

25 WATER CHILLER MUEN-H6 Digital Scroll



DIGITAL SCROLL COMPRESSOR COPELAND®

In traditional air cooling systems the output capacity is monitored by on / off compressor control. The accuracy of the control mode is not very good and the compressor starts and stops frequently, which is not too good for its useful life.

The Digital Scroll air-cooled system breaks the traditional design. It is designed with a parallel connection of a Digital Scroll compressor and one (or two) fixed Scroll compressors.

The system can achieve a linear fit of its capacity, from 0.5 % to 100 %, this range is one of the larger from the sector. When the system is operating at partial load, it is possible to adjust accurately the cooling or heating power.

OPERATION UNDER LOW TEMPERATURES

Thanks to control condensation fan, units can operate in both cooling and heating up to -10 °C outdoor temperature.

Easy connection

Easy connection between the master and slave units. All units can be connected via a wired remote control (included with each unit) using a three pole shielded cable.

MODULAR SYSTEM

Modular design that allows up to 16 units to operate together, it can form an equipment of up to 1 024 kW.



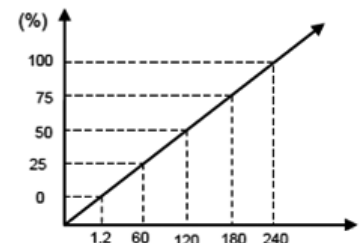
30 kW



65 kW



CL92266 (Included)



Digital Scroll output capacity



Output capacity with fixed compressor



65 kW



65 kW



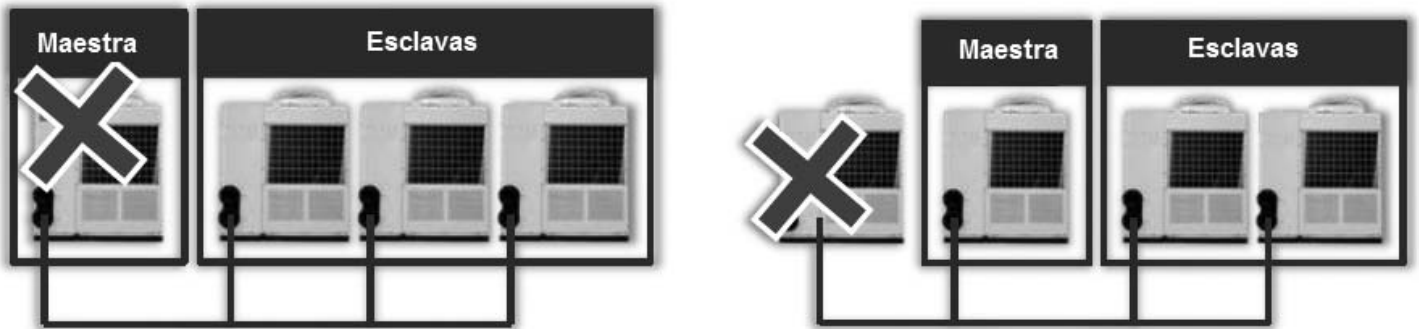
1024 kW

SAFEGUARD FUNCTION

If the unit gives an error code (E *)

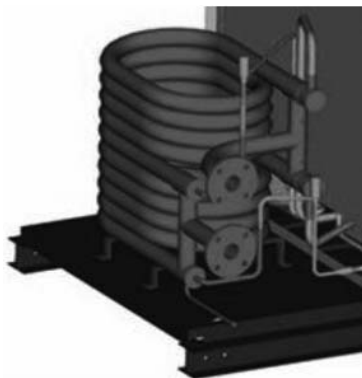
- If it is in the master unit, all units stop (a slave unit can be configured as master unit to leave the system in service temporarily).
- If the error is in a slave unit, just that unit stops.

If the unit gives a protection code (P *), the unit stops but the rest keep ongoing, regardless of whether it is not the master unit (except PE and P9 codes).

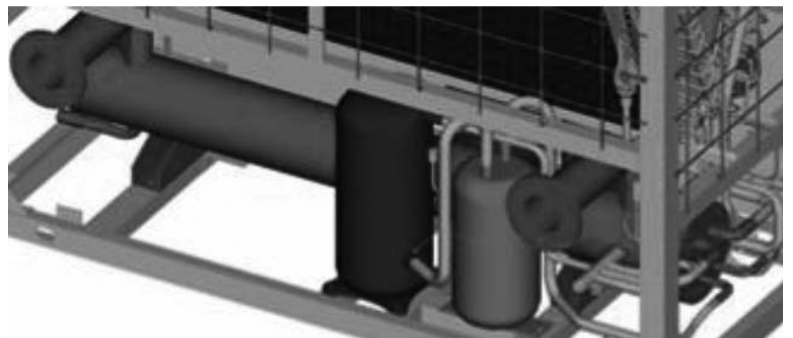


NEW HEAT EXCHANGERS

More reliable system thanks to the new heat exchangers. 30 kW modules incorporate a heat exchanger of double pipe, while the 65 kW modules carry shell and tube heat exchanger.



Double pipe heat exchanger



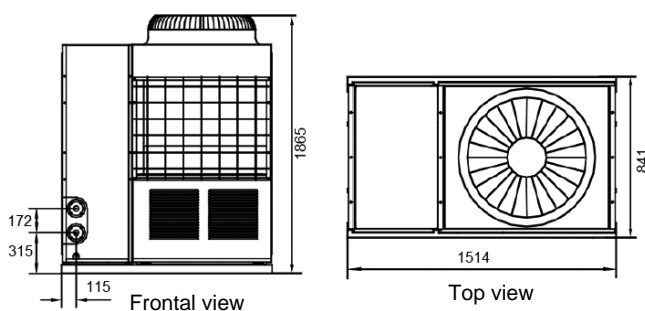
Shell heat exchangers and tubes

CHECK FUNCTION

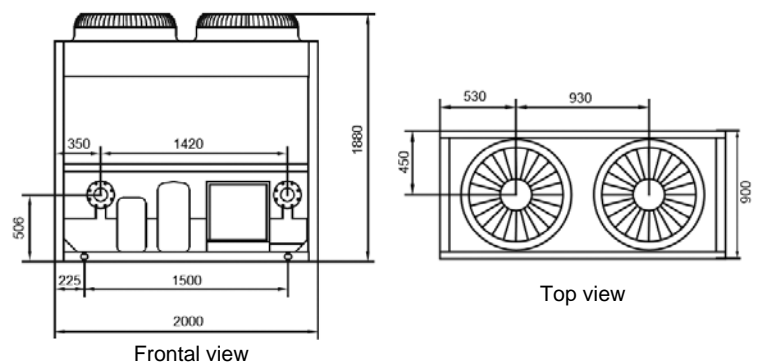
From the display of the electronic board of the unit, you can check various operating parameters in real time.

DIMENSIONS

MUEN-30-H6T



MUEN-65-H6T



TECHNICAL SPECIFICATIONS:

Model			MUEN-30-H6T	MUEN-65-H6T	
Code			CL 25 616	CL 25 617	
Power supply		F, V, Hz	3N-, 400V, 50Hz	3N-, 400V, 50Hz	
Cooling (1)	Capacity	kW	30	65	
	Power consumption	kW	10	20.4	
	Current	A	16.3	36.5	
	Max. current	A	21.1	54.5	
	EER	W/W	3.00	3.18	
	SEER	W/W	3.21	3.15	
Heating (2)	Capacity	kW	32	69	
	Power consumption	kW	9.8	21.5	
	Current	A	16	37.2	
	Max. current	A	21.1	54.5	
	COP	W/W	3.27	3.21	
	SCOP (heating 35°C)	W/W	3.14	3.04	
	Energy labelling (heating 35°C)		A+	A+	
Compressors	Brand		Copeland	Copeland	
	Type		Scroll	Scroll	
	Digital Scroll	Model		ZPD67KCE-TFD-532	ZPD72KCE-TFD-433
		Amount		1	1
		Capacity	kW	16.2	16.9
		Power consumption	kW	5.26	5.75
		Max. current	A	10.6	12.7
	Fixed	Model		ZP67KCE-TFD-522	ZP144KCE-TFD-522
		Amount		1	1
		Capacity	kW	16.2	35.4
		Power consumption	kW	5.2	10.8
		Max. current	A	11.8	21.1
	Fixed	Model			ZP67KCE-TFD-420
		Amount			1
		Capacity	kW		16.2
Power consumption		kW		5.2	
Max. current		A		11.8	
Fan	Amount		1	2	
	Air flow (H)	m ³ /h	12,000	24,000	
	Power	kW	0.670	0.865 x 2	
Sound pressure (3)		dB(A)	65	67	
Sound power (3)		dB(A)	80	83	
Water exchanger	Type		Double tube	Carcass and tube	
	Water pressure drop	Kpa	60	15	
	Volume	L	10	42	
	Nominal flow	m ³ /h	5.2	11.2	
	Soiling factor	m ² ·°C /kW	0.086	0.086	
	Max. design pressure	Mpa	1	1	
	Connection type		Flanged	Flanged	
	Hydraulic connections		mm	DN40 (1 1/2")	DN 100 (4")
Dimensions	Net dimensions (Width x Height x		mm	1514 x 1865 x 841	2000 x 1880 x 900
	Gross Dimensions (Width x Height x		mm	1590 x 2065 x 995	2106 x 2090 x 998
Weight	Net		Kg	375	610
	Gross		Kg	400	680
Refrigerant	Type		R410A	R410A	
	Amount		Kg	3.5 x 2	7 x 2
Electrical connections	Power wiring (4)		mm ²	4 x 10 + T (L<20m)	4 x 25 + T (L<20m)
	Communication wiring (5)		mm ²	3 x 0.75 (shielded)	3 x 0.75 (shielded)
Ambient temperature in operation	Cooling		°C	-10 to 46	-10 to 46
	Heating		°C	-10 to 21	-10 to 21
Water temperature in operation	Cooling (6)		°C	0 to 17	0 to 17
	Heating		°C	22 to 50	45 to 50

Notes:

- (1) Nominal conditions cooling: Water temperature 12 °C (Inlet), 7 °C (Outlet), outdoor temperature 35 °C DB. Water flow rate 0.172 m³/(h·KW)
- (2) Nominal heating conditions: Water temperature 40 °C (Inlet), 45 °C (Outlet), outdoor temperature 7 °C DB. Water flow rate 0.172 m³/(h·KW)
- (3) Sound level measured at 1 m of distance in an open field.
- (4) Power wiring recommended for L < 20 m, for longer distances it should be calculated.
- (5) Remote control wiring and interconnection of several modules.
- (6) Below 5 °C antifreeze must be added to the hydraulic circuit.