



HEAT PUMP - WATER CHILLER MUENR-H16T Series

HOT WATER UP TO 62 °C

The new H16T series chillers have a Domestic Hot Water function. Sanitary Hot Water function.



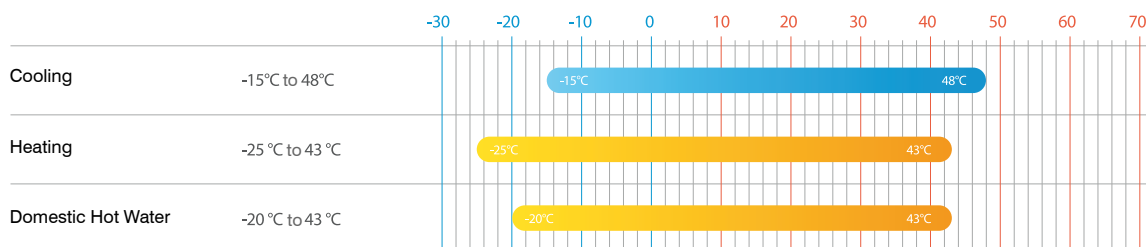
Compatible with various heating and cooling solutions



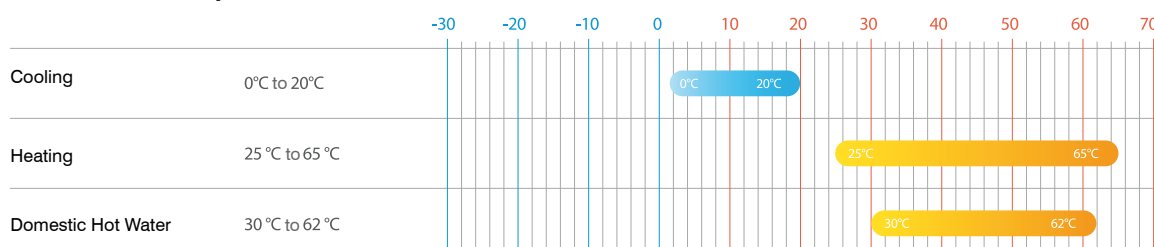
OPERATION UNDER LOW TEMPERATURES

Thanks to the EVI compressor, the equipment can work in heating up to -25 °C ambient temperature.

Ambient Cooling



Water outlet temperature



Models 50 and 65

⁽¹⁾For more information consult the specifications table.



KJRM-120H2/BMWKO-E
Included
(CL09205)



OPTIONALS

Accessories



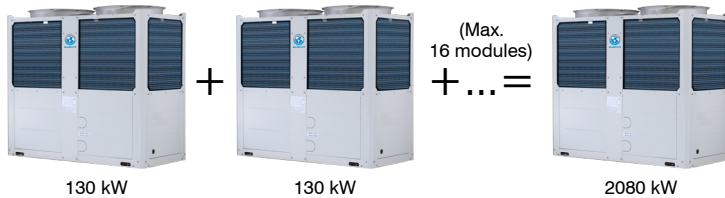
VICTAULIC-RM 2" KIT
Model 50 and 65
(CL97296)

HIGH POWER HEAT PUMPS - WATER CHILLER MUENR-H16T Series



MODULAR SYSTEM

The modular design allows that up to 16 units can operate together, forming a system up to 2080 kW (in cooling).



ROTATING FUNCTION

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



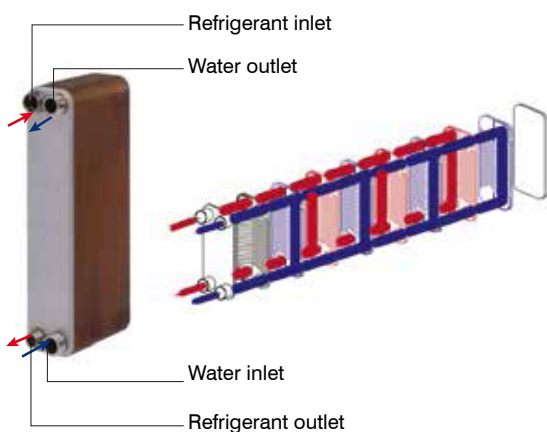
BACKUP FUNCTION

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



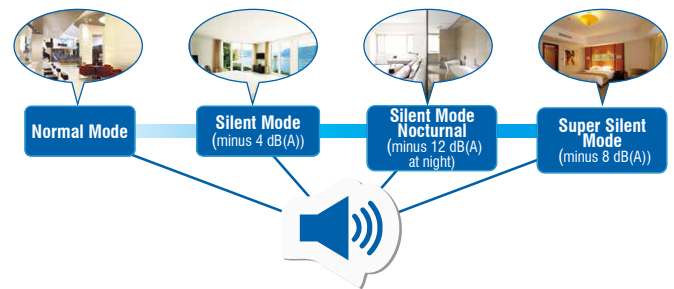
HIGHLY EFFICIENT PLATE-TYPE HEAT EXCHANGER

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



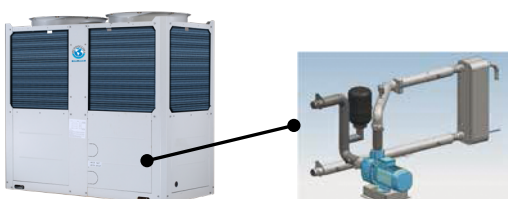
MULTIPLE SILENT MODES

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



HYDRAULIC GROUP INCLUDED (K Version)

The modules of the MUENR-H16T(K) version incorporate 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.

HIGH POWER HEAT PUMPS - WATER CHILLER MUENR-H16T Series



TECHNICAL SPECIFICATIONS

Model				MUENR-50-H16T(K)	MUENR-65-H16T(K)
Code				CL25650	CL25651
Cooling	Air: 35 °C Water: 12 / 7 °C	Capacity	kW	50.3	57.0
		Power consumption	kW	14.5	19.0
		EER	W/W	3.5	3.0
		SEER	W/W	5.0	5.0
Heating (mild zone)	Air: 7 °C Water: 30 / 35 °C	Capacity	kW	49.5	64.0
		Power consumption	kW	10.5	15.2
		COP	W/W	4.7	4.2
		SCOP	W/W	4.5	4.5
		Energy Efficiency Class Labeling	A+++		
	Air: 7 °C Water: 47 / 55 °C	Capacity	kW	49.8	64.0
		Power consumption	kW	15.6	21.3
		COP	W/W	3.20	3.00
		SCOP	W/W	3.4	3.4
		Energy Efficiency Class Labeling	A+++		
Max. current			A	46.0	
Sound pressure ⁽¹⁾			dB(A)	64.0	
Sound power ⁽¹⁾			dB(A)	83.0	
Power supply			Ph / V / Hz	3 / 380-415 / 50	
Compressor	Brand			Hitachi	
	Model			DD110PHDG-D1Y6	
	Type			EVI Scroll Inverter	
	Quantity			1	
Fan	Type			DC	
	Quantity			2	
	Air flow rate	m³/h	22,000		
Water exchanger	Type			Plate heat exchanger	
	Total pressure drop (includes hydraulic elements)	kPa	253.1	225.6	
	Volume	L	5.2		
	Nominal flow rate (min-max)	m³/h	3 ~ 14		
	Max. design pressure	MPa	1		
Water pump	Model			MHIE802-1/10/E/3-380-60-2	
	Nominal flow	m³/h	8.6	11.2	
	Nominal pressure	kPa (mwc)	-	0.6	
	Nominal height	m	27.1		
Expansion tank			L	12	
Dimensions (W x H x D)			mm	2000 x 1770 x 960	
Weight			kg	475	
Refrigerant	Type / GWP			R32 / 675	
	Quantity	kg / TCO ₂ eq	9 / 6.08		
Hydraulic connections			mm (inches)	DN50 (2")	
Electrical connections	Power wiring ⁽²⁾ / PCS		mm² / A	4 x 16 + T / 63	
	Communication wiring ⁽³⁾		mm²	3 x 0.75 (shielded)	
Operating ambient temp.	Cooling	°C	-15 ~ 48		
	Heating	°C	-25 ~ 43		
	DHW	°C	-20 ~ 43		
Outlet water temperature	Cooling ⁽⁴⁾	°C	0 ~ 20		
	Heating	°C	25 ~ 65		
	DHW	°C	30 ~ 62		

Note: ⁽¹⁾ Noise level measured in a semi-anechoic chamber at 1 m frontal distance and 1.1 m height.

⁽²⁾ Recommended power wiring for L < 20 m. For longer distances, it should be recalculated.

⁽³⁾ Interconnection wiring between modules.

⁽⁴⁾ Below 5 °C antifreeze must be added to the hydraulic circuit and the "TEMP" parameter must be set. MIN FOR COLD" from the service menu.

*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 can be changed without previous notice.




Features Description

MUNDCLIMA®











Comfort

	WEEKLY TIMER Sets the weekly operation of the unit.		NIGHT MODE Makes the unit operate according to the preset nighttime temperature curve, which creates an ideal nighttime environment and improves sleep quality.		SILENCING This function allows you to select the ultra-quiet speed, so that the sound level of the equipment is very low.
	FOLLOW ME FUNCTION (IFEEL) The remote control incorporates an ambient temperature sensor.		DAILY TIMER The timer can be set to start and stop at any point in a 24-hour period.		CONTROL PANEL It adds a control panel to run the machine without any wireless remote control.
	AUTOMATIC RESTART Recovery of the adjustments before the electrical cut.		360° DESIGN Thanks to the 360° panel design, the air is more evenly distributed.		DUAL AIR FLOW Top and bottom air outlet. In cooling mode only the upper outlet works, while in heating mode both outlets work, thus heating from ground level is achieved.
	EMERGENCY OPERATION Possibility of manually operating the unit with the button in case of any alarms sounding.		HORIZONTAL AND VERTICAL FLAP ROTATION Better air distribution thanks to the flap's horizontal and vertical automatic swing.		CORE GENIUS The frequency of traditional Inverter equipment has a fluctuation of $\pm 1^\circ\text{C}$ of the ambient temperature during operation. However, with the new "CORE GENIUS" Inverter technology that adjusts 0.6 Hz for each step, the frequency variation of the Inverter is so smooth that the $\pm 0.5^\circ\text{C}$ fluctuation of the ambient temperature is not noticeable.
	COLD AIR PRECAUTION When heating, the initial fan speed is adjusted according to the battery temperature.		GEAR Allows to set the equipment capacity to 50%, 75% or 100% (default).		INDIVIDUAL LOUVERS CONTROL Possibility to adjust independently the angle of the 4 louvers.
	TURBO OPERATION Maximum cooling/heating time reduction.		COLD CATALYST FILTER The equipment features a purifying filter that can absorb formaldehyde without the need for ultra-violet light.		120° The upper slat allows a 120° adjustment.
	LOW SOUND LEVEL Thanks to the Silence mode and its new design, the sound level is reduced to the minimum.		SPRINT START Like a sprinter, this function allows the compressor to reach 65Hz in just 6 s.		BACKLIT WALL CONTROL The new KJR-120N wired wall control features backlit screen for easy reading.
	TEMPERATURE COMPENSATION The remote control allows you to adjust the compensation temperature for heating and cooling mode.		HUMIDITY CONTROL In dehumidification mode, the relative humidity control can be set between 35% and 85%.		HEATING 8 °C The unit automatically switches to heating mode when the ambient temperature is below 8 °C, thus preventing the room temperature from being too low when we are not at home.
	FRESH AIR (ION) Equipment that incorporates ionizer to generate OH(-) and thus purify the air by deactivating bacteria, viruses and other contaminants in the environment, providing a very pleasant feeling of freshness.		VENTILATION FUNCTION It allows operation with only ventilation.		
	BREZE AWAY Function that allows to divert the air flow to another place to prevent the equipment from blowing directly on people.		THERMOSTAT It automatically maintains the set temperature.		
	QUIETER OUTDOOR UNIT Optimized design of air outlet grille with noise reduction of 3.3 dB(A) compared to previous models.		DEHUMIDIFICATION Humidity reduction helps restoring an optimum temperature in wet areas.		
	WIDE WORKING RANGE Cooling operation until 50 °C and in heating up to -15 °C.		MULTI-SPEED INDOOR FAN Up to 12 levels of fan speed automatically adjusted if the automatic ventilation is activated.		




Connectivity

	WIFI Possibility for the unit to be controlled via WIFI, through an APP.		CENTRALIZED CONTROLLER Possibility of controlling several units with the same control.		DOMOTICS Possibility of integration with the main manufacturers of home automation systems (Consult).
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Energy efficiency

	ENERGY LABELLING FOR COOLING A+++		ENERGY LABELLING FOR HEATING A+++		STANDBY FUNCTION (ONLY 1W IN STANDBY) The outdoor unit is automatically disconnected from the supply when the unit is in standby, that way the consumption in standby mode is only 1W.
	ENERGY LABELLING FOR COOLING A++		ENERGY LABELLING FOR HEATING A++		PRESENCE SENSOR Detects inactivity (30 min) in the room to reduce the operating frequency and thus save energy.
	ENERGY LABELLING FOR COOLING A+		ENERGY LABELLING FOR HEATING A+		
	ENERGY LABELLING FOR COOLING A		ENERGY LABELLING FOR HEATING A		

Refrigerant

	R410A Equipment using refrigerant R410A with a GWP of 2088.		R32 Equipment using the most environmentally friendly refrigerant R32 with a GWP of 675. In order to install equipment with R32 refrigerant gas, you must review the current legislation.		R290 Equipment using the new refrigerant R290 which has a GWP of only 3.
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Note: This Features Description is generic, you will find the icons that apply to this data sheet in the header of the first page of the data sheet.

Features Description

MUND[®]CLIMA

Easy installation and maintenance



REMOVABLE FILTERS

New filter fastening system with tabs to ensure correct fastening without vibrations.



OUTSIDE AIR INLET

Possibility of supplying outdoor air directly on the indoor unit.



DRAINAGE PUMP

Incorporates drainage pump to facilitate the drainage of the indoor unit.



REMINDER CLEANING FILTER

The equipment tells us when to clean and / or replace the air filter of the indoor unit.



PIPE COMPATIBILITY

Possibility of increasing one size over the standard diameter in the gas or liquid pipe or both.



DIGITAL LED DISPLAY

Equipment with a digital display showing the set temperature during normal operation or the ambient temperature in ventilation mode.



LESS SCREWS

Both the indoor unit and the outdoor unit have less screws, so the disassembly is going to be easier.



REFRIGERANT LEAK DETECTION

The unit automatically detects the existence of possible leaks of refrigerant in the circuit.



SELF-CLEANING

This function performs a self cleaning on the indoor unit. When the "SELF-CLEANING" function is activated (SelfClean or iClean buttons), the unit initially operates in cooling mode with the fan at low speed, during this period the condensation water drags the dust from the battery. The unit then switches to heating mode with the fan at low speed, to dry the battery and the inside of the unit. Finally the unit switches to ventilation mode to finish drying completely.



ULTRA-REINFORCED MOUNTING PLATE

Reinforced mounting plate with measuring range and spirit level included.



POWER SUPPLY ONLY TO OUTDOOR UNIT

The indoor unit is powered by the same interconnection cable with the outdoor unit.



SINGLE-FAN OUTDOOR UNITS

Optimize outdoor space thanks to outdoor units with lower height.



HIGH STATIC PRESSURE

Wide static pressure range.



SET TEMPERATURES RANGE ADJUSTMENT

The remote control is able to adjust: Minimum cooling from 16 °C up to 24 °C; Maximum heating from 30 °C up to 25 °C.



LEG IN U FORM

Thanks to the new back leg in the outdoor unit, installation is easier.



LOW VOLTAGE START

The equipment can start up and operate normally up to a supply voltage lower than the nominal voltage.



PROBLEM SOLVING

Error codes are displayed on the indoor panel, the wall control or on the outdoor PCB.



REMOTE SIGNALS (CP)

The indoor unit has an ON/OFF input.



CONFIGURABLE STATIC PRESSURE

From the PCB (or any model with the wireless or wired remote control) the static pressure of the fan can be adjusted, so that the machine can be adapted to each installation.



CONFIGURABLE RETURN

The air intake can be set up either at the rear or at the bottom of the unit. By default, it is set up at the rear.



TWIN FUNCTION (2x1)

Two indoor units can be connected to the same outdoor unit. Both indoor units will function identically as if they were one single unit. It is perfect for open rooms.



REVERSE ROTATION

When the unit is stopped, the outdoor unit fan rotates backwards to remove leaves or other external elements from the coil.



ROTATION & BACK UP

This function allows redundant operation in installations with 2 units connected to the same KJR-120N wired control, in the event that one machine does not reach the set temperature, the two machines will automatically start operating together at 24 °C in the selected mode. At the same time a rotation in the operation of the 2 machines is carried out so that both machines operate for the same amount of time.



AUTO ROUTING

The outdoor unit can assign address to the indoor units automatically.



ENGINEERING MODE

Function adjustment and operating parameters query using the control.



EXTRA FLAT DUCT

Indoor unit height between 200 and 300 mm.



DELIVERY OUTLET TO ADJACENT ROOM

The unit has pre-drilled outlets for connecting a small duct to climatize an adjacent room.



AIR DISCHARGE TUBE TO THE OUTSIDE

Easy and quick to install, it allows the use of the air conditioner immediately.



CONDENSATE REMOVAL

Removes condensate water so it is not necessary to connect the air conditioner to a drain. In dehumidification mode and in very humid environments, it is recommended to connect the equipment to a drain.



PANEL OF COMPACT SIZE

The grid panel of the cassette type unit measures 600x600 mm.



GOLDEN FIN

Heat exchanger with special treatment, which protects the equipment against atmospheric phenomena and the effects of aggressive environments. It also prevents the proliferation of bacteria and mold.



BLUE FIN

Heat exchanger with treatment that protects the equipment against corrosion and the growth of bacteria and mold.



AUTOMATIC REFRIGERANT REFILL

Allows the system to be refilled with refrigerant gas without having to do any additional calculation.



HORIZONTAL / VERTICAL

Equipment that can be installed in both horizontal and vertical position.



META FUNCTION

Advanced air conditioning technology that optimizes temperature, refrigerant and air flow to save energy and maximize the comfort.

Technology



SUPER DC

Equipment that has both, DC Inverter compressor and DC fan motors.



COOLING AT LOW TEMPERATURES

Cooling operation down to -15 °C outside.



HEATING AT LOW TEMPERATURES

Heating operation down to -25 °C outside.



CONSTANT AIR FLOW CONTROL

The indoor fan adjusts to the required static pressure to ensure a constant air supply at all times.



DC

Unit with DC fan motor, low noise and low-energy consumption.



EVI COMPRESSOR

High efficiency asymmetric scroll compressor with steam injection technology.



INPUT 0-10V

Unit with DC fan motor with 0-10V regulation.



OUTPUT 0-10V

Equipment with 0-10V output for the control of an auxiliary valve.



7 SPEED FAN

Unit with DC fan motor with 7 speeds.



DIFFERENT SPEEDS OF THE EXTERNAL FAN

Accurate adjustment of fan speed thanks to the DC motor.



EVX

Equipment with electronic expansion valve, adjusts in a more stable way the capacity of the equipment.