

Chiller 2.0

04/2022

Air Cooled Chiller&Heat Pump with Inverter scroll compressors

Databook

EWA(Y)T~CZ

BLUEVOLUTION

- Nominal capacity range 16 90 kW
- Packaged solution
- R-32 refrigerant



Performance according to EN14511.







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Low operating cost.

The new Daikin BLUEVOLUTION chiller&heat pump series (EWA(Y)T-CZ) is the result of careful design aimed to optimize the energy efficiency and thus the total life cycle cost of the unit, with reduced operating cost thanks to outstanding performances and reliability.

The units feature high efficiency scroll compressor arranged in single or tandem configuration on each refrigerant circuit, optimized condensing section with advanced technology condensing fans and plates evaporator with low refrigerant content and reduced pressure drops.

Low environmental impact.

Latest revision of F-GAS, entered into force in 2015, set up a phase down program for traditional HFC's refrigerants. In 2018 first significant reduction step has been introduced (37%) and in 2030 the reduction (calculated in equivalent CO2 tons) will need to achieve almost 80%.





(*) Baseline value (100%) is the annual average of total quantity of CO2 equivalents placed on EU Market from 2009 to 2012

The new Daikin BLUEVOLUTION series uses R-32 refrigerant to reduce drastically the carbon footprint of the unit. The selection of R-32 (chemical name difluoromethane) minimises the global warming impact of scroll compressor units thanks to the lower Global Warming Potential in combination with high-energy efficiency. The Global Warming Potential of R-32 is 675, which is only one third of the commonly used refrigerant R-410A.

Thanks to the low flammability classification (R-32 refrigerant is classified A2L in ISO817), it can be safely used in many applications including chilled water systems. Being a single component refrigerant, R-32 is also easier to recycle and reuse, that is another environmental plus in its favour.

Daikin has a long history of continuous reduction of the environmental impact of cooling, heating and refrigeration, having a unique expertise that comes from manufacturing both refrigerants and equipment. This position is one of the results of company's corporate philosophy to "Be a Company that Leads in Applying Environmentally Friendly Practices".

Outstanding reliability.

The units have one or two truly independent refrigerant circuits with one or two compressors to assure maximum safety for any maintenance, whether planned or not.

Condensation control.

Units are equipped with fan speed modulation.

Fan silent mode.

Units are standardly supplied with fan silent mode. This feature allows the user to set up detailed time bands to reduce fan rotation speed and therefore sound emission in those areas where night quietness is a mandatory requirement. The average sound power reduction is -2dB(A) and a consequent drop in Capacity of -4%.

Superior control logic.

The control logic is designed to provide maximum efficiency, to continue operation in unusual operating conditions and to provide history of unit operation. Easy interface with, Bacnet, Ethernet TCP/IP or Modbus communications. Master/Slave operation is provided as standard allowing to connect up to 4 units working as single system.

Dynamic Condensing Pressure Management.

Superior software logic has been developed to get the highest efficiency at whatever operating condition: thanks to the Dynamic Condensing Pressure Management the unit controller adjusts the condensing pressure set-point to minimize the overall power input.

Code requirements - Safety and compliance to laws/directives

Units are designed and manufactured in accordance to the following directives and harmonized standards:

Low voltage directive	DIRECTIVE 2014/35/EU
Electromagnetic compatibility (EMC)	DIRECTIVE 2014/30/EU
Machinery directive	DIRECTIVE 2006/42/EC
Pressure equipment Directive	DIRECTIVE 2014/68/EU
Ecodesing	DIRECTIVE 2009/125/EC
Safety of machinery	EN 60335-2-40
EMC - Part 6-2	EN 61000-6-2
EMC - Part 6-4	EN 61000-6-4
Low voltage directive	DIRECTIVE 2014/35/EU
Electromagnetic compatibility (EMC)	DIRECTIVE 2014/30/EU

Certifications.

Units are CE and EAC marked, complying with European directives in force, concerning manufacturing and safety. On request units can be produced complying with laws in force in non-European countries (ASME, etc.), and with other applications.

Compressors

Hermetic orbiting scroll type optimized for R-32 operation and complete with motor over-temperature and overcurrent protection devices. Each compressor is equipped with an oil heater that keeps the oil from being diluted by the refrigerant when the unit is not running. Each compressor is mounted on rubber antivibration mounts and is standardly equipped with compressor jacket for a quite operation. Unit is delivered with complete oil charge. The Variable Frequency Drive (VFD) is integrated in the electrical panel of the unit and it allows continuous modulation of compressor's rotational speed.

On site, unit can be set to operate in **Boosted mode**, please check the technical table values in the _MAX section. Another feature to be set on site is the **Constant Heating Capacity**, a standard control feature that has the purpose of keeping the heat capacity supplied by the unit unchanged as the ambient temperature decreases. This is achieved accelerating the compressor frequency to get as close as possible to the Heating Capacity at 40/45 °C, OAT 7°C, while the ambient temperate decreases. Please check the CSS in the Energy Analysis section.

Water Side Heat Exchanger

The unit is equipped with a direct expansion plate-to-plate type Heat Exchanger optimized for R-32 refrigerant operation. This heat exchanger is made of stainless-steel brazed plates and is covered with 20mm closed cell insulation material. The flow switch is standard and factory mounted while the water filter on the heat exchanger side is shipped with the chiller but needs to be field installed.

Air Side Heat Exchanger

The Air Side Heat Exchanger is manufactured with internally enhanced seamless copper tubes arranged in a staggered row pattern and mechanically expanded into lanced and rippled aluminum Air Side Heat Exchanger fins with full fin collars. An integral sub-cooler circuit provides sub-cooling to effectively eliminate liquid flashing and increase cooling capacity without increasing the power input.

Air Side Heat Exchanger fans

Air Side Heat Exchanger fans are propeller type with high efficiency design blades to maximize performances. The blades are made of glass-reinforced resin and a guard protects each fan. Units are standardly equipped with inverter driven fans.

Electronic expansion valve

The unit is equipped with electronic expansion valves to achieve precise control of R-32 refrigerant mass flow. Electronic expansion valves become mandatory to improve the energy efficiency and to accurately control the temperature in a wide range.

Electronic expansion valves have unique features: short opening and closing time, high resolution, positive shutoff function to eliminate use of additional solenoid valve, continuous modulation of mass flow without stress in the refrigerant circuit and corrosion resistant stainless-steel body.

If compared to traditional thermostatic valves, electronic expansion valves allow the system to work with low condenser pressure (wintertime) without any refrigerant flow problems and to perfectly control the chilled water temperature.

Refrigerant circuit

Each unit has one or two independent refrigerant circuits and each one includes:

- Compressors
- Refrigerant
- Water side Heat Exchanger
- Air Side Heat Exchanger
- Electronic expansion valve
- Filters
- Charging valves
- High pressure switch
- High pressure transducers
- Low pressure transducers
- Suction temperature sensor
- Discharge temperature sensor

Electrical panel

Power and control are in the main panel that is manufactured to ensure protection against weather conditions. The electrical panel is IPX4 and fitted with a main switch interlocked door that shuts off power supply when opening.

Safety device / logic for each refrigerant circuit

The following devices / logics are available:

- high pressure switch;
- high pressure transducer;
- low pressure transducer;
- high compressor discharge temperature;
- Compressor case temperatute switch
- low pressure ratio;

System security

The following securities are available:

- low ambient temperature lock-out;
- freeze protection.

Supervising systems remote communication

Controller can communicate to BMS (Building Management System) based on the most common protocols as:

- Modbus MSTP TCP-IP Accessory
- BACnet MSTP TCP-IP Accessory

Additional information related to F-GAS Regulation (EU) No 517/2014 of the European Parliament and of the Council of 16 April 2014 on fluorinated greenhouse gases and repealing Regulation (EC) No 842/2006

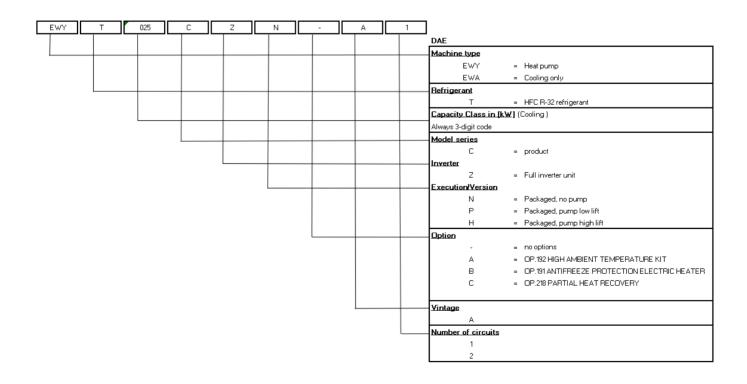
Unit Model	Refrigerant type	Refrigerant GWP	N° of circuits	Refrigerant charge Circuit 1 [kg]	Refrigerant charge Circuit 2 [kg]
EWAT/EWYT016CZN-A1	R32	675	1	3.0	-
EWAT/EWYT021CZN-A1	R32	675	1	5.0	-
EWAT/EWYT025CZN-A1	R32	675	1	5.0	-
EWAT/EWYT032CZN-A1	R32	675	1	6.5	-
EWAT/EWYT040CZN-A1	R32	675	1	6.7	-
EWAT/EWYT040CZN-A2	R32	675	2	5.1	5.1
EWAT/EWYT050CZN-A2	R32	675	2	5.1	5.1
EWAT/EWYT064CZN-A2	R32	675	2	6.4	5.0
EWAT/EWYT090CZN-A2	R32	675	2	7.2	7.2

Note: Equipment contains fluorinated greenhouse gases.

Refrigerant Charges of the P and H version are the same as for the N version.

Actual refrigerant charge depends on the final unit construction, details can be found on the unit labels.

Nomenclature



Standard Component and Features (supplied on basic units)

Hour run meter (provided as standard)

General fault contactor (provided as standard)

Main switch interlock door (provided as standard)

Master / Slave (provided as standard)

The DAIKIN Master/ Slave (M/S) control. Once set which unit has the role of master, the other(s) will operate as slave(s) based on the inputs provided by the master.

The chillers must be installed in parallel in the hydronic plant.

With Master/Slave control it is possible to balance the working hours of the compressors enhancing reliability and extending the life of the system.

In order to operate in Master/Slave mode an additional probe (NTC10K type or available as an accessory EKRSCTMS) must be installed on the common line of the plant and connected to the master unit.

The master / slave feature allows to manage the start and stop of field supplied water pumps. The power supply of the field supplied pumps is separate from the unit.

20mm evaporator insulation (provided as standard)

The heat exchanger is fitted with 20mm closed cell insulation material

Brine Version (provided as standard)

For operation with temperature at the outlet of the evaporator below +4°C the unit must operate with a glycol mixture (with ethylene or propylene glycol) and the Brine Version to be enabled in the controller.



Fans speed regulation

Fans speed regulation: continuous modulation of the fans' speed for optimal condensation control at low ambient temperatures.

<u>Fans silent mode</u>: This feature allows the user to set up customized time bands to reduce fans' speed rotation and therefore sound emission in those areas where quiet is a mandatory requirement during specific time of the day (e.g. night operation). The average sound power reduction is -2 dB(A). For heat pump operation, it must be taken into account that the unit will defrost more often.

<u>Fan Boost:</u> the unit can go in fan Boost operation in case of external canalization or in case of high ambient conditions just enabling the function in the controller. Refer to "Available fan static pressure correction factors" tables in case of additional pressure drop due to ducts or canalizations.

Alarm from external device

The unit controller is able to receive an external alarm signal. The user can decide whether this alarm signal will stop the unit or not.

Water filter (provided as standard)

The water filter removes impurities from the ater by means of a fine physical barrier. It must be installed on the water pipe connected to the heat exchanger inlet.

The filter is shipped loose. NOTE: The installation of the water filter is mandatory.

Shut off valve (provided as standard)

Shut off valves are delivered with the unit and to be field installed.

Evaporator flow switch (provided as standard)

It is always factory mounted on the leaving water side and cabled. For additional information please check the Piping Diagram ("Hydraulic schemes" paragraph).

Hydronic kit

Unit mounted hydronic kits are available for the P and H version in low and high lift solution.

The Low lift pump kit provides an average available head of 100 kPa at chiller standard conditions. The High lift pump kit provides an average available head of 200 kPa at chiller standard conditions.

The kit is completed with mechanical elements specified in the P&I. The hydronic kit is protected from freezing selecting the additional OP.191-ANTIFREEZE PROTECTION ELECTRIC HEATER.

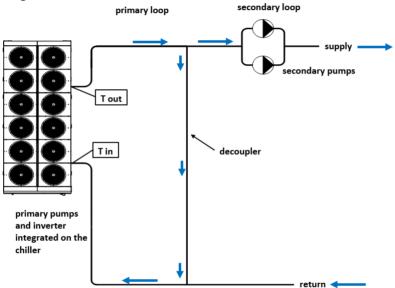
Inverter for pump (provided as standard for P and H versions)

The Inverter kit is standardly associated with the hydronic kit. The inverter for the pump has been designed for operation at an ambient temperature of max 50 ° C; continuous operation at full load at an ambient temperature of 50 ° C will reduce the useful life of the inverter itself.

The inverter pump can be used for the following purposes:

- Adjusting the water flow rate during unit commissioning.
- Set a "thermostat off" pump speed. With the inverter kit, it is possible to manage two different water flow settings: a setting for water flow during the "Thermostat ON" mode (when the chiller is actually providing cooling to the plant), and a set for the "thermostat off" mode (when the plant load is satisfied and the compressors are waiting to start). This feature allows to achieve energy saving on plant operating cost by reducing the speed of the pumps when the chiller has reached the set point.
- Control variable flow on primary loop based on chiller delta-T (available for single chiller installation only) Having the unit with the inverter kit for the on-board pump it is possible to manage a variable water flow rate for the primary loop. This function is available as standard when the hydronic kit plus inverter are selected. The standard feature is applicable for single unit installation only. In case of multiple chillers installation an additional control is needed.

The variable flow control is suitable for primary/secondary plant but can not be used in Variable Primary Flow chilled water system configurations.



In a Primary-Secondary plant configuration a key component is the decoupler. The decoupler is always open (no valve must be installed). The aim of the decoupler is to allows the primary and secondary pumps to operate at different flow rates. This is necessary because the primary pumps and secondary pumps are managed differently and so the primary and secondary flow rate are practically never the same. Specifically, the primary flow rate is managed based on the chiller delta-T ($T_{out} - T_{in}$), the secondary flow rate is regulated to maintain the necessary pressure differential in the secondary loop. The direction of the water flow through the decoupler must be always from supply to return. To ensure this the primary flow rate must be higher than the secondary flow rate. If this condition is not respected the warmer return water will flow backwards through the decoupler and raise the supply water temperature. Due to the higher temperature of the supply water the terminal (users) unit control will open the valves asking for higher water flow rate. The secondary pumps will speed up increasing even more the water flow rate on secondary plant making the situation even worst (secondary flow rate >> primary flow rate). As result there will be no control on the supply water temperature losing effectiveness of the cooling plant.

On the other side any excess in the primary flow, vs. secondary flow, flows through the decoupler from the supply to the return mixing with the warmer return water. To reach this target is very important to have minimum pressure drop in the decoupler that needs to be sized to reach a pressure drop that should not exceed $4\div5$ kPa for the flow rate of the primary pump.

Activating the variable flow control the chiller will modulate the water flow rate based on the chiller delta-T.

When the secondary loop will reduce the water flow rate (because the plant load decrease), the water flow rate in the decoupler (always from supply to return) increases. The return water temperature mixes with the supply water from the decoupler reducing the inlet water temperature and so the delta-T on the chiller. As consequence the chiller control reduce the speed of the pump, reducing the primary flow rate.

On the opposite, when the flow rate on secondary flow increases also the water temperature at the chiller inlet increase (increasing the delta-T); therefore, the chiller control will increase the water flow rate.

Options – On request

ANTIFREEZE PROTECTION ELECTRIC HEATER (OP. Code 191) – Option Incompatibility OP.192

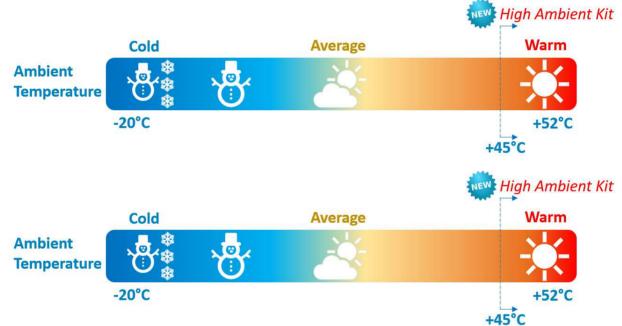
A heater tape is wound around the water side components to protect vital parts of the hydraulic system inside the unit including the BPHE. This heater tape will only protect internal parts of the unit. It can not protect field installed parts outside the unit. Field heater tapes must be provided by the installer. Selecting OP.191 the nomenclature Digit is "B", for additional information refer to "Nomenclature" paragraph.

HIGH AMBIENT TEMPERATURE KIT (OP. Code 192) - Option Incompatibility OP.191

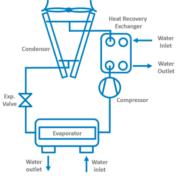
The high ambient kit allows to increase the maximum operating ambient temperature (OAT) thanks oversized components in the electrical panel and acceleration of the fan speed order to reach 52°C OAT.

In case of OP.192 is selected together wit the Pump Kit the pump control will be ON/OFF so without the Inverter. The Heat pump with OP.192 is not CE certified.

Selecting OP.192 the nomenclature Digit is "A, for additional information refer to "Nomenclature" paragraph.



PARTIAL HEAT RECOVERY (OP. Code 218) – *Option 218 always includes Option 191* The Partial Heat Recovery function operates according to the following scheme:



A plate to plate heat exchanger for each refrigerant circuit is installed in series to the air condenser coil. There is no switch nor solenoid valve in the circuit, thus compressor discharged refrigerant is always flowing through the heat recovery exchanger and warm water production is always available while the chiller is providing cooling.

During the operation in heat recover the condenser coils provides the sub-cooling ensuring the right amount of liquid at the inlet of the expansion valve. The unit controller manages the condensing temperature set point in order to maximize the cooling effect and amount of energy recovered.

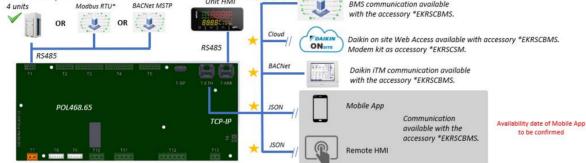
The amount of heat recovered is about the **15/20%** (according to the operating conditions) of the total heat rejection of the chiller. Heat recovery capability is subject to cooling load demand (if no cooling demand is present then no heat recovery is available) and strongly affected by the ambient temperature and requested hot water temperature. The unit controller does not manage the condensing temperature in partial heat recover operation. The heat recovery operation must be managed from the plant manager that controls the pump on the recovery circuit. Also, when Partial Heat Recovery is ON the efficiency of the chiller is represented by TER and not simply by EER.

$$TER = \frac{Cooling \ capacity + Heating \ capacity}{Cooling \ capacity}$$

Accessories

Ma

EKRSCTMS Temperature sensor for master/slave configuration								
	Serial Cards & Communication Mod	dules						
EKRSCIO	I/O extension for VPF, domestic hot water, de noise	mand limit, setpo	int reset, low					
EKRSCBMS Connectivity for external BMS communication (Modbus TCP-IP, Bacnet TCP-IP and MSTP/IP)								
EKRSCSM	kit DoS router with antenna							
Available in the standard u Available selecting the Acce		*EKRSCB	MS Accessory					
or Slave up to V S Modbus RTU*	BACNet MSTP							



EKRSCTMS - Temperature sensor for master/slave configuration

EKRSCIO is an additional module for the controller extending the numbers of Inputs/Outputs (I/O). The additional I/O module is valid for VPF-Variable Primary Flow, DHW-Domestic hot water management, Demand limit, Setpoint reset, Low noise, Double set point, Defrost out, Cooling heating output.

EKDAGBL - Restricted Application Definer

By activation of software key EKDAGBL, the unit envelope still keeps following compliancy to Ecodesign regulation No. 813/2013 and the standard EN14825:2018, however the Application is defined as for the dedicated Envelope.

Temperature sensors	Domestic Hot Water sensor	NTC10K measuring range 100-670000 Ω	X1
Voltage Input	Demand Limit/Current Limit	Analog input volt 0-10V	X2
	Evaporator DP (VPF)/DHW 3WV Feedback Open	Analog input volt 0-10V	X3
Voltage Input	System DP (VPF)/DHW 3WV Feedback Close	Analog input volt 0-10V	X4
	Setpoint Reset	Analog input volt 0-10V	X5
Digital inputs	Low Noise	Digital input potential free contact	X6

I/O extension – PINOU

	Demostic Het Weten Enchla	Disited insult astrophial function to the	VO
Digital inputs	Domestic Hot Water Enable	Digital input potential free contact	X8
Digital inputs	Double Setpoint	Powered Digital input 230VAC	DI1
Digital outputs	Cooling/Heating	Digital output relay 230V - 2A	D01
Digital outputs	Defrost Output	Digital output relay 230V - 2A	DO2
	Bypass Valve (VPF)	Digital output relay 230V - 2A	DO3
	Domestic Hot Water 3 Way Valve	Digital output relay 230V - 2A	D04
	-	Digital output relay 230V - 2A	D05

	M/S	DHW	VPF	Demand Limit	Current Limit
M/S		Not compatible	Not compatible	Compatible	Compatible
DHW			Not compatible	Compatible	Compatible
VPF				Compatible	Compatible
Demand Limit					Compatible
Current Limit					

Double set point

Possibility to set two different chilled water temperature set points.

Ambient outside temperature sensor and setpoint reset (provided as standard)

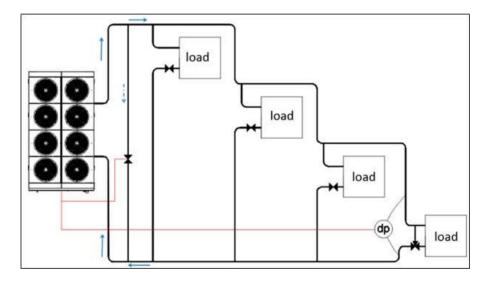
The leaving water temperature set-point can be overwritten through an external 0-10V signal, through the ambient temperature, or through the water side heat exchanger ΔT .

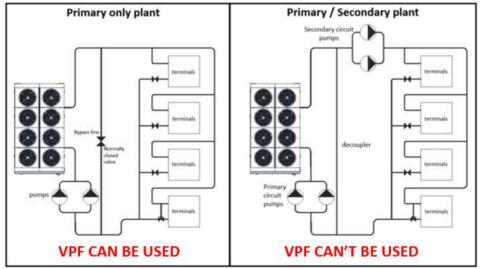
Variable Primary Flow

By selecting EKRSCIO the chiller can manage the Variable Primary water flow according to the differential pressure measured in a specific point of the plant, selected by the plant designer. The differential pressure transducer is available as an accessory EKRSCDP. However, not providing the connection capillaries between the evaporator and the accessory itself. Once installed, the differential pressure transducer must be connected to the unit. As an alternative the unit controller can receive directly the differential pressure value from an external BMS communicating with the standards communication protocols (eg. MODBUS).

The Variable Primary Flow (VPF) configuration is an alternative to the more "traditional" Primary/Secondary (P/S) plant configuration.

Daikin Applied Europe is not responsible for the plant configuration and cannot confirm the optimal position of the differential pressure transducer.





A bypass line (field supply) needs to be installed which always guarantees that the minimum water flow of the chiller is supplied (refer to the "Operating limit" chapter for indication on minimum water flow). The bypass valve will be an ON/OFF normally closed valve controlled by the chiller. In case the minimum water flow allowed is not reached, the chiller will open the bypass line restoring the water flow above the minimum value.

In case of multiple units' installations in a primary only plant, to control the pump speed an external control is required. Master/Slave function does not support primary only chilled water systems with variable flow operation. For unit installed in Primary/Secondary plants the option Variable Primary Flow is not applicable. In this case an external control is required.

Note: VPF can be used only for units installed in a primary only plant to be controlled according to VPF strategy. Master/Slave function does not support primary only chilled water systems with variable flow operation.

EKRSCDP - Differential Pressure Transducers

Domestic Hot Water Control

By selecting EKRSCIO the chiller can manage the Domestic Hot Water Loop with different configurations.

The unit can receive an external input coming from an external temp. sensor in order to switch to the DHW setpoint and giving an output to a 3-way valve the hot water can be diverted to the DHW Loop.

In case the Domestic Hot Water DHW function is selected the control system is improved to manage a secondary circuit to generate domestic hot water.

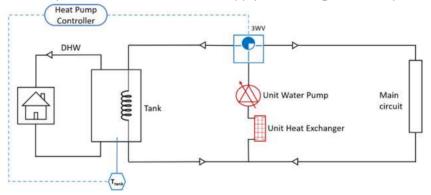
The control software can manage the production of domestic hot water controlling two additional components, not supplied by Daikin Applied Europe: the Tank Temperature Sensor and the 3-Way Valve.

To enable the DHW the user must install:

- The water pump if it's not integrated in the unit (N naked version);
- A three-way valve;
- A water tank designed for DHW use;
- A tank temperature sensor;

• Two water circuits (and the equipment): one for the technical water and one for the domestic hot water. The tank temperature sensor is necessary to maintain the DHW at the costumer's set point (Tset) and the 3-Way Valve switch the pump delivery to the domestic hot water circuit instead of main one (if Ttank < Tset).

Domestic hot water is always provided by the tank and the two water circuits (technical water and domestic hot water) are distinguished and separated. For this reason, the heat pump cannot be defined as a "combination heater" because it's not directly connected to an external supply of drinking or sanitary water.



Low Noise

By selecting EKRSCIO the unit can manage the Low Noise Operation.

EKRSCBMS – Connectivity Card

In case the BMS communication is needed, with Modbus or BACnet protocol, the connectivity card is delivered with the unit. Through a dedicated App, available for iOS and Android, it is possible to scan the QRCode and the activation key and generate the controller license file for activating the corresponding communication protocol.



	M/S - Master (T1)	M/S - Slave (T1)	Modbsu RTU (T1)	Modbus TCP-IP	Bacnet MSTP (T1)	Bacnet TCP-IP	IO Extension Pack	Modem
M/S - Master (T1)		Not compatible	Not compatible	Compatible	Not compatible	Compatible	Compatible	Compatible
M/S - Slave (T1)			Not compatible	Not compatible	Not compatible	Compatible	Not compatible	Compatible
Modbsu RTU (T1)				Compatible	Not compatible	Compatible	Not compatible	Compatible
Modbus TCP-IP					Compatible	Compatible	Compatible	Not compatible
Bacnet MSTP (T1)						To be confirmed	Not compatible	Compatible
Bacnet TCP- IP							Compatible	Not compatible
IO Extension Pack								Compatible
Modem								

EKRSCSM - Daikin on site modem with antenna (Accessory) Connecting the unit to Daikin on Site will be possible through a dedicated modem that can be ordered from Factory as an accessory.

EWAT~CZN

MODEL		EWAT016CZN-	EWAT021CZN-	EWAT025CZN-	EWAT032CZN-	EWAT040CZN-	EWAT040CZN-
		A1	A1	A1	A1	A1	A2
COOLING PERFORMANCE							
Capacity - Cooling	kW	15.9	20.9	25.6	32.4	39.6	41.4
Capacity control - Type		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
		Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Capacity control - Minimum capacity	%	18	14	12	19	15	14
Unit power input - Cooling	kW	5.5	6.6	8.5	10.3	13.4	13.2
EER		2.9	3.16	3	3.13	2.95	3.12
SEER		5	5	5.06	5.21	5.09	5.41
IPLV		5.83	6.29	6.05	6.25	5.87	6.37
CASING							
Colour *		IW	IW	IW	IW	IW	IW
Material *		GPSS	GPSS	GPSS	GPSS	GPSS	GPSS
DIMENSIONS							
Height	mm	1878	1878	1878	1878	1878	1878
Width	mm	1152	1152	1152	1752	1752	2306
Length	mm	802	802	802	802	802	814
WEIGHT							
Unit Weight	kg	222	245	245	340	339	480
Operating Weight	kg	223	243	243	343	342	486
WATER HEAT							
EXCHANGER							
Type *		Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate
Fluid		Water	Water	Water	Water	Water	Water
Fouling Factor	m2°C/W	0	0	0	0	0	0
Water Volume	I	1	2	2	2	2	5
Water temperature in	°C	12	12	12	12	12	12
Water temperature out	°C	7	7	7	7	7	7
Water flow rate	l/s	0.8	1	1.2	1.6	1.9	2
Water pressure drop	kPa	19.8	11.3	16.3	19.2	27.6	9.91
		Black closed-	Black closed-	Black closed-	Black closed-	Black closed-	Black closed-
Insulation material *		cell flexible elastomeric	cell flexible elastomeric	cell flexible elastomeric	cell flexible elastomeric	cell flexible elastomeric	cell flexible elastomeric
		foam	foam	foam	foam	foam	foam
AIR HEAT EXCHANGER							
Type *		Al Fins&Cu Tubes	Al Fins&Cu Tubes	Al Fins&Cu Tubes	Al Fins&Cu Tubes	Al Fins&Cu Tubes	Al Fins&Cu Tubes
FAN		Tubes	Tubes	Tubes	Tubes	Tubes	Tubes
		Avial	Avial	Avial	Avial	Avial	Avial
Type * Drive *		Axial VFD	Axial VFD	Axial VFD	Axial VFD	Axial VFD	Axial VFD
Nominal air flow	l/s	3228	3122	3524	5080	6701	5444
Air Temperature	°C	35	35	35	35	35	35
Quantity	No.	1	1	1	2	2	2
Speed	rpm	800	800	900	700	900	700
Motor input	kW	0.4	0.4	0.5	0.5	1.1	0.5
COMPRESSOR							
Туре		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Oil charge	I	2.2	2.2	2.2	3.2	3.2	4.4
Quantity	No.	1	1	1	1	1	2
SOUND LEVEL**							
Sound Power - Cooling	dB(A)	76	76	78	79	80	80
Sound Pressure level @1m	dB(A)	59.7	59.7	61.7	62.2	63.2	62.8
distance - Cooling		3317		0117	0212	0012	02.0
REFRIGERANT CIRCUIT							
Refrigerant type		R32	R32	R32	R32	R32	R32
Refrigerant charge	kg	3	5	5	6.5	6.7	10.2
N. of circuits	No.	1	1	1	1	1	2
PIPING CONNECTIONS							
Evaporator water	mm	1''1/4 (female)	1''1/4 (female)	1''1/4 (female)	1''1/4 (female)	1''1/4 (female)	2" (female)
inlet/outlet		, ((12111010)	, . (, ((2.1.0.0)	, , (, , , , , , , , , , , , , , , , ,	, , (, , , , , , , , , , , , , , , , ,	(

MODEL		EWAT050CZN- A2	EWAT064CZN- A2	EWAT090CZN- A2
COOLING PERFORMANCE		AZ	AZ	AZ
Capacity - Cooling	kW	50.8	64	88.3
	K V V	Inverter	Inverter	Inverter
Capacity control - Type		Controlled	Controlled	Controlled
Capacity control - Minimum	%	12	15	14
capacity Unit power input - Cooling	kW	17	21.8	31
EER	KVV	2,98	2.93	2,84
SEER		5.33	5.21	5.03
IPLV		5.92	5.88	5.61
CASING				
Colour *		IW	IW	IW
Material *		GPSS	GPSS	GPSS
DIMENSIONS				
Height	mm	1878	1878	1878
Width	mm	2306	2906	3506
Length	mm	814	814	814
WEIGHT				
Unit Weight	kg	480	574	672
Operating Weight WATER HEAT EXCHANGER	kg	486	580	680
		Duese division	Duese division	Duese division
Type * Fluid		Brazed plate Water	Brazed plate Water	Brazed plate Water
Fouling Factor	m2°C/W	0	0	0
Water Volume		5	5	8
Water temperature in	°C	12	12	12
Water temperature out Water flow rate	°C	7 2.4	7 3.1	7 4,2
Water pressure drop	l/s kPa	2.4 14.3	3.1 21.7	4.2 20.1
	КГŬ	Black closed-	Black closed-	Black closed-
Insulation material *		cell flexible	cell flexible	cell flexible
		elastomeric	elastomeric	elastomeric
AIR HEAT EXCHANGER		foam	foam	foam
AIR HEAT EXCHANGER		Al Fins&Cu	Al Fins&Cu	Al Fins&Cu
Type *		Tubes	Tubes	Tubes
FAN				
Type *		Axial	Axial	Axial
Drive *		VFD	VFD	VFD
Nominal air flow	l/s	7048	8967	13402
Air Temperature	°C	35	35	35
Quantity	No.	2	3	4
Speed Motor input	rpm kW	900 1.1	800 1.2	900 2.3
COMPRESSOR	L A A	1.1	1.2	2.5
Туре		Scroll	Scroll	Scroll
Oil charge	I	4.4	5.4	6.4
Quantity	No.	2	2	2
SOUND LEVEL**				
Sound Power - Cooling	dB(A)	81	83	85
Sound Pressure level @1m			65.4	
distance - Cooling	dB(A)	63.8	03.4	67
REFRIGERANT CIRCUIT				
Refrigerant type		R32	R32	R32
Refrigerant charge	kg	10.2	11.4	14.4
N. of circuits	No.	2	2	2
PIPING CONNECTIONS				
Evaporator water inlet/outlet	mm	2" (female)	2" (female)	2" (female)

EWAT~CZP

MODEL		EWAT016CZP-	EWAT021CZP-	EWAT025CZP-	EWAT032CZP-	EWAT040CZP-	EWAT040CZP-
COOLING		A1	A1	A1	A1	A1	A2
PERFORMANCE							
Capacity - Cooling	kW	16.2	21.1	25.8	32.7	39.9	41.7
Capacity control - Type		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
		Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Capacity control - Minimum capacity	%	18	14	12	19	15	14
Unit power input - Cooling	kW	5.5	6.6	8.5	10.3	13.3	13.2
EER		2.96	3.22	3.05	3.18	3	3.17
SEER		5.3	5.41	5.41	5.7	5.36	5.76
IPLV		5.83	6.29	6.05	6.25	5.87	6.37
CASING							
Colour *		IW	IW	IW	IW	IW	IW
Material *		GPSS	GPSS	GPSS	GPSS	GPSS	GPSS
DIMENSIONS		0.00	0.00	0.00	0.00	0.00	0.00
Height	mm	1878	1878	1878	1878	1878	1878
Width	mm	1152	1152	1152	1752	1752	2306
Length	mm	802	802	802	802	802	814
WEIGHT	111111	002	002	002	002	002	014
		254	272	270	202	202	504
Unit Weight	kg	256	278	278	383	382	531
Operating Weight	kg	257	280	280	386	385	537
WATER HEAT EXCHANGER							
Type *		Brazed plate					
Fluid		Water	Water	Water	Water	Water	Water
Fouling Factor	m2°C/W	0	0	0	0	0	0
Water Volume	I	1	2	2	2	2	5
Water temperature in	°C	12	12	12	12	12	12
Water temperature out	°C	7	7	7	7	7	7
Water flow rate	l/s	0.8	1	1.2	1.6	1.9	2
Water pressure drop	kPa	19.8	11.3	16.3	19.2	27.6	9.91
		Black closed-					
Insulation material *		cell flexible					
		elastomeric foam	elastomeric foam	elastomeric foam	elastomeric foam	elastomeric foam	elastomeric foam
AIR HEAT EXCHANGER		IUalii	IUalli	IUdili	IUalii	IUalii	TUATT
AIR HEAT EXCHANGER		Al Fins&Cu					
Type *		Tubes	Tubes	Tubes	Tubes	Tubes	Tubes
FAN							
Type *		Axial	Axial	Axial	Axial	Axial	Axial
Drive *		VFD	VFD	VFD	VFD	VFD	VFD
Nominal air flow	l/s	3228	3122	3524	5080	6701	5444
Air Temperature	°C	35	35	35	35	35	35
Quantity	No.	1	1	1	2	2	2
Speed	rpm	800	800	900	700	900	700
Motor input	kW	0.4	0.4	0.5	0.5	1.1	0.5
COMPRESSOR							
Туре		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Oil charge	I.	2.2	2.2	2.2	3.2	3.2	4.4
Quantity	No.	1	1	1	1	1	2
SOUND LEVEL**		-			-	-	-
Sound Power - Cooling	dB(A)	76	76	78	79	80	80
Sound Pressure level @1m							
distance - Cooling	dB(A)	59.7	59.7	61.7	62.2	63.2	62.8
REFRIGERANT CIRCUIT							
Refrigerant type		R32	R32	R32	R32	R32	R32
Refrigerant charge	kg	3	5	5	6.5	6.7	10.2
N. of circuits	No.	1	1	1	1	1	2
PIPING CONNECTIONS		-	÷	-	÷	÷	-
Evaporator water inlet/outlet	mm	1"1/4 (female)	1''1/4 (female)	1''1/4 (female)	1''1/4 (female)	1"1/4 (female)	2" (female)
					1	1	l

COOLING PERFORMANCEA2A2A2Cooling performanceKW51.11.1Inverter ControlledInverter ControlledCapacity control - Type0121514Capacity control - Minimum capacity control - Minimum capacity control - Minimum sepacity%121514Capacity control - Minimum capacity%12151414Capacity control - Minimum capacity%121514Capacity control - Minimum capacity%121514Capacity control - Minimum capacity%121514Capacity control - Minimum capacity%121514Calour *5485.345.185.615.61CASING	MODEL		EWAT050CZP- A2	EWAT064CZP-	
Capacity - Cooling kW 51.1 64.4 88.8 Capacity control - Type Inverter Controlled Inverter Controlled Inverter Controlled Inverter Controlled Inverter Controlled Capacity control - Minimum capacity % 12 15 14 Unit power input - Cooling kW 17 21.9 31.1 ER 5.48 5.34 5.18 11 Colour * 5.92 5.88 5.61 5.85 Colour * JW W W W Material * GPSS GPSS GPSS Differstors Inverter Inverter 11 Mitch mm 1878 1878 1878 Unit Weight kg 531 630 727 Operating Weight kg 531 636 735 Water Mater Brazed plate Brazed plate Water Vint Weight kg 5.1 5 8 Stard flow rate In 5 </th <th></th> <th></th> <th>AZ</th> <th>AZ</th> <th>AZ</th>			AZ	AZ	AZ
Capacity control - Type Inverter Controlled Inverter Controlled Inverter Controlled Inverter Controlled Capacity control - Minimum capacity % 12 15 14 Unit power input - Cooling kW 17 21.9 31.1 EER 5.48 5.34 5.38 5.61 CASING 5.92 5.88 5.61 Colour * IW IW IW Material * GPSS GPSS GPSS DIMENSIONS Imm 814 814 814 Weight kg 531 630 727 Operating Weight kg 537 636 735 WATER HEAF EXCHANGER Brazed plate Water Water Water Fluid 5 5 8 8 Vater frequenture out °C 7 7 7 Yope * Isolation material * Black closed- cell flexible elastomeric foam Black closed- cell flexible elastomeric foam Black closed- cell flexible elastomeric foam Al Fins&Cu T		L:\\/	E1 1	64.4	00.0
Capacity control - Minimum % Controlled Controlled Controlled Capacity control - Minimum % 12 15 14 Capacity control - Minimum % 12 15 14 Unit power input - Cooling kW 17 21.9 31.1 ER 3.03 2.95 2.85 5.61 CASING 5.48 5.34 5.61 Calour * 1W W W 1W Material * 6PSS GPSS GPSS DIMENSIONS Imm 1878 1878 1878 Height mm 1878 1878 1878 Unit Weight kg 531 636 727 Operating Weight kg 537 636 735 Water Brazed plate Brazed plate Water Water Fluid 5 5 8 30.1 20.1 Water theat Exchanger I 5 8 30.1 20.1 <	Capacity - Cooling	KVV	-	-	
capacity 70 1.2 1.3 1.4 Unit power input - Cooling kW 1.7 21.9 31.1 EER 3.03 2.95 2.85 SEER 5.48 5.34 5.18 IPLV 5.92 5.88 5.61 Casine IW IW IW Colour * IW IW IW Material * GPSS GPSS GPSS DIMENSIONS IRT 1878 1878 Length mm 814 814 814 Weight kg 531 636 727 Operating Weight kg 531 636 735 WATER HEAT EXCHANGER Frazed plate Water Water Water Fouling Factor m2°C/W 0 0 0 0 Vater temperature out °C 7 7 7 20.1 Water temperature out °C 7 7 7 20.1 <t< td=""><td>Capacity control - Type</td><td></td><td></td><td></td><td></td></t<>	Capacity control - Type				
capacity Unit power input - Cooling ERkW1721.931.1ER3.032.952.85SEER5.925.885.61PLV5.925.885.61CastingIWIWIWColour *IWIWIWMaterial *CPS5GPS5GPS5DIMENSIONSICPS66.956.95Heightmm187818781878Withmm2306200620063506Lengthmm814814814WEIGHTUnit Weightkg531630727Operating Weightkg531636727Operating Weightkg531636727Operating Weightkg531636722Unit Weightkg531636722Vater temperature in°C1212Water temperature in°C1212Water temperature out°C77Water flow rateI/s2.43.14.2Unit Heat EXCHANGERIBlack closed- cell fickble elastomeric foamBlack closed- cell fickble elastomeric foamScr		%	12	15	14
EER 3.03 2.95 2.85 SEER 5.48 5.34 5.18 TPLV 5.92 5.88 5.61 Colour * IW IW IW Material * GPSS GPSS GPSS DIMENSIONS IB78 1878 1878 Height mm 1376 287 Unit Weight kg 531 630 727 Operating Weight kg 531 630 727 Valer Mater and pacter Water Water Water Water Fouling Factor m °C 12 12 12 12 <t< td=""><td></td><td>-</td><td></td><td>-</td><td></td></t<>		-		-	
SEER IPLV 5.48 5.92 5.34 5.88 5.18 5.92 CASING IW IW IW IW Colour * IW IW IW IW Material * GPSS GPSS GPSS DiMENSIONS IS73 1878 1878 Weight mm 814 814 814 WEIGHT Int Weight kg 537 636 727 Operating Weight kg 537 636 725 WATER HEAT EXCHANGER Brazed plate Water Water Water Foling Factor m2°C/W 0 0 0 0 Water temperature out °C 7 7 7 7 Water temperature out °C 7 7 20.1 Black closed-cell flexible elastomeric foam		KVV		-	-
IPLV5.925.885.61CASINGIWIWCASINGColour*IWIWIWMaterial*CPSSGPSSGPSSDIMENSIONSIB7818781878Heightmm187818781878Widthmm230629063506Lengthmm814814814WEIGHTUnit Weightkg531630727Operating Weightkg537636735WATER HEAT EXCHANGERBrazed plateBrazed plateBrazed plateFluidIS58Water VolumeIS58Water temperature in°C121212Vater temperature ou°C777Water temperature ou°C777Water temperature ou°C14.321.720.1Water temperature ou°C14.321.720.1Insulation material *Black closed- cell flexible elastomeric foamBlack closed- cell flexible elastomeric foamAl Fins&Cu TubesType *AxialAxialAxialAxialAir Temperature°C353535QuantityNo.234Speedrpm900800900Motor inputkW111.22.3ComperatureC353535QuantityNo.2<					
Colour * IW IW IW W Material * GPSS GPSS GPSS DIMENSIONS - - - Height mm 1878 1878 1878 Width mm 2306 2906 3506 Length mm 814 814 814 WeIGHT - - - - Unit Weight kg 531 630 727 Operating Weight kg 537 636 735 WATER HEAT EXCHANGER - - Brazed plate Brazed plate Water Water Fouling Factor m2°C/W 0 0 0 0 0 Water temperature out °C 7 7 7 7 20.1 12 <td></td> <td></td> <td></td> <td></td> <td></td>					
Material * GPSS GPSS GPSS DIMENSIONS - - - Height mm 1878 1878 1878 Width mm 2306 2906 3506 Length mm 814 814 814 WEIGHT kg 531 630 727 Operating Weight kg 537 636 735 WATER HEAT EXCHANGER Brazed plate Brazed plate Water Fouling Factor m2°C/W 0 0 0 Water temperature in °C 12 12 12 Water temperature out °C 7 7 7 Water for yate //>//>/ 2.4 3.1 4.2 Water for yate //>/ 2.4 3.1 4.2 Water for yate //>/ 2.4 3.1 4.2 Water for yate //>/ 2.4 3.1 4.2 Insulation material * Lisck closed-cleif flexible ela	CASING				
DIMENSIONS Imm 1878 1878 1878 1878 Height mm 2306 2906 3506 Length mm 814 814 814 WEIGHT kg 531 630 727 Operating Weight kg 537 636 735 WATER HEAT EXCHANGER Brazed plate Brazed plate Water Water Water Fouling Factor m2°C/W 0 0 0 0 0 Water Velume I 5 5 8	Colour *		IW	IW	IW
Height mm 1878 1878 1878 1878 Width mm 2306 2906 3506 Length mm 814 814 814 Unit Weight kg 531 630 727 Operating Weight kg 537 636 735 WATER HEAT EXCHANGER Type * Brazed plate Brazed plate Brazed plate Water Water Fouling Factor m2°C/W 0 0 0 0 Water temperature in °C 12 12 12 12 Water temperature out °C 7 7 7 7 7 12 12 12 12 12 12 14 13 14 20.1 13 4.2 13 14 20 14 3 14 20 13 14 20 14 3 14 16 6ad 6al flexible elastomeric foam 6at 6at 6at <td< td=""><td>Material *</td><td></td><td>GPSS</td><td>GPSS</td><td>GPSS</td></td<>	Material *		GPSS	GPSS	GPSS
Width mm 2306 2906 3506 Length mm 814 814 814 WEIGHT kg 531 630 727 Operating Weight kg 537 636 735 WATER HEAT EXCHANGER Brazed plate Brazed plate Brazed plate Brazed plate Fouling Factor m2°C/W 0 0 0 0 Water temperature in °C 12 12 12 12 Water temperature out °C 7 7 7 7 Water flow rate I/s 14.3 21.7 20.1 Black closed- Blac	DIMENSIONS				
Lengthmm814814814WEIGHTkg531630727Operating Weightkg537636735WATER HEAT EXCHANGERBrazed plateBrazed plateBrazed plateFluidBrazed C000Water VolumeI558Water temperature in°C121212Water temperature out°C777Water flow rateI/s2.43.14.2Water pressure dropkPaBlack closed- cell flexibleBlack closed- cell flexibleBlack closed- cell flexibleBlack closed- cell flexibleType *Al Fins&Cu TubesTubesAl Fins&Cu TubesAl Fins&Cu TubesAl Fins&Cu TubesFANAl Fins&Cu TubesAl Fins&Cu TubesAl Fins&Cu TubesAl Fins&Cu TubesFANVFDVFDVFDVFDNon234Seedrpm900800900Motor inputkW1.11.22.3COMPRESSORI4.45.46.4QuantityNo.222Sound Pressure level @1m dB(A)63.865.467REFRIGERANT CIRCUITRA32R32R32R32Refrigerant typeR32R32R32R32Refrigerant typekg10.21.41.4No.2222Sound Power - C	Height	mm	1878	1878	1878
WEIGHT Unit Weightkg531630727Operating Weightkg537636735WATER HEAT EXCHANGERBrazed plate WaterBrazed plate WaterBrazed plate WaterBrazed plate WaterFouling Factorm2°C/W000Water VolumeI558Water temperature in Water temperature out Water flow rate°C1212Water flow rateI/s2.43.14.2Water pressure dropkPa14.321.7Black closed- cell flexible elastomeric foamBlack closed- cell flexible elastomeric foamBlack closed- cell flexible elastomeric foamAl Fins&Cu TubesAl Fins&Cu TubesFANAl Fins&Cu TubesAl Fins&Cu TubesAl Fins&Cu TubesAl Fins&Cu TubesAl Fins&Cu TubesType *AxialAxialAxialAxialAxialDrive *No.234Speedrpm900800900Motor inputkW1.11.22.3COMPRESSORI4.45.46.4QuantityNo.222SOUND LEVEL**Bd(A)63.865.467Sound Pressure level @Im dB(A)63.865.467REFRIGERANT CIRCUITRR32R32R32Refrigerant typeR32R32R32R32Refrigerant thrapekg10.211.41.4 <td>Width</td> <td>mm</td> <td>2306</td> <td>2906</td> <td>3506</td>	Width	mm	2306	2906	3506
Unit Weight Operating Weight kg 531 537 630 636 727 735 WATER HEAT EXCHANGER Brazed plate Water		mm	814	814	814
Operating Weightkg537636735WATER HEAT EXCHANGERFrazed plateBrazed plateWaterBrazed plateType *WaterWaterWaterWaterFouling Factorm2°C/W000Water VolumeI558Water temperature in°C121212Water temperature out°C777Water flow rateI/s2.43.14.2Water pressure dropkPa14.321.720.1Black closed- cell flexible elastomericBlack closed- cell flexible elastomericBlack closed- cell flexible elastomericBlack closed- cell flexible elastomericFANAl Fins&CuAl Fins&Cu TubesAl Fins&Cu TubesAl Fins&Cu TubesFANVFDVFDVFDType *AxialAxialAxial AxialAxial AxialDrive *No.234Speedrpm900800900Motor inputkW1.11.22.3COMPRESSORTypeScrollScrollScrollOut pressure level @1m dlstanedB(A)818385Sound Pressure level @1m dlstanedB(A)63.865.467REFRIGERANT CIRCUITR32R32R32R32Refrigerant typekg10.211.414.4No.2222PIPI	WEIGHT				
WATER HEAT EXCHANGERBrazed plateBrazed plateBrazed plateType * FluidBrazed plateBrazed plateBrazed plateBrazed plateFouling Factorm2°C/W000Water VolumeI558Water temperature in°C121212Water temperature out°C777Water flow rateI/s2.43.14.2Water pressure dropkPa14.321.720.1Black closed-cell flexible elastomeric foamBlack closed-cell flexible elastomeric foamBlack closed-cell flexible elastomeric foamAIR HEAT EXCHANGER Type *Al Fins&Cu TubesAl Fins&Cu TubesAl Fins&Cu TubesType *Axial VFDAxial VFDAxial VFDAxial Axial Axial AxialAxial Axial		-			
Type * FluidBrazed plate WaterBrazed plate WaterBrazed plate WaterBrazed plate WaterBrazed plate WaterFouling Factorm2°C/W000Water temperature in°C121212Water temperature out°C777Water fow rateI/S2.43.14.2Water pressure dropkPa14.321.720.1Black closed- cell flexible elastomeric foamBlack closed- cell flexible elastomeric foamBlac		kg	537	636	735
FluidWaterWaterWaterFouling Factorm2°C/W000Water VolumeI558Water temperature out°C121212Water temperature out°C777Water flow rateI/s2.43.14.2Water pressure dropkPa14.321.720.1Black closed- cell flexibleBlack closed- cell flexibleBlack closed- cell flexibleBlack closed- cell flexibleBlack closed- cell flexibleAIR HEAT EXCHANGERHHins&Cu TubesTubesHType *AkialAxialAxialAxialType *AxialAxialAxialAxialDrive *VFDVFDVFDNominal air flowI/s7048896713402Air Temperature°C353535QuantityNo.234Speedrpm900800900Motor inputkW1.11.22.3COMPRESSORI4.45.46.4QuantityNo.222Sound Power - CoolingdB(A)63.865.467Refrigerant typeR32R32R32Refrigerant typekg10.211.414.4N. of circuitsNo.222PIPING CONNECTIONSK222					
Fouling Factor m2°C/W 0 0 0 Water Volume I 5 5 8 Water temperature in °C 12 12 12 Water temperature out °C 7 7 7 Water pressure drop kPa 14.3 21.7 20.1 Black closed- cell fiexible elastomeric foam Al Fins&Cu Tubes Type * Axial Axial Axial Axial Drive * VFD VFD VFD VFD Noninal air flow I/s 7048 8967	<i>,</i> ,,				
Water Volume I 5 5 8 Water temperature in °C 12 12 12 12 Water temperature out °C 7 7 7 7 Water flow rate I/s 2.4 3.1 4.2 4.2 Water pressure drop kPa 14.3 21.7 20.1 Black closed-cell flexible elastomeric foam Mutor fubes Nutres Nutres Nutres Nutres Nutres Nutres Nutres Nutres	Fluid		Water	Water	Water
Water temperature in Water temperature out°C121212Water temperature out°C777Water flow rateI/s2.43.14.2Water pressure dropkPa14.321.720.1Insulation material *Black closed- cell flexible elastomeric foamBlack closed- cell flexible elastomeric 	Fouling Factor	m2°C/W	0	0	0
Water temperature out Water flow rate°C I7 77 7Water flow rateI/S2.43.14.2Water pressure dropkPa14.321.720.1Insulation material *Black closed- cell flexible elastomeric foamBlack closed- cell flexible elastomeric foadBlack closed- cell flexible <b< td=""><td>Water Volume</td><td>Ι</td><td>5</td><td>5</td><td>8</td></b<>	Water Volume	Ι	5	5	8
Water flow rate Water pressure dropI/s kPa2.4 14.33.1 21.74.2 20.1Insulation material *Black closed- cel flexible elastomeric foamBlack closed- cel flexible elastomeric foamAl Fins&CuAl Fins&CuType *AxialAxialAxialAxialAxialAxialAxialNo2334SoudSoudSoudSoudOil chargeI4.445	Water temperature in	-			
Water pressure dropkPa14.321.720.1Insulation material *Black closed- cell flexible elastomeric foamBlack closed- cell flexible elastomeric foamBlack closed- cell flexible elastomeric foamBlack closed- cell flexible elastomeric foamBlack closed- cell flexible elastomeric foamBlack closed- cell flexible elastomeric foamAIR HEAT EXCHANGERAl Fins&Cu TubesAl Fins&Cu TubesAl Fins&Cu TubesAl Fins&Cu TubesFANAxialAxialAxialAxialType *AxialAxialAxialAxialDrive *VFDVFDVFDVFDNominal air flowI/s7048896713402Air Temperature°C353535QuantityNo.234Speedrpm900800900Motor inputkW1.11.22.3COMPRESSORI4.45.46.4QuantityNo.222Sound Power - CoolingdB(A)818385Sound Pressure level @1m distance - CoolingdB(A)63.865.467Refrigerant typeR32R32R32R32Refrigerant typekg10.211.414.4N. of circuitsNo.222PIPING CONNECTIONSKg10.211.414.4		-			
Insulation material *Black closed-cell flexible elastomeric foamBlack closed-cell flexible foamBlack closed-cell flexible flexible tubesBlack closed-cell flexible flexible tubesBlack closed-cell flexible flexible tubesBlack closed-cell flexible flexible tubesBlack closed-cell flexible flexible tubesBlack closed-cell flexible flexible tu		-		-	
Insulation material *cell flexible elastomeric foamcell flexible flexible tubescell flexible flexible tubescell flexible flexible tubescell flexible flexible tubescell flexible fleadtowncell flexible fleadtowncell flexible fleadtowncell flexible fleadtowncell flexible fleadtowncell flexible fleadtowncell flexible fleadtowncell flexible fleadtowncell flexible fleadtown<	Water pressure drop	кРа	-		-
Insulation material *elastomeric foamelastomeric foamelastomeric foamelastomeric foamAIR HEAT EXCHANGERAI Fins&Cu Tupe *AI Fins&Cu TubesAI Fins&Cu TubesAI Fins&Cu TubesFANAxialAxialAxialAxialType *AxialAxialAxialAxialDrive *VFDVFDVFDNominal air flowI/s7048896713402Air Temperature°C353535QuantityNo.234Speedrpm900800900Motor inputkW1.11.22.3COMPRESSORScrollScrollTypeScrollScrollScrollScrollOil chargeI4.45.46.4QuantityNo.222Sound Power - CoolingdB(A)818385Sound Pressure level @1m distance - CoolingdB(A)63.865.467Refrigerant typeR32R32R32R32Refrigerant chargekg10.211.414.4N. of circuitsNo.222PIPING CONNECTIONSKeKeKeKeKe					
AIR HEAT EXCHANGERAI Fins&Cu TubesAI Fins&Cu TubesAl Fins&Cu TubesType *AxialAxialAxialAxialDrive *VFDVFDVFDVFDNominal air flowI/s7048896713402Air Temperature°C353535QuantityNo.234Speedrpm900800900Motor inputkW1.11.22.3COMPRESSORScrollScrollOil chargeI4.45.46.4QuantityNo.222Sound Power - CoolingdB(A)818385Sound Pressure level @1m distance - CoolingdB(A)63.865.467ReFRIGERANT CIRCUITRaffigerant typeR32R32R32Refrigerant typekg10.211.414.4N. of circuitsNo.222PIPING CONNECTIONSVo.222	Insulation material *				
Type *Al Fins&Cu TubesAl Fins&Cu TubesAl Fins&Cu TubesFAN </td <td></td> <td></td> <td>foam</td> <td>foam</td> <td>foam</td>			foam	foam	foam
TubesTubesTubesTubesFANAxialAxialAxialType *AxialAxialAxialDrive *VFDVFDVFDNominal air flowI/s7048896713402Air Temperature°C353535QuantityNo.234Speedrpm900800900Motor inputkW1.11.22.3COMPRESSORTypeScrollScrollOil chargeI4.45.46.4QuantityNo.222SOUND LEVEL**No.222Sound Power - CoolingdB(A)63.865.467REFRIGERANT CIRCUITRaft gerant typeR32R32R32Refrigerant typekg10.211.414.4N. of circuitsNo.222PIPING CONNECTIONSLL22	AIR HEAT EXCHANGER				
FANAxialAxialAxialType *AxialAxialAxialDrive *VFDVFDVFDNominal air flowI/s70488967Air Temperature°C3535QuantityNo.23Speedrpm900800900Motor inputkW1.11.22.3COMPRESSORTypeScrollScrollScrollOil chargeI4.45.46.4QuantityNo.222SOUND LEVEL**Sound Pressure level @1m dlstance - CoolingdB(A)818385Sound Pressure level @1m distance - CoolingdB(A)63.865.467REFRIGERANT CIRCUIT Refrigerant typeR32R32R32Refrigerant chargekg10.211.414.4N. of circuitsNo.222PIPING CONNECTIONSV222	Туре *				
Drive * VFD VFD VFD Nominal air flow I/s 7048 8967 13402 Air Temperature °C 35 35 35 Quantity No. 2 3 4 Speed rpm 900 800 900 Motor input kW 1.1 1.2 2.3 COMPRESSOR 7 2 2 Type Scroll Scroll Scroll Scroll Oil charge I 4.4 5.4 6.4 Quantity No. 2 2 2 SOUND LEVEL** 63.8 65.4 67 Sound Pressure level @1m dB(A) 63.8 65.4 67 Refrigerant type R32 R32 R32 Refrigerant type kg 10.2 11.4 14.4 N. of circuits No. 2 2 2	FAN				
Drive * VFD VFD VFD Nominal air flow I/s 7048 8967 13402 Air Temperature °C 35 35 35 Quantity No. 2 3 4 Speed rpm 900 800 900 Motor input kW 1.1 1.2 2.3 COMPRESSOR 7 2 2 Type Scroll Scroll Scroll Scroll Oil charge I 4.4 5.4 6.4 Quantity No. 2 2 2 SOUND LEVEL** 63.8 65.4 67 Sound Pressure level @1m dB(A) 63.8 65.4 67 Refrigerant type R32 R32 R32 Refrigerant type kg 10.2 11.4 14.4 N. of circuits No. 2 2 2	Type *		Axial	Axial	Axial
Nominal air flow I/s 7048 8967 13402 Air Temperature °C 35 35 35 Quantity No. 2 3 4 Speed rpm 900 800 900 Motor input kW 1.1 1.2 2.3 COMPRESSOR Scroll Scroll Scroll Oil charge I 4.4 5.4 6.4 Quantity No. 2 2 2 Sound Power - Cooling dB(A) 81 83 85 Sound Power - Cooling dB(A) 63.8 65.4 67 Refrigerant type R32 R32 R32 R32 Refrigerant type kg 10.2 11.4 14.4 N. of circuits No. 2 2 2			-		-
Quantity No. 2 3 4 Speed rpm 900 800 900 Motor input kW 1.1 1.2 2.3 COMPRESSOR Scroll Scroll Scroll Oil charge I 4.4 5.4 6.4 Quantity No. 2 2 2 SOUND LEVEL** No. 2 2 2 Sound Power - Cooling dB(A) 81 83 85 Sound Pressure level @1m dB(A) 63.8 65.4 67 REFRIGERANT CIRCUIT R32 R32 R32 Refrigerant type Kg 10.2 11.4 14.4 N. of circuits No. 2 2 2 PIPING CONNECTIONS I I 2 2 2	Nominal air flow	l/s	7048		
Speedrpm900800900Motor inputkW1.11.22.3COMPRESSOR22.3TypeScrollScrollScrollOil chargeI4.45.46.4QuantityNo.222SOUND LEVEL**Sound Power - CoolingdB(A)818385Sound Pressure level @1mdB(A)63.865.467REFRIGERANT CIRCUITR32R32R32R32Refrigerant typekg10.211.414.4N. of circuitsNo.222PIPING CONNECTIONSLLLL		-			
Motor inputkW1.11.22.3COMPRESSORScrollScrollScrollTypeScrollScrollScrollOil chargeI4.45.46.4QuantityNo.222SOUND LEVEL**Sound Power - CoolingdB(A)818385Sound Pressure level @1m distance - CoolingdB(A)63.865.467REFRIGERANT CIRCUITRefrigerant typeR32R32R32Refrigerant chargekg10.211.414.4N. of circuitsNo.222PIPING CONNECTIONSLLLL					
COMPRESSORScrollScrollScrollTypeScrollScrollScrollOil chargeI4.45.46.4QuantityNo.222SOUND LEVEL**Sound Power - CoolingdB(A)818385Sound Pressure level @1m distance - CoolingdB(A)63.865.467REFRIGERANT CIRCUITR32R32R32Refrigerant typeR32R32R32Refrigerant chargekg10.211.414.4N. of circuitsNo.222PIPING CONNECTIONSImage: Constant const		-			
TypeScrollScrollScrollOil chargeI4.45.46.4QuantityNo.222SOUND LEVEL**KKKSound Power - CoolingdB(A)818385Sound Pressure level @1mdB(A)63.865.467REFRIGERANT CIRCUITKKK14.4Refrigerant typeR32R32R32Refrigerant chargekg10.211.414.4N. of circuitsNo.222PIPING CONNECTIONSLLLL		кW	1.1	1.2	2.3
Did chargeI4.45.46.4QuantityNo.222SOUND LEVEL** </td <td></td> <td></td> <td>c "</td> <td><i></i></td> <td>- ···</td>			c "	<i></i>	- ···
QuantityNo.222SOUND LEVEL** </td <td></td> <td>ı</td> <td></td> <td></td> <td></td>		ı			
SOUND LEVEL**Sound Power - CoolingdB(A)818385Sound Pressure level @1m distance - CoolingdB(A)63.865.467REFRIGERANT CIRCUITRefrigerant typeR32R32R32Refrigerant chargekg10.211.414.4N. of circuitsNo.222PIPING CONNECTIONSImage: Constant of the second secon					
Sound Power - CoolingdB(A)818385Sound Pressure level @1mdB(A)63.865.467distance - CoolingdB(A)63.865.467REFRIGERANT CIRCUITRefrigerant typeR32R32Refrigerant chargekg10.211.4N. of circuitsNo.22PIPING CONNECTIONSLLL	c 1	NU.	۷	۷	۷
Sound Pressure level @1m distance - CoolingdB(A)63.865.467REFRIGERANT CIRCUITR32R32R32Refrigerant typeR32R32R32Refrigerant chargekg10.211.414.4N. of circuitsNo.222PIPING CONNECTIONSLLLL		dB(A)	Q1	63	QL
distance - CoolingdB(A)63.865.467REFRIGERANT CIRCUITR32R32R32Refrigerant typeR32R32R32Refrigerant chargekg10.211.414.4N. of circuitsNo.222PIPING CONNECTIONSLLL	-				
REFRIGERANT CIRCUITR32R32R32Refrigerant typeR32R32R32Refrigerant chargekg10.211.414.4N. of circuitsNo.222PIPING CONNECTIONS </td <td></td> <td>dB(A)</td> <td>63.8</td> <td>65.4</td> <td>67</td>		dB(A)	63.8	65.4	67
Refrigerant chargekg10.211.414.4N. of circuitsNo.222PIPING CONNECTIONSImage: Constant of the second					
Refrigerant chargekg10.211.414.4N. of circuitsNo.222PIPING CONNECTIONSImage: Constant of the second	Refrigerant type		R32	R32	R32
N. of circuits No. 2 2 2 PIPING CONNECTIONS		kg			
		-	2	2	2
Evaporator water inlet/outlet mm 2" (female) 2" (female) 2" (female)	PIPING CONNECTIONS				
	Evaporator water inlet/outlet	mm	2" (female)	2" (female)	2" (female)

EWAT~CZH

MODEL		EWAT016CZH-	EWAT021CZH-	EWAT025CZH-	EWAT032CZH-	EWAT040CZH-	EWAT040CZH-
		A1	A1	A1	A1	A1	A2
COOLING PERFORMANCE							
Capacity - Cooling	kW	16.2	21.2	25.9	32.8	40.1	41.8
Capacity control - Type		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
. , , , , ,		Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Capacity control - Minimum capacity	%	18	14	12	19	15	14
Unit power input - Cooling	kW	5.62	6.74	8.7	10.4	13.5	13.3
EER		2.89	3.15	2.98	3.14	2.97	3.15
SEER		5.2	5.32	5.34	5.67	5.34	5.76
IPLV		5.83	6.29	6.05	6.25	5.87	6.37
CASING							
Colour *		IW	IW	IW	IW	IW	IW
Material *		GPSS	GPSS	GPSS	GPSS	GPSS	GPSS
DIMENSIONS							
Height	mm	1878	1878	1878	1878	1878	1878
Width	mm	1152	1152	1152	1752	1752	2306
Length	mm	802	802	802	802	802	814
WEIGHT							
Unit Weight	kg	256	278	278	383	382	531
Operating Weight	kg	257	280	280	386	385	537
WATER HEAT							
EXCHANGER		Duran durata	Duran di alata				
Type *		Brazed plate					
Fluid		Water	Water	Water	Water	Water	Water
Fouling Factor	m2°C/W	0	0	0	0	0	0
Water Volume	Ι	1	2	2	2	2	5
Water temperature in	°C	12	12	12	12	12	12
Water temperature out	°C	7	7	7	7	7	7
Water flow rate	l/s	0.8	1	1.2	1.6	1.9	2
Water pressure drop	kPa	19.8	11.3	16.3	19.2	27.6	9.9
		Black closed- cell flexible					
Insulation material *		elastomeric	elastomeric	elastomeric	elastomeric	elastomeric	elastomeric
		foam	foam	foam	foam	foam	foam
AIR HEAT EXCHANGER							
Type *		Al Fins&Cu Tubes					
FAN							
Type *		Axial	Axial	Axial	Axial	Axial	Axial
Drive *		VFD	VFD	VFD	VFD	VFD	VFD
Nominal air flow	l/s	3228	3122	3524	5080	6701	5444
Air Temperature	°C	35	35	35	35	35	35
Quantity	No.	1	1	1	2	2	2
Speed	rpm	800	800	900	700	900	700
Motor input	kW	0.4	0.4	0.5	0.5	1.1	0.5
COMPRESSOR							
Туре		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Oil charge	I	2.2	2.2	2.2	3.2	3.2	4.4
Quantity	No.	1	1	1	1	1	2
SOUND LEVEL**							
Sound Power - Cooling	dB(A)	76	76	78	79	80	80
Sound Pressure level @1m distance - Cooling	dB(A)	59.7	59.7	61.7	62.2	63.2	62.8
REFRIGERANT CIRCUIT							
Refrigerant type		R32	R32	R32	R32	R32	R32
Refrigerant charge	kg	3	5	5	6.5	6.7	10.2
N. of circuits	No.	1	1	1	1	1	2
PIPING CONNECTIONS							
Evaporator water	mm	1''1/4 (female)	2" (female)				
inlet/outlet		, ((endic)	, · (iemaie)	, · (iemaic)	, · (iemaie)	, · (iemaie)	_ ((ende)

MODEL		EWAT050CZH-	EWAT064CZH-	EWAT090CZH-
COOLING PERFORMANCE		A2	A2	A2
Capacity - Cooling	kW	51.3	64.5	88.9
	r VV	Inverter	Inverter	Inverter
Capacity control - Type		Controlled	Controlled	Controlled
Capacity control - Minimum	%	12	15	14
capacity Unit power input - Cooling	kW	17	22	31.2
EER	K V V	3.02	2.93	2.85
SEER		5.4	5.27	5.12
IPLV		5.92	5.88	5.61
CASING				
Colour *		IW	IW	IW
Material *		GPSS	GPSS	GPSS
DIMENSIONS				
Height	mm	1878	1878	1878
Width	mm	2306	2906	3506
Length	mm	814	814	814
WEIGHT				
Unit Weight	kg ka	531	630 636	727
Operating Weight WATER HEAT EXCHANGER	kg	537	636	735
		Duesed whete	Duesed alate	Duesed alste
Type * Fluid		Brazed plate Water	Brazed plate Water	Brazed plate Water
Fouling Factor	m2°C/W	0	0	0
Water Volume	I	5	5	8
Water temperature in	°C	12	12	12
Water temperature out Water flow rate	°C	7 2.4	7 3.1	7 4,2
Water pressure drop	l/s kPa	2.4 14.3	21.7	20.1
	Ki û	Black closed-	Black closed-	Black closed-
Insulation material *		cell flexible	cell flexible	cell flexible
insulation material		elastomeric foam	elastomeric foam	elastomeric foam
AIR HEAT EXCHANGER		Ioani	Iuani	Ioann
		Al Fins&Cu	Al Fins&Cu	Al Fins&Cu
Type *		Tubes	Tubes	Tubes
FAN				
Type *		Axial	Axial	Axial
Drive *		VFD	VFD	VFD
Nominal air flow	l/s	7048	8967	13402
Air Temperature	°C	35	35	35
Quantity Speed	No.	2 900	3	4 900
Speea Motor input	rpm kW	900 1.1	800 1.2	2.3
COMPRESSOR	IN V V	1.1	1.2	2.5
Туре		Scroll	Scroll	Scroll
Oil charge	I	4.4	5.4	6.4
Quantity	No.	2	2	2
SOUND LEVEL**				
Sound Power - Cooling	dB(A)	81	83	85
Sound Pressure level @1m	dB(A)	63.8	65.4	67
distance - Cooling	uD(A)	0.00	05.4	07
REFRIGERANT CIRCUIT				
Refrigerant type		R32	R32	R32
Refrigerant charge	kg	10.2	11.4	14.4
N. of circuits PIPING CONNECTIONS	No.	2	2	2
Evaporator water inlet/outlet	mm	2" (female)	2" (female)	2" (female)

EWAT~CZN MAX ("MAX" configuration has to be setted on site through the controller)

MODEL		EWAT016CZN-	EWAT021CZN-	EWAT025CZN-	EWAT032CZN-	EWAT040CZN-	EWAT040CZN-
		A1_MAX	A1_MAX	A1_MAX	A1_MAX	A1_MAX	A2_MAX
COOLING PERFORMANCE							
Capacity - Cooling	kW	18.3	25	29.3	38.6	45.2	49.6
Capacity control - Type		Inverter Controlled	Inverter Controlled	Inverter Controlled	Inverter Controlled	Inverter Controlled	Inverter Controlled
Capacity control - Minimum capacity	%	18	14	12	19	15	14
Unit power input - Cooling	kW	6.8	8.5	10.7	13.5	16.7	17.3
EER		2.69	2.94	2.74	2.87	2.71	2.87
SEER		5	5	5.06	5.21	5.09	5.41
IPLV		5.83	6.29	6.05	6.25	5.87	6.37
CASING							
Colour *		IW	IW	IW	IW	IW	IW
Material *		GPSS	GPSS	GPSS	GPSS	GPSS	GPSS
DIMENSIONS							
Height	mm	1878	1878	1878	1878	1878	1878
Width	mm	1152	1152	1152	1752	1752	2306
Length WEIGHT	mm	802	802	802	802	802	814
	l.e.	222	245	245	240	220	400
Unit Weight	kg ka	222 223	245 247	245 247	340 343	339 342	480 486
Operating Weight WATER HEAT	kg	225	247	247	545	542	400
EXCHANGER							
Туре *		Brazed plate					
Fluid		Water	Water	Water	Water	Water	Water
Fouling Factor	m2°C/W	0	0	0	0	0	0
Water Volume	I.	1	2	2	2	2	5
Water temperature in	°C	12	12	12	12	12	12
Water temperature out	°C	7	7	7	7	7	7
Water flow rate	l/s	0.9	1.2	1.4	1.8	2.2	2.4
Water pressure drop	kPa	25.6	15.7	20.7	26.4	35	13.8
Insulation material *		Black closed- cell flexible elastomeric foam					
AIR HEAT EXCHANGER		Tourn	Tourn	Tourn	loann	loan	louin
Type *		Al Fins&Cu					
FAN		Tubes	Tubes	Tubes	Tubes	Tubes	Tubes
		Avial	Avial	Avial	Avial	Avial	Avial
Type * Drive *		Axial VFD	Axial VFD	Axial VFD	Axial VFD	Axial VFD	Axial VFD
Nominal air flow	l/s	3228	3122	3524	5080	6701	5444
Air Temperature	°C	35	35	35	35	35	35
Quantity	No.	1	1	1	2	2	2
Speed	rpm	800	800	900	700	900	700
Motor input	kW	0.4	0.4	0.5	0.5	1.1	0.5
COMPRESSOR							
Туре		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Oil charge	I	2.2	2.2	2.2	3.2	3.2	4.4
Quantity	No.	1	1	1	1	1	2
SOUND LEVEL**							
Sound Power - Cooling	dB(A)	76	76	78	79	80	80
Sound Pressure level @1m distance - Cooling	dB(A)	59.7	59.7	61.7	62.2	63.2	62.8
REFRIGERANT CIRCUIT							
Refrigerant type		R32	R32	R32	R32	R32	R32
Refrigerant charge	kg	3	5	5	6.5	6.7	10.2
N. of circuits	No.	1	1	1	1	1	2
PIPING CONNECTIONS							
Evaporator water inlet/outlet	mm	1''1/4 (female)	2" (female)				

MODEL		EWAT050CZN- A2 MAX	EWAT064CZN- A2 MAX	EWAT090CZN- A2 MAX
COOLING PERFORMANCE		AZ_MAA	AZ_MAA	AZ_MAA
Capacity - Cooling	kW	58.2	72.7	98.3
	NVV	Inverter	Inverter	Inverter
Capacity control - Type		Controlled	Controlled	Controlled
Capacity control - Minimum	%	12	15	14
capacity Unit power input - Cooling	kW	21.3	27.4	38.2
EER	K V V	2.73	2.65	2.57
SEER		5.33	5.21	5.03
IPLV		5.92	5.88	5.61
CASING				
Colour *		IW	IW	IW
Material *		GPSS	GPSS	GPSS
DIMENSIONS				
Height	mm	1878	1878	1878
Width	mm	2306	2906	3506
Length	mm	814	814	814
WEIGHT				
Unit Weight	kg	480	574	672
Operating Weight	kg	486	580	680
WATER HEAT EXCHANGER				
Type *		Brazed plate	Brazed plate	Brazed plate
Fluid		Water	Water	Water
Fouling Factor	m2°C/W	0	0	0
Water Volume	I	5	5	8
Water temperature in	°C	12	12	12
Water temperature out	°C	7	7	7
Water flow rate	l/s kPa	2.8 18.3	3.5 27.4	4.7 24.4
Water pressure drop	кга	Black closed-	Black closed-	Black closed-
		cell flexible	cell flexible	cell flexible
Insulation material *		elastomeric	elastomeric	elastomeric
AIR HEAT EXCHANGER		foam	foam	foam
Type *		Al Fins&Cu Tubes	Al Fins&Cu Tubes	Al Fins&Cu Tubes
FAN				
Type *		Axial	Axial	Axial
Drive *		VFD	VFD	VFD
Nominal air flow	l/s	7048	8967	13402
Air Temperature	°C	35	35	35
Quantity	No.	2	3	4
Speed Motor input	rpm kW	900 1.1	800 1.2	900 2.3
Motor input COMPRESSOR	ĸW	1.1	1.2	2.3
Туре		Scroll	Scroll	Foroll
Oil charge	I	Scroll 4.4	5.4	Scroll 6.4
Quantity	No.	2	2	2
SOUND LEVEL**				
Sound Power - Cooling	dB(A)	81	83	85
Sound Pressure level @1m				
distance - Cooling	dB(A)	63.8	65.4	67
REFRIGERANT CIRCUIT				
Refrigerant type		R32	R32	R32
Refrigerant charge	kg	10.2	11.4	14.4
N. of circuits	No.	2	2	2
PIPING CONNECTIONS				
Evaporator water inlet/outlet	mm	2" (female)	2" (female)	2" (female)

EWAT~CZP MAX ("MAX" configuration has to be setted on site through the controller)

MODEL		EWAT016CZP-	EWAT021CZP-	EWAT025CZP-	EWAT032CZP-	EWAT040CZP-	EWAT040CZP-
COOLING		A1_MAX	A1_MAX	A1_MAX	A1_MAX	A1_MAX	A2_MAX
PERFORMANCE							
Capacity - Cooling	kW	18.6	25.3	29.6	38.9	45.6	50
Capacity control - Type		Inverter Controlled	Inverter Controlled	Inverter Controlled	Inverter Controlled	Inverter Controlled	Inverter Controlled
Capacity control - Minimum capacity	%	18	14	12	19	15	14
Unit power input - Cooling	kW	6.8	8.5	10.6	13.4	16.6	17.2
EER		2.75	2.98	2.78	2.91	2.75	2.91
SEER		5.3	5.41	5.41	5.7	5.36	5.76
IPLV		5.83	6.29	6.05	6.25	5.87	6.37
CASING							
Colour *		IW	IW	IW	IW	IW	IW
Material *		GPSS	GPSS	GPSS	GPSS	GPSS	GPSS
DIMENSIONS							
Height	mm	1878	1878	1878	1878	1878	1878
Width	mm	1152	1152	1152	1752	1752	2306
Length	mm	802	802	802	802	802	814
WEIGHT							
Unit Weight	kg	256	278	278	383	382	531
Operating Weight	kg	257	280	280	386	385	537
WATER HEAT EXCHANGER							
Type *		Brazed plate					
Fluid		Water	Water	Water	Water	Water	Water
Fouling Factor	m2°C/W	0	0	0	0	0	0
Water Volume	I	1	2	2	2	2	5
Water temperature in	°C	12	12	12	12	12	12
Water temperature out	°C	7	7	7	7	7	7
Water flow rate	l/s	0.88	1.2	1.4	1.84	2.16	2.37
Water pressure drop	kPa	25.6	15.7	20.7	26.4	35	13.8
Insulation material *		Black closed- cell flexible elastomeric					
		foam	foam	foam	foam	foam	foam
AIR HEAT EXCHANGER		Al Fins&Cu					
Type *		Tubes	Tubes	Tubes	Tubes	Tubes	Tubes
FAN							
Type *		Axial	Axial	Axial	Axial	Axial	Axial
Drive *		VFD	VFD	VFD	VFD	VFD	VFD
Nominal air flow	l/s	3228	3122	3524	5080	6701	5444
Air Temperature	°C	35	35	35	35	35	35
Quantity	No.	1	1	1	2	2	2
Speed	rpm	800	800	900	700	900	700
Motor input	kW	0.4	0.4	0.5	0.5	1.1	0.5
COMPRESSOR							
Туре		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Oil charge	I	2.2	2.2	2.2	3.2	3.2	4.4
Quantity	No.	1	1	1	1	1	2
SOUND LEVEL**							
Sound Power - Cooling	dB(A)	76	76	78	79	80	80
Sound Pressure level @1m distance - Cooling	dB(A)	59.7	59.7	61.7	62.2	63.2	62.8
REFRIGERANT CIRCUIT							
Refrigerant type		R32	R32	R32	R32	R32	R32
Refrigerant charge	kg	3	5	5	6.5	6.7	10.2
N. of circuits	No.	1	1	1	1	1	2
PIPING CONNECTIONS							
Evaporator water	mm	1''1/4 (female)	2'' (female)				

MODEL		EWAT050CZP-	EWAT064CZP-	EWAT090CZP-
		A2_MAX	A2_MAX	A2_MAX
COOLING PERFORMANCE				
Capacity - Cooling	kW	58.6	73.3	98.8
Capacity control - Type		Inverter Controlled	Inverter Controlled	Inverter Controlled
Capacity control - Minimum	%	12	15	14
capacity Unit power input - Cooling	kW	21.2	27.5	38.4
EER	KVV	2.77	2.67	2.58
SEER		5.48	5.34	5.18
IPLV		5.92	5.88	5.61
CASING				
Colour *		IW	IW	IW
Material *		GPSS	GPSS	GPSS
DIMENSIONS				
Height	mm	1878	1878	1878
Width	mm	2306	2906	3506
Length	mm	814	814	814
WEIGHT				
Unit Weight	kg	531	630	727
Operating Weight WATER HEAT EXCHANGER	kg	537	636	735
Type *		Brazed plate	Brazed plate	Brazed plate
Fluid		Water	Water	Water
Fouling Factor	m2°C/W	0	0	0
Water Volume		5	5	8
Water temperature in	°C °C	12 7	12 7	12 7
Water temperature out Water flow rate	l/s	2.8	3.5	4.7
Water pressure drop	kPa	18.3	27.4	24.4
	in u	Black closed-	Black closed-	Black closed-
Insulation material *		cell flexible	cell flexible	cell flexible
		elastomeric foam	elastomeric foam	elastomeric foam
AIR HEAT EXCHANGER		Ioani	IUaiii	Ioann
		Al Fins&Cu	Al Fins&Cu	Al Fins&Cu
Type *		Tubes	Tubes	Tubes
FAN				
Туре *		Axial	Axial	Axial
Drive *		VFD	VFD	VFD
Nominal air flow	l/s	7048	8967	13402
Air Temperature	°C	35	35	35
Quantity Speed	No. rpm	2 900	3 800	4 900
Motor input	kW	1.1	1.2	2.3
COMPRESSOR				
Туре		Scroll	Scroll	Scroll
Oil charge	Ι	4.4	5.4	6.4
Quantity	No.	2	2	2
SOUND LEVEL**				
Sound Power - Cooling	dB(A)	81	83	85
Sound Pressure level @1m	dB(A)	63.8	65.4	67
distance - Cooling	uD(A)	0.0	03.4	07
REFRIGERANT CIRCUIT				
Refrigerant type		R32	R32	R32
Refrigerant charge	kg	10.2	11.4	14.4
N. of circuits PIPING CONNECTIONS	No.	2	2	2
Evaporator water inlet/outlet	mm	2" (female)	2" (female)	2" (female)

EWAT~CZH MAX ("MAX" configuration has to be setted on site through the controller)

LWAT CZII MAA	•	_			_		
MODEL		EWAT016CZH- A1_MAX	EWAT021CZH- A1_MAX	EWAT025CZH- A1_MAX	EWAT032CZH- A1_MAX	EWAT040CZH- A1_MAX	EWAT040CZH- A2_MAX
COOLING							
PERFORMANCE	1-14/	10.7	25.4	20.6	20.1	45.7	E0 1
Capacity - Cooling	kW	18.7	25.4 Inverter	29.6 Inverter	39.1	45.7	50.1
Capacity control - Type		Inverter Controlled	Controlled	Controlled	Inverter Controlled	Inverter Controlled	Inverter Controlled
Capacity control - Minimum capacity	%	18	14	12	19	15	14
Unit power input - Cooling	kW	6.9	8.7	10.8	13.5	16.7	17.3
EER		2.69	2.93	2.73	2.89	2.73	2.9
SEER		5.2	5.32	5.34	5.67	5.34	5.76
IPLV		5.83	6.29	6.05	6.25	5.87	6.37
CASING			-	-			
Colour * Material *		IW GPSS	IW GPSS	IW GPSS	IW GPSS	IW GPSS	IW GPSS
DIMENSIONS		GPSS	GPSS	GPSS	GPSS	GPSS	GPSS
		1070	1070	1070	1070	1070	1070
Height Width	mm mm	1878 1152	1878 1152	1878 1152	1878 1752	1878 1752	1878 2306
Length	mm	802	802	802	802	802	814
WEIGHT		002	002	002	002	002	014
Unit Weight	kg	256	278	278	383	382	531
Operating Weight	kg kg	250	280	280	386	385	537
WATER HEAT	ĸġ	237	200	200	500	505	337
EXCHANGER							
Type *		Brazed plate					
Fluid		Water	Water	Water	Water	Water	Water
Fouling Factor	m2°C/W	0	0	0	0	0	0
Water Volume	I	1	2	2	2	2	5
Water temperature in	°C	12	12	12	12	12	12
Water temperature out	°C	7	7	7	7	7	7
Water flow rate	l/s	0.9	1.2	1.4	1.8	2.2	2.4
Water pressure drop	kPa	25.6	15.7	20.7	26.4	35	13.8
		Black closed- cell flexible					
Insulation material *		elastomeric	elastomeric	elastomeric	elastomeric	elastomeric	elastomeric
		foam	foam	foam	foam	foam	foam
AIR HEAT EXCHANGER							
Type *		Al Fins&Cu Tubes					
FAN							
Type *		Axial	Axial	Axial	Axial	Axial	Axial
Drive *		VFD	VFD	VFD	VFD	VFD	VFD
Nominal air flow	l/s	3228	3122	3524	5080	6701	5444
Air Temperature	°C	35	35	35	35	35	35
Quantity	No.	1	1	1	2	2	2
Speed Mater in sub	rpm	800	800	900	700	900	700
Motor input COMPRESSOR	kW	0.4	0.4	0.5	0.5	1.1	0.5
		Carroll	C	C	C	C	Carrall
Type Oil charge	1	Scroll 2.2	Scroll 2.2	Scroll 2.2	Scroll 3.2	Scroll 3.2	Scroll 4.4
Oil charge Quantity	No.	2.2	2.2	2.2	3.2	3.2	4.4
SOUND LEVEL**	140.	1	1	1	1	1	۷
Sound Power - Cooling	dB(A)	76	76	78	79	80	80
Sound Pressure level @1m							
distance - Cooling	dB(A)	59.7	59.7	61.7	62.2	63.2	62.8
REFRIGERANT CIRCUIT							
Refrigerant type		R32	R32	R32	R32	R32	R32
Refrigerant charge	kg	3	5	5	6.5	6.7	10.2
N. of circuits	No.	1	1	1	1	1	2
PIPING CONNECTIONS							
Evaporator water inlet/outlet	mm	1''1/4 (female)	2" (female)				
		I	1	1		1	

A2MAXA2MAXA2MAXCooling PEFORMANCECapacity - CoolingkW58.773.498.9Capacity control - TypeInverter ControlledInverter ControlledInverter ControlledCapacity control - Minimum capacity control - Minimum capacity control - Minimum scapacity%121514Capacity control - Minimum capacity%21.327.638.5Casante5.45.275.12SEER5.45.275.12Color *Material *GPSSGPSSDMENSIONSINWINWINWHeightmm18781878Unit Weight Widthmm187818781878Unit Weight built Weightkg531630727Operating Weightkg531630727Type *m2°C/W0000Water VolumeI558Vater NouraeI/s2.83.54.7Water Interperature out vater Nourae°C121212Water Interperature out vater Nourae°C353.54.7Water Interperature out vater Nourae°C353.54.7Water Interperature out vater Nourae°C353.54.7Yope *Akial TubesAkialAkial AkialAkial AkialAkial AkialAkial AkialType *Akial No23 <t< th=""><th>MODEL</th><th></th><th>EWAT050CZH-</th><th>EWAT064CZH-</th><th>EWAT090CZH-</th></t<>	MODEL		EWAT050CZH-	EWAT064CZH-	EWAT090CZH-
Capacity - Cooling kW 58.7 73.4 98.9 Capacity control - Type Inverter Controlled Inverter Controlled Inverter Controlled Inverter Controlled Capacity control - Minimum capacity % 12 15 14 Unit power input - Cooling kW 21.3 27.6 38.5 ER 5.4 5.27 5.12 5.12 IVU 5.92 5.88 5.61 Colour * IW IW IW Colour * MW IW IW Material * GPSS GPSS GPSS DIMENSIONS Inverter Inverter Inverter Height mm 1878 1878 1878 Unit Weight kg 531 636 727 Operating Weight kg 531 636 735 WATE The ACMANGER Type * 7 7 7 For the ACT EXCHANGER Ype * 18.3 27.4 24.4 <td< th=""><th></th><th></th><th>A2_MAX</th><th>A2_MAX</th><th>A2_MAX</th></td<>			A2_MAX	A2_MAX	A2_MAX
Capacity control - TypeInverter ControlledInverter ControlledInverter ControlledInverter ControlledInverter ControlledInverter ControlledInverter ControlledInverter ControlledInverter ControlledInverter ControlledInverter ControlledInverter ControlledInverter ControlledInverter ControlledInverter ControlledInverter 					
Capacity control - Minimum % 12 Controlled Controlled Capacity control - Minimum % 12 15 14 Capacity control - Minimum % 12 15 14 Unit power input - Cooling kW 21.3 27.6 38.5 ER 5.4 5.27 5.12 51.2 IPU 5.92 5.88 5.61 Colour * IW IW W M Material * GPSS GPSS GPSS JIMENSIONS IN 1878 1878 1878 Height mm 1878 1878 1878 Unit Weight kg 531 636 727 Operating Weight kg 537 636 7235 WATER HEAT EXCHANGER Brazed plate Brazed plate Brazed plate Water Fouling Factor m2°C/W 0 0 0 0 Water toloure 1 5 5 8	Capacity - Cooling	kW			
capacity ro 1.12 1.3 1.4 Unit power input - Cooling kW 21.3 27.6 38.5 EER 5.4 5.27 5.12 IPUV 5.92 5.88 5.61 CASING IW IW IW Colour * IW IW IW Material * GPSS GPSS GPSS DIMENSIONS Imm 187.8 187.8 187.8 Height mm 81.4 81.4 81.4 81.4 Width mm 81.4 81.4 81.4 81.4 Unit Weight kg 53.7 63.6 72.7 Operating Weight kg 53.7 63.6 73.5 Water Mater Water Water Water Water Fouling Factor m2°C/W 0 0 0 0 Water towperature in °C 7 7 7 7 Water towpareture in °C					
Unit power input - Cooling kW 21.3 27.6 38.5 EER 2.76 2.66 2.57 SEER 5.4 5.27 5.12 IPLV 5.92 5.88 5.61 CASING IW IW IW Colour * IW IW IW Material * GPSS GPSS GPSS DIMENSIONS Image: Colour * IN IW IW Height mm 1878 1878 1878 Width mm 2306 2906 3506 Length mm 814 814 814 Weight kg 531 630 727 Operating Weight kg 537 636 735 Fouling Factor m2°C/W 0 0 0 0 Water Volume 1 5 5 8 8 Mater temperature out °C 7 7 7 7 7		%	12	15	14
EER 2.76 2.66 2.57 SEER 5.4 5.27 5.12 IPLV 5.92 5.88 5.61 Colour * IW IW IW IW Material * GPSS GPSS GPSS GPSS DIMENSIONS IB78 1878 1878 1878 Length mm 814 814 814 814 Weight kg 531 630 727 Operating Weight kg 537 636 735 Water Praced plate Brazed plate Brazed plate Brazed plate Water Fouling Factor m2°C/W 0 0 0 0 0 Water temperature in °C 12 12 12 12 12 Water temperature out °C 7 7 7 7 2 4.4 Black closed-cell flockible elastomeric foam Fame Fame Fame Fame Fame Fame Fame		kW	21.3	27.6	38.5
IPLV5.925.885.61CASINGIWIWWColour *IWIWWMaterial *GPSSGPSSGPSSDIMENSIONSIB7818781878Heightmm230629063506Lengthmm814814814WEIGHTUnit Weightkg531630727Operating Weightkg537636735WATER HEAT EXCHANGERBrazed plateBrazed plateBrazed plateFluidS588Water VolumeI558Water VolumeI558Water temperature in< vert retimperature on vert retimperature on vert et mergerature on cell flexible elastomeric foamBlack closed- cell flexible elastomeric foamBlack closed- cell flexible elastomeric foamAxialAxialAIR HEAT EXCHANGER Type *AxialAxialAxialAxialType *AxialAxialAxialAxialAxialAIR HEAT EXCHANGER Type *VFDVFDVFDType *AxialAxialAxialAxialAir Temperature outYS3553535QuantityNo.234Drive *VFDVFDVFDNominal air flowI/s7048896713402Air Temperature outKW1.11.22.335Sound Power Cooling <b< td=""><td></td><td></td><td>-</td><td></td><td></td></b<>			-		
CASING IW IW IW IW Colour * IW IW IW IW Material * GPSS GPSS GPSS DIMENSIONS IB78 1878 1878 1878 Height mm 1878 1878 1878 3506 Length mm 814 814 814 814 WEIGHT Unit Weight kg 531 630 727 Operating Weight kg 537 636 735 WATER HEAT EXCHANGER Brazed plate Brazed plate Water Water Water Fouling Factor m2°C/W 0 0 0 0 Water temperature in °C 12 12 12 12 12 Water temperature out °C 7 7 7 4.7 Water fumperature out °C 7.4 818.3 816.4 6084 elack closed-cell flexible elastomeric foam foam 104.4 5.4 4.4	SEER		5.4		
Colour * IW IW IW IW IW Material * GPSS GPSS GPSS GPSS DIMENSIONS mm 1878 1878 1878 Width mm 2306 2906 3506 Length mm 814 814 814 WEIGHT unit Weight kg 531 630 727 Operating Weight kg 537 636 735 WATER HEAT EXCHANGER Type * Brazed plate Brazed plate Water Water Fouling Factor m2°C/W 0 0 0 0 Water temperature out °C 7 7 7 Water temperature out °C 7 7 7 Water flow rate I/s 2.8 3.5 4.7 Water pressure drop kPa 18.3 27.4 24.4 Black closed-cell flexible elastomeric featsomeric featsomeric rope * Axia	IPLV		5.92	5.88	5.61
Material * GPSS GPSS GPSS GPSS DIMENSIONS mm 1878 1878 1878 Height mm 2306 2906 3506 Length mm 814 814 814 WEIGHT unit Weight kg 531 630 727 Operating Weight kg 537 636 735 WATER HEAT EXCHANGER Brazed plate Brazed plate Water Water Fouling Factor m2°C/W 0 0 0 0 Water temperature in °C 12 12 12 12 Water temperature out °C 7 7 7 7 Water for yrate L/S 2.8 3.5 4.7 24.4 81ack closed-cell flexible elastomeric foam Black closed-cell flexible elastomeric foam Foam Cell flexible elastomeric foam Foam 156an 14.4 51a402 24.4 81a402 24.4 81ack closed-cell flexible elastomeric foam Foam 12.4	CASING				
DIMENSIONS mm 1878 1878 1878 1878 Height mm 2306 2906 3506 Length mm 814 814 814 WEIGHT kg 531 630 727 Operating Weight kg 537 636 735 WATER HEAT EXCHANGER Brazed plate Brazed plate Water Water Water Water Brazed plate Water Wate	Colour *		IW	IW	IW
Height mm 1878 1878 1878 1878 Width mm 814 814 814 814 Unit Weight kg 531 630 727 Operating Weight kg 537 636 735 WATER HEAT EXCHANGER Frazed plate Brazed plate Brazed plate Water Brazed plate Water Water Brazed plate Water Mater Menperature out °C 7 7 7 Z	Material *		GPSS	GPSS	GPSS
Width mm 2306 2906 3506 Length mm 814 814 814 814 WEIGHT i i i i i i Operating Weight kg 531 636 735 WATER HEAT EXCHANGER Brazed plate Brazed plate Water Water Water Water Water Fouling Factor m2°C/W 0 0 0 0 0 Water temperature in °C 12 12 12 12 12 Water temperature out °C 7 7 7 7 7 Water flow rate I/s 2.8 3.5 4.7 Water 24.4 Black closed- Black closed- Black closed- cell flexible elastomeric foam cell flexible elastomeric foam 353 35 35 35 35 35 35 35 35 35 35 35 35 35 </td <td>DIMENSIONS</td> <td></td> <td></td> <td></td> <td></td>	DIMENSIONS				
Lengthmm814814814WEIGHTkg531630727Operating Weightkg537636735WATER HEAT EXCHANGERBrazed plateBrazed plateBrazed plateFluidBrazed plateWaterWaterWaterFouling Factorm2°C/W000Water VolumeI558Water temperature in°C121212Water temperature out°C777Water flow rateI/s2.83.54.7Water pressure dropkPa18.327.424.4Black closed- cell flexible elastomeric foamBlack closed- cell flexible elastomeric foamBlack closed- cell flexible elastomeric foamType *All Fins&Cu TubesAl Fins&Cu TubesAl Fins&Cu TubesAl Fins&Cu TubesFANVFDVFDVFDVFDType *AxialAxial AxialAxial AxialDrive *VFDVFDVFDNominal air flowI/s70488967TypeScrollScrollScrollQuantityNo.234Sound Power - Cooling old that get statene e Level @1m dB(A)63.865.467Refrigerant VpeR32R32R32R32Refrigerant Chargekg10.211.414.4No.222Sound Pressure level @1m 	Height	mm	1878	1878	1878
WEIGHTkg531630727Operating Weightkg537636735WATER HEAT EXCHANGERBrazed plateBrazed plateWaterBrazed plateFluidm2°C/W000Water VolumeI558Fluidrm2°C/W000Water VolumeI558Water temperature in°C121212Water temperature out°C777Water flow rateI/s2.83.54.7Water flow rateI/s2.83.54.7Water flow rateI/s2.83.54.7Insulation material *Black closed- cell flexible elastomeric foamBlack closed- cell flexible elastomeric foamBlack closed- cell flexible elastomeric foamAl Fins&Cu TubesType *Ali Fins&Cu TubesAl Fins&Cu TubesAl Fins&Cu TubesAl Fins&Cu TubesType *Axial VFDAxial VFDAxial A Axial AxialAxial A Axial A Airal A ArialDrive *No.234Speedrpm 900800900Motor inputKW1.11.22.3COMPRESORI4.45.46.4CyuentityNo.222Sound Power - Coling old chargedB(A)63.865.467Refrigerant ClacuutMB(A)63.865.4 <td< td=""><td></td><td>mm</td><td></td><td></td><td></td></td<>		mm			
Number Kg 531 630 727 Operating Weight kg 537 636 735 WATER HEAT EXCHANGER Brazed plate Brazed plate Brazed plate Brazed plate Brazed plate Fulid Water Water Water Water Water Water Fouling Factor m2°C/W 0 0 0 0 Water temperature in °C 12 12 12 12 Water temperature out °C 7 7 7 7 Water temperature out °C 7 7 7 7 Water temperature out °C 7 7 7 7 7 Water temperature out °C 7		mm	814	814	814
Operating Weightkg537636735WATER HEAT EXCHANGERBrazed plateBrazed plateBrazed plateWaterBrazed plateFluidWaterWaterWaterWaterWaterFouling Factorm2°C/W000Water VolumeI558Water temperature in°C121212Water temperature out°C777Water flow rateI/s2.83.54.7Water pressure dropkPa18.327.424.4Black closed- cell flexible elastomeric foamBlack closed- cell flexible elastomeric foamAl Fins&Cu TubesType *AxialAxialAxialAxialAxialAid cell flexibleJointra el *VFDVFD <td></td> <td></td> <td></td> <td></td> <td></td>					
WATER HEAT EXCHANGERType * FluidBrazed plate WaterBrazed plate WaterBr	5	-			
Type * FluidBrazed plate WaterBrazed plate WaterBrazed plate WaterBrazed plate WaterFouling Factorm2°C/W000Water VolumeI558Water temperature in°C121212Water temperature out°C777Water flow rateI/s2.83.54.7Water pressure dropkPaBlack closed- cell flexible elastomeric foamBlack closed		kg	537	636	735
FluidWaterWaterWaterFouling Factorm2°C/W000Water VolumeI558Water temperature out°C121212Water temperature out°C777Water flow rateI/s2.83.54.7Water flow rateI/s2.83.54.7Water pressure dropkPa18.327.424.4Insulation material *Black closed-cell flexible elastomeric foamBlack closed-cell flexible elastomeric foam <td></td> <td></td> <td></td> <td></td> <td></td>					
Fouling Factor m2°C/W 0 0 0 Fouling Factor m2°C/W 0 0 0 Water Volume I 5 5 8 Water temperature in °C 12 12 12 Water temperature out °C 7 7 7 Water pressure drop kPa 18.3 27.4 24.4 Insulation material * Ealack closed- cell flexible elastomeric foam Elack closed- cell flexible elastomeric foam Al Fins&Cu Tubes Type * Axial Axial Axial Axial Drive * VFD VFD VFD VFD Nominal air flow I/s 7048 8967	<i>,</i> ,				
Water VolumeI558Water temperature in°C12121212Water temperature out°C777Water flow rateI/s2.83.54.7Water pressure dropkPa18.327.424.4Black closed- cell flexible elastomeric foamBlack closed- 	Fluid		Water	Water	Water
Water temperature in Water temperature out°C °C12 712 	Fouling Factor	m2°C/W	0	0	0
Water temperature out Water flow rate°C I/s7 Z.87 Z.87 Z.4Water pressure dropkPa18.327.424.4Insulation material *Black closed- cell flexible elastomeric foamBlack closed- cell fl	Water Volume		5	5	8
Water flow rate Water pressure dropI/s kPa2.8 18.33.5 27.44.7 24.4Mater pressure dropkPa18.327.4Black closed- cell flexible elastomeric foamBlack closed- cell flexible slastomeric foamAkial Axial Axial Axial Axial Axial Axial <td></td> <td>-</td> <td></td> <td></td> <td></td>		-			
Water pressure dropkPa18.327.424.4Insulation material *Black closed-cell flexible elastomeric foamBlack closed-cell flexible elastomeric 		-			
Insulation material *Black closed-cell flexible elastomeric foamBlack closed-cell flexible mutersBlack closed-cell flexible mutersBlack closed-cell flexible mutersBlack closed-cell flexible mutersBlack closed-cell flexible mutersBlack closed-cell flexible mutersType *AxialAxial<			-		
Insulation material *cell flexible elastomeric foamcell flexible foamcell flexible tubescell flexible tubescell flexible tubescell flexible tubescell flexible foamcell flexible tubescell flexible<	water pressure drop	KPd			
AIR HEAT EXCHANGERelastomeric foamelastomeric foamelastomeric foamType *Al Fins&Cu TubesAl Fins&Cu TubesAl Fins&Cu TubesFANTubesAxialAxialAxialType *AxialAxialAxialAxialDrive *VFDVFDVFDNominal air flowI/s7048896713402Air Temperature°C353535QuantityNo.234Speedrpm900800900Motor inputkW1.11.22.3COMPRESSORScrollScrollTypeScrollScrollScrollScrollOil chargeI4.45.46.4QuantityNo.222Sound Power - CoolingdB(A)818385Sound Power - CoolingdB(A)63.865.467REFRIGERANT CIRCUITR32R32R32R32Refrigerant typeR32R32R32R32Refrigerant chargekg10.211.414.4N. of circuitsNo.222PIPING CONNECTIONSVo222					
AIR HEAT EXCHANGER Type *AI Fins&Cu TubesAI Fins&Cu TubesAl Fins&Cu TubesFAN	Insulation material *				
Type *Al Fins&Cu TubesAl Fins&Cu TubesAl Fins&Cu TubesFAN </td <td></td> <td></td> <td>foam</td> <td>foam</td> <td>foam</td>			foam	foam	foam
TubesTubesTubesTubesFANAxialAxialAxialType *AxialAxialAxialDrive *VFDVFDVFDNominal air flowI/s7048896713402Air Temperature°C353535QuantityNo.234Speedrpm900800900Motor inputkW1.11.22.3COMPRESSORScrollScrollTypeScrollScrollScrollOil chargeI4.45.46.4QuantityNo.222SOUND LEVEL**63.865.467REFRIGERANT CIRCUITR32R32R32R32Refrigerant typekg10.211.414.4N. of circuitsNo.222PIPING CONNECTIONSLL22	AIR HEAT EXCHANGER				
Type *AxialAxialAxialDrive *VFDVFDVFDNominal air flowI/s7048896713402Air Temperature°C353535QuantityNo.234Speedrpm900800900Motor inputkW1.11.22.3COMPRESSORTypeScrollScrollScrollOil chargeI4.45.46.4QuantityNo.222SOUND LEVEL**Scould Pressure level @1m dlstance - CoolingdB(A)818385Sound Pressure level @1m dlstance - CoolingdB(A)63.865.467REFRIGERANT CIRCUITR32R32R32R32Refrigerant typekg10.211.414.4N. of circuitsNo.222PIPING CONNECTIONSLL22	Type *				
No. VFD VFD VFD VFD Nominal air flow I/s 7048 8967 13402 Air Temperature °C 35 35 35 Quantity No. 2 3 4 Speed rpm 900 800 900 Motor input kW 1.1 1.2 2.3 COMPRESSOR 2 2 Type Scroll Scroll Scroll Scroll Oil charge I 4.4 5.4 6.4 Quantity No. 2 2 2 SOUND LEVEL** Sound Power - Cooling dB(A) 81 83 85 Sound Pressure level @1m dB(A) 63.8 65.4 67 Refrigerant type R32 R32 R32 Refrigerant type kg 10.2 11.4 14.4 N. of circuits No. 2 2 2 PIPING CONNECTIONS	FAN				
Nominal air flow I/s 7048 8967 13402 Air Temperature °C 35 35 35 Quantity No. 2 3 4 Speed rpm 900 800 900 Motor input kW 1.1 1.2 2.3 COMPRESSOR Scroll Scroll Scroll Oil charge I 4.4 5.4 6.4 Quantity No. 2 2 2 Sound Power - Cooling dB(A) 81 83 85 Sound Pressure level @1m dB(A) 63.8 65.4 67 Refrigerant type R32 R32 R32 R32 Refrigerant type kg 10.2 11.4 14.4 N. of circuits No. 2 2 2	Type *		Axial	Axial	Axial
Air Temperature °C 35 35 35 Quantity No. 2 3 4 Speed rpm 900 800 900 Motor input kW 1.1 1.2 2.3 COMPRESSOR 7 2 2 Type Scroll Scroll Scroll Scroll Oil charge I 4.4 5.4 6.4 Quantity No. 2 2 2 SOUND LEVEL** 83 85 Sound Power - Cooling dB(A) 81 83 85 Sound Pressure level @1m dB(A) 63.8 65.4 67 Refrigerant type R32 R32 R32 R32 Refrigerant type kg 10.2 11.4 14.4 N. of circuits No. 2 2 2 PIPING CONNECTIONS 2 2 2	Drive *		VFD	VFD	VFD
Quantity No. 2 3 4 Speed rpm 900 800 900 Motor input kW 1.1 1.2 2.3 COMPRESSOR Image: constraint of the system o		-			
Speed rpm 900 800 900 Motor input kW 1.1 1.2 2.3 COMPRESSOR Image: constraint of the system of the syste		-			
Motor inputkW1.11.22.3COMPRESSORScrollScrollScrollTypeScrollScrollScrollOil chargeI4.45.46.4QuantityNo.222SOUND LEVEL**Sound Power - CoolingdB(A)818385Sound Pressure level @1mdB(A)63.865.467REFRIGERANT CIRCUITR32R32R32Refrigerant typekg10.211.414.4N. of circuitsNo.222PIPING CONNECTIONSLLLL					
COMPRESSORScrollScrollScrollTypeScrollScrollScrollOil chargeI4.45.46.4QuantityNo.222SOUND LEVEL**Sound Power - CoolingdB(A)818385Sound Pressure level @1m distance - CoolingdB(A)63.865.467REFRIGERANT CIRCUITR32R32R32R32Refrigerant typekg10.211.414.4N. of circuitsNo.222PIPING CONNECTIONSImage: Constant of the second		-			
TypeScrollScrollScrollOil chargeI4.45.46.4QuantityNo.222SOUND LEVEL**Image: Sound Power - CoolingdB(A)818385Sound Pressure level @1mdB(A)63.865.467REFRIGERANT CIRCUITImage: Sound Pressure level @1mR32R32R32Refrigerant typeR32R32R32Refrigerant chargekg10.211.414.4N. of circuitsNo.222PIPING CONNECTIONS		ĸvv	1.1	1.2	2.3
No.I4.45.46.4QuantityNo.222SOUND LEVEL**Image: Sound Power - CoolingdB(A)818385Sound Pressure level @1mdB(A)63.865.467REFRIGERANT CIRCUITImage: Rage registration of circuitsR32R32R32Refrigerant typeR3211.414.4N. of circuitsNo.222PIPING CONNECTIONSImage: Sound Presson of circuitsImage: Sound Presson of circuitsImage: Sound Presson of circuits			Scroll	Scroll	Scroll
QuantityNo.222SOUND LEVEL** </td <td></td> <td>I</td> <td></td> <td></td> <td></td>		I			
Sound LEVEL**Bit<					
Sound Power - CoolingdB(A)818385Sound Pressure level @1mdB(A)63.865.467distance - CoolingdB(A)63.865.467REFRIGERANT CIRCUITRefrigerant typeR32R32R32Refrigerant chargekg10.211.414.4N. of circuitsNo.222PIPING CONNECTIONS					-
Sound Pressure level @1m distance - CoolingdB(A)63.865.467REFRIGERANT CIRCUITR32R32R32Refrigerant typeR32R32R32Refrigerant chargekg10.211.414.4N. of circuitsNo.222PIPING CONNECTIONS		dB(A)	81	83	85
distance - CoolingdB(A)63.865.467REFRIGERANT CIRCUITR32R32R32R32Refrigerant typeR3211.414.4N. of circuitsNo.222PIPING CONNECTIONSImage: Constant of the second sec		. ,			
Refrigerant typeR32R32R32Refrigerant chargekg10.211.414.4N. of circuitsNo.222PIPING CONNECTIONS		dB(A)	63.8	65.4	67
Refrigerant chargekg10.211.414.4N. of circuitsNo.222PIPING CONNECTIONSImage: Constraint of the second secon					
N. of circuits No. 2 2 2 PIPING CONNECTIONS	Refrigerant type		R32	R32	R32
PIPING CONNECTIONS	5	kg	10.2	11.4	14.4
		No.	2	2	2
Evaporator water inlet/outlet mm 2" (female) 2" (female) 2" (female)	PIPING CONNECTIONS				
	Evaporator water inlet/outlet	mm	2" (female)	2" (female)	2" (female)

EWYT~CZN

MODEL		EWYT016CZN-	EWYT021CZN-	EWYT025CZN-	EWYT032CZN-	EWYT040CZN-	EWYT040CZN-
6001 TNG		A1	A1	A1	A1	A1	A2
COOLING PERFORMANCE							
Capacity - Cooling	kW	15.9	20.9	25.6	32.4	39.6	41.4
Capacity control - Type		Inverter Controlled	Inverter Controlled	Inverter Controlled	Inverter Controlled	Inverter Controlled	Inverter Controlled
Capacity control - Minimum	%	18	14	12	19	15	14
capacity							
Unit power input - Cooling	kW	5.5	6.6	8.5 3	10.3	13.4	13.2
EER SEER		2.9 5	3.16 5	5.06	3.13 5.21	2.95 5.09	3.12 5.41
IPLV		5.83	6.29	6.05	6.25	5.09	6.37
HEATING		5.65	0.29	0.05	0.25	5.67	0.37
PERFORMANCE	kW	15.9	20.2	24.8	32.4	39.4	40.3
Capacity - Heating	kW	4.7	5.8	7.5	9.4	11.8	11.9
Unit power input - Heating COP	KVV	3.41	3.46	3.33	9.4 3.45	3.33	3.38
SCOP Low / Medium Temp		3.89 / 0	4 / 2.83	3.33 4.07 / 2.89	3.45 4.06 / 2.85	3.33 4.07 / 2.89	3.38 4.02 / 2.93
WATER HEAT		3.69/0	4 / 2.65	4.07 / 2.09	4.00 / 2.85	4.07 / 2.09	4.02 / 2.93
EXCHANGER HEATING							
Water temperature in	°C	40	40	40	40	40	40
Water temperature out	°C	45	45	45	45	45	45
Water flow rate	l/s	0.8	1	1.2	1.5	1.9	1.9
Water pressure drop	kPa	19.6	10.6	15.4	19.1	27.1	9.4
FAN							
Air Temperature		7	7	7	7	7	7
WATER HEAT							
EXCHANGER COOLING							
Type *		Brazed plate					
Fluid		Water	Water	Water	Water	Water	Water
Fouling Factor	m2°C/W	0	0	0	0	0	0
Water Volume	I	1	2	2	2	2	5
Water temperature in	°C	12	12	12	12	12	12
Water temperature out	°C	7	7	7	7	7	7
Water flow rate	l/s	0.8	1	1.2	1.6	1.9	2
Water pressure drop	kPa	19.8	11.3	16.3	19.2	27.6	9.91
Insulation material *		Black closed- cell flexible elastomeric foam					
AIR HEAT EXCHANGER							
Type *		Al Fins&Cu Tubes					
FAN		Tubes	Tubes	Tubes	Tubes	Tubes	Tubes
		A 1	A ! = !	A ! = !	A	A . : = 1	0
Type *		Axial	Axial VFD	Axial	Axial VFD	Axial VFD	Axial VFD
Drive * Nominal air flow	l/s	VFD 3228	3122	VFD 3524	5080	6701	5444
Air Temperature	°C	3228	3122	3524	35	35	5444 35
Quantity	No.	1	1	1	2	2	2
Speed	rpm	800	800	900	700	900	700
Motor input	kW	0.4	0.4	0.5	0.5	1.1	0.5
CASING	17.11	UIT	0.7	0.5	0.5	1.1	0.5
Colour *		τ\Δ/	τ\Δ/	τ\Δ/	τ\Λ/	τ\Δ/	τ\٨/
Material *		IW GPSS	IW GPSS	IW GPSS	IW GPSS	IW GPSS	IW GPSS
DIMENSIONS		GF 33	GF 33	GF 33	Gr 33	GF 33	Gr 33
		1070	1070	1070	1070	1070	1070
Height Width	mm	1878 1152	1878 1152	1878	1878 1752	1878 1752	1878 2306
	mm	802	802	1152 802	802	802	814
Length WEIGHT	mm	002	002	002	002	002	014
Unit Weight	kg	227	252	252	350	349	494
Operating Weight	kg	228	254	254	353	352	500
Туре		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Oil charge	I	2.2	2.2	2.2	3.2	3.2	4.4
Quantity	No.	1	1	1	1	1	2

SOUND LEVEL**							
Sound Power - Cooling	dB(A)	76	76	78	79	80	80
Sound Pressure level @1m distance - Cooling	dB(A)	59.7	59.7	61.7	62.2	63.2	62.8
REFRIGERANT CIRCUIT							
Refrigerant type		R32	R32	R32	R32	R32	R32
Refrigerant charge	kg	3	5	5	6.5	6.7	10.2
N. of circuits	No.	1	1	1	1	1	2
PIPING CONNECTIONS							
Evaporator water inlet/outlet	mm	1''1/4 (female)	1''1/4 (female)	1''1/4 (female)	1''1/4 (female)	1''1/4 (female)	2" (female)

MODEL		EWYT050CZN-	EWYT064CZN-	EWYT090CZN-
		A2	A2	A2
COOLING PERFORMANCE				
Capacity - Cooling	kW	50.8	64	88.3
Capacity control - Type		Inverter Controlled	Inverter Controlled	Inverter Controlled
Capacity control - Minimum capacity	%	12	15	14
Unit power input - Cooling	kW	17	21.8	31
EER		2.98	2.93	2.84
SEER		5.33	5.21	5.03
IPLV		5.92	5.88	5.61
HEATING PERFORMANCE				
Capacity - Heating	kW	49.8	61.9	85.8
Unit power input - Heating	kW	15.4	19.1	27.2
СОР		3.24	3.23	3.16
SCOP Low / Medium Temp		4 / 2.92	3.98 / 2.9	4 / 2.89
WATER HEAT EXCHANGER HEATING				
Water temperature in	°C	40	40	40
Water temperature out	°C	45	45	45
Water flow rate	l/s	2.4	3	4.1
Water pressure drop	kPa	13.8	20.4	19.1
FAN				
Air Temperature		7	7	7
WATER HEAT EXCHANGER COOLING				
Type *		Brazed plate	Brazed plate	Brazed plate
Fluid		Water	Water	Water
Fouling Factor	m2°C/W	0	0	0
Water Volume	I	5	5	8
Water temperature in	°C	12	12	12
Water temperature out	°C	7	7	7
Water flow rate	l/s	2.4	3.1	4.2
Water pressure drop	kPa	14.3	21.7	20.1
Insulation material *		Black closed- cell flexible elastomeric foam	Black closed- cell flexible elastomeric foam	Black closed- cell flexible elastomeric foam
AIR HEAT EXCHANGER			1	
Type *		Al Fins&Cu Tubes	Al Fins&Cu Tubes	Al Fins&Cu Tubes
FAN			14000	14505
Type *		Axial	Axial	Axial
Drive *		VFD	VFD	VFD
Nominal air flow	l/s	7048	8967	13402
Air Temperature	°C	35	35	35
Quantity	No.	2	3	4
Speed	rpm	900	800	900
Motor input	kW	1.1	1.2	2.3
CASING				
Colour *		IW	IW	IW
Material *		GPSS	GPSS	GPSS

DIMENSIONS				
DIMENSIONS				
Height	mm	1878	1878	1878
Width	mm	2306	2906	3506
Length	mm	814	814	814
WEIGHT				
Unit Weight	kg	494	588	693
Operating Weight	kg	500	594	701
COMPRESSOR				
Туре		Scroll	Scroll	Scroll
Oil charge	1	4.4	5.4	6.4
Quantity	No.	2	2	2
SOUND LEVEL**				
Sound Power - Cooling	dB(A)	81	83	85
Sound Pressure level @1m distance - Cooling	dB(A)	63.8	65.4	67
REFRIGERANT CIRCUIT				
Refrigerant type		R32	R32	R32
Refrigerant charge	kg	10.2	11.4	14.4
N. of circuits	No.	2	2	2
PIPING CONNECTIONS				
Evaporator water inlet/outlet	mm	2" (female)	2" (female)	2" (female)

EWYT~CZP

MODEL		EWYT016CZP- A1	EWYT021CZP- A1	EWYT025CZP- A1	EWYT032CZP- A1	EWYT040CZP- A1	EWYT040CZP- A2
COOLING PERFORMANCE		<u> </u>	<u> </u>			<u> </u>	
Capacity - Cooling	kW	16.1	21.1	25.9	32.7	39.9	41.7
		Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
Capacity control - Type		Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Capacity control - Minimum	%	18	14	12	19	15	14
capacity Unit power input - Cooling	kW	5.4	6.6	8.5	10.3	13.3	13.2
EER		3	3.2	3.1	3.2	3	3.2
SEER		5.3	5.41	5.41	5.7	5.36	5.76
IPLV		5.83	6.29	6.05	6.25	5.87	6.37
HEATING PERFORMANCE							
Capacity - Heating	kW	15.6	19.9	24.6	32.1	39	40
Unit power input - Heating	kW	4.6	5.8	7.4	9.3	11.7	11.8
COP		3.37	3.43	3.31	3.44	3.33	3.38
SCOP Low / Medium Temp		4.03 / 0	4.19 / 2.93	4.19 / 2.97	4.18 / 2.9	4.18 / 2.95	4.19 / 3.02
WATER HEAT EXCHANGER HEATING							
Water temperature in	°C	40	40	40	40	40	40
Water temperature out	°C	45	45	45	45	45	45
Water flow rate	l/s	0.8	1	1.2	1.5	1.9	1.9
Water pressure drop	kPa	19.6	10.6	15.4	19.1	27.1	9.4
FAN		_	_	_	_	_	_
Air Temperature WATER HEAT		7	7	7	7	7	7
EXCHANGER COOLING							
Туре *		Brazed plate					
Fluid		Water	Water	Water	Water	Water	Water
Fouling Factor	m2°C/W	0	0	0	0	0	0
Water Volume	I	1	2	2	2	2	5
Water temperature in	°C	12	12	12	12	12	12
Water temperature out	°C	7	7	7	7	7	7
Water flow rate	l/s	0.8	1	1.2	1.6	1.9	2
Water pressure drop	kPa	19.8	11.3	16.3	19.2	27.6	9.91
		Black closed- cell flexible					
Insulation material *		elastomeric	elastomeric	elastomeric	elastomeric	elastomeric	elastomeric
		foam	foam	foam	foam	foam	foam
AIR HEAT EXCHANGER							
Туре *		Al Fins&Cu Tubes					
FAN							
Type *		Axial	Axial	Axial	Axial	Axial	Axial
Drive *		VFD	VFD	VFD	VFD	VFD	VFD
Nominal air flow	l/s	3228	3122	3524	5080	6701	5444
Air Temperature	°C	35	35	35	35	35	35
Quantity	No.	1	1	1	2	2	2
Speed	rpm	800	800	900	700	900	700
Motor input	kW	0.4	0.4	0.5	0.5	1.1	0.5
CASING							
Colour *		IW	IW	IW	IW	IW	IW
Material *		GPSS	GPSS	GPSS	GPSS	GPSS	GPSS
DIMENSIONS		1070	1070	1070	1070	1070	1070
Height Width	mm	1878 1152	1878 1152	1878 1152	1878 1752	1878 1752	1878 2306
Length	mm mm	802	802	802	802	802	2306 814
WEIGHT		002	002	002	002	002	014
	ka	261	286	286	202	202	546
Unit Weight Operating Weight	kg kg	261 262	286 288	286 288	393 396	392 395	546 551
	ĸy	202	200	200	550	333	551
		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Type Oil charge	Ι	2.2	2.2	2.2	3.2	3.2	4.4
Quantity	No.	2.2	2.2	1	3.2 1	5.2 1	4.4
2	1101	-	-		-	-	-

SOUND LEVEL**							
Sound Power - Cooling	dB(A)	76	76	78	79	80	80
Sound Pressure level @1m distance - Cooling	dB(A)	59.7	59.7	61.7	62.2	63.2	62.8
REFRIGERANT CIRCUIT							
Refrigerant type		R32	R32	R32	R32	R32	R32
Refrigerant charge	kg	3	5	5	6.5	6.7	10.2
N. of circuits	No.	1	1	1	1	1	2
PIPING CONNECTIONS							
Evaporator water inlet/outlet	mm	1''1/4 (female)	1''1/4 (female)	1''1/4 (female)	1''1/4 (female)	1''1/4 (female)	2" (female)

MODEL		EWYT050CZP-	EWYT064CZP-	EWYT090CZP-
COOLING PERFORMANCE		A2	A2	A2
		F 4 4	<i></i>	
Capacity - Cooling	kW	51.1	64.4	88.8
Capacity control - Type		Inverter Controlled	Inverter Controlled	Inverter Controlled
Capacity control - Minimum capacity	%	12	15	14
Unit power input - Cooling	kW	17	21.9	31.1
EER		3.03	2.95	2.85
SEER		5.48	5.34	5.18
IPLV		5.92	5.88	5.61
HEATING PERFORMANCE				
Capacity - Heating	kW	49.5	61.4	85.3
Unit power input - Heating	kW	15.3	19.2	27.3
COP		3.23	3.2	3.13
SCOP Low / Medium Temp		4.12 / 2.98	4.01 / 2.87	4.04 / 2.91
WATER HEAT EXCHANGER				
HEATING				
Water temperature in	°C	40	40	40
Water temperature out	°C	45	45	45
Water flow rate	l/s	2.4	3	4.1
Water pressure drop	kPa	13.8	20.4	19.1
FAN				
Air Temperature		7	7	7
WATER HEAT EXCHANGER COOLING				
Type *		Brazed plate	Brazed plate	Brazed plate
Fluid		Water	Water	Water
Fouling Factor	m2°C/W	0	0	0
Water Volume	I	5	5	8
Water temperature in	°C	12	12	12
Water temperature out	°C	7	7	7
Water flow rate	l/s	2.4	3.1	4.2
Water pressure drop	kPa	14.3	21.7	20.1
Insulation material *		Black closed- cell flexible elastomeric	Black closed- cell flexible elastomeric	Black closed- cell flexible elastomeric
		foam	foam	foam
AIR HEAT EXCHANGER				
Type *		Al Fins&Cu Tubes	Al Fins&Cu Tubes	Al Fins&Cu Tubes
FAN				
Type *		Axial	Axial	Axial
Drive *		VFD	VFD	VFD
Nominal air flow	l/s	7048	8967	13402
	°C	35	35	35
Air Temperature				
Quantity	No.	2	3	4
Quantity Speed	No. rpm	900	800	900
Quantity Speed Motor input	No.			
Quantity Speed	No. rpm	900	800	900
Quantity Speed Motor input	No. rpm	900	800	900

DIMENSIONS				
DIMENSIONS				
Height	mm	1878	1878	1878
Width	mm	2306	2906	3506
Length	mm	814	814	814
WEIGHT				
Unit Weight	kg	546	644	749
Operating Weight	kg	551	650	757
COMPRESSOR				
Туре		Scroll	Scroll	Scroll
Oil charge	1	4.4	5.4	6.4
Quantity	No.	2	2	2
SOUND LEVEL**				
Sound Power - Cooling	dB(A)	81	83	85
Sound Pressure level @1m distance - Cooling	dB(A)	63.8	65.4	67
REFRIGERANT CIRCUIT				
Refrigerant type		R32	R32	R32
Refrigerant charge	kg	10.2	11.4	14.4
N. of circuits	No.	2	2	2
PIPING CONNECTIONS				
Evaporator water inlet/outlet	mm	2" (female)	2" (female)	2" (female)

EWYT~CZH

CBOLING Explort Ancel Capacity - Cooling Capacity - Cooling Capacity cortai - Minimum Controlled Capacity cortai - Minimum Controlled Capacity cortai - Minimum Controlled Capacity cortai - Minimum (1) 14. 12 23.9 Tinverter Controlled Controle Control Contreaction Control Control Control Contreaction Contr	MODEL		EWYT016CZH- A1	EWYT021CZH- A1	EWYT025CZH- A1	EWYT032CZH- A1	EWYT040CZH- A1	EWYT040CZH- A2
Capacity control - Type LW 10.2 2.2. 2.5.9 12.8 40.1 41.8 Capacity control - Hammung Invertare Controlled Controlled Invertare Controlled Intertare Controlled Intertare Controled	COOLING							
Capacity control - Type Towether Controlled Control Control Controlled Controlled Controlled Control Controlled Co	PERFORMANCE		16.0	24.2	25.0	22.0	10.1	44.0
Capacity control Controlled controlled Controlled controled C	Capacity - Cooling	ĸW	-					-
cspacity 79 19 14 12 19 13 14 http: powr input - Cooling kW 5.6 6.7 8.7 10.4 13.5 13.3 EER 2.89 3.15 2.96 3.14 2.97 3.15 SER S.2 5.32 5.34 5.67 5.74 6.77 PENFORMANCE Stat 6.29 6.08 6.25 5.87 6.37 PENFORMANCE - - - - 3.33 3.22 3.33 3.23 3.33 3.22 3.37 3.28 3.33 3.25 3.34 4.06 / 2.84 4.08 / 2.89 4.11 / 2.87 4.13 / 2.91 4.14 / 2.98 4.11 / 2.87 4.13 / 2.91 4.14 / 2.93 4.14 / 2.93 4.14 / 2.93 5.33 3.33 5.55 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4	Capacity control - Type							
Unit power input - Cooling KW 5.6 6.7 8.7 10.4 12.5 13.3 ERR 5.2 5.32 5.34 5.67 5.74 5.75 SER 5.2 5.32 5.34 5.67 5.74 5.76 FRV 5.83 6.29 6.05 6.25 5.87 6.77 ERRORMACE KW 15.5 19.8 24.5 3.2 3.8.9 3.9.9 Corp Ling Work Induct KW 4.06 / 2.4 4.08 / 2.89 4.11 / 2.87 4.13 / 2.9 3.33 Corp Ling Work Induct 3.8.7 3.2.4 3.3.1 3.2.2 3.3.7 3.2.8 3.3.3 State Integration in 5 4.06 / 2.4 4.08 / 2.89 4.11 / 2.87 4.13 / 2.9 4.13 / 2.98 4.13 / 2.98 4.13 / 2.98 4.13 / 2.98 4.13 / 2.98 4.13 / 2.98 4.13 / 2.98 4.13 / 2.98 4.13 / 2.98 4.13 / 2.98 4.13 / 2.98 4.13 / 2.98 4.13 / 2.98 4.13 / 2.98 4.13 / 2.98 4.13 / 2.98 4.13 / 2.98 4		%	18	14	12	19	15	14
EER 2.89 3.15 2.98 3.14 2.97 3.15 STER 5.2 5.33 6.29 6.05 6.25 5.87 6.37 IPLV 5.83 6.29 6.05 6.25 5.87 6.37 IPLV 5.83 6.29 6.05 6.25 5.87 6.37 Gapacity - Heating KW 15.5 19.8 24.5 32 38.9 3.33 SCOP (or / Medium Temp 3.88 / 0 4.06 / 2.84 4.08 / 2.89 4.11 / 2.87 4.13 / 2.91 4.14 / 2.98 WATER HEATING		kW	5.6	6.7	8.7	10.4	13.5	13.3
SERR 5.2 5.32 5.34 5.67 5.44 5.76 IPIV 5.83 6.29 6.05 6.25 5.87 6.37 Gapacity - Heaking KW 15.5 19.8 24.5 32 38.9 39.9 Unit power input - Heaking KW 4.8 6 7.6 9.5 11.9 12 COP 3.24 3.31 3.22 3.37 3.38 3.33 SCPL tor / Hedium Term 3.86 / 0 4.06 / 2.84 4.08 / 2.89 4.11/2.87 4.13 / 2.91 4.14 / 2.98 Water temperature in *C 40 41.12.87 4.13 4.5 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 <td< td=""><td></td><td></td><td></td><td>-</td><td>-</td><td>-</td><td></td><td></td></td<>				-	-	-		
IPU 5.83 6.29 6.05 6.25 5.87 6.37 PERFORMANCE Capacity - Heating Capacity - Heating Capacity - Heating KW 15.5 19.8 24.5 32 38.9 39.9 Cop (p. Hedium Temp) 3.88 / 0 4.06 / 2.84 4.08 / 2.89 4.11 / 2.87 4.13 / 2.91 4.14 / 2.98 Water Heart Water temperature in Water temperature in Water temperature in temperature out °C 40 40 40 40 40 40 40 40 40 40 40 40 40 40 40 40 45 <								
HATING DEPROPARATE Capacity - Heating kW 15.5 19.8 24.5 32 38.9 39.9 Capacity - Heating kW 4.8 6 7.6 9.5 11.9 12 COP 3.84 / 0 4.06 / 2.84 4.08 / 2.89 4.11 / 2.87 4.13 / 2.91 4.14 / 2.88 EXCHANGE RHATING Water temperature out °C 40 41 4.14 / 2.88 45 47 47 </td <td>IPLV</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	IPLV							
Capacity - Heating kW 15.5 19.8 24.5 32 38.9 99.9 Unit power input - Heating kW 4.8 6 7.6 9.5 11.9 12 COP 00 / Medium Temp 3.88 / 0 4.06 / 2.84 4.08 / 2.89 4.11 / 2.87 4.13 / 2.91 4.14 / 2.98 WATER HEAT EXCHANGER HEATING Water temperature out °C 40 40 40 40 40 40 40 40 Water temperature out °C 45 45 45 45 45 45 45 45 45 45 45 45 45	HEATING							
Unit power input-Heating kW 4.8 6 7.6 9.5 11.9 12 SCOP 3.24 3.31 3.22 3.37 3.28 3.33 SCOP tow / Medium Temp 3.88 / 0 4.06 / 2.84 4.08 / 2.89 4.11 / 2.87 4.13 / 2.91 4.14 / 2.88 Water temperature in °C 40 <	PERFORMANCE							
COP 3.24 3.31 3.22 3.37 3.28 1.33 SCOP Low // Medium Temp 3.88 / 0 4.06 / 2.84 4.08 / 2.89 4.11 / 2.87 4.13 / 2.91 4.14 / 2.98 WATER MEAT EXCHANGER HEATING ************************************	Capacity - Heating	kW	15.5	19.8	24.5	32	38.9	39.9
SCOP Low / Medium Temp 3.88 / 0 4.06 / 2.84 4.08 / 2.89 4.11 / 2.87 4.13 / 2.91 4.14 / 2.98 Water temperature out °C 40 40 40 40 40 Water temperature out °C 45 45 45 45 45 Water freesure drop kPa 19.6 10.6 15.4 19.1 22.1 9.4 FAN Air Temperature 7 7 7 7 7 7 Water freesure drop kPa 19.6 10.6 15.4 19.1 22.1 9.4 FAN 7 7 7 7 7 7 7 Water freestree for temperature with % 0 <td< td=""><td>Unit power input - Heating</td><td>kW</td><td>4.8</td><td>6</td><td>7.6</td><td>9.5</td><td>11.9</td><td>12</td></td<>	Unit power input - Heating	kW	4.8	6	7.6	9.5	11.9	12
WATER HEAT EXCHANGER HEATING 40 <	COP		3.24	3.31	3.22	3.37	3.28	3.33
Exchance Hearms res res res res res Water temperature in $\ ^{\circ}C$ 40 <	SCOP Low / Medium Temp		3.88 / 0	4.06 / 2.84	4.08 / 2.89	4.11 / 2.87	4.13 / 2.91	4.14 / 2.98
Water temperature in Water temperature out water inwerster water inwerster in versione drop °C 40 40 40 40 40 40 Water inwerster water inwerster in remperature °C 45	WATER HEAT							
Water temperature out °C 45 45 45 45 45 45 45 Water flow rate V/S 0.8 1 1.2 1.6 1.9.1 27.1 9.4 Arr Temperature 7 7 7 7 7 7 7 Arr Temperature 7 7 7 7 7 7 7 Water HAT Brazed plate Brazed plate Brazed plate Water 1.2 1.2 1.2 1.2 1.2 1.2 1.6 1.9 9.9 9.9 9.9 9.9 9.9 9.9 9.9 9.9 9.9 9.9 9.9 9.9 9.9 9.9 9.9 9.9	EXCHANGER HEATING							
Water flow rate Vs 0.8 1 1.2 1.6 1.9 1.9 Water pressure drop kPa 19.6 10.6 15.4 19.1 27.1 9.4 An Temperature 7 7 7 7 7 7 WATER HEAT Brazed plate Brazed plate Brazed plate Brazed plate Brazed plate Brazed plate Water 1.1.2 1.6 1.9 2 2 2 2 5 1.1.2 1.6 1.9 2 1.2 1.2 1.2 1.6 1.9 9.9 1.1.3 1.6.3 1.9.2 1.7.6 1.9 2.7.6 1.9.9	Water temperature in	-	-	-	-	-	40	-
Water pressure drop KPa 19.6 10.6 15.4 19.1 27.1 9.4 Kan r r r r r r r Kar Temperature 7 7 7 7 7 7 7 7 7 WATER HEAT EXCHANGER COOLING Brazed plate Water No D <thd< th=""> D D D</thd<>	Water temperature out	°C	45	45	45	45	45	45
FAN 7	Water flow rate	l/s	0.8	1	1.2	1.6	1.9	1.9
Air Temperature 7 7 7 7 7 7 WATER HEAT EXCHANGER COOLING Type * Brazed plate Water Brazed plate Water <td>Water pressure drop</td> <td>kPa</td> <td>19.6</td> <td>10.6</td> <td>15.4</td> <td>19.1</td> <td>27.1</td> <td>9.4</td>	Water pressure drop	kPa	19.6	10.6	15.4	19.1	27.1	9.4
WATE FLAT EXCHANGER COOLING Type * Brazed plate Water Brazed plate Water Water <thw< td=""><td>FAN</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></thw<>	FAN							
EXCHANGER COOLING Type * FluidBrazed plate WaterBrazed plate MaterBrazed plate MaterBrazed plate MaterBrazed plate MaterBrazed plate MaterBrazed plate MaterBrazed plate MaterBrazed plate Mater </td <td>Air Temperature</td> <td></td> <td>7</td> <td>7</td> <td>7</td> <td>7</td> <td>7</td> <td>7</td>	Air Temperature		7	7	7	7	7	7
Type * FuidBrazed plate WaterBrazed plate MaterBrazed plate Mater	WATER HEAT							
FluidWaterWaterWaterWaterWaterWaterWaterWaterFouling Factorm2°C/W00000000Water volumeI122225Water temperature in°C121212121212Water temperature out°C777777Water flow rateI/S0.811.21.61.92Water flow rateI/S0.811.21.61.92Water flow rateI/S0.811.21.61.92Water flow rateI/S0.811.21.61.92Water flow rateI/S0.811.21.61.92Water flow rateI/S0.811.21.61.92Insulation material *Elack closed- roamBlack closed- roamScodeScodeAl Fins&Cu TubesAl Fins&Cu TubesAl Fins&Cu TubesAl Fins&Cu TubesAl Fins&Cu TubesAl Fins&Cu TubesAl Fin	EXCHANGER COOLING							
Fouling Factor m2°C/W 0 0 0 0 0 0 0 Water Volume I 1 2 2 2 2 2 5 Water temperature in °C 12 13 13 16.3 19.2 27.6 18 clack closed- cell flexible elastomeric foarm Elack closed- cell flexible elastomeric foarm Elack closed- cell flexible elastomeric foarm 16 classoff 16 classoff 16 classoff 16 classoff 16 classoff 16 classoff 16	Type *		Brazed plate					
Valume I 1 2 2 2 2 2 5 Water tremperature in °C 12 13 12 13 13 15 15 16 16 16 16 16 16 16 16 16 16 16 16 16 16 16 16 16 16	Fluid		Water	Water	Water	Water	Water	Water
Water temperature in Water temperature out Water flow rate Water flow rate Water flow rate Insulation material * °C 12 7	Fouling Factor	m2°C/W	0	0	0	0	0	0
Water temperature in Water temperature out Water flow rate Water flow rate Water flow rate Insulation material * °C 12 7	Water Volume	1	1	2	2	2	2	5
Water temperature out Water flow rate°C V V B7 A7 V C7 V C7 V C7 V C7 V C7 V C7 V C7 C7 V C7 C7 C7 V C7 C7 C7 V C7 C <td></td> <td>•</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td>		•						-
Water flow rateI/s0.811.21.61.92Water pressure dropkPa19.811.316.319.227.69.9Insulation material *Black closed-cell flexible elastomericBlack closed-cell flexible elastomericCell flexible foamBlack closed-cell flexible elastomericBlack closed-cell flexible tubesCell flexible tubesBlack closed-cell flexible elastomericCell flexible foamAl fins&cuAl fins&cuAl fins&cuAl fins&cuAl fins&cuAl fins&cuTubesTubesTubesTubesTubesTubesTubesTubesTubesTubesTubesTubesTubes		-						
Water pressure dropKPa19.811.316.319.227.69.9Insulation material *Black closed- cell fiexible elastomeric foamBlack closed- cell fiexible elastomeric foamAl Fins&Cu Al Fins&Cu TubesAl Fins&Cu Al Fins&Cu TubesAl Fins&Cu Al Fins&Cu TubesAl FinsAl FinsAl FinsAl F	•	-				-		
Insulation material *Black closed- cell flexible elastomeric foamBlack closed- cell flexible elastomeric foamType *Al Fins&Cu TubesAl FinsAl Fins </td <td></td> <td>-</td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td>		-				-		
Insulation material * Insulation material * cell flexible elastomeric foam cell flexible flexible								
AIR HEAT EXCHANGERAl Fins&Cu TubesAl Fins<&Cu TubesAl Fins<&Cu TubesAl Fins<&Cu TubesAl Fins<&Cu TubesAl Fins<&Cu TubesAl Fins<&Cu TubesAl Fins<&Cu TubesAl Fins<&Cu TubesAl Fins<&Cu TubesAl Fins<Al FinsAl Fins <td>Insulation material *</td> <td></td> <td>cell flexible elastomeric</td> <td>cell flexible elastomeric</td> <td>cell flexible elastomeric</td> <td>cell flexible elastomeric</td> <td>cell flexible elastomeric</td> <td>cell flexible elastomeric</td>	Insulation material *		cell flexible elastomeric					
Type *Al Fins&Cu TubesAl Fins&Cu TubesFANVFD	ATR HEAT EXCHANGER		loann	louin	···	louin	louin	Tourn
Type *TubesTubesTubesTubesTubesTubesFANAxialAxialAxialAxialAxialAxialAxialAxialAxialType *VFDVFDVFDVFDVFDVFDVFDVFDNominal air flow1/s322731223524508067015444Air Temperature°C35353535353535QuantityNo.1112222Speedrpm800800900700900700Motor inputkW0.40.40.50.51.10.5CASINGIWIWIWIWIWIWIWMeterial *GPSSGPSSGPSSGPSSGPSSGPSSDIMENSIONSI11521152115217522306Lengthmm187818781878187818781878WeIGHTUnit Weightkg261286286393392546Operating Weightkg261286286393392546Operating Weightkg261226228288396395551COMPRESSORI2.22.22.23.24.44.4								
FAN Axial A	Type *							
Type *AxialAxialAxialAxialAxialAxialAxialDrive *VFDVFDVFDVFDVFDVFDVFDNominal air flowI/s 3227 3122 3524 5080 6701 5444 Air Temperature°C 35 35 35 35 35 35 35 QuantityNo.111 2 2 2 2 Speedrpm 800 800 900 700 9000 700 Motor inputkW 0.4 0.4 0.5 0.5 1.1 0.5 CASINGINWINWINWINWINWINWINWMaterial *GPSSGPSSGPSSGPSSGPSSGPSSDIMENSIONSIntegetInteget18781878187818781878Widthmm115211521152175217522306Lengthmm802 802 802 802 802 814 WEIGHTkg261286286 393 392 546Operating Weightkg262288288 396 395 551COMPRESSORI2.22.22.2 3.2 4.4	FAN		Tubes	10005	Tubes	10005	10005	Tubes
Drive * VFD VFD VFD VFD VFD VFD VFD VFD Nominal air flow 1/s 3227 3122 3524 5080 6701 5444 Air Temperature °C 35 35 35 35 35 35 35 Quantity No. 1 1 1 2 2 2 Speed rpm 800 800 900 700 900 700 Motor input KW 0.4 0.4 0.5 0.5 1.1 0.5 Colour * IW 0.4 0.4 0.5 0.5 1.1 0.5 Colour * IW IW IW IW IW IW IW Material * GPSS GPSS <td></td> <td></td> <td>A: = I</td> <td>A: = !</td> <td>A: = I</td> <td>A: = 1</td> <td>A: = 1</td> <td>Assial</td>			A: = I	A: = !	A: = I	A: = 1	A: = 1	Assial
Nominal air flow I/s 3227 3122 3524 5080 6701 5444 Air Temperature °C 35 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
Air Temperature °C 35 35 35 35 35 35 35 Quantity No. 1 1 1 2 2 2 Speed rpm 800 800 900 700 900 700 Motor input kW 0.4 0.4 0.5 0.5 1.1 0.5 CASING INW INW INW INW INW INW INW INW Colour * INW INU		1/c						
Quantify No. 1 1 1 2 2 2 Speed rpm 800 800 900 700 900 700 Motor input kW 0.4 0.4 0.5 0.5 1.1 0.5 CASING IW IW IW IW IW IW IW IW IW Colour * IW								
Speed rpm 800 800 900 700 900 700 Motor input kW 0.4 0.4 0.5 0.5 1.1 0.5 CASING IW								
Motor input kW 0.4 0.4 0.5 0.5 1.1 0.5 CASING IW IN IN <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
CASING IW IN <th< td=""><td>•</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	•							
Colour * Material *IW GPSS <t< td=""><td></td><td>ĸw</td><td>0.4</td><td>0.4</td><td>0.5</td><td>0.5</td><td>1.1</td><td>0.5</td></t<>		ĸw	0.4	0.4	0.5	0.5	1.1	0.5
Material * GPSS								_
DIMENSIONS mm 1878								
Height mm 1878 <th< td=""><td></td><td></td><td>GPSS</td><td>GPSS</td><td>GPSS</td><td>GPSS</td><td>GPSS</td><td>GPSS</td></th<>			GPSS	GPSS	GPSS	GPSS	GPSS	GPSS
width mm 1152 1152 1152 1752 1752 2306 Length mm 802 802 802 802 802 802 814 WEIGHT kg 261 286 286 393 392 546 Operating Weight kg 262 288 288 396 395 551 COMPRESSOR								
Length mm 802 802 802 802 802 814 WEIGHT kg 261 286 286 393 392 546 Operating Weight kg 262 288 288 396 395 551 COMPRESSOR	Height							
WEIGHT kg 261 286 286 393 392 546 Unit Weight kg 262 288 288 396 395 551 COMPRESSOR	Width	mm						
Unit Weight kg 261 286 286 393 392 546 Operating Weight kg 262 288 288 396 395 551 COMPRESSOR Type Scroll Scroll Scroll Scroll Scroll Scroll Scroll Scroll Scroll Add 0il charge I 2.2 2.2 3.2 3.2 4.4	Length	mm	802	802	802	802	802	814
Operating Weight kg 262 288 288 396 395 551 COMPRESSOR Figure 1 Scroll	WEIGHT							
Operating Weight kg 262 288 288 396 395 551 COMPRESSOR	Unit Weight	kg	261	286	286	393	392	546
COMPRESSORScrollScrollScrollScrollScrollTypeScrollScrollScrollScrollScrollScrollOil chargeI2.22.22.23.23.24.4	Operating Weight	-		288	288	396	395	551
Oil charge I 2.2 2.2 2.2 3.2 3.2 4.4	COMPRESSOR	-						
Oil charge I 2.2 2.2 2.2 3.2 3.2 4.4	Type		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
		I						
	Quantity	No.	1	1	1	1	1	2

SOUND LEVEL**							
Sound Power - Cooling	dB(A)	76	76	78	79	80	80
Sound Pressure level @1m distance - Cooling	dB(A)	59.7	59.7	61.7	62.2	63.2	62.8
REFRIGERANT CIRCUIT							
Refrigerant type		R32	R32	R32	R32	R32	R32
Refrigerant charge	kg	3	5	5	6.5	6.7	10.2
N. of circuits	No.	1	1	1	1	1	2
PIPING CONNECTIONS							
Evaporator water inlet/outlet	mm	1''1/4 (female)	1''1/4 (female)	1''1/4 (female)	1''1/4 (female)	1''1/4 (female)	2" (female)

MODEL		EWYT050CZH-	EWYT064CZH-	EWYT090CZH-
		A2	A2	A2
COOLING PERFORMANCE				
Capacity - Cooling	kW	51.3	64.5	88.9
Capacity control - Type		Inverter Controlled	Inverter Controlled	Inverter Controlled
Capacity control - Minimum	%	12	15	14
capacity Unit power input - Cooling	kW	17	22	31.2
EER		3.02	2.93	2.85
SEER		5.4	5.27	5.12
IPLV		5.92	5.88	5.61
HEATING PERFORMANCE				
Capacity - Heating	kW	49.4	61.3	85.2
Unit power input - Heating	kW	15.4	19.3	27.4
СОР		3.2	3.17	3.12
SCOP Low / Medium Temp		4.09 / 2.96	3.94 / 2.84	4 / 2.88
WATER HEAT EXCHANGER				
HEATING				
Water temperature in	°C	40	40	40
Water temperature out	°C	45	45	45
Water flow rate	l/s	2.4	3	4.1
Water pressure drop FAN	kPa	13.8	20.4	19.1
		7	7	7
Air Temperature WATER HEAT EXCHANGER		7	7	7
COOLING				
Type *		Brazed plate	Brazed plate	Brazed plate
Fluid		Water	Water	Water
Fouling Factor	m2°C/W	0	0	0
Water Volume	I	5	5	8
Water temperature in	°C	12	12	12
Water temperature out	°C	7	7	7
Water flow rate	l/s	2.4	3.1	4.2
Water pressure drop	kPa	14.3	21.7	20.1
		Black closed-	Black closed- cell flexible	Black closed- cell flexible
Insulation material *		cell flexible elastomeric	elastomeric	elastomeric
		foam	foam	foam
AIR HEAT EXCHANGER				
Туре *		Al Fins&Cu Tubes	Al Fins&Cu Tubes	Al Fins&Cu Tubes
FAN				
Type *		Axial	Axial	Axial
Drive *		VFD	VFD	VFD
Nominal air flow	l/s	7048	8967	13402
Air Temperature	°C	35	35	35
Quantity	No.	2	3	4
Speed	rpm	900	800	900
Motor input	kW	1.1	1.2	2.3
CASING				
Colour *		IW	IW	IW
Material *		GPSS	GPSS	GPSS

DIMENSIONS				
DIMENSIONS				
Height	mm	1878	1878	1878
Width	mm	2306	2906	3506
Length	mm	814	814	814
WEIGHT				
Unit Weight	kg	546	644	749
Operating Weight	kg	551	650	757
COMPRESSOR				
Туре		Scroll	Scroll	Scroll
Oil charge	I	4.4	5.4	6.4
Quantity	No.	2	2	2
SOUND LEVEL**				
Sound Power - Cooling	dB(A)	81	83	85
Sound Pressure level @1m distance - Cooling	dB(A)	63.8	65.4	67
REFRIGERANT CIRCUIT				
Refrigerant type		R32	R32	R32
Refrigerant charge	kg	10.2	11.4	14.4
N. of circuits	No.	2	2	2
PIPING CONNECTIONS				
Evaporator water inlet/outlet	mm	2" (female)	2" (female)	2" (female)

EWYT~CZN MAX ("MAX" configuration has to be setted on site through the controller)

MODEL		EWYT016CZN-	EWYT021CZN-	EWYT025CZN-	EWYT032CZN-	EWYT040CZN-	EWYT040CZN-
MODEL		A1_MAX	A1_MAX	A1_MAX	A1_MAX	A1_MAX	A2_MAX
COOLING							
PERFORMANCE Capacity - Cooling	kW	18.3	25	29.3	38.6	45.2	49.6
Capacity - Cooling	KVV	Inverter	25 Inverter	29.3 Inverter	Jo.0 Inverter	45.2 Inverter	49.6 Inverter
Capacity control - Type		Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Capacity control - Minimum	%	18	14	12	19	15	14
capacity	-						
Unit power input - Cooling	kW	6.8	8.5	10.7	13.5	16.7	17.3
EER		2.69	2.94	2.74	2.87	2.71	2.87
SEER		5	5	5.06	5.21	5.09	5.41
IPLV		5.83	6.29	6.05	6.25	5.87	6.37
HEATING							
PERFORMANCE Capacity - Heating	kW	18.3	24.3	28.7	36.5	44.7	48.7
	kW	5.6	7.2	9	11.5	14.2	14.7
Unit power input - Heating	KVV			-			
COP		3.28	3.38	3.19	3.17	3.15	3.31
SCOP Low / Medium Temp		3.89 / 0	4 / 2.83	4.07 / 2.89	4.06 / 2.85	4.07 / 2.89	4.02 / 2.93
WATER HEAT EXCHANGER HEATING							
Water temperature in	°C	40	40	40	40	40	40
Water temperature out	°C	45	45	45	45	45	45
Water flow rate	l/s	0.9	1.2	1.4	1.7	2.1	2.3
Water pressure drop	kPa	25.3	14.7	19.8	23.7	34.1	13.25
FAN						<u> </u>	10.20
		7	7	7	7	7	7
Air Temperature		7	7	7	7	7	7
WATER HEAT EXCHANGER COOLING							
Type *		Brazed plate					
Fluid		Water	Water	Water	Water	Water	Water
Fouling Factor	m2°C/W	0	0	0	0	0	0
Water Volume	I.	1	2	2	2	2	5
Water temperature in	°C	12	12	12	12	12	12
Water temperature out	°C	7	7	7	7	7	7
Water flow rate	-	0.9	1.2	1.4	1.8	2,2	2,4
	l/s					35	
Water pressure drop	kPa	25.5	15.6	20.7	26.3		13.7
Insulation material *		Black closed- cell flexible elastomeric					
AIR HEAT EXCHANGER		foam	foam	foam	foam	foam	foam
		Al Fins&Cu					
Type *		Tubes	Tubes	Tubes	Tubes	Tubes	Tubes
FAN							
Type *		Axial	Axial	Axial	Axial	Axial	Axial
Drive *		VFD	VFD	VFD	VFD	VFD	VFD
Nominal air flow	l/s	3227	3122	3524	5080	6701	5444
Air Temperature	°C	35	35	35	35	35	35
Quantity	No.	1	1	1	2	2	2
Speed	rpm	800	800	900	700	900	700
Motor input	kW	0.4	0.4	0.5	0.5	1.1	0.5
CASING							
Colour *		IW	IW	IW	IW	IW	IW
Material *		GPSS	GPSS	GPSS	GPSS	GPSS	GPSS
DIMENSIONS		0.00	0.00	0.00	0.35	0.00	0, 35
		1070	1070	1070	1070	1070	1070
Height	mm	1878	1878	1878	1878	1878	1878
Width	mm	1152	1152	1152	1752	1752	2306
Length	mm	802	802	802	802	802	814
WEIGHT							
Unit Weight	kg	227	252	252	350	349	494
Operating Weight	kg	228	254	254	353	352	500
COMPRESSOR							
Туре		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Oil charge	I	2.2	2.2	2.2	3.2	3.2	4.4
			1			1	
Quantity	No.	1	1	1	1	1	2

SOUND LEVEL**							
Sound Power - Cooling	dB(A)	76	76	78	79	80	80
Sound Pressure level @1m distance - Cooling	dB(A)	59.7	59.7	61.7	62.2	63.2	62.8
REFRIGERANT CIRCUIT							
Refrigerant type		R32	R32	R32	R32	R32	R32
Refrigerant charge	kg	3	5	5	6.5	6.7	10.2
N. of circuits	No.	1	1	1	1	1	2
PIPING CONNECTIONS							
Evaporator water inlet/outlet	mm	1''1/4 (female)	1''1/4 (female)	1''1/4 (female)	1''1/4 (female)	1''1/4 (female)	2" (female)

MODEL		EWYT050CZN-	EWYT064CZN-	EWYT090CZN-
		A2_MAX	A2_MAX	A2_MAX
COOLING PERFORMANCE				
Capacity - Cooling	kW	58.2	72.7	98.3
Capacity control - Type		Inverter Controlled	Inverter Controlled	Inverter Controlled
Capacity control - Minimum	%	12	15	14
capacity Unit power input - Cooling	kW	21.3	27.4	38.2
EER		2.73	2.65	2.57
SEER		5.33	5.21	5.03
IPLV		5.92	5.88	5.61
HEATING PERFORMANCE				
Capacity - Heating	kW	57.3	69.2	94.7
Unit power input - Heating	kW	18.6	23.2	32.4
СОР		3.09	2.98	2.92
SCOP Low / Medium Temp		4 / 2.92	3.98 / 2.9	4 / 2.89
WATER HEAT EXCHANGER				
HEATING		40	10	10
Water temperature in	°C	40	40	40
Water temperature out Water flow rate	°C	45 2.74	45 3.31	45 4.52
Water pressure drop	l/s kPa	2.74	24.9	22.7
FAN	κια	17.7	24.5	22.7
Air Temperature		7	7	7
WATER HEAT EXCHANGER COOLING				
Type *		Brazed plate	Brazed plate	Brazed plate
Fluid		Water	Water	Water
Fouling Factor	m2°C/W	0	0	0
Water Volume	Ι	5	5	8
Water temperature in	°C	12	12	12
Water temperature out	°C	7	7	7
Water flow rate	l/s	2.8	3.5	4.7
Water pressure drop	kPa	18.3	27.4	24.4
Insulation material *		Black closed- cell flexible elastomeric foam	Black closed- cell flexible elastomeric foam	Black closed- cell flexible elastomeric foam
AIR HEAT EXCHANGER			iouin	iouin
Type *		Al Fins&Cu Tubes	Al Fins&Cu Tubes	Al Fins&Cu Tubes
FAN		1 4 5 6 5	1 4 5 6 5	1 4 5 6 5
Type *		Axial	Axial	Axial
Drive *		VFD	VFD	VFD
Nominal air flow	l/s	7048	8967	13402
Air Temperature	°C	35	35	35
Quantity	No.	2	3	4
Speed	rpm	900	800	900
Motor input	kW	1.1	1.2	2.3
CASING				
Colour *		IW	IW	IW
Material *		GPSS	GPSS	GPSS

DIMENSIONS				
DIMENSIONS				
Height	mm	1878	1878	1878
Width	mm	2306	2906	3506
Length	mm	814	814	814
WEIGHT				
Unit Weight	kg	494	588	693
Operating Weight	kg	500	594	701
COMPRESSOR				
Туре		Scroll	Scroll	Scroll
Oil charge	I.	4.4	5.4	6.4
Quantity	No.	2	2	2
SOUND LEVEL**				
Sound Power - Cooling	dB(A)	81	83	85
Sound Pressure level @1m distance - Cooling	dB(A)	63.8	65.4	67
REFRIGERANT CIRCUIT				
Refrigerant type		R32	R32	R32
Refrigerant charge	kg	10.2	11.4	14.4
N. of circuits	No.	2	2	2
PIPING CONNECTIONS				
Evaporator water inlet/outlet	mm	2" (female)	2" (female)	2" (female)

EWYT~CZP MAX ("MAX" configuration has to be setted on site through the controller)

MODEL		EWYT016CZP-	EWYT021CZP-	EWYT025CZP-	EWYT032CZP-	EWYT040CZP-	EWYT040CZP-
COOLING PERFORMANCE		A1_MAX	A1_MAX	A1_MAX	A1_MAX	A1_MAX	A2_MAX
Cooling PERFORMANCE Capacity - Cooling	kW	18.6	25.3	29.6	38.9	45.6	50
. , _	ĸvv	Inverter	25.5 Inverter	29.6 Inverter	Inverter	45.6 Inverter	Inverter
Capacity control - Type		Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Capacity control - Minimum	%	18	14	12	19	15	14
capacity Unit power input - Cooling	kW	6.8	8.5	10.6	13.4	16.6	17.2
EER	ĸvv	2.75	2.98	2.78	2.91	2.75	2.91
SEER		5.3	5.41	5.41	5.7	5.36	5.76
IPLV		5.83	6.29	6.05	6.25	5.87	6.37
HEATING PERFORMANCE							
Capacity - Heating	kW	18	24	28.4	36.2	44.3	48.4
Unit power input - Heating	kW	5.3	7.2	8.9	11.5	14.1	14.6
COP		3.26	3.36	3.18	3.16	3.15	3.31
SCOP Low / Medium Temp		4.03 / 0	4.19 / 2.93	4.19 / 2.97	4.18 / 2.9	4.18 / 2.95	4.19 / 3.02
WATER HEAT EXCHANGER HEATING							
Water temperature in	°C	40	40	40	40	40	40
Water temperature out	°C	45	45	45	45	45	45
Water flow rate	l/s	0.9	1.2	1.4	1.7	2.1	2.3
Water pressure drop	kPa	25.3	14.7	19.8	23.7	34.1	13.3
FAN		7	7	7	7	7	7
Air Temperature WATER HEAT		7	7	7	7	7	7
EXCHANGER COOLING							
Type *		Brazed plate					
Fluid		Water	Water	Water	Water	Water	Water
Fouling Factor	m2°C/W	0	0	0	0	0	0
Water Volume	Ι	1	2	2	2	2	5
Water temperature in	°C	12	12	12	12	12	12
Water temperature out	°C	7	7	7	7	7	7
Water flow rate	l/s	0.9	1.2	1.4	1.8	2.2	2.4
Water pressure drop	kPa	25.6	15.7 Dia da ala a d	20.7	26.4	35 Dia da ala a d	13.8 Dia da ada ada
		Black closed- cell flexible					
Insulation material *		elastomeric	elastomeric	elastomeric	elastomeric	elastomeric	elastomeric
		foam	foam	foam	foam	foam	foam
AIR HEAT EXCHANGER							
Type *		Al Fins&Cu Tubes					
FAN		Tubes	14565	Tubes	Tubes	Tubes	Tubes
Type *		Axial	Axial	Axial	Axial	Axial	Axial
Drive *		VFD	VFD	VFD	VFD	VFD	VFD
Nominal air flow	l/s	3228	3122	3524	5080	6701	5444
Air Temperature	°C	35	35	35	35	35	35
Quantity	No.	1	1	1	2	2	2
Speed	rpm	800	800	900	700	900	700
Motor input	kW	0.4	0.4	0.5	0.5	1.1	0.5
CASING		T\/	T\/	T14/	T14/	T\	T14/
Colour * Material *		IW GPSS	IW GPSS	IW GPSS	IW GPSS	IW GPSS	IW GPSS
		6733	6733	Groo	6733	6733	6735
Height	mm	1878	1878	1878	1878	1878	1878
Width	mm	1152	1152	1152	1752	1752	2306
Length	mm	802	802	802	802	802	814
WEIGHT							-
Unit Weight	kg	261	286	286	393	392	546
Operating Weight	kg	262	288	288	396	395	551
COMPRESSOR							1
Туре		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
				1		1	1
Oil charge	I	2.2	2.2	2.2	3.2	3.2	4.4

TECHNICAL SPECIFICATION

SOUND LEVEL**							
Sound Power - Cooling	dB(A)	76	76	78	79	80	80
Sound Pressure level @1m distance - Cooling	dB(A)	59.7	59.7	61.7	62.2	63.2	62.8
REFRIGERANT CIRCUIT							
Refrigerant type		R32	R32	R32	R32	R32	R32
Refrigerant charge	kg	3	5	5	6.5	6.7	10.2
N. of circuits	No.	1	1	1	1	1	2
PIPING CONNECTIONS							
Evaporator water inlet/outlet	mm	1''1/4 (female)	1''1/4 (female)	1''1/4 (female)	1''1/4 (female)	1''1/4 (female)	2" (female)

MODEL				
MODEL		EWYT050CZP- A2_MAX	EWYT064CZP- A2_MAX	EWYT090CZP- A2_MAX
COOLING PERFORMANCE		<u> </u>	A6_11AA	
Capacity - Cooling	kW	58.6	73.3	98.8
Capacity control - Type		Inverter Controlled	Inverter Controlled	Inverter Controlled
Capacity control - Minimum capacity	%	12	15	14
Unit power input - Cooling	kW	21.2	27.5	38.4
EER		2.77	2.67	2.58
SEER		5.48	5.34	5.18
IPLV		5.92	5.88	5.61
HEATING PERFORMANCE				
Capacity - Heating	kW	58.9	68.7	94.1
Unit power input - Heating	kW	18.5	23.3	32.5
COP		3.08	2.96	2.9
SCOP Low / Medium Temp		4.12 / 2.98	4.01 / 2.87	4.04 / 2.91
WATER HEAT EXCHANGER HEATING				
Water temperature in	°C	40	40	40
Water temperature out	°C	45	45	45
Water flow rate	l/s	2.7	3.3	4.5
Water pressure drop	kPa	17.7	24.9	22.7
FAN				
Air Temperature		7	7	7
WATER HEAT EXCHANGER COOLING				
Type *		Brazed plate	Brazed plate	Brazed plate
Fluid		Water	Water	Water
Fouling Factor	m2°C/W	0	0	0
Water Volume	I	5	5	8
Water temperature in	°C	12	12	12
Water temperature out	°C	7	7	7
Water flow rate	l/s	2.8	3.5	4.7
Water pressure drop	kPa	18.3	27.4	24.4
Insulation material *		Black closed- cell flexible elastomeric foam	Black closed- cell flexible elastomeric foam	Black closed- cell flexible elastomeric foam
AIR HEAT EXCHANGER				
Type *		Al Fins&Cu Tubes	Al Fins&Cu Tubes	Al Fins&Cu Tubes
FAN				
Type *		Axial	Axial	Axial
Drive *		VFD	VFD	VFD
Nominal air flow	l/s	7048	8967	13402
Air Temperature	°C	35	35	35
Quantity	No.	2	3	4
Speed	rpm	900	800	900
Motor input	kW	1.1	1.2	2.3
CASING				
Colour *		IW	IW	IW
Material *		GPSS	GPSS	GPSS

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DIMENSIONS				
DIMENSIONS				
Height	mm	1878	1878	1878
Width	mm	2306	2906	3506
Length	mm	814	814	814
WEIGHT				
Unit Weight	kg	546	644	749
Operating Weight	kg	551	650	757
COMPRESSOR				
Туре		Scroll	Scroll	Scroll
Oil charge	I	4.4	5.4	6.4
Quantity	No.	2	2	2
SOUND LEVEL**				
Sound Power - Cooling	dB(A)	81	83	85
Sound Pressure level @1m distance - Cooling	dB(A)	63.8	65.4	67
REFRIGERANT CIRCUIT				
Refrigerant type		R32	R32	R32
Refrigerant charge	kg	10.2	11.4	14.4
N. of circuits	No.	2	2	2
PIPING CONNECTIONS				
Evaporator water inlet/outlet	mm	2" (female)	2" (female)	2" (female)

EWYT~CZH MAX ("MAX" configuration has to be setted on site through the controller)

MODEL		EWYT016CZH-	EWYT021CZH-	EWYT025CZH-	EWYT032CZH-	EWYT040CZH-	EWYT040CZH-
NODEL		A1_MAX	A1_MAX	A1_MAX	A1_MAX	A1_MAX	A2_MAX
COOLING							
PERFORMANCE							
Capacity - Cooling	kW	18.7	25.4	29.6	39.1	45.7	50.1
Capacity control - Type		Inverter Controlled	Inverter Controlled	Inverter Controlled	Inverter Controlled	Inverter Controlled	Inverter Controlled
Capacity control - Minimum capacity	%	18	14	12	19	15	14
Unit power input - Cooling	kW	6.9	8.7	10.8	13.5	16.7	17.3
EER		2.69	2.93	2.73	2.89	2.73	2.9
SEER		5.2	5.32	5.34	5.67	5.34	5.76
IPLV		5.83	6.29	6.05	6.25	5.87	6.37
HEATING							
PERFORMANCE							
Capacity - Heating	kW	18	23.9	28.3	36.1	44.2	48.3
Unit power input - Heating	kW	5.7	7.3	9.1	11.6	14.2	14.7
COP		3.15	3.26	3.1	3.11	3.11	3.28
SCOP Low / Medium Temp		3.88 / 0	4.06 / 2.84	4.08 / 2.89	4.11 / 2.87	4.13 / 2.91	4.14 / 2.98
WATER HEAT EXCHANGER HEATING							
Water temperature in	°C	40	40	40	40	40	40
Water temperature out	°C	45	45	45	45	45	45
Water flow rate	l/s	0.9	1.2	1.4	1.8	2.2	2.3
Water pressure drop	kPa	25.3	14.7	19.8	23.7	34.1	13.3
FAN	-						
Air Temperature		7	7	7	7	7	7
WATER HEAT EXCHANGER COOLING							
Type *		Brazed plate					
Fluid		Water	Water	Water	Water	Water	Water
Fouling Factor	m2°C/W	0	0	0	0	0	0
Water Volume	I	1	2	2	2	2	5
Water temperature in	°C	12	12	12	12	12	12
Water temperature out	°C	7	7	7	7	7	7
Water flow rate	l/s	0.9	1.2	1.4	1.9	2.2	2.4
Water pressure drop	kPa	25.6	15.7	20.7	26.4	35	13.8
Insulation material *		Black closed- cell flexible elastomeric					
AIR HEAT EXCHANGER		foam	foam	foam	foam	foam	foam
Type *		Al Fins&Cu					
<i>·</i> ··		Tubes	Tubes	Tubes	Tubes	Tubes	Tubes
FAN							
Type *		Axial	Axial	Axial	Axial	Axial	Axial
Drive *		VFD	VFD	VFD	VFD	VFD	VFD
Nominal air flow	l/s	3228	3122	3524	5080	6701	5444
Air Temperature	°C	35	35	35	35	35	35
Quantity	No.	1	1	1	2	2	2
Speed Motor input	rpm kW	800 0.4	800	900 0.5	700 0.5	900	700 0.5
Motor input CASING	κvV	0.4	0.4	0.5	0.5	1.1	0.5
Colour *		IW	IW	IW	IW	IW	IW
Material *		GPSS	GPSS	GPSS	GPSS	GPSS	GPSS
DIMENSIONS							
Height	mm	1878	1878	1878	1878	1878	1878
Width	mm	1152	1152	1152	1752	1752	2306
Length	mm	802	802	802	802	802	814
WEIGHT							
Unit Weight	kg	261	286	286	393	392	546
Operating Weight	kg	262	288	288	396	395	551
COMPRESSOR							
Туре		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Oil charge	I	2.2	2.2	2.2	3.2	3.2	4.4
	No.	1	1	1	1	1	2

TECHNICAL SPECIFICATION

SOUND LEVEL**							
Sound Power - Cooling	dB(A)	76	76	78	79	80	80
Sound Pressure level @1m distance - Cooling	dB(A)	59.7	59.7	61.7	62.2	63.2	62.8
REFRIGERANT CIRCUIT							
Refrigerant type		R32	R32	R32	R32	R32	R32
Refrigerant charge	kg	3	5	5	6.5	6.7	10.2
N. of circuits	No.	1	1	1	1	1	2
PIPING CONNECTIONS							
Evaporator water inlet/outlet	mm	1''1/4 (female)	1''1/4 (female)	1''1/4 (female)	1''1/4 (female)	1''1/4 (female)	2" (female)

MODEL		EWYT050CZH-	EWYT064CZH-	EWYT090CZH-
		A2_MAX	A2_MAX	A2_MAX
COOLING PERFORMANCE				
Capacity - Cooling	kW	58.7 Inventor	73.4 Traventer	98.9
Capacity control - Type		Inverter Controlled	Inverter Controlled	Inverter Controlled
Capacity control - Minimum capacity	%	12	15	14
Unit power input - Cooling	kW	21.3	27.6	38.5
EER		2.76	2.66	2.57
SEER		5.4	5.27	5.12
IPLV		5.92	5.88	5.61
HEATING PERFORMANCE				
Capacity - Heating	kW	56.7	68.6	94
Unit power input - Heating	kW	18.6	23.4	32.6
COP		3.06	2.94	2.88
SCOP Low / Medium Temp		4.09 / 2.96	3.94 / 2.84	4 / 2.88
WATER HEAT EXCHANGER HEATING				
Water temperature in	°C	40	40	40
Water temperature out	°C	45	45	45
Water flow rate	l/s	2.7	3.3	4.5
Water pressure drop	kPa	17.7	24.9	22.7
FAN				
Air Temperature		7	7	7
WATER HEAT EXCHANGER COOLING				
Type *		Brazed plate	Brazed plate	Brazed plate
Fluid		Water	Water	Water
Fouling Factor	m2°C/W	0	0	0
Water Volume	I	5	5	8
Water temperature in	°C	12	12	12
Water temperature out	°C	7	7	7
Water flow rate	l/s	2.8	3.5	4.7
Water pressure drop	kPa	18.3	27.4	24.4
Insulation material *		Black closed- cell flexible elastomeric foam	Black closed- cell flexible elastomeric foam	Black closed- cell flexible elastomeric foam
AIR HEAT EXCHANGER			loann	
Type *		Al Fins&Cu Tubes	Al Fins&Cu Tubes	Al Fins&Cu Tubes
FAN		10000	1 4000	10000
Type *		Axial	Axial	Axial
Drive *		VFD	VFD	VFD
Nominal air flow	l/s	7048	8967	13402
Air Temperature	°C	35	35	35
Quantity	No.	2	3	4
Speed	rpm	900	800	900
Motor input	kW	1.1	1.2	2.3
CASING				
Colour *		IW	IW	IW
Material *		GPSS	GPSS	GPSS
L				

DIMENSIONS				
Height	mm	1878	1878	1878
Width	mm	2306	2906	3506
Length	mm	814	814	814
WEIGHT				
Unit Weight	kg	546	644	749
Operating Weight	kg	551	650	757
COMPRESSOR				
Туре		Scroll	Scroll	Scroll
Oil charge	I	4.4	5.4	6.4
Quantity	No.	2	2	2
SOUND LEVEL**				
Sound Power - Cooling	dB(A)	81	83	85
Sound Pressure level @1m distance - Cooling	dB(A)	63.8	65.4	67
REFRIGERANT CIRCUIT				
Refrigerant type		R32	R32	R32
Refrigerant charge	kg	10.2	11.4	14.4
N. of circuits	No.	2	2	2
PIPING CONNECTIONS				
Evaporator water inlet/outlet	mm	2" (female)	2" (female)	2" (female)

All the cooling performances (Cooling capacity, unit power input in cooling and EER) are based on the following conditions: 12,0/7,0°C; ambient 35,0°C, unit at full load operation; operating fluid: Water; fouling factor = 0. EN14511:2018

All the heating performances (Heating capacity, unit power input in heating and COP) are based on the following conditions: 40,0/45,0°C; ambient 7,0°C, unit at full load operation; operating fluid: Water; fouling factor = 0. EN14511:2018

The values of SCOP and η s are calculated in accordance with the Ecodesign regulation No. 813/2013 and the standard EN 14825-2018, these units are classified as "Medium Temperature Heat Pumps" exept for the 16kW size that is classified as "Low Temperature Heat Pumps".

SCOP calculation for Low and Medium Temperature is based on the following conditions: Tbivalent -7 °C, Tdesign -10 °C, Average Climate.

SEER is calculated in accordance with the regulation No. 2281/2016 and standard EN14825 for information only, unless the unit is a "cooling-only" type.

** Sound power level is measured in cooling mode at full load (referred to 12/7°C, ambient 35°C) in accordance with ISO 9614 and Eurovent requirements The sound pressure is calculated from the sound power level and are for information only and not considered binding.

The minimum capacity indicated is referred to unit operating at standard Eurovent conditions.

Dimensions and weights are for indication only and not considered binding. Before designing the installation, consult the official drawings available from the factory at request.

All the data are referred to standard unit without options. All data are subject to change without notice

EWAT~CZN / MAX

MODEL		EWAT016CZN- A1	EWAT021CZN- A1	EWAT025CZN- A1	EWAT032CZN- A1	EWAT040CZN- A1	EWAT040CZN- A2
POWER SUPPLY							
Phases	No.	3	3	3	3	3	3
Frequency	Hz	50	50	50	50	50	50
Voltage	V	400	400	400	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%
Voltage tolerance Maximum	%	10%	10%	10%	10%	10%	10%
UNIT							
Maximum inrush current	А	0	0	0	0	0	0
Nominal running current cooling STD / MAX	А	14 / 16	15 / 18	18 / 21	25 / 30	29 / 33	30 / 35
Maximum running current	Α	17	21	23	34	38	41
Maximum current for wires sizing	А	21	25	28	41	46	50
COMPRESSORS							
Phases	No.	3	3	3	3	3	3
Voltage	V	400	400	400	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%
Voltage tolerance Maximum	%	10%	10%	10%	10%	10%	10%
Maximum running current	А	0	0	0	0	0	0
Starting method		VFD	VFD	VFD	VFD	VFD	VFD

MODEL		EWAT050CZN- A2	EWAT064CZN- A2	EWAT090CZN- A2
POWER SUPPLY				
Phases	No.	3	3	3
Frequency	Hz	50	50	50
Voltage	V	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%
Voltage tolerance Maximum	%	10%	10%	10%
UNIT				
Maximum inrush current	А	0	0	0
Nominal running current cooling STD / MAX	А	34 / 41	46 / 54	62 / 72
Maximum running current	Α	46	61	83
Maximum current for wires sizing	Α	56	73	101
COMPRESSORS				
Phases	No.	3	3	3
Voltage	V	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%
Voltage tolerance Maximum	%	10%	10%	10%
Maximum running current	Α	0	0	0
Starting method		VFD	VFD	VFD

EWAT~CZP / MAX

MODEL		EWAT016CZP- A1	EWAT021CZP- A1	EWAT025CZP- A1	EWAT032CZP- A1	EWAT040CZP- A1	EWAT040CZP- A2
POWER SUPPLY							
Phases	No.	3	3	3	3	3	3
Frequency	Hz	50	50	50	50	50	50
Voltage	V	400	400	400	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%
Voltage tolerance Maximum	%	10%	10%	10%	10%	10%	10%
UNIT							
Maximum inrush current	А	0	0	0	0	0	0
Nominal running current cooling STD / MAX	А	11 / 13	13 / 16	16 / 19	22 / 27	25 / 30	26 / 32
Maximum running current	А	21	25	27	38	42	45
Maximum current for wires sizing	А	21	25	28	41	46	50
COMPRESSORS							
Phases	No.	3	3	3	3	3	3
Voltage	V	400	400	400	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%
Voltage tolerance Maximum	%	10%	10%	10%	10%	10%	10%
Maximum running current	А	0	0	0	0	0	0
Starting method		VFD	VFD	VFD	VFD	VFD	VFD

MODEL		EWAT050CZP- A2	EWAT064CZP- A2	EWAT090CZP- A2
POWER SUPPLY				
Phases	No.	3	3	3
Frequency	Hz	50	50	50
Voltage	V	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%
Voltage tolerance Maximum	%	10%	10%	10%
UNIT				
Maximum inrush current	Α	0	0	0
Nominal running current Cooling STD / MAX	А	31 / 38	42 / 51	58 / 68
Maximum running current	Α	50	66	88
Maximum current for wires sizing	Α	56	73	101
COMPRESSORS				
Phases	No.	3	3	3
Voltage	V	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%
Voltage tolerance Maximum	%	10%	10%	10%
Maximum running current	Α	0	0	0
Starting method		VFD	VFD	VFD

EWAT~CZH / MAX

MODEL		EWAT016CZH- A1	EWAT021CZH- A1	EWAT025CZH- A1	EWAT032CZH- A1	EWAT040CZH- A1	EWAT040CZH- A2
POWER SUPPLY							
Phases	No.	3	3	3	3	3	3
Frequency	Hz	50	50	50	50	50	50
Voltage	V	400	400	400	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%
Voltage tolerance Maximum	%	10%	10%	10%	10%	10%	10%
UNIT							
Maximum inrush current	А	0	0	0	0	0	0
Nominal running current cooling STD / MAX	А	11 / 13	13 / 16	16 / 19	22 / 27	25 / 30	26 / 32
Maximum running current	А	21	25	27	39	43	46
Maximum current for wires sizing	А	21	25	28	41	46	50
COMPRESSORS							
Phases	No.	3	3	3	3	3	3
Voltage	V	400	400	400	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%
Voltage tolerance Maximum	%	10%	10%	10%	10%	10%	10%
Maximum running current	А	0	0	0	0	0	0
Starting method		VFD	VFD	VFD	VFD	VFD	VFD

MODEL		EWAT050CZH- A2	EWAT064CZH- A2	EWAT090CZH- A2
POWER SUPPLY				
Phases	No.	3	3	3
Frequency	Hz	50	50	50
Voltage	V	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%
Voltage tolerance Maximum	%	10%	10%	10%
UNIT				
Maximum inrush current	А	0	0	0
Nominal running current Cooling STD / MAX	А	31 / 38	42 / 51	58 / 68
Maximum running current	Α	51	68	90
Maximum current for wires sizing	Α	56	73	101
COMPRESSORS				
Phases	No.	3	3	3
Voltage	V	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%
Voltage tolerance Maximum	%	10%	10%	10%
Maximum running current	А	0	0	0
Starting method		VFD	VFD	VFD

EWYT~CZN / MAX

MODEL		EWYT016CZN- A1	EWYT021CZN- A1	EWYT025CZN- A1	EWYT032CZN- A1	EWYT040CZN- A1	EWYT040CZN- A2
POWER SUPPLY							
Phases	No.	3	3	3	3	3	3
Frequency	Hz	50	50	50	50	50	50
Voltage	V	400	400	400	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%
Voltage tolerance Maximum	%	10%	10%	10%	10%	10%	10%
UNIT							
Maximum inrush current	А	0	0	0	0	0	0
Nominal running current cooling STD / MAX	А	13 / 15	15 / 18	18 / 21	24 / 29	28 / 32	29 / 34
Maximum running current	А	17	21	23	34	38	41
Maximum current for wires sizing	А	21	25	28	41	46	50
COMPRESSORS							
Phases	No.	3	3	3	3	3	3
Voltage	V	400	400	400	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%
Voltage tolerance Maximum	%	10%	10%	10%	10%	10%	10%
Maximum running current	А	0	0	0	0	0	0
Starting method		VFD	VFD	VFD	VFD	VFD	VFD

MODEL		EWYT050CZN- A2	EWYT064CZN- A2	EWYT090CZN- A2
POWER SUPPLY				
Phases	No.	3	3	3
Frequency	Hz	50	50	50
Voltage	V	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%
Voltage tolerance Maximum	%	10%	10%	10%
UNIT				
Maximum inrush current	А	0	0	0
Nominal running current cooling STD / MAX	А	33 / 40	44 / 52	60 / 70
Maximum running current	Α	46	61	83
Maximum current for wires sizing	Α	56	73	101
COMPRESSORS				
Phases	No.	3	3	3
Voltage	V	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%
Voltage tolerance Maximum	%	10%	10%	10%
Maximum running current	Α	0	0	0
Starting method		VFD	VFD	VFD

.

EWYT~CZP / MAX

MODEL		EWYT016CZP- A1	EWYT021CZP- A1	EWYT025CZP- A1	EWYT032CZP- A1	EWYT040CZP- A1	EWYT040CZP- A2
POWER SUPPLY							
Phases	No.	3	3	3	3	3	3
Frequency	Hz	50	50	50	50	50	50
Voltage	V	400	400	400	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%
Voltage tolerance Maximum	%	10%	10%	10%	10%	10%	10%
UNIT							
Maximum inrush current	А	0	0	0	0	0	0
Nominal running current cooling STD / MAX	А	11 / 13	13 / 16	16 / 19	22 / 27	25 / 30	26 / 32
Maximum running current	А	21	25	27	38	42	45
Maximum current for wires sizing	А	21	25	28	41	46	50
COMPRESSORS							
Phases	No.	3	3	3	3	3	3
Voltage	V	400	400	400	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%
Voltage tolerance Maximum	%	10%	10%	10%	10%	10%	10%
Maximum running current	А	0	0	0	0	0	0
Starting method		VFD	VFD	VFD	VFD	VFD	VFD

MODEL		EWYT050CZP- A2	EWYT064CZP- A2	EWYT090CZP- A2
POWER SUPPLY				
Phases	No.	3	3	3
Frequency	Hz	50	50	50
Voltage	V	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%
Voltage tolerance Maximum	%	10%	10%	10%
UNIT				
Maximum inrush current	А	0	0	0
Nominal running current Cooling STD / MAX	А	31 / 38	42 / 51	58 / 68
Maximum running current	Α	50	66	88
Maximum current for wires sizing	Α	56	73	101
COMPRESSORS				
Phases	No.	3	3	3
Voltage	V	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%
Voltage tolerance Maximum	%	10%	10%	10%
Maximum running current	Α	0	0	0
Starting method		VFD	VFD	VFD

EWYT~CZH / MAX

MODEL		EWYT016CZH- A1	EWYT021CZH- A1	EWYT025CZH- A1	EWYT032CZH- A1	EWYT040CZH- A1	EWYT040CZH- A2
POWER SUPPLY							
Phases	No.	3	3	3	3	3	3
Frequency	Hz	50	50	50	50	50	50
Voltage	V	400	400	400	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%
Voltage tolerance Maximum	%	10%	10%	10%	10%	10%	10%
UNIT							
Maximum inrush current	А	0	0	0	0	0	0
Nominal running current cooling STD / MAX	А	11 / 13	13 / 16	16 / 19	22 / 27	25 / 30	26 / 32
Maximum running current	А	21	25	27	39	43	46
Maximum current for wires sizing	А	21	25	28	41	46	50
COMPRESSORS							
Phases	No.	3	3	3	3	3	3
Voltage	V	400	400	400	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%
Voltage tolerance Maximum	%	10%	10%	10%	10%	10%	10%
Maximum running current	А	0	0	0	0	0	0
Starting method		VFD	VFD	VFD	VFD	VFD	VFD

MODEL		EWYT050CZH- A2	EWYT064CZH- A2	EWYT090CZH- A2
POWER SUPPLY				
Phases	No.	3	3	3
Frequency	Hz	50	50	50
Voltage	V	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%
Voltage tolerance Maximum	%	10%	10%	10%
UNIT				
Maximum inrush current	А	0	0	0
Nominal running current Cooling STD / MAX	А	31 / 37	42 / 51	58 / 68
Maximum running current	Α	51	68	90
Maximum current for wires sizing	Α	56	73	101
COMPRESSORS				
Phases	No.	3	3	3
Voltage	V	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%
Voltage tolerance Maximum	%	10%	10%	10%
Maximum running current	Α	0	0	0
Starting method		VFD	VFD	VFD

The data are referred to the standard unit without options All data are subject to change without notice, Please refer to unit nameplate data

Fluid: Water

Allowed voltage tolerance \pm 10%, Voltage unbalance between phases must be within \pm 3%.

Anowed voltage tolerance ± 10%, voltage unbalance between phases must be within ± 3%. Maximum starting current: In case of inverter driven units, no inrush current at start up is experienced. Nominal current in cooling mode is referred to the following conditions: evaporator 12/7°C; ambient 35°C; compressors + fans current Maximum running current is based on max compressor absorbed current in its envelope and max fans absorbed current Maximum unit current for wires sizing is based on minimum allowed voltage

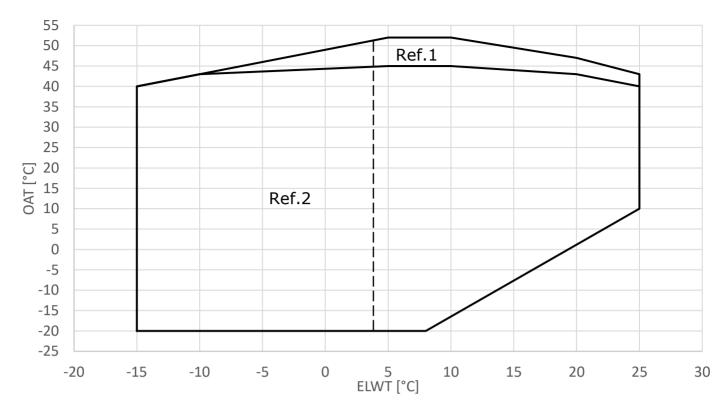
EWA(Y)T~CZ

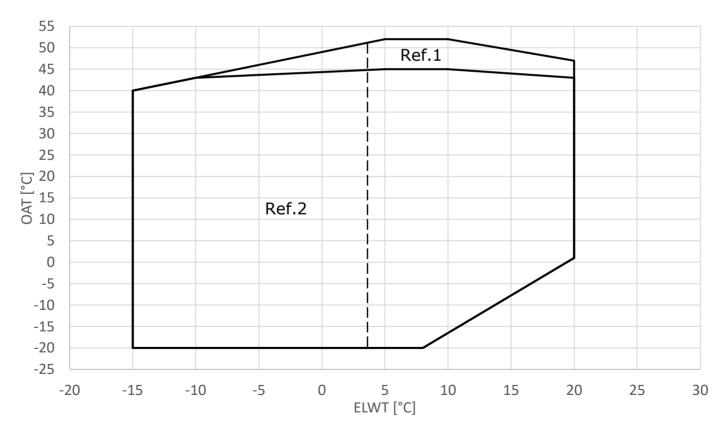
			Cound			1	the unit			Sound	
		Sound pressure level at 1 m from the unit									
MODEL	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	db(A)	db (A)	
EWYT/EWAT016CZ-A1	68.1	63.0	58.0	54.9	55.5	50.8	49.0	42.3	59.6	76.0	
EWYT/EWAT021CZ-A1	71.2	65.5	58.7	55.4	53.7	51.5	49.0	42.9	59.6	76.0	
EWYT/EWAT025CZ-A1	74.3	69.9	60.9	56.8	54.5	53.5	51.1	44.8	61.6	78.0	
EWYT/EWAT032CZ-A1	68.5	62.6	59.5	58.2	57.9	55.0	49.1	33.8	62.2	79.0	
EWYT/EWAT040CZ-A1	68.6	62.7	59.7	58.8	59.5	55.9	49.2	33.8	63.2	80.0	
EWYT/EWAT040CZ-A2	74.3	68.5	61.8	58.5	56.9	54.6	52.1	45.9	62.8	80.0	
EWYT/EWAT050CZ-A2	77.1	72.0	63.4	59.0	56.3	55.1	53.6	47.8	63.8	81.0	
EWYT/EWAT064CZ-A2	75.0	70.8	64.9	61.3	58.9	58.6	52.4	46.2	65.4	83.0	
EWYT/EWAT090CZ-A2	75.2	71.3	65.7	62.6	60.6	61.3	52.7	46.2	67.0	85.0	

Sound power level (referred to evaporator 12/7°C, ambient 35°C full load operation) are measured in accordance with ISO 9614 and Eurovent 8/1. The certification refers only to the overall sound power level. The sound data in the Octave band spectrum is intended for reference only and not considered binding.

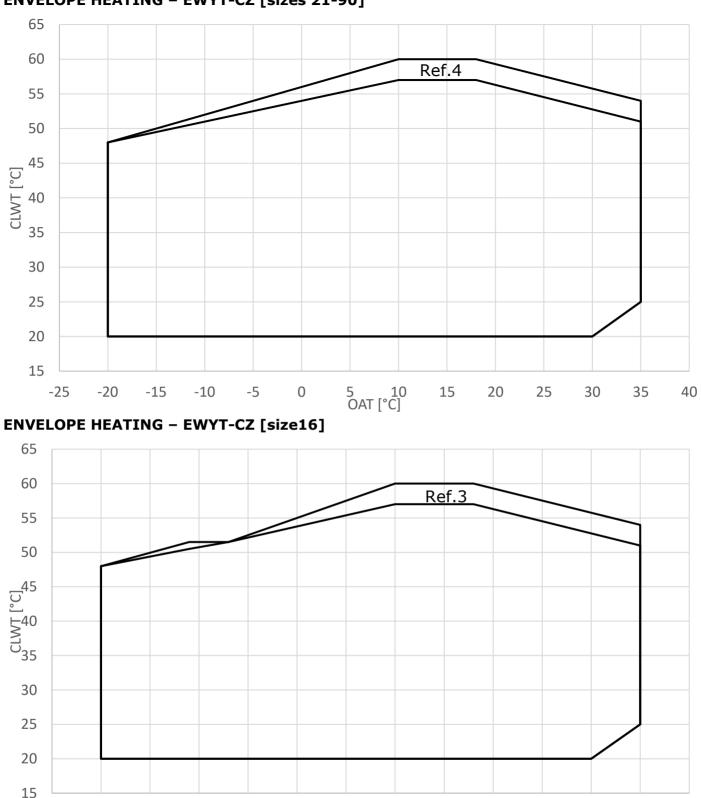
The sound pressure is calculated from the sound power level and are for information only and not considered binding.

ENVELOPE COOLING – EWAT-CZ





ENVELOPE COOLING – EWYT-CZ



ENVELOPE HEATING - EWYT-CZ [sizes 21-90]

OAT [°C] *16 kW size has a dedicated envelope, being a "Low Temp. Heat Pump" and not a "Medium Temp." One Ref. 1 Unit operations in this area require OP. 192 - HIGH AMBIENT TEMPERATURE KIT.

5

10

15

20

25

30

35

40

Ref. 2 Unit operations in this area require the enabling of the Brine version in the controller and the use of the proper amount of glycol.

Ref. 3 Certain unit sizes might work in part load in this area.

-10

-5

0

Ref. 4 Certain unit sizes might work in part load in this area. Selecting the accessoy EKDAGBL - "Restricted Application Definer" the unit can't work in this specific area.

-25

-20

-15

Water heat exchanger - minimum/maximum water Δt

The minimum and maximum allowed Δt at full load conditions are respectively 4°C and 8°C. Contact factory in case lower or higher Δt are required. Minimum and maximum evaporator flows are to be respected withing the Δt range above.

Water flow

The following tables indicate the minimum and maximum water flow allowed for each model. For application with Variable Primary Flow refer to the following value for the dimensioning of the bypass line.

The minimum flow indicated correspond to the minimum flow allowed at minimum load for the unit. It is not intended as minimum flow allowed for unit full load operation.

For minimum flow allowed (maximum deltaT) in full load operation refer to Selection Software.

Note: the performances are certified at standard conditions and with the unit operating with the nominal water flow (corresponding to OAT 35°C; water in/out 12/7°C).

N – Naked	Version		P – H Pump Versions					
MODEL	Min Flow [l/s]	Max flow [l/s]	MODEL	Min flow [l/s]	Max flow [l/s]			
EWAT/EWYT016CZN-A1	0.44	2.34	EWAT/EWYT016CZP(H)-A1	0.44	1.70			
EWAT/EWYT021CZN-A1	0.84	2.66	EWAT/EWYT021CZP(H)-A1	0.84	1.90			
EWAT/EWYT025CZN-A1	0.84	2.66	EWAT/EWYT025CZP(H)-A1	0.84	1.90			
EWAT/EWYT032CZN-A1	1.01	2.66	EWAT/EWYT032CZP(H)-A1	1.01	2.66			
EWAT/EWYT040CZN-A1	1.01	2.66	EWAT/EWYT040CZP(H)-A1	1.01	2.66			
EWAT/EWYT040CZN-A2	1.41	6.00	EWAT/EWYT040CZP(H)-A2	1.41	3.89			
EWAT/EWYT050CZN-A2	1.41	6.00	EWAT/EWYT050CZP(H)-A2	1.41	3.89			
EWAT/EWYT064CZN-A2	1.41	6.00	EWAT/EWYT064CZP(H)-A2	1.41	5.50			
EWAT/EWYT090CZN-A2	2.43	6.66	EWAT/EWYT090CZP(H)-A2	2.43	6.00			

Minimum glycol percentage for low air ambient temperature to prevent freezing of the hydraulic circuit

AMBIENT T [°C]	-3	-8	-15	-20	AMBIENT T [°C]	-3	-8	-15	-20
ETHYLENE GLYCOL	10%	20%	30%	40%	PROPYLENE GLYCOL	10%	20%	30%	40%

The presence of glycol in the water system will affect unit performances. Refer to the selection software for details. All machine protection systems, such as antifreeze and low-pressure protection will need to be set in accordance to the type and percentage of the glycol and plant requirements.

Air heat exchanger - Altitude correction factors

ELEVATION ABOVE SEA LEVEL [m]	0	300	600	900	1200	1500	1800
BAROMETRIC PRESSURE [mbar]	1013	997	942	908	875	843	812
COOLING CAPACITY CORRECTION FACTOR	1	0,993	0,986	0,979	0,973	0,967	0,96
POWER INPUT CORRECTION FACTOR	1	1,005	1,009	1,015	1,021	1,026	1,031

Maximum operating altitude is 1800 m above sea level.

Available fan static pressure correction factors

COOLING			
EXTERNAL STATIC PRESSURE [Pa]	0	50	100
COOLING CAPACITY CORRECTION FACTOR	1	0.99	0.98
UNIT PI CORRECTION FACTOR	1	1.03	1.07
REDUCTION OF MAX OPERATING AMBIENT TEMPERATURE [°C]	0	-1.5	-2.5

HEATING			
EXTERNAL STATIC PRESSURE [Pa]	0	50	100
HEATING CAPACITY CORRECTION FACTOR	1	0.99	0.97
UNIT PI CORRECTION FACTOR	1	1.008	1.011
INCREASE OF MIN OPERATING AMBIENT TEMPERATURE [°C]	0	+0.5	+1.0

COOLING Boosted Fan					
EXTERNAL STATIC PRESSURE [Pa]	0	50	100		
COOLING CAPACITY CORRECTION FACTOR	1	1	1		
UNIT PI CORRECTION FACTOR	1	1.04	1.09		
REDUCTION OF MAX OPERATING AMBIENT TEMPERATURE [°C]	0	0	0		

HEATING Boosted Fan			
EXTERNAL STATIC PRESSURE [Pa]	0	50	100
HEATING CAPACITY CORRECTION FACTOR	1	1	1
UNIT PI CORRECTION FACTOR	1	1.05	1.10
INCREASE OF MIN OPERATING AMBIENT TEMPERATURE [°C]	0	0	0

Applications with more than 100 Pa of external static pressure are not recommended. Heating correction factors are intented not considering the de frost. In case of canalization is not possible to redcude Sound powe level with Fan Silent Mode.

Maximum cable dimension

Maximum cable dimension that can be physically connected to the main switch of the unit.

Model	Max cable size [mm^2]	Model [A]	Max cable size [mm^2]	Model [A]	
Houer	STD Configuration		HIGH AMBIENT TEMPERATURE KIT OP.19		
EWAT/EWYT016CZN(P)(H)-A1	16	63	16	63	
EWAT/EWYT021CZN(P)(H)-A1	16	63	16	63	
EWAT/EWYT025CZN(P)(H)-A1	16	63	16	63	
EWAT/EWYT032CZN(P)(H)-A1	16	63	50	100	
EWAT/EWYT040CZN(P)(H)-A1	16	63	50	100	
EWAT/EWYT040CZN(P)(H)-A2	50	80	50	80	
EWAT/EWYT050CZN(P)(H)-A2	50	80	50	80	
EWAT/EWYT064CZN(P)(H)-A2	50	100	70	125	
EWAT/EWYT090CZN(P)(H)-A2	70	125	70	125	

Plant water content The chilled water distribution circuits should have a minimum water content to avoid excessive compressors start and stop.

During the span of one hour there will be no more than 10 starts of the compressor. The plant side should therefore ensure that the overall water content allows a more constant functioning of the unit and consequently greater environmental comfort.

The calculation of the water content should also consider the plant's design parameters.

As a general indication the water content should not be less than the values in the following table:

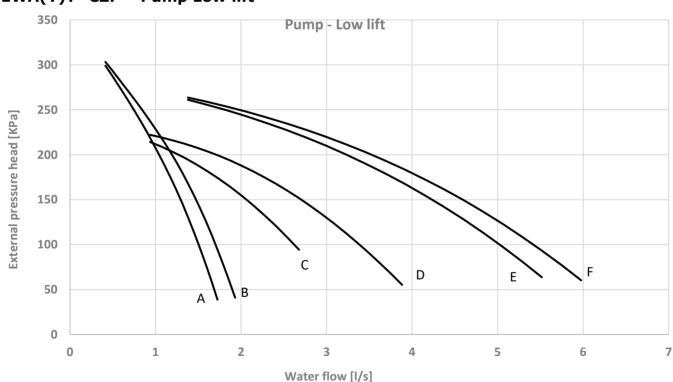
Heat-Pump	Suggested L/kW	Min water content [L]	Cooling-Only	Suggested L/kW	Min water content [L]
EWYT016CZN/P/H-A1	5.7	90	EWAT016CZN/P/H-A1	3.7	58
EWYT021CZN/P/H-A1	5.0	100	EWAT021CZN/P/H-A1	2.8	58
EWYT025CZN/P/H-A1	4.4	110	EWAT025CZN/P/H-A1	2.3	58
EWYT032CZN/P/H-A1	4.9	160	EWAT032CZN/P/H-A1	2.8	90
EWYT040CZN/P/H-A1	4.6	180	EWAT040CZN/P/H-A1	2.3	90
EWYT040CZN/P/H-A2	3.0	120	EWAT040CZN/P/H-A2	1.5	60
EWYT050CZN/P/H-A2	2.6	130	EWAT050CZN/P/H-A2	1.2	60
EWYT064CZN/P/H-A2	2.7	170	EWAT064CZN/P/H-A2	1.1	73
EWYT090CZN/P/H-A2	2.7	230	EWAT090CZN/P/H-A2	1.0	90

Note: The indication is intended as a general guideline and not intended to substitute the evaluation made by qualified technical personnel or by HVAC engineers. For more detailed analysis is better to consider the use of other more detailed approach.

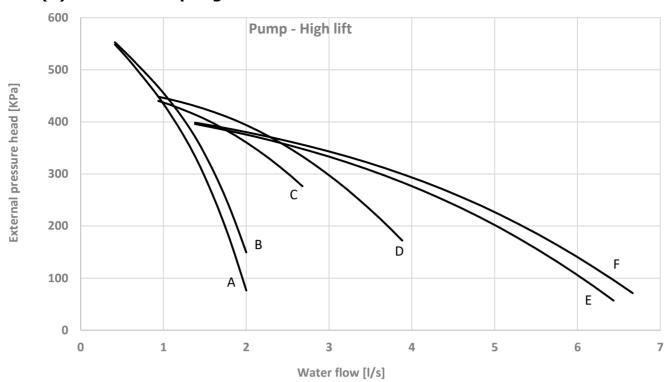
Water quality Before putting the unit into operation, clean the water circuit. Dirt, scales, corrosion debrits and other material can accumulate inside the heat exchanger and reduce its heat exchanging capacity. Pressure drop can increase as well, thus reducing water flow. Proper water treatment therefore reduces the risk of corrosion, erosion, scaling, etc. The most appropriate water treatment must be determined locally, according to the type of system and water characteristics. The manufacturer is not responsible for damage to or malfunctioning of equipment caused by failure to treat water or by improperly treated water. Plant water quality must respect the following table;

DAE Water quality requirements	BPHE
Ph (25 °C)	7.5 – 9.0
Electrical conductivity [µS/cm] (25°C)	< 500
Chloride ion [mgCl ⁻ /l]	< 70 (HP ¹); < 300 (CO ²)
Sulphate ion [mgSO4 ²⁻ /l]	< 100
Alkalinity [mg CaCO ₃ /I]	< 200
Total Hardness [mgCaCO ₃ /I]	75 ÷ 150
Iron [mgFe/l]	< 0.2
Ammonium ion [mg NH ⁴⁺ /l]	< 0.5
Silica [mgSiO ₂ /l]	-
Chlorine molecular (mgCl ₂ /l)	< 0.5

Note: 1. Heat Pump 2. Cooling Only



EWA(Y)T~CZP – Pump Low lift



EWA(Y)T~CZH – Pump High lift

External pressure head refers to unit equipped with hydronic kit, defined as difference between pump external static pressure and evaporator and water filter pressure drops.

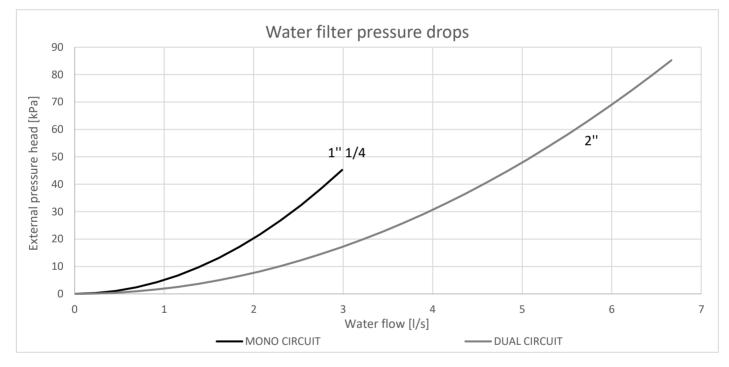
For water flow limits of the unit refer to water flow section.

Pump - Low li	ift	Pump - High lift	
Model	Pump's curve	Model	Pump's curve
EWAT/EWYT016CZP-A1	А	EWAT/EWYT016CZH-A1	А
EWAT/EWYT021CZP-A1	В	EWAT/EWYT021CZH-A1	В
EWAT/EWYT025CZP-A1	В	EWAT/EWYT025CZH-A1	В
EWAT/EWYT032CZP-A1	С	EWAT/EWYT032CZH-A1	С
EWAT/EWYT040CZP-A1	С	EWAT/EWYT040CZH-A1	С
EWAT/EWYT040CZP-A2	D	EWAT/EWYT040CZH-A2	D
EWAT/EWYT050CZP-A2	D	EWAT/EWYT050CZH-A2	D
EWAT/EWYT064CZP-A2	E	EWAT/EWYT064CZH-A2	E
EWAT/EWYT090CZP-A2	F	EWAT/EWYT090CZH-A2	F

Pump data

Model	Power [kW]	Current [A]	Model	Power [kW]	Current [A]
EWA(Y)T016CZP-A1	1,1	2,4	EWA(Y)T016CZH-A1	1,5	3,2
EWA(Y)T021CZP-A1	1,1	2,4	EWA(Y)T021CZH-A1	1,5	3,2
EWA(Y)T025CZP-A1	1,1	2,4	EWA(Y)T025CZH-A1	1,5	3,2
EWA(Y)T032CZP-A1	1,1	2,4	EWA(Y)T032CZH-A1	2,2	4,56
EWA(Y)T040CZP-A1	1,1	2,4	EWA(Y)T040CZH-A1	2,2	4,56
EWA(Y)T040CZP-A2	1,1	2,4	EWA(Y)T040CZH-A2	2,2	4,56
EWA(Y)T050CZP-A2	1,1	2,4	EWA(Y)T050CZH-A2	2,2	4,56
EWA(Y)T064CZP-A2	2,2	4,56	EWA(Y)T064CZH-A2	3	6,35
EWA(Y)T090CZP-A2	2,2	4,56	EWA(Y)T090CZH-A2	3	6,35

Water filter pressure drops



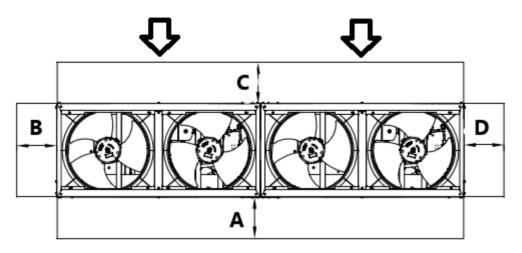
Space requirements

It is fundamental to respect minimum distances on all units to ensure optimum ventilation to the condenser coils. When deciding where to position the unit and to ensure a proper air flow, the following factors must be taken into consideration:

- avoid any warm air recirculation;
- avoid insufficient air supply to the air-cooled condenser.

Both these conditions can cause an increase of condensing pressure, which leads to a reduction in energy efficiency and refrigerating capacity.

Any side of the unit must be accessible for post-installation maintenance operations and vertical air discharge must not be obstructed. Figure below shows the minimum space required.



DUAL 90 kW unit

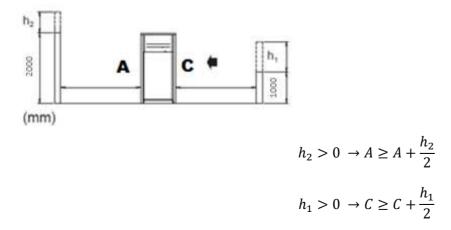
Where:

- A : Electrical panel side
- **B/D** : Side view of battery
- **C** : Front view of battery
- U Suction side

If the unit is installed in a free field, the distances indicated are:

A/B/C/D≥500 mm

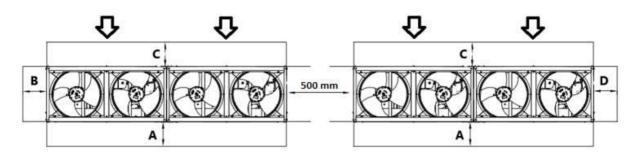
In the presence of obstacles or walls, the following minimum distances are recommended:



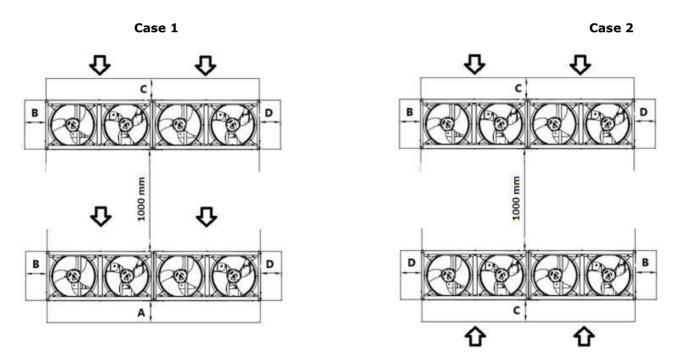
INSTALLATIONS NOTES

If two units are installed in a free field side by side along their longer sides, A and C, the minimum recommended distance between them is 1000 mm; if two units are installed side by side along their shorter sides, sides B and D, the minimum distance between them should be 500 mm. Should the unit be installed without observing the recommended minimum distances from walls and/or vertical obstacles, there could be a combination of warm air recirculation and/or insufficient supply to the air-cooled condenser which could cause a reduction of capacity and efficiency.

In any case, the microprocessor will allow the unit to adapt itself to new operating conditions and deliver the maximum available capacity under any given circumstances, even if the lateral distance is lower than recommended, unless the operating conditions should affect personnel safety or unit reliability.



Units installed side by side along their shorter sides, B or D



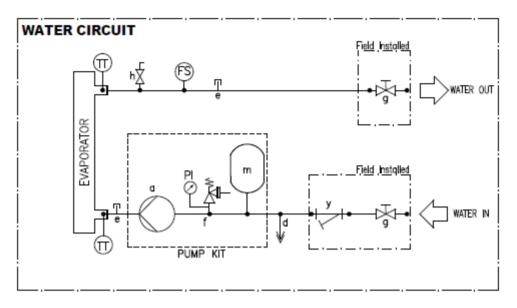
Units installed side by side along their longer sides (Case 1 and Case 2)

The minimum distances, reported above, ensure functionality of the unit in most applications.

Water filter The installation of the filter is mandatory. The water filter has to be installed as close as possible to the chiller. If the chiller is installed in a different part of the hydraulic system, the installer must ensure the cleaning of the water pipes between water filter and evaporator. The pressure drop value showed in CSS (Chiller Selection Software) are referred to chiller evaporator only.

Hydraulic schemes

- Hydraulic scheme



WATER CIRCUIT EQUIPMENT

a	PUMP
d	DRAIN
е	PLUGGED FITTING
f	SAFETY VALVE 3 BAR 1/2*
g	SHUT OFF VALVE
h	AIR VENT (valvola di sflato)
m	EXPANSION VESSEL
У	WATER FILTER
Π	TEMPERATURE SENSOR (sensore di temperatura)
PI	PRESSURE GAUGE (monometro)
FS	FLOWSWITCH (fluesostato)

Water pressure

Check whether the water pressure is above 1 bar. If it is lower, add water.

The maximum operating pressure is 3 bar for P and H versions.

For N version please take care that the components installed in the field piping can withstand the water pressure "maximum 3 bar + static pressure of the external pump" and not exceeding 10 bar.

General

The unit will be designed and manufactured in accordance with the following European directives and harmonized standards:

- Low voltage directive -DIRECTIVE 2014/35/EU
- Electromagnetic compatibility (EMC)DIRECTIVE 2014/30/EU
- Machinery directive DIRECTIVE 2006/42/EC
- Pressure equipment Directive DIRECTIVE 2014/68/EU
- Ecodesing DIRECTIVE 2009/125/EC
- Safety of machinery EN 60335-2-40
- EMC Part 6-2 EN 61000-6-2
 EMC Part 6-4 EN 61000-6-4

The unit will be tested at full load in the factory (at the nominal working conditions and water temperatures). The unit will be delivered to the job site completely assembled and charged with refrigerant and oil.

The installation of the unit must comply with the manufacturer's instructions for rigging and handling equipment.

The unit will be able to start up and operate (as standard) at full load with:

- Outside air temperature from...... °C to...... °C
- Evaporator leaving fluid temperature between...... °C and...... °C

Refrigerant HFC R-32

Performance Chiller shall supply the following performances:

- Number of chiller(s):..... unit(s)
- Cooling capacity for single chiller:..... kW
- Power input for single chiller in cooling mode:..... kW
- Heat exchanger entering water temperature in cooling mode:..... °C
- Heat exchanger leaving water temperature in cooling mode:..... °C
- Heat exchanger water flow:..... I/s
- Nominal outside working ambient temperature in cooling mode:.....°C
- Minimum full load efficiency (EER): (kW/kW)
- Minimum part load efficiency (SEER): (kW/kW)

Operating voltage range should be 400V ±10%, 3ph, 50Hz voltage unbalance maximum 3%, without neutral conductor and shall only have one power connection point.

Unit description Chiller shall include one or two independent refrigerant circuits, hermetic orbiting scroll type optimized for R-32 operation, electronic expansion device (EEXV), direct expansion, PHE evaporator, air-cooled condenser section made with copper-aluminum technology, R-32 refrigerant, lubrication system, motor starting components, control system and all components necessary for a safe and stable unit operation.

The chiller will be factory assembled on a robust base frame made of galvanized steel, protected by an epoxy paint.

Sound level and vibrations Sound power level shall not exceeddB(A). The sound power levels must be rated in accordance to ISO 9614 (other types of rating cannot be used). Vibration on the base frame should not exceed 2 mm/s.

Dimensions Unit dimensions shall not exceed following indications:

- Unit length..... mm
- Unit width..... mm
- Unit height..... mm

Compressors

Hermetic orbiting scroll type optimized for R-32 operation and complete with motor over-temperature and over-current protection devices. Each compressor equipped with oil heater that keeps the oil from being diluted by the refrigerant when the chiller is not running. Each compressor is mounted on rubber antivibration mounts for a quite operation. Unit is delivered with complete oil charge.

Evaporator

The units shall be equipped with a direct expansion plate to plate type evaporator

- The evaporator will be made of stainless steel brazed plates and shall be linked with an electrical heater controlled by a thermostat and shall be insulated with flexible, closed cell polyurethane insulation material
- The evaporator will be manufactured in accordance to PED approval •
- Flow switch on evaporator is factory mounted as standard
- Water flter on evaporator is shipped loose as standard

Air Side Heat Exchanger

The Air Side Heat Exchanger is manufactured with internally enhanced seamless copper tubes arranged in a staggered row pattern and mechanically expanded into lanced and rippled aluminum Air Side Heat Exchanger fins with full fin collars. An integral sub-cooler circuit provides sub-cooling to effectively eliminate liquid flashing and increase cooling capacity without increasing the power input.

Air Side Heat Exchanger fans

Air Side Heat Exchanger fans are propeller type with high efficiency design blades to maximize performances. The blades are made of glass-reinforced resin and a guard protects each fan. Units are standardly equipped with inverter driven fans.

Refrigerant circuit The unit shall have one or two independent refrigerant.

• The unit automatically unloads when abnormal high condensing pressure is detected. This to prevent the shutdown of the refrigerant circuit (shutdown of the unit) due to a high-pressure fault.

The compressor shall be connected to unit's metal base frame by rubber anti vibration supports to prevent the transmission of vibrations to all metal unit structure, in order to limit the unit noise emissions.

Master/Slave

The unit shell be able to operate in Master / Slave mode in order to be connected with another similar unit (up to 4). The master unit shall manage the slave units connected in parallel on the hydraulic plant with the aim of optimize the running hours of each compressor and to balance running hours and the load between the units.

Electrical control panel

Power and control shall be located in the main panel that will be manufactured to ensure protection against all weather conditions.

• The electrical panel shall be IPX4 and (when opening the doors) internally protected against possible accidental contact with live parts

- The main panel shall be fitted with a main switch interlocked door that shuts off power supply when opening
- The power section will include compressors and fans starter devices

Controller

The controller will be installed as standard and it will be used to modify unit set-points and check control parameters. • A sophisticated software with predictive logic, will select the most energy efficient combination of compressors, EEXV and condenser fans to keep stable operating conditions to maximize unit energy efficiency and reliability • The controller will be able to protect critical components based on external signals received from the unit itself

Controller features

Controller shall be guarantee following minimum functions:

- Management of the compressors,
- Chiller enabled to work in partial failure condition
- Full routine operation at condition of:
- high ambient temperature value
- high thermal load
- high evaporator entering water temperature (start-up)
- Leaving water evaporator temperature regulation
- Display of Status Safety Devices
- Number of starts and compressor working hours
- Optimized management of unit load
- Fan management according to condensing pressure
- Start at high evaporator water temperature
- Master / Slave (provided as standard)
- Variable primary Flow (available as accessory)



Daikin's unique position as a manufacturer of air conditioning equipment, compressors and refrigerants has led to its close involvement in environmental iasues. For several years Daikin has had the intention to become a leader in the provision of products that have limited impact on the environment. This challenge demands the eco design and development of a wide range of products and an energy management system, resulting in energy conservation and a reduction of waste.





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