		260	275	300	315
Width	kg mm	200	215		213
Depth	mm		13		
Height	mm			35	
Sound pressure level**	dB(A)	67	67	67	67
<del>-</del>	- ' '				1

\* Data relating to operation under the following conditions: intake/outlet temperature 20/15°C, water without glycol, ambient temperature 32°C. Cooling power refers to the evaporator unit.

\*\* Sound pressure level, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.

\*\*\* Weight includes pallets and packaging (where provided for), with refrigerant charge, storage tank empty, axial fans.

\*\*\*\* The electrical data refer to  $\cos \varphi = 0.8$ .

IP rating

Correction factors for calculating the cooling power													
	F	°C					8	10	15	20	25		
Water outlet temperature	Fw	factor					0.86	0.92	1	1.05	1.12		
A b.:	Fa	°C					15	20	25	32	35	40	45
Ambient Temperature	Fa	factor					1.16	1.1	1.05	1	0.97	<b>40</b> 0.91	0.84
Btara abaad baaraisht		%	0	10	15	20	25	30	35	40			
Percentage glycol by weight	Fg	factor	1	0.99	0.98	0.97	0.96	0.94	0.92	0.89			
Cooling power = Nominal cooling power v Fw v Fa v Fg													





# TCWB2-C8 Size 4

Industrial water chillers

# **COOLING CAPACITY**

# 23000 - 28300 - 32800 - 37600 W



Axial fan, complete with thermal cut-out and safety grille.

In powder-coated steel sheet, RAL 7035 textured

Hermetic scroll compressor, cooled by the

refrigerant, complete with thermal cut-out.

Complete with charging port, safety valve,

liquid receiver, drier filter, liquid inspection port,

solenoid valve, thermostatic valve, high- and

low-pressure pressure switch, R410A refrigerant.

## LIQUID CIRCUIT

Liquid circuit composed entirely of non-ferrous material in contact with the liquid to prevent contamination. Stainless-steel centrifugal pump with 3 bar available head. Stainless-steel storage tank complete with drain valve, electrical level and visual level indicator, 0-10 bar pressure gauge, differential pressure switch protecting the water flow, regulation sensor.

## ELECTRICAL PANEL

With main disconnect switch, relay motor protection, phase sequence relays.

## MANAGEMENT AND CONTROL

The TX200 control unit manages the operation of the chiller and provides complete operator alarm diagnostics. An on-off contact allows the machine to be switched on remotely. Illuminated control selector. Possibility of remote display for machine regulation.

## PAINT/COATING

Standard colour: RAL 7035 textured.

# MAIN ACCESSORIES (ref. page 189)

BA - Mechanical bypass valve protecting the pump

HR - Fluid heating element

LTA - Operation at low ambient temperatures

FP - Polyurethane air filter

RU - Castors

TD - Differential fluid temperature management (two sensors)

LS - Liquid circuit for laser application

- HIGH-pressure pump version "H" - 5 bar, version "R" - 7 bar.

- Non-standard paint/coating

- Satin AISI 304 stainless steel framework

- Temperature Precision +/- 1 K

STRUCTURE

COMPRESSOR

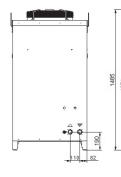
finish. Easily removed panels

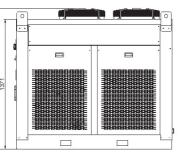
With brazed stainless-steel plates and temperature sensor for protection against freezing.

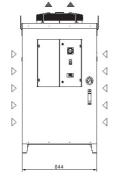
## AIR CONDENSER

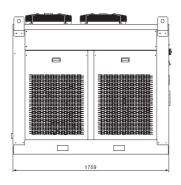
Finned high-efficiency copper tube condensing coil, complete with safety grille.

# Dimensions









Model		TCWB2	TCWB7	TCWC1	TCWC8						
Rated Cooling Capacity*	w	23000	28300	32800	37600						
Ambient temperature operating limits	°C		+15	- +45	'						
Settable fluid temperature range	°C		+8 -	+25							
Fluid type		Water									
Temperature precision	К	+/-2									
Refrigerant gas	HFC			10A							
Power supply	111 C		K I.	10/1							
Supply voltage	V ph Hz		400\/ (+/ 100	%) 2nh 50Hz							
Secondary supply voltage	V PIT HZ			%) 3ph 50Hz / AC							
· · · · · · ·	V		TX								
Digital thermostat			17.	200							
Compressor											
Compressor type				roll							
Quantity - Number of circuits	no.			- 1							
Max. power draw	kW	8.6	10.1	11.6	13.3						
Max. current draw	A	15.0	17.3	18.8	23.0						
Axial Fan											
Fan type			Ax								
Quantity	no.	2	2	2	2						
Air flow rate	m₃/h	10000	10000	10000	10000						
Max. power draw	kW	1.4	1.4	1.4	1.4						
Max. current draw	A	2.8	2.8	2.8	2.8						
Centrifugal Fan (optional)											
Fan type				ifugal							
Quantity	no.	2	2	2	2						
Air flow rate  Available head	m₃/h Pa	10000 250	10000 250	10000 220	10000 220						
Max, power draw	kW	3.0	3.0	3.0	3.0						
Max. current draw	A	6.0	6.0	6.0	6.0						
Standard Pump											
Pump type			Centr	ifugal							
Quantity	no.	1	1	1	1						
Nominal/max fluid flow rate	l/min	65.0 - 150.0	80.0 - 150.0	95.0 - 150.0	110.0 - 150.0						
Nominal available head	bar	3.7	3.5	3.3	3.1						
Max. power draw	kW	1.7	1.7	1.7	1.7						
Max. current draw	A	2.9	2.9	2.9	2.9						
High Pressure Pump											
Pump type			Centr	ifugal							
Quantity	no.	1	1	1	1						
Nominal available head	bar	5.8	5.5	5.2	5.0						
Max. power draw	kW	2.6	2.6	2.6	2.6						
Max. current draw	A	5.1	5.1	5.1	5.1						
					5.2						
Storage tank canacity	l		3.	20							
Storage tank capacity											
IN/OUT liquid connections	inch		11								
Net weight (approximate)***	kg	440	460	500	520						
Width	mm		84	14							
Depth	mm		17	59							
Height	mm	n 1485									
Sound pressure level**	dB(A)	70	70	70	70						
	IP		4								

\* Data relating to operation under the following conditions: intake/outlet temperature 20/15°C, water without glycol, ambient temperature 32°C. Cooling power refers to the evaporator unit.

\*\* Sound pressure level, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.

\*\*\* Weight includes pallets and packaging (where provided for), with refrigerant charge, storage tank empty, axial fans.

\*\*\*\* The electrical data refer to  $\cos \phi$  = 0.8.

			Correction	on factors f	or calcula	ting the co	oling pow	er					
Make a subjet to make a subjet in	F	°C					8	10	15	20	25		
Water outlet temperature	Fw	factor					0.86	0.92	1	1.05	1.12		
Ambient Temperature	Fa	°C					15	20	25	32	35	40	45
Ambient Temperature	га	factor					1.16	1.1	1.05	1	0.97	0.91	0.84
Percentage glycol by weight	Fa	%	0	10	15	20	25	30	35	40			
Percentage grycor by weight	Fg	factor	1	0.99	0.98	0.97	0.96	0.94	0.92	0.89			
Cooling power = Nominal cooling power x Fw x Fa x Fg													

# TCWD4-G8 Size 5

Industrial water chillers

# **COOLING CAPACITY**

# 41400 - 46100 - 56600 - 65600 - 75200 W



In powder-coated steel sheet, RAL 7035 textured

Hermetic scroll compressor (connected in

Complete with charging port, safety valve, liquid receiver, drier filter, liquid inspection port,

solenoid valve, thermostatic valve, high- and

Stepped cooling power regulation, 2 steps on

refrigerant, complete with thermal cut-out.

## **EVAPORATOR**

With brazed stainless-steel plates and temperature sensor for protection against freezing.

### AIR CONDENSER

Finned high-efficiency copper tube condensing coil, complete with safety grille.

### ΔΧΙΔΙ ΕΔΝ

Axial fan, complete with thermal cut-out and safety grille.

### LIQUID CIRCUIT

Liquid circuit composed entirely of non-ferrous material in contact with the liquid to prevent contamination. Stainless-steel centrifugal pump with 3 bar available head. Stainless-steel storage tank complete with drain valve, electrical level and visual level indicator, protective flow switch, 0-10 bar pressure gauge, regulation sensor.

## **ELECTRICAL PANEL**

With main disconnect switch, relay motor protection, phase sequence relays.

# MANAGEMENT AND CONTROL

The TX400 control unit manages the operation of the chiller and provides complete operator alarm diagnostics. An on-off contact allows the machine to be switched on remotely. Illuminated control selector. Dual remote ON-OFF. Ethernet and RS485 connection. Possibility of remote display for machine regulation.

# PAINT/COATING

Standard colour: RAL 7035 textured.

# tandem for E0 and E4 models), cooled by the MAIN ACCESSORIES (ref. page 189)

BA - Mechanical bypass valve protecting the pump

HR - Fluid heating element

LTA - Operation at low ambient temperatures

FP - Polyurethane air filter

U - Castors

TD - Differential fluid temperature management (two sensors)

low-pressure pressure switch, R410A refrigerant. LS - Liquid circuit for laser application

- HIGH-pressure pump version "H" - 5 bar, version "R" - 7 bar.

- Non-standard paint/coating

- Satin AISI 304 stainless steel framework

- Temperature Precision +/- 1 K

# **Dimensions**

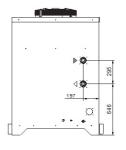
STRUCTURE

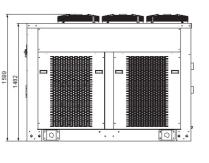
COMPRESSOR

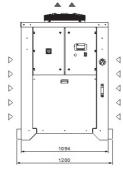
finish. Easily removed panels

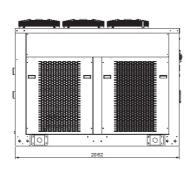
REFRIGERATION CIRCUIT

models TCW E0-E4-F7-G8.









Model		TCWD4	TCWE0	TCWE4	TCWF7	TCWG8					
Rated Cooling Capacity*	W	41400	46100	56600	65600	75200					
Ambient temperature operating limits	°C		'	+15 - +45	'						
Settable fluid temperature range	°C			+8 - +25							
Fluid type		Water									
Temperature precision	К	+/-2									
Refrigerant gas	HFC			R410A							
Power supply											
Supply voltage	V ph Hz		40	0V (+/-10%) 3ph 50	)Hz						
Secondary supply voltage	V			24 V AC							
Digital thermostat				TX400							
Compressor											
Compressor type				Scroll							
Quantity - Number of circuits	no.	1-1	2	- 1	2	- 2					
Max. power draw	kW	14.8	16.7	20.2	23.2	26.6					
Max. current draw	A	25.3	29.8	34.5	37.6	46.0					
Axial Fan		2010	23.0	0.10	0110	1010					
Fan type				Axial							
Quantity	no.	3	3	3	3	3					
Air flow rate	m <sub>3</sub> /h	17000	17000	17000	17000	17000					
Max. power draw	kW	2.1	2.1	2.1	2.1	2.1					
Max. current draw	A	4.2	4.2	4.2	4.2	4.2					
Centrifugal Fan (optional)											
Fan type				Centrifugal							
Quantity	no.	3	3	3	3	3					
Air flow rate	m <sub>3</sub> /h	17000	17000	17000	17000	17000					
Available head	Pa	260	260	260	230	230					
Max. power draw	kW	4.5	4.5	4.5	4.5	4.5					
Max. current draw	A	9.0	9.0	9.0	9.0	9.0					
Standard Pump											
Pump type				Centrifugal							
Quantity	no.	1	1	1	1	1					
Nominal/max fluid flow rate	l/min	115.0 - 210.0	130.0 - 210.0	160.0 - 210.0	185.0 - 400.0	215.0 - 400.0					
Nominal available head	bar	3.6	3.4	3.2	3.2	3.0					
Max. power draw	kW	2.3	2.3	2.3	3.0	3.0					
Max. current draw	A	4.9	4.9	4.9	6.2	6.2					
High-Pressure Pump (optional)											
Pump type				Centrifugal							
Quantity	no.	1	1	1	1	1					
Nominal available head	bar	5.6	5.5	5.3	5.0	4.8					
Max. power draw	kW	3.7	3.7	3.7	5.5	5.5					
Max. current draw	A	6.3	6.3	6.3	11.0	11.0					
Storage tank capacity	l			250							
IN/OUT liquid connections	inch	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"					
Net weight (approximate)***	kg	600	640	680	730	750					
Width	mm			1094							
Depth	mm			2062							
Height	mm										
Sound pressure level**	dB(A)	72	72	72	72	72					
IP rating	IP			44							

- \* Data relating to operation under the following conditions: intake/outlet temperature 20/15°C, water without glycol, ambient temperature 32°C. Cooling power refers to the evaporator unit.
- \*\* Sound pressure level, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.
- \*\*\* Weight includes pallets and packaging (where provided for), with refrigerant charge, storage tank empty, axial fans.
- \*\*\*\* The electrical data refer to  $\cos \phi$  = 0.8.

			Correction	on factors f	or calcula	ting the co	oling pow	er					
Make a subjet to make a subjet in	F	°C					8	10	15	20	25		
Water outlet temperature	Fw	factor					0.86	0.92	1	1.05	1.12		
Ambient Temperature	Fa	°C					15	20	25	32	35	40	45
Ambient Temperature	га	factor					1.16	1.1	1.05	1	0.97	0.91	0.84
Percentage glycol by weight	Fa	%	0	10	15	20	25	30	35	40			
Percentage grycor by weight	Fg	factor	1	0.99	0.98	0.97	0.96	0.94	0.92	0.89			
Cooling power = Nominal cooling power x Fw x Fa x Fg													

# TCWH2-Q0 Size 6

# **COOLING CAPACITY**

# 82800 - 92200 - 113200 - 131200 - 150400 W

# **EVAPORATOR**

With brazed stainless-steel plates and temperature sensor for protection against freezing.

Finned high-efficiency copper tube condensing coil, complete with safety grille.

Axial fan, complete with thermal cut-out and safety grille. Speed regulator.

Liquid circuit composed entirely of non-ferrous material in contact with the liquid to prevent contamination. Stainless-steel centrifugal pump with 3 bar available head. Stainless-steel storage tank complete with drain valve,  $electrical\ level\ and\ visual\ level\ indicator,\ protective\ flow\ switch,\ 0-10\ bar\ pressure\ gauge,\ regulation\ sensor.$ 

## **ELECTRICAL PANEL**

With main disconnect switch, relay motor protection, phase sequence relays. Glass electrical protection window

## MANAGEMENT AND CONTROL

The TX400 control unit manages the operation of the chiller and provides complete operator alarm diagnostics. An on-off contact allows the machine to be switched on remotely. Illuminated control selector. Dual remote ON-OFF. Ethernet and RS485 connection. Possibility of remote display for machine regulation.

# PAINT/COATING

Standard colour: RAL 7035 textured.

# MAIN ACCESSORIES (ref. page 189)

BA - Mechanical bypass valve protecting the pump

HR - Fluid heating element FP - Polyurethane air filter

RU - Castors

TD - Differential fluid temperature management (two sensors)

LS - Liquid circuit for laser application

- HIGH-pressure pump version "H" 5 bar, version "R" 7 bar.
- Non-standard paint/coating
- Satin AISI 304 stainless steel framework
- Temperature Precision +/- 1 K

**STRUCTURE** 

finish. Easily removed panels Chiller for outdoor

In powder-coated steel sheet, RAL 7035 textured

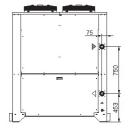
## COMPRESSOR

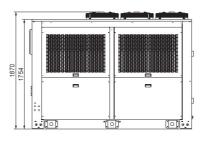
Hermetic scroll compressor (connected in tandem for I3 and M4 models), cooled by the refrigerant, complete with thermal cut-out and casing heating element for heating the oil. Stepped cooling power regulation, 2 steps on model TCWH2, 4 steps on models TCW I3-M4-O1-Q0.

# REFRIGERATION CIRCUIT

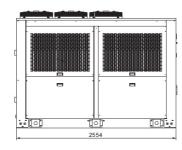
Complete with charging port, safety valve, liquid receiver, drier filter, liquid inspection port, solenoid valve, thermostatic valve, high- and low-pressure pressure switch, R410A refrigerant.

# **Dimensions**









Model		TCWH2	TCWI3	TCWM4	TCW01	TCWQ0
Rated Cooling Capacity*	w	82800	92200	113200	131200	150400
Ambient temperature operating limits	°C			-10 - +45		
Settable fluid temperature range	°C			+8 - +25		
Fluid type				Water		
Temperature precision	К			+/-2		
Refrigerant gas	HFC			R410A		
Power supply						
Supply voltage	V ph Hz		40	0V (+/-10%) 3ph 50	)Hz	
Secondary supply voltage	V			24 V AC		
Digital thermostat				TX400		
Compressor				17400		
				Covell		
Compressor type		2.2		Scroll		4
Quantity - Number of circuits	no.	2 - 2		- 2		- 4
Max. power draw	kW	29.6	33.4	40.2	46.4	53.2
Max. current draw	A	50.6	59.6	69.0	75.2	92.0
Axial Fan						
Fan type		_	_	Axial	_	_
Quantity	no.	6	6	6	6	6
Air flow rate  Max. power draw	m₃/h kW	34000 4.2	34000 4.2	34000 4.2	34000 4.2	34000 4.2
Max. current draw	A	8.4	8.4	8.4	8.4	8.4
Centrifugal Fan (optional)	, A	0.4	0.4	0.4	0.4	0.4
Fan type				Centrifugal		
Quantity	no.	6	6	6	6	6
Air flow rate	m <sub>3</sub> /h	34000	34000	34000	34000	34000
Available head	Pa	260	260	260	230	230
Max. power draw	kW	9.0	9.0	9.0	9.0	9.0
Max. current draw	A	18.0	18.0	18.0	18.0	18.0
Standard Pump						
Pump type				Centrifugal		
Quantity	no.	1	1	1	1	1
Nominal/max fluid flow rate	l/min	230.0 - 400.0	260.0 - 400.0	320.0 - 400.0	370.0 - 800.0	430.0 - 800.0
Nominal available head	bar	3.0	2.9	2.6	2.9	2.7
Max. power draw	kW	3.0	3.0	3.0	4.0	4.0
Max. current draw	A	6.2	6.2	6.2	8.0	8.0
High-Pressure Pump (optional)						
Pump type				Centrifugal		
Quantity	no.	1	1	1	1	1
Nominal available head	bar	4.8	4.7	4.4	5.5	5.4
Max. power draw	kW	5.5	5.5	5.5	9.0	9.0
Max. current draw	A	11.0	11.0	11.0	16.0	16.0
Storage tank capacity	l			500		
IN/OUT liquid connections	inch	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"
Net weight (approximate)***	kg	1500	1650	1650	1800	1800
Width	mm			1508		
Depth	mm			2554		
Height Sound pressure level**	mm dB(A)	75	75	1870 75	75	75

- \* Data relating to operation under the following conditions: intake/outlet temperature 20/15°C, water without glycol, ambient temperature 32°C. Cooling power refers to the evaporator
- \*\* Sound pressure level, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.
- \*\*\* Weight includes pallets and packaging (where provided for), with refrigerant charge, storage tank empty, axial fans.
- \*\*\*\* The electrical data refer to  $\cos \varphi = 0.8$ .

			Correction	on factors f	or calcula	ting the co	oling pow	er					
Make a subjet to make a subjet in	F	°C					8	10	15	20	25		
Water outlet temperature	Fw	factor					0.86	0.92	1	1.05	1.12		
Ambient Temperature	Fa	°C					15	20	25	32	35	40	45
Ambient Temperature	га	factor					1.16	1.1	1.05	1	0.97	0.91	0.84
Percentage glycol by weight	Fa	%	0	10	15	20	25	30	35	40			
Percentage grycor by weight	Fg	factor	1	0.99	0.98	0.97	0.96	0.94	0.92	0.89			
Cooling power = Nominal cooling power x Fw x Fa x Fg													

# TCWR2-Z0 Size 7

Industrial water chillers

# **COOLING CAPACITY**

# 166600 - 184400 - 226400 - 262400 - 300800 W



In powder-coated steel sheet, RAL 7035 textured

finish. Easily removed panels Chiller for outdoor

Hermetic scroll compressor, connected in tandem, cooled by the refrigerant, complete

with thermal cut-out and casing heating element

for heating the oil. Stepped cooling power

regulation, 4 steps on model TCWR2, 8 steps on

Complete with charging port, safety valve,

liquid receiver, drier filter, liquid inspection port,

solenoid valve, thermostatic valve, high- and

low-pressure pressure switch, R410A refrigerant.

# **EVAPORATOR**

With brazed stainless-steel plates and temperature sensor for protection against freezing.

### AIR CONDENSER

Finned high-efficiency copper tube condensing coil, complete with safety grille.

### AXIAL FAN

Axial fan, complete with thermal cut-out and safety grille. Speed regulator.

### LIOUID CIRCUIT

Liquid circuit composed entirely of non-ferrous material in contact with the liquid to prevent contamination. Stainless-steel centrifugal pump with 3 bar available head. Storage tank, closed expansion vessel with pressure reducer and automatic filling system, complete with drain valve, 0-10 bar pressure gauge. Circuit protection consists of a flow switch, minimum pressure switch (normally disabled, operation to be assessed during the initial installation phase), maximum pressure switch, tank max. pressure safety valve, regulation sensor.

### FLECTRICAL PANEL

With main disconnect switch, relay motor protection, phase sequence relays. Glass electrical protection window and aluminium frame.

### MANAGEMENT AND CONTROL

The TX400 control unit manages the operation of the chiller and provides complete operator alarm diagnostics. An on-off contact allows the machine to be switched on remotely. Illuminated control selector. Dual remote ON-OFF. Ethernet and RS485 connection. Possibility of remote display for machine regulation.

# PAINT/COATING

Standard colour: RAL 7035 textured.

# MAIN ACCESSORIES (ref. page 189)

BA - Mechanical bypass valve protecting the pump

BM - Manual mechanical bypass valve protecting the pump

HR - Fluid heating element

AV - Vibration damper supports

FP - Polyurethane air filters

TD - Differential fluid temperature management (two sensors)

- HIGH-pressure pump version "H" 5 bar, version "R" 7 bar.
- Non-standard paint/coating
- Satin AISI 304 stainless steel framework
- Temperature Precision +/- 1 K

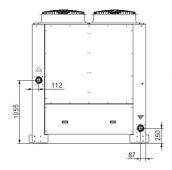
# **Dimensions**

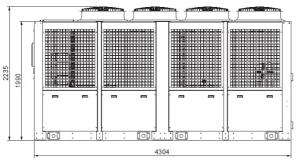
**STRUCTURE** 

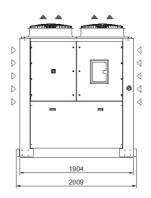
COMPRESSOR

models TCW S4-T6-Q0-Z0.

REFRIGERATION CIRCUIT







Model		TCWR2	TCWS4	TCWT6	TCWV3	TCWZ0
Rated Cooling Capacity*	W	166600	184400	226400	262400	300800
Ambient temperature operating limits	°C			-10 - +45	'	
Settable fluid temperature range	°C			+8 - +25		
Fluid type				Water		
Temperature precision	K			+/-2.5		
Refrigerant gas	HFC			R410A		
Power supply						
Supply voltage	V ph Hz		40	0V (+/-10%) 3ph 50	)Hz	
Secondary supply voltage	V			24 V AC		
Digital thermostat				TX400		
Compressor						
Compressor type				Scroll		
Quantity - Number of circuits	no.	4 - 2			- 4	
Max. power draw	kW	59.2	66.8	80.4	92.8	106.4
Max. current draw	A	101.2	119.2	138.0	150.4	194.0
Capacity steps	NR x %			8x12.5%	1	
Axial Fan						
Fan type				Axial		
Quantity	no.	4	8	8	8	8
Air flow rate	m <sub>3</sub> /h	86000	86000	86000	86000	86000
Max. power draw	kW	8.3	8.3	8.3	8.3	8.3
Max. current draw	A	11.6	11.6	11.6	11.6	11.6
Centrifugal Fan (optional)						
Fan type				Centrifugal		
Quantity	no.	6	6	8	8	8
Air flow rate	m₃/h	72000	72000	72000	72000	72000
Available head	Pa	260	260	260	260	260
Max. power draw	kW	16.0	16.0	16.0	16.0	16.0
Max. current draw	A	28.0	28.0	28.0	28.0	28.0
Standard Pump						
Pump type				Centrifugal		
Quantity	no.	1	1	1	1	1
Nominal/max fluid flow rate	l/min	460 - 800	520 - 800	640 - 1400	740 - 1400	860 - 1400
Nominal available head	bar	2.9	2.6	3.2	3.1	3.0
Max. power draw	kW	4.0	4.0	7.5	7.5	7.5
Max. current draw	A	8.1	8.1	14.6	14.6	14.6
High-Pressure Pump (optional)						
Pump type				Centrifugal		
Quantity	no.	1	1	1	1	1
Nominal available head	bar	5.6	5.2	6.1	5.9	5.4
Max. power draw	kW	11.0	11.0	15.0	15.0	15.0
Max. current draw	A	21.2	21.2	28.6	28.6	28.6
Storage tank capacity	l			500		
Expansion vessel capacity	l			18		1
IN/OUT liquid connections	inch	4"	4"	4"	4"	4"
Net weight (approximate)***	kg	2000	2450	2500	2650	2700
Width	mm			1904		
Depth	mm			4304		
Height	mm			2235		
Sound pressure level**	dB(A)	79	79	79	79	79
IP rating	IP			54		

\* Data relating to operation under the following conditions: intake/outlet temperature 20/15°C, water without glycol, ambient temperature 32°C. Cooling power refers to the evaporator unit.

\*\* Sound pressure level, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.

\*\*\* Weight includes pallets and packaging (where provided for), with refrigerant charge, storage tank empty, axial fans.

\*\*\*\* The electrical data refer to  $\cos \phi$  = 0.8.

			Correction	on factors f	for calcula	ting the co	oling pow	er					
	F	°C					8	10	15	20	25		
Water outlet temperature	Fw	factor					0.86	0.92	1	1.05	1.12		
Ambient Temperature	F	°C					15	20	25	32	35	40	45
Ambient Temperature	Fa	factor					1.16	1.1	1.05	1	0.97	0.91	0.84
Dougoute as alread by weight		%	0	10	15	20	25	30	35	40			
Percentage glycol by weight	Fg	factor	1	0.99	0.98	0.97	0.96	0.94	0.92	0.89			
Cooling power = Nominal cooling power x Fw x Fa x Fg													

# TCW3E-4A Size 8

Industrial water chillers

# **COOLING CAPACITY**

# 355000 - 400000 W



In powder-coated steel sheet, RAL 7035 textured

finish. Easily removed panels Chiller for outdoor

Hermetic scroll compressor, connected in tandem, cooled by the refrigerant, complete

with thermal cut-out and casing heating element

for heating the oil. Stepped cooling power

Complete with charging port, safety valve,

liquid receiver, drier filter, liquid inspection port,

solenoid valve, thermostatic valve, high- and

low-pressure pressure switch, R410A refrigerant.

regulation, 8 steps on all models.

REFRIGERATION CIRCUIT

## **EVAPORATOR**

With brazed stainless-steel plates and temperature sensor for protection against freezing.

### AIR CONDENSER

Finned high-efficiency copper tube condensing coil, complete with safety grille.

### AXIAL FAN

Axial fan, complete with thermal cut-out and safety grille. Speed regulator.

### LIOUID CIRCUIT

Liquid circuit composed entirely of non-ferrous material in contact with the liquid to prevent contamination. Stainless-steel centrifugal pump with 3 bar available head. Storage tank, closed expansion vessel with pressure reducer and automatic filling system, complete with drain valve, 0-10 bar pressure gauge. Circuit protection consists of a flow switch, minimum pressure switch (normally disabled, operation to be assessed during the initial installation phase), maximum pressure switch, tank max. pressure safety valve, regulation sensor.

### FLECTRICAL PANEL

With main disconnect switch, relay motor protection, phase sequence relays. Glass electrical protection window and aluminium frame.

### MANAGEMENT AND CONTRO

The TX400 control unit manages the operation of the chiller and provides complete operator alarm diagnostics. An on-off contact allows the machine to be switched on remotely. Illuminated control selector. Dual remote ON-OFF. Ethernet and RS485 connection. Possibility of remote display for machine regulation.

# PAINT/COATING

Standard colour: RAL 7035 textured.

# MAIN ACCESSORIES (ref. page 189)

BA - Mechanical bypass valve protecting the pump

BM - Manual mechanical bypass valve protecting the pump

HR - Fluid heating element

AV - Vibration damper supports

FP - Polyurethane air filters

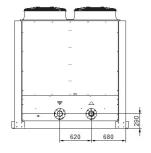
TD - Differential fluid temperature management (two sensors)

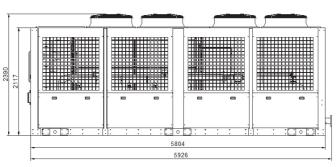
- HIGH-pressure pump version "H" 5 bar, version "R" 7 bar.
- Non-standard paint/coating
- Satin AISI 304 stainless steel framework
- Temperature Precision +/- 1 K

# **Dimensions**

**STRUCTURE** 

COMPRESSOR







Model		TCW3E	TCW4A
Rated Cooling Capacity*	W	355000	400000
Ambient temperature operating limits	°C	-10 -	+45
Settable fluid temperature range	°C	+8 -	+25
Fluid type		Wa	
Temperature precision	К		/-2.5
Refrigerant gas	HFC	R41	
Power supply			
Supply voltage	V ph Hz	400V (+/-109	6) 3ph 50Hz
Secondary supply voltage	V PITTIZ	24 V	
Digital thermostat	V	TX4	
Compressor			
Compressor type		Scr	
Quantity - Number of circuits	no	8 - 4	8 - 4
	no.		
Max. power draw		12.0	13.6
Max. current draw	A ND v 0/	20.5	24.0
Capacity steps	NR x %	8x12	
Axial Fan			
Fan type		Axi	
Quantity	no.	8	8
Air flow rate	m₃/h	115000	115000
Max. power draw	kW	12.0	12.0
Max. current draw	A	23.4	23.4
Centrifugal Fan (optional)			
Fan type		Centri	
Quantity	no.	8	8
Air flow rate	m₃/h	115000	115000
Available head	Pa	250	250
Max. power draw	kW	29.0	29.0
Max. current draw	A	48.0	48.0
Standard Pump			
Pump type		Centri	
Quantity	no.	1	1
Nominal/max fluid flow rate	l/min	1010	1150
Nominal available head	bar	4.5	4.2
Max. power draw	kW	11.0	11.0
Max. current draw	A	20.0	20.0
High-Pressure Pump (optional)			
Pump type		Centr	ifugal
Quantity	no.	1	1
Nominal available head	bar	6.5	6.2
Max. power draw	kW	22.0	22.0
Max. current draw	A	40.0	40.0
Storage tank capacity	l	80	00
Expansion vessel capacity	l	1	8
IN/OUT liquid connections	inch	DN 100	DN 100
Net weight (approximate)***	kg	3700	3800
Width	mm	21	94
Depth	mm	58	
Height	mm	23	
Sound pressure level**	dB(A)	79	79
IP rating	IP	5-	4

\* Data relating to operation under the following conditions: intake/outlet temperature 20/15°C, water without glycol, ambient temperature 32°C. Cooling power refers to the evaporator unit.

\*\* Sound pressure level, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.

\*\*\* Weight includes pallets and packaging (where provided for), with refrigerant charge, storage tank empty, axial fans.

\*\*\*\* The electrical data refer to  $\cos \phi$  = 0.8.

Correction factors for calculating the cooling power													
Weeker author town auctions	F	°C					8	10	15	20	25		
Water outlet temperature	Fw	factor					0.86	0.92	1	1.05	1.12		
A		°C					15	20	25	32	35	40	45
Ambient Temperature	Fa	factor					1.16	1.1	1.05	1	0.97	0.91	0.84
Bi-h		%	0	10	15	20	25	30	35	40			
Percentage glycol by weight	Fg	factor	1	0.99	0.98	0.97	0.96	0.94	0.92	0.89			
Cooling power = Nominal cooling power x Fw x Fa x Fg													





# **LCW** Negative temperature liquid chillers

When very low cooling temperatures are required, **texa industries**' LCW range is your guarantee for maximum performance of your industrial equipment.



# LCW15-22 Size 2

Negative temperature liquid chillers

## **COOLING CAPACITY**

## 2200 - 3400 W



## **EVAPORATOR**

With brazed stainless-steel plates with sensor for protection against freezing.

Finned high-efficiency copper tube condensing coil, complete with safety grille.

#### LIQUID CIRCUIT

Liquid circuit composed entirely of non-ferrous material in contact with the liquid to prevent contamination. Stainless-steel centrifugal pump with 3 bar available head. Stainless-steel storage tank complete with drain valve,

#### MANAGEMENT AND CONTROL

Standard colour: RAL 7035 textured.

## MAIN ACCESSORIES (ref. page 189)

BA - Mechanical bypass valve protecting the pump

HR - Fluid heating element

LTA - Operation at low ambient temperatures

RU - Castors

TD - Differential fluid temperature management (two sensors)

- Non-standard paint/coating

High- and low-pressure gas pressure gauge.

# STRUCTURE

In powder-coated steel sheet, RAL 7035 textured finish. Easily removed panels

## COMPRESSOR

Hermetic scroll compressor, cooled by the refrigerant, complete with thermal cut-out. Case heating element for oil. Mechanical management coolant injection valve.

#### REFRIGERATION CIRCUIT

Complete with charging port, drier filter, liquid receiver, thermostatic valve, solenoid valve, liquid viewing port, high- and low-pressure pressure switch, intake oil separator, R404A refrigerant. Solenoid valve for liquid injection.

Axial fan, complete with thermal cut-out and safety grille. Fan adjustment step pressure switch.

electrical level and visual level indicator, 0-10 bar pressure gauge, protective flow switch, regulation sensor.

#### **ELECTRICAL PANEL**

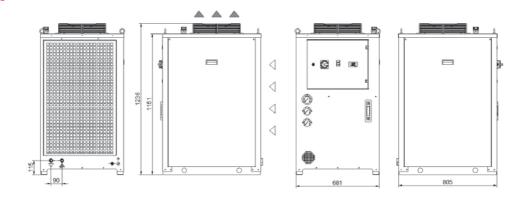
With main disconnect switch, relay motor protection, phase sequence relays.

The TX200 control unit manages the operation of the chiller and provides complete operator alarm diagnostics. An on-off contact allows the machine to be switched on remotely. Illuminated control selector. Possibility of remote display for machine regulation.

FP - Polyurethane air filter

- HIGH-pressure pump version "H" 5 bar.
- Satin AISI 304 stainless steel framework

## **Dimensions**



Model		LCW15	LCW22						
Rated Cooling Capacity*	w	2200	3400						
Ambient temperature operating limits	°C	+15 -	+48						
Settable fluid temperature range	°C	-30 -	-5						
Fluid type		Water + Ethylen							
Temperature precision	К	+/							
Refrigerant gas	HFC	R404							
Power supply	111.0	Kio							
Supply voltage	V ph Hz	400V (+/-10%	) 2nh E0H7						
Secondary supply voltage	V pit nz		<u> </u>						
Digital thermostat	V	24 V AC TX200							
Compressor		IXZC	, o						
•		Sava	"						
Compressor type		Scro							
Quantity - Number of circuits	no.	1-1	1-1						
Max. power draw Max. current draw	kW A	4.0 7.3	7.8						
wax. current draw Axial Fan	A	1.3	12.0						
Compressor type		Axia							
Quantity	no.	1-1							
Air flow rate	m₃/h	280							
Max. power draw Max. current draw	W A	0.6							
	A	0.6							
Centrifugal Fan (optional)		C + 17							
Fan type		Centrif							
Quantity Air flow rate	no. m₃/h	1 280	1						
Available head	Pa	230							
Max. power draw	kW	0.6							
Max. current draw	A	2.3							
Standard Pump		2.3							
Pump type		Centrif	lean						
Quantity	no.	1	ugut						
Nominal/max fluid flow rate	l/min	10.0 - 50.0	15.0 - 50.0						
Nominal available head	bar	3.5	3.3						
Available power draw	kW	0.9							
Max. current draw	A	1.7							
High-Pressure Pump (optional)		··							
Pump type		Centrif	ugal						
Quantity	no.	1	~5~·						
Nominal available head	bar	5.1	4.9						
Max. power draw	kW	1.4							
Max. current draw	A	2.7							
Storage tank capacity	l	30							
IN/OUT liquid connections	inch	3/4							
Net weight (approximate)***	kg	195	200						
Width	mm	193 681							
Depth	mm	805							
Height	mm	123							
Sound pressure level**	dB(A)	60							
	IP IP	60 44							

- \* Data relating to operation under the following conditions: intake/outlet temperature -20/-25°C, water with 50% glycol, ambient temperature 32°C. Cooling power refers to the evaporator
- \*\* Sound pressure level, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.
- \*\*\* Weight includes pallets and packaging (where provided for), with refrigerant charge, storage tank empty, axial fans.
- \*\*\*\* The electrical data refer to  $\cos \varphi = 0.8$ .

Correction factors for calculating the cooling power														
Maker and at term and the	_	°C	-30	-28	-26	-25	-22	-20	-18	-16	-14	-12	-10	-5
Water outlet temperature	Fw	factor	0.75	0.85	0.95	1.00	1.1	1.20	1.30	1.42	1.54	1.64	1.76	1.80
Ambient Terrorenture	_	°C					15	20	25	32	35	40	48	
Ambient Temperature	Fa	factor					1.16	1.10	1.05	1.00	0.97	0.91	0.84	
Deventors alved by weight	F-	%										50		
Percentage glycol by weight	Fg	factor										1.00		





# LCW45-70 Size 3

Negative temperature liquid chillers

## **COOLING CAPACITY**

## 6500 - 10450 W



#### **EVAPORATOR**

With brazed stainless-steel plates with sensor for protection against freezing.

Finned high-efficiency copper tube condensing coil, complete with safety grille.

Axial fan, complete with thermal cut-out and safety grille. Fan adjustment step pressure switch.

#### LIQUID CIRCUIT

Liquid circuit composed entirely of non-ferrous material in contact with the liquid to prevent contamination. Stainless-steel centrifugal pump with 3 bar available head. Stainless-steel storage tank complete with drain valve,  $electrical\ level\ and\ visual\ level\ indicator, 0-10\ bar\ pressure\ gauge, protective\ flow\ switch, regulation\ sensor.$ 

#### ELECTRICAL PANEL

With main disconnect switch, relay motor protection, phase sequence relays.

#### MANAGEMENT AND CONTROL

The TX200 control unit manages the operation of the chiller and provides complete operator alarm diagnostics. An on-off contact allows the machine to be switched on remotely. Illuminated control selector. Possibility of remote display for machine regulation.

Standard colour: RAL 7035 textured.

## MAIN ACCESSORIES (ref. page 189)

BA - Mechanical bypass valve protecting the pump

HR - Fluid heating element

LTA - Operation at low ambient temperatures

FP - Polyurethane air filter RU - Castors

TD - Differential fluid temperature management (two sensors)

- HIGH-pressure pump version "H" 5 bar.
- Non-standard paint/coating
- Satin AISI 304 stainless steel framework

receiver, thermostatic valve, solenoid valve, liquid viewing port, high- and low-pressure pressure switch, intake oil separator, R404A refrigerant. Solenoid valve for liquid injection.

# STRUCTURE

In powder-coated steel sheet, RAL 7035 textured finish. Easily removed panels

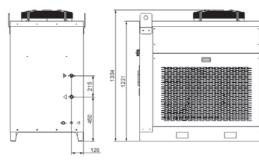
#### COMPRESSOR

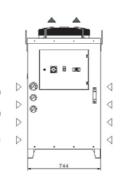
Hermetic scroll compressor (connected in tandem for model 70), cooled by the refrigerant, complete with thermal cut-out. Case heating element for oil. Electronic management coolant injection valve.

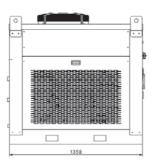
#### REFRIGERATION CIRCUIT

Complete with charging port, drier filter, liquid High- and low-pressure gas pressure gauge.

**Dimensions** 







Model		LCW45 LCW70					
Rated Cooling Capacity*	w	6500	10450				
Ambient temperature operating limits	°C	+15 -					
Settable fluid temperature range	°C	-30					
Fluid type	-						
Temperature precision	K	Water + Ethyle	·/-2				
	HFC	R40					
Refrigerant gas	HFC	R4C	4A				
Power supply			0.5.1.500				
Supply voltage	V ph Hz	400V (+/-109					
Secondary supply voltage	V	24 V					
Digital thermostat		TX2	200				
Compressor							
Compressor type		Scr	oll				
Quantity - Number of circuits	no.	1-1	2 - 1				
Max. power draw	kW	14.0	22.0				
Max. current draw	A	23.5	37.4				
Axial Fan							
Compressor type		Axi	al				
Quantity	no.	1-	1				
Air flow rate	m₃/h	57	00				
Max. power draw	kW	0.	7				
Max. current draw	А	1.	4				
Centrifugal Fan (optional)							
Fan type		Centri	fugal				
Quantity	no.	1	1				
Air flow rate	m <sub>3</sub> /h	5700	5700				
Available head	Pa	220	220				
Max. power draw	kW	1.5	1.5				
Max. current draw	A	3.0	3.0				
Standard Pump	,,	3.0	3.0				
		Control	fugal				
Pump type		Centri					
Quantity	no.	1					
Nominal/max fluid flow rate	l/min	25.0 - 80.0	35.0 - 80.0				
Nominal available head	bar	3.7	3.5				
Available power draw	kW	1.					
Max. current draw	А	2.	4				
High-Pressure Pump (optional)							
Pump type		Centri					
Quantity  Nominal available head	no.	1					
Max. power draw	bar kW	5.1	4.9				
Max. current draw	A	5.					
max. Current Ulaw	_ A	5.					
Storago tank canacity	ι						
Storage tank capacity IN/OUT liquid connections	inch	6					
Net weight (approximate)***	kg	350	380				
Width	mm	74					
Depth	mm	13.					
Height	mm	13.					
Sound pressure level**	dB(A)	67	68				
IP rating	IP	4.					

\* Data relating to operation under the following conditions: intake/outlet temperature -20/-25°C, water with 50% glycol, ambient temperature 32°C. Cooling power refers to the evaporator

\*\* Sound pressure level, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.

\*\*\* Weight includes pallets and packaging (where provided for), with refrigerant charge, storage tank empty, axial fans.

\*\*\*\* The electrical data refer to  $\cos \varphi = 0.8$ .

	Correction factors for calculating the cooling power													
Water outlet temperature	F	°C	-30	-28	-26	-25	-22	-20	-18	-16	-14	-12	-10	-5
water outlet temperature	Fw	factor	0.75	0.85	0.95	1.00	1.1	1.20	1.30	1.42	1.54	1.64	1.76	1.80
A		°C					15	20	25	32	35	40	48	
Ambient Temperature	Fa	factor					1.16	1.10	1.05	1.00	0.97	0.91	0.84	
Develope always by waight	-	%										50		
Percentage glycol by weight	Fg	factor										1.00		
Cooling power = Nominal cooling powery Fw x Fa x Fg														

# LCWA2-A8 Size 4

Negative temperature liquid chillers

## **COOLING CAPACITY**

## 13000 - 19600 W



#### **EVAPORATOR**

With brazed stainless-steel plates with sensor for protection against freezing.

Finned high-efficiency copper tube condensing coil, complete with safety grille.

Axial fan, complete with thermal cut-out and safety grille. Fan adjustment step pressure switch.

#### LIQUID CIRCUIT

Liquid circuit composed entirely of non-ferrous material in contact with the liquid to prevent contamination. Stainless-steel centrifugal pump with 3 bar available head. Stainless-steel storage tank complete with drain valve,  $electrical\ level\ and\ visual\ level\ indicator, 0-10\ bar\ pressure\ gauge, protective\ flow\ switch, regulation\ sensor.$ 

#### ELECTRICAL PANEL

With main disconnect switch, relay motor protection, phase sequence relays.

#### MANAGEMENT AND CONTROL

The TX200 control unit manages the operation of the chiller and provides complete operator alarm diagnostics. An on-off contact allows the machine to be switched on remotely. Illuminated control selector. Possibility of remote display for machine regulation.

Standard colour: RAL 7035 textured.

## MAIN ACCESSORIES (ref. page 189)

BA - Mechanical bypass valve protecting the pump

HR - Fluid heating element

LTA - Operation at low ambient temperatures FP - Polyurethane air filter

RU - Castors

TD - Differential fluid temperature management (two sensors)

- HIGH-pressure pump version "H" 5 bar.
- Non-standard paint/coating
- Satin AISI 304 stainless steel framework

receiver, thermostatic valve, solenoid valve, liquid viewing port, high- and low-pressure pressure switch, intake oil separator, R404A refrigerant. Solenoid valve for liquid injection.

### STRUCTURE

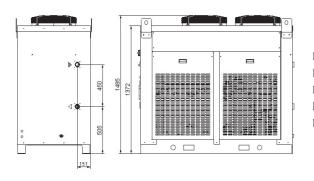
In powder-coated steel sheet, RAL 7035 textured finish. Easily removed panels

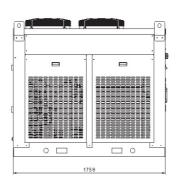
#### COMPRESSOR

Hermetic scroll compressor (connected in tandem), cooled by the refrigerant, complete with thermal cut-out. Case heating element for oil. Electronic management coolant injection

#### REFRIGERATION CIRCUIT

Complete with charging port, drier filter, liquid High- and low-pressure gas pressure gauge.





Model		LCWA2	LCWA8				
Rated Cooling Capacity*	w	13000	19600				
Ambient temperature operating limits	°C	+15 - +48	3				
Settable fluid temperature range	°C	-305					
Fluid type		Water + Ethylene 0	Glycol 50%				
Temperature precision	К	+/-2					
Refrigerant gas	HFC	R404A					
Power supply	0						
Supply voltage	V ph Hz	400\((+/,1006),2)	nh				
	V	400V (+/-10%) 3					
Secondary supply voltage	V	24 V AC					
Digital thermostat		TX200					
Compressor							
Compressor type		Scroll					
Quantity - Number of circuits	no.	2-1	3-1				
Max. power draw	kW	28.0	42.0				
Max. current draw	A	47.0	70.5				
Axial Fan							
Compressor type		Axial					
Quantity	no.	2					
Air flow rate	m₃/h	10000					
Max. power draw	kW	1.4					
Max. current draw	A	2.8					
Centrifugal Fan (optional)							
Fan type		Centrifug	al				
Quantity	no.	2	2				
Air flow rate	m₃/h	10000	10000				
Available head	Pa	220	220				
Max. power draw	kW	3.0	3.0				
Max. current draw	A	6.0	6.0				
Standard Pump							
Pump type		Centrifug	al				
Quantity	no.	1					
Nominal/max fluid flow rate	l/min	50.0 - 150.0	75.0 - 150.0				
Nominal available head	bar	3.7	3.3				
Available power draw	kW	1.4	5.5				
Max. current draw	A	2.8					
High-Pressure Pump (optional)		2.0					
Pump type		Centrifug					
Quantity	no.	1	at				
Nominal available head	bar	5.4	5.1				
Max. power draw	kW	2.8	5.1				
Max. current draw	A	5.3					
Max. Current draw		5.5					
Change took and the		120					
Storage tank capacity  IN/OUT liquid connections	l	120 1 1/2"					
Net weight (approximate)***	kg	550	610				
Width	mm	844	010				
Depth	mm	1759					
Height	mm						
	'''''	1703					
Sound pressure level**	dB(A)	70	72				

- \* Data relating to operation under the following conditions: intake/outlet temperature -20/-25°C, water with 50% glycol, ambient temperature 32°C. Cooling power refers to the evaporator
- \*\* Sound pressure level, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.
- \*\*\* Weight includes pallets and packaging (where provided for), with refrigerant charge, storage tank empty, axial fans.
- \*\*\*\* The electrical data refer to  $\cos \varphi = 0.8$ .

	Correction factors for calculating the cooling power													
		°C	-30	-28	-26	-25	-22	-20	-18	-16	-14	-12	-10	-5
Water outlet temperature	Fw	factor	0.75	0.85	0.95	1.00	1.1	1.20	1.30	1.42	1.54	1.64	1.76	1.80
Ambient Temperature	Fa	°C					15	20	25	32	35	40	48	
Ambient Temperature	га	factor					1.16	1.10	1.05	1.00	0.97	0.91	0.84	
Davisanta as alvest by weight	-	%										50		
Percentage glycol by weight	Fg	factor										1.00		
	Cooling power = Nominal cooling power x Fw x Fa x Fg													



# LCWB5-C4 Size 5

Negative temperature liquid chillers

## **COOLING CAPACITY**

## 24100 - 34800 W



#### **EVAPORATOR**

With brazed stainless-steel plates with sensor for protection against freezing.

#### AIR CONDENSER

Finned high-efficiency copper tube condensing coil, complete with safety grille. Fan adjustment step pressure switch.

#### AXIAL FAN

Axial fan, complete with thermal cut-out and safety grille.

## LIQUID CIRCUIT

Liquid circuit composed entirely of non-ferrous material in contact with the liquid to prevent contamination. Stainless-steel centrifugal pump with 3 bar available head. Stainless-steel storage tank complete with drain valve, electrical level and visual level indicator, 0-10 bar pressure gauge, protective flow switch, regulation sensor.

#### **ELECTRICAL PANEL**

With main disconnect switch, relay motor protection, phase sequence relays.

#### MANAGEMENT AND CONTROL

The TX200 control unit manages the operation of the chiller and provides complete operator alarm diagnostics. An on-off contact allows the machine to be switched on remotely. Illuminated control selector. Possibility of remote display for machine regulation.

### PAINT/COATING

Standard colour: RAL 7035 textured.

## MAIN ACCESSORIES (ref. page 189)

- BA Mechanical bypass valve protecting the pump
- HR Fluid heating element LTA - Operation at low ambient temperatures
- FP Polyurethane air filter
- RU Castors
- TD Differential fluid temperature management (two sensors)
- HIGH-pressure pump version "H" 5 bar.
- Non-standard paint/coating
- Satin AISI 304 stainless steel framework

# oil. Electronic management coolant injection valve. Stepped cooling power regulation, 2 steps.

finish. Easily removed panels

STRUCTURE

COMPRESSOR

REFRIGERATION CIRCUIT
Complete with charging port, drier filter, liquid receiver, thermostatic valve, solenoid valve, liquid viewing port, high- and low-pressure pressure switch, intake oil separator, R404A refrigerant. Solenoid valve for liquid injection.

High- and low-pressure gas pressure gauge.

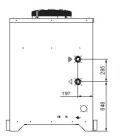
In powder-coated steel sheet, RAL 7035 textured

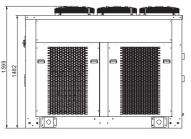
Hermetic scroll compressor (connected in

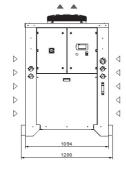
tandem), cooled by the refrigerant, complete

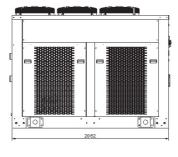
with thermal cut-out. Case heating element for

# **Dimensions**









Model		LCWB5	LCWC4					
Rated Cooling Capacity*	w	24100	34800					
Ambient temperature operating limits	°C	+5 -	+48					
Settable fluid temperature range	°C	-30 -	5					
Fluid type		Water + Ethylei	ne Glycol 50%					
Temperature precision	К	+	/-1					
Refrigerant gas	HFC	R40	4A					
Power supply								
Supply voltage	V ph Hz	400V (+/-10%	6) 3ph 50Hz					
Secondary supply voltage	V	24 V						
Digital thermostat	-	TX2						
Compressor		17.2						
Compressor type		Scr	oll					
Quantity - Number of circuits	no.	4-2	6 - 2					
Max. power draw	kW	56.0	84.0					
Max. current draw	A	94.0	141.5					
Axial Fan	A	5 1.0						
Compressor type		Axi	al					
Quantity	no.	3						
Air flow rate	m <sub>3</sub> /h	170						
Max. power draw	kW	2						
Max. current draw	A	4.3						
Centrifugal Fan (optional)								
Fan type		Centrifugal						
Quantity	no.	3	-					
Air flow rate	m <sub>3</sub> /h	170						
Available head	Pa	26						
Max. power draw	kW	4.						
Max. current draw	A	9.						
Standard Pump		5						
Pump type		Centri	fugal					
Quantity	no.	1						
Nominal/max fluid flow rate	l/min	100.0 - 300.0	150.0 - 300.0					
Nominal available head	bar	3.4	3.1					
Available power draw	kW	2						
Max. current draw	A	4.9						
	^	4.						
High-Pressure Pump (optional)		Contri	£ 1					
Pump type		Centri						
Quantity	no.	1						
Nominal available head	bar	5.4	5.1					
Max. power draw	kW	3.						
Max. current draw	A	6.:	3					
Storage tank capacity	l	16						
IN/OUT liquid connections	inch	2'						
Net weight (approximate)***	kg	650	720					
Width	mm							
Depth Height	mm	159						
Sound pressure level**	mm dB(A)	72	74					
IP rating	IP	44						

<sup>\*</sup> Data relating to operation under the following conditions: intake/outlet temperature -20/-25°C, water with 50% glycol, ambient temperature 32°C. Cooling power refers to the evaporator unit.

<sup>\*\*\*\*</sup> The electrical data refer to  $\cos \phi$  = 0.8.

Correction factors for calculating the cooling power														
Weter autlet term auture	Fw	°C	-30	-28	-26	-25	-22	-20	-18	-16	-14	-12	-10	-5
Water outlet temperature	FW	factor	0.75	0.85	0.95	1.00	1.1	1.20	1.30	1.42	1.54	1.64	1.76	1.80
Ambient Temperature	F	°C					15	20	25	32	35	40	48	
Ambient Temperature	Fa	factor					1.16	1.10	1.05	1.00	0.97	0.91	0.84	
Barranda an alural burnaiaht		%										50		
Percentage glycol by weight	Fg	factor										1.00		

<sup>\*\*</sup> Sound pressure level, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.

<sup>\*\*\*</sup> Weight includes pallets and packaging (where provided for), with refrigerant charge, storage tank empty, axial fans.

# TCO Industrial oil chillers

The new range of **texa industries** chillers for oil, specifically designed and manufactured for cooling hydraulic control units and motors of any power.



# TCO08-19 Minichiller

## **COOLING CAPACITY**

## 900-1100 - 1600-1900 - 2200-2550 W

#### AXIAL FAN

#### HYDRAULIC CIRCUIT

Hydraulic circuit with gear pump without tank, with maximum available pressure 20 bar, 0-25 bar pressure gauge,

#### MANAGEMENT AND CONTROL

and a general serious fault alarm, with the display indicating if this refers to the refrigeration or hydraulic circuit. An on-off contact allows the machine to be switched on remotely. Control disconnect switch for switching on the

Standard colour: RAL 7035 textured.

#### MAIN ACCESSORIES (ref. page 189)

LTA - Operation at low ambient temperatures

FP - Polyurethane air filter

RU - Castors

TD - Differential fluid temperature management (two sensors)

BGC - Hot gas bypass for +/- 1 K temperature precision

FL - Customer flow switch

- Satin AISI 304 stainless steel framework

## STRUCTURE

In powder-coated steel sheet, RAL 7035 textured finish. Easily removed panels

# COMPRESSOR

Hermetic reciprocating compressor, cooled by the refrigerant, complete with thermal cut-out.

#### REFRIGERATION CIRCUIT

Complete with charging port, drier filter, expansion valve, high- and low-pressure safety pressure switch, R134a refrigerant.

## **EVAPORATOR**

Brazed stainless-steel plate model.

## AIR CONDENSER

Finned high-efficiency copper tube condensing coil, complete with safety grille.

Axial fan, complete with electrical protection and safety grille.

regulation temperature sensor. Hydraulic safety with safety low- and high-pressure pressure switch.

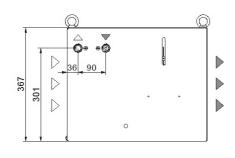
With main breaker, fused motor protection with LED visual fault indicator, voltage presence light.

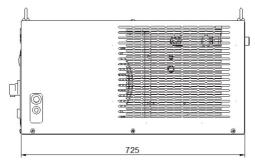
The TX110 control unit manages the chiller's operation, providing warnings including high/low temperature alarms

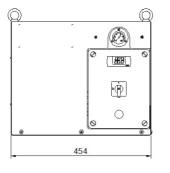
#### PAINT/COATING

- Non-standard paint/coating

# **Dimensions**







Model		TC	008	TC	012	TCO19			
		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz		
Rated Cooling Capacity*	W	900	1100	1600	1900	2200	2550		
Ambient temperature operating limits	°C			+15	- +45				
Settable oil temperature range	°C			+25	- +40				
Fluid type				ISO	/G 32				
Temperature precision	К				+/-2				
Refrigerant gas	HFC			R1	34a				
Power supply									
Supply voltage	V ph Hz			230V (+/-10%	) 1ph 50/60Hz				
Secondary supply voltage	V AC			2	30				
Digital thermostat				TX	110				
Compressor									
Compressor type				Recipr	ocating				
Quantity - Number of circuits	no.	1-1							
Max. power draw	kW	0.5	0.6	0.7	1.1	1.0	1.15		
Max. current draw	A	2.8	3.1	4.1	4.3	6.0	6.5		
Axial Fan									
Fan type		Axial							
Quantity	no.		1		1		1		
Air flow rate	m₃/h	10	000	10	00	1000			
Max. power draw	W	150	190	150	190	150	190		
Max. current draw	A	0.66	0.85	0.66	0.85	0.66	0.85		
Standard Pump									
Pump type				Gear	pump				
Quantity	no.		1		1		1		
Nominal fluid flow rate	l/min	1	LO	1	0	1	LO		
Nominal available head	bar	2	20	2	0	2	20		
Max. power draw	kW	0.	55	0.	55	0.	55		
Max. current draw	A	4.0	4.2	4.0	4.2	4.0	4.2		
Storage tank capacity (optional)	l			1	0				
IN/OUT liquid connections	inch	1/2"							
Net weight (approximate)***	kg		59	6	1	6	53		
Width	mm			7:	25	1			
Depth	mm			4.	54				
Height	mm			3	67				
Sound pressure level**	dB(A)		56	5	6	5	56		
IP rating	IP				4				

\* Data relating to operation under the following conditions: intake/outlet temperature 40/30°C, ISO VG 32 oil, ambient temperature 32°C. Cooling power refers to the evaporator unit.

\*\* Sound pressure level at 50Hz, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.

\*\*\* Weight includes pallets and packaging (where provided for), with refrigerant charge, without storage tank and axial fans.

\*\*\*\* The electrical data refer to  $\cos \phi$  = 0.8.

	Correction factors for calculating the cooling power														
Oil austlat tanna austrius	F	°C	20	25	30	35									
Oil outlet temperature	Fo	factor	0.82	0.92	1	1.05									
A		°C				15	20	25	32	35	40	45			
Ambient Temperature	Fa	factor				1.16	1.1	1.05	1	0.97	0.91	0.84			
0.11		type	ISO	ISO VG 10 ISO VG 22		/G 22	ISO VG 32		ISO VG 46		ISO VG 68				
Oil type	Ft	factor	1.15		1	1.1		1		0.9		82			
Cooling power = Nominal cooling power x Fo x Fa x Ft															



# TCO31-41 Minichiller HP

Industrial oil chillers

## **COOLING CAPACITY**

## 3000/3450 - 3900/4450 W



Axial fan, complete with thermal cut-out and safety grille.

#### HYDRAULIC CIRCUIT

Hydraulic circuit with gear pump without tank, with maximum available pressure 20 bar, 0-25 bar pressure gauge, regulation temperature sensor. Hydraulic safety with safety low- and high-pressure pressure switch.

#### FLECTRICAL PANEL

With main breaker, fused motor protection with LED visual fault indicator, voltage presence light.

#### MANAGEMENT AND CONTROL

The TX110 control unit manages the chiller's operation, providing warnings including high/low temperature alarms and a general serious fault alarm, with the display indicating if this refers to the refrigeration or hydraulic circuit. An on-off contact allows the machine to be switched on remotely. Control disconnect switch for switching on the machine.

#### PAINT/COATING

Standard colour: RAL 7035 textured.

#### MAIN ACCESSORIES (ref. page 189)

LTA - Operation at low ambient temperatures FP - Polyurethane air filter

RU - Castors

TD - Differential fluid temperature management (two sensors)

BGC - Hot gas bypass for +/- 1 K temperature precision

FL - Customer flow switch

- Non-standard paint/coating

- Satin AISI 304 stainless steel framework

## STRUCTURE

In powder-coated steel sheet, RAL 7035 textured finish. Easily removed panels

# COMPRESSOR

Hermetic reciprocating compressor, cooled by the refrigerant, complete with thermal cut-out.

#### REFRIGERATION CIRCUIT

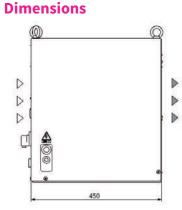
Complete with charging port, drier filter, expansion valve, high- and low-pressure safety pressure switch, thermostatic valve. R134a refrigerant.

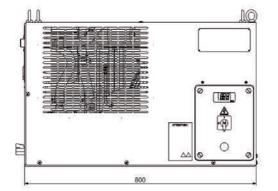
### EVAPORATOR

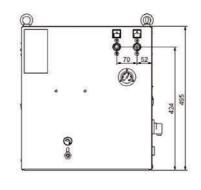
Brazed stainless-steel plate model.

## AIR CONDENSER

Finned high-efficiency copper tube condensing coil, complete with safety grille.







Model	TCO31								
		50Hz	60Hz	50Hz	60Hz				
Rated Cooling Capacity*	w	3000	3450	3900	4450				
Ambient temperature operating limits	°C		+15	- +45	•				
Settable oil temperature range	°C		+25	- +40					
Fluid type			ISO \	/G 32					
Temperature precision	K		-	+/-2					
Refrigerant gas	HFC		R13	34a					
Power supply									
Supply voltage	V ph Hz		230V (+/-10%)	) 1ph 50/60Hz					
Secondary supply voltage	V AC	230							
Digital thermostat		TX110							
Compressor									
Compressor type			Recipro	ocating					
Quantity - Number of circuits	no.		1	- 1					
Max. power draw	kW	1.15	1.5	1.6	1.92				
Max. current draw	A	6.1	8.1	7.2	8.4				
Axial Fan									
Fan type		Axial							
Quantity	no.		1		1				
Air flow rate	m₃/h	2300	2650	2300	2650				
Max. power draw	W	180	250	180	250				
Max. current draw	A	0.81	1.1	0.81	1.1				
Standard Pump									
Pump type			Gear	pump					
Quantity	no.		1	1					
Nominal fluid flow rate	l/min		10		10				
Nominal available head	bar		20		20				
Max. power draw	kW	C	).55	C	).55				
Max. current draw	A	4.0	4.2	4.0	4.2				
IN/OUT liquid connections	inch	1/2"							
Net weight (approximate)***	kg	74 75							
Width	mm	800							
Depth	mm		45	50					
Height	mm		49	95					
Sound pressure level**	dB(A)	57	60	57	60				
IP rating	IP		4	4					

\* Data relating to operation under the following conditions: intake/outlet temperature 40/30°C, ISO VG 32 oil, ambient temperature 32°C. Cooling power refers to the evaporator unit.

	Correction factors for calculating the cooling power														
Oil austlat tanna austrius	F	°C	20	25	30	35									
Oil outlet temperature	Fo	factor	0.82	0.92	1	1.05									
A		°C				15	20	25	32	35	40	45			
Ambient Temperature	Fa	factor				1.16	1.1	1.05	1	0.97	0.91	0.84			
0.11		type	ISO	ISO VG 10 ISO VG 22		/G 22	ISO VG 32		ISO VG 46		ISO VG 68				
Oil type	Ft	factor	1.15		1	1.1		1		0.9		82			
Cooling power = Nominal cooling power x Fo x Fa x Ft															



<sup>\*\*</sup> Sound pressure level at 50Hz, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.

<sup>\*\*\*</sup> Weight includes pallets and packaging (where provided for), with refrigerant charge, without storage tank and axial fans.

<sup>\*\*\*\*</sup> The electrical data refer to  $\cos \varphi = 0.8$ .

# TCO15-36 Size 1

Industrial oil chillers

## **COOLING CAPACITY**

## 1600-1900 - 2200-2550 - 3300-3900 W



## AXIAL FAN

Axial fan, complete with thermal cut-out and safety grille.

#### HYDRAULIC CIRCUIT

Hydraulic circuit with gear pump without tank, with maximum available pressure 20 bar, pressure limiting valve calibrated at 10 bar, 0-25 bar pressure gauge, regulation temperature sensor. Hydraulic safety with safety low- and high-pressure pressure switch.

#### ELECTRICAL PANEL

With main disconnect switch, fused motor protection.

#### MANAGEMENT AND CONTRO

The TX110 control unit manages the chiller's operation, providing warnings including high/low temperature alarms and a general serious fault alarm, with the display indicating if this refers to the refrigeration or hydraulic circuit. An on-off contact allows the machine to be switched on remotely. Control disconnect switch for switching on the machine.

#### PAINT/COATING

Standard colour: RAL 7035 textured.

#### MAIN ACCESSORIES (ref. page 189)

HR - Oil heating element

LTA - Operation at low ambient temperatures

FP - Polyurethane air filter

U - Castor

TD - Differential fluid temperature management (two sensors)

BGC - Hot gas bypass for +/- 1 K temperature precision

FL - Customer flow switch

- Non-standard paint/coating

- Satin AISI 304 stainless steel framework

# STRUCTURE In powder-coa

In powder-coated steel sheet, RAL 7035 textured finish. Easily removed panels

# COMPRESSOR

Hermetic reciprocating compressor, cooled by the refrigerant, complete with electrical protection.

#### REFRIGERATION CIRCUIT

Complete with charging port, drier filter, thermostatic valve, high- and low-pressure pressure switch, R134a refrigerant.

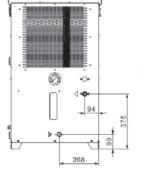
#### EVAPORATO

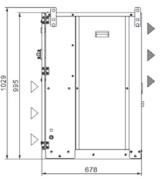
Brazed stainless-steel plate model.

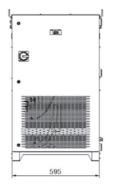
### AIR CONDENSER

Finned high-efficiency copper tube condensing coil, complete with safety grille.

## **Dimensions**









Model		TC	015	TCC	)22	TCO36		
		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	
Rated Cooling Capacity*	W	1600	1900	2200	2550	3300	3900	
Ambient temperature operating limits	°C			+15	- +45			
Settable oil temperature range	°C			+25	- +40			
Fluid type		ISO VG 32						
Temperature precision	K	+/-2						
Refrigerant gas	HFC			R13	34a			
Power supply								
Supply voltage	V ph Hz			230V (+/-10%)	) 1ph 50/60Hz			
Secondary supply voltage	V AC			23	30			
Digital thermostat				TX	110			
Compressor								
Compressor type				Recipro	ocating			
Quantity - Number of circuits	no.			1-				
Max. power draw	kW	1.03	1.06	1.15	1.5	1.73	2.2	
Max. current draw	A	5.6	5.8	6.1	8.1	9.4	12	
Axial Fan								
Fan type				Ax	ial			
Quantity	no.							
Air flow rate	m₃/h	2300	- 2650	2300 -	- 2650	2300 - 2650		
Max. power draw	kW	0.18 0.25		0.18	0.25	0.18	0.25	
Max. current draw	A	0.81	1.1	0.81	1.1	0.81	1.1	
Centrifugal Fan (optional)								
Fan type				Centr	ifugal			
Quantity	no.			1	l			
Air flow rate	m₃/h	2100	- 2400	2100 -	- 2400	2100	- 2400	
Available head	Pa			25	50	,		
Max. power draw	kW	0.15	0.21	0.15	0.21	0.15	0.21	
Max. current draw	A	0.35	0.37	0.35	0.37	0.35	0.37	
Standard Pump								
Pump type				Gear	pump			
Quantity	no.		1	1	l		1	
Nominal fluid flow rate	l/min	1	10	1	0	1	.0	
Nominal available head	bar	2	20	2	0	2	.0	
Max. power draw	kW	0.55		0.	55	0.	55	
Max. current draw	A	4.0	4.2	4.0	4.2	4.0	4.2	
Storage tank capacity (optional)	l	l 30						
IN/OUT liquid connections	inch	ich 3/4"						
Net weight (approximate)***	kg	kg 130 132				1:	32	
Width	mm	mm 595						
Depth	mm	mm 678						
Height	mm	mm 995						
Sound pressure level**	dB(A)	57	- 60	57 -	- 60	57	- 60	
IP rating	IP	44						

<sup>\*</sup> Data relating to operation under the following conditions: intake/outlet temperature 40/30°C, ISO VG 32 oil, ambient temperature 32°C. Cooling power refers to the evaporator unit.

<sup>\*\*\*\*</sup> The electrical data refer to  $\cos \phi$  = 0.8.

Correction factors for calculating the cooling power												
Oil contlet terminamentum	F	°C	20	25	30	35						
Oil outlet temperature	Fo	factor	0.82	0.92	1	1.05						
Ambient Temperature	Fa	°C				15	20	25	32	35	40	45
Ambient Temperature	га	factor				1.16	1.1	1.05	1	0.97	0.91	0.84
0.11		type	ISO	ISO VG 10		ISO VG 22		ISO VG 32		ISO VG 46		/G 68
Oil type	Ft	factor	1.15		1.1		1		0.9		0.82	
Cooling power = Nominal cooling power v. Fo. v. Fa. v. Ft												





<sup>\*\*</sup> Sound pressure level at 50Hz, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.

<sup>\*\*\*</sup> Weight includes pallets and packaging (where provided for), with refrigerant charge, without storage tank and axial fans.

# TCO22-55 Size 1 Three Phase

## **COOLING CAPACITY**

## 2200 - 3300 - 4400 - 5300 W



Axial fan, complete with thermal cut-out and safety grille

## HYDRAULIC CIRCUIT

Hydraulic circuit with gear pump without tank, with maximum available pressure 20 bar, pressure limiting valve  $calibrated \ at \ 10 \ bar, 0-25 \ bar \ pressure \ gauge, \ regulation \ temperature \ sensor. \ Hydraulic \ safety \ with \ safety \ low- \ and \ low- \$ high-pressure pressure switch.

#### ELECTRICAL PANEL

With main disconnect switch, relay motor protection, phase sequence relays.

 $The TX110\ control\ unit\ manages\ the\ chiller's\ operation,\ providing\ warnings\ including\ high/low\ temperature\ alarms$ and a general serious fault alarm, with the display indicating if this refers to the refrigeration or hydraulic circuit. An on-off contact allows the machine to be switched on remotely. Control disconnect switch for switching on the

#### PAINT/COATING

Standard colour: RAL 7035 textured.

## MAIN ACCESSORIES (ref. page 189)

HR - Oil heating element

LTA - Operation at low ambient temperatures

FP - Polyurethane air filter

TD - Differential fluid temperature management (two sensors)

BGC - Hot gas bypass for +/- 1 K temperature precision

FL - Customer flow switch

- Non-standard paint/coating

- Satin AISI 304 stainless steel framework

## **STRUCTURE**

In powder-coated steel sheet, RAL 7035 textured finish. Easily removed panels

# COMPRESSOR

Hermetic reciprocating compressor, cooled by the refrigerant, complete with thermal cut-out.

#### REFRIGERATION CIRCUIT

Complete with charging port, drier filter, thermostatic valve, high- and low-pressure pressure switch, R134a refrigerant.

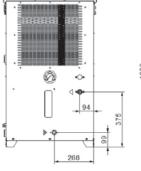
## **EVAPORATOR**

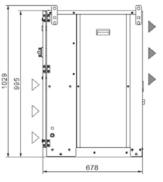
With brazed stainless-steel plates with protection against freezing.

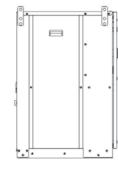
### AIR CONDENSER

Finned high-efficiency copper tube condensing coil, complete with safety grille.

# **Dimensions**







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Model		TC022	TCO36	TCO44	TCO55			
Rated Cooling Capacity*	w	2200	3300	4400	5300			
Ambient temperature operating limits	°C		+15	- +45				
Settable oil temperature range	°C		+25	- +40				
Fluid type		ISO VG 32						
Temperature precision	К	+/-2						
Refrigerant gas	HFC	R134a						
Power supply								
Supply voltage	V ph Hz		400V (+/-10°	%) 3ph 50Hz				
Secondary supply voltage	V AC		23	30				
Digital thermostat			TX	110				
Compressor								
Compressor type			Recipro	ocating				
Quantity - Number of circuits	no.		1.	-1				
Max. power draw	kW	1.50	1.72	2.32	2.61			
Max. current draw	A	2.71	3.10	4.2	4.7			
Axial Fan								
Fan type			Ax	ial				
Quantity	no.	1	1	1	1			
Air flow rate	m₃/h	2300	2300	2050	2050			
Available head	Pa	250						
Max. power draw	kW	0.18	0.18	0.18	0.18			
Max. current draw	A	0.81	0.81	0.81	0.81			
Centrifugal Fan (optional)								
Fan type			Centr	ifugal				
Quantity	no.	1	1	1	1			
Air flow rate	m₃/h	2100 - 2400	2100 - 2400	2100 - 2400	2100 - 2400			
Max. power draw	W	145 - 205	145 - 205	145 - 205	145 - 205			
Max. current draw	A	0.35 - 0.37	0.35 - 0.37	0.35 - 0.37	0.35 - 0.37			
Standard Pump								
Pump type			Gear	pump				
Quantity	no.	1	1	1	1			
Nominal fluid flow rate	l/min	10	10	20	20			
Nominal available head	bar	20	20	20	20			
Max. power draw	kW	0.75	0.75	1.1	1.1			
Max. current draw	A	1.7	1.7	2.6	2.6			
Storage tank capacity (optional)	l		3	0				
IN/OUT liquid connections	inch	:h 3/4"						
Net weight (approximate)***	kg	132	134	136	138			
Width	mm	mm 595						
Depth	mm	mm 678						
Height	mm	mm 995						
Sound pressure level**	dB(A)	57	57	57	57			
ID rating	ID	·		4				

\* Data relating to operation under the following conditions: intake/outlet temperature 40/30°C, ISO VG 32 oil, ambient temperature 32°C. Cooling power refers to the evaporator unit.

\*\* Sound pressure level, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.

\*\*\* Weight includes pallets and packaging (where provided for), with refrigerant charge, without storage tank and axial fans.

\*\*\*\* The electrical data refer to  $\cos \varphi = 0.8$ .

Correction factors for calculating the cooling power												
Oil contlet terms and tore	Fo	°C	20	25	30	35						
Oil outlet temperature	FO	factor	0.82	0.92	1	1.05						
Ambient Temperature	T _	°C				15	20	25	32	35	40	45
Ambient Temperature	Fa	factor				1.16	1.1	1.05	1	0.97	0.91	0.84
0.11		type	ISO	ISO VG 10		ISO VG 22		ISO VG 32		/G 46	ISO VG 68	
Oil type	Ft	factor	1.15		1.1		1		0.9		0.82	



# TCO56-A0 Size 2

Industrial oil chillers

## **COOLING CAPACITY**

## 6000 - 8100 - 9200 - 10900 W



#### AIR CONDENSER

Finned high-efficiency copper tube condensing coil, complete with safety grille.

#### AXIAI FAN

Axial fan, complete with thermal cut-out and safety grille.

#### HYDRAULIC CIRCUIT

Hydraulic circuit with gear pump without tank, with maximum available pressure 20 bar, pressure limiting valve calibrated at 10 bar, 0-25 bar oil pressure gauge, regulation sensor.

#### ELECTRICAL PANEL

With main disconnect switch, relay motor protection, phase sequence relays.

#### MANAGEMENT AND CONTROL

The TX200 control unit manages the operation of the chiller and provides complete operator alarm diagnostics. An on-off contact allows the machine to be switched on remotely. Illuminated control selector. Possibility of remote display for machine regulation.

#### PAINT/COATING

Standard colour: RAL 7035 textured.

## MAIN ACCESSORIES (ref. page 189)

HR - Oil heating element

LTA - Operation at low ambient temperatures

FP - Polyurethane air filter

RU - Castors

TD - Differential fluid temperature management (two sensors)

BGC - Hot gas bypass for +/- 1 K temperature precision

FL - Customer flow switch

- Non-standard paint/coating

## STRUCTURE

In powder-coated steel sheet, RAL 7035 textured finish. Easily removed panels

## ${\tt COMPRESSOR}$

Hermetic scroll compressor, cooled by the refrigerant, complete with thermal cut-out.

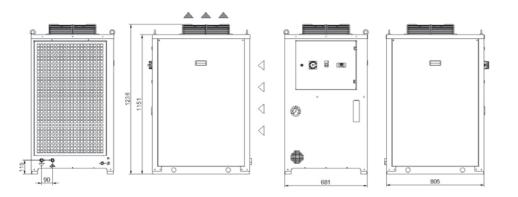
#### REFRIGERATION CIRCUIT

Complete with charging port, liquid receiver, drier filter, thermostatic valve, high- and low-pressure pressure switch, R134a refrigerant.

### **EVAPORATOR**

With brazed stainless-steel plates and temperature sensor for protection against freezing.

- Satin AISI 304 stainless steel framework



Model		TCO56	TCO70	TCO91	TCOA0		
Rated Cooling Capacity*	w	6000	8100	9200	10900		
Ambient temperature operating limits	°C		+15	- +45	•		
Settable oil temperature range	°C		+25	- +40			
Fluid type		ISO VG 32					
Temperature precision	К	+/-2					
Refrigerant gas	HFC		R1:	34a			
Power supply							
Supply voltage	V ph Hz		400V (+/-10°	%) 3ph 50Hz			
Secondary supply voltage	V			4 V AC			
Digital thermostat			TX	200			
Compressor							
Compressor type			Sci	roll			
Quantity - Number of circuits	no.		1	- 1			
Max. power draw	kW	3.7	3.9	4.4	4.6		
Max. current draw	A	5.4	6.7	7.2	7.5		
Axial Fan							
Fan type			Ax	rial			
Quantity	no.	1	1	1	1		
Air flow rate	m <sub>3</sub> /h	2800	2800	2800	2800		
Max. power draw	W	130	130	130	130		
Max. current draw	A	0.6	0.6	0.6	0.6		
Centrifugal Fan (optional)		0.0	0.0	0.0	0.0		
Fan type			Centr	rifugal			
Quantity	no.	1					
Air flow rate	m₃/h			800			
Available head	Pa	2	50		30		
Max. power draw	kW			60	<u> </u>		
Max. current draw	A			.3			
Standard Pump							
Pump type			Gear	pump			
Quantity	no.	1	1	1	1		
Nominal fluid flow rate	l/min	20	20	40	40		
Nominal available head	bar	20	20	20	20		
Max. power draw	kW	1.1	1.1	1.9	1.9		
Max. current draw	A	3	3	4.6	4.6		
Storage tank capacity (optional)	l l		6	50			
IN/OUT liquid connections	inch	3/4"					
Net weight (approximate)***	kg	145 155 175					
Width	mm						
	1000						
	mm						
Depth Height	mm						
Height Sound pressure level**	mm mm dB(A)	60			60		

<sup>\*</sup> Data relating to operation under the following conditions: intake/outlet temperature 40/30°C, ISO VG 32 oil, ambient temperature 32°C. Cooling power refers to the evaporator unit.

Correction factors for calculating the cooling power												
Oil autlet terminerature	Fo	°C	20	25	30	35						
Oil outlet temperature F	FO	factor	0.82	0.92	1	1.05						
Ambient Temperature	Fa	°C				15	20	25	32	35	40	45
	га	factor				1.16	1.1	1.05	1	0.97	0.91	0.84
Oil towns	F.	type	ISO	/G 10	ISO V	/G 22	ISO VG 32		ISO VG 46		ISO VG 68	
Oil type	Ft	factor	1.15		1.1		1		0.9		0.82	
Cooling power = Nominal cooling power x Fo x Fa x Ft												



<sup>\*\*</sup> Sound pressure level, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.

<sup>\*\*\*</sup> Weight includes pallets and packaging (where provided for), with refrigerant charge, without storage tank and axial fans.

<sup>\*\*\*\*</sup> The electrical data refer to  $\cos \phi$  = 0.8.

# TCOA2-A9 Size 3

## **COOLING CAPACITY**

## 12300 - 16400 - 17800 - 20700 W



In powder-coated steel sheet, RAL 7035 textured

Hermetic scroll compressor, cooled by the

Complete with charging port, liquid receiver,

drier filter, thermostatic valve, high- and

refrigerant, complete with thermal cut-out.

#### AIR CONDENSER

Finned high-efficiency copper tube condensing coil, complete with safety grille.

Axial fan, complete with thermal cut-out and safety grille.

Hydraulic circuit with screw pump without tank, with maximum available pressure 20 bar, pressure limiting valve calibrated at 10 bar, high- and low-pressure safety pressure switch, 0-25 bar oil pressure gauge, regulation sensor.

#### ELECTRICAL PANEL

With main disconnect switch, relay motor protection, phase sequence relays.

The TX200 control unit manages the operation of the chiller and provides complete operator alarm diagnostics. An on-off contact allows the machine to be switched on remotely. Illuminated control selector. Possibility of remote display for machine regulation.

#### PAINT/COATING

Standard colour: RAL 7035 textured.

LTA - Operation at low ambient temperatures

FP - Polyurethane air filter

RU - Castors

TD - Differential fluid temperature management (two sensors)

- Non-standard paint/coating

- Satin AISI 304 stainless steel framework

low-pressure pressure switch, liquid viewing port, solenoid valve, R410a refrigerant.

STRUCTURE

COMPRESSOR

finish. Easily removed panels

REFRIGERATION CIRCUIT

With brazed stainless-steel plates and temperature sensor for protection against

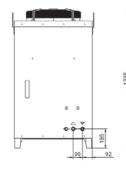
#### MAIN ACCESSORIES (ref. page 189)

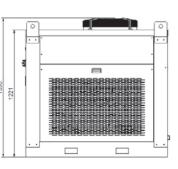
HR - Oil heating element

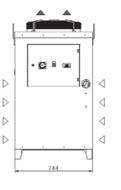
FL - Customer flow switch

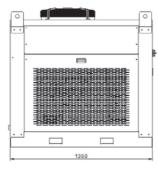
- Temperature Precision +/- 1 K

# **Dimensions**









Model		TCOA2	TCOA4	TCOA7	TCOA9			
Rated Cooling Capacity*	W	12300	16400	17800	20700			
Ambient temperature operating limits	°C		+15	+45				
Settable oil temperature range	°C		+25	+40				
Fluid type			ISO \	/G 32				
Temperature precision	K	+/-2						
Refrigerant gas	HFC	R410A						
Power supply								
Supply voltage	V ph Hz		400V (+/-10°	%) 3ph 50Hz				
Secondary supply voltage	V		24\	/ AC				
Digital thermostat			TX2	200				
Compressor								
Compressor type			Sci	roll				
Quantity - Number of circuits	no.		1.	1				
Max. power draw	kW	4.7	6.4	6.6	7.4			
Max. current draw	А	9.8	12.1	12.5	14.8			
Axial Fan								
Fan type			Ax	ial				
Quantity	no.	1	1	1	1			
Air flow rate	m₃/h	5700	5700	5700	5700			
Max. power draw	kW	0.7	0.7	0.7	0.7			
Max. current draw	А	1.4	1.4	1.4	1.4			
Centrifugal Fan (optional)								
Fan type			Centr	ifugal				
Quantity	no.	1	1	1	1			
Air flow rate	m₃/h	5700	5700	5700	5700			
Available head	Pa	250	250	220	220			
Max. power draw	kW	1.5	1.5	1.5	1.5			
Max. current draw	A	3	3	3	3			
Standard Pump								
Pump type			Screw	pump				
Quantity	no.	1	1	1	1			
Nominal fluid flow rate	l/min	60	60	60	60			
Nominal available head	bar	20	20	20	20			
Max. power draw	kW	3	3	3	3			
Max. current draw	А	4.6	4.6	4.6	4.6			
Storage tank capacity (optional)	l		15	50				
IN/OUT liquid connections	inch		1	"				
Net weight (approximate)***	kg	240	255	280	295			
Width	mm							
Depth	mm							
Height	mm							
Sound pressure level**	dB(A)							
		IP 44						

<sup>\*</sup> Data relating to operation under the following conditions: intake/outlet temperature 40/30°C, ISO VG 32 oil, ambient temperature 32°C. Cooling power refers to the evaporator unit.

Correction factors for calculating the cooling power												
Oil author towns and the	Fo	°C	20	25	30	35						
Oil outlet temperature	FO	factor	0.82	0.92	1	1.05						
	Fa	°C				15	20	25	32	35	40	45
Ambient Temperature	га	factor				1.16	1.1	1.05	1	0.97	0.91	0.84
0.11	F4	type	ISO	ISO VG 10		ISO VG 22		ISO VG 32		ISO VG 46		VG 68
Oil type	Ft -	factor	1.15		1.1		1		0.9		0.82	

<sup>\*\*</sup> Sound pressure level, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.

<sup>\*\*\*</sup> Weight includes pallets and packaging (where provided for), with refrigerant charge, without storage tank and axial fans.

<sup>\*\*\*\*</sup> The electrical data refer to  $\cos \varphi = 0.8$ .

# TCOB2-C8 Size 4

## **COOLING CAPACITY**

## 23000 - 28300 - 32800 - 37600 W



Finned high-efficiency copper tube condensing coil, complete with safety grille.

Axial fan, complete with thermal cut-out and safety grille.

#### HYDRAULIC CIRCUIT

Hydraulic circuit with screw pump without tank, with maximum available pressure 20 bar, pressure limiting valve calibrated at 10 bar, 0-25 bar oil pressure gauge, protective flow switch, regulation sensor.

#### ELECTRICAL PANEL

With main disconnect switch, relay motor protection, phase sequence relays.

The TX200 control unit manages the operation of the chiller and provides complete operator alarm diagnostics. An on-off contact allows the machine to be switched on remotely. Illuminated control selector. Possibility of remote display for machine regulation.

#### PAINT/COATING

Standard colour: RAL 7035 textured.

## MAIN ACCESSORIES (ref. page 189)

FP - Polyurethane air filter

TD - Differential fluid temperature management (two sensors)

- Non-standard paint/coating

- Satin AISI 304 stainless steel framework

Complete with charging port, safety valve,

REFRIGERATION CIRCUIT

finish. Easily removed panels

liquid receiver, drier filter, liquid inspection port, solenoid valve, thermostatic valve, high- and low-pressure pressure switch, R410A refrigerant.

In powder-coated steel sheet, RAL 7035 textured

Hermetic scroll compressor, cooled by the

refrigerant, complete with thermal cut-out.

STRUCTURE

COMPRESSOR

With brazed stainless-steel plates and

HR - Oil heating element

LTA - Operation at low ambient temperatures

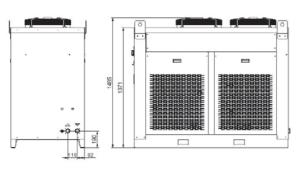
RU - Castors

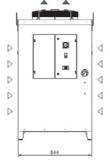
FL - Customer flow switch.

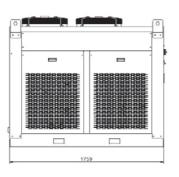
- Temperature Precision +/- 1 K

temperature sensor for protection against

# **Dimensions**







Model		TCOB2	тсов7	TCOC1	TCOC8			
Rated Cooling Capacity*	w	23000	28300	32800	37600			
Ambient temperature operating limits	°C		+15 -	+45				
Settable oil temperature range	°C		+25 -	+40				
Fluid type			ISO V	/G 32				
Temperature precision	K	+/-2						
Refrigerant gas	HFC	R410A						
Power supply								
Supply voltage	V ph Hz		400V (+/-109	%) 3ph 50Hz				
Secondary supply voltage	V		24 V	/ AC				
Digital thermostat			TX2	200				
Compressor								
Compressor type			Scr	roll				
Quantity - Number of circuits	no.		1-	.1				
Max. power draw	kW	8.6	10.1	11.6	13.3			
Max. current draw	A	15	17.3	18.8	23			
Axial Fan								
Fan type			Ax	ial				
Quantity	no.	2	2	2	2			
Air flow rate	m₃/h	10000	10000	10000	10000			
Max. power draw	kW	1.4	1.4	1.4	1.4			
Max. current draw	A	2.8	2.8	2.8	2.8			
Centrifugal Fan (optional)								
Fan type			Centr	ifugal				
Quantity	no.	2	2	2	2			
Air flow rate	m₃/h	10000	10000	10000	10000			
Available head	Pa	250	250	220	220			
Max. power draw	kW	3	3	3	3			
Max. current draw	A	6	6	6	6			
Standard Pump								
Pump type			Screw	pump				
Quantity	no.	1	1	1	1			
Nominal fluid flow rate	l/min	120	120	120	120			
Nominal available head	bar	20	20	20	20			
Max. power draw	kW	6	6	6	6			
Max. current draw								
Max. current draw	A	10.2	10.2	10.2	10.2			
Max. Carrette draw	A	10.2		10.2	10.2			
Storage tank capacity (optional)	A l	10.2			10.2			
		10.2	10.2	20	10.2			
Storage tank capacity (optional)	l	10.2	10.2	20	10.2 520			
Storage tank capacity (optional)  IN/OUT liquid connections	l inch		10.2 22 1.1	20 /2" 500				
Storage tank capacity (optional)  IN/OUT liquid connections  Net weight (approximate)***	l inch kg		10.2 22 11, 460	20 /2" 500				
Storage tank capacity (optional) IN/OUT liquid connections Net weight (approximate)*** Width	l inch kg mm		10.2 22 11. 460	20 /2" 500 14 59				
Storage tank capacity (optional) IN/OUT liquid connections Net weight (approximate)*** Width Depth	l inch kg mm		10.2 22 11 460 84	20 /2" 500 14 59				
Storage tank capacity (optional) IN/OUT liquid connections Net weight (approximate)*** Width Depth Height	l inch kg mm mm	440	10.2  22 11, 460  84 17	500 /2" 500 14 59 85	520			

\* Data relating to operation under the following conditions: intake/outlet temperature 40/30°C, ISO VG 32 oil, ambient temperature 32°C. Cooling power refers to the evaporator unit.

\*\* Sound pressure level, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.

\*\*\* Weight includes pallets and packaging (where provided for), with refrigerant charge, without storage tank and axial fans.

\*\*\*\* The electrical data refer to  $\cos \varphi = 0.8$ .

Correction factors for calculating the cooling power												
Oil outlet temperature	Fo	°C	20	25	30	35						
Oil outlet temperature	10	factor	0.82	0.92	1	1.05						
		°C				15	20	25	32	35	40	45
Ambient Temperature	Fa	factor				1.16	1.1	1.05	1	0.97	0.91	0.84
-11.		type	ISO	ISO VG 10		ISO VG 22		ISO VG 32		ISO VG 46		/G 68
Oil type	Ft	factor	1.15		1.1		1		0.9		0.82	
Cooling power = Nominal cooling power x Fo x Fa x Ft												

# TCOD4-G8 Size 5

## **COOLING CAPACITY**

## 41400 - 46100 - 56600 - 65600 - 75200 W

# AIR CONDENSER

Finned high-efficiency copper tube condensing coil, complete with safety grille.

Axial fan (connected in tandem for E0, E4), complete with thermal cut-out and safety grille.

Hydraulic circuit with screw pump without tank, with maximum available pressure 20 bar, pressure limiting valve calibrated at 10 bar, 0-25 bar oil pressure gauge, protective flow switch, temperature regulation sensor.

#### **ELECTRICAL PANEL**

With main disconnect switch, relay motor protection, phase sequence relays.

The TX400 control unit manages the operation of the chiller and provides complete operator alarm diagnostics. An on-off contact allows the machine to be switched on remotely. Illuminated control selector. Dual remote ON-OFF. Ethernet and RS485 connection. Possibility of remote display for machine regulation.

#### PAINT/COATING

Standard colour: RAL 7035 textured.

## MAIN ACCESSORIES (ref. page 189)

HR - Oil heating element

LTA - Operation at low ambient temperatures

FP - Polyurethane air filter

RU - Castors

TD - Differential fluid temperature management (two sensors)

FL - Customer flow switch

- Non-standard paint/coating

- Satin AISI 304 stainless steel framework

- Temperature Precision +/- 1 K

## STRUCTURE

In powder-coated steel sheet, RAL 7035 textured finish. Easily removed panels

# COMPRESSOR

Hermetic scroll compressor, cooled by the refrigerant, complete with thermal cut-out.

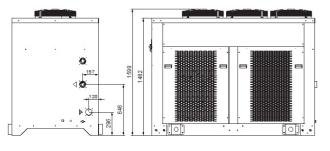
#### REFRIGERATION CIRCUIT

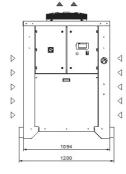
Complete with charging port, safety valve, liquid receiver, drier filter, liquid inspection port, solenoid valve, thermostatic valve, high- and low-pressure pressure switch, R410A refrigerant. Stepped cooling power regulation, 2 steps on models TCW E0-E4-F7-G8.

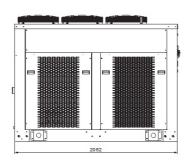
## **EVAPORATOR**

With brazed stainless-steel plates and temperature sensor for protection against freezing.

# **Dimensions**







Model		TCOD4	TCOE0	TCOE4	TCOF7	TCOG8			
Rated Cooling Capacity*	w	41400	46100	56600	65600	75200			
Ambient temperature operating limits	°C		'	+15 - +45	•	'			
Settable fluid temperature range	°C			+25 - +40					
Fluid type				ISO VG - 32					
Temperature precision	K	+/-2							
Refrigerant gas	HFC			R410A					
Power supply									
Supply voltage	V ph Hz		40	0V (+/-10%) 3ph 50	Hz				
Secondary supply voltage	V			24 V AC					
Digital thermostat				TX400					
Compressor									
Compressor type				Scroll					
Quantity - Number of circuits	no.	1-1	2	- 1	2	- 2			
Max. power draw	kW	14.8	16.7	20.2	23.2	26.6			
Max. current draw	A	25.3	29.8	34.5	37.6	46			
Axial Fan									
Fan type				Axial					
Quantity	no.	3	3	3	3	3			
Air flow rate	m₃/h	17000	17000	17000	17000	17000			
Max. power draw	kW	2.1	2.1	2.1	2.1	2.1			
Max. current draw	A	4.2	4.2	4.2	4.2	4.2			
Centrifugal Fan (optional)									
Fan type				Centrifugal					
Quantity	no.	3	3	3	3	3			
Air flow rate	m₃/h	17000	17000	17000	17000	17000			
Available head	Pa	260	260	260	230	230			
Max. power draw	kW	4.5	4.5	4.5	4.5	4.5			
Max. current draw	A	9	9	9	9	9			
Standard Pump									
Pump type				Screw pump					
Quantity	no.	1	1	1	1	1			
Nominal fluid flow rate	l/min	220	220	220	220	220			
Nominal available head	bar	10	10	10	10	10			
Max. power draw	kW	11	11	11	11	11			
Max. current draw	A	19.5	19.5	19.5	19.5	19.5			
Storage tank capacity (optional)	l			250					
IN/OUT liquid connections	inch	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"			
Net weight (approximate)***	kg	580	620	660	710	730			
Width	mm								
Depth	mm	mm 2062							
Height	mm	mm 1599							
Sound pressure level**	dB(A)	72	72	72	72	72			
IP rating	IP			44					

\* Data relating to operation under the following conditions: intake/outlet temperature 40/30°C, ISO VG 32 oil, ambient temperature 32°C. Cooling power refers to the evaporator unit.

\*\* Sound pressure level, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.

\*\*\* Weight includes pallets and packaging (where provided for), with refrigerant charge, without storage tank and axial fans.

\*\*\*\* The electrical data refer to  $\cos \varphi = 0.8$ .

Correction factors for calculating the cooling power												
Oil autlet terminerature	Fo	°C	20	25	30	35						
Oil outlet temperature	FO	factor	0.82	0.92	1	1.05						
Ambient Terrorenture	-	°C				15	20	25	32	35	40	45
Ambient Temperature	Fa	factor				1.16	1.1	1.05	1	0.97	0.91	0.84
Oil town		type	ISO	ISO VG 10		ISO VG 22		/G 32	ISO \	/G 46	ISO	/G 68
Oil type	Ft	factor	1.15		1.	.1 1		1	0.9		0.82	



# TCU Industrial chillers for contaminated or dirty fluids

With its innovative tube heat exchange system, the TCU range allows dirty fluids to be cooled while guaranteeing the highest levels of performance and the lowest maintenance costs.



# TCU15-36 Size 1

Industrial chillers for contaminated or dirty fluids

## **COOLING CAPACITY**

## 1600-1900 - 2200-2550 - 3300-3900 W



#### AXIAL FAN

Axial fan, complete with thermal cut-out and safety grille.

#### FLUID POWER CIRCUIT

Fluid power circuit with centrifugal pump without tank, with maximum available pressure 3 bar, dual oil safety pressure switch, 0-10 bar oil pressure gauge, regulation sensor.

#### **ELECTRICAL PANEL**

With main disconnect switch, relay motor protection, phase sequence relays.

#### MANAGEMENT AND CONTROL

 $The TX110 \, control \, unit \, manages \, the \, chiller's \, operation, \, providing \, warnings \, including \, high/low \, temperature \, alarms \, alarms$ and a general serious fault alarm, with the display indicating if this refers to the refrigeration or fluid power circuit. An on-off contact allows the machine to be switched on remotely. Control disconnect switch for switching on the

#### PAINT/COATING

Standard colour: RAL 7035 textured.

## MAIN ACCESSORIES (ref. page 189)

HR - Fluid heating element

LTA - Operation at low ambient temperatures

FP - Polyurethane air filter

RU - Castors

TD - Differential fluid temperature management (two sensors)

BGC - Hot gas bypass for +/- 1 K temperature precision

- Non-standard paint/coating
- Satin AISI 304 stainless steel framework

### **STRUCTURE**

In powder-coated steel sheet, RAL 7035 textured finish. Easily removed panels

# COMPRESSOR

Hermetic reciprocating compressor, cooled by the refrigerant, complete with thermal cut-out.

#### REFRIGERATION CIRCUIT

Complete with charging port, drier filter, thermostatic valve, high- and low-pressure safety pressure switch, R134a refrigerant.

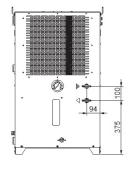
### **EVAPORATOR**

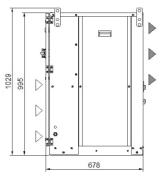
Tube evaporator with mantle, steel heads and copper heat exchanger tubes, with anti-freezing protection.

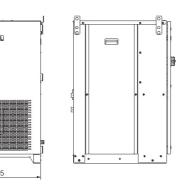
### AIR CONDENSER

Finned high-efficiency copper tube condensing coil, complete with safety grille.

# **Dimensions**







Model	TCU15					TCU36		
		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	
Rated Cooling Capacity*	w	1600	1900	2200	2550	3300	3900	
Ambient temperature operating limits	°C			+15	- +45			
Settable fluid temperature range	°C	+25 - +40						
Fluid type		Dirty fluids (oil and mineral oil emulsions)						
Maximum oil impurity size	μm			1!	50			
Temperature precision	К			+/	<b>'-2</b>			
Refrigerant gas	HFC	R134a						
Power supply								
Supply voltage	V ph Hz			230V (+/-10%	) 1ph 50/60Hz			
Secondary supply voltage	V			2:	30			
Digital thermostat				TX	110			
Compressor								
Compressor type				Recipro	ocating			
Quantity - Number of circuits	no.				-1			
Max. power draw	kW	1.03	1.06	1.15	1.5	1.73	2.22	
Max. current draw	A	5.6	5.8	6.1	8.1	9.4	12	
Axial Fan								
Fan type				Ax	ial			
Quantity	no.	1 1					 [	
Air flow rate	m₃/h	2300 - 2650 2300 - 2650				2300 -		
Max. power draw	W	180	250	180	250	180	250	
Max. current draw	A			1.1	0.81	1.1		
Centrifugal Fan (optional)		A 0.81 1.1 0.01 1.1				5.52		
Fan type				Centr	ifugal			
Quantity	no.		1		1	1	 L	
Air flow rate	m₃/h	2100	- 2400		- 2400	2100 -	2100 - 2400	
Available head	Pa			2!	50			
Max. power draw	kW	0.15	0.21	0.15	0.21	0.15	0.21	
Max. current draw	A	0.35	0.37	0.35	0.37	0.35	0.37	
Centrifugal Pump								
Pump type				Centr	ifugal			
Quantity	no.		1		1	1	L	
Nominal/max fluid flow rate	l/min	14	- 55	14	- 55	18 -	- 55	
Nominal available head	bar	3	3.2	3	.2	3.	.0	
Max. power draw	kW	W 0.67 0.67			0.0	67		
Max. current draw	A	A 4.9 4.9				4.	.9	
IN/OUT liquid connections	inch			3/	4"			
Net weight (approximate)***	kg	1	30	13	32	13	32	
Width	mm	mm 595						
Depth	mm	mm 678						
Height	mm							
Sound pressure level**	dB(A)	57	- 60	57	- 60	57 -	- 60	
IP rating	IP			. 4	4			
0	"				-			

<sup>\*</sup> Data relating to operation under the following conditions: intake/outlet temperature 40/30°C, ISO VG 32 mineral oil, ambient temperature 32°C. Cooling power refers to the evaporator

<sup>\*\*\*\*</sup> The electrical data refer to  $\cos \varphi = 0.8$ .

Correction factors for calculating the cooling power												
Oil outlet temperature Fo	-	°C	20	25	30	35						
Oil outlet temperature	FO	factor	0.82	0.92	1	1.05						
A	Fa	°C				15	20	25	32	35	40	45
Ambient Temperature	га	factor				1.16	1.1	1.05	1	0.97	0.91	0.84
0.11	F4	type	ISO VG 10		ISO VG 22		ISO	/G 32	ISO	/G 46	ISO \	VG 68
Oil type	Ft	factor	1.	1.15		.1	1		0.9		0.	82

<sup>\*\*</sup> Sound pressure level at 50Hz, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.

<sup>\*\*\*</sup> Weight includes pallets and packaging (where provided for), with refrigerant charge, without storage tank and axial fans.

# TCU22-55 Size 1 Three Phase

Industrial chillers for contaminated or dirty fluids

## **COOLING CAPACITY**

## 2200 - 3300 - 4400 - 5300 W



#### AXIAL FAN

Axial fan, complete with thermal cut-out and safety grille.

#### FLUID POWER CIRCUIT

Fluid power circuit with centrifugal pump without tank, with maximum available pressure 3 bar, dual oil safety pressure switch, 0-10 bar oil pressure gauge, regulation sensor.

#### **ELECTRICAL PANEL**

With main disconnect switch, relay motor protection, phase sequence relays.

#### MANAGEMENT AND CONTROL

The TX110 control unit manages the chiller's operation, providing warnings including high/low temperature alarms and a general serious fault alarm, with the display indicating if this refers to the refrigeration or fluid power circuit. An on-off contact allows the machine to be switched on remotely. Control disconnect switch for switching on the machine.

#### PAINT/COATING

Standard colour: RAL 7035 textured.

#### MAIN ACCESSORIES (ref. page 189)

HR - Fluid heating element

LTA - Operation at low ambient temperatures

FP - Polyurethane air filter

RU - Castors

TD - Differential fluid temperature management (two sensors)

BGC - Hot gas bypass for +/- 1 K temperature precision

- Non-standard paint/coating

- Satin AISI 304 stainless steel framework

# **STRUCTURE**

In powder-coated steel sheet, RAL 7035 textured finish. Easily removed panels

# COMPRESSOR

Hermetic reciprocating compressor, cooled by the refrigerant, complete with thermal cut-out.

#### REFRIGERATION CIRCUIT

Complete with charging port, drier filter, thermostatic valve, high- and low-pressure safety pressure switch, R134a refrigerant.

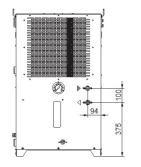
## **EVAPORATOR**

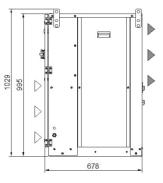
Tube evaporator with mantle, steel heads and copper heat exchanger tubes, with anti-freezing protection.

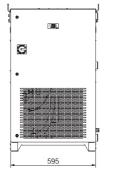
## AIR CONDENSER

Finned high-efficiency copper tube condensing coil, complete with safety grille.

# **Dimensions**









Model		TCU22	TCU36	TCU44	TCU55			
Rated Cooling Capacity*	w	2200	3300	4400	5300			
Ambient temperature operating limits	°C		+15	- +45				
Settable oil temperature range	°C		+25	- +40				
Fluid type		Dirty fluids (oil and mineral oil emulsions)						
Maximum oil impurity size	μm		1	50				
Temperature precision	К		+,	/-2				
Refrigerant gas	HFC		R1	34a				
Power supply								
Supply voltage	V ph Hz		400V (+/-10 <sup>4</sup>	%) 3ph 50Hz				
Secondary supply voltage	V		230	V AC				
Digital thermostat			TX	110				
Compressor								
Compressor type			Recipro	ocating				
Quantity	no.		1	- 1				
Max. power draw	kW	1.5	1.72	2.32	2.61			
Max. current draw	А	2.7	3.1	4.2	4.7			
Axial Fan								
Fan type			Ax	ial				
Quantity	no.	1	1	1	1			
Air flow rate	m₃/h	2300	2300	2050	2050			
Max. power draw	W	180	180	180	180			
Max. current draw	А	0.81	0.81	0.81	0.81			
Centrifugal Fan (optional)								
Fan type			Centr	rifugal				
Quantity	no.			1				
Air flow rate	m₃/h	2100 - 2400	2100 - 2400	2100 - 2400	2100 - 2400			
Available head	Pa	25	50	2	30			
Max. power draw	W	145 - 205	145 - 205	145 - 205	145 - 205			
Max. current draw	A	0.35 - 0.37	0.35 - 0.37	0.35 - 0.37	0.35 - 0.37			
Centrifugal Pump								
Pump type			Centi	rifugal				
Quantity	no.	1	1	1	1			
Nominal fluid flow rate	l/min	14 - 60	18 - 60	24 - 60	30 - 60			
Nominal available head	bar	3.2	3.2	3.0	2.8			
Max. power draw	kW	0.67	0.67	0.67	0.67			
Max. current draw	A	1.6	1.6	1.6	1.6			
IN/OUT liquid connections	inch		3/	4"				
Net weight (approximate)***	kg	100	110	135	145			
Width	mm 595							
Depth	mm 678							
Height	mm 995							
Sound pressure level**	dB(A)	57	57	57	57			
•								

\* Data relating to operation under the following conditions: intake/outlet temperature 40/30°C, ISO VG 32 mineral oil, ambient temperature 32°C. Cooling power refers to the evaporator

IΡ

44

- \*\* Sound pressure level, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.
- \*\*\* Weight includes pallets and packaging (where provided for), with refrigerant charge, without storage tank and axial fans.
- \*\*\*\* The electrical data refer to  $\cos \varphi = 0.8$ .

IP rating

Correction factors for calculating the cooling power												
Oil contlet terms and tore	Fo	°C	20	25	30	35						
Oil outlet temperature	FO	factor	0.82	0.92	1	1.05						
Ambient Temperature	Fa	°C				15	20	25	32	35	40	45
Ambient Temperature	га	factor				1.16	1.1	1.05	1	0.97	0.91	0.84
0.11		type	ISO	VG 10	ISO \	/G 22	ISO	/G 32	ISO \	/G 46	ISO \	/G 68
Oil type	Ft	factor	1.	1.15		.1	1		0.9		0.82	

# TCU56-A0 Size 2

Industrial chillers for contaminated or dirty fluids

## **COOLING CAPACITY**

## 6000 - 8100 - 9200 - 10900 W



#### AXIAL FAN

Axial fan, complete with thermal cut-out and safety grille.

#### FLUID POWER CIRCUIT

#### **ELECTRICAL PANEL**

With main disconnect switch, relay motor protection, phase sequence relays.

#### MANAGEMENT AND CONTROL

on-off contact allows the machine to be switched on remotely. Illuminated control selector. Possibility of remote display for machine regulation.

#### PAINT/COATING

FP - Polyurethane air filter

TD - Differential fluid temperature management (two sensors)

- Non-standard paint/coating

## STRUCTURE

In powder-coated steel sheet, RAL 7035 textured finish. Easily removed panels

# COMPRESSOR

Hermetic scroll compressor, cooled by the refrigerant, complete with thermal cut-out.

#### REFRIGERATION CIRCUIT

Complete with charging port, liquid receiver, drier filter, thermostatic valve, high- and low-pressure pressure switch, R134a refrigerant.

### **EVAPORATOR**

Tube evaporator with mantle, steel heads and copper heat exchanger tubes, with anti-freezing protection.

### AIR CONDENSER

Finned high-efficiency copper tube condensing coil, complete with safety grille.

Fluid power circuit with centrifugal pump without tank, with maximum available pressure 3 bar, dual oil safety pressure switch, 0-10 bar oil pressure gauge, regulation sensor.

The TX200 control unit manages the operation of the chiller and provides complete operator alarm diagnostics. An

Standard colour: RAL 7035 textured.

## MAIN ACCESSORIES (ref. page 189)

HR - Fluid heating element

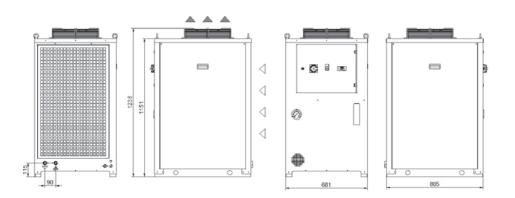
LTA - Operation at low ambient temperatures

RU - Castors

BGC - Hot gas bypass for +/- 1 K temperature precision

- Satin AISI 304 stainless steel framework

## **Dimensions**



Model		TCU56	TCU70	TCU91	TCUA0			
Rated Cooling Capacity*	W	6000	8100	9200	10900			
Ambient temperature operating limits	°C		+15	- +45	•			
Settable oil temperature range	°C		+25	- +40				
Fluid type		Dirty fluids (oil and mineral oil emulsions)						
Maximum oil impurity size	μm		15	50				
Temperature precision	К		+/	'-2				
Refrigerant gas	HFC		R13	34a				
Power supply								
Supply voltage	V ph Hz		400V (+/-10°	%) 3ph 50Hz				
Secondary supply voltage	V		230-2	4 V AC				
Digital thermostat			TX	200				
Compressor								
Compressor type			Sci	roll				
Quantity	no.	1	1	1	1			
Max. power draw	kW	3.7	3.9	4.4	4.6			
Max. current draw	A	5.4	6.7	7.2	7.5			
Axial Fan								
Fan type		Axial						
Quantity	no.	1	1	1	1			
Air flow rate	m <sub>3</sub> /h	2800	2800	2800	2800			
Max. power draw	W	130	130	130	130			
Max. current draw	A	0.6	0.6	0.6	0.6			
Centrifugal Fan (optional)								
Fan type			Centr	ifugal				
Quantity	no.	1	1	1	1			
Air flow rate	m <sub>3</sub> /h	2800	2800	2800	2800			
Available head	Pa	2	50	2	30			
Max. power draw	kW	0.6	0.6	0.6	0.6			
Max. current draw	A	2.3	2.3	2.3	2.3			
Centrifugal Pump								
Pump type			Centr	ifugal				
Quantity	no.	1	1	1	1			
Nominal fluid flow rate	l/min	27.0 - 50.0	36.0 - 50.0	42.0 - 50.0	45.0 - 50.0			
Nominal available head	bar	2.4	1.8	1.4	1.3			
Max. power draw	kW	1.1	1.1	1.9	1.9			
Max. current draw	A	2.2	2.2	2.2	2.2			
IN/OUT liquid connections	inch		1	"				
Net weight (approximate)***	kg							
Width	mm	mm 681						
Depth	mm	mm 805						
Height	mm	mm 1236						
Sound pressure level**	dB(A)	60	60	60	60			
IP rating	IP		4	4				

<sup>\*</sup> Data relating to operation under the following conditions: intake/outlet temperature 40/30°C, ISO VG 32 mineral oil, ambient temperature 32°C. Cooling power refers to the evaporator

<sup>\*\*\*\*</sup> The electrical data refer to  $\cos \varphi = 0.8$ .

Correction factors for calculating the cooling power												
	_	°C	20	25	30	35						
Oil outlet temperature	Fo	factor	0.82	0.92	1	1.05						
A		°C				15	20	25	32	35	40	45
Ambient Temperature	Fa	factor				1.16	1.1	1.05	1	0.97	0.91	0.84
type ISO VG 10 ISO VG 22 ISO VG 32 ISO VG 46 ISO VG										/G 68		
Oil type	Ft	factor	1.	15	1	.1	1		0.9		0.82	





<sup>\*\*</sup> Sound pressure level, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.

<sup>\*\*\*</sup> Weight includes pallets and packaging (where provided for), with refrigerant charge, without storage tank and axial fans.



The new TCI range of chillers from **texa industries**, featuring immersion coil evaporators, is **texa industries**' answer to any oil/water cooling requirements for industrial applications.



# TCI56-91 Size 2

## **COOLING CAPACITY**

## 6000 - 7100 - 8100 - 9650 - 9200 - 11000 W



#### AIR CONDENSER

Finned high-efficiency copper tube condensing coil, complete with safety grille.

Axial fan, complete with thermal cut-out and safety grille. On request, centrifugal fan for air expulsion ducting.

With main disconnect switch, fused motor protection.

#### MANAGEMENT AND CONTROL

The TX110 control unit manages the chiller's operation, providing warnings including high/low temperature alarms and a general serious fault alarm, with the display indicating if this refers to the refrigeration circuit or protection of the immersion coils. An on-off contact allows the machine to be switched on remotely. Control disconnect switch for switching on the machine.

#### PAINT/COATING

Standard colour: RAL 7035 textured.

#### MAIN ACCESSORIES (on request, ref. page 189)

LE - Electric level

FP - Polyurethane air filter

TD - Differential fluid temperature management (two sensors)

BGP - Hot gas bypass for +/- 0.5 K temperature precision

- Agitator for fluid movement

- Non-standard paint/coating

- Satin AISI 304 stainless steel framework

- Design of higher cooling powers with dedicated framework

- Centrifugal fans for condensation air ducting

### STRUCTURE

In powder-coated steel sheet, RAL 7035 textured finish. Easily removed panels

# COMPRESSOR

Hermetic SCROLL compressor, cooled by the refrigerant, complete with thermal cut-out.

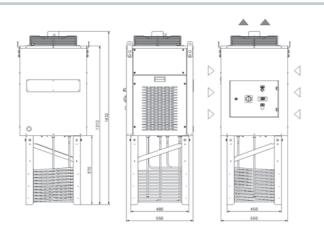
#### REFRIGERATION CIRCUIT

Complete with charging port, drier filter, thermostatic valve, high- and low-pressure pressure switch, refrigerant gas.

## **EVAPORATOR**

Dual concentric coil in AISI 304 stainless steel. Resin-covered stainless-steel regulation sensor, IP67 rated.

# **Dimensions**



Model		TC	156	TC	170	тс	191
		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
Rated Cooling Capacity*	W	6000	7100	8100	9650	9200	11000
Ambient temperature operating limits	°C	-5 - +45					
Settable fluid temperature range	°C	+15 / +25 water or emulsion max 5 cSt - 40°C +20 / +30 mineral oil 32 cSt - 40°C					
Temperature precision	К			+/	- 1		
Refrigerant gas	HFC			R1	34a		
Minimum fluid flow rate (emulsion/oil)	l/min			40	- 60		
Minimum volume in tank (emulsion/oil)	l.			60 -	100		
Power supply							
Supply voltage	V ph Hz			400/460V (+/-10	%) 3ph 50/60H	Z	
Secondary supply voltage	V			230V-2	24V AC		
Digital thermostat				TX	110		
Compressor							
Compressor type				Sc	roll		
Quantity - Number of circuits	no.	1-1					
Max. power draw	kW	3.7	4.5	4.2	5.1	2.9	3.6
Max. current draw	A	5.4	6.3	7.1	8.0	6.0	6.9
Axial Fan							
Fan type				Ax	rial		
Quantity	no.			:	1		
Air flow rate	m₃/h			20	000		
Max. power draw	kW	0.18	0.25	0.18	0.25	0.18	0.25
Max. current draw	A	0.81	1.1	0.81	1.1	0.81	1.1
Net weight (approximate)***	kg	145 147 150					50
Width	mm	1 550					
Depth	mm	nm 550					
Height	mm	mm 1432					
Sound pressure level**	dB(A)	dB(A) 57 57				57	
IP rating	IP			4	4		

\* Data relates to operation under the following conditions: Ambient temperature 32°C.

\*\* Sound pressure level at 50Hz, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.

\*\*\* Weight includes pallets and packaging (where provided for), with refrigerant charge and axial fans.

\*\*\*\* The electrical data refer to  $\cos \varphi = 0.8$ .

Correc	ction factors	for calcula	ting the cooli	ng power				
Ambient Temperature	Emulsion	Oil			Cooling	capacity		
	15	20	4620	5467	6237	7431	7084	8470
32	20	25	5460	6461	7371	8782	8372	10010
	25	30	6000	7100	8100	9650	9200	11000
	15	20	4332	5126	5848	6967	6642	7942
37	20	25	5187	6138	7002	8342	7953	9510
	25	30	5700	6745	7695	9168	8740	10450
	15	20	4066	4811	5489	6539	6234	7454
42	20	25	4805	5686	6486	7728	7367	8809
	25	30	5280	6248	7128	8492	8096	9680

# TCIA2-A7 Size 3

## **COOLING CAPACITY**

# 12300 - 14600 - 16400 - 16200 - 17800 - 20450 W



#### AIR CONDENSER

Finned high-efficiency copper tube condensing coil, complete with safety grille.

Axial fan, complete with thermal cut-out and safety grille. On request, centrifugal fan for air expulsion ducting.

With main disconnect switch, fused motor protection.

#### MANAGEMENT AND CONTROL

The TX110 control unit manages the chiller's operation, providing warnings including high/low temperature alarms and a general serious fault alarm, with the display indicating if this refers to the refrigeration circuit or protection of the immersion coils. An on-off contact allows the machine to be switched on remotely. Control disconnect switch for switching on the machine.

#### PAINT/COATING

Standard colour: RAL 7035 textured.

#### MAIN ACCESSORIES (on request, ref. page 189)

LE - Electric level

FP - Polyurethane air filter

TD - Differential fluid temperature management (two sensors)

BGP - Hot gas bypass for +/- 0.5 K temperature precision

- Agitator for fluid movement

- Non-standard paint/coating

- Satin AISI 304 stainless steel framework

- Design of higher cooling powers with dedicated framework

- Centrifugal fans for condensation air ducting

## STRUCTURE

In powder-coated steel sheet, RAL 7035 textured finish. Easily removed panels

# COMPRESSOR

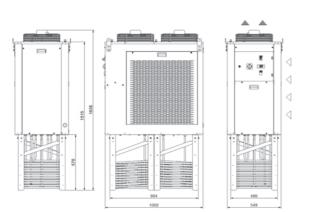
Hermetic SCROLL compressor, cooled by the refrigerant, complete with thermal cut-out.

#### REFRIGERATION CIRCUIT

Complete with charging port, drier filter, thermostatic valve, high- and low-pressure pressure switch, refrigerant gas.

## **EVAPORATOR**

Dual concentric coil in AISI 304 stainless steel. Resin-covered stainless-steel regulation sensor, IP67 rated



Model		TC	IA2	TCIA4		TCIA7	
		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
Rated Cooling Capacity*	W	12300	14600	16400	16200	17800	20450
Ambient temperature operating limits	°C			-5 -	+45		
Settable fluid temperature range	°C	+15 / +25 water or emulsion max 5 cSt - 40°C +20 / +30 mineral oil 32 cSt - 40°C					
Temperature precision	K			+/	- 1		
Refrigerant gas	HFC			R4	10A		
Minimum fluid flow rate (emulsion/oil)	l/min			80 -	120		
Minimum volume in tank (emulsion/oil)	l.			150	- 250		
Power supply							
Supply voltage	V ph Hz			400/460V (+/-10	0%) 3ph 50/60H	Z	
Secondary supply voltage	V			230V-:	24V AC		
Digital thermostat				TX	110		
Compressor							
Compressor type				Sc	roll		
Quantity - Number of circuits	no.	1-1					
Max. power draw	kW	3.1	3.5	4.0	3.7	4.1	4.7
Max. current draw	A	9.8	9.6	12.1	9.9	12.5	12.1
Axial Fan							
Fan type				Ax	rial		
Quantity	no.				2		
Air flow rate	m₃/h			43	300		
Max. power draw	kW	0.4	0.55	0.4	0.55	0.4	0.55
Max. current draw	A	1.7	2.2	1.7	2.2	1.7	2.2
Net weight (approximate)***	kg	215 215 215					15
Width	mm	n 549					
Depth	mm	n 1002					
Height	mm	nm 1636					
Sound pressure level**	dB(A)	dB(A) 60 60				50	
IP rating	IP			4	14		

<sup>\*</sup> Data relates to operation under the following conditions: Ambient temperature 32°C.

<sup>\*\*\*\*</sup> The electrical data refer to  $\cos \varphi = 0.8$ .

Correc	ction factors	for calcula	ting the cooli	ng power				
Ambient Temperature	Emulsion	Oil Cooling capacity						
	15	20	9471	11242	12628	12474	13706	15747
32	20	25	11193	13286	14924	14742	16198	18610
	25	30	12300	14600	16400	16200	17800	20450
	15	20	8881	10541	11841	11696	12852	14765
37	20	25	10633	12622	14178	14005	15388	17679
	25	30	11685	13870	15580	15390	16910	19428
	15	20	8334	9893	11113	10977	12061	13857
42	20	25	9850	11692	13133	12973	14254	16376
	25	30	10824	12848	14432	14256	15664	17996



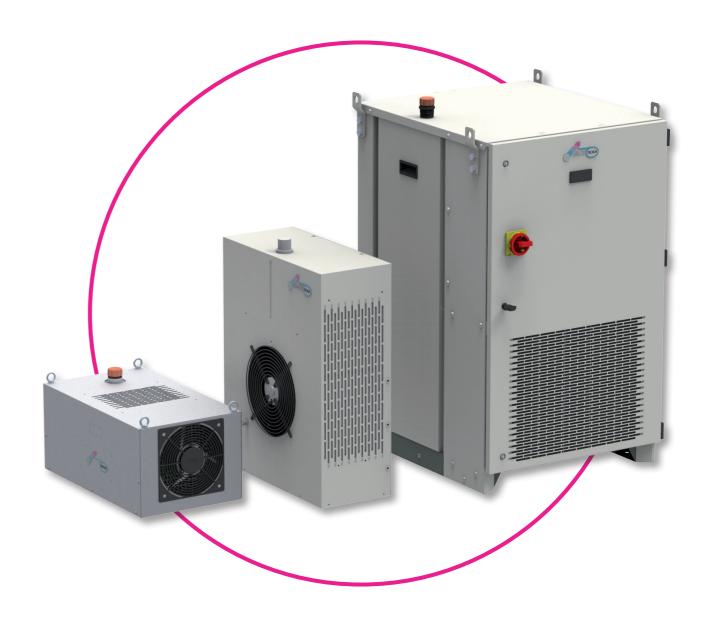


<sup>\*\*</sup> Sound pressure level at 50Hz, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.

<sup>\*\*\*</sup> Weight includes pallets and packaging (where provided for), with refrigerant charge and axial fans.



The most simple and cost-effective system for cooling of fluids in industrial processes through the ambient air.



# SAW10 Water-air heat exchangers

# **COOLING CAPACITY**

## 1500-1750 W



Power supply cable: 1.5 m.

## PAINT/COATING

Standard colour: RAL 7035 textured.

## MAIN ACCESSORIES (ref. page 189)

LE - Electrical level indicator

FP - Polyurethane air filter

TR - Digital regulation thermostat, temperature display complete with NTC sensor

RU - Castors

AV - Vibration damper supports

Others on request



In powder-coated steel sheet

### AXIAL FAN

Aluminium axial fan, diameter 200 mm.

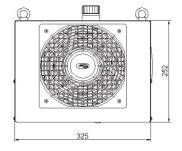
#### LIQUID CIRCUIT

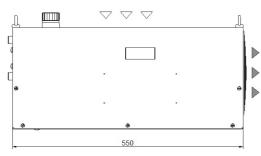
Liquid circuit composed entirely of non-ferrous switch.

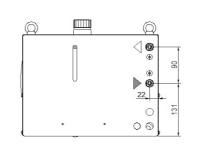
### COOLING COIL

material in contact with the liquid to prevent contamination. Brass electric pump with 3 bar available head with thermal cut-out. Storage tank, complete with filling. Protective water flow

Finned aluminium cooling coil with copper tubes.







Model		SAW	10				
		50Hz	60Hz				
Rated Cooling Capacity*	w	1500	1750				
Max. ambient operating temp.	°C	50					
Fluid type		Wate	er				
Power supply							
Supply voltage	V ph Hz	230V (+/-10%)	1ph 50/60Hz				
Axial Fan							
Fan type		Axia	al				
Quantity	no.	1 x d.20	0 mm				
Air flow rate	m <sub>3</sub> /h	700 - 8	820				
Standard Pump							
Pump type		Periph	eral				
Quantity	no.	1					
Nominal/max fluid flow rate	l/min	9.0 - 16.0	12.0 - 18.0				
Nominal available head	bar	3.2	2				
Max. power draw	kW	0.6	0.8				
Max. current draw	A	2.7	3.3				
Storage tank capacity	l	10					
IN/OUT liquid connections	inch	1/4	"				
Net weight (approximate)***	kg	12					
Width	mm	325					
Depth	mm	550					
Height	mm	252					
Sound pressure level**	dB(A)	(A) 38					
IP rating	IP	34					

<sup>\*</sup> Data relates to operation under the following conditions: outlet temp. 50°C water, ambient temperature 35°C.

<sup>\*\*\*\*\*</sup> Permitted inlet/outlet temperature range -5 / +60°C.

Correction factors for calculating the cooling power												
T water- T ambient ∆T	Fw	°C		5	10	15	20	25	30	35	40	
		factor		0.38	0.67	1.00	1.30	1.67	1.91	2.32	2.55	
Percentage glycol by weight	Fg	%		0	10	15	20	25	30	35	40	
		factor		1.00	0.97	0.96	0.95	0.94	0.93	0.91	0.90	
Cooling power = Nominal cooling power x Fo x Fa x Ft												





<sup>\*\*</sup> Sound pressure level at 50Hz, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.

 $<sup>\</sup>ensuremath{^{\star\star\star}}$  Weights with storage tank empty and all packaging removed.

<sup>\*\*\*\*</sup> The electrical data refer to  $\cos \phi$  = 0.8.

# SAV50 Water-air heat exchangers

## **COOLING CAPACITY**

## 5000-5650 W



#### MANAGEMENT AND CONTROL

Power supply cable: 1.5 m.

#### PAINT/COATING

Standard colour: RAL 7035 textured.

## MAIN ACCESSORIES (ref. page 189)

LE - Electrical level indicator

FP - Polyurethane air filter

TR - Digital regulation thermostat, temperature display complete with NTC sensor

RU - Castors

AV - Vibration damper supports

Others on customer request

## STRUCTURE

In powder-coated steel sheet

#### AXIAL FAN

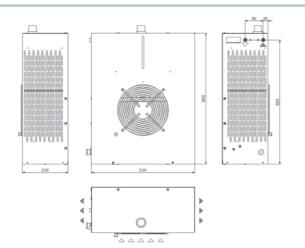
Aluminium axial fan, diameter 250 mm.

### LIQUID CIRCUIT

Liquid circuit composed entirely of non-ferrous material in contact with the liquid to prevent contamination. Brass electric pump with 3 bar available head with thermal cut-out. Storage tank, complete with filling. Protective water flow switch.

## COOLING COIL

Dual finned aluminium cooling coil with copper



Model		SAW:	50				
		50Hz	60Hz				
Rated Cooling Capacity*	w	5000	5650				
Max. ambient operating temp.	°C	50					
Fluid type		Water					
Power supply							
Supply voltage	V ph Hz	230V (+/-10%) I	1ph 50/60Hz				
Axial Fan							
Fan type		Axia	al				
Quantity	no.	1 x d.250	0 mm				
Air flow rate	m₃/h	1500 - 1	1725				
Standard Pump							
Pump type		Peripheral					
Quantity	no.	1					
Nominal/max fluid flow rate	l/min	10.0 - 16.0	13.5 - 18.0				
Nominal available head	bar	2.8	1				
Max. power draw	kW	0.65	0.70				
Max. current draw	A	3.4	4.6				
Storage tank capacity	l	5					
IN/OUT liquid connections	inch	1/4'	"				
Net weight (approximate)***	kg	19					
Width	mm	520					
Depth	mm	230	)				
Height	mm	660	)				
Sound pressure level**	dB(A)	38					
IP rating	IP	34					

<sup>\*</sup> Data relates to operation under the following conditions: outlet temp. 50°C water, ambient temperature 35°C.

<sup>\*\*\*\*\*</sup> Permitted inlet/outlet temperature range -5 / +60°C.

Correction factors for calculating the cooling power												
T water- T ambient ∆T	Fw	°C		5	10	15	20	25	30	35	40	
		factor		0.38	0.67	1.00	1.30	1.67	1.91	2.32	2.55	
Percentage glycol by weight	Fg	%		0	10	15	20	25	30	35	40	
		factor		1.00	0.97	0.96	0.95	0.94	0.93	0.91	0.90	
Cooling power = Nominal cooling power x Fo x Fa x Ft												



<sup>\*\*</sup> Sound pressure level at 50Hz, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.

<sup>\*\*\*</sup> Weights with storage tank empty and all packaging removed.

<sup>\*\*\*\*</sup> The electrical data refer to  $\cos \phi$  = 0.8.

# SAVAO Water-air heat exchangers

## **COOLING CAPACITY**

## 10000 W



#### MANAGEMENT AND CONTROL

Power supply cable: 1.5 m.

#### PAINT/COATING

Standard colour: RAL 7035 textured.

## MAIN ACCESSORIES (ref. page 189)

LE - Electrical level indicator

FP - Polyurethane air filter

TR - Digital regulation thermostat, temperature display complete with NTC sensor

RU - Castors

AV - Vibration damper supports

Others on customer request

## STRUCTURE

In powder-coated steel sheet

#### AXIAL FAN

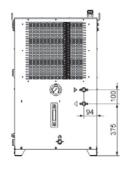
Aluminium axial fan, diameter 350 mm.

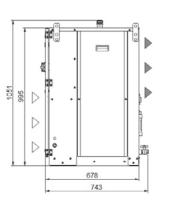
### LIQUID CIRCUIT

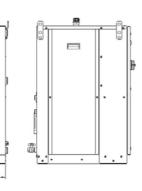
Liquid circuit composed entirely of non-ferrous material in contact with the liquid to prevent contamination. Stainless-steel electric pump with available head of over 3.5 bar, with thermal cut-out. Storage tank, complete with filling. Protective water flow switch.

## COOLING COIL

Dual finned aluminium cooling coil with copper







Model		SAWA0
Rated Cooling Capacity*	W	10000
Max. ambient operating temp.	°C	50
Fluid type		Water
Power supply		
Supply voltage	V ph Hz	230V (+/-10%) 1ph 50Hz
Axial Fan		
Fan type		Axial
Quantity	no.	1 x d.350 mm
Air flow rate	m₃/h	2500 - 2850
Standard Pump		
Pump type		Peripheral
Quantity	no.	1
Nominal/max fluid flow rate	l/min	32 - 80
Nominal available head	bar	3.5
Max. power draw	kW	1.5
Max. current draw	A	6.5
Storage tank capacity	l	25
IN/OUT liquid connections	inch	3/4"
Net weight (approximate)***	kg	90
Width	mm	595
Depth	mm	678
Height	mm	995
Sound pressure level**	dB(A)	38
IP rating	IP	44

<sup>\*</sup> Data relates to operation under the following conditions: outlet temp. 50°C water, ambient temperature 35°C.

<sup>\*\*\*\*\*</sup> Permitted inlet/outlet temperature range -5 / +60°C.

Correction factors for calculating the cooling power												
T water- T ambient ∆⊤	Fw	°C		5	10	15	20	25	30	35	40	
	rw	factor		0.38	0.67	1.00	1.30	1.67	1.91	2.32	2.55	
Percentage glycol by weight		%		0	10	15	20	25	30	35	40	
	Fg	factor		1.00	0.97	0.96	0.95	0.94	0.93	0.91	0.90	

Cooling power = Nominal cooling power x Fo x Fa x Ft

<sup>\*\*</sup> Sound pressure level, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.

 $<sup>\</sup>ensuremath{^{\star\star\star}}$  Weights with storage tank empty and all packaging removed.

<sup>\*\*\*\*</sup> The electrical data refer to  $\cos \phi$  = 0.8.



texa industries temperature controllers offer maximum reliability in a compact package for process liquid heating/cooling precision.



# **TTW90**

Temperature controllers

## **HEATING CAPACITY**

## 3000 - 6000 W



#### ELECTRICAL PANEL

Complete with motor starting, heating element and main disconnect switch with circuit breakers, electrical power connections with relay phase sequence control and alarm signal. The front of the panel incorporates indicator lights, green for correct operation, red for general, pump and heating element faults. Static power relays for heatingtemperature regulation.

#### MANAGEMENT AND CONTROL

maximum temperature control. RS485 serial communication on request.

MAIN ACCESSORIES (on request, ref. page 191)

VO - Stop valves

RU - Castors

- External temperature sensor kit
- Non-standard paint/coating
- Satin AISI 304 stainless steel framework
- Non-standard supply voltages possible

## STRUCTURE

In powder-coated steel sheet, RAL 7035 textured

#### LIQUID CIRCUIT

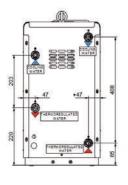
on request with plate heat exchanger). ON-OFF cooling solenoid valve, or modulating valve on request. Stainless-steel centrifugal pump. Reinforced heating elements with large heat-exchange area.

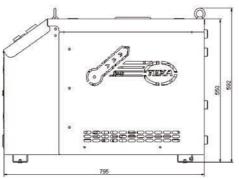
Flow switch, minimum pressure switch and mechanical maximum pressure valve are

finish. Easily removed panels

DIRECT cooling circuit (high-efficiency INDIRECT

installed to protect the fluid circuit.







Model		TTW9	90			
Type of heating/cooling		Direct				
Stepping	%	0-100				
Field of operation	°C	+5 - +95				
Temperature regulation precision	°C	+/-0.5				
Control action	-	PID				
Heating section						
Power	kW	3.0	6.0			
Maximum temperature	°C	95				
Туре	-	Electr	ric			
Control	-	SSR	1			
Pump						
Pump type	-	Centrifugal				
Min/max fluid flow rate	l/min	36.0	60.0			
Nominal head	bar	5.4	3.6			
Max. power draw	kW	0.9				
Max. current draw	A	1.8				
Maximum pressure	bar	10				
Electrical specifications						
Supply voltage	V ph Hz	400V (+/-10%) 3ph 50Hz				
Secondary supply voltage	V	24 V AC				
Max. power draw	kW	3.8	6.8			
Max. current draw	A	7.2	12			
Total volume	1	3.6	5.4			
IN/OUT liquid connections	inch	3/4"				
IN/OUT cooling connections	inch	3/4"				
Net weight (approximate)*	kg	61 65				
Width	mm	304				
Depth	mm	795				
Height	mm	550	1			
Noise**	dB(A)	50				
Colour	-	RAL70	35			
ID rating	l ID	44				

<sup>\*</sup> Weight without pallets, packaging and drained of fluid.

<sup>\*\*</sup> Sound pressure level, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.

<sup>\*\*\*</sup> The electrical data refer to  $\cos \varphi = 0.8$ .

# **TTW95**

Temperature controllers

## **HEATING CAPACITY**

## 3000 - 6000 - 9000 - 12000 W



#### ELECTRICAL PANEL

Complete with motor starting, heating element and main disconnect switch with circuit breakers, electrical power connections with relay phase sequence control and alarm signal. The front of the panel incorporates indicator lights, green for correct operation, red for general, pump and heating element faults. Static power relays for heatingtemperature regulation.

#### MANAGEMENT AND CONTROL

maximum temperature control. RS485 serial communication on request.

MAIN ACCESSORIES (on request, ref. page 191)

VO - Stop valves

RU - Castors

- External temperature sensor kit
- Non-standard paint/coating
- Satin AISI 304 stainless steel framework
- Non-standard supply voltages possible

## STRUCTURE

In powder-coated steel sheet, RAL 7035 textured

#### LIQUID CIRCUIT

heat-exchange area.

mechanical maximum pressure valve are

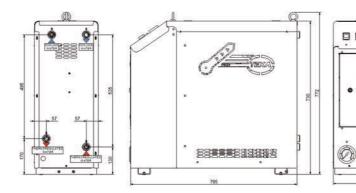
finish. Easily removed panels

DIRECT cooling circuit (high-efficiency INDIRECT on request with plate heat exchanger). ON-OFF cooling solenoid valve, or modulating valve on request. Stainless-steel centrifugal pump. Reinforced heating elements with large

Flow switch, minimum pressure switch and

# installed to protect the fluid circuit.

# **Dimensions**



Model			TTV	V95				
Type of heating/cooling		Direct						
Stepping	%	0-100						
Field of operation	°C	+5 - +95						
Temperature regulation precision	°C	+/-0.5						
Control action	-	PID						
Heating section								
Power	kW	3.0	6.0	9.0	12.0			
Maximum temperature	°C		9	5				
Туре	-		Elec	tric				
Control	-		SS	SR				
Pump								
Pump type	-		Centr	ifugal				
Min/max fluid flow rate	l/min	36	5.0	6	0.0			
Nominal head	bar	5.4 3.6						
Max. power draw	kW	0.9						
Max. current draw	А	1.8						
Maximum pressure	bar	10						
Electrical specifications								
Supply voltage	V ph Hz		400V (+/-10°	%) 3ph 50Hz				
Secondary supply voltage	V		24\	/ AC				
Max. power draw	kW	3.8	6.8	9.8	12.8			
Max. current draw	А	7.2	12.0	16.8	21.6			
Total volume	1	3.6	5.4	7.2	9.0			
IN/OUT liquid connections	inch	1"						
IN/OUT cooling connections	inch		1	"				
Net weight (approximate)*	kg	75 80 90 95						
Width	mm		30	)4				
Depth	mm		79	95				
Height	mm		73	30				
Noise**	dB(A)		5	0				
Colour	-	RAL7035						

<sup>\*</sup> Weight without pallets, packaging and drained of fluid.

IP rating



44

<sup>\*\*</sup> Sound pressure level, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.

<sup>\*\*\*</sup> The electrical data refer to  $\cos \varphi = 0.8$ .

# **TEXA FLUID**

Chemical additives for industrial cooling circuits

## INTRODUCTION

texa industries, thanks to its experience in manufacturing industrial cooling systems, has developed multiple liquid solutions for industrial systems to be used with or without mixing with water. Whenever water is used as the heat transfer medium in circuits, the use of these liquid solutions offers complete protection of the liquid system, also guaranteeing that the heat transfer capacity is maintained.

These products have been designed to limit the onset of problems such as corrosion, the formation of deposits and scale, bacteriological phenomena, reduction in performance, increases in maintenance costs, unexpected stoppages and reduction of the average lifespan of the systems. The phenomenon which causes the greatest number of problems in circuits is CORROSION. The water present in the systems tends to form scale deposits and bacterial slime, and above all encourages corrosion caused by the metal being attacked by the oxygen it contains. The use of high-purity water (demineralised, RO purified and in some cases softened) prevents the formation of scale but significantly increases corrosion issues. The main causes of corrosion are:

OXIDATION of the metals due to the oxygen dissolved in the water

ACID produced by the breakdown of glycol over time

texa industries therefore decided to develop multiple solutions to meet customer requirements in order to prevent damage to industrial systems, particularly closed circuits (at atmospheric and other pressures).

WARNING: For detailed information on the toxicity and other safety factors relating to any type of fluid, refer to the MSDS provided by texa industries.



## **TEXA FLUID 903-TX**

Product code: C15001209- 25 kg can C15002650- 10 kg can

This is a liquid solution based on 93% ethylene glycol with the addition of inhibitors and biocides. The product is compatible with all the most common metals (iron, steel, copper and its alloys, aluminium and its alloys), as well as plastic and rubber. Designed to protect liquid circuits in industrial machines, machine tools and all those systems where the recirculation of cold or hot water in multi-metal circuits is necessary.

It is formulated with substances which provide three key actions to protect the system:

ANTIFREEZE ACTION: prevents the formation of ice at temperatures around zero

**CORROSION INHIBITION:** prevents corrosion by forming a protective film on metal surfaces

BIOCIDAL ACTION: inhibits growth of fungi, moulds and bacteria, preventing slime build-up. Do not mix with softened, demineralised and RO purified water.



# **TEXA FLUID 903-TX-MIXED**

Product code: C15001218- 25 kg can

This is a liquid solution based on 30% ethylene glycol with the addition of inhibitors and biocides, and mixed with 70 % water. Retains the same chemical characteristics as 903-TX.



## **TEXA FLUID BIOCIDE-ALGICIDE FLUID**

Product code: C15003950- 25 kg can C15003930- 1 kg can

This is a biocide formulation based on isothiazolinone with an excellent algicidal and biomass dispersion action. It is used to control biological pollution in open recirculated or similar cooling circuits. It penetrates the biological masses thanks to its effective dispersive action, guaranteeing the best possible cleaning of the heat exchange surfaces. This liquid, as well as having a powerful biocidal and algicidal effect, also has low levels of toxicity. The use of this liquid is particularly recommended for softened, demineralised and RO purified water (laser applications).



## **TEXA FLUID CORROSION INHIBITOR**

Product code: C15003949- 25 kg can C15003929- 1 kg can

This is a highly ecological formulation which prevents corrosion in closed recirculated hot and cold water circuits. The presence of a strong inorganic anodic inhibitor, which is ecologically compatible, together with organic inhibitors and polymer dispersants, provides excellent protection from corrosion for ferrous and cupric metals and alloys and excellent cleaning of the heat exchange surfaces, preventing the formation of any kind of deposits. Also compatible with non-metallic components.



# **TEXA FLUID FOOD**

Product code: C15004334- 25 kg can

This is a multifunctional diathermic fluid based on FDA approved inhibited mono ethylene glycol. Recommended for use as a diathermic fluid whenever accidental food contact is possible. Not suitable for use as a direct food component or additive. It is compatible with most other diathermic fluids based on mono ethylene glycol. Exclusive use of this product is recommended for optimum protection against corrosion. It must be mixed only with low hardness distilled water. It protects metals and alloys used in systems against all forms of corrosion. The combination of low toxicity and FDA approved ingredients with a high level of corrosion protection makes this product unique on the market. Competing products often provide insufficient protection for aluminium and copper. Given the frequent use of copper in the food industry, the excellent protection that TEXA FLUID FOOD provides for it makes it a particularly suitable product.





# SERVICE NETWORK

Availability, courtesy and efficiency

Our customers benefit from a wide network composed of engineers and technicians which offers an efficient support service around the world.

