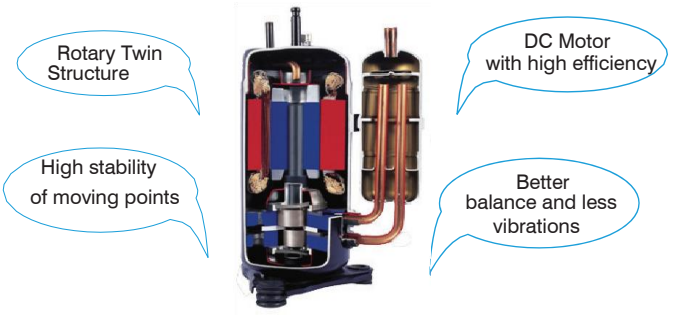
MODULAR INVERTER WATER CHILLER

MUENR-H9 Series

MUNDOCLIMA SUPER DC INVERTER

R32

The new Super DC Inverter modular chillers are available in two versions with and without hydraulic module.

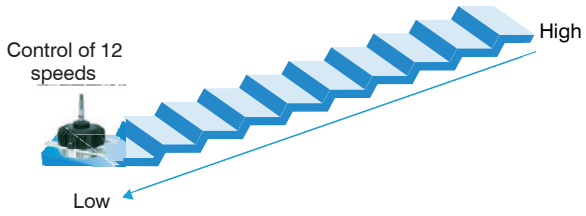


DC INVERTER TWIN ROTARY COMPRESSOR

Thanks to the DC Inverter Twin Rotary Compressor, electricity consumption can be reduced by 25%.

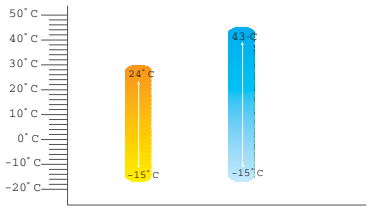
DC FAN MOTORS

The fan speed is adjusted according to the pressure of the refrigerant and the required load, thus reducing the electric consumption by 30%.



OPERATION UNDER LOW TEMPERATURES

Thanks to fan condensation control, the units can operate in both cooling and heating up to -15 °C ambient temperature.



MODULAR SYSTEM

The modular design allows that up to 16 units can operate together, forming a system up to 880 kW (in cooling).

55 kW + 55 kW (Max. 16 modules) +...= 880 kW

Model 30

Model 60

KJRM-120H/BMWKO3-E
Included

Modbus

OPTIONAL

Accessories

KIT VICTAULIC-RM 2"
Mod. 60
(CL 97 296)

Easy connection

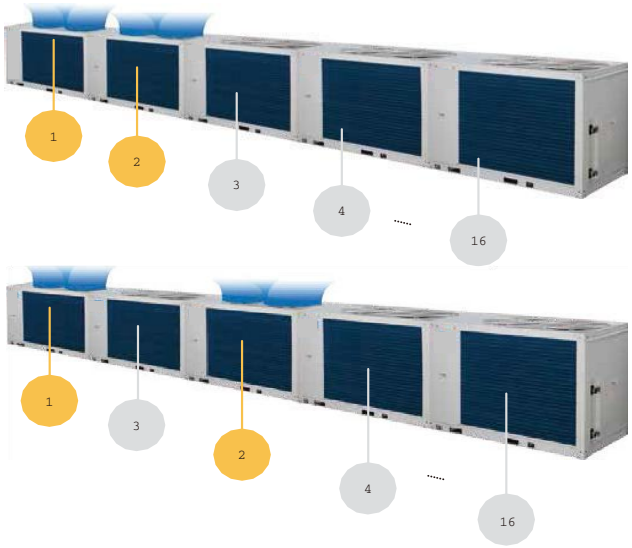
Easy connection between the master and slave units. All units can be connected via a wired remote control (included with each unit) using a three pole shielded cable.

INVERTER WATER CHILLER MUENR-H9 Series

MUNDOCLIMA® SUPER DC INVERTER

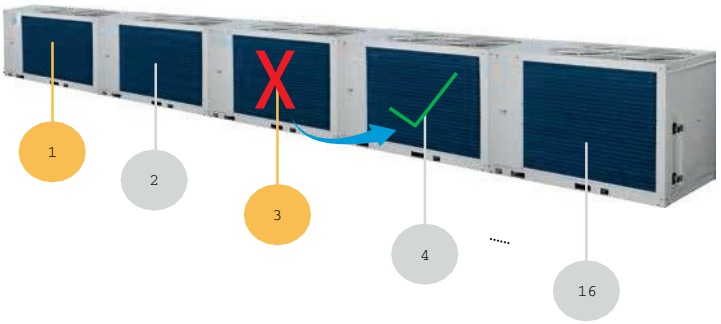
ROTARY FUNCTION

In a modular system, the rotary function allows all slave units to operate for the same amount of hours.



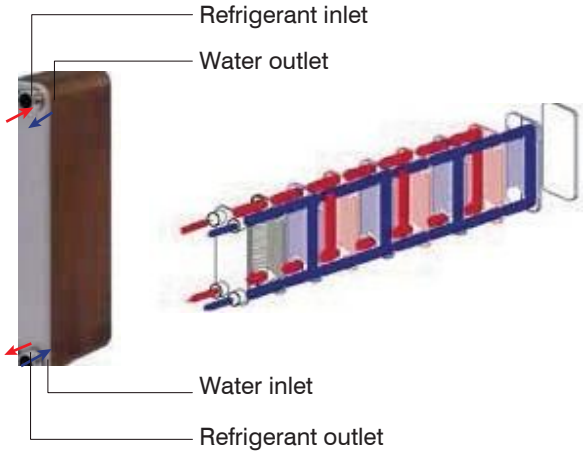
BACKUP FUNCTION

In a modular system, if any of the slave modules fails, the other modules continue to operate normally.



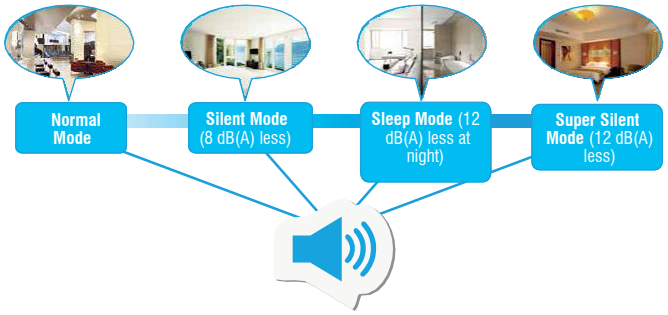
HIGHLY EFFICIENT PLATE-TYPE HEAT EXCHANGER

The plate-type heat exchanger uses multiple metal plates to achieve high efficiency in the transfer of heat between refrigerant and water.



MULTIPLE SILENT MODES

Several silent modes allow the reduction of the sound level during the day and / or night.



FLOW SWITCH INCLUDED

All modules (with or without hydraulic group) add a flow switch.

HYDRAULIC GROUP INCLUDED (Version K)

The modules of the MUENR-H9T (K) version add a recirculation pump and an expansion tank.

REMOTE SIGNALS

ON/OFF signals, mode selection and potential-free alarm signals available on each unit's PCB.

INVERTER WATER CHILLER MUENR-H9 Series

MUNDOCLIMA® SUPER DC INVERTER

TECHNICAL SPECIFICATIONS

MODEL			MUENR-30-H9T	MUENR-30-H9T(K)	MUENR-60-H9T	MUENR-60-H9T(K)
Code			CL 25 635	CL 25 636	CL 25 637	CL 25 638
Cooling[1]	Capacity	kW	27.5		55	
	Power consumption	kW	10.3	11	21.5	23
	Level	A	15.9	17	33.1	35.5
	EER	W/W	2.67	2.5	2.55	2.39
	SEER	W/W	4.62	4.25	4.00	4.03
Heating[2]	Capacity	kW	32		62	
	Power consumption	kW	10	10.7	20	21.5
	Level	A	15.4	16.5	30.8	33.1
	COP	W/W	3.20	2.99	3.10	2.88
	SCOP	W/W	4.24	3.99	3.86	3.72
	Energy efficiency class		A++	A++	A++	A+
Max. intensity		A	20	21.5	40.5	43.5
Sound pressure[3]		dB(A)	64.8	65.1	71.3	71.4
Sound power[3]		dB(A)	78	78	86	86
Power supply		Ph, V, Hz	3N-, 400, 50			
Compressor	Brand		Mitsubishi Electric			
	Model		LVB65FAEMC			
	Type		Inverter DC Twin Rotary			
	Amount		1		2	
Fan	Type		DC			
	Number		1		2	
	Air flow rate	m³/h	12,500		24,000	
Water exchanger	Type		Plates			
	Water pressure drop	kPa	55	–	61	–
	Total pressure drop (includes hydraulic elements)	kPa	–	150	–	200
	Volume	L	2.44		5.17	
	Nom. flow rate (min-max)	m³/h	5.0 (3.8 - 6.4)		9.8 (8.0 - 13.0)	
	Max. design pressure	Mpa	1			
Water pump	Model		–	Grundfos CM5-3A(96806817)	–	Grundfos CM10-2A(98669754)
	Nominal flow	m³/h	–	4.7	–	10
	Nominal pressure	kPa (mca)	–	210 (21.45)	–	280 (28.6)
	Nominal height	m	–	22.8	–	27.1
Expansion tank		L	–	5	–	12
Dimensions (W x H x D)		mm	1870 x 1175 x 1000		2220 x 1325 x 1055	
Weight		kg	300	325	480	515
Refrigerant	Type / PCA		R32 / 675			
	Number	kg/tCO$_2$eq	7.9 / 5.33		14 / 9.45	
Hydraulic connections		mm(inches)	DN40 (1 1/2")		DN50 (2")	
Connection wiring	Power wiring[4]/ ICP	mm²/A	4 x 10 + T / 36		4 x 16 + T / 63	
	Communication wiring[5]	mm²	3 x 0,75 (shielded)			
Ambient temperature in operation	Cooling	°C	-10 to 43			
	Heating	°C	-14 to 30			
Outlet water temperature	Cooling[6]	°C	0 - 20			
	Heating	°C	25 - 54			

Notes:
[1]Nominal cooling conditions: Inlet/outlet water temperature 7 °C / 12 °C; Outside ambient temperature 35 °C DB.
[2]Nominal heating conditions: Inlet/outlet water temperature 40 °C / 45 °C; Outdoor ambient temperature 7 °C DB / 6 °C WB.
[3]Noise level measured in semi-anechoic chamber at 1 m front distance and 1.1 m height.
[4]Power wiring recommended for L < 20 m, for longer distances it should be calculated.
[5]Interconnection wiring of several modules.
[6]Below 5 °C antifreeze must be added to the hydraulic circuit and the S12-3 must be set to ON (on all modules).
*The capacity and efficiency data have been calculated in accordance with EN 14511, EN 14825.

Caution:
- Do not use groundwater or well water directly.
- The hydraulic circuit must be closed.
- Data and specifications are subject to changes without previous notice.