

INVERTER WATER CHILLER MUENR-H12 Series



DC Inverter compressor and fan motor: All the units in the range incorporate a DC Inverter compressor and fan motor, thus improving system performance at medium frequencies and ensuring more sensitive and efficient control.

Hydraulic module: Fully integrated hydraulic module equipped with hydraulic components such as expansion vessel, plate heat exchanger and recirculating pump.

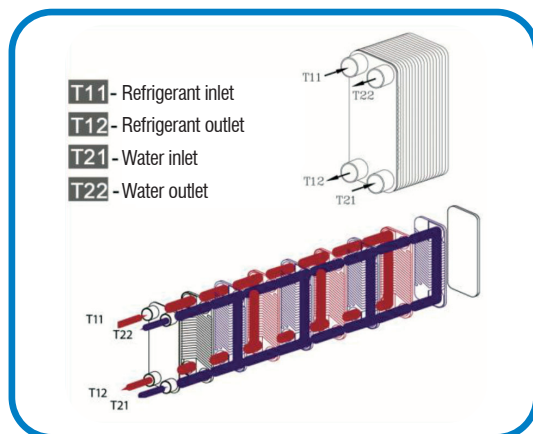
High Efficiency Recirculating Pump:

Complying with the ERP ecodesign directive, the new high-efficiency pump reduces consumption.



Plate heat exchanger:

The plate heat exchanger is made of AISI 316 stainless steel to ensure high heat exchange efficiency.



Wired wall remote control:

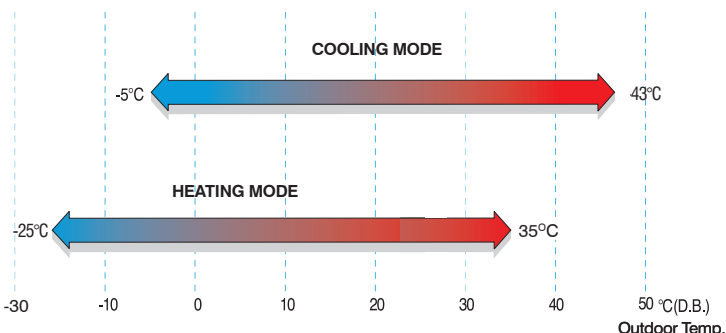
All units come from the factory with a wired wall-mounted remote control to control the unit from inside the home. This controller incorporates a wifi module that allows to control the equipment remotely and Modbus protocol to integrate it to a management system.



KJRH-120H/BMK0-E
code. CL09204
(included)

Wide working temperature range:

The MUENR-H12 units can operate in extreme temperature conditions, in heating mode down to -25°C and in cooling mode up to 43°C.



INTEGRATED AND COMPACT DESIGN

Fully integrated and built-in hydraulic module with expansion vessel, plate heat exchanger, circulating pump, etc. Cost and installation space saving.

ON/OFF AND REMOTE FUNCTION

Possibility to stop/start the equipment by means of a potential-free signal.

SPACE SAVING

The mini chillers of the H12 Series are more compact, and have a single fan motor up to the 16 kW model, both in single-phase and three-phase. This translates into significant savings in the space required for installation.

DATA SHEET

Energy efficiency class A+: Thanks to the plate heat exchanger, the high efficiency pump, the compressor and the DC Inverter fan motor, energy consumption is reduced and operation of the equipment is optimized, obtaining an A+++ energy label for heating at 35°C.

Model MUENR-			05-H12	07-H12	09-H12	12-H12	14-H12	16-H12	12-H12T	14-H12T	16-H12T			
Code			CL25640	CL25641	CL25642	CL25643	CL25644	CL25645	CL25646	CL25647	CL25648			
Power supply			V / Ph / Hz						220 - 240 / 1N / 50			380 - 415 / 3N / 50		
Cooling	Conditions 1 ⁽¹⁾	Capacity (min. ~ max.)	kW	5.50	7.40	9	11.6	13.4	14	11.6	13.4	14		
		Consumption	kW	1.69	2.35	3.10	3.74	4.57	4.83	3.74	4.57	4.83		
		EER	kW / kW	3.25	3.15	2.90	3.10	2.93	2.90	3.10	2.93	2.90		
	Conditions 2 ⁽²⁾	Capacity	kW	6.50	8.30	10.00	12.20	13.90	15.40	12.20	13.90	15.40		
		Consumption	kW	1.28	1.71	2.33	2.65	3.16	3.67	2.65	3.16	3.67		
		EER	kW / kW	5.10	4.85	4.30	4.60	4.40	4.2	4.60	4.40	4.2		
Heating	Conditions 3 ⁽³⁾	Capacity (min. ~ max.)	kW	6.60	8.50	10.20	12.5	14.5	16.2	12.5	14.5	16.2		
		Consumption	kW	1.65	2.24	2.80	3.38	4.09	4.70	3.38	4.09	4.70		
		COP	kW / kW	4.00	3.80	3.65	3.70	3.55	3.45	3.70	3.55	3.45		
	Conditions 4 ⁽⁴⁾	Capacity	kW	6.50	8.40	10.00	12.20	14.10	16.00	12.20	14.10	16.00		
		Consumption	kW	1.23	1.66	2.13	2.49	3.00	3.56	2.49	3.00	3.56		
		COP	kW / kW	5.30	5.05	4.70	4.90	4.70	4.50	4.90	4.70	4.50		
SCOP	kW / kW	5.12	5.18	5.12	5.09	4.89	4.84	5.08	4.89	4.84				
Energy classification at low temperature (35°C) / ηs			A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++			
Max. current			A	18	18	18	30	30	30	14	14	14		
Compressor	Model		EKT M225D63UKER				EKT F420D66UM5BR							
	Brand		GMCC				GMCC							
	Coolant oil	Type	ESTER OIL VG75R				ESTER OIL VG75R							
		Quantity	ml	620 ± 15				1000 ± 15 ml						
Fan	Type / Engine / Quantity		AXIAL / DC / 1				AXIAL / DC / 1							
	Air flow		m ³ /h	3,900	4,500	4,500	5,200	5,200	5,200	5,200	5,200	5,200		
Plate heat exchanger	Water flow rate (min ~ max)		m ³ /h	0.40 ~ 1.25	0.40 ~ 1.65	0.40 ~ 2.10	0.70 ~ 2.50	0.70 ~ 2.75	0.70 ~ 3.00	0.70 ~ 2.50	0.70 ~ 2.75	0.70 ~ 3.00		
	Water volume		L	1.15	1.15	1.15	1.54	1.54	1.54	1.54	1.54	1.54		
	Pressure drop		kPa	18	18	18	26	26	26	26	26	26		
Water pump	Model		SHIMGE APM25-9-130PWM1				WILO FOR 25/9 IPWM-130							
	Maximum flow rate		m ³ /h	1.25	1.65	2.1	2.5	2.75	3	2.5	2.75	3		
	Height		m	9	9	9	9	9	9	9	9	9		
Expansion tank	Water volume		L	5	5	5	5	5	5	5	5			
Minimum / maximum water inlet pressure ⁽⁵⁾			kPa	100 / 300				100 / 300						
Sound pressure ⁽⁶⁾			dB(A)	48	51	53	56	58	58	57	59	59		
Sound power ⁽⁶⁾			dB(A)	60	63	68	70	72	72	70	72	72		
Dimensions (W x H x D)			mm	1040 × 865 × 410										
Weight			kg	87	87	87	106	106	106	120	120	120		
Refrigerant	Type / PCA		R32 / 675	R32 / 675	R32 / 675	R32 / 675	R32 / 675	R32 / 675	R32 / 675	R32 / 675	R32 / 675	R32 / 675		
	Quantity		kg / TCO2eq	1.25 / 0.844				1.8 / 1.215						
Connection wiring	Power supply		mm ²	2 x 4+T	2 x 4+T	2 x 4+T	2 x 6+T	2 x 6+T	2 x 6+T	4 x 2.5+T	4 x 2.5+T	4 x 2.5+T		
Hydraulic connections	Water inlet / outlet		inch	1" - 1"	1" - 1"	1" - 1"	1 1/4" - 1 1/4"	1 1/4" - 1 1/4"	1 1/4" - 1 1/4"	1 1/4" - 1 1/4"	1 1/4" - 1 1/4"	1 1/4" - 1 1/4"		
Operating temperature range	Cooling		°C	-5 ~ 43										
	Heating		°C	-25 ~ 35										
Water outlet temperature range	Cooling		°C	5 ~ 25										
	Heating		°C	25 ~ 65										

- Notes:
- (1) Conditions 1: Water inlet / outlet temperature: 12 / 7 °C, outside temperature 35°C DB
 - (2) Conditions 2: Water inlet / outlet temperature: 23 / 18 °C, outside temperature 35°C DB
 - (3) Conditions 3: Water inlet / outlet temperature: 40 / 45 °C, outside temperature 7°C DB / 6°C HB / 85% RH
 - (4) Conditions 4: Water inlet / outlet temperature: 30 / 35 °C, outside temperature 7°C DB / 6°C HB / 85% RH
 - (5) Pressures at which the pressure switches are activated
 - (6) Measured at 1m distance in open field
 - (7) The unit controls the return temperature, so the minimum set temperature is 10°C, the 4°C are for air outlet
 - (8) The equipment controls the return temperature, so the maximum set temperature is 50°C, the 55°C are for air outlet