

## Air cooled screw chillers



### EWAD~C- UNIT WITH TOTAL HEAT RECOVERY

C-SS (Standard Efficiency - Standard Noise) - Cooling Capacity from 647 to 1922 kW

C-SL (Standard Efficiency - Low Noise) - Cooling Capacity from 647 to 1922 kW

C-SR (Standard Efficiency - Reduced Noise) - Cooling Capacity from 619 to 1833 kW

C-XS (High Efficiency - Standard Noise) - Cooling Capacity from 756 to 2008 kW

C-XL (High Efficiency - Low Noise) - Cooling Capacity from 756 to 2008 kW

C-XR (High Efficiency - Reduced Noise) - Cooling Capacity from 736 to 1952 kW

C-PS (Premium Efficiency - Standard Noise) - Cooling Capacity from 821 to 1562 kW

C-PL (Premium Efficiency - Low Noise) - Cooling Capacity from 821 to 1562 kW

C-PR (Premium Efficiency - Reduced Noise) - Cooling Capacity from 809 to 1521 kW



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## Low operating cost and extended operating life

This chiller range is the result of careful design, aimed to optimize the energy efficiency of the chillers, with the objective of bringing down operating costs and improving installation profitability, effectiveness and economical management. The chillers feature a high efficiency single screw compressor design, large condenser coil surface area for maximum heat transfer and low discharge pressure, advanced technology condenser fans and a 'shell&tube' evaporator with low refrigerant pressure drops.

## Low operating sound levels

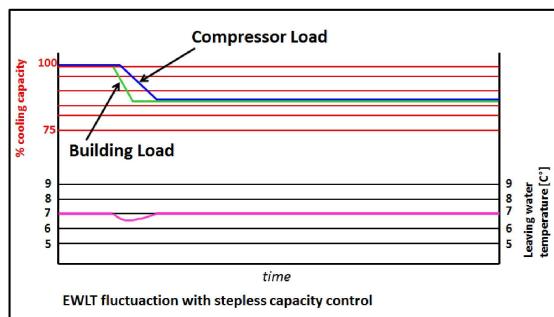
Very low sound levels both at full load and part load conditions are achieved by the latest compressor design and by a unique new fan that moves large volume of air at exceptionally low sound levels and by the virtually vibration-free operation.

## Outstanding reliability

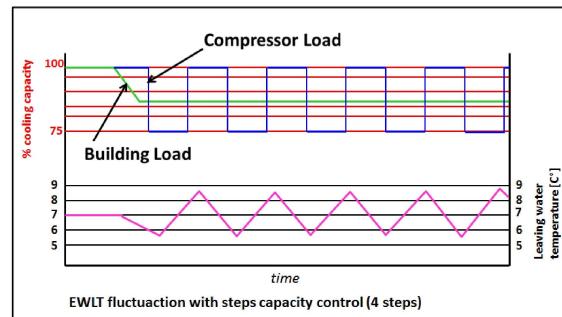
The chillers have two or three truly independent refrigerant circuits, in order to assure maximum safety for any maintenance, whether planned or not. They are equipped with a rugged compressor design with advanced composite compressor gaterotors material, a proactive control logic and are full factory-run-tested to optimized trouble-free operation.

## Infinite capacity control

Cooling capacity control is infinitely variable by means of a single screw asymmetric compressor controlled by microprocessor system. Each unit has infinitely variable capacity control from 100% down to 12.5% (two compressors unit) down to 7% (three compressors unit). This modulation allows the compressor capacity to exactly match the building cooling load without any leaving evaporator water temperature fluctuation. This chilled water temperature fluctuation is avoided with a stepless control.



With a compressor load step control in fact, the compressor capacity, at partial loads, will be too high or too low compared to the building cooling load. The result is an increase in chiller energy costs, particularly at the part-load conditions at which the chiller operates most of the time.



Units with stepless regulation offer benefits that the units with step regulation are unable to match. The ability to follow the system energy demand at any time and the possibility to provide steady outlet water temperature without deviations from the set-point, are the two points that allow you to understand how the optimum operating conditions of a system can be met through the use of a unit with stepless regulation.

## Superior control logic

The new MicroTech III controller provides an easy to use control environmental. The control logic is designed to provide maximum efficiency, to continue operation in unusual operating conditions and to provide a history of unit operation. One of the greatest benefits is the easy interface with LonWorks, Bacnet, Ethernet TCP/IP or Modbus communications.

## Code requirements – Safety and observant of laws/directives

Units are designed and manufactured in accordance with applicable selections of the following:

Construction of pressure vessel	97/23/EC (PED)
Machinery Directive	2006/42/EC
Low Voltage	2006/95/EC
Electromagnetic Compatibility	2004/108/EC
Electrical & Safety codes	EN 60204-1 / EN 60335-2-40
Manufacturing Quality Stds	UNI – EN ISO 9001:2004

## Certifications

Units are CE 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, GOST, etc.), and with other applications, such as naval (RINA, etc.).

## Versions

This unit is available in three different versions:

S: Standard Efficiency,

X: High Efficiency

P: Premium Efficiency

The EER (Energy Efficiency Ratio) is the ratio of the Cooling Capacity to the Power Input of the unit. The Power Input includes: the power input for operation of the compressor, the power input of all control and safety devices, the power input for fans.

The ESEER (European Seasonal Energy Efficiency Ratio) is a weighed formula enabling to take into account the variation of EER with the load rate and the variation of air inlet condenser temperature.

$$\text{ESEER} = A \times \text{EER100\%} + B \times \text{EER75\%} + C \times \text{EER50\%} + D \times \text{EER25\%}$$

	A	B	C	D
Coefficient	0.03 (3%)	0.33 (33%)	0.41 (41%)	0.23 (23%)
Air inlet condenser temperature	35°C	30°C	25°C	20°C

## Sound configurations

Standard, low and reduced sound configurations available as follows:

-S: Standard Sound

Condenser fan rotating at 900 rpm, rubber antivibration under compressor

-L: Low Sound

Condenser fan rotating at 900 rpm, rubber antivibration under compressor, compressor sound enclosure.

-R: Reduced Sound

Condenser fan rotating at 700 rpm, rubber antivibration under compressor, compressor sound enclosure.

-R: Reduced Sound

Condenser fan rotating at 700 rpm, rubber antivibration under compressor, compressor sound enclosure.

**Cabinet and structure** The cabinet is made of galvanized steel sheet and painted to provide a high resistance to corrosion. Colour Ivory White (Munsell code 5Y7.5/1) ( $\pm$ RAL7044). The base frame has an eye-hook to lift the unit with ropes for an easy installation. The weight is uniformly distributed along the profiles of the base and this facilitates the arrangement of the unit.

**Compressor (Asymmetric Single Screw)** The compressor is semi-hermetic, single-screw type with gate-rotor made with the latest high-strength fibre reinforced star material. The compressor has an asymmetric slide regulation managed by the unit controller for infinitely modulating capacity from 100% to 25%. An integrated high efficiency oil separator maximizes the oil separation and standard start is Wye-Delta (Y- $\Delta$ ) type.

**Refrigerant** The compressors have been designed to operate with R-134a, ecological refrigerant with zero ODP (Ozone Depletion Potential) and very low GWP (Global Warming Potential), resulting in low TEWI (Total Equivalent Warming Impact).

**Evaporator (Shell&Tube)** The unit is equipped with a direct expansion shell&tube evaporator with refrigerant evaporating inside the tubes and water flowing outside. The tubes are enhanced for maximum heat transfer and rolled into steel tube sheet and sealed.

The evaporators are single-pass on both the refrigerant and water sides for pure counter-flow heat exchange and low refrigerant pressure drops. Both attributes contribute to the heat exchanger effectiveness and total unit's outstanding efficiency. The water side is designed for 10 bar of maximum operating pressure and is provided with vents and drain.

The external shell is covered with a 20mm closed cell insulation material and the evaporator water connections are provided with victaulic kit (as standard). Each evaporator has 2 or 3 circuits, one for each compressor and is manufactured in accordance to 97/23/EC directive (PED).

**Condenser** The condenser is manufactured with internally enhanced seamless copper tubes arranged in a staggered row pattern and mechanically expanded into lanced and rippled aluminum condenser 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.

**Heat Recovery Exchanger** The unit is equipped with a plate to plate type heat exchanger for each circuit made of stainless steel brazed plates and manufactured in accordance to PED approval.

**Condenser fans (ø 800)** The condenser fans are propeller type with high efficiency design blades to maximize performances. The material of the blades is glass reinforced resin and each fan is protected by a guard. Fan motors are protected by circuit breakers (installed inside the electrical panel as a standard) and are IP54.

**Electronic expansion valve** The unit is equipped with the most advanced electronic expansion valves to achieve precise control of refrigerant mass flow. As today's system requires improved energy efficiency, tighter temperature control, wider range of operating conditions and incorporate features like remote monitoring and diagnostics, the application of electronic expansion valves becomes mandatory.

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

Electronic expansion valves are typically working with lower  $\Delta P$  between high and low pressure side, than a thermostatic expansion valve. The electronic expansion valve allows the system to work with low condenser pressure (winter time) without any refrigerant flow problems and with a perfect chilled water leaving temperature control.

**Refrigerant circuit** Each unit has 2 or 3 independent refrigerant circuits and each one includes:

- Compressor with integrated oil separator
- Refrigerant
- Evaporator
- Air Cooled Condenser
- Electronic expansion valve
- Discharge line shut off valve
- Liquid line shut off valve
- Sight glass with moisture indicator
- Filter drier
- Charging valves
- High pressure switch
- High pressure transducers
- Low pressure transducers
- Oil pressure transducer

**Electrical control panel** Power and control are located in the main panel that is manufactured to ensure protection against all weather conditions. The electrical panel is IP54 and (when opening the doors) internally protected with plexiglas panel against possible accidental contact with electrical components (IP20). The main panel is fitted with a main switch interlocked door.

**Power Section** The power section includes compressors and fans protection devices, compressors and fans starters and control circuit power supply.

**MicroTech III controller** MicroTech III controller is installed as standard; it can be used to modify unit set-points and check control parameters. A built-in display shows chiller operating status plus temperatures and pressures of water, refrigerant and air, programmable values, set-points. A sophisticated software with predictive logic, selects the most energy efficient combination of compressors, EEXV and condenser fans to keep stable operating conditions to maximise chiller energy efficiency and reliability. MicroTech III is able to protect critical components based on external signs from its system (such as motor temperatures, refrigerant gas and oil pressures, correct phase sequence, pressure switches and evaporator). The input coming from the high pressure switch cuts all digital output from the controller in less than 50ms, this is an additional security for the equipment. Fast program cycle (200ms) for a precise monitoring of the system. Floating point calculations supported for increased accuracy in Pressure / Temperature conversions.

**Control section - main features** • Management of the compressor stepless capacity and fans modulation.

- 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)
- Display of evaporator entering/leaving water temperature.
- Display of Outdoor Ambient Temperature.
- Display of condensing-evaporating temperature and pressure, suction and discharge superheat for each circuit.
- Leaving water evaporator temperature regulation (temperature tolerance = 0,1°C).
- Compressor and evaporator pumps hours counter.
- Display of Status Safety Devices.
- Number of starts and compressor working hours.
- Optimized management of compressor load.
- Fan management according to condensing pressure.
- Re-start in case of power failure (automatic / manual).
- Soft Load (optimized management of the compressor load during the start-up).
- Start at high evaporator water temperature.
- Return Reset (Set Point Reset based on return water temperature).
- OAT (Outside Ambient temperature) Reset.
- Set point Reset (optional).
- Application and system upgrade with commercial SD cards.
- Ethernet port for remote or local servicing using standard web browsers.
- Two different sets of default parameters could be stored for easy restore.

**Safety device / logic for each refrigerant circuit** • High pressure (pressure switch).

- High pressure (transducer).
- Low pressure (transducer).
- Fans circuit breaker.
- High compressor discharge temperature.
- High motor winding temperature.
- Phase Monitor.
- Low pressure ratio.
- High oil pressure drop.
- Low oil pressure.
- No pressure change at start.

**System security** • Phase monitor.

- Low Ambient temperature lock-out.
- Freeze protection.

**Regulation type** Proportional + integral + derivative regulation on the evaporator leaving water output probe.

**MicroTech III** MicroTech III built-in terminal has the following features.

- 164x44 dots liquid crystal display with white back lighting. Supports Unicode fonts for multi-lingual.
- Key-pad consisting of 3 keys.
- Push'n'Roll control for an increased usability.
- Memory to protect the data.
- General faults alarm relays.
- Password access to modify the setting.
- Application security to prevent application tampering or hardware usability with third party applications.
- Service report displaying all running hours and general conditions.
- Alarm history memory to allow an easy fault analysis.

### **Supervising systems (on request)**

**MicroTech III remote control** MicroTech III is able to communicate to BMS (Building Management System) based on the most common protocols as:

- ModbusRTU
- LonWorks, now also based on the international 8040 Standard Chiller Profile and LonMark Technology.
- BacNet BTP certifie over IP and MS/TP (class 4) (Native).
- Ethernet TCP/IP.

## **Standard Options (supplied on basic unit)**

**Wye-Delta compressor starter (Y-D)** - For low inrush current and reduced starting torque

**Double setpoint** - Dual leaving water temperature setpoints.

**Phase monitor** - The phase monitor controls that phases sequence is correct and controls phase loss.

**Evaporator victaulic kit** - Hydraulic joint with gasket for an easy and quick water connection.

**20mm evaporator insulation** - The external shell is covered with a 20mm closed cell insulation material.

**Evaporator electric heater** - Electric heater (controlled by a thermostat) to protect the evaporator from freezing down to -28°C ambient temperature, providing the power supply is on.

### **Electronic expansion valve**

**Discharge line shut-off valve** - Installed on the discharge port of the compressor to facilitate maintenance operation.

### **Ambient outside temperature sensor and setpoint reset**

#### **Hour run meter**

#### **General fault contactor**

**Setpoint reset, Demand limit and Alarm from external device** - (Set-point reset): The leaving water temperature set-point can be overwritten with the following options: 4-20mA from external source (by user); outside ambient temperature; evaporator water temperature  $\Delta t$ . - (Demand limit): User can limit the load of the unit by 4-20mA signal or by network system. - (Alarm from external device): Microprocessor is able to receive an alarm signal from an external device (eg. pump, etc...). User can decide if this alarm signal will stop or not the unit.

**Fans circuit breakers** - Safety device against motor overloading and short circuit

#### **Main switch interlock door**

#### **Emergency stop**

## **Options (on request)**

### **MECHANICAL**

**Brine version** - Allows the unit to operate down to -8°C leaving liquid temperature (antifreeze required).

#### **Evaporator flange kit**

#### **Condenser coil guards**

#### **Evaporator area guards**

**Cu-Cu condenser coil** - To give better protection against corrosion by aggressive environments.

**Cu-Cu-Sn condenser coil** - To give better protection against corrosion in aggressive environments and by salty air.

**Alucoat fins coil** - Fins are protected by a special acrylic paint with a high resistance to corrosion.

**Suction line shut-off valve** - Installed on the suction port of the compressor to facilitate maintenance operation.

#### **High pressure side manometers**

#### **Low pressure side manometers**

**One centrifugal pump (low lift)** - Hydronic kit consists of: single direct driven centrifugal pump, water filling system with pressure gauge, safety valve, drain valve. The motor pump is protected by a circuit breaker installed in control panel. The kit is assembled and wired to the control panel. The pipe and pump are protected from freezing with an additional electrical heater.

**One centrifugal pump (high lift)** Hydronic kit consists of: single direct driven centrifugal pump, water filling system with pressure gauge, safety valve, drain valve. The motor pump is protected by a circuit breaker installed in control panel. The kit is assembled and wired to the control panel. The pipe and pump are protected from freezing with an additional electrical heater.

**Two centrifugal pump (low lift)** - Hydronic kit consists of: twin direct driven centrifugal pumps, water filling system with pressure gauge, safety valve, drain valve. The motor pump is protected by a circuit breaker installed in control panel. The kit is assembled and wired to the control panel. The pipe and pumps are protected from freezing with an additional electrical heater.

**Two centrifugal pump (high lift)** Hydronic kit consists of: twin direct driven centrifugal pumps, water filling system with pressure gauge, safety valve, drain valve. The motor pump is protected by a circuit breaker installed in control panel. The kit is assembled and wired to the control panel. The pipe and pumps are protected from freezing with an additional electrical heater.

#### **Double pressure relief valve with diverter**

#### **Evaporator right water connections**

### **ELECTRICAL / CONTROL**

**Soft starter** - Electronic starting device to reduce the mechanical stress during compressor start-up

**Compressor thermal overload relays** - Safety devices against compressor motor overloading. This device together with internal motor protection (standard) guarantee the best safety system for compressor motor.

**Under / Over voltage control** - This device control the voltage value of power supply and stop the chiller if the value exceeds the allowed operating limits.

**Energy meter** - Device installed inside the control box showing ampere and volt values

**Capacitors for power factor correction** - To increase the operating power factor of the unit at nominal operating conditions. The capacitors are "dry" self-regenerating type with over pressure disconnecting safety device insulated with a no toxic dielectric mix with no PCB or PCT.

**Current limit** - To limit maximum absorbed current of the unit whenever is required

**Speedtrol (fan speed control device - ON/OFF - up to -18°C)** - Continuous fan speed modulation on the first fan of each circuit. It allows the unit working with air temperature down to -18°C.

**Evaporator flow switch** - Supplied separately to be wired and installed on the evaporator water piping (by the customer).

#### **Compressors circuit breakers**

**Fans speed regulation (+ fan silent mode)** - To control the fan speed revolution for smooth operating control of the unit. This option improves the sound level of the unit during low ambient temperature operation.

**Ground fault relay** - To shut down the entire unit if a ground fault condition is detected.

**Rapid restart** - It allows the unit to start as fast as 30 seconds after power is restored (in case of power failure).

### **INSTALLATION**

**Rubber anti vibration mounts** - Supplied separately, these are positioned under the base of the unit during installation. Ideal to reduce the vibrations when the unit is floor mounted.

**Spring anti vibration mounts** - Supplied separately, these are positioned under the base of the unit during installation. Ideal for dampening vibrations for installation on roofs and metallic structures.

### **OTHER**

**Container Kit**

**Witness test**

**Acoustic test**

**Refrigerant recovery unit** - This option allows to stock refrigerant charge of 1 circuit for maintenance operation. Liquid receiver includes in/out shut-off valve and relieve valve.

**Transport kit**

# TECHNICAL SPECIFICATIONS (Heat Recovery OFF)

## EWAD C-SS

MODEL		650	740	830	910	970	C11	C12	C15
Capacity - Cooling (1)	kW	640	738	824	904	958	1055	1143	1524
Capacity control - Type	---	Stepless							
Capacity control - Minimum capacity	%	12.5	12.5	12.5	12.5	12.5	12.5	12.5	7.0
Unit power input - Cooling (1)	kW	224	266	304	323	356	384	410	561
EER (1)	---	2.85	2.77	2.71	2.80	2.69	2.75	2.79	2.72
ESEER	---	3.84	3.85	3.80	3.82	3.70	3.78	3.74	3.80
IPLV	---	4.19	4.08	4.05	4.12	4.02	4.07	4.08	4.13
CASING									
Colour	---	IW							
Material (2)	---	GPSS							
DIMENSIONS									
Height	mm	2540	2540	2540	2540	2540	2540	2540	2540
Width	mm	2285	2285	2285	2285	2285	2285	2285	2285
Length	mm	6185	6185	6185	6185	6185	7085	7985	10185
WEIGHT									
Unit Weight	kg	5630	5740	5760	6280	6560	7010	7280	10320
Operating Weight	kg	5910	5990	6010	6530	6810	7250	7520	10730
WATER HEAT EXCHANGER									
Type (3)	---	S&T							
Water Volume	l	266	266	251	251	251	243	243	408
Nominal water flow rate - Cooling	l/s	30.5	35.2	39.3	43.2	45.7	50.3	54.5	72.7
Nominal Water pressure drop - Cooling	kPa	46	53	52	61	68	63	73	61
Insulation material (4)		CC							
AIR HEAT EXCHANGER									
Type (5)	---	HFP							
FAN									
Type (6)	---	DPT							
Drive (7)	---	DOL							
Diameter	mm	800	800	800	800	800	800	800	800
Nominal air flow	l/s	53442	53442	53442	64131	64131	74819	85508	106885
Quantity	No.	10	10	10	12	12	14	16	20
Speed	rpm	900	900	900	900	900	900	900	900
Motor input	kW	17.5	17.5	17.5	21.0	21.0	24.5	28.0	35.0
COMPRESSOR									
Type	---	Asymm Single Screw							
Oil charge	l	38	38	38	44	50	50	50	75
Quantity	No.	2	2	2	2	2	2	2	3
SOUND LEVEL									
Sound Power - Cooling	dB(A)	100	100	100	101	101	102	102	103
Sound Pressure - Cooling (8)	dB(A)	79	80	80	80	81	81	81	81
REFRIGERANT CIRCUIT									
Refrigerant type	---	R134a							
Refrigerant charge	kg	128	128	128	146	144	162	178	260
N. of circuits	No.	2	2	2	2	2	2	2	3
PIPING CONNECTIONS									
Evaporator water inlet/outlet		168.3 mm	219.1 mm						

Fluid: Water

(1) Cooling capacity, unit power input in cooling and EER are based on the following conditions: evaporator 12.0/7.0°C; ambient 35.0°C, unit at full load operation;

(2) GPSS: Galvanized and Painted Steel Sheet; (3) PHE: Plate Heat Exchanger --- S&T: Single Pass Shell & Tube

(4) CC: Closed Cell; (5) HFP: High efficiency fin and tube type with integral subcooler

(6) DPT: Direct Propeller Type; (7) DOL: Direct On Line - VFD: Inverter - BRS: Brushless

(8) The values are according to ISO 3744 and are referred to: evaporator 12/7°C, ambient 35°C, full load operation.

**EWAD C-SS**

<b>MODEL</b>		<b>C16</b>	<b>C17</b>						
Capacity - Cooling (1)	kW	1608	1699						
Capacity control - Type	---	Stepless	Stepless						
Capacity control - Minimum capacity	%	7.0	7.0						
Unit power input - Cooling (1)	kW	589	629						
EER (1)	---	2.73	2.70						
ESEER	---	3.78	3.68						
IPLV	---	4.07	4.01						
<b>CASING</b>									
Colour	---	IW	IW						
Material (2)	---	GPSS	GPSS						
<b>DIMENSIONS</b>									
Height	mm	2540	2540						
Width	mm	2285	2285						
Length	mm	11085	11085						
<b>WEIGHT</b>									
Unit Weight	kg	10710	10770						
Operating Weight	kg	11110	11260						
<b>WATER HEAT EXCHANGER</b>									
Type (3)	---	S&T	S&T						
Water Volume	l	408	474						
Nominal water flow rate - Cooling	l/s	76.7	81.1						
Nominal Water pressure drop - Cooling	kPa	67	74						
Insulation material (4)		CC	CC						
<b>AIR HEAT EXCHANGER</b>									
Type (5)	---	HFP	HFP						
<b>FAN</b>									
Type (6)	---	DPT	DPT						
Drive (7)	---	DOL	DOL						
Diameter	mm	800	800						
Nominal air flow	l/s	117573	117573						
Quantity	No.	22	22						
Speed	rpm	900	900						
Motor input	kW	38.5	38.5						
<b>COMPRESSOR</b>									
Type	---	Asymm Single Screw	Asymm Single Screw						
Oil charge	l	75	75						
Quantity	No.	3	3						
<b>SOUND LEVEL</b>									
Sound Power - Cooling	dB(A)	103	103						
Sound Pressure - Cooling (8)	dB(A)	81	81						
<b>REFRIGERANT CIRCUIT</b>									
Refrigerant type	---	R134a	R134a						
Refrigerant charge	kg	261	261						
N. of circuits	No.	3	3						
<b>PIPING CONNECTIONS</b>									
Evaporator water inlet/outlet		219.1 mm	219.1 mm						

**Fluid:** Water

(1) Cooling capacity, unit power input in cooling and EER are based on the following conditions: evaporator 12.0/7.0°C; ambient 35.0°C, unit at full load operation;

(2) GPSS: Galvanized and Painted Steel Sheet; (3) PHE: Plate Heat Exchanger --- S&amp;T: Single Pass Shell &amp; Tube

(4) CC: Closed Cell; (5) HFP: High efficiency fin and tube type with integral subcooler

(6) DPT: Direct Propeller Type; (7) DOL: Direct On Line - VFD: Inverter - BRS: Brushless

(8) The values are according to ISO 3744 and are referred to: evaporator 12/7°C, ambient 35°C, full load operation.

# TECHNICAL SPECIFICATIONS (Heat Recovery OFF)

## EWAD C-SL

MODEL		650	740	830	910	970	C11	C12	C15
Capacity - Cooling (1)	kW	640	738	824	904	958	1055	1143	1524
Capacity control - Type	---	Stepless							
Capacity control - Minimum capacity	%	12.5	12.5	12.5	12.5	12.5	12.5	12.5	7.0
Unit power input - Cooling (1)	kW	224	266	304	323	356	384	410	561
EER (1)	---	2.85	2.77	2.71	2.80	2.69	2.75	2.79	2.72
ESEER	---	3.84	3.85	3.80	3.82	3.70	3.78	3.74	3.80
IPLV	---	4.19	4.08	4.05	4.12	4.02	4.07	4.08	4.13
CASING									
Colour	---	IW							
Material (2)	---	GPSS							
DIMENSIONS									
Height	mm	2540	2540	2540	2540	2540	2540	2540	2540
Width	mm	2285	2285	2285	2285	2285	2285	2285	2285
Length	mm	6185	6185	6185	6185	6185	7085	7985	10185
WEIGHT									
Unit Weight	kg	5920	6030	6050	6570	6850	7300	7570	10770
Operating Weight	kg	6200	6280	6300	6820	7100	7540	7810	11170
WATER HEAT EXCHANGER									
Type (3)	---	S&T							
Water Volume	l	266	266	251	251	251	243	243	408
Nominal water flow rate - Cooling	l/s	30.5	35.2	39.3	43.2	45.7	50.3	54.5	72.7
Nominal Water pressure drop - Cooling	kPa	46	53	52	61	68	63	73	61
Insulation material (4)		CC							
AIR HEAT EXCHANGER									
Type (5)	---	HFP							
FAN									
Type (6)	---	DPT							
Drive (7)	---	DOL							
Diameter	mm	800	800	800	800	800	800	800	800
Nominal air flow	l/s	53442	53442	53442	64131	64131	74819	85508	106885
Quantity	No.	10	10	10	12	12	14	16	20
Speed	rpm	900	900	900	900	900	900	900	900
Motor input	kW	17.5	17.5	17.5	21.0	21.0	24.5	28.0	35.0
COMPRESSOR									
Type	---	Asymm Single Screw							
Oil charge	l	38	38	38	44	50	50	50	75
Quantity	No.	2	2	2	2	2	2	2	3
SOUND LEVEL									
Sound Power - Cooling	dB(A)	96	96	96	98	97	98	98	99
Sound Pressure - Cooling (8)	dB(A)	76	76	76	77	77	77	77	77
REFRIGERANT CIRCUIT									
Refrigerant type	---	R134a							
Refrigerant charge	kg	128	128	128	146	144	162	178	260
N. of circuits	No.	2	2	2	2	2	2	2	3
PIPING CONNECTIONS									
Evaporator water inlet/outlet		168.3 mm	219.1 mm						

Fluid: Water

(1) Cooling capacity, unit power input in cooling and EER are based on the following conditions: evaporator 12.0/7.0°C; ambient 35.0°C, unit at full load operation;

(2) GPSS: Galvanized and Painted Steel Sheet; (3) PHE: Plate Heat Exchanger --- S&T: Single Pass Shell & Tube

(4) CC: Closed Cell; (5) HFP: High efficiency fin and tube type with integral subcooler

(6) DPT: Direct Propeller Type; (7) DOL: Direct On Line - VFD: Inverter - BRS: Brushless

(8) The values are according to ISO 3744 and are referred to: evaporator 12/7°C, ambient 35°C, full load operation.

**EWAD C-SL**

<b>MODEL</b>		<b>C16</b>	<b>C17</b>						
Capacity - Cooling (1)	kW	1608	1699						
Capacity control - Type	---	Stepless	Stepless						
Capacity control - Minimum capacity	%	7.0	7.0						
Unit power input - Cooling (1)	kW	589	629						
EER (1)	---	2.73	2.70						
ESEER	---	3.78	3.68						
IPLV	---	4.07	4.01						
<b>CASING</b>									
Colour	---	IW	IW						
Material (2)	---	GPSS	GPSS						
<b>DIMENSIONS</b>									
Height	mm	2540	2540						
Width	mm	2285	2285						
Length	mm	11085	11085						
<b>WEIGHT</b>									
Unit Weight	kg	11150	11210						
Operating Weight	kg	11550	11700						
<b>WATER HEAT EXCHANGER</b>									
Type (3)	---	S&T	S&T						
Water Volume	l	408	474						
Nominal water flow rate - Cooling	l/s	76.7	81.1						
Nominal Water pressure drop - Cooling	kPa	67	74						
Insulation material (4)		CC	CC						
<b>AIR HEAT EXCHANGER</b>									
Type (5)	---	HFP	HFP						
<b>FAN</b>									
Type (6)	---	DPT	DPT						
Drive (7)	---	DOL	DOL						
Diameter	mm	800	800						
Nominal air flow	l/s	117573	117573						
Quantity	No.	22	22						
Speed	rpm	900	900						
Motor input	kW	38.5	38.5						
<b>COMPRESSOR</b>									
Type	---	Asymm Single Screw	Asymm Single Screw						
Oil charge	l	75	75						
Quantity	No.	3	3						
<b>SOUND LEVEL</b>									
Sound Power - Cooling	dB(A)	100	100						
Sound Pressure - Cooling (8)	dB(A)	77	77						
<b>REFRIGERANT CIRCUIT</b>									
Refrigerant type	---	R134a	R134a						
Refrigerant charge	kg	261	261						
N. of circuits	No.	3	3						
<b>PIPING CONNECTIONS</b>									
Evaporator water inlet/outlet		219.1 mm	219.1 mm						

**Fluid:** Water

(1) Cooling capacity, unit power input in cooling and EER are based on the following conditions: evaporator 12.0/7.0°C; ambient 35.0°C, unit at full load operation;

(2) GPSS: Galvanized and Painted Steel Sheet; (3) PHE: Plate Heat Exchanger --- S&amp;T: Single Pass Shell &amp; Tube

(4) CC: Closed Cell; (5) HFP: High efficiency fin and tube type with integral subcooler

(6) DPT: Direct Propeller Type; (7) DOL: Direct On Line - VFD: Inverter - BRS: Brushless

(8) The values are according to ISO 3744 and are referred to: evaporator 12/7°C, ambient 35°C, full load operation.

# TECHNICAL SPECIFICATIONS (Heat Recovery OFF)

## EWAD C-SR

MODEL		620	720	790	880	920	C10	C11	C13
Capacity - Cooling (1)	kW	611	707	779	867	911	1009	1101	1353
Capacity control - Type	---	Stepless							
Capacity control - Minimum capacity	%	12.5	12.5	12.5	12.5	12.5	12.5	12.5	7.0
Unit power input - Cooling (1)	kW	227	278	320	336	375	401	424	527
EER (1)	---	2.69	2.55	2.44	2.58	2.43	2.52	2.60	2.57
ESEER	---	3.98	3.85	3.86	3.89	3.88	3.85	3.85	3.80
IPLV	---	4.24	4.20	4.10	4.17	4.08	4.08	4.15	4.11
CASING									
Colour	---	IW							
Material (2)	---	GPSS							
DIMENSIONS									
Height	mm	2540	2540	2540	2540	2540	2540	2540	2540
Width	mm	2285	2285	2285	2285	2285	2285	2285	2285
Length	mm	6185	6185	6185	6185	6185	7085	7985	10185
WEIGHT									
Unit Weight	kg	5920	6030	6050	6570	6850	7300	7570	10750
Operating Weight	kg	6200	6280	6300	6820	7100	7540	7810	11170
WATER HEAT EXCHANGER									
Type (3)	---	S&T							
Water Volume	l	266	266	251	251	251	243	243	421
Nominal water flow rate - Cooling	l/s	29.2	33.7	37.2	41.3	43.5	48.1	52.5	64.6
Nominal Water pressure drop - Cooling	kPa	42	49	47	57	62	58	68	44
Insulation material (4)		CC							
AIR HEAT EXCHANGER									
Type (5)	---	HFP							
FAN									
Type (6)	---	DPT							
Drive (7)	---	DOL							
Diameter	mm	800	800	800	800	800	800	800	800
Nominal air flow	l/s	41007	41007	41007	49209	49209	57410	65611	82014
Quantity	No.	10	10	10	12	12	14	16	20
Speed	rpm	700	700	700	700	700	700	700	700
Motor input	kW	7.8	7.8	7.8	9.4	9.4	11.0	12.5	15.7
COMPRESSOR									
Type	---	Asymm Single Screw							
Oil charge	l	38	38	38	44	50	50	50	75
Quantity	No.	2	2	2	2	2	2	2	3
SOUND LEVEL									
Sound Power - Cooling	dB(A)	92	92	92	93	93	94	94	95
Sound Pressure - Cooling (8)	dB(A)	71	72	72	72	73	73	73	73
REFRIGERANT CIRCUIT									
Refrigerant type	---	R134a							
Refrigerant charge	kg	128	128	128	146	144	162	178	260
N. of circuits	No.	2	2	2	2	2	2	2	3
PIPING CONNECTIONS									
Evaporator water inlet/outlet		168.3 mm	219.1 mm						

Fluid: Water

(1) Cooling capacity, unit power input in cooling and EER are based on the following conditions: evaporator 12.0/7.0°C; ambient 35.0°C, unit at full load operation;

(2) GPSS: Galvanized and Painted Steel Sheet; (3) PHE: Plate Heat Exchanger --- S&T: Single Pass Shell & Tube

(4) CC: Closed Cell; (5) HFP: High efficiency fin and tube type with integral subcooler

(6) DPT: Direct Propeller Type; (7) DOL: Direct On Line - VFD: Inverter - BRS: Brushless

(8) The values are according to ISO 3744 and are referred to: evaporator 12/7°C, ambient 35°C, full load operation.

**EWAD C-SR**

<b>MODEL</b>		<b>C14</b>	<b>C15</b>	<b>C16</b>					
Capacity - Cooling (1)	kW	1454	1539	1605					
Capacity control - Type	---	Stepless	Stepless	Stepless					
Capacity control - Minimum capacity	%	7.0	7.0	7.0					
Unit power input - Cooling (1)	kW	587	614	658					
EER (1)	---	2.48	2.51	2.44					
ESEER	---	3.76	3.79	3.72					
IPLV	---	4.11	4.12	4.06					
<b>CASING</b>									
Colour	---	IW	IW	IW					
Material (2)	---	GPSS	GPSS	GPSS					
<b>DIMENSIONS</b>									
Height	mm	2540	2540	2540					
Width	mm	2285	2285	2285					
Length	mm	10185	11085	11085					
<b>WEIGHT</b>									
Unit Weight	kg	10770	11150	11210					
Operating Weight	kg	11170	11550	11700					
<b>WATER HEAT EXCHANGER</b>									
Type (3)	---	S&T	S&T	S&T					
Water Volume	l	408	408	474					
Nominal water flow rate - Cooling	l/s	69.4	73.4	76.6					
Nominal Water pressure drop - Cooling	kPa	56	62	68					
Insulation material (4)		CC	CC	CC					
<b>AIR HEAT EXCHANGER</b>									
Type (5)	---	HFP	HFP	HFP					
<b>FAN</b>									
Type (6)	---	DPT	DPT	DPT					
Drive (7)	---	DOL	DOL	DOL					
Diameter	mm	800	800	800					
Nominal air flow	l/s	82014	90216	90216					
Quantity	No.	20	22	22					
Speed	rpm	700	700	700					
Motor input	kW	15.7	17.3	17.3					
<b>COMPRESSOR</b>									
Type	---	Asymm Single Screw	Asymm Single Screw	Asymm Single Screw					
Oil charge	l	75	75	75					
Quantity	No.	3	3	3					
<b>SOUND LEVEL</b>									
Sound Power - Cooling	dB(A)	95	95	95					
Sound Pressure - Cooling (8)	dB(A)	73	73	73					
<b>REFRIGERANT CIRCUIT</b>									
Refrigerant type	---	R134a	R134a	R134a					
Refrigerant charge	kg	260	261	261					
N. of circuits	No.	3	3	3					
<b>PIPING CONNECTIONS</b>									
Evaporator water inlet/outlet		219.1 mm	219.1 mm	219.1 mm					

**Fluid:** Water

(1) Cooling capacity, unit power input in cooling and EER are based on the following conditions: evaporator 12.0/7.0°C; ambient 35.0°C, unit at full load operation;

(2) GPSS: Galvanized and Painted Steel Sheet; (3) PHE: Plate Heat Exchanger --- S&amp;T: Single Pass Shell &amp; Tube

(4) CC: Closed Cell; (5) HFP: High efficiency fin and tube type with integral subcooler

(6) DPT: Direct Propeller Type; (7) DOL: Direct On Line - VFD: Inverter - BRS: Brushless

(8) The values are according to ISO 3744 and are referred to: evaporator 12/7°C, ambient 35°C, full load operation.

**EWAD C-XS**

<b>MODEL</b>		<b>760</b>	<b>830</b>	<b>890</b>	<b>990</b>	<b>C10</b>	<b>C11</b>	<b>C12</b>	<b>C13</b>
Capacity - Cooling (1)	kW	751	825	883	994	1066	1188	1271	1339
Capacity control - Type	---	Stepless							
Capacity control - Minimum capacity	%	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
Unit power input - Cooling (1)	kW	236	257	282	312	343	369	407	417
EER (1)	---	3.18	3.21	3.13	3.19	3.11	3.22	3.13	3.21
ESEER	---	3.92	4.03	3.90	4.01	3.95	4.04	3.92	4.18
IPLV	---	4.36	4.36	4.32	4.36	4.32	4.39	4.35	4.47
<b>CASING</b>									
Colour	---	IW							
Material (2)	---	GPSS							
<b>DIMENSIONS</b>									
Height	mm	2540	2540	2540	2540	2540	2540	2540	2540
Width	mm	2285	2285	2285	2285	2285	2285	2285	2285
Length	mm	6185	7085	7085	7985	7985	9785	9785	9785
<b>WEIGHT</b>									
Unit Weight	kg	5990	6340	6360	7190	7470	8220	8240	8900
Operating Weight	kg	6240	6580	6600	7600	7870	8610	8630	9890
<b>WATER HEAT EXCHANGER</b>									
Type (3)	---	S&T							
Water Volume	l	251	243	243	403	403	386	386	979
Nominal water flow rate - Cooling	l/s	35.8	39.3	42.1	47.4	50.9	56.7	60.6	63.9
Nominal Water pressure drop - Cooling	kPa	80	56	63	60	68	45	51	67
Insulation material (4)		CC							
<b>AIR HEAT EXCHANGER</b>									
Type (5)	---	HFP							
<b>FAN</b>									
Type (6)	---	DPT							
Drive (7)	---	DOL							
Diameter	mm	800	800	800	800	800	800	800	800
Nominal air flow	l/s	64131	74819	74819	85508	85508	106885	106885	106885
Quantity	No.	12	14	14	16	16	20	20	20
Speed	rpm	900	900	900	900	900	900	900	900
Motor input	kW	21.0	24.5	24.5	28.0	28.0	35.0	35.0	35.0
<b>COMPRESSOR</b>									
Type	---	Asymm Single Screw							
Oil charge	l	38	38	38	44	50	50	50	50
Quantity	No.	2	2	2	2	2	2	2	2
<b>SOUND LEVEL</b>									
Sound Power - Cooling	dB(A)	100	101	101	101	102	102	103	103
Sound Pressure - Cooling (8)	dB(A)	80	80	80	80	81	80	80	80
<b>REFRIGERANT CIRCUIT</b>									
Refrigerant type	---	R134a							
Refrigerant charge	kg	146	162	162	182	182	214	214	225
N. of circuits	No.	2	2	2	2	2	2	2	2
<b>PIPING CONNECTIONS</b>									
Evaporator water inlet/outlet		168.3 mm	168.3 mm	168.3 mm	219.1 mm	219.1 mm	219.1 mm	219.1 mm	273 mm

**Fluid:** Water

(1) Cooling capacity, unit power input in cooling and EER are based on the following conditions: evaporator 12.0/7.0°C; ambient 35.0°C, unit at full load operation;

(2) GPSS: Galvanized and Painted Steel Sheet; (3) PHE: Plate Heat Exchanger --- S&amp;T: Single Pass Shell &amp; Tube

(4) CC: Closed Cell; (5) HFP: High efficiency fin and tube type with integral subcooler

(6) DPT: Direct Propeller Type; (7) DOL: Direct On Line - VFD: Inverter - BRS: Brushless

(8) The values are according to ISO 3744 and are referred to: evaporator 12/7°C, ambient 35°C, full load operation.

**EWAD C-XS**

<b>MODEL</b>		<b>C16</b>	<b>C17</b>	<b>C18</b>	<b>C19</b>			
Capacity - Cooling (1)	kW	1585	1674	1756	1846			
Capacity control - Type	---	Stepless	Stepless	Stepless	Stepless			
Capacity control - Minimum capacity	%	7.0	7.0	7.0	7.0			
Unit power input - Cooling (1)	kW	512	542	571	600			
EER (1)	---	3.10	3.09	3.08	3.08			
ESEER	---	4.07	4.06	4.02	4.04			
IPLV	---	4.41	4.39	4.35	4.36			
<b>CASING</b>								
Colour	---	IW	IW	IW	IW			
Material (2)	---	GPSS	GPSS	GPSS	GPSS			
<b>DIMENSIONS</b>								
Height	mm	2540	2540	2540	2540			
Width	mm	2285	2285	2285	2285			
Length	mm	11985	12885	13785	14685			
<b>WEIGHT</b>								
Unit Weight	kg	11570	11900	12260	12600			
Operating Weight	kg	12430	12760	13140	13470			
<b>WATER HEAT EXCHANGER</b>								
Type (3)	---	S&T	S&T	S&T	S&T			
Water Volume	l	850	850	871	850			
Nominal water flow rate - Cooling	l/s	75.6	79.8	83.8	88.1			
Nominal Water pressure drop - Cooling	kPa	61	68	67	74			
Insulation material (4)		CC	CC	CC	CC			
<b>AIR HEAT EXCHANGER</b>								
Type (5)	---	HFP	HFP	HFP	HFP			
<b>FAN</b>								
Type (6)	---	DPT	DPT	DPT	DPT			
Drive (7)	---	DOL	DOL	DOL	DOL			
Diameter	mm	800	800	800	800			
Nominal air flow	l/s	128262	138950	149639	160327			
Quantity	No.	24	26	28	30			
Speed	rpm	900	900	900	900			
Motor input	kW	42.0	45.5	49.0	52.5			
<b>COMPRESSOR</b>								
Type	---	Asymm Single Screw	Asymm Single Screw	Asymm Single Screw	Asymm Single Screw			
Oil charge	l	75	75	75	75			
Quantity	No.	3	3	3	3			
<b>SOUND LEVEL</b>								
Sound Power - Cooling	dB(A)	103	104	104	104			
Sound Pressure - Cooling (8)	dB(A)	81	81	81	81			
<b>REFRIGERANT CIRCUIT</b>								
Refrigerant type	---	R134a	R134a	R134a	R134a			
Refrigerant charge	kg	297	312	328	343			
N. of circuits	No.	3	3	3	3			
<b>PIPING CONNECTIONS</b>								
Evaporator water inlet/outlet		273 mm	273 mm	273 mm	273 mm			

**Fluid:** Water

(1) Cooling capacity, unit power input in cooling and EER are based on the following conditions: evaporator 12.0/7.0°C; ambient 35.0°C, unit at full load operation;

(2) GPSS: Galvanized and Painted Steel Sheet; (3) PHE: Plate Heat Exchanger --- S&amp;T: Single Pass Shell &amp; Tube

(4) CC: Closed Cell; (5) HFP: High efficiency fin and tube type with integral subcooler

(6) DPT: Direct Propeller Type; (7) DOL: Direct On Line - VFD: Inverter - BRS: Brushless

(8) The values are according to ISO 3744 and are referred to: evaporator 12/7°C, ambient 35°C, full load operation.

# TECHNICAL SPECIFICATIONS (Heat Recovery OFF)

## EWAD C-XL

MODEL		760	830	890	990	C10	C11	C12	C13
Capacity - Cooling (1)	kW	751	825	883	994	1066	1188	1271	1339
Capacity control - Type	---	Stepless							
Capacity control - Minimum capacity	%	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
Unit power input - Cooling (1)	kW	236	257	282	312	343	369	407	417
EER (1)	---	3.18	3.21	3.13	3.19	3.11	3.22	3.13	3.21
ESEER	---	3.92	4.03	3.90	4.01	3.95	4.04	3.92	4.18
IPLV	---	4.36	4.36	4.32	4.36	4.32	4.39	4.35	4.47
CASING									
Colour	---	IW							
Material (2)	---	GPSS							
DIMENSIONS									
Height	mm	2540	2540	2540	2540	2540	2540	2540	2540
Width	mm	2285	2285	2285	2285	2285	2285	2285	2285
Length	mm	6185	7085	7085	7985	7985	9785	9785	9785
WEIGHT									
Unit Weight	kg	6280	6630	6650	7480	7760	8510	8530	9190
Operating Weight	kg	6520	6870	6890	7880	8160	8900	8920	10180
WATER HEAT EXCHANGER									
Type (3)	---	S&T							
Water Volume	l	251	243	243	403	403	386	386	979
Nominal water flow rate - Cooling	l/s	35.8	39.3	42.1	47.4	50.9	56.7	60.6	63.9
Nominal Water pressure drop - Cooling	kPa	80	56	63	60	68	45	51	67
Insulation material (4)		CC							
AIR HEAT EXCHANGER									
Type (5)	---	HFP							
FAN									
Type (6)	---	DPT							
Drive (7)	---	DOL							
Diameter	mm	800	800	800	800	800	800	800	800
Nominal air flow	l/s	64131	74819	74819	85508	85508	106885	106885	106885
Quantity	No.	12	14	14	16	16	20	20	20
Speed	rpm	900	900	900	900	900	900	900	900
Motor input	kW	21.0	24.5	24.5	28.0	28.0	35.0	35.0	35.0
COMPRESSOR									
Type	---	Asymm Single Screw							
Oil charge	l	38	38	38	44	50	50	50	50
Quantity	No.	2	2	2	2	2	2	2	2
SOUND LEVEL									
Sound Power - Cooling	dB(A)	97	97	97	98	98	99	99	99
Sound Pressure - Cooling (8)	dB(A)	76	77	77	77	77	77	77	77
REFRIGERANT CIRCUIT									
Refrigerant type	---	R134a							
Refrigerant charge	kg	146	162	162	182	182	214	214	225
N. of circuits	No.	2	2	2	2	2	2	2	2
PIPING CONNECTIONS									
Evaporator water inlet/outlet		168.3 mm	168.3 mm	168.3 mm	219.1 mm	219.1 mm	219.1 mm	219.1 mm	273 mm

Fluid: Water

(1) Cooling capacity, unit power input in cooling and EER are based on the following conditions: evaporator 12.0/7.0°C; ambient 35.0°C, unit at full load operation;

(2) GPSS: Galvanized and Painted Steel Sheet; (3) PHE: Plate Heat Exchanger --- S&T: Single Pass Shell & Tube

(4) CC: Closed Cell; (5) HFP: High efficiency fin and tube type with integral subcooler

(6) DPT: Direct Propeller Type; (7) DOL: Direct On Line - VFD: Inverter - BRS: Brushless

(8) The values are according to ISO 3744 and are referred to: evaporator 12/7°C, ambient 35°C, full load operation.

**EWAD C-XL**

<b>MODEL</b>		<b>C16</b>	<b>C17</b>	<b>C18</b>	<b>C19</b>				
Capacity - Cooling (1)	kW	1585	1674	1756	1846				
Capacity control - Type	---	Stepless	Stepless	Stepless	Stepless				
Capacity control - Minimum capacity	%	7.0	7.0	7.0	7.0				
Unit power input - Cooling (1)	kW	512	542	571	600				
EER (1)	---	3.10	3.09	3.08	3.08				
ESEER	---	4.07	4.06	4.02	4.04				
IPLV	---	4.41	4.39	4.35	4.36				
<b>CASING</b>									
Colour	---	IW	IW	IW	IW				
Material (2)	---	GPSS	GPSS	GPSS	GPSS				
<b>DIMENSIONS</b>									
Height	mm	2540	2540	2540	2540				
Width	mm	2285	2285	2285	2285				
Length	mm	11985	12885	13785	14685				
<b>WEIGHT</b>									
Unit Weight	kg	12010	12350	12700	13040				
Operating Weight	kg	12870	13200	13580	13910				
<b>WATER HEAT EXCHANGER</b>									
Type (3)	---	S&T	S&T	S&T	S&T				
Water Volume	l	850	850	871	850				
Nominal water flow rate - Cooling	l/s	75.6	79.8	83.8	88.1				
Nominal Water pressure drop - Cooling	kPa	61	68	67	74				
Insulation material (4)		CC	CC	CC	CC				
<b>AIR HEAT EXCHANGER</b>									
Type (5)	---	HFP	HFP	HFP	HFP				
<b>FAN</b>									
Type (6)	---	DPT	DPT	DPT	DPT				
Drive (7)	---	DOL	DOL	DOL	DOL				
Diameter	mm	800	800	800	800				
Nominal air flow	l/s	128262	138950	149639	160327				
Quantity	No.	24	26	28	30				
Speed	rpm	900	900	900	900				
Motor input	kW	42.0	45.5	49.0	52.5				
<b>COMPRESSOR</b>									
Type	---	Asymm Single Screw	Asymm Single Screw	Asymm Single Screw	Asymm Single Screw				
Oil charge	l	75	75	75	75				
Quantity	No.	3	3	3	3				
<b>SOUND LEVEL</b>									
Sound Power - Cooling	dB(A)	100	100	100	100				
Sound Pressure - Cooling (8)	dB(A)	77	77	78	78				
<b>REFRIGERANT CIRCUIT</b>									
Refrigerant type	---	R134a	R134a	R134a	R134a				
Refrigerant charge	kg	297	312	328	343				
N. of circuits	No.	3	3	3	3				
<b>PIPING CONNECTIONS</b>									
Evaporator water inlet/outlet		273 mm	273 mm	273 mm	273 mm				

**Fluid:** Water

(1) Cooling capacity, unit power input in cooling and EER are based on the following conditions: evaporator 12.0/7.0°C; ambient 35.0°C, unit at full load operation;

(2) GPSS: Galvanized and Painted Steel Sheet; (3) PHE: Plate Heat Exchanger --- S&amp;T: Single Pass Shell &amp; Tube

(4) CC: Closed Cell; (5) HFP: High efficiency fin and tube type with integral subcooler

(6) DPT: Direct Propeller Type; (7) DOL: Direct On Line - VFD: Inverter - BRS: Brushless

(8) The values are according to ISO 3744 and are referred to: evaporator 12/7°C, ambient 35°C, full load operation.

# TECHNICAL SPECIFICATIONS (Heat Recovery OFF)

## EWAD C-XR

MODEL		740	810	870	970	C10	C11	C12	C13
Capacity - Cooling (1)	kW	730	805	859	966	1031	1159	1237	1290
Capacity control - Type	---	Stepless							
Capacity control - Minimum capacity	%	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
Unit power input - Cooling (1)	kW	238	258	286	314	349	371	412	421
EER (1)	---	3.06	3.12	3.00	3.07	2.95	3.12	3.00	3.06
ESEER	---	4.18	4.25	4.09	4.23	4.13	4.26	4.12	4.22
IPLV	---	4.45	4.48	4.40	4.50	4.41	4.52	4.43	4.45
CASING									
Colour	---	IW							
Material (2)	---	GPSS							
DIMENSIONS									
Height	mm	2540	2540	2540	2540	2540	2540	2540	2540
Width	mm	2285	2285	2285	2285	2285	2285	2285	2285
Length	mm	6185	7085	7085	7985	7985	9785	9785	9785
WEIGHT									
Unit Weight	kg	6280	6630	6650	7480	7760	8510	8530	9190
Operating Weight	kg	6520	6870	6890	7880	8160	8900	8920	10180
WATER HEAT EXCHANGER									
Type (3)	---	S&T							
Water Volume	l	251	243	243	403	403	386	386	979
Nominal water flow rate - Cooling	l/s	34.8	38.4	41.0	46.1	49.2	55.3	59.0	61.5
Nominal Water pressure drop - Cooling	kPa	76	54	60	57	64	43	48	63
Insulation material (4)		CC							
AIR HEAT EXCHANGER									
Type (5)	---	HFP							
FAN									
Type (6)	---	DPT							
Drive (7)	---	DOL							
Diameter	mm	800	800	800	800	800	800	800	800
Nominal air flow	l/s	49209	57410	57410	65611	65611	82014	82014	82014
Quantity	No.	12	14	14	16	16	20	20	20
Speed	rpm	700	700	700	700	700	700	700	700
Motor input	kW	9.4	11.0	11.0	12.5	12.5	15.7	15.7	15.7
COMPRESSOR									
Type	---	Asymm Single Screw							
Oil charge	l	38	38	38	44	50	50	50	50
Quantity	No.	2	2	2	2	2	2	2	2
SOUND LEVEL									
Sound Power - Cooling	dB(A)	92	92	92	94	94	94	95	95
Sound Pressure - Cooling (8)	dB(A)	72	72	72	72	73	72	72	72
REFRIGERANT CIRCUIT									
Refrigerant type	---	R134a							
Refrigerant charge	kg	146	162	162	182	182	214	214	225
N. of circuits	No.	2	2	2	2	2	2	2	2
PIPING CONNECTIONS									
Evaporator water inlet/outlet		168.3 mm	168.3 mm	168.3 mm	219.1 mm	219.1 mm	219.1 mm	219.1 mm	273 mm

Fluid: Water

(1) Cooling capacity, unit power input in cooling and EER are based on the following conditions: evaporator 12.0/7.0°C; ambient 35.0°C, unit at full load operation;

(2) GPSS: Galvanized and Painted Steel Sheet; (3) PHE: Plate Heat Exchanger --- S&T: Single Pass Shell & Tube

(4) CC: Closed Cell; (5) HFP: High efficiency fin and tube type with integral subcooler

(6) DPT: Direct Propeller Type; (7) DOL: Direct On Line - VFD: Inverter - BRS: Brushless

(8) The values are according to ISO 3744 and are referred to: evaporator 12/7°C, ambient 35°C, full load operation.

**EWAD C-XR**

<b>MODEL</b>		<b>C16</b>	<b>C17</b>	<b>C18</b>	<b>C19</b>				
Capacity - Cooling (1)	kW	1536	1625	1708	1798				
Capacity control - Type	---	Stepless	Stepless	Stepless	Stepless				
Capacity control - Minimum capacity	%	7.0	7.0	7.0	7.0				
Unit power input - Cooling (1)	kW	520	550	576	607				
EER (1)	---	2.95	2.95	2.96	2.96				
ESEER	---	4.15	4.08	4.10	4.09				
IPLV	---	4.47	4.44	4.46	4.44				
<b>CASING</b>									
Colour	---	IW	IW	IW	IW				
Material (2)	---	GPSS	GPSS	GPSS	GPSS				
<b>DIMENSIONS</b>									
Height	mm	2540	2540	2540	2540				
Width	mm	2285	2285	2285	2285				
Length	mm	11985	12885	13785	14685				
<b>WEIGHT</b>									
Unit Weight	kg	12010	12350	12700	13040				
Operating Weight	kg	12870	13200	13580	13910				
<b>WATER HEAT EXCHANGER</b>									
Type (3)	---	S&T	S&T	S&T	S&T				
Water Volume	l	850	850	871	850				
Nominal water flow rate - Cooling	l/s	73.3	77.5	81.5	85.8				
Nominal Water pressure drop - Cooling	kPa	58	64	64	70				
Insulation material (4)		CC	CC	CC	CC				
<b>AIR HEAT EXCHANGER</b>									
Type (5)	---	HFP	HFP	HFP	HFP				
<b>FAN</b>									
Type (6)	---	DPT	DPT	DPT	DPT				
Drive (7)	---	DOL	DOL	DOL	DOL				
Diameter	mm	800	800	800	800				
Nominal air flow	l/s	98417	106619	114820	123021				
Quantity	No.	24	26	28	30				
Speed	rpm	700	700	700	700				
Motor input	kW	18.8	20.4	22.0	23.5				
<b>COMPRESSOR</b>									
Type	---	Asymm Single Screw	Asymm Single Screw	Asymm Single Screw	Asymm Single Screw				
Oil charge	l	75	75	75	75				
Quantity	No.	3	3	3	3				
<b>SOUND LEVEL</b>									
Sound Power - Cooling	dB(A)	95	96	96	96				
Sound Pressure - Cooling (8)	dB(A)	73	73	73	73				
<b>REFRIGERANT CIRCUIT</b>									
Refrigerant type	---	R134a	R134a	R134a	R134a				
Refrigerant charge	kg	297	312	328	343				
N. of circuits	No.	3	3	3	3				
<b>PIPING CONNECTIONS</b>									
Evaporator water inlet/outlet		273 mm	273 mm	273 mm	273 mm				

Fluid: Water

(1) Cooling capacity, unit power input in cooling and EER are based on the following conditions: evaporator 12.0/7.0°C; ambient 35.0°C, unit at full load operation;

(2) GPSS: Galvanized and Painted Steel Sheet; (3) PHE: Plate Heat Exchanger --- S&T: Single Pass Shell & Tube

(4) CC: Closed Cell; (5) HFP: High efficiency fin and tube type with integral subcooler

(6) DPT: Direct Propeller Type; (7) DOL: Direct On Line - VFD: Inverter - BRS: Brushless

(8) The values are according to ISO 3744 and are referred to: evaporator 12/7°C, ambient 35°C, full load operation.

**EWAD C-PS**

<b>MODEL</b>		<b>820</b>	<b>890</b>	<b>980</b>	<b>C11</b>	<b>C12</b>	<b>C13</b>	<b>C14</b>	
Capacity - Cooling (1)	kW	816	885	969	1067	1150	1270	1381	
Capacity control - Type	---	Stepless							
Capacity control - Minimum capacity	%	12.5	12.5	12.5	12.5	12.5	12.5	12.5	
Unit power input - Cooling (1)	kW	229	253	278	306	335	369	402	
EER (1)	---	3.56	3.50	3.48	3.48	3.43	3.44	3.43	
ESEER	---	4.33	4.39	4.31	4.44	4.28	4.33	4.21	
IPLV	---	4.66	4.55	4.58	4.56	4.60	4.53	4.60	
<b>CASING</b>									
Colour	---	IW							
Material (2)	---	GPSS							
<b>DIMENSIONS</b>									
Height	mm	2540	2540	2540	2540	2540	2540	2540	
Width	mm	2285	2285	2285	2285	2285	2285	2285	
Length	mm	8885	8885	8885	9785	9785	11085	11985	
<b>WEIGHT</b>									
Unit Weight	kg	7530	7530	7660	8290	8550	9390	9730	
Operating Weight	kg	8130	8130	8700	9330	9590	10380	10720	
<b>WATER HEAT EXCHANGER</b>									
Type (3)	---	S&T							
Water Volume	l	599	599	1043	1027	1027	995	979	
Nominal water flow rate - Cooling	l/s	38.9	42.2	46.2	50.9	54.9	60.6	65.9	
Nominal Water pressure drop - Cooling	kPa	57	66	30	60	69	60	69	
Insulation material (4)		CC							
<b>AIR HEAT EXCHANGER</b>									
Type (5)	---	HFP							
<b>FAN</b>									
Type (6)	---	DPT							
Drive (7)	---	DOL							
Diameter	mm	800	800	800	800	800	800	800	
Nominal air flow	l/s	96196	96196	96196	106885	106885	117573	128262	
Quantity	No.	18	18	18	20	20	22	24	
Speed	rpm	900	900	900	900	900	900	900	
Motor input	kW	31.5	31.5	31.5	35.0	35.0	38.5	42.0	
<b>COMPRESSOR</b>									
Type	---	Asymm Single Screw							
Oil charge	l	38	38	38	44	50	50	50	
Quantity	No.	2	2	2	2	2	2	2	
<b>SOUND LEVEL</b>									
Sound Power - Cooling	dB(A)	101	101	101	102	102	103	103	
Sound Pressure - Cooling (8)	dB(A)	80	80	80	80	81	80	81	
<b>REFRIGERANT CIRCUIT</b>									
Refrigerant type	---	R134a							
Refrigerant charge	kg	204	202	204	220	220	252	254	
N. of circuits	No.	2	2	2	2	2	2	2	
<b>PIPING CONNECTIONS</b>									
Evaporator water inlet/outlet		219.1 mm	219.1 mm	273 mm	273 mm	273 mm	273 mm	273 mm	

**Fluid:** Water

(1) Cooling capacity, unit power input in cooling and EER are based on the following conditions: evaporator 12.0/7.0°C; ambient 35.0°C, unit at full load operation;

(2) GPSS: Galvanized and Painted Steel Sheet; (3) PHE: Plate Heat Exchanger --- S&amp;T: Single Pass Shell &amp; Tube

(4) CC: Closed Cell; (5) HFP: High efficiency fin and tube type with integral subcooler

(6) DPT: Direct Propeller Type; (7) DOL: Direct On Line - VFD: Inverter - BRS: Brushless

(8) The values are according to ISO 3744 and are referred to: evaporator 12/7°C, ambient 35°C, full load operation.

# TECHNICAL SPECIFICATIONS (Heat Recovery OFF)

## EWAD C-PL

MODEL		820	890	980	C11	C12	C13	C14	
Capacity - Cooling (1)	kW	816	885	969	1067	1150	1270	1381	
Capacity control - Type	---	Stepless							
Capacity control - Minimum capacity	%	12.5	12.5	12.5	12.5	12.5	12.5	12.5	
Unit power input - Cooling (1)	kW	229	253	278	306	335	369	402	
EER (1)	---	3.56	3.50	3.48	3.48	3.43	3.44	3.43	
ESEER	---	4.33	4.39	4.31	4.44	4.28	4.33	4.21	
IPLV	---	4.66	4.55	4.58	4.56	4.60	4.53	4.60	
CASING									
Colour	---	IW							
Material (2)	---	GPSS							
DIMENSIONS									
Height	mm	2540	2540	2540	2540	2540	2540	2540	
Width	mm	2285	2285	2285	2285	2285	2285	2285	
Length	mm	8885	8885	8885	9785	9785	11085	11985	
WEIGHT									
Unit Weight	kg	7820	7820	7950	8580	8840	10380	10720	
Operating Weight	kg	8420	8420	8990	9620	9880	10670	11010	
WATER HEAT EXCHANGER									
Type (3)	---	S&T							
Water Volume	l	599	599	1043	1027	1027	995	979	
Nominal water flow rate - Cooling	l/s	38.9	42.2	46.2	50.9	54.9	60.6	65.9	
Nominal Water pressure drop - Cooling	kPa	57	66	30	60	69	60	69	
Insulation material (4)		CC							
AIR HEAT EXCHANGER									
Type (5)	---	HFP							
FAN									
Type (6)	---	DPT							
Drive (7)	---	DOL							
Diameter	mm	800	800	800	800	800	800	800	
Nominal air flow	l/s	96196	96196	96196	106885	106885	117573	128262	
Quantity	No.	18	18	18	20	20	22	24	
Speed	rpm	900	900	900	900	900	900	900	
Motor input	kW	31.5	31.5	31.5	35.0	35.0	38.5	42.0	
COMPRESSOR									
Type	---	Asymm Single Screw							
Oil charge	l	38	38	38	44	50	50	50	
Quantity	No.	2	2	2	2	2	2	2	
SOUND LEVEL									
Sound Power - Cooling	dB(A)	98	98	98	99	100	99	100	
Sound Pressure - Cooling (8)	dB(A)	77	77	77	77	77	77	77	
REFRIGERANT CIRCUIT									
Refrigerant type	---	R134a							
Refrigerant charge	kg	204	202	204	220	220	252	254	
N. of circuits	No.	2	2	2	2	2	2	2	
PIPING CONNECTIONS									
Evaporator water inlet/outlet		219.1 mm	219.1 mm	273 mm	273 mm	273 mm	273 mm	273 mm	

Fluid: Water

(1) Cooling capacity, unit power input in cooling and EER are based on the following conditions: evaporator 12.0/7.0°C; ambient 35.0°C, unit at full load operation;

(2) GPSS: Galvanized and Painted Steel Sheet; (3) PHE: Plate Heat Exchanger --- S&T: Single Pass Shell & Tube

(4) CC: Closed Cell; (5) HFP: High efficiency fin and tube type with integral subcooler

(6) DPT: Direct Propeller Type; (7) DOL: Direct On Line - VFD: Inverter - BRS: Brushless

(8) The values are according to ISO 3744 and are referred to: evaporator 12/7°C, ambient 35°C, full load operation.

**EWAD C-PR**

<b>MODEL</b>		<b>810</b>	<b>880</b>	<b>960</b>	<b>C10</b>	<b>C11</b>	<b>C13</b>	<b>C14</b>	
Capacity - Cooling (1)	kW	804	869	949	1045	1123	1241	1348	
Capacity control - Type	---	Stepless							
Capacity control - Minimum capacity	%	12.5	12.5	12.5	12.5	12.5	12.5	12.5	
Unit power input - Cooling (1)	kW	222	248	277	304	336	370	403	
EER (1)	---	3.62	3.50	3.43	3.44	3.35	3.36	3.35	
ESEER	---	4.51	4.45	4.40	4.47	4.38	4.41	4.39	
IPLV	---	4.90	4.75	4.76	4.73	4.68	4.68	4.68	
<b>CASING</b>									
Colour	---	IW							
Material (2)	---	GPSS							
<b>DIMENSIONS</b>									
Height	mm	2540	2540	2540	2540	2540	2540	2540	
Width	mm	2285	2285	2285	2285	2285	2285	2285	
Length	mm	8885	8885	8885	9785	9785	11085	11985	
<b>WEIGHT</b>									
Unit Weight	kg	7820	7820	7950	8580	8840	10380	10720	
Operating Weight	kg	8420	8420	8990	9620	9880	10670	11010	
<b>WATER HEAT EXCHANGER</b>									
Type (3)	---	S&T							
Water Volume	l	599	599	1043	1027	1027	995	979	
Nominal water flow rate - Cooling	l/s	38.4	41.5	45.3	49.9	53.6	59.2	64.3	
Nominal Water pressure drop - Cooling	kPa	55	64	29	58	66	57	66	
Insulation material (4)		CC							
<b>AIR HEAT EXCHANGER</b>									
Type (5)	---	HFP							
<b>FAN</b>									
Type (6)	---	DPT							
Drive (7)	---	DOL							
Diameter	mm	800	800	800	800	800	800	800	
Nominal air flow	l/s	73813	73813	73813	82014	82014	90216	98417	
Quantity	No.	18	18	18	20	20	22	24	
Speed	rpm	700	700	700	700	700	700	700	
Motor input	kW	14.1	14.1	14.1	15.7	15.7	17.3	18.8	
<b>COMPRESSOR</b>									
Type	---	Asymm Single Screw							
Oil charge	l	38	38	38	44	50	50	50	
Quantity	No.	2	2	2	2	2	2	2	
<b>SOUND LEVEL</b>									
Sound Power - Cooling	dB(A)	93	93	93	93	94	94	94	
Sound Pressure - Cooling (8)	dB(A)	71	71	71	72	72	72	72	
<b>REFRIGERANT CIRCUIT</b>									
Refrigerant type	---	R134a							
Refrigerant charge	kg	204	202	204	220	220	252	254	
N. of circuits	No.	2	2	2	2	2	2	2	
<b>PIPING CONNECTIONS</b>									
Evaporator water inlet/outlet		219.1 mm	219.1 mm	273 mm	273 mm	273 mm	273 mm	273 mm	

**Fluid:** Water

(1) Cooling capacity, unit power input in cooling and EER are based on the following conditions: evaporator 12.0/7.0°C; ambient 35.0°C, unit at full load operation;

(2) GPSS: Galvanized and Painted Steel Sheet; (3) PHE: Plate Heat Exchanger --- S&amp;T: Single Pass Shell &amp; Tube

(4) CC: Closed Cell; (5) HFP: High efficiency fin and tube type with integral subcooler

(6) DPT: Direct Propeller Type; (7) DOL: Direct On Line - VFD: Inverter - BRS: Brushless

(8) The values are according to ISO 3744 and are referred to: evaporator 12/7°C, ambient 35°C, full load operation.

**EWAD C-SS**

<b>MODEL</b>		<b>650</b>	<b>740</b>	<b>830</b>	<b>910</b>	<b>970</b>	<b>C11</b>	<b>C12</b>	<b>C15</b>
Capacity - Cooling	kW	593	722	824	888	952	1037	1111	1501
Unit power input - Cooling	kW	232	266	294	321	348	381	416	556
<b>Heat recovery capacity</b>	<b>kW</b>	<b>696</b>	<b>834</b>	<b>944</b>	<b>1021</b>	<b>1098</b>	<b>1197</b>	<b>1289</b>	<b>1736</b>
<b>HEAT RECOVERY EXCHANGER</b>									
Type		PHE	PHE	PHE	PHE	PHE	PHE	PHE	PHE
Water temperature in	°C	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
Water temperature out	°C	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
Nominal water flow rate	l/s	33.6	40.3	45.6	49.3	53.0	57.8	62.2	83.9
Nominal Water pressure drop	kPa	35	43	29	39	39	52	52	51
<b>EVAPORATOR</b>									
Nominal water flow rate	l/s	28.3	34.4	39.3	42.4	45.4	49.5	53.0	71.6
Nominal Water pressure drop	kPa	40	51	52	59	67	61	69	59

<b>MODEL</b>		<b>C16</b>	<b>C17</b>						
Capacity - Cooling	kW	1575	1676						
Unit power input - Cooling	kW	590	624						
<b>Heat recovery capacity</b>	<b>kW</b>	<b>1827</b>	<b>1941</b>						
<b>HEAT RECOVERY EXCHANGER</b>									
Type		PHE	PHE						
Water temperature in	°C	40.0	40.0						
Water temperature out	°C	45.0	45.0						
Nominal water flow rate	l/s	88.3	93.6						
Nominal Water pressure drop	kPa	51	53						
<b>EVAPORATOR</b>									
Nominal water flow rate	l/s	75.2	80.0						
Nominal Water pressure drop	kPa	65	72						

**EWAD C-SL**

<b>MODEL</b>		<b>650</b>	<b>740</b>	<b>830</b>	<b>910</b>	<b>970</b>	<b>C11</b>	<b>C12</b>	<b>C15</b>
Capacity - Cooling	kW	593	722	824	888	952	1037	1111	1501
Unit power input - Cooling	kW	232	266	294	321	348	381	416	556
<b>Heat recovery capacity</b>	<b>kW</b>	<b>696</b>	<b>834</b>	<b>944</b>	<b>1021</b>	<b>1098</b>	<b>1197</b>	<b>1289</b>	<b>1736</b>
<b>HEAT RECOVERY EXCHANGER</b>									
Type		PHE	PHE	PHE	PHE	PHE	PHE	PHE	PHE
Water temperature in	°C	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
Water temperature out	°C	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
Nominal water flow rate	l/s	33.6	40.3	45.6	49.3	53.0	57.8	62.2	83.9
Nominal Water pressure drop	kPa	35	43	29	39	39	52	52	51
<b>EVAPORATOR</b>									
Nominal water flow rate	l/s	28.3	34.4	39.3	42.4	45.4	49.5	53.0	71.6
Nominal Water pressure drop	kPa	40	51	52	59	67	61	69	59

<b>MODEL</b>		<b>C16</b>	<b>C17</b>						
Capacity - Cooling	kW	1575	1676						
Unit power input - Cooling	kW	590	624						
<b>Heat recovery capacity</b>	<b>kW</b>	<b>1827</b>	<b>1941</b>						
<b>HEAT RECOVERY EXCHANGER</b>									
Type		PHE	PHE						
Water temperature in	°C	40.0	40.0						
Water temperature out	°C	45.0	45.0						
Nominal water flow rate	l/s	88.3	93.6						
Nominal Water pressure drop	kPa	51	53						
<b>EVAPORATOR</b>									
Nominal water flow rate	l/s	75.2	80.0						
Nominal Water pressure drop	kPa	65	72						

# TOTAL HEAT RECOVERY MODE (Heat Recovery ON)

## EWAD C-SR

MODEL		620	720	790	880	920	C10	C11	C13
Capacity - Cooling	kW	593	722	824	889	953	1037	1111	1364
Unit power input - Cooling	kW	230	264	290	317	345	377	410	511
<b>Heat recovery capacity</b>	<b>kW</b>	<b>697</b>	<b>835</b>	<b>943</b>	<b>1022</b>	<b>1099</b>	<b>1197</b>	<b>1288</b>	<b>1588</b>
<b>HEAT RECOVERY EXCHANGER</b>									
Type		PHE	PHE	PHE	PHE	PHE	PHE	PHE	PHE
Water temperature in	°C	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
Water temperature out	°C	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
Nominal water flow rate	l/s	33.6	40.3	45.6	49.3	53.0	57.8	62.2	76.8
Nominal Water pressure drop	kPa	35	43	29	39	39	52	52	36
<b>EVAPORATOR</b>									
Nominal water flow rate	l/s	28.3	34.5	39.3	42.4	45.4	49.5	53.0	65.1
Nominal Water pressure drop	kPa	40	51	52	59	67	61	69	45

MODEL		C14	C15	C16					
Capacity - Cooling	kW	1501	1576	1659					
Unit power input - Cooling	kW	550	582	615					
<b>Heat recovery capacity</b>	<b>kW</b>	<b>1737</b>	<b>1827</b>	<b>1925</b>					
<b>HEAT RECOVERY EXCHANGER</b>									
Type		PHE	PHE	PHE					
Water temperature in	°C	40.0	40.0	40.0					
Water temperature out	°C	45.0	45.0	45.0					
Nominal water flow rate	l/s	83.9	88.3	93.0					
Nominal Water pressure drop	kPa	51	51	52					
<b>EVAPORATOR</b>									
Nominal water flow rate	l/s	71.6	75.2	79.2					
Nominal Water pressure drop	kPa	59	65	72					

## EWAD C-XS

MODEL		760	830	890	990	C10	C11	C12	C13
Capacity - Cooling	kW	711	775	837	940	1017	1119	1208	1275
Unit power input - Cooling	kW	247	271	295	325	355	389	425	429
<b>Heat recovery capacity</b>	<b>kW</b>	<b>809</b>	<b>884</b>	<b>956</b>	<b>1068</b>	<b>1158</b>	<b>1273</b>	<b>1378</b>	<b>1439</b>
<b>HEAT RECOVERY EXCHANGER</b>									
Type		PHE	PHE	PHE	PHE	PHE	PHE	PHE	PHE
Water temperature in	°C	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
Water temperature out	°C	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
Nominal water flow rate	l/s	39.0	42.7	46.2	51.5	55.8	61.5	66.6	69.4
Nominal Water pressure drop	kPa	48	48	30	43	43	60	60	65
<b>EVAPORATOR</b>									
Nominal water flow rate	l/s	33.9	37.0	39.9	44.8	48.5	53.4	57.6	60.8
Nominal Water pressure drop	kPa	72	50	58	54	63	40	46	61

MODEL		C16	C17	C18	C19				
Capacity - Cooling	kW	1514	1595	1668	1749				
Unit power input - Cooling	kW	530	565	598	631				
<b>Heat recovery capacity</b>	<b>kW</b>	<b>1725</b>	<b>1823</b>	<b>1913</b>	<b>2009</b>				
<b>HEAT RECOVERY EXCHANGER</b>									
Type		PHE	PHE	PHE	PHE				
Water temperature in	°C	40.0	40.0	40.0	40.0				
Water temperature out	°C	45.0	45.0	45.0	45.0				
Nominal water flow rate	l/s	83.4	88.0	92.2	96.9				
Nominal Water pressure drop	kPa	43	57	56	56				
<b>EVAPORATOR</b>									
Nominal water flow rate	l/s	72.2	76.1	79.6	83.5				
Nominal Water pressure drop	kPa	56	62	61	67				

# TOTAL HEAT RECOVERY MODE (Heat Recovery ON)

## EWAD C-XL

MODEL		760	830	890	990	C10	C11	C12	C13
Capacity - Cooling	kW	711	775	837	940	1017	1119	1208	1275
Unit power input - Cooling	kW	247	271	295	325	355	389	425	429
<b>Heat recovery capacity</b>	<b>kW</b>	<b>809</b>	<b>884</b>	<b>956</b>	<b>1068</b>	<b>1158</b>	<b>1273</b>	<b>1378</b>	<b>1439</b>
<b>HEAT RECOVERY EXCHANGER</b>									
Type		PHE							
Water temperature in	°C	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
Water temperature out	°C	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
Nominal water flow rate	l/s	39.0	42.7	46.2	51.5	55.8	61.5	66.6	69.4
Nominal Water pressure drop	kPa	48	48	30	43	43	60	60	65
<b>EVAPORATOR</b>									
Nominal water flow rate	l/s	33.9	37.0	39.9	44.8	48.5	53.4	57.6	60.8
Nominal Water pressure drop	kPa	72	50	58	54	63	40	46	61
MODEL		C16	C17	C18	C19				
Capacity - Cooling	kW	1514	1595	1668	1749				
Unit power input - Cooling	kW	530	565	598	631				
<b>Heat recovery capacity</b>	<b>kW</b>	<b>1725</b>	<b>1823</b>	<b>1913</b>	<b>2009</b>				
<b>HEAT RECOVERY EXCHANGER</b>									
Type		PHE	PHE	PHE	PHE				
Water temperature in	°C	40.0	40.0	40.0	40.0				
Water temperature out	°C	45.0	45.0	45.0	45.0				
Nominal water flow rate	l/s	83.4	88.0	92.2	96.9				
Nominal Water pressure drop	kPa	43	57	56	56				
<b>EVAPORATOR</b>									
Nominal water flow rate	l/s	72.2	76.1	79.6	83.5				
Nominal Water pressure drop	kPa	56	62	61	67				

## EWAD C-XR

MODEL		740	810	870	970	C10	C11	C12	C13
Capacity - Cooling	kW	711	776	838	939	1017	1119	1209	1270
Unit power input - Cooling	kW	244	268	292	322	351	385	420	423
<b>Heat recovery capacity</b>	<b>kW</b>	<b>809</b>	<b>884</b>	<b>957</b>	<b>1068</b>	<b>1158</b>	<b>1274</b>	<b>1379</b>	<b>1434</b>
<b>HEAT RECOVERY EXCHANGER</b>									
Type		PHE	PHE	PHE	PHE	PHE	PHE	PHE	PHE
Water temperature in	°C	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
Water temperature out	°C	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
Nominal water flow rate	l/s	39.0	42.7	46.2	51.5	55.8	61.5	66.6	69.2
Nominal Water pressure drop	kPa	48	48	30	43	43	60	60	64
<b>EVAPORATOR</b>									
Nominal water flow rate	l/s	33.9	37.0	40.0	44.8	48.5	53.4	57.7	60.6
Nominal Water pressure drop	kPa	72	50	58	54	63	40	46	61

MODEL		C16	C17	C18	C19				
Capacity - Cooling	kW	1513	1594	1667	1750				
Unit power input - Cooling	kW	523	558	589	624				
<b>Heat recovery capacity</b>	<b>kW</b>	<b>1724</b>	<b>1822</b>	<b>1911</b>	<b>2010</b>				
<b>HEAT RECOVERY EXCHANGER</b>									
Type		PHE	PHE	PHE	PHE				
Water temperature in	°C	40.0	40.0	40.0	40.0				
Water temperature out	°C	45.0	45.0	45.0	45.0				
Nominal water flow rate	l/s	83.1	88.0	92.2	97.2				
Nominal Water pressure drop	kPa	43	57	56	56				
<b>EVAPORATOR</b>									
Nominal water flow rate	l/s	72.2	76.0	79.6	83.5				
Nominal Water pressure drop	kPa	56	62	61	67				

### **EWAD C-PS**

<b>MODEL</b>		<b>820</b>	<b>890</b>	<b>980</b>	<b>C11</b>	<b>C12</b>	<b>C13</b>	<b>C14</b>	
Capacity - Cooling	kW	746	814	897	988	1073	1185	1287	
Unit power input - Cooling	kW	248	271	297	326	355	391	427	
<b>Heat recovery capacity</b>	<b>kW</b>	<b>839</b>	<b>917</b>	<b>1008</b>	<b>1110</b>	<b>1206</b>	<b>1330</b>	<b>1447</b>	
<b>HEAT RECOVERY EXCHANGER</b>									
Type		PHE	PHE	PHE	PHE	PHE	PHE	PHE	
Water temperature in	°C	40.0	40.0	40.0	40.0	40.0	40.0	40.0	
Water temperature out	°C	45.0	45.0	45.0	45.0	45.0	45.0	45.0	
Nominal water flow rate	l/s	40.4	44.2	48.6	53.6	58.2	64.2	69.8	
Nominal Water pressure drop	kPa	51	51	33	47	47	66	66	
<b>EVAPORATOR</b>									
Nominal water flow rate	l/s	35.6	38.8	42.8	47.1	51.2	56.5	61.4	
Nominal Water pressure drop	kPa	48	57	27	52	61	53	61	

### **EWAD C-PL**

<b>MODEL</b>		<b>820</b>	<b>890</b>	<b>980</b>	<b>C11</b>	<b>C12</b>	<b>C13</b>	<b>C14</b>	
Capacity - Cooling	kW	746	814	897	988	1073	1185	1287	
Unit power input - Cooling	kW	248	271	297	326	355	391	427	
<b>Heat recovery capacity</b>	<b>kW</b>	<b>839</b>	<b>917</b>	<b>1008</b>	<b>1110</b>	<b>1206</b>	<b>1330</b>	<b>1447</b>	
<b>HEAT RECOVERY EXCHANGER</b>									
Type		PHE	PHE	PHE	PHE	PHE	PHE	PHE	
Water temperature in	°C	40.0	40.0	40.0	40.0	40.0	40.0	40.0	
Water temperature out	°C	45.0	45.0	45.0	45.0	45.0	45.0	45.0	
Nominal water flow rate	l/s	40.4	44.2	48.6	53.6	58.2	64.2	69.8	
Nominal Water pressure drop	kPa	51	51	33	47	47	66	66	
<b>EVAPORATOR</b>									
Nominal water flow rate	l/s	35.6	38.8	42.8	47.1	51.2	56.5	61.4	
Nominal Water pressure drop	kPa	48	57	27	52	61	53	61	

### **EWAD C-PR**

<b>MODEL</b>		<b>810</b>	<b>880</b>	<b>960</b>	<b>C10</b>	<b>C11</b>	<b>C13</b>	<b>C14</b>	
Capacity - Cooling	kW	746	814	897	988	1072	1185	1287	
Unit power input - Cooling	kW	247	271	297	326	354	390	425	
<b>Heat recovery capacity</b>	<b>kW</b>	<b>841</b>	<b>919</b>	<b>1011</b>	<b>1113</b>	<b>1208</b>	<b>1333</b>	<b>1449</b>	
<b>HEAT RECOVERY EXCHANGER</b>									
Type		PHE	PHE	PHE	PHE	PHE	PHE	PHE	
Water temperature in	°C	40.0	40.0	40.0	40.0	40.0	40.0	40.0	
Water temperature out	°C	45.0	45.0	45.0	45.0	45.0	45.0	45.0	
Nominal water flow rate	l/s	40.6	44.4	48.8	53.7	58.4	64.4	70.0	
Nominal Water pressure drop	kPa	52	51	33	47	47	66	66	
<b>EVAPORATOR</b>									
Nominal water flow rate	l/s	35.6	38.8	42.8	47.1	51.2	56.5	61.4	
Nominal Water pressure drop	kPa	48	57	27	52	61	53	61	

**EWAD C-SS**

MODEL		650	740	830	910	970	C11	C12	C15
<b>POWER SUPPLY</b>									
Phases	Nr	3	3	3	3	3	3	3	3
Frequency	Hz	50	50	50	50	50	50	50	50
Voltage	V	400	400	400	400	400	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%
Voltage tolerance Maximum	%	+10%	+10%	+10%	+10%	+10%	+10%	+10%	+10%
<b>UNIT</b>									
Maximum starting current	A	604	649	649	915	962	1017	1021	1312
Nominal running current cooling	A	366	432	492	524	577	624	667	909
Maximum running current	A	476	545	589	656	715	787	859	1144
Maximum current for wires sizing	A	520	596	644	717	781	860	939	1251
<b>FANS</b>									
Nominal running current cooling	A	40	40	40	48	48	56	64	80
<b>COMPRESSORS</b>									
Phases	Nr	3	3	3	3	3	3	3	3
Voltage	V	400	400	400	400	400	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%
Voltage tolerance Maximum	%	+10%	+10%	+10%	+10%	+10%	+10%	+10%	+10%
Maximum running current	A	218	231	274	274	333	333	398	398
		218	274	274	333	333	398	398	333
Starting method	---	Y-Δ							

**EWAD C-SS**

MODEL		C16	C17						
<b>POWER SUPPLY</b>									
Phases	Nr	3	3						
Frequency	Hz	50	50						
Voltage	V	400	400						
Voltage tolerance Minimum	%	-10%	-10%						
Voltage tolerance Maximum	%	+10%	+10%						
<b>UNIT</b>									
Maximum starting current	A	1363	1367						
Nominal running current cooling	A	959	1023						
Maximum running current	A	1217	1281						
Maximum current for wires sizing	A	1330	1400						
<b>FANS</b>									
Nominal running current cooling	A	88	88						
<b>COMPRESSORS</b>									
Phases	Nr	3	3						
Voltage	V	400	400						
Voltage tolerance Minimum	%	-10%	-10%						
Voltage tolerance Maximum	%	+10%	+10%						
Maximum running current	A	398	398						
		398	398						
		333	398						
Starting method	---	Y-Δ	Y-Δ						

Fluid: Water

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

Maximum starting current: starting current of biggest compressor + current of the compressor at 75% maximum load + fans current for the circuit at 75%.

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

Maximum current for wires sizing: (compressors full load ampere + fans current)  $\times 1,1$ .

**EWAD C-SL**

MODEL		650	740	830	910	970	C11	C12	C15
<b>POWER SUPPLY</b>									
Phases	Nr	3	3	3	3	3	3	3	3
Frequency	Hz	50	50	50	50	50	50	50	50
Voltage	V	400	400	400	400	400	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%
Voltage tolerance Maximum	%	+10%	+10%	+10%	+10%	+10%	+10%	+10%	+10%
<b>UNIT</b>									
Maximum starting current	A	604	649	649	915	962	1017	1021	1312
Nominal running current cooling	A	366	432	492	524	577	624	667	909
Maximum running current	A	476	545	589	656	715	787	859	1144
Maximum current for wires sizing	A	520	596	644	717	781	860	939	1251
<b>FANS</b>									
Nominal running current cooling	A	40	40	40	48	48	56	64	80
<b>COMPRESSORS</b>									
Phases	Nr	3	3	3	3	3	3	3	3
Voltage	V	400	400	400	400	400	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%
Voltage tolerance Maximum	%	+10%	+10%	+10%	+10%	+10%	+10%	+10%	+10%
Maximum running current	A	218	231	274	274	333	333	398	398
		218	274	274	333	333	398	398	333
Starting method	---	Y-Δ							

**EWAD C-SL**

MODEL		C16	C17						
<b>POWER SUPPLY</b>									
Phases	Nr	3	3						
Frequency	Hz	50	50						
Voltage	V	400	400						
Voltage tolerance Minimum	%	-10%	-10%						
Voltage tolerance Maximum	%	+10%	+10%						
<b>UNIT</b>									
Maximum starting current	A	1363	1367						
Nominal running current cooling	A	959	1023						
Maximum running current	A	1217	1281						
Maximum current for wires sizing	A	1330	1400						
<b>FANS</b>									
Nominal running current cooling	A	88	88						
<b>COMPRESSORS</b>									
Phases	Nr	3	3						
Voltage	V	400	400						
Voltage tolerance Minimum	%	-10%	-10%						
Voltage tolerance Maximum	%	+10%	+10%						
Maximum running current	A	398	398						
		398	398						
		333	398						
Starting method	---	Y-Δ	Y-Δ						

Fluid: Water

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

Maximum starting current: starting current of biggest compressor + current of the compressor at 75% maximum load + fans current for the circuit at 75%.

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

Maximum current for wires sizing: (compressors full load ampere + fans current)  $\times 1,1$ .

**EWAD C-SR**

MODEL		620	720	790	880	920	C10	C11	C13
<b>POWER SUPPLY</b>									
Phases	Nr	3	3	3	3	3	3	3	3
Frequency	Hz	50	50	50	50	50	50	50	50
Voltage	V	400	400	400	400	400	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%
Voltage tolerance Maximum	%	+10%	+10%	+10%	+10%	+10%	+10%	+10%	+10%
<b>UNIT</b>									
Maximum starting current	A	597	642	642	906	953	1007	1010	1241
Nominal running current cooling	A	371	450	518	548	609	654	694	857
Maximum running current	A	462	531	575	639	698	767	837	1052
Maximum current for wires sizing	A	506	582	630	700	765	841	916	1152
<b>FANS</b>									
Nominal running current cooling	A	26	26	26	31	31	36	42	52
<b>COMPRESSORS</b>									
Phases	Nr	3	3	3	3	3	3	3	3
Voltage	V	400	400	400	400	400	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%
Voltage tolerance Maximum	%	+10%	+10%	+10%	+10%	+10%	+10%	+10%	+10%
Maximum running current	A	218	231	274	274	333	333	398	333
		218	274	274	333	333	398	398	333
Starting method	---	Y-Δ							

**EWAD C-SR**

MODEL		C14	C15	C16					
<b>POWER SUPPLY</b>									
Phases	Nr	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%					
<b>UNIT</b>									
Maximum starting current	A	1292	1344	1346					
Nominal running current cooling	A	954	1002	1075					
Maximum running current	A	1116	1186	1250					
Maximum current for wires sizing	A	1223	1299	1369					
<b>FANS</b>									
Nominal running current cooling	A	52	57	57					
<b>COMPRESSORS</b>									
Phases	Nr	3	3	3					
Voltage	V	400	400	400					
Voltage tolerance Minimum	%	-10%	-10%	-10%					
Voltage tolerance Maximum	%	+10%	+10%	+10%					
Maximum running current	A	398	398	398					
		333	398	398					
		333	333	398					
Starting method	---	Y-Δ	Y-Δ	Y-Δ					

Fluid: Water

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

Maximum starting current: starting current of biggest compressor + current of the compressor at 75% maximum load + fans current for the circuit at 75%.

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

Maximum current for wires sizing: (compressors full load ampere + fans current)  $\times 1,1$ .

**EWAD C-XS**

MODEL		760	830	890	990	C10	C11	C12	C13
<b>POWER SUPPLY</b>									
Phases	Nr	3	3	3	3	3	3	3	3
Frequency	Hz	50	50	50	50	50	50	50	50
Voltage	V	400	400	400	400	400	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%
Voltage tolerance Maximum	%	+10%	+10%	+10%	+10%	+10%	+10%	+10%	+10%
<b>UNIT</b>									
Maximum starting current	A	618	657	657	923	970	1029	1029	1029
Nominal running current cooling	A	387	423	463	511	559	607	667	686
Maximum running current	A	510	561	605	672	731	811	875	875
Maximum current for wires sizing	A	556	612	660	733	797	884	955	955
<b>FANS</b>									
Nominal running current cooling	A	48	56	56	64	64	80	80	80
<b>COMPRESSORS</b>									
Phases	Nr	3	3	3	3	3	3	3	3
Voltage	V	400	400	400	400	400	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%
Voltage tolerance Maximum	%	+10%	+10%	+10%	+10%	+10%	+10%	+10%	+10%
Maximum running current	A	231	231	274	274	333	333	398	398
Starting method	---	Y-Δ							

**EWAD C-XS**

MODEL		C16	C17	C18	C19				
<b>POWER SUPPLY</b>									
Phases	Nr	3	3	3	3				
Frequency	Hz	50	50	50	50				
Voltage	V	400	400	400	400				
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%				
Voltage tolerance Maximum	%	+10%	+10%	+10%	+10%				
<b>UNIT</b>									
Maximum starting current	A	1268	1328	1387	1387				
Nominal running current cooling	A	835	885	934	984				
Maximum running current	A	1096	1168	1241	1313				
Maximum current for wires sizing	A	1196	1275	1354	1432				
<b>FANS</b>									
Nominal running current cooling	A	96	104	112	120				
<b>COMPRESSORS</b>									
Phases	Nr	3	3	3	3				
Voltage	V	400	400	400	400				
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%				
Voltage tolerance Maximum	%	+10%	+10%	+10%	+10%				
Maximum running current	A	333	333	398	398				
Starting method	---	Y-Δ	Y-Δ	Y-Δ	Y-Δ				

Fluid: Water

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

Maximum starting current: starting current of biggest compressor + current of the compressor at 75% maximum load + fans current for the circuit at 75%.

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

Maximum current for wires sizing: (compressors full load ampere + fans current)  $\times 1,1$ .

**EWAD C-XL**

MODEL		760	830	890	990	C10	C11	C12	C13
<b>POWER SUPPLY</b>									
Phases	Nr	3	3	3	3	3	3	3	3
Frequency	Hz	50	50	50	50	50	50	50	50
Voltage	V	400	400	400	400	400	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%
Voltage tolerance Maximum	%	+10%	+10%	+10%	+10%	+10%	+10%	+10%	+10%
<b>UNIT</b>									
Maximum starting current	A	618	657	657	923	970	1029	1029	1029
Nominal running current cooling	A	387	423	463	511	559	607	667	686
Maximum running current	A	510	561	605	672	731	811	875	875
Maximum current for wires sizing	A	556	612	660	733	797	884	955	955
<b>FANS</b>									
Nominal running current cooling	A	48	56	56	64	64	80	80	80
<b>COMPRESSORS</b>									
Phases	Nr	3	3	3	3	3	3	3	3
Voltage	V	400	400	400	400	400	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%
Voltage tolerance Maximum	%	+10%	+10%	+10%	+10%	+10%	+10%	+10%	+10%
Maximum running current	A	231	231	274	274	333	333	398	398
Starting method	---	Y-Δ							

**EWAD C-XL**

MODEL		C16	C17	C18	C19				
<b>POWER SUPPLY</b>									
Phases	Nr	3	3	3	3				
Frequency	Hz	50	50	50	50				
Voltage	V	400	400	400	400				
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%				
Voltage tolerance Maximum	%	+10%	+10%	+10%	+10%				
<b>UNIT</b>									
Maximum starting current	A	1268	1328	1387	1387				
Nominal running current cooling	A	835	885	934	984				
Maximum running current	A	1096	1168	1241	1313				
Maximum current for wires sizing	A	1196	1275	1354	1432				
<b>FANS</b>									
Nominal running current cooling	A	96	104	112	120				
<b>COMPRESSORS</b>									
Phases	Nr	3	3	3	3				
Voltage	V	400	400	400	400				
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%				
Voltage tolerance Maximum	%	+10%	+10%	+10%	+10%				
Maximum running current	A	333	333	398	398				
Starting method	---	Y-Δ	Y-Δ	Y-Δ	Y-Δ				

Fluid: Water

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

Maximum starting current: starting current of biggest compressor + current of the compressor at 75% maximum load + fans current for the circuit at 75%.

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

Maximum current for wires sizing: (compressors full load ampere + fans current)  $\times 1,1$ .

**EWAD C-XR**

MODEL		740	810	870	970	C10	C11	C12	C13
<b>POWER SUPPLY</b>									
Phases	Nr	3	3	3	3	3	3	3	3
Frequency	Hz	50	50	50	50	50	50	50	50
Voltage	V	400	400	400	400	400	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%
Voltage tolerance Maximum	%	+10%	+10%	+10%	+10%	+10%	+10%	+10%	+10%
<b>UNIT</b>									
Maximum starting current	A	610	647	647	911	959	1015	1015	1015
Nominal running current cooling	A	392	426	470	518	572	613	679	699
Maximum running current	A	493	542	585	649	708	783	847	847
Maximum current for wires sizing	A	540	592	640	710	775	856	927	927
<b>FANS</b>									
Nominal running current cooling	A	31	36	36	42	42	52	52	52
<b>COMPRESSORS</b>									
Phases	Nr	3	3	3	3	3	3	3	3
Voltage	V	400	400	400	400	400	400	400	400
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%
Voltage tolerance Maximum	%	+10%	+10%	+10%	+10%	+10%	+10%	+10%	+10%
Maximum running current	A	231	231	274	274	333	333	398	398
Starting method	---	Y-Δ							

**EWAD C-XR**

MODEL		C16	C17	C18	C19				
<b>POWER SUPPLY</b>									
Phases	Nr	3	3	3	3				
Frequency	Hz	50	50	50	50				
Voltage	V	400	400	400	400				
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%				
Voltage tolerance Maximum	%	+10%	+10%	+10%	+10%				
<b>UNIT</b>									
Maximum starting current	A	1246	1303	1359	1359				
Nominal running current cooling	A	854	903	951	1000				
Maximum running current	A	1063	1132	1201	1271				
Maximum current for wires sizing	A	1163	1238	1314	1390				
<b>FANS</b>									
Nominal running current cooling	A	62	68	73	78				
<b>COMPRESSORS</b>									
Phases	Nr	3	3	3	3				
Voltage	V	400	400	400	400				
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%				
Voltage tolerance Maximum	%	+10%	+10%	+10%	+10%				
Maximum running current	A	333	333	398	398				
Starting method	---	Y-Δ	Y-Δ	Y-Δ	Y-Δ				

Fluid: Water

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

Maximum starting current: starting current of biggest compressor + current of the compressor at 75% maximum load + fans current for the circuit at 75%.

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

Maximum current for wires sizing: (compressors full load ampere + fans current)  $\times 1,1$ .

**EWAD C-PS**

<b>MODEL</b>		<b>820</b>	<b>890</b>	<b>980</b>	<b>C11</b>	<b>C12</b>	<b>C13</b>	<b>C14</b>	
<b>POWER SUPPLY</b>									
Phases	Nr	3	3	3	3	3	3	3	
Frequency	Hz	50	50	50	50	50	50	50	
Voltage	V	400	400	400	400	400	400	400	
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	
Voltage tolerance Maximum	%	+10%	+10%	+10%	+10%	+10%	+10%	+10%	
<b>UNIT</b>									
Maximum starting current	A	630	665	665	702	978	1037	1037	
Nominal running current cooling	A	386	424	465	511	555	614	671	
Maximum running current	A	534	577	621	670	747	819	891	
Maximum current for wires sizing	A	580	628	676	729	813	892	971	
<b>FANS</b>									
Nominal running current cooling	A	72	72	72	80	80	88	96	
<b>COMPRESSORS</b>									
Phases	Nr	3	3	3	3	3	3	3	
Voltage	V	400	400	400	400	400	400	400	
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	
Voltage tolerance Maximum	%	+10%	+10%	+10%	+10%	+10%	+10%	+10%	
Maximum running current	A	231	231	274	274	333	333	398	
		231	274	274	316	333	398	398	
Starting method	---	Y-Δ							

*Fluid: Water**Allowed voltage tolerance  $\pm 10\%$ . Voltage unbalance between phases must be within  $\pm 3\%$ .**Maximum starting current: starting current of biggest compressor + current of the compressor at 75% maximum load + fans current for the circuit at 75%.**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**Maximum current for wires sizing: (compressors full load ampere + fans current)  $\times 1,1$ .*

**EWAD C-PL**

<b>MODEL</b>		<b>820</b>	<b>890</b>	<b>980</b>	<b>C11</b>	<b>C12</b>	<b>C13</b>	<b>C14</b>	
<b>POWER SUPPLY</b>									
Phases	Nr	3	3	3	3	3	3	3	
Frequency	Hz	50	50	50	50	50	50	50	
Voltage	V	400	400	400	400	400	400	400	
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	
Voltage tolerance Maximum	%	+10%	+10%	+10%	+10%	+10%	+10%	+10%	
<b>UNIT</b>									
Maximum starting current	A	630	665	665	702	978	1037	1037	
Nominal running current cooling	A	386	424	465	511	555	614	671	
Maximum running current	A	534	577	621	670	747	819	891	
Maximum current for wires sizing	A	580	628	676	729	813	892	971	
<b>FANS</b>									
Nominal running current cooling	A	72	72	72	80	80	88	96	
<b>COMPRESSORS</b>									
Phases	Nr	3	3	3	3	3	3	3	
Voltage	V	400	400	400	400	400	400	400	
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	
Voltage tolerance Maximum	%	+10%	+10%	+10%	+10%	+10%	+10%	+10%	
Maximum running current	A	231	231	274	274	333	333	398	
		231	274	274	316	333	398	398	
Starting method	---	Y-Δ							

*Fluid: Water**Allowed voltage tolerance  $\pm 10\%$ . Voltage unbalance between phases must be within  $\pm 3\%$ .**Maximum starting current: starting current of biggest compressor + current of the compressor at 75% maximum load + fans current for the circuit at 75%.**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**Maximum current for wires sizing: (compressors full load ampere + fans current)  $\times 1,1$ .*

## EWAD C-PR

MODEL		810	880	960	C10	C11	C13	C14	
<b>POWER SUPPLY</b>									
Phases	Nr	3	3	3	3	3	3	3	
Frequency	Hz	50	50	50	50	50	50	50	
Voltage	V	400	400	400	400	400	400	400	
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	
Voltage tolerance Maximum	%	+10%	+10%	+10%	+10%	+10%	+10%	+10%	
<b>UNIT</b>									
Maximum starting current	A	618	653	653	917	964	1020	1020	
Nominal running current cooling	A	375	416	461	506	555	614	671	
Maximum running current	A	509	552	596	660	719	788	858	
Maximum current for wires sizing	A	555	603	651	721	785	861	937	
<b>FANS</b>									
Nominal running current cooling	A	47	47	47	52	52	57	62	
<b>COMPRESSORS</b>									
Phases	Nr	3	3	3	3	3	3	3	
Voltage	V	400	400	400	400	400	400	400	
Voltage tolerance Minimum	%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	
Voltage tolerance Maximum	%	+10%	+10%	+10%	+10%	+10%	+10%	+10%	
Maximum running current	A	231	231	274	274	333	333	398	
		231	274	274	333	333	398	398	
Starting method	---	Y-Δ							

*Fluid: Water**Allowed voltage tolerance  $\pm 10\%$ . Voltage unbalance between phases must be within  $\pm 3\%$ .**Maximum starting current: starting current of biggest compressor + current of the compressor at 75% maximum load + fans current for the circuit at 75%.**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**Maximum current for wires sizing: (compressors full load ampere + fans current)  $\times 1,1$ .*

**EWAD C-SS**

<b>MODEL</b>	<b>Sound pressure level at 1 m from the unit (rif. 2 x 10<sup>-5</sup> Pa)</b>									<b>Power dB(A)</b>
	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	<b>dB(A)</b>	
<b>650</b>	73.9	76.0	78.8	78.0	73.9	69.4	59.8	50.7	<b>79.0</b>	<b>99.5</b>
<b>740</b>	74.4	76.5	79.3	78.5	74.4	69.9	60.3	51.2	<b>79.5</b>	<b>100.0</b>
<b>830</b>	74.4	76.5	79.3	78.5	74.4	69.9	60.3	51.2	<b>79.5</b>	<b>100.0</b>
<b>910</b>	75.3	77.4	80.2	79.4	75.3	70.8	61.2	52.1	<b>80.4</b>	<b>100.9</b>
<b>970</b>	75.5	77.6	80.4	79.6	75.5	71.0	61.4	52.3	<b>80.6</b>	<b>101.1</b>
<b>C11</b>	75.5	77.6	80.4	79.6	75.5	71.0	61.4	52.3	<b>80.6</b>	<b>101.5</b>
<b>C12</b>	75.5	77.6	80.4	79.6	75.5	71.0	61.4	52.3	<b>80.6</b>	<b>101.7</b>
<b>C15</b>	76.0	78.1	80.9	80.1	76.0	71.5	61.9	52.8	<b>81.1</b>	<b>103.0</b>
<b>C16</b>	76.0	78.1	80.9	80.1	76.0	71.5	61.9	52.8	<b>81.1</b>	<b>103.2</b>
<b>C17</b>	76.1	78.2	81.0	80.2	76.1	71.6	62.0	52.9	<b>81.2</b>	<b>103.3</b>

**EWAD C-SL**

<b>MODEL</b>	<b>Sound pressure level at 1 m from the unit (rif. 2 x 10<sup>-5</sup> Pa)</b>									<b>Power dB(A)</b>
	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	<b>dB(A)</b>	
<b>650</b>	70.4	72.5	75.3	74.5	70.4	65.9	56.3	47.2	<b>75.5</b>	<b>96.0</b>
<b>740</b>	70.5	72.6	75.4	74.6	70.5	66.0	56.4	47.3	<b>75.6</b>	<b>96.1</b>
<b>830</b>	70.5	72.6	75.4	74.6	70.5	66.0	56.4	47.3	<b>75.6</b>	<b>96.1</b>
<b>910</b>	71.4	73.5	76.3	75.5	71.4	66.9	57.3	48.2	<b>76.5</b>	<b>97.5</b>
<b>970</b>	71.5	73.6	76.4	75.6	71.5	67.0	57.4	48.3	<b>76.6</b>	<b>97.1</b>
<b>C11</b>	71.7	73.8	76.6	75.8	71.7	67.2	57.6	48.5	<b>76.8</b>	<b>97.6</b>
<b>C12</b>	71.8	73.9	76.7	75.9	71.8	67.3	57.7	48.6	<b>76.9</b>	<b>98.1</b>
<b>C15</b>	72.1	74.2	77.0	76.2	72.1	67.6	58.0	48.9	<b>77.2</b>	<b>99.1</b>
<b>C16</b>	72.2	74.3	77.1	76.3	72.2	67.7	58.1	49.0	<b>77.3</b>	<b>99.5</b>
<b>C17</b>	72.3	74.4	77.2	76.4	72.3	67.8	58.2	49.1	<b>77.4</b>	<b>99.5</b>

Fluid: Water

Note: The values are according to ISO 3744 and are referred to: evaporator 12/7° C, air ambient 35°C, full load operation

**EWAD C-SR**

<b>MODEL</b>	<b>Sound pressure level at 1 m from the unit (rif. 2 x 10<sup>-5</sup> Pa)</b>									<b>Power dB(A)</b>
	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	<b>dB(A)</b>	
<b>620</b>	67.6	60.8	67.9	73.1	60.5	56.9	48.6	36.0	<b>71.0</b>	<b>91.5</b>
<b>720</b>	68.1	61.3	68.4	73.6	61.0	57.4	49.1	36.5	<b>71.5</b>	<b>92.0</b>
<b>790</b>	68.1	61.3	68.4	73.6	61.0	57.4	49.1	36.5	<b>71.5</b>	<b>92.0</b>
<b>880</b>	68.6	61.8	68.9	74.1	61.5	57.9	49.6	37.0	<b>72.0</b>	<b>92.5</b>
<b>920</b>	69.1	62.3	69.4	74.6	62.0	58.4	50.1	37.5	<b>72.5</b>	<b>93.0</b>
<b>C10</b>	69.2	62.4	69.5	74.7	62.1	58.5	50.2	37.6	<b>72.6</b>	<b>93.5</b>
<b>C11</b>	69.3	62.5	69.6	74.8	62.2	58.6	50.3	37.7	<b>72.7</b>	<b>93.8</b>
<b>C13</b>	69.5	62.7	69.8	75.0	62.4	58.8	50.5	37.9	<b>72.9</b>	<b>94.8</b>
<b>C14</b>	69.6	62.8	69.9	75.1	62.5	58.9	50.6	38.0	<b>73.0</b>	<b>94.9</b>
<b>C15</b>	69.6	62.8	69.9	75.1	62.5	58.9	50.6	38.0	<b>73.0</b>	<b>95.1</b>
<b>C16</b>	69.7	62.9	70.0	75.2	62.6	59.0	50.7	38.1	<b>73.1</b>	<b>95.2</b>

**EWAD C-XS**

<b>MODEL</b>	<b>Sound pressure level at 1 m from the unit (rif. 2 x 10<sup>-5</sup> Pa)</b>									<b>Power dB(A)</b>
	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	<b>dB(A)</b>	
<b>760</b>	74.6	76.7	79.5	78.7	74.6	70.1	60.5	51.4	<b>79.7</b>	<b>100.2</b>
<b>830</b>	74.6	76.7	79.5	78.7	74.6	70.1	60.5	51.4	<b>79.7</b>	<b>100.5</b>
<b>890</b>	74.6	76.7	79.5	78.7	74.6	70.1	60.5	51.4	<b>79.7</b>	<b>100.5</b>
<b>990</b>	75.1	77.2	80.0	79.2	75.1	70.6	61.0	51.9	<b>80.2</b>	<b>101.4</b>
<b>C10</b>	75.6	77.7	80.5	79.7	75.6	71.1	61.5	52.4	<b>80.7</b>	<b>101.9</b>
<b>C11</b>	75.2	77.3	80.1	79.3	75.2	70.7	61.1	52.0	<b>80.3</b>	<b>102.4</b>
<b>C12</b>	75.3	77.4	80.2	79.4	75.3	70.8	61.2	52.1	<b>80.4</b>	<b>102.5</b>
<b>C13</b>	75.3	77.4	80.2	79.4	75.3	70.8	61.2	52.1	<b>80.4</b>	<b>102.5</b>
<b>C16</b>	75.8	77.9	80.7	79.9	75.8	71.3	61.7	52.6	<b>80.9</b>	<b>103.2</b>
<b>C17</b>	75.7	77.8	80.6	79.8	75.7	71.2	61.6	52.5	<b>80.8</b>	<b>103.5</b>
<b>C18</b>	75.9	78.0	80.8	80.0	75.9	71.4	61.8	52.7	<b>81.0</b>	<b>103.7</b>
<b>C19</b>	75.9	78.0	80.8	80.0	75.9	71.4	61.8	52.7	<b>81.0</b>	<b>103.9</b>

**EWAD C-XL**

<b>MODEL</b>	<b>Sound pressure level at 1 m from the unit (rif. 2 x 10<sup>-5</sup> Pa)</b>									<b>Power dB(A)</b>
	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	<b>dB(A)</b>	
<b>760</b>	71.2	73.3	76.1	75.3	71.2	66.7	57.1	48.0	<b>76.3</b>	<b>96.8</b>
<b>830</b>	71.4	73.5	76.3	75.5	71.4	66.9	57.3	48.2	<b>76.5</b>	<b>97.4</b>
<b>890</b>	71.4	73.5	76.3	75.5	71.4	66.9	57.3	48.2	<b>76.5</b>	<b>97.4</b>
<b>990</b>	71.8	73.9	76.7	75.9	71.8	67.3	57.7	48.6	<b>76.9</b>	<b>98.0</b>
<b>C10</b>	72.0	74.1	76.9	76.1	72.0	67.5	57.9	48.8	<b>77.1</b>	<b>98.2</b>
<b>C11</b>	71.6	73.7	76.5	75.7	71.6	67.1	57.5	48.4	<b>76.7</b>	<b>98.8</b>
<b>C12</b>	71.7	73.8	76.6	75.8	71.7	67.2	57.6	48.5	<b>76.8</b>	<b>98.9</b>
<b>C13</b>	71.7	73.8	76.6	75.8	71.7	67.2	57.6	48.5	<b>76.8</b>	<b>98.9</b>
<b>C16</b>	72.2	74.3	77.1	76.3	72.2	67.7	58.1	49.0	<b>77.3</b>	<b>99.6</b>
<b>C17</b>	72.3	74.4	77.2	76.4	72.3	67.8	58.2	49.1	<b>77.4</b>	<b>100.0</b>
<b>C18</b>	72.4	74.5	77.3	76.5	72.4	67.9	58.3	49.2	<b>77.5</b>	<b>100.2</b>
<b>C19</b>	72.4	74.5	77.3	76.5	72.4	67.9	58.3	49.2	<b>77.5</b>	<b>100.4</b>

Fluid: Water

Note: The values are according to ISO 3744 and are referred to: evaporator 12/7° C, air ambient 35°C, full load operation

**EWAD C-XR**

<b>MODEL</b>	<b>Sound pressure level at 1 m from the unit (rif. 2 x 10<sup>-5</sup> Pa)</b>									<b>Power dB(A)</b>
	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	<b>dB(A)</b>	
<b>740</b>	68.1	61.3	68.4	73.6	61.0	57.4	49.1	36.5	<b>71.5</b>	<b>92.0</b>
<b>810</b>	68.1	61.3	68.4	73.6	61.0	57.4	49.1	36.5	<b>71.5</b>	<b>92.3</b>
<b>870</b>	68.1	61.3	68.4	73.6	61.0	57.4	49.1	36.5	<b>71.5</b>	<b>92.3</b>
<b>970</b>	68.9	62.1	69.2	74.4	61.8	58.2	49.9	37.3	<b>72.3</b>	<b>93.5</b>
<b>C10</b>	69.1	62.3	69.4	74.6	62.0	58.4	50.1	37.5	<b>72.5</b>	<b>93.7</b>
<b>C11</b>	68.8	62.0	69.1	74.3	61.7	58.1	49.8	37.2	<b>72.2</b>	<b>94.3</b>
<b>C12</b>	68.9	62.1	69.2	74.4	61.8	58.2	49.9	37.3	<b>72.3</b>	<b>94.5</b>
<b>C13</b>	68.9	62.1	69.2	74.4	61.8	58.2	49.9	37.3	<b>72.3</b>	<b>94.5</b>
<b>C16</b>	69.5	62.7	69.8	75.0	62.4	58.8	50.5	37.9	<b>72.9</b>	<b>95.3</b>
<b>C17</b>	69.5	62.7	69.8	75.0	62.4	58.8	50.5	37.9	<b>72.9</b>	<b>95.6</b>
<b>C18</b>	69.6	62.8	69.9	75.1	62.5	58.9	50.6	38.0	<b>73.0</b>	<b>95.7</b>
<b>C19</b>	69.6	62.8	69.9	75.1	62.5	58.9	50.6	38.0	<b>73.0</b>	<b>95.9</b>

**EWAD C-PS**

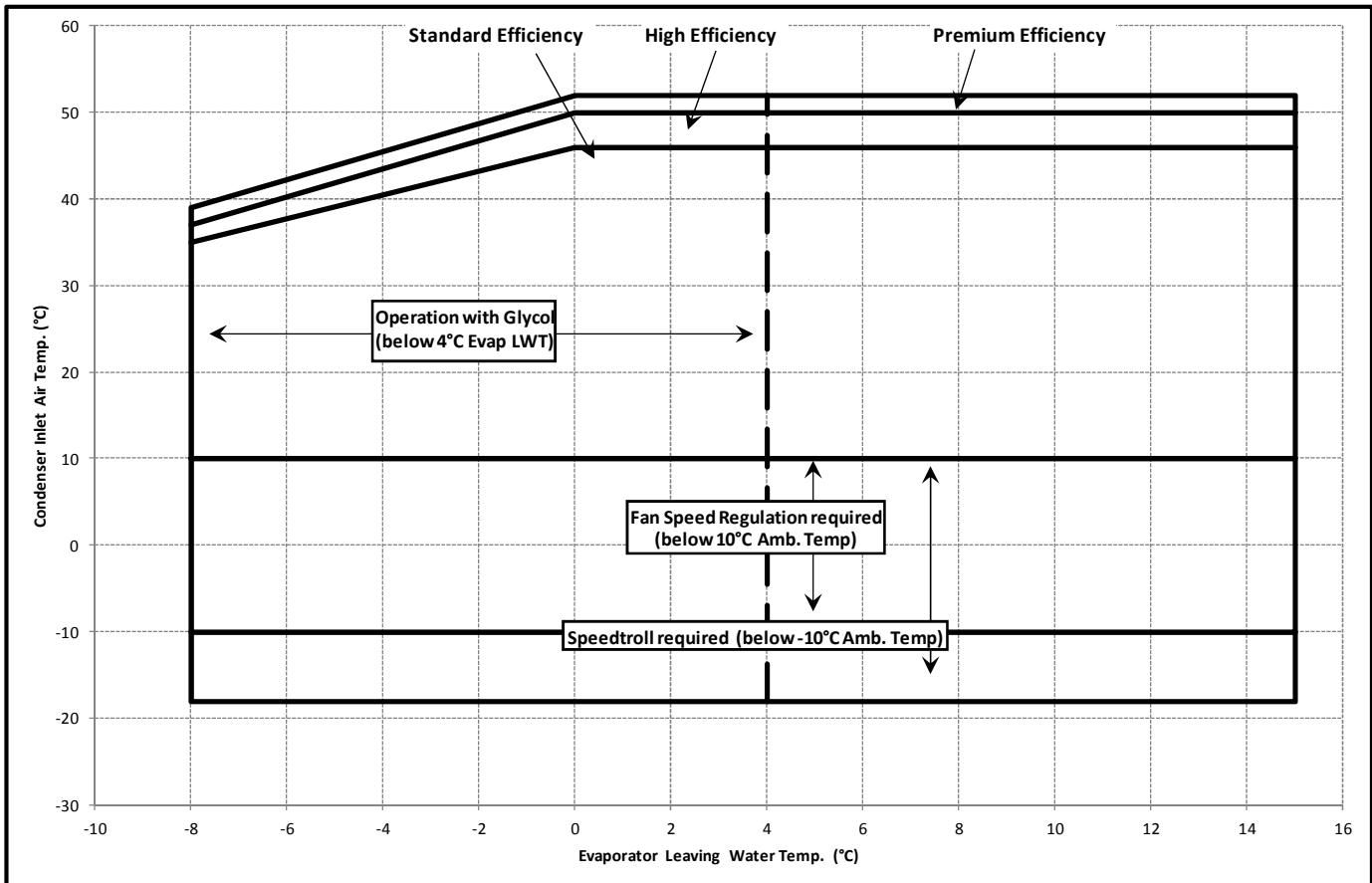
<b>MODEL</b>	<b>Sound pressure level at 1 m from the unit (rif. 2 x 10<sup>-5</sup> Pa)</b>									<b>Power dB(A)</b>
	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	<b>dB(A)</b>	
<b>820</b>	74.4	76.5	79.3	78.5	74.4	69.9	60.3	51.2	<b>79.5</b>	<b>101.0</b>
<b>890</b>	74.4	76.5	79.3	78.5	74.4	69.9	60.3	51.2	<b>79.5</b>	<b>101.0</b>
<b>980</b>	74.4	76.5	79.3	78.5	74.4	69.9	60.3	51.2	<b>79.5</b>	<b>101.0</b>
<b>C11</b>	74.9	77.0	79.8	79.0	74.9	70.4	60.8	51.7	<b>80.0</b>	<b>101.8</b>
<b>C12</b>	75.4	77.5	80.3	79.5	75.4	70.9	61.3	52.2	<b>80.5</b>	<b>102.3</b>
<b>C13</b>	75.3	77.4	80.2	79.4	75.3	70.8	61.2	52.1	<b>80.4</b>	<b>102.6</b>
<b>C14</b>	75.4	77.5	80.3	79.5	75.4	70.9	61.3	52.2	<b>80.5</b>	<b>102.9</b>

**EWAD C-PL**

<b>MODEL</b>	<b>Sound pressure level at 1 m from the unit (rif. 2 x 10<sup>-5</sup> Pa)</b>									<b>Power dB(A)</b>
	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	<b>dB(A)</b>	
<b>820</b>	71.8	73.9	76.7	75.9	71.8	67.3	57.7	48.6	<b>76.9</b>	<b>98.4</b>
<b>890</b>	71.8	73.9	76.7	75.9	71.8	67.3	57.7	48.6	<b>76.9</b>	<b>98.4</b>
<b>980</b>	71.8	73.9	76.7	75.9	71.8	67.3	57.7	48.6	<b>76.9</b>	<b>98.4</b>
<b>C11</b>	71.9	74.0	76.8	76.0	71.9	67.4	57.8	48.7	<b>77.0</b>	<b>98.8</b>
<b>C12</b>	72.0	74.1	76.9	76.1	72.0	67.5	57.9	48.8	<b>77.1</b>	<b>99.9</b>
<b>C13</b>	72.0	74.1	76.9	76.1	72.0	67.5	57.9	48.8	<b>77.1</b>	<b>99.3</b>
<b>C14</b>	72.1	74.2	77.0	76.2	72.1	67.6	58.0	48.9	<b>77.2</b>	<b>99.6</b>

**EWAD C-PR**

<b>MODEL</b>	<b>Sound pressure level at 1 m from the unit (rif. 2 x 10<sup>-5</sup> Pa)</b>									<b>Power dB(A)</b>
	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	<b>dB(A)</b>	
<b>810</b>	67.8	61.0	68.1	73.3	60.7	57.1	48.8	36.2	<b>71.2</b>	<b>92.7</b>
<b>880</b>	67.8	61.0	68.1	73.3	60.7	57.1	48.8	36.2	<b>71.2</b>	<b>92.7</b>
<b>960</b>	67.8	61.0	68.1	73.3	60.7	57.1	48.8	36.2	<b>71.2</b>	<b>92.7</b>
<b>C10</b>	68.3	61.5	68.6	73.8	61.2	57.6	49.3	36.7	<b>71.7</b>	<b>93.4</b>
<b>C11</b>	68.6	61.8	68.9	74.1	61.5	57.9	49.6	37.0	<b>72.0</b>	<b>93.8</b>
<b>C13</b>	68.6	61.8	68.9	74.1	61.5	57.9	49.6	37.0	<b>72.0</b>	<b>94.1</b>
<b>C14</b>	68.6	61.8	68.9	74.1	61.5	57.9	49.6	37.0	<b>72.0</b>	<b>94.4</b>



## Water content in cooling circuit

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

In fact, each time the compressor starts up, an excessive quantity of oil goes from the compressor sump and simultaneously there is a rise in the temperature of the compressor motor's stator due to the inrush current during the start-up.

To prevent damage to the compressors, It has been envisaged the application of a device to limit frequent stops and restarts.

During the span of one hour there will be no more than 6 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 minimum water content per unit should be calculated using this simplified formula:

For 2 compressors unit

$$M \text{ (liters)} = (0.1595 \times \Delta T(\text{°C}) + 3.0825) \times P(\text{kW})$$

For 3 compressors unit

$$M \text{ (liters)} = (0.0443 \times \Delta T(\text{°C}) + 1.6202) \times P(\text{kW})$$

where:

M minimum water content per unit expressed in litres

P Cooling Capacity of the unit expressed in kW

$\Delta T$  evaporator entering / leaving water temperature difference expressed in °C

This formula is valid for:

- standard microprocessor parameters

For more accurate determination of quantity of water, it is advisable to contact the designer of the plant.

## Water charge, flow and quality

Items (1) (6)	Cooling Water			Cooled Water			Heated water (2)		
	Circulating System		Once Flow	Low temperature		High temperature		Tendency if out of criteria	
	Circulating water	Supply water (4)	Flowing water [Below 20°C]	Circulating water [20°C ~ 60°C]	Supply water (4) [60°C ~ 80°C]	Circulating water [60°C ~ 80°C]	Supply water (4)	Circulating water	Supply water (4)
pH	at 25°C	6.5 ~ 8.2	6.0 ~ 8.0	6.8 ~ 8.0	6.0 ~ 8.0	7.0 ~ 8.0	7.0 ~ 8.0	7.0 ~ 8.0	7.0 ~ 8.0
Electrical conductivity	[mS/m] at 25°C [µSi/cm] at 25°C	Below 80 (Below 800)	Below 30 (Below 300)	Below 80 (Below 400)	Below 80 (Below 800)	Below 30 (Below 300)	Below 30 (Below 300)	Below 30 (Below 300)	Below 30 (Below 300)
Chloride ion	[mgCl <sup>2-</sup> /l]	Below 200	Below 50	Below 200	Below 50	Below 50	Below 50	Below 30	Corrosion + Scale
Sulfate ion	[mgSO <sup>2-</sup> <sub>4</sub> /l]	Below 200	Below 50	Below 200	Below 50	Below 50	Below 50	Below 30	Corrosion + Scale
M-alkalinity (pH4.8)	[mgCaCO <sub>3</sub> /l]	Below 100	Below 50	Below 100	Below 50	Below 50	Below 50	Below 50	Corrosion + Scale
Total hardness	[mgCaCO <sub>3</sub> /l]	Below 200	Below 70	Below 200	Below 70	Below 70	Below 70	Below 70	Corrosion
Calcium hardness	[mgCaCO <sub>3</sub> /l]	Below 150	Below 50	Below 50	Below 50	Below 50	Below 50	Below 50	Corrosion
Silica ion	[mgSiO <sub>2</sub> /l]	Below 50	Below 30	Below 30	Below 30	Below 30	Below 30	Below 30	Scale
Oxygen	[mg O <sub>2</sub> /l]	Below 1.0	Below 1.0	Below 1.0	Below 1.0	Below 1.0	Below 1.0	Below 1.0	Scale
Particle size (mm)		Below 0.5	Below 0.5	Below 0.5	Below 0.5	Below 0.5	Below 0.5	Below 0.5	Erosion
Total dissolved solids (mg/l)		Below 1000	Below 1000	Below 1000	Below 1000	Below 1000	Below 1000	Below 1000	Erosion
Ethyleneglycol (weight conc.)		Below 60%	---	Below 60%	Below 60%	Below 60%	Below 60%	Below 60%	--
Nitrate ion (mg NO <sub>3</sub> -/l)		Below 100	Below 100	Below 100	Below 100	Below 100	Below 100	Below 100	Corrosion
TOC Total organic carbon (mg/l)		Below 1.0	Below 1.0	Below 1.0	Below 1.0	Below 1.0	Below 1.0	Below 1.0	Erosion
Iron	[mgFe/l]	Below 1.0	Below 0.3	Below 1.0	Below 0.3	Below 1.0	Below 0.3	Below 1.0	Corrosion
Copper	[mgCu/l]	Below 0.3	Below 0.1	Below 1.0	Below 1.0	Below 1.0	Below 0.1	Below 1.0	Corrosion
Sulfite ion	[mgS <sup>2-</sup> /l]	Not detectable	Not detectable	Not detectable	Not detectable	Not detectable	Not detectable	Not detectable	Corrosion
Ammonium ion	[mgNH <sup>+</sup> <sub>4</sub> /l]	Below 1.0	Below 0.1	Below 1.0	Below 0.1	Below 0.3	Below 0.1	Below 0.1	Corrosion
Remaining chloride	[mgCl/l]	Below 0.3	Below 0.3	Below 0.3	Below 0.3	Below 0.25	Below 0.1	Below 0.1	Corrosion
Free carbide	[mgCO <sub>2</sub> /l]	Below 4.0	Below 4.0	Below 4.0	Below 4.0	Below 0.4	Below 0.4	Below 4.0	Corrosion
Stability index		6.0 ~ 7.0	---	---	---	---	---	---	Corrosion + Scale

1 Names, definitions and units are according to JIS K 0101. Units and figures between brackets are old units published as reference only.

2 In case of using heated water (more than 40°C), corrosion is generally noticeable.

Especially when the iron materials is in direct contact with water without any protection shields, it is desirable to give the valid measure for corrosion. E.g. chemical measure

3 In the cooling water using hermetic cooling tower, close circuit water is according to heated water standard, and scattered water is according to cooling water standard.

4 Supply water is considered drink water, industrial water and ground water except for genuine water, neutral water and soft water.

5 The above mentioned items are representable items in corrosion and scale cases.

6 The limits above have to be considered as a general prescription and can not totally assure the absence of corrosion and erosion.

Some particular combinations of elements or the presence of components not listed in the table or factors not considered may trigger corrosion phenomena.

## EWAD C-SS

		650						740					
Twout	Ta	25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	667	637	603	564	538	510	748	727	701	667	642	603
	PI kW	188	202	217	234	244	255	219	238	259	282	297	308
	qw l/s	31.8	30.3	28.7	26.9	25.6	24.3	35.6	34.7	33.4	31.8	30.6	28.7
	dpw kPa	49	45	41	36	33	30	55	52	49	44	41	37
<b>7</b>	CC kW	707	675	640	600	573	543	788	766	738	702	675	622
	PI kW	194	208	224	241	252	263	225	245	266	290	306	306
	qw l/s	33.7	32.2	30.5	28.6	27.3	25.9	37.6	36.5	35.2	33.5	32.2	29.7
	dpw kPa	55	50	46	41	37	34	60	57	53	49	45	39
<b>9</b>	CC kW	747	715	677	635	608	578	828	805	775	737	709	643
	PI kW	200	215	231	249	260	271	232	252	274	299	315	307
	qw l/s	35.7	34.1	32.3	30.3	29.0	27.6	39.6	38.4	37.0	35.2	33.9	30.7
	dpw kPa	60	56	51	45	42	38	66	63	58	53	50	42
<b>11</b>	CC kW	788	754	716	672	643	612	870	845	813	773	733	655
	PI kW	206	221	238	256	268	280	239	260	283	308	317	302
	qw l/s	37.7	36.0	34.2	32.1	30.7	29.2	41.6	40.4	38.9	37.0	35.0	31.3
	dpw kPa	67	61	56	50	46	42	72	68	64	58	53	43
<b>13</b>	CC kW	830	794	754	709	679	646	912	886	852	810	754	655
	PI kW	212	228	246	264	276	288	247	268	291	317	317	302
	qw l/s	39.7	38.0	36.1	33.9	32.5	30.9	43.6	42.4	40.8	38.7	36.1	31.3
	dpw kPa	73	67	62	55	51	47	79	74	69	63	56	43
<b>15</b>	CC kW	872	835	793	746	716	670	956	927	892	847	777	664
	PI kW	219	235	253	272	285	291	254	276	300	326	318	295
	qw l/s	41.8	40.0	38.0	35.7	34.3	32.1	45.8	44.4	42.7	40.5	37.2	31.8
	dpw kPa	80	74	67	61	56	50	85	81	75	69	59	44
		830						910					
Twout	Ta	25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	843	817	783	739	707	629	917	892	860	817	786	731
	PI kW	250	271	295	321	338	328	265	289	314	342	360	367
	qw l/s	40.2	38.9	37.3	35.2	33.7	30.0	43.7	42.5	41.0	39.0	37.5	34.8
	dpw kPa	54	51	47	42	39	32	63	60	56	51	48	42
<b>7</b>	CC kW	887	860	824	778	744	636	966	939	904	860	827	756
	PI kW	258	280	304	331	349	319	273	297	323	352	371	367
	qw l/s	42.3	41.0	39.3	37.1	35.5	30.4	46.1	44.8	43.2	41.0	39.5	36.1
	dpw kPa	59	56	52	47	43	33	69	66	61	56	52	44
<b>9</b>	CC kW	932	903	865	817	759	646	1015	986	950	903	866	782
	PI kW	266	289	314	342	346	311	282	306	333	362	381	367
	qw l/s	44.5	43.1	41.3	39.0	36.2	30.9	48.5	47.1	45.4	43.1	41.4	37.3
	dpw kPa	65	61	57	51	45	33	76	72	67	61	57	47
<b>11</b>	CC kW	978	947	907	856	767	641	1065	1034	996	946	892	791
	PI kW	275	298	324	353	338	319	290	315	343	373	381	359
	qw l/s	46.8	45.3	43.3	40.9	36.7	30.6	50.9	49.4	47.6	45.2	42.6	37.8
	dpw kPa	71	67	62	56	46	33	83	78	73	67	60	48
<b>13</b>	CC kW	1025	991	948	895	777	646	1116	1084	1043	990	917	792
	PI kW	284	308	335	364	330	308	299	325	353	384	380	359
	qw l/s	49.0	47.4	45.4	42.8	37.2	30.9	53.4	51.8	49.9	47.4	43.9	37.9
	dpw kPa	77	72	67	60	47	34	90	85	79	72	63	48
<b>15</b>	CC kW	1073	1036	991	903	785	659	1168	1134	1090	1029	943	802
	PI kW	293	318	346	357	321	301	308	335	364	393	381	349
	qw l/s	51.4	49.6	47.4	43.2	37.6	31.5	55.9	54.3	52.2	49.3	45.2	38.4
	dpw kPa	84	79	72	61	48	35	98	93	86	78	66	50

## EWAD C-SS

Twout	Ta	970						C11					
		25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	977	949	912	864	829	751	1071	1041	1003	954	917	851
	PI kW	292	318	346	377	398	395	315	342	373	406	429	436
	qw l/s	46.6	45.2	43.5	41.2	39.5	35.8	51.0	49.6	47.8	45.5	43.7	40.6
	dpw kPa	70	67	62	56	52	44	65	62	58	53	49	43
<b>7</b>	CC kW	1028	997	958	908	871	761	1127	1095	1055	1002	964	879
	PI kW	301	327	356	389	410	385	324	353	384	418	441	435
	qw l/s	49.0	47.6	45.7	43.3	41.5	36.3	53.8	52.3	50.3	47.8	46.0	41.9
	dpw kPa	77	73	68	62	57	45	71	68	63	58	54	46
<b>9</b>	CC kW	1079	1047	1005	951	908	773	1184	1151	1108	1052	1006	906
	PI kW	310	338	367	400	420	376	334	363	395	431	451	434
	qw l/s	51.5	50.0	48.0	45.4	43.3	36.9	56.6	55.0	52.9	50.2	48.0	43.3
	dpw kPa	84	80	74	67	62	46	78	74	69	63	58	48
<b>11</b>	CC kW	1132	1097	1053	996	918	782	1243	1207	1161	1102	1036	917
	PI kW	320	348	379	413	411	365	344	374	407	443	451	423
	qw l/s	54.1	52.4	50.3	47.6	43.9	37.4	59.4	57.7	55.5	52.7	49.5	43.8
	dpw kPa	92	87	81	73	63	47	85	81	75	69	61	49
<b>13</b>	CC kW	1185	1148	1101	1041	926	777	1302	1264	1215	1153	1065	917
	PI kW	330	359	390	425	400	375	355	386	419	457	450	423
	qw l/s	56.7	54.9	52.7	49.8	44.3	37.2	62.3	60.5	58.1	55.2	50.9	43.9
	dpw kPa	100	94	88	79	64	47	93	88	82	75	65	49
<b>15</b>	CC kW	1239	1199	1149	1075	937	787	1363	1322	1270	1195	1096	928
	PI kW	340	370	402	432	390	363	365	397	432	464	450	411
	qw l/s	59.3	57.4	55.0	51.5	44.9	37.7	65.3	63.3	60.8	57.2	52.5	44.4
	dpw kPa	108	102	95	84	66	48	101	95	89	80	68	50

Twout	Ta	C12						C15					
		25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	1155	1125	1087	1037	1000	957	1550	1505	1448	1373	1318	1220
	PI kW	336	366	398	434	458	484	460	500	544	593	625	636
	qw l/s	55.0	53.6	51.8	49.4	47.7	45.6	73.9	71.7	69.0	65.4	62.8	58.2
	dpw kPa	74	71	67	61	57	53	63	60	56	51	47	41
<b>7</b>	CC kW	1215	1183	1143	1091	1052	1007	1634	1586	1524	1445	1387	1254
	PI kW	346	377	410	447	471	497	474	515	561	611	644	631
	qw l/s	58.0	56.4	54.5	52.0	50.2	48.0	77.9	75.6	72.7	68.9	66.2	59.8
	dpw kPa	81	78	73	67	63	58	69	66	61	55	52	43
<b>9</b>	CC kW	1276	1243	1200	1145	1104	1033	1719	1668	1602	1518	1457	1288
	PI kW	356	387	421	459	484	497	489	532	578	629	663	625
	qw l/s	61.0	59.4	57.3	54.7	52.7	49.3	82.1	79.6	76.5	72.5	69.6	61.5
	dpw kPa	89	85	80	73	69	61	76	72	67	61	56	45
<b>11</b>	CC kW	1339	1304	1258	1200	1157	1045	1806	1751	1681	1593	1488	1304
	PI kW	366	398	433	472	498	485	504	548	596	649	657	610
	qw l/s	64.0	62.3	60.2	57.4	55.3	49.9	86.3	83.7	80.4	76.1	71.1	62.4
	dpw kPa	97	93	87	80	75	62	83	79	73	66	59	46
<b>13</b>	CC kW	1403	1366	1318	1256	1211	1060	1895	1836	1762	1668	1522	1300
	PI kW	377	410	446	486	512	475	520	566	615	669	651	614
	qw l/s	67.1	65.3	63.0	60.1	57.9	50.7	90.6	87.8	84.3	79.8	72.8	62.2
	dpw kPa	106	101	95	87	81	64	91	86	80	72	61	46
<b>15</b>	CC kW	1469	1428	1378	1313	1252	1072	1985	1922	1843	1731	1559	1317
	PI kW	388	422	459	499	519	463	537	583	634	682	646	597
	qw l/s	70.3	68.4	66.0	62.8	59.9	51.3	95.0	92.0	88.3	82.9	74.6	63.1
	dpw kPa	115	110	103	94	86	65	99	93	86	77	64	47

## EWAD C-SS

Twout	Ta	C16						C17					
		25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	1632	1586	1528	1451	1395	1294	1728	1679	1616	1534	1473	1361
	PI kW	483	526	572	623	657	669	515	561	611	667	704	714
	qw l/s	77.8	75.6	72.8	69.2	66.5	61.7	82.4	80.0	77.0	73.1	70.2	64.9
	dpw kPa	69	65	61	56	52	45	76	72	67	61	57	49
<b>7</b>	CC kW	1720	1671	1608	1527	1468	1330	1818	1766	1699	1612	1547	1398
	PI kW	498	542	589	642	677	662	531	578	629	687	724	709
	qw l/s	82.1	79.7	76.7	72.9	70.0	63.5	86.8	84.3	81.1	76.9	73.8	66.7
	dpw kPa	76	72	67	61	57	48	83	79	74	67	62	52
<b>9</b>	CC kW	1809	1757	1690	1605	1542	1363	1910	1855	1783	1691	1617	1423
	PI kW	513	558	607	661	697	652	547	596	649	707	743	695
	qw l/s	86.4	83.9	80.7	76.6	73.7	65.1	91.2	88.6	85.2	80.7	77.2	67.9
	dpw kPa	83	79	74	67	62	50	91	86	80	73	67	54
<b>11</b>	CC kW	1901	1845	1774	1683	1575	1399	2004	1944	1869	1771	1652	1447
	PI kW	529	575	625	681	690	645	564	614	668	728	736	681
	qw l/s	90.9	88.2	84.8	80.5	75.3	66.9	95.8	92.9	89.3	84.6	78.9	69.2
	dpw kPa	91	86	80	73	65	52	99	94	87	79	70	55
<b>13</b>	CC kW	1994	1934	1859	1763	1612	1414	2099	2036	1955	1852	1695	1436
	PI kW	545	593	644	701	681	661	582	633	688	750	733	680
	qw l/s	95.4	92.5	88.9	84.3	77.1	67.7	100.4	97.4	93.5	88.6	81.1	68.7
	dpw kPa	99	94	88	80	68	54	108	102	95	86	74	55
<b>15</b>	CC kW	2089	2025	1945	1831	1652	1452	2196	2129	2043	1921	1733	1460
	PI kW	562	611	664	715	675	653	600	652	709	765	728	664
	qw l/s	100.0	97.0	93.1	87.6	79.1	69.5	105.1	101.9	97.8	92.0	83.0	69.9
	dpw kPa	108	102	95	85	71	56	117	111	103	92	77	56

Fluid: Water

Heat Recovery OFF

Ta: Condenser inlet air temperature; Twout: Evaporator leaving water temperature ( $\Delta t 5.0^{\circ}\text{C}$ );

CC: Cooling capacity; PI: Power input; qw: Fluid flow rate; dpw: Fluid pressure drop

\* For working condition where dpw value is "Italic-Red Color" please contact factory

## EWAD C-SL

		650						740					
Twout	Ta	25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	667	637	603	564	538	510	748	727	701	667	642	603
	PI kW	188	202	217	234	244	255	219	238	259	282	297	308
	qw l/s	31.8	30.3	28.7	26.9	25.6	24.3	35.6	34.7	33.4	31.8	30.6	28.7
	dpw kPa	49	45	41	36	33	30	55	52	49	44	41	37
<b>7</b>	CC kW	707	675	640	600	573	543	788	766	738	702	675	622
	PI kW	194	208	224	241	252	263	225	245	266	290	306	306
	qw l/s	33.7	32.2	30.5	28.6	27.3	25.9	37.6	36.5	35.2	33.5	32.2	29.7
	dpw kPa	55	50	46	41	37	34	60	57	53	49	45	39
<b>9</b>	CC kW	747	715	677	635	608	578	828	805	775	737	709	643
	PI kW	200	215	231	249	260	271	232	252	274	299	315	307
	qw l/s	35.7	34.1	32.3	30.3	29.0	27.6	39.6	38.4	37.0	35.2	33.9	30.7
	dpw kPa	60	56	51	45	42	38	66	63	58	53	50	42
<b>11</b>	CC kW	788	754	716	672	643	612	870	845	813	773	733	655
	PI kW	206	221	238	256	268	280	239	260	283	308	317	302
	qw l/s	37.7	36.0	34.2	32.1	30.7	29.2	41.6	40.4	38.9	37.0	35.0	31.3
	dpw kPa	67	61	56	50	46	42	72	68	64	58	53	43
<b>13</b>	CC kW	830	794	754	709	679	646	912	886	852	810	754	655
	PI kW	212	228	246	264	276	288	247	268	291	317	317	302
	qw l/s	39.7	38.0	36.1	33.9	32.5	30.9	43.6	42.4	40.8	38.7	36.1	31.3
	dpw kPa	73	67	62	55	51	47	79	74	69	63	56	43
<b>15</b>	CC kW	872	835	793	746	716	670	956	927	892	847	777	664
	PI kW	219	235	253	272	285	291	254	276	300	326	318	295
	qw l/s	41.8	40.0	38.0	35.7	34.3	32.1	45.8	44.4	42.7	40.5	37.2	31.8
	dpw kPa	80	74	67	61	56	50	85	81	75	69	59	44
		830						910					
Twout	Ta	25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	843	817	783	739	707	629	917	892	860	817	786	731
	PI kW	250	271	295	321	338	328	265	289	314	342	360	367
	qw l/s	40.2	38.9	37.3	35.2	33.7	30.0	43.7	42.5	41.0	39.0	37.5	34.8
	dpw kPa	54	51	47	42	39	32	63	60	56	51	48	42
<b>7</b>	CC kW	887	860	824	778	744	636	966	939	904	860	827	756
	PI kW	258	280	304	331	349	319	273	297	323	352	371	367
	qw l/s	42.3	41.0	39.3	37.1	35.5	30.4	46.1	44.8	43.2	41.0	39.5	36.1
	dpw kPa	59	56	52	47	43	33	69	66	61	56	52	44
<b>9</b>	CC kW	932	903	865	817	759	646	1015	986	950	903	866	782
	PI kW	266	289	314	342	346	311	282	306	333	362	381	367
	qw l/s	44.5	43.1	41.3	39.0	36.2	30.9	48.5	47.1	45.4	43.1	41.4	37.3
	dpw kPa	65	61	57	51	45	33	76	72	67	61	57	47
<b>11</b>	CC kW	978	947	907	856	767	641	1065	1034	996	946	892	791
	PI kW	275	298	324	353	338	319	290	315	343	373	381	359
	qw l/s	46.8	45.3	43.3	40.9	36.7	30.6	50.9	49.4	47.6	45.2	42.6	37.8
	dpw kPa	71	67	62	56	46	33	83	78	73	67	60	48
<b>13</b>	CC kW	1025	991	948	895	777	646	1116	1084	1043	990	917	792
	PI kW	284	308	335	364	330	308	299	325	353	384	380	359
	qw l/s	49.0	47.4	45.4	42.8	37.2	30.9	53.4	51.8	49.9	47.4	43.9	37.9
	dpw kPa	77	72	67	60	47	34	90	85	79	72	63	48
<b>15</b>	CC kW	1073	1036	991	903	785	659	1168	1134	1090	1029	943	802
	PI kW	293	318	346	357	321	301	308	335	364	393	381	349
	qw l/s	51.4	49.6	47.4	43.2	37.6	31.5	55.9	54.3	52.2	49.3	45.2	38.4
	dpw kPa	84	79	72	61	48	35	98	93	86	78	66	50

## EWAD C-SL

Twout	Ta	970						C11					
		25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	977	949	912	864	829	751	1071	1041	1003	954	917	851
	PI kW	292	318	346	377	398	395	315	342	373	406	429	436
	qw l/s	46.6	45.2	43.5	41.2	39.5	35.8	51.0	49.6	47.8	45.5	43.7	40.6
	dpw kPa	70	67	62	56	52	44	65	62	58	53	49	43
<b>7</b>	CC kW	1028	997	958	908	871	761	1127	1095	1055	1002	964	879
	PI kW	301	327	356	389	410	385	324	353	384	418	441	435
	qw l/s	49.0	47.6	45.7	43.3	41.5	36.3	53.8	52.3	50.3	47.8	46.0	41.9
	dpw kPa	77	73	68	62	57	45	71	68	63	58	54	46
<b>9</b>	CC kW	1079	1047	1005	951	908	773	1184	1151	1108	1052	1006	906
	PI kW	310	338	367	400	420	376	334	363	395	431	451	434
	qw l/s	51.5	50.0	48.0	45.4	43.3	36.9	56.6	55.0	52.9	50.2	48.0	43.3
	dpw kPa	84	80	74	67	62	46	78	74	69	63	58	48
<b>11</b>	CC kW	1132	1097	1053	996	918	782	1243	1207	1161	1102	1036	917
	PI kW	320	348	379	413	411	365	344	374	407	443	451	423
	qw l/s	54.1	52.4	50.3	47.6	43.9	37.4	59.4	57.7	55.5	52.7	49.5	43.8
	dpw kPa	92	87	81	73	63	47	85	81	75	69	61	49
<b>13</b>	CC kW	1185	1148	1101	1041	926	777	1302	1264	1215	1153	1065	917
	PI kW	330	359	390	425	400	375	355	386	419	457	450	423
	qw l/s	56.7	54.9	52.7	49.8	44.3	37.2	62.3	60.5	58.1	55.2	50.9	43.9
	dpw kPa	100	94	88	79	64	47	93	88	82	75	65	49
<b>15</b>	CC kW	1239	1199	1149	1075	937	787	1363	1322	1270	1195	1096	928
	PI kW	340	370	402	432	390	363	365	397	432	464	450	411
	qw l/s	59.3	57.4	55.0	51.5	44.9	37.7	65.3	63.3	60.8	57.2	52.5	44.4
	dpw kPa	108	102	95	84	66	48	101	95	89	80	68	50

Twout	Ta	C12						C15					
		25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	1155	1125	1087	1037	1000	957	1550	1505	1448	1373	1318	1220
	PI kW	336	366	398	434	458	484	460	500	544	593	625	636
	qw l/s	55.0	53.6	51.8	49.4	47.7	45.6	73.9	71.7	69.0	65.4	62.8	58.2
	dpw kPa	74	71	67	61	57	53	63	60	56	51	47	41
<b>7</b>	CC kW	1215	1183	1143	1091	1052	1007	1634	1586	1524	1445	1387	1254
	PI kW	346	377	410	447	471	497	474	515	561	611	644	631
	qw l/s	58.0	56.4	54.5	52.0	50.2	48.0	77.9	75.6	72.7	68.9	66.2	59.8
	dpw kPa	81	78	73	67	63	58	69	66	61	55	52	43
<b>9</b>	CC kW	1276	1243	1200	1145	1104	1033	1719	1668	1602	1518	1457	1288
	PI kW	356	387	421	459	484	497	489	532	578	629	663	625
	qw l/s	61.0	59.4	57.3	54.7	52.7	49.3	82.1	79.6	76.5	72.5	69.6	61.5
	dpw kPa	89	85	80	73	69	61	76	72	67	61	56	45
<b>11</b>	CC kW	1339	1304	1258	1200	1157	1045	1806	1751	1681	1593	1488	1304
	PI kW	366	398	433	472	498	485	504	548	596	649	657	610
	qw l/s	64.0	62.3	60.2	57.4	55.3	49.9	86.3	83.7	80.4	76.1	71.1	62.4
	dpw kPa	97	93	87	80	75	62	83	79	73	66	59	46
<b>13</b>	CC kW	1403	1366	1318	1256	1211	1060	1895	1836	1762	1668	1522	1300
	PI kW	377	410	446	486	512	475	520	566	615	669	651	614
	qw l/s	67.1	65.3	63.0	60.1	57.9	50.7	90.6	87.8	84.3	79.8	72.8	62.2
	dpw kPa	106	101	95	87	81	64	91	86	80	72	61	46
<b>15</b>	CC kW	1469	1428	1378	1313	1252	1072	1985	1922	1843	1731	1559	1317
	PI kW	388	422	459	499	519	463	537	583	634	682	646	597
	qw l/s	70.3	68.4	66.0	62.8	59.9	51.3	95.0	92.0	88.3	82.9	74.6	63.1
	dpw kPa	115	110	103	94	86	65	99	93	86	77	64	47

## EWAD C-SL

Twout	Ta	C16						C17					
		25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	1632	1586	1528	1451	1395	1294	1728	1679	1616	1534	1473	1361
	PI kW	483	526	572	623	657	669	515	561	611	667	704	714
	qw l/s	77.8	75.6	72.8	69.2	66.5	61.7	82.4	80.0	77.0	73.1	70.2	64.9
	dpw kPa	69	65	61	56	52	45	76	72	67	61	57	49
<b>7</b>	CC kW	1720	1671	1608	1527	1468	1330	1818	1766	1699	1612	1547	1398
	PI kW	498	542	589	642	677	662	531	578	629	687	724	709
	qw l/s	82.1	79.7	76.7	72.9	70.0	63.5	86.8	84.3	81.1	76.9	73.8	66.7
	dpw kPa	76	72	67	61	57	48	83	79	74	67	62	52
<b>9</b>	CC kW	1809	1757	1690	1605	1542	1363	1910	1855	1783	1691	1617	1423
	PI kW	513	558	607	661	697	652	547	596	649	707	743	695
	qw l/s	86.4	83.9	80.7	76.6	73.7	65.1	91.2	88.6	85.2	80.7	77.2	67.9
	dpw kPa	83	79	74	67	62	50	91	86	80	73	67	54
<b>11</b>	CC kW	1901	1845	1774	1683	1575	1399	2004	1944	1869	1771	1652	1447
	PI kW	529	575	625	681	690	645	564	614	668	728	736	681
	qw l/s	90.9	88.2	84.8	80.5	75.3	66.9	95.8	92.9	89.3	84.6	78.9	69.2
	dpw kPa	91	86	80	73	65	52	99	94	87	79	70	55
<b>13</b>	CC kW	1994	1934	1859	1763	1612	1414	2099	2036	1955	1852	1695	1436
	PI kW	545	593	644	701	681	661	582	633	688	750	733	680
	qw l/s	95.4	92.5	88.9	84.3	77.1	67.7	100.4	97.4	93.5	88.6	81.1	68.7
	dpw kPa	99	94	88	80	68	54	108	102	95	86	74	55
<b>15</b>	CC kW	2089	2025	1945	1831	1652	1452	2196	2129	2043	1921	1733	1460
	PI kW	562	611	664	715	675	653	600	652	709	765	728	664
	qw l/s	100.0	97.0	93.1	87.6	79.1	69.5	105.1	101.9	97.8	92.0	83.0	69.9
	dpw kPa	108	102	95	85	71	56	117	111	103	92	77	56

Fluid: Water

Heat Recovery OFF

Ta: Condenser inlet air temperature; Twout: Evaporator leaving water temperature ( $\Delta t 5.0^{\circ}\text{C}$ );

CC: Cooling capacity; PI: Power input; qw: Fluid flow rate; dpw: Fluid pressure drop

\* For working condition where dpw value is "Italic-Red Color" please contact factory

## EWAD C-SR

Twout	Ta	620						720					
		25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	645	613	577	535	507	477	731	706	674	632	582	499
	PI kW	188	203	219	236	246	257	225	246	269	294	293	281
	qw l/s	30.7	29.2	27.5	25.5	24.2	22.7	34.8	33.7	32.1	30.1	27.7	23.8
	dpw kPa	46	42	38	33	30	27	52	49	45	40	35	26
<b>7</b>	CC kW	683	649	611	568	538	507	769	742	707	659	600	506
	PI kW	195	210	227	244	255	267	233	254	278	301	293	272
	qw l/s	32.6	31.0	29.2	27.1	25.7	24.2	36.7	35.4	33.7	31.5	28.6	24.1
	dpw kPa	51	47	42	37	33	30	57	54	49	44	37	27
<b>9</b>	CC kW	721	686	646	601	570	515	807	778	741	680	612	514
	PI kW	202	218	235	253	264	262	242	263	287	302	289	264
	qw l/s	34.4	32.7	30.8	28.7	27.2	24.6	38.6	37.2	35.4	32.5	29.2	24.6
	dpw kPa	57	52	46	41	37	31	63	59	54	46	38	28
<b>11</b>	CC kW	759	723	681	634	603	526	846	815	776	699	613	517
	PI kW	209	226	243	262	274	256	250	273	297	302	289	264
	qw l/s	36.3	34.5	32.5	30.3	28.8	25.1	40.5	39.0	37.1	33.4	29.3	24.7
	dpw kPa	62	57	51	45	41	32	68	64	59	49	38	28
<b>13</b>	CC kW	798	760	717	667	624	530	886	853	811	720	620	523
	PI kW	217	234	252	271	277	246	259	282	307	303	281	254
	qw l/s	38.2	36.3	34.3	31.9	29.9	25.3	42.4	40.8	38.8	34.4	29.6	25.0
	dpw kPa	68	62	56	49	44	33	74	69	63	51	39	29
<b>15</b>	CC kW	837	797	752	702	631	540	926	890	841	727	629	533
	PI kW	224	242	261	281	270	240	268	292	315	295	273	248
	qw l/s	40.1	38.2	36.0	33.6	30.2	25.8	44.3	42.6	40.3	34.8	30.1	25.5
	dpw kPa	74	68	61	54	45	34	81	75	68	52	40	30

Twout	Ta	790						880					
		25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	818	785	742	688	592	486	897	866	826	773	706	601
	PI kW	260	283	308	336	305	289	273	298	325	355	350	333
	qw l/s	39.0	37.4	35.4	32.8	28.2	23.2	42.7	41.3	39.3	36.9	33.7	28.7
	dpw kPa	51	47	43	37	29	20	60	56	52	46	39	29
<b>7</b>	CC kW	859	824	779	695	602	497	943	909	867	803	731	612
	PI kW	269	293	320	328	297	282	283	308	336	361	352	324
	qw l/s	41.0	39.3	37.2	33.1	28.7	23.7	45.0	43.4	41.3	38.3	34.9	29.2
	dpw kPa	56	52	47	38	29	21	66	62	57	49	42	30
<b>9</b>	CC kW	901	864	816	703	596	505	989	953	908	828	739	622
	PI kW	280	304	332	319	306	273	293	319	348	362	342	314
	qw l/s	43.0	41.2	39.0	33.6	28.5	24.1	47.2	45.5	43.4	39.5	35.3	29.7
	dpw kPa	61	56	51	39	29	22	72	67	62	52	43	31
<b>11</b>	CC kW	943	903	852	713	603	515	1036	998	949	851	740	623
	PI kW	290	316	344	312	296	264	303	330	360	361	343	313
	qw l/s	45.1	43.2	40.7	34.1	28.8	24.6	49.5	47.7	45.4	40.7	35.4	29.8
	dpw kPa	66	61	55	40	30	22	78	73	67	55	43	31
<b>13</b>	CC kW	986	942	879	721	611	523	1084	1043	991	870	748	633
	PI kW	301	327	351	302	286	255	314	342	372	359	331	303
	qw l/s	47.1	45.1	42.1	34.5	29.2	25.0	51.8	49.9	47.4	41.6	35.8	30.3
	dpw kPa	72	66	59	41	30	23	85	79	72	57	44	32
<b>15</b>	CC kW	1028	982	887	712	622	534	1132	1088	1023	881	758	642
	PI kW	313	340	342	307	277	247	325	354	378	351	322	293
	qw l/s	49.2	47.0	42.5	34.1	29.8	25.5	54.2	52.1	49.0	42.2	36.3	30.8
	dpw kPa	78	71	60	40	31	24	92	86	77	59	45	33

## EWAD C-SR

		920						C10					
Twout	Ta	25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	952	916	870	810	709	586	1046	1009	962	901	822	697
	PI kW	304	332	363	397	370	351	325	355	388	424	417	393
	qw l/s	45.4	43.7	41.5	38.6	33.8	27.9	49.8	48.1	45.8	42.9	39.2	33.2
	dpw kPa	67	63	57	50	40	28	62	58	53	48	40	30
<b>7</b>	CC kW	999	961	911	831	722	595	1099	1059	1009	932	845	706
	PI kW	315	344	375	398	361	340	336	367	401	429	414	380
	qw l/s	47.7	45.8	43.5	39.7	34.4	28.4	52.4	50.5	48.1	44.5	40.3	33.7
	dpw kPa	73	68	62	53	41	29	68	64	58	51	42	31
<b>9</b>	CC kW	1047	1006	953	842	732	605	1153	1110	1056	960	857	719
	PI kW	326	356	389	389	350	328	348	380	415	430	404	370
	qw l/s	50.0	48.0	45.5	40.2	35.0	28.9	55.0	53.0	50.4	45.8	40.9	34.4
	dpw kPa	80	74	67	54	42	30	74	69	63	53	44	32
<b>11</b>	CC kW	1095	1051	995	849	722	617	1207	1162	1104	987	855	721
	PI kW	338	369	402	376	358	319	360	393	429	428	403	367
	qw l/s	52.3	50.2	47.5	40.6	34.5	29.5	57.7	55.5	52.8	47.2	40.9	34.5
	dpw kPa	87	80	73	55	41	31	81	75	69	56	43	32
<b>13</b>	CC kW	1144	1097	1037	859	733	627	1263	1214	1153	1006	866	735
	PI kW	350	382	416	366	347	308	373	407	443	424	391	357
	qw l/s	54.7	52.5	49.6	41.1	35.0	30.0	60.4	58.1	55.1	48.1	41.4	35.1
	dpw kPa	94	87	79	56	42	32	88	82	74	58	45	33
<b>15</b>	CC kW	1193	1142	1058	873	745	639	1319	1267	1186	1008	881	746
	PI kW	363	395	416	358	337	299	386	421	448	425	382	345
	qw l/s	57.1	54.7	50.6	41.8	35.7	30.6	63.1	60.6	56.8	48.3	42.2	35.7
	dpw kPa	101	94	82	58	43	33	95	88	79	59	46	34

		C11						C13					
Twout	Ta	25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	1131	1096	1049	988	943	808	1392	1346	1287	1210	1137	999
	PI kW	344	376	411	450	475	434	428	467	510	558	575	561
	qw l/s	53.9	52.2	50.0	47.1	45.0	38.5	66.3	64.2	61.3	57.7	54.2	47.6
	dpw kPa	72	68	62	56	52	39	47	44	40	36	32	26
<b>7</b>	CC kW	1189	1151	1101	1036	969	822	1465	1416	1353	1271	1182	1015
	PI kW	356	388	424	464	476	422	442	483	527	576	582	546
	qw l/s	56.7	54.9	52.5	49.4	46.2	39.2	69.9	67.6	64.6	60.7	56.4	48.4
	dpw kPa	78	74	68	61	54	40	51	48	44	40	35	26
<b>9</b>	CC kW	1248	1207	1153	1085	981	812	1540	1487	1420	1322	1217	1027
	PI kW	367	401	438	479	465	434	458	499	545	587	583	529
	qw l/s	59.6	57.6	55.1	51.8	46.9	38.8	73.5	71.0	67.8	63.2	58.1	49.1
	dpw kPa	86	81	74	67	56	40	56	53	48	43	37	27
<b>11</b>	CC kW	1307	1263	1207	1135	991	827	1616	1559	1487	1371	1235	1041
	PI kW	380	414	452	494	451	423	474	516	563	595	571	512
	qw l/s	62.5	60.4	57.7	54.2	47.3	39.5	77.2	74.5	71.1	65.5	59.0	49.8
	dpw kPa	93	88	81	72	57	41	61	57	53	45	38	28
<b>13</b>	CC kW	1368	1321	1260	1147	1003	839	1693	1633	1556	1418	1239	1038
	PI kW	392	428	467	486	438	408	490	534	582	601	563	515
	qw l/s	65.4	63.2	60.3	54.9	48.0	40.1	81.0	78.1	74.4	67.9	59.3	49.7
	dpw kPa	101	95	87	74	58	42	67	62	57	48	38	28
<b>15</b>	CC kW	1429	1379	1315	1164	996	853	1771	1707	1625	1451	1255	1057
	PI kW	406	442	482	477	450	396	507	552	602	599	547	501
	qw l/s	68.4	66.0	62.9	55.7	47.7	40.8	84.8	81.7	77.8	69.5	60.1	50.6
	dpw kPa	110	103	94	76	57	43	72	68	62	50	39	29

## EWAD C-SR

Twout	Ta	C14						C15					
		25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	1512	1456	1385	1293	1169	985	1594	1538	1465	1372	1241	1076
	PI kW	476	519	567	620	603	571	498	543	593	649	628	613
	qw l/s	72.0	69.4	66.0	61.6	55.7	46.9	76.0	73.3	69.8	65.4	59.1	51.3
	dpw kPa	60	56	51	45	38	28	66	62	57	50	42	33
<b>7</b>	CC kW	1590	1531	1454	1340	1201	1003	1677	1617	1539	1420	1278	1108
	PI kW	493	538	587	630	598	556	515	562	614	657	624	606
	qw l/s	75.9	73.0	69.4	63.9	57.3	47.8	80.0	77.1	73.4	67.7	61.0	52.8
	dpw kPa	66	61	56	48	40	29	72	68	62	54	44	34
<b>9</b>	CC kW	1670	1606	1524	1372	1219	1019	1761	1696	1613	1457	1314	1125
	PI kW	511	557	608	624	584	539	534	582	635	651	617	589
	qw l/s	79.8	76.7	72.8	65.5	58.2	48.7	84.1	81.0	77.0	69.6	62.7	53.7
	dpw kPa	72	67	61	51	41	30	79	74	68	56	47	35
<b>11</b>	CC kW	1751	1682	1595	1406	1216	1027	1847	1777	1688	1491	1327	1144
	PI kW	530	577	629	620	589	532	553	602	657	643	635	572
	qw l/s	83.7	80.4	76.2	67.2	58.1	49.1	88.3	84.9	80.7	71.3	63.4	54.7
	dpw kPa	79	73	66	53	41	30	86	81	74	59	48	36
<b>13</b>	CC kW	1833	1759	1666	1435	1231	1045	1934	1858	1764	1528	1361	1161
	PI kW	549	598	652	612	571	516	572	624	680	636	627	554
	qw l/s	87.7	84.1	79.7	68.6	58.9	50.0	92.5	88.9	84.4	73.1	65.1	55.5
	dpw kPa	85	79	72	55	42	31	94	87	80	61	50	38
<b>15</b>	CC kW	1916	1836	1714	1452	1250	1057	2021	1941	1816	1569	1376	1173
	PI kW	570	620	658	597	555	495	593	646	686	634	606	532
	qw l/s	91.7	87.9	82.0	69.5	59.8	50.6	96.8	92.9	86.9	75.1	65.9	56.1
	dpw kPa	93	86	76	56	43	32	102	95	84	65	51	38

Twout	Ta	C16											
		25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	1669	1609	1530	1430	1289	1080						
	PI kW	533	582	636	697	674	631						
	qw l/s	79.5	76.7	72.9	68.1	61.4	51.5						
	dpw kPa	72	68	62	55	45	33						
<b>7</b>	CC kW	1753	1688	1605	1473	1316	1102						
	PI kW	552	602	658	702	664	615						
	qw l/s	83.6	80.5	76.6	70.3	62.8	52.6						
	dpw kPa	79	74	68	58	47	34						
<b>9</b>	CC kW	1838	1769	1679	1510	1334	1108						
	PI kW	571	623	681	698	646	607						
	qw l/s	87.8	84.5	80.2	72.1	63.7	52.9						
	dpw kPa	86	81	73	61	49	35						
<b>11</b>	CC kW	1924	1850	1755	1550	1330	1126						
	PI kW	592	645	705	695	651	588						
	qw l/s	92.0	88.4	83.9	74.1	63.6	53.8						
	dpw kPa	94	87	80	64	48	36						
<b>13</b>	CC kW	2012	1932	1831	1572	1349	1142						
	PI kW	613	668	729	681	632	567						
	qw l/s	96.2	92.4	87.6	75.2	64.5	54.7						
	dpw kPa	102	95	86	65	50	37						
<b>15</b>	CC kW	2100	2014	1882	1564	1366	1163						
	PI kW	635	692	737	682	611	550						
	qw l/s	100.5	96.4	90.1	74.9	65.4	55.7						
	dpw kPa	110	102	90	65	51	38						

Fluid: Water

Heat Recovery OFF

Ta: Condenser inlet air temperature; Twout: Evaporator leaving water temperature ( $\Delta t = 5.0^{\circ}\text{C}$ );

CC: Cooling capacity; PI: Power input; qw: Fluid flow rate; dpw: Fluid pressure drop

\* For working condition where dpw value is "Italic-Red Color" please contact factory

## EWAD C-XS

		760						830					
Twout	Ta	25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	752	732	710	681	660	635	824	803	779	749	727	701
	PI kW	195	212	230	249	261	275	212	231	250	271	285	299
	qw l/s	35.8	34.9	33.8	32.5	31.4	30.2	39.3	38.3	37.1	35.7	34.6	33.4
	dpw kPa	80	76	72	67	63	59	56	53	51	47	45	42
<b>7</b>	CC kW	795	775	751	721	698	672	872	850	825	793	769	742
	PI kW	201	218	236	256	269	282	218	237	257	278	292	307
	qw l/s	37.9	37.0	35.8	34.4	33.3	32.1	41.6	40.5	39.3	37.8	36.7	35.4
	dpw kPa	88	84	80	74	70	65	62	59	56	52	50	46
<b>9</b>	CC kW	839	818	793	761	738	710	919	897	871	838	813	784
	PI kW	206	224	243	263	276	290	224	244	264	286	300	315
	qw l/s	40.0	39.0	37.9	36.3	35.2	33.9	43.9	42.8	41.6	40.0	38.8	37.4
	dpw kPa	97	93	88	82	77	72	68	65	62	58	55	51
<b>11</b>	CC kW	882	861	835	802	778	749	966	943	916	883	858	828
	PI kW	212	231	250	271	284	298	230	250	271	294	309	324
	qw l/s	42.2	41.1	39.9	38.3	37.2	35.8	46.2	45.1	43.8	42.2	41.0	39.6
	dpw kPa	107	102	97	90	85	80	75	72	68	64	60	57
<b>13</b>	CC kW	927	904	877	843	818	789	1013	990	962	927	902	872
	PI kW	218	237	257	278	292	307	235	256	278	302	317	333
	qw l/s	44.3	43.3	42.0	40.3	39.1	37.7	48.5	47.4	46.0	44.4	43.1	41.7
	dpw kPa	117	112	106	99	93	87	82	78	74	70	66	62
<b>15</b>	CC kW	972	948	920	884	858	828	1059	1036	1008	972	946	915
	PI kW	224	243	264	286	300	315	241	263	285	309	325	341
	qw l/s	46.5	45.4	44.0	42.3	41.1	39.6	50.7	49.6	48.3	46.6	45.3	43.8
	dpw kPa	127	122	115	107	102	96	88	85	81	76	72	68
		890						990					
Twout	Ta	25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	885	861	835	801	776	747	996	969	938	899	871	837
	PI kW	233	253	274	298	313	329	257	280	303	328	345	362
	qw l/s	42.2	41.1	39.8	38.2	37.0	35.6	47.4	46.2	44.7	42.9	41.5	39.9
	dpw kPa	64	61	57	53	50	47	60	57	54	50	47	44
<b>7</b>	CC kW	936	911	883	847	820	790	1055	1027	994	953	923	887
	PI kW	240	260	282	306	321	338	265	288	312	338	355	372
	qw l/s	44.6	43.5	42.1	40.4	39.1	37.7	50.3	49.0	47.4	45.5	44.0	42.3
	dpw kPa	70	67	63	59	56	52	67	64	60	56	53	49
<b>9</b>	CC kW	982	960	932	894	866	833	1115	1086	1052	1008	976	939
	PI kW	246	268	290	315	330	347	272	296	321	348	365	383
	qw l/s	46.9	45.8	44.5	42.7	41.3	39.8	53.3	51.9	50.2	48.1	46.6	44.8
	dpw kPa	77	74	70	65	61	57	74	71	67	62	58	54
<b>11</b>	CC kW	1028	1005	977	942	913	879	1177	1146	1109	1064	1031	992
	PI kW	252	274	298	324	340	357	280	305	330	358	375	394
	qw l/s	49.1	48.0	46.7	45.0	43.6	42.0	56.2	54.8	53.0	50.9	49.3	47.4
	dpw kPa	84	80	76	72	68	63	82	78	74	68	64	60
<b>13</b>	CC kW	1075	1051	1022	985	958	925	1239	1207	1169	1121	1086	1046
	PI kW	258	281	305	332	349	367	289	314	340	368	386	405
	qw l/s	51.4	50.3	48.9	47.1	45.8	44.3	59.3	57.7	55.9	53.6	51.9	50.0
	dpw kPa	91	87	83	78	74	69	90	86	81	75	71	66
<b>15</b>	CC kW	1123	1098	1067	1029	1001	968	1302	1268	1228	1178	1142	1100
	PI kW	265	288	313	340	357	376	297	323	350	378	397	416
	qw l/s	53.7	52.5	51.1	49.2	47.9	46.4	62.3	60.7	58.8	56.4	54.7	52.7
	dpw kPa	98	94	90	84	80	75	98	94	88	82	78	73

## EWAD C-XS

		C10						C11					
Twout	Ta	25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	1071	1041	1007	963	930	892	1188	1157	1123	1079	1046	1008
	PI kW	283	307	333	361	379	399	304	332	360	390	409	430
	qw l/s	51.0	49.6	48.0	45.9	44.3	42.5	56.6	55.2	53.5	51.4	49.9	48.1
	dpw kPa	69	65	61	57	53	49	45	43	40	37	35	33
<b>7</b>	CC kW	1134	1103	1066	1019	985	945	1257	1225	1188	1142	1108	1068
	PI kW	291	317	343	372	391	411	313	341	369	400	420	441
	qw l/s	54.1	52.6	50.9	48.6	47.0	45.1	60.0	58.4	56.7	54.5	52.9	51.0
	dpw kPa	76	73	68	63	59	55	49	47	45	42	39	37
<b>9</b>	CC kW	1196	1164	1127	1077	1040	999	1327	1294	1255	1207	1171	1130
	PI kW	300	326	354	383	402	422	321	350	380	411	432	453
	qw l/s	57.1	55.6	53.8	51.4	49.7	47.7	63.4	61.8	59.9	57.6	55.9	53.9
	dpw kPa	84	80	75	70	65	61	55	52	49	46	44	41
<b>11</b>	CC kW	1259	1226	1186	1136	1097	1053	1398	1363	1323	1272	1235	1192
	PI kW	309	336	364	394	414	435	330	359	390	422	443	466
	qw l/s	60.2	58.6	56.7	54.3	52.5	50.4	66.8	65.2	63.2	60.8	59.0	57.0
	dpw kPa	92	88	83	77	72	67	60	57	54	51	48	45
<b>13</b>	CC kW	1323	1289	1247	1193	1155	1110	1471	1435	1392	1339	1300	1255
	PI kW	317	345	374	406	426	447	339	369	400	434	455	478
	qw l/s	63.3	61.7	59.7	57.1	55.2	53.1	70.4	68.6	66.6	64.0	62.2	60.1
	dpw kPa	101	96	91	84	79	74	66	63	60	56	53	50
<b>15</b>	CC kW	1389	1352	1308	1252	1212	1165	1545	1507	1462	1406	1366	1319
	PI kW	327	355	385	417	438	460	348	379	411	446	468	491
	qw l/s	66.5	64.7	62.6	60.0	58.0	55.8	74.0	72.1	70.0	67.3	65.4	63.2
	dpw kPa	110	105	99	92	86	80	72	69	65	61	58	54

		C12						C13					
Twout	Ta	25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	1274	1241	1203	1154	1117	1074	1344	1306	1261	1205	1164	1116
	PI kW	335	365	395	429	451	474	343	373	404	437	459	482
	qw l/s	60.7	59.2	57.3	55.0	53.2	51.2	64.1	62.2	60.1	57.4	55.5	53.2
	dpw kPa	51	48	46	42	40	37	67	64	60	55	52	48
<b>7</b>	CC kW	1346	1312	1271	1220	1181	1136	1426	1386	1339	1278	1235	1184
	PI kW	344	375	407	441	463	487	354	385	417	451	473	496
	qw l/s	64.2	62.6	60.6	58.2	56.4	54.2	68.0	66.1	63.9	61.0	58.9	56.5
	dpw kPa	56	53	51	47	44	41	75	71	67	61	58	53
<b>9</b>	CC kW	1419	1383	1341	1287	1247	1200	1510	1467	1417	1354	1307	1254
	PI kW	354	385	418	453	476	501	365	397	429	465	487	511
	qw l/s	67.7	66.1	64.0	61.4	59.5	57.3	72.1	70.1	67.7	64.7	62.4	59.9
	dpw kPa	62	59	56	52	49	46	83	79	74	68	64	59
<b>11</b>	CC kW	1493	1456	1411	1355	1313	1264	1597	1551	1497	1430	1382	1326
	PI kW	364	396	429	466	489	514	377	409	443	479	502	526
	qw l/s	71.4	69.6	67.4	64.8	62.7	60.4	76.3	74.2	71.6	68.3	66.0	63.4
	dpw kPa	68	65	61	57	54	50	92	87	82	75	71	66
<b>13</b>	CC kW	1569	1530	1482	1423	1380	1330	1685	1638	1580	1508	1457	1399
	PI kW	374	407	441	479	503	528	389	422	457	494	517	542
	qw l/s	75.1	73.2	70.9	68.1	66.0	63.6	80.6	78.4	75.6	72.1	69.7	66.9
	dpw kPa	74	71	67	62	59	55	101	96	90	83	78	72
<b>15</b>	CC kW	1647	1605	1555	1492	1447	1395	1775	1724	1664	1588	1534	1473
	PI kW	384	418	454	492	516	543	401	435	471	509	533	558
	qw l/s	78.9	76.9	74.5	71.4	69.3	66.8	85.0	82.5	79.7	76.0	73.4	70.5
	dpw kPa	81	77	73	68	64	60	111	106	99	91	86	80

## EWAD C-XS

Twout	Ta	C16						C17					
		25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	1591	1550	1500	1437	1390	1335	1678	1636	1586	1521	1473	1417
	PI kW	421	459	497	540	567	597	446	486	527	572	602	634
	qw l/s	75.8	73.9	71.5	68.5	66.2	63.6	80.0	78.0	75.6	72.5	70.2	67.5
	dpw kPa	62	59	55	51	48	45	68	65	61	57	54	50
<b>7</b>	CC kW	1678	1636	1585	1518	1469	1411	1770	1726	1674	1606	1555	1496
	PI kW	433	472	512	555	583	614	459	499	542	588	618	651
	qw l/s	80.1	78.0	75.6	72.4	70.1	67.3	84.4	82.3	79.8	76.6	74.2	71.4
	dpw kPa	68	65	61	57	53	50	75	71	68	63	59	55
<b>9</b>	CC kW	1768	1723	1669	1600	1549	1489	1863	1817	1762	1691	1639	1578
	PI kW	445	485	526	571	600	631	471	513	557	605	635	668
	qw l/s	84.4	82.3	79.7	76.4	74.0	71.1	89.0	86.8	84.1	80.8	78.3	75.3
	dpw kPa	75	71	67	62	59	55	82	79	74	69	65	61
<b>11</b>	CC kW	1859	1812	1755	1682	1629	1568	1959	1911	1852	1778	1723	1660
	PI kW	458	498	541	587	617	649	484	527	572	621	653	687
	qw l/s	88.9	86.6	83.9	80.4	77.9	75.0	93.7	91.3	88.5	85.0	82.4	79.4
	dpw kPa	82	78	74	68	65	60	90	86	81	76	71	67
<b>13</b>	CC kW	1953	1903	1842	1766	1710	1647	2058	2006	1944	1866	1809	1743
	PI kW	471	512	556	603	634	666	498	542	588	638	670	705
	qw l/s	93.4	91.0	88.1	84.5	81.8	78.8	98.4	96.0	93.0	89.2	86.5	83.4
	dpw kPa	90	86	81	75	71	66	98	94	89	83	78	73
<b>15</b>	CC kW	2049	1996	1932	1851	1793	1726	2158	2104	2038	1955	1895	1827
	PI kW	485	527	572	620	651	684	512	557	604	655	688	724
	qw l/s	98.1	95.6	92.5	88.6	85.8	82.6	103.3	100.7	97.6	93.6	90.7	87.5
	dpw kPa	98	93	88	81	77	72	107	103	97	90	85	80

Twout	Ta	C18						C19					
		25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	1759	1715	1664	1597	1548	1489	1848	1802	1749	1681	1631	1571
	PI kW	470	512	555	603	634	667	494	538	584	634	667	702
	qw l/s	83.9	81.7	79.3	76.1	73.8	71.0	88.1	85.9	83.4	80.1	77.7	74.9
	dpw kPa	67	64	61	57	53	50	74	70	67	62	59	55
<b>7</b>	CC kW	1857	1811	1756	1686	1634	1573	1950	1902	1846	1774	1721	1659
	PI kW	483	526	571	619	651	685	507	552	600	651	684	720
	qw l/s	88.6	86.4	83.8	80.5	78.0	75.1	93.0	90.7	88.1	84.6	82.1	79.1
	dpw kPa	74	71	67	62	59	55	81	78	74	68	65	61
<b>9</b>	CC kW	1958	1909	1851	1777	1723	1659	2055	2004	1945	1869	1813	1748
	PI kW	496	540	586	636	669	703	521	567	616	668	703	739
	qw l/s	93.5	91.1	88.4	84.9	82.3	79.2	98.1	95.7	92.9	89.3	86.6	83.5
	dpw kPa	82	78	74	69	65	61	89	85	81	75	71	67
<b>11</b>	CC kW	2061	2009	1948	1870	1812	1746	2163	2109	2046	1966	1907	1839
	PI kW	510	555	602	653	687	722	535	583	632	686	721	759
	qw l/s	98.5	96.0	93.1	89.4	86.6	83.5	103.4	100.8	97.8	94.0	91.2	87.9
	dpw kPa	90	86	81	75	71	67	98	94	89	83	78	73
<b>13</b>	CC kW	2166	2112	2047	1964	1904	1835	2273	2217	2150	2065	2004	1933
	PI kW	524	570	619	671	705	742	550	598	649	705	741	779
	qw l/s	103.6	101.0	97.9	94.0	91.1	87.8	108.7	106.1	102.9	98.8	95.9	92.5
	dpw kPa	98	94	89	83	78	73	107	103	97	90	86	80
<b>15</b>	CC kW	2274	2217	2148	2061	1998	1926	2386	2327	2256	2167	2102	2028
	PI kW	539	586	636	690	724	761	565	615	667	724	760	799
	qw l/s	108.9	106.1	102.8	98.6	95.6	92.2	114.2	111.4	108.0	103.7	100.6	97.1
	dpw kPa	108	103	97	90	85	80	117	112	106	99	93	88

Fluid: Water

Heat Recovery OFF

Ta: Condenser inlet air temperature; Twout: Evaporator leaving water temperature ( $\Delta t = 5.0^\circ\text{C}$ );

CC: Cooling capacity; PI: Power input; qw: Fluid flow rate; dpw: Fluid pressure drop

\* For working condition where dpw value is "Italic-Red Color" please contact factory

## EWAD C-XL

		760						830					
Twout	Ta	25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	752	732	710	681	660	635	824	803	779	749	727	701
	PI kW	195	212	230	249	261	275	212	231	250	271	285	299
	qw l/s	35.8	34.9	33.8	32.5	31.4	30.2	39.3	38.3	37.1	35.7	34.6	33.4
	dpw kPa	80	76	72	67	63	59	56	53	51	47	45	42
<b>7</b>	CC kW	795	775	751	721	698	672	872	850	825	793	769	742
	PI kW	201	218	236	256	269	282	218	237	257	278	292	307
	qw l/s	37.9	37.0	35.8	34.4	33.3	32.1	41.6	40.5	39.3	37.8	36.7	35.4
	dpw kPa	88	84	80	74	70	65	62	59	56	52	50	46
<b>9</b>	CC kW	839	818	793	761	738	710	919	897	871	838	813	784
	PI kW	206	224	243	263	276	290	224	244	264	286	300	315
	qw l/s	40.0	39.0	37.9	36.3	35.2	33.9	43.9	42.8	41.6	40.0	38.8	37.4
	dpw kPa	97	93	88	82	77	72	68	65	62	58	55	51
<b>11</b>	CC kW	882	861	835	802	778	749	966	943	916	883	858	828
	PI kW	212	231	250	271	284	298	230	250	271	294	309	324
	qw l/s	42.2	41.1	39.9	38.3	37.2	35.8	46.2	45.1	43.8	42.2	41.0	39.6
	dpw kPa	107	102	97	90	85	80	75	72	68	64	60	57
<b>13</b>	CC kW	927	904	877	843	818	789	1013	990	962	927	902	872
	PI kW	218	237	257	278	292	307	235	256	278	302	317	333
	qw l/s	44.3	43.3	42.0	40.3	39.1	37.7	48.5	47.4	46.0	44.4	43.1	41.7
	dpw kPa	117	112	106	99	93	87	82	78	74	70	66	62
<b>15</b>	CC kW	972	948	920	884	858	828	1059	1036	1008	972	946	915
	PI kW	224	243	264	286	300	315	241	263	285	309	325	341
	qw l/s	46.5	45.4	44.0	42.3	41.1	39.6	50.7	49.6	48.3	46.6	45.3	43.8
	dpw kPa	127	122	115	107	102	96	88	85	81	76	72	68
		890						990					
Twout	Ta	25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	885	861	835	801	776	747	996	969	938	899	871	837
	PI kW	233	253	274	298	313	329	257	280	303	328	345	362
	qw l/s	42.2	41.1	39.8	38.2	37.0	35.6	47.4	46.2	44.7	42.9	41.5	39.9
	dpw kPa	64	61	57	53	50	47	60	57	54	50	47	44
<b>7</b>	CC kW	936	911	883	847	820	790	1055	1027	994	953	923	887
	PI kW	240	260	282	306	321	338	265	288	312	338	355	372
	qw l/s	44.6	43.5	42.1	40.4	39.1	37.7	50.3	49.0	47.4	45.5	44.0	42.3
	dpw kPa	70	67	63	59	56	52	67	64	60	56	53	49
<b>9</b>	CC kW	982	960	932	894	866	833	1115	1086	1052	1008	976	939
	PI kW	246	268	290	315	330	347	272	296	321	348	365	383
	qw l/s	46.9	45.8	44.5	42.7	41.3	39.8	53.3	51.9	50.2	48.1	46.6	44.8
	dpw kPa	77	74	70	65	61	57	74	71	67	62	58	54
<b>11</b>	CC kW	1028	1005	977	942	913	879	1177	1146	1109	1064	1031	992
	PI kW	252	274	298	324	340	357	280	305	330	358	375	394
	qw l/s	49.1	48.0	46.7	45.0	43.6	42.0	56.2	54.8	53.0	50.9	49.3	47.4
	dpw kPa	84	80	76	72	68	63	82	78	74	68	64	60
<b>13</b>	CC kW	1075	1051	1022	985	958	925	1239	1207	1169	1121	1086	1046
	PI kW	258	281	305	332	349	367	289	314	340	368	386	405
	qw l/s	51.4	50.3	48.9	47.1	45.8	44.3	59.3	57.7	55.9	53.6	51.9	50.0
	dpw kPa	91	87	83	78	74	69	90	86	81	75	71	66
<b>15</b>	CC kW	1123	1098	1067	1029	1001	968	1302	1268	1228	1178	1142	1100
	PI kW	265	288	313	340	357	376	297	323	350	378	397	416
	qw l/s	53.7	52.5	51.1	49.2	47.9	46.4	62.3	60.7	58.8	56.4	54.7	52.7
	dpw kPa	98	94	90	84	80	75	98	94	88	82	78	73

## EWAD C-XL

Twout	Ta	C10						C11					
		25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	1071	1041	1007	963	930	892	1188	1157	1123	1079	1046	1008
	PI kW	283	307	333	361	379	399	304	332	360	390	409	430
	qw l/s	51.0	49.6	48.0	45.9	44.3	42.5	56.6	55.2	53.5	51.4	49.9	48.1
	dpw kPa	69	65	61	57	53	49	45	43	40	37	35	33
<b>7</b>	CC kW	1134	1103	1066	1019	985	945	1257	1225	1188	1142	1108	1068
	PI kW	291	317	343	372	391	411	313	341	369	400	420	441
	qw l/s	54.1	52.6	50.9	48.6	47.0	45.1	60.0	58.4	56.7	54.5	52.9	51.0
	dpw kPa	76	73	68	63	59	55	49	47	45	42	39	37
<b>9</b>	CC kW	1196	1164	1127	1077	1040	999	1327	1294	1255	1207	1171	1130
	PI kW	300	326	354	383	402	422	321	350	380	411	432	453
	qw l/s	57.1	55.6	53.8	51.4	49.7	47.7	63.4	61.8	59.9	57.6	55.9	53.9
	dpw kPa	84	80	75	70	65	61	55	52	49	46	44	41
<b>11</b>	CC kW	1259	1226	1186	1136	1097	1053	1398	1363	1323	1272	1235	1192
	PI kW	309	336	364	394	414	435	330	359	390	422	443	466
	qw l/s	60.2	58.6	56.7	54.3	52.5	50.4	66.8	65.2	63.2	60.8	59.0	57.0
	dpw kPa	92	88	83	77	72	67	60	57	54	51	48	45
<b>13</b>	CC kW	1323	1289	1247	1193	1155	1110	1471	1435	1392	1339	1300	1255
	PI kW	317	345	374	406	426	447	339	369	400	434	455	478
	qw l/s	63.3	61.7	59.7	57.1	55.2	53.1	70.4	68.6	66.6	64.0	62.2	60.1
	dpw kPa	101	96	91	84	79	74	66	63	60	56	53	50
<b>15</b>	CC kW	1389	1352	1308	1252	1212	1165	1545	1507	1462	1406	1366	1319
	PI kW	327	355	385	417	438	460	348	379	411	446	468	491
	qw l/s	66.5	64.7	62.6	60.0	58.0	55.8	74.0	72.1	70.0	67.3	65.4	63.2
	dpw kPa	110	105	99	92	86	80	72	69	65	61	58	54

Twout	Ta	C12						C13					
		25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	1274	1241	1203	1154	1117	1074	1344	1306	1261	1205	1164	1116
	PI kW	335	365	395	429	451	474	343	373	404	437	459	482
	qw l/s	60.7	59.2	57.3	55.0	53.2	51.2	64.1	62.2	60.1	57.4	55.5	53.2
	dpw kPa	51	48	46	42	40	37	67	64	60	55	52	48
<b>7</b>	CC kW	1346	1312	1271	1220	1181	1136	1426	1386	1339	1278	1235	1184
	PI kW	344	375	407	441	463	487	354	385	417	451	473	496
	qw l/s	64.2	62.6	60.6	58.2	56.4	54.2	68.0	66.1	63.9	61.0	58.9	56.5
	dpw kPa	56	53	51	47	44	41	75	71	67	61	58	53
<b>9</b>	CC kW	1419	1383	1341	1287	1247	1200	1510	1467	1417	1354	1307	1254
	PI kW	354	385	418	453	476	501	365	397	429	465	487	511
	qw l/s	67.7	66.1	64.0	61.4	59.5	57.3	72.1	70.1	67.7	64.7	62.4	59.9
	dpw kPa	62	59	56	52	49	46	83	79	74	68	64	59
<b>11</b>	CC kW	1493	1456	1411	1355	1313	1264	1597	1551	1497	1430	1382	1326
	PI kW	364	396	429	466	489	514	377	409	443	479	502	526
	qw l/s	71.4	69.6	67.4	64.8	62.7	60.4	76.3	74.2	71.6	68.3	66.0	63.4
	dpw kPa	68	65	61	57	54	50	92	87	82	75	71	66
<b>13</b>	CC kW	1569	1530	1482	1423	1380	1330	1685	1638	1580	1508	1457	1399
	PI kW	374	407	441	479	503	528	389	422	457	494	517	542
	qw l/s	75.1	73.2	70.9	68.1	66.0	63.6	80.6	78.4	75.6	72.1	69.7	66.9
	dpw kPa	74	71	67	62	59	55	101	96	90	83	78	72
<b>15</b>	CC kW	1647	1605	1555	1492	1447	1395	1775	1724	1664	1588	1534	1473
	PI kW	384	418	454	492	516	543	401	435	471	509	533	558
	qw l/s	78.9	76.9	74.5	71.4	69.3	66.8	85.0	82.5	79.7	76.0	73.4	70.5
	dpw kPa	81	77	73	68	64	60	111	106	99	91	86	80

## EWAD C-XL

Twout	Ta	C16						C17					
		25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	1591	1550	1500	1437	1390	1335	1678	1636	1586	1521	1473	1417
	PI kW	421	459	497	540	567	597	446	486	527	572	602	634
	qw l/s	75.8	73.9	71.5	68.5	66.2	63.6	80.0	78.0	75.6	72.5	70.2	67.5
	dpw kPa	62	59	55	51	48	45	68	65	61	57	54	50
<b>7</b>	CC kW	1678	1636	1585	1518	1469	1411	1770	1726	1674	1606	1555	1496
	PI kW	433	472	512	555	583	614	459	499	542	588	618	651
	qw l/s	80.1	78.0	75.6	72.4	70.1	67.3	84.4	82.3	79.8	76.6	74.2	71.4
	dpw kPa	68	65	61	57	53	50	75	71	68	63	59	55
<b>9</b>	CC kW	1768	1723	1669	1600	1549	1489	1863	1817	1762	1691	1639	1578
	PI kW	445	485	526	571	600	631	471	513	557	605	635	668
	qw l/s	84.4	82.3	79.7	76.4	74.0	71.1	89.0	86.8	84.1	80.8	78.3	75.3
	dpw kPa	75	71	67	62	59	55	82	79	74	69	65	61
<b>11</b>	CC kW	1859	1812	1755	1682	1629	1568	1959	1911	1852	1778	1723	1660
	PI kW	458	498	541	587	617	649	484	527	572	621	653	687
	qw l/s	88.9	86.6	83.9	80.4	77.9	75.0	93.7	91.3	88.5	85.0	82.4	79.4
	dpw kPa	82	78	74	68	65	60	90	86	81	76	71	67
<b>13</b>	CC kW	1953	1903	1842	1766	1710	1647	2058	2006	1944	1866	1809	1743
	PI kW	471	512	556	603	634	666	498	542	588	638	670	705
	qw l/s	93.4	91.0	88.1	84.5	81.8	78.8	98.4	96.0	93.0	89.2	86.5	83.4
	dpw kPa	90	86	81	75	71	66	98	94	89	83	78	73
<b>15</b>	CC kW	2049	1996	1932	1851	1793	1726	2158	2104	2038	1955	1895	1827
	PI kW	485	527	572	620	651	684	512	557	604	655	688	724
	qw l/s	98.1	95.6	92.5	88.6	85.8	82.6	103.3	100.7	97.6	93.6	90.7	87.5
	dpw kPa	98	93	88	81	77	72	107	103	97	90	85	80
Twout	Ta	C18						C19					
		25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	1759	1715	1664	1597	1548	1489	1848	1802	1749	1681	1631	1571
	PI kW	470	512	555	603	634	667	494	538	584	634	667	702
	qw l/s	83.9	81.7	79.3	76.1	73.8	71.0	88.1	85.9	83.4	80.1	77.7	74.9
	dpw kPa	67	64	61	57	53	50	74	70	67	62	59	55
<b>7</b>	CC kW	1857	1811	1756	1686	1634	1573	1950	1902	1846	1774	1721	1659
	PI kW	483	526	571	619	651	685	507	552	600	651	684	720
	qw l/s	88.6	86.4	83.8	80.5	78.0	75.1	93.0	90.7	88.1	84.6	82.1	79.1
	dpw kPa	74	71	67	62	59	55	81	78	74	68	65	61
<b>9</b>	CC kW	1958	1909	1851	1777	1723	1659	2055	2004	1945	1869	1813	1748
	PI kW	496	540	586	636	669	703	521	567	616	668	703	739
	qw l/s	93.5	91.1	88.4	84.9	82.3	79.2	98.1	95.7	92.9	89.3	86.6	83.5
	dpw kPa	82	78	74	69	65	61	89	85	81	75	71	67
<b>11</b>	CC kW	2061	2009	1948	1870	1812	1746	2163	2109	2046	1966	1907	1839
	PI kW	510	555	602	653	687	722	535	583	632	686	721	759
	qw l/s	98.5	96.0	93.1	89.4	86.6	83.5	103.4	100.8	97.8	94.0	91.2	87.9
	dpw kPa	90	86	81	75	71	67	98	94	89	83	78	73
<b>13</b>	CC kW	2166	2112	2047	1964	1904	1835	2273	2217	2150	2065	2004	1933
	PI kW	524	570	619	671	705	742	550	598	649	705	741	779
	qw l/s	103.6	101.0	97.9	94.0	91.1	87.8	108.7	106.1	102.9	98.8	95.9	92.5
	dpw kPa	98	94	89	83	78	73	107	103	97	90	86	80
<b>15</b>	CC kW	2274	2217	2148	2061	1998	1926	2386	2327	2256	2167	2102	2028
	PI kW	539	586	636	690	724	761	565	615	667	724	760	799
	qw l/s	108.9	106.1	102.8	98.6	95.6	92.2	114.2	111.4	108.0	103.7	100.6	97.1
	dpw kPa	108	103	97	90	85	80	117	112	106	99	93	88

Fluid: Water

Heat Recovery OFF

Ta: Condenser inlet air temperature; Twout: Evaporator leaving water temperature ( $\Delta t = 5.0^{\circ}\text{C}$ );

CC: Cooling capacity; PI: Power input; qw: Fluid flow rate; dpw: Fluid pressure drop

\* For working condition where dpw value is "Italic-Red Color" please contact factory

## EWAD C-XR

		740						810					
Twout	Ta	25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	738	717	691	657	632	603	811	788	761	726	700	670
	PI kW	195	212	231	251	264	278	211	230	250	272	286	302
	qw l/s	35.2	34.2	32.9	31.3	30.1	28.7	38.7	37.6	36.3	34.6	33.4	31.9
	dpw kPa	77	73	69	63	58	54	54	52	48	45	42	39
<b>7</b>	CC kW	780	758	730	694	668	637	858	834	805	767	740	709
	PI kW	201	219	238	259	273	287	218	237	258	280	295	311
	qw l/s	37.2	36.2	34.8	33.1	31.8	30.4	40.9	39.8	38.4	36.6	35.3	33.8
	dpw kPa	86	81	76	69	65	59	60	57	54	49	46	43
<b>9</b>	CC kW	823	799	770	732	704	650	904	880	849	809	780	730
	PI kW	208	227	246	268	282	285	224	245	266	289	304	310
	qw l/s	39.3	38.2	36.8	34.9	33.6	31.1	43.2	42.0	40.5	38.6	37.3	34.9
	dpw kPa	94	89	84	76	71	62	66	63	59	54	51	45
<b>11</b>	CC kW	865	840	810	770	741	657	950	925	894	852	822	753
	PI kW	215	234	254	276	290	278	231	252	274	298	314	310
	qw l/s	41.4	40.2	38.7	36.8	35.4	31.4	45.4	44.2	42.7	40.7	39.3	36.0
	dpw kPa	103	98	92	84	78	63	72	69	65	60	56	48
<b>13</b>	CC kW	908	882	850	808	778	666	997	970	937	895	861	778
	PI kW	222	241	262	285	300	272	238	260	283	307	322	310
	qw l/s	43.4	42.2	40.6	38.7	37.2	31.9	47.7	46.4	44.8	42.8	41.2	37.2
	dpw kPa	113	107	100	91	85	65	79	75	71	65	61	51
<b>15</b>	CC kW	951	924	890	847	785	673	1041	1015	981	937	886	788
	PI kW	229	249	270	294	294	264	245	267	291	317	323	304
	qw l/s	45.5	44.2	42.6	40.5	37.6	32.2	49.9	48.6	47.0	44.9	42.4	37.7
	dpw kPa	123	116	109	100	87	66	86	82	77	71	64	52

		870						970					
Twout	Ta	25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	869	844	813	774	744	710	977	948	913	867	834	796
	PI kW	234	254	277	302	318	335	257	280	304	331	348	367
	qw l/s	41.4	40.2	38.8	36.9	35.5	33.8	46.6	45.2	43.5	41.3	39.8	37.9
	dpw kPa	62	58	55	50	46	43	58	55	52	47	44	40
<b>7</b>	CC kW	919	892	859	816	785	749	1035	1004	966	917	882	822
	PI kW	242	263	286	311	328	345	266	289	314	342	359	367
	qw l/s	43.8	42.6	41.0	38.9	37.5	35.7	49.4	47.9	46.1	43.8	42.1	39.2
	dpw kPa	68	65	60	55	51	47	65	61	57	52	49	43
<b>9</b>	CC kW	966	941	905	860	827	755	1093	1061	1020	968	931	849
	PI kW	249	272	295	321	338	337	275	299	325	353	371	367
	qw l/s	46.1	44.9	43.2	41.0	39.5	36.0	52.2	50.7	48.7	46.2	44.5	40.6
	dpw kPa	75	71	66	60	56	48	71	68	63	57	54	45
<b>11</b>	CC kW	1011	984	951	904	869	762	1152	1118	1075	1020	974	879
	PI kW	256	280	305	332	349	327	284	309	336	365	380	367
	qw l/s	48.3	47.1	45.5	43.2	41.6	36.4	55.1	53.4	51.4	48.8	46.6	42.0
	dpw kPa	81	77	73	66	62	49	79	75	69	63	58	48
<b>13</b>	CC kW	1056	1028	993	949	907	772	1212	1176	1130	1073	1004	889
	PI kW	264	288	314	342	358	320	294	320	347	377	381	359
	qw l/s	50.5	49.2	47.5	45.4	43.4	36.9	58.0	56.2	54.1	51.3	48.0	42.5
	dpw kPa	88	84	79	72	67	50	86	82	76	69	62	49
<b>15</b>	CC kW	1102	1073	1036	989	916	779	1273	1234	1186	1126	1033	887
	PI kW	272	296	323	352	350	310	304	330	358	389	380	357
	qw l/s	52.8	51.4	49.6	47.4	43.8	37.3	60.9	59.1	56.8	53.9	49.5	42.4
	dpw kPa	95	90	85	78	68	51	94	89	83	76	65	49

## EWAD C-XR

Twout	Ta	C10						C11					
		25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	1049	1017	976	924	885	842	1169	1136	1096	1045	1007	963
	PI kW	285	311	338	367	387	407	303	331	360	391	412	434
	qw l/s	50.0	48.5	46.5	44.0	42.2	40.1	55.7	54.1	52.2	49.8	48.0	45.9
	dpw kPa	66	63	58	53	49	45	43	41	39	35	33	31
<b>7</b>	CC kW	1110	1075	1031	975	935	849	1236	1201	1159	1104	1064	1015
	PI kW	295	321	349	380	400	398	313	341	371	404	425	446
	qw l/s	53.0	51.3	49.2	46.5	44.6	40.5	58.9	57.3	55.3	52.7	50.8	48.4
	dpw kPa	73	69	64	58	54	45	48	46	43	39	37	34
<b>9</b>	CC kW	1171	1135	1088	1028	986	859	1304	1267	1222	1165	1123	1046
	PI kW	306	333	361	393	413	387	323	352	383	416	438	445
	qw l/s	55.9	54.2	52.0	49.1	47.1	41.0	62.3	60.5	58.4	55.6	53.6	50.0
	dpw kPa	81	76	71	64	59	46	53	50	47	43	40	36
<b>11</b>	CC kW	1232	1193	1145	1082	1024	872	1373	1334	1287	1226	1183	1079
	PI kW	316	344	374	406	420	378	333	363	395	429	452	444
	qw l/s	58.9	57.0	54.7	51.7	48.9	41.7	65.6	63.8	61.5	58.6	56.5	51.6
	dpw kPa	89	84	78	70	64	48	58	55	52	47	44	38
<b>13</b>	CC kW	1293	1252	1201	1136	1035	881	1443	1402	1352	1289	1235	1115
	PI kW	327	355	386	420	411	367	344	375	407	443	462	444
	qw l/s	61.8	59.9	57.4	54.4	49.5	42.2	69.0	67.1	64.7	61.7	59.1	53.3
	dpw kPa	97	92	85	77	65	49	64	60	57	52	48	40
<b>15</b>	CC kW	1355	1312	1258	1190	1041	871	1515	1471	1418	1352	1271	1125
	PI kW	338	367	399	433	398	373	355	387	420	456	462	433
	qw l/s	64.9	62.8	60.2	57.0	49.8	41.7	72.5	70.4	67.9	64.7	60.8	53.9
	dpw kPa	106	100	92	84	66	48	69	66	62	57	51	41

Twout	Ta	C12						C13					
		25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	1252	1217	1171	1113	1070	1019	1312	1270	1218	1152	1104	1050
	PI kW	336	366	399	434	457	482	345	375	407	442	465	489
	qw l/s	59.7	58.0	55.8	53.0	51.0	48.6	62.5	60.5	58.0	54.9	52.6	50.0
	dpw kPa	49	47	43	40	37	34	65	61	56	51	47	43
<b>7</b>	CC kW	1322	1284	1237	1175	1129	1070	1390	1346	1290	1219	1168	1066
	PI kW	347	378	412	448	472	495	357	388	421	457	480	481
	qw l/s	63.1	61.3	59.0	56.0	53.9	51.1	66.3	64.2	61.5	58.2	55.7	50.9
	dpw kPa	54	51	48	44	41	37	72	68	63	57	53	45
<b>9</b>	CC kW	1393	1353	1302	1237	1190	1077	1470	1422	1363	1288	1234	1078
	PI kW	359	391	425	463	487	480	370	402	436	473	497	469
	qw l/s	66.5	64.6	62.2	59.1	56.8	51.5	70.2	67.9	65.1	61.5	58.9	51.5
	dpw kPa	60	57	53	48	45	38	80	75	69	63	58	46
<b>11</b>	CC kW	1465	1422	1369	1300	1251	1087	1553	1501	1437	1358	1292	1095
	PI kW	370	403	439	477	502	467	384	417	452	490	511	458
	qw l/s	70.0	68.0	65.4	62.1	59.8	52.0	74.2	71.7	68.7	64.9	61.8	52.3
	dpw kPa	65	62	58	53	49	38	88	83	76	69	63	47
<b>13</b>	CC kW	1538	1492	1436	1364	1296	1101	1637	1581	1513	1428	1296	1107
	PI kW	382	416	453	492	511	455	398	432	468	507	495	445
	qw l/s	73.6	71.4	68.7	65.3	62.0	52.7	78.3	75.6	72.4	68.3	62.0	52.9
	dpw kPa	71	68	63	58	52	39	97	91	84	76	64	48
<b>15</b>	CC kW	1612	1564	1503	1428	1308	1111	1721	1662	1590	1500	1314	1098
	PI kW	395	430	467	508	499	440	413	448	485	524	485	453
	qw l/s	77.2	74.9	72.0	68.4	62.6	53.2	82.4	79.6	76.1	71.8	62.9	52.5
	dpw kPa	78	74	69	62	53	40	106	100	92	83	65	47

## EWAD C-XR

Twout	Ta	C16						C17					
		25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	1561	1515	1456	1380	1325	1262	1648	1601	1542	1465	1408	1342
	PI kW	425	463	504	549	578	609	449	490	533	581	613	646
	qw l/s	74.4	72.2	69.4	65.8	63.2	60.1	78.6	76.3	73.5	69.8	67.1	64.0
	dpw kPa	60	56	53	48	44	41	66	62	58	53	50	45
<b>7</b>	CC kW	1646	1598	1536	1456	1397	1272	1737	1688	1625	1543	1484	1377
	PI kW	439	478	520	566	596	595	463	505	550	600	632	643
	qw l/s	78.5	76.2	73.3	69.4	66.7	60.7	82.9	80.5	77.5	73.6	70.8	65.7
	dpw kPa	66	62	58	53	49	41	72	69	64	59	55	48
<b>9</b>	CC kW	1732	1680	1616	1532	1471	1287	1827	1775	1709	1623	1561	1393
	PI kW	453	493	537	585	616	579	478	521	568	618	651	629
	qw l/s	82.7	80.3	77.2	73.2	70.2	61.4	87.3	84.8	81.6	77.5	74.5	66.5
	dpw kPa	72	68	64	58	54	42	79	75	70	64	60	49
<b>11</b>	CC kW	1820	1765	1696	1609	1536	1306	1919	1863	1793	1704	1632	1415
	PI kW	468	510	554	604	632	565	494	538	586	638	669	615
	qw l/s	87.0	84.4	81.1	76.9	73.4	62.4	91.7	89.1	85.7	81.4	78.0	67.6
	dpw kPa	79	75	70	63	58	43	87	82	77	70	65	50
<b>13</b>	CC kW	1909	1851	1777	1685	1552	1320	2014	1954	1879	1784	1672	1428
	PI kW	483	526	572	623	618	548	510	555	604	658	667	596
	qw l/s	91.3	88.5	85.0	80.6	74.2	63.1	96.3	93.5	89.9	85.4	80.0	68.3
	dpw kPa	86	81	76	69	59	44	95	90	84	76	68	51
<b>15</b>	CC kW	2001	1938	1860	1762	1563	1305	2110	2046	1966	1866	1693	1423
	PI kW	499	543	591	642	600	557	526	573	623	678	655	595
	qw l/s	95.8	92.8	89.0	84.4	74.8	62.5	101.0	97.9	94.1	89.3	81.0	68.1
	dpw kPa	94	89	82	75	60	43	103	98	91	83	69	51
Twout	Ta	C18						C19					
		25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	1729	1681	1620	1540	1482	1414	1818	1768	1707	1626	1566	1496
	PI kW	470	513	558	609	642	677	495	540	588	642	677	715
	qw l/s	82.4	80.1	77.2	73.4	70.6	67.4	86.7	84.3	81.3	77.5	74.6	71.3
	dpw kPa	65	62	58	53	49	45	71	68	64	58	55	50
<b>7</b>	CC kW	1824	1772	1708	1624	1562	1475	1917	1864	1798	1713	1650	1577
	PI kW	485	529	576	628	662	688	511	557	607	662	698	736
	qw l/s	87.0	84.6	81.5	77.5	74.5	70.4	91.5	89.0	85.8	81.7	78.7	75.3
	dpw kPa	72	68	64	58	54	49	79	75	70	64	60	55
<b>9</b>	CC kW	1921	1866	1797	1709	1644	1501	2019	1963	1892	1801	1735	1609
	PI kW	501	546	594	648	682	679	527	574	626	682	719	730
	qw l/s	91.7	89.1	85.8	81.6	78.5	71.7	96.4	93.7	90.4	86.0	82.9	76.9
	dpw kPa	79	75	70	64	60	51	86	82	77	70	66	58
<b>11</b>	CC kW	2020	1961	1888	1794	1724	1519	2123	2063	1988	1892	1822	1627
	PI kW	517	563	613	668	702	663	543	592	645	703	740	712
	qw l/s	96.5	93.7	90.2	85.8	82.4	72.6	101.5	98.6	95.0	90.4	87.1	77.8
	dpw kPa	87	82	77	70	65	52	95	90	84	77	72	59
<b>13</b>	CC kW	2121	2058	1980	1881	1788	1540	2229	2165	2085	1983	1910	1650
	PI kW	534	581	633	688	712	647	561	611	665	724	763	696
	qw l/s	101.5	98.5	94.7	90.0	85.5	73.7	106.6	103.6	99.7	94.9	91.4	78.9
	dpw kPa	95	90	84	76	70	53	104	98	92	84	78	60
<b>15</b>	CC kW	2224	2158	2074	1970	1823	1545	2337	2269	2184	2076	1953	1667
	PI kW	551	600	653	710	708	636	579	630	686	746	761	676
	qw l/s	106.5	103.3	99.3	94.3	87.3	74.0	111.9	108.6	104.6	99.4	93.5	79.8
	dpw kPa	103	98	91	83	72	54	113	107	100	91	82	62

Fluid: Water

Heat Recovery OFF

Ta: Condenser inlet air temperature; Twout: Evaporator leaving water temperature ( $\Delta t = 5.0^\circ\text{C}$ );

CC: Cooling capacity; PI: Power input; qw: Fluid flow rate; dpw: Fluid pressure drop

\* For working condition where dpw value is "Italic-Red Color" please contact factory

## EWAD C-PS

		820						890					
Twout	Ta	25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	812	790	768	743	724	703	881	857	833	804	783	759
	PI kW	189	206	224	241	253	264	209	227	246	266	278	292
	qw l/s	38.7	37.6	36.6	35.4	34.5	33.5	42.0	40.8	39.7	38.3	37.3	36.2
	dpw kPa	56	54	51	48	46	43	65	62	59	55	53	50
<b>7</b>	CC kW	863	839	816	790	771	748	935	910	885	854	832	807
	PI kW	194	212	229	247	259	271	214	233	253	273	286	299
	qw l/s	41.2	40.0	38.9	37.7	36.8	35.7	44.6	43.4	42.2	40.8	39.7	38.5
	dpw kPa	63	60	57	54	51	49	73	69	66	62	59	56
<b>9</b>	CC kW	915	891	866	838	818	795	990	965	938	906	883	856
	PI kW	198	217	235	253	265	278	219	239	259	280	293	307
	qw l/s	43.7	42.5	41.4	40.0	39.1	38.0	47.3	46.1	44.8	43.3	42.2	40.9
	dpw kPa	70	67	63	60	57	54	81	77	73	69	66	62
<b>11</b>	CC kW	970	944	918	888	867	843	1047	1021	993	959	935	907
	PI kW	203	222	241	260	272	284	225	245	266	287	300	315
	qw l/s	46.3	45.1	43.9	42.5	41.4	40.3	50.1	48.8	47.4	45.8	44.7	43.4
	dpw kPa	78	74	71	66	64	60	89	85	81	76	73	69
<b>13</b>	CC kW	1025	999	972	940	918	892	1105	1078	1049	1013	988	959
	PI kW	208	228	247	266	279	292	231	252	273	294	308	323
	qw l/s	49.0	47.8	46.5	45.0	43.9	42.7	52.9	51.6	50.2	48.5	47.3	45.9
	dpw kPa	86	82	78	74	71	67	99	94	90	84	81	76
<b>15</b>	CC kW	1081	1055	1027	994	970	943	1165	1137	1106	1069	1042	1012
	PI kW	214	233	253	273	286	299	237	258	280	302	316	331
	qw l/s	51.8	50.5	49.1	47.6	46.5	45.2	55.8	54.4	52.9	51.2	49.9	48.4
	dpw kPa	95	91	86	81	78	74	109	104	99	93	89	84

		980						C11					
Twout	Ta	25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	966	939	911	878	854	825	1064	1035	1004	967	940	909
	PI kW	230	250	271	292	306	321	253	276	298	322	338	354
	qw l/s	46.0	44.8	43.4	41.8	40.7	39.3	50.7	49.3	47.8	46.1	44.8	43.3
	dpw kPa	30	29	27	25	24	23	60	57	54	50	48	45
<b>7</b>	CC kW	1026	998	969	933	907	877	1130	1100	1067	1028	1000	967
	PI kW	236	257	278	300	315	330	260	283	306	331	347	363
	qw l/s	49.0	47.6	46.2	44.5	43.3	41.9	53.9	52.5	50.9	49.0	47.7	46.1
	dpw kPa	34	32	30	28	27	26	67	63	60	56	53	50
<b>9</b>	CC kW	1089	1060	1028	990	963	931	1199	1167	1132	1091	1061	1026
	PI kW	243	264	286	309	323	339	267	291	315	340	356	373
	qw l/s	52.0	50.6	49.1	47.3	46.0	44.5	57.2	55.7	54.1	52.1	50.7	49.0
	dpw kPa	38	36	34	32	30	28	74	71	67	63	60	56
<b>11</b>	CC kW	1155	1124	1090	1050	1021	987	1269	1236	1199	1155	1124	1088
	PI kW	250	272	294	317	332	348	274	299	324	349	366	383
	qw l/s	55.2	53.7	52.1	50.2	48.8	47.2	60.7	59.1	57.3	55.2	53.7	52.0
	dpw kPa	42	40	38	35	34	32	82	79	74	70	66	62
<b>13</b>	CC kW	1222	1190	1154	1111	1080	1045	1341	1307	1269	1222	1189	1150
	PI kW	257	280	302	326	341	357	282	307	332	359	376	394
	qw l/s	58.5	56.9	55.2	53.2	51.7	50.0	64.2	62.5	60.7	58.5	56.9	55.0
	dpw kPa	46	44	42	39	37	35	91	87	82	77	73	69
<b>15</b>	CC kW	1292	1258	1220	1174	1142	1104	1416	1379	1339	1290	1255	1215
	PI kW	265	288	311	336	351	367	290	316	342	369	386	404
	qw l/s	61.9	60.2	58.4	56.2	54.6	52.9	67.8	66.0	64.1	61.8	60.1	58.2
	dpw kPa	51	49	46	43	41	39	100	96	91	85	81	76

## EWAD C-PS

Twout	Ta	C12						C13					
		25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	1148	1117	1083	1042	1011	976	1268	1233	1195	1149	1115	1076
	PI kW	276	301	326	353	370	388	304	331	359	388	407	427
	qw l/s	54.7	53.2	51.6	49.6	48.2	46.5	60.4	58.8	57.0	54.8	53.2	51.3
	dpw kPa	69	65	62	58	55	51	59	56	53	50	47	44
<b>7</b>	CC kW	1219	1186	1150	1106	1074	1037	1347	1310	1270	1221	1185	1144
	PI kW	284	309	335	362	380	398	313	341	369	399	418	438
	qw l/s	58.1	56.6	54.9	52.8	51.2	49.5	64.3	62.5	60.6	58.3	56.6	54.6
	dpw kPa	76	73	69	64	61	57	66	63	60	55	53	49
<b>9</b>	CC kW	1292	1257	1219	1173	1139	1100	1429	1390	1347	1295	1258	1214
	PI kW	292	318	345	373	390	409	322	351	380	410	430	451
	qw l/s	61.7	60.0	58.2	56.0	54.4	52.5	68.2	66.4	64.4	61.9	60.1	58.0
	dpw kPa	85	81	77	71	68	64	74	70	66	62	59	55
<b>11</b>	CC kW	1367	1331	1290	1241	1205	1164	1513	1473	1427	1372	1332	1286
	PI kW	300	327	354	383	401	421	331	361	391	422	442	463
	qw l/s	65.3	63.6	61.7	59.3	57.6	55.6	72.3	70.4	68.2	65.6	63.7	61.4
	dpw kPa	94	90	85	79	75	71	82	78	74	69	65	61
<b>13</b>	CC kW	1443	1406	1364	1311	1273	1230	1598	1557	1509	1450	1408	1359
	PI kW	309	336	364	394	412	432	341	371	402	434	455	476
	qw l/s	69.0	67.2	65.2	62.7	60.9	58.8	76.5	74.5	72.2	69.4	67.3	65.0
	dpw kPa	104	99	94	87	83	78	90	86	82	76	72	68
<b>15</b>	CC kW	1520	1481	1437	1382	1343	1298	1686	1642	1592	1530	1486	1435
	PI kW	318	346	375	405	424	444	351	382	413	446	467	489
	qw l/s	72.8	70.9	68.8	66.2	64.3	62.1	80.7	78.6	76.2	73.2	71.1	68.7
	dpw kPa	114	109	103	96	91	86	100	95	90	84	79	75

Twout	Ta	C14											
		25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	1378	1341	1300	1250	1213	1170						
	PI kW	332	361	391	423	443	465						
	qw l/s	65.7	63.9	61.9	59.6	57.8	55.8						
	dpw kPa	69	65	62	58	55	51						
<b>7</b>	CC kW	1463	1424	1381	1328	1289	1244						
	PI kW	341	371	402	435	456	478						
	qw l/s	69.8	67.9	65.9	63.3	61.5	59.3						
	dpw kPa	77	73	69	64	61	57						
<b>9</b>	CC kW	1550	1509	1464	1408	1367	1320						
	PI kW	351	382	414	447	469	491						
	qw l/s	74.0	72.1	69.9	67.2	65.3	63.0						
	dpw kPa	85	81	77	72	68	64						
<b>11</b>	CC kW	1641	1598	1549	1489	1447	1397						
	PI kW	361	393	425	460	482	505						
	qw l/s	78.4	76.4	74.0	71.2	69.1	66.8						
	dpw kPa	95	90	85	80	75	71						
<b>13</b>	CC kW	1732	1687	1637	1573	1528	1476						
	PI kW	371	404	437	473	495	519						
	qw l/s	82.8	80.7	78.3	75.3	73.1	70.6						
	dpw kPa	104	100	94	88	83	78						
<b>15</b>	CC kW	1825	1779	1725	1660	1612	1557						
	PI kW	381	415	450	486	509	533						
	qw l/s	87.4	85.1	82.6	79.5	77.2	74.6						
	dpw kPa	115	110	104	97	92	86						

Fluid: Water

Heat Recovery OFF

Ta: Condenser inlet air temperature; Twout: Evaporator leaving water temperature ( $\Delta t = 5.0^{\circ}\text{C}$ );

CC: Cooling capacity; PI: Power input; qw: Fluid flow rate; dpw: Fluid pressure drop

\* For working condition where dpw value is "Italic-Red Color" please contact factory

## EWAD C-PL

		820						890					
Twout	Ta	25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	812	790	768	743	724	703	881	857	833	804	783	759
	PI kW	189	206	224	241	253	264	209	227	246	266	278	292
	qw l/s	38.7	37.6	36.6	35.4	34.5	33.5	42.0	40.8	39.7	38.3	37.3	36.2
	dpw kPa	56	54	51	48	46	43	65	62	59	55	53	50
<b>7</b>	CC kW	863	839	816	790	771	748	935	910	885	854	832	807
	PI kW	194	212	229	247	259	271	214	233	253	273	286	299
	qw l/s	41.2	40.0	38.9	37.7	36.8	35.7	44.6	43.4	42.2	40.8	39.7	38.5
	dpw kPa	63	60	57	54	51	49	73	69	66	62	59	56
<b>9</b>	CC kW	915	891	866	838	818	795	990	965	938	906	883	856
	PI kW	198	217	235	253	265	278	219	239	259	280	293	307
	qw l/s	43.7	42.5	41.4	40.0	39.1	38.0	47.3	46.1	44.8	43.3	42.2	40.9
	dpw kPa	70	67	63	60	57	54	81	77	73	69	66	62
<b>11</b>	CC kW	970	944	918	888	867	843	1047	1021	993	959	935	907
	PI kW	203	222	241	260	272	284	225	245	266	287	300	315
	qw l/s	46.3	45.1	43.9	42.5	41.4	40.3	50.1	48.8	47.4	45.8	44.7	43.4
	dpw kPa	78	74	71	66	64	60	89	85	81	76	73	69
<b>13</b>	CC kW	1025	999	972	940	918	892	1105	1078	1049	1013	988	959
	PI kW	208	228	247	266	279	292	231	252	273	294	308	323
	qw l/s	49.0	47.8	46.5	45.0	43.9	42.7	52.9	51.6	50.2	48.5	47.3	45.9
	dpw kPa	86	82	78	74	71	67	99	94	90	84	81	76
<b>15</b>	CC kW	1081	1055	1027	994	970	943	1165	1137	1106	1069	1042	1012
	PI kW	214	233	253	273	286	299	237	258	280	302	316	331
	qw l/s	51.8	50.5	49.1	47.6	46.5	45.2	55.8	54.4	52.9	51.2	49.9	48.4
	dpw kPa	95	91	86	81	78	74	109	104	99	93	89	84

		980						C11					
Twout	Ta	25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	966	939	911	878	854	825	1064	1035	1004	967	940	909
	PI kW	230	250	271	292	306	321	253	276	298	322	338	354
	qw l/s	46.0	44.8	43.4	41.8	40.7	39.3	50.7	49.3	47.8	46.1	44.8	43.3
	dpw kPa	30	29	27	25	24	23	60	57	54	50	48	45
<b>7</b>	CC kW	1026	998	969	933	907	877	1130	1100	1067	1028	1000	967
	PI kW	236	257	278	300	315	330	260	283	306	331	347	363
	qw l/s	49.0	47.6	46.2	44.5	43.3	41.9	53.9	52.5	50.9	49.0	47.7	46.1
	dpw kPa	34	32	30	28	27	26	67	63	60	56	53	50
<b>9</b>	CC kW	1089	1060	1028	990	963	931	1199	1167	1132	1091	1061	1026
	PI kW	243	264	286	309	323	339	267	291	315	340	356	373
	qw l/s	52.0	50.6	49.1	47.3	46.0	44.5	57.2	55.7	54.1	52.1	50.7	49.0
	dpw kPa	38	36	34	32	30	28	74	71	67	63	60	56
<b>11</b>	CC kW	1155	1124	1090	1050	1021	987	1269	1236	1199	1155	1124	1088
	PI kW	250	272	294	317	332	348	274	299	324	349	366	383
	qw l/s	55.2	53.7	52.1	50.2	48.8	47.2	60.7	59.1	57.3	55.2	53.7	52.0
	dpw kPa	42	40	38	35	34	32	82	79	74	70	66	62
<b>13</b>	CC kW	1222	1190	1154	1111	1080	1045	1341	1307	1269	1222	1189	1150
	PI kW	257	280	302	326	341	357	282	307	332	359	376	394
	qw l/s	58.5	56.9	55.2	53.2	51.7	50.0	64.2	62.5	60.7	58.5	56.9	55.0
	dpw kPa	46	44	42	39	37	35	91	87	82	77	73	69
<b>15</b>	CC kW	1292	1258	1220	1174	1142	1104	1416	1379	1339	1290	1255	1215
	PI kW	265	288	311	336	351	367	290	316	342	369	386	404
	qw l/s	61.9	60.2	58.4	56.2	54.6	52.9	67.8	66.0	64.1	61.8	60.1	58.2
	dpw kPa	51	49	46	43	41	39	100	96	91	85	81	76

## EWAD C-PL

Twout	Ta	C12						C13					
		25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	1148	1117	1083	1042	1011	976	1268	1233	1195	1149	1115	1076
	PI kW	276	301	326	353	370	388	304	331	359	388	407	427
	qw l/s	54.7	53.2	51.6	49.6	48.2	46.5	60.4	58.8	57.0	54.8	53.2	51.3
	dpw kPa	69	65	62	58	55	51	59	56	53	50	47	44
<b>7</b>	CC kW	1219	1186	1150	1106	1074	1037	1347	1310	1270	1221	1185	1144
	PI kW	284	309	335	362	380	398	313	341	369	399	418	438
	qw l/s	58.1	56.6	54.9	52.8	51.2	49.5	64.3	62.5	60.6	58.3	56.6	54.6
	dpw kPa	76	73	69	64	61	57	66	63	60	55	53	49
<b>9</b>	CC kW	1292	1257	1219	1173	1139	1100	1429	1390	1347	1295	1258	1214
	PI kW	292	318	345	373	390	409	322	351	380	410	430	451
	qw l/s	61.7	60.0	58.2	56.0	54.4	52.5	68.2	66.4	64.4	61.9	60.1	58.0
	dpw kPa	85	81	77	71	68	64	74	70	66	62	59	55
<b>11</b>	CC kW	1367	1331	1290	1241	1205	1164	1513	1473	1427	1372	1332	1286
	PI kW	300	327	354	383	401	421	331	361	391	422	442	463
	qw l/s	65.3	63.6	61.7	59.3	57.6	55.6	72.3	70.4	68.2	65.6	63.7	61.4
	dpw kPa	94	90	85	79	75	71	82	78	74	69	65	61
<b>13</b>	CC kW	1443	1406	1364	1311	1273	1230	1598	1557	1509	1450	1408	1359
	PI kW	309	336	364	394	412	432	341	371	402	434	455	476
	qw l/s	69.0	67.2	65.2	62.7	60.9	58.8	76.5	74.5	72.2	69.4	67.3	65.0
	dpw kPa	104	99	94	87	83	78	90	86	82	76	72	68
<b>15</b>	CC kW	1520	1481	1437	1382	1343	1298	1686	1642	1592	1530	1486	1435
	PI kW	318	346	375	405	424	444	351	382	413	446	467	489
	qw l/s	72.8	70.9	68.8	66.2	64.3	62.1	80.7	78.6	76.2	73.2	71.1	68.7
	dpw kPa	114	109	103	96	91	86	100	95	90	84	79	75

Twout	Ta	C14											
		25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	1378	1341	1300	1250	1213	1170						
	PI kW	332	361	391	423	443	465						
	qw l/s	65.7	63.9	61.9	59.6	57.8	55.8						
	dpw kPa	69	65	62	58	55	51						
<b>7</b>	CC kW	1463	1424	1381	1328	1289	1244						
	PI kW	341	371	402	435	456	478						
	qw l/s	69.8	67.9	65.9	63.3	61.5	59.3						
	dpw kPa	77	73	69	64	61	57						
<b>9</b>	CC kW	1550	1509	1464	1408	1367	1320						
	PI kW	351	382	414	447	469	491						
	qw l/s	74.0	72.1	69.9	67.2	65.3	63.0						
	dpw kPa	85	81	77	72	68	64						
<b>11</b>	CC kW	1641	1598	1549	1489	1447	1397						
	PI kW	361	393	425	460	482	505						
	qw l/s	78.4	76.4	74.0	71.2	69.1	66.8						
	dpw kPa	95	90	85	80	75	71						
<b>13</b>	CC kW	1732	1687	1637	1573	1528	1476						
	PI kW	371	404	437	473	495	519						
	qw l/s	82.8	80.7	78.3	75.3	73.1	70.6						
	dpw kPa	104	100	94	88	83	78						
<b>15</b>	CC kW	1825	1779	1725	1660	1612	1557						
	PI kW	381	415	450	486	509	533						
	qw l/s	87.4	85.1	82.6	79.5	77.2	74.6						
	dpw kPa	115	110	104	97	92	86						

Fluid: Water

Heat Recovery OFF

Ta: Condenser inlet air temperature; Twout: Evaporator leaving water temperature ( $\Delta t = 5.0^{\circ}\text{C}$ );

CC: Cooling capacity; PI: Power input; qw: Fluid flow rate; dpw: Fluid pressure drop

\* For working condition where dpw value is "Italic-Red Color" please contact factory

## EWAD C-PR

Twout	Ta	810						880					
		25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	801	780	757	729	708	684	868	845	819	787	763	736
	PI kW	181	199	216	234	246	259	203	222	241	262	275	289
	qw l/s	38.2	37.2	36.1	34.7	33.8	32.6	41.4	40.3	39.0	37.5	36.4	35.1
	dpw kPa	55	52	50	46	44	41	64	60	57	53	50	47
<b>7</b>	CC kW	851	828	804	774	753	728	921	897	869	835	810	781
	PI kW	187	204	222	241	253	266	209	229	248	270	283	298
	qw l/s	40.6	39.5	38.4	36.9	35.9	34.7	44.0	42.8	41.5	39.8	38.7	37.3
	dpw kPa	61	58	55	52	49	46	71	67	64	59	56	53
<b>9</b>	CC kW	902	879	853	821	799	772	976	950	921	885	858	828
	PI kW	192	210	229	248	260	273	216	235	256	278	292	306
	qw l/s	43.1	42.0	40.7	39.2	38.1	36.9	46.6	45.4	44.0	42.2	41.0	39.5
	dpw kPa	68	65	62	58	55	52	79	75	71	66	62	59
<b>11</b>	CC kW	956	931	903	870	846	818	1031	1004	973	935	908	876
	PI kW	198	217	235	255	268	281	222	243	264	286	300	315
	qw l/s	45.7	44.5	43.2	41.6	40.4	39.1	49.3	48.0	46.5	44.7	43.4	41.9
	dpw kPa	76	72	68	64	61	57	87	83	78	73	69	65
<b>13</b>	CC kW	1010	984	955	920	894	865	1088	1060	1027	987	958	925
	PI kW	204	223	242	263	276	289	229	250	272	294	309	324
	qw l/s	48.3	47.1	45.7	44.0	42.8	41.4	52.1	50.7	49.1	47.2	45.8	44.2
	dpw kPa	84	80	76	71	67	63	96	91	86	80	76	72
<b>15</b>	CC kW	1065	1038	1008	971	944	913	1146	1117	1082	1040	1010	975
	PI kW	210	230	250	270	284	297	236	258	280	303	318	334
	qw l/s	51.0	49.7	48.2	46.5	45.2	43.7	54.9	53.5	51.8	49.8	48.3	46.7
	dpw kPa	92	88	84	78	74	70	105	101	95	88	84	79

Twout	Ta	960						C10					
		25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	951	924	894	856	828	796	1047	1018	984	943	912	876
	PI kW	226	247	268	291	306	322	248	271	295	320	336	353
	qw l/s	45.3	44.0	42.6	40.8	39.5	37.9	49.9	48.5	46.9	44.9	43.5	41.8
	dpw kPa	29	28	26	24	23	21	58	55	52	48	45	42
<b>7</b>	CC kW	1010	981	949	909	879	845	1112	1081	1045	1001	968	931
	PI kW	234	255	277	300	315	331	256	280	304	330	346	364
	qw l/s	48.2	46.8	45.3	43.3	41.9	40.3	53.0	51.6	49.9	47.7	46.2	44.4
	dpw kPa	33	31	29	27	26	24	65	62	58	54	50	47
<b>9</b>	CC kW	1071	1041	1006	962	931	895	1179	1146	1108	1060	1026	986
	PI kW	242	263	286	310	325	342	265	289	314	340	357	375
	qw l/s	51.1	49.7	48.0	46.0	44.5	42.8	56.3	54.7	52.9	50.6	49.0	47.1
	dpw kPa	37	35	33	30	28	27	72	68	64	60	56	52
<b>11</b>	CC kW	1134	1102	1065	1018	985	947	1247	1213	1172	1121	1085	1044
	PI kW	250	272	295	320	335	352	274	298	324	351	368	387
	qw l/s	54.2	52.7	50.9	48.7	47.1	45.3	59.6	58.0	56.0	53.6	51.9	49.9
	dpw kPa	41	39	36	33	32	29	80	76	71	66	62	58
<b>13</b>	CC kW	1199	1165	1125	1076	1040	1000	1317	1281	1238	1184	1146	1086
	PI kW	258	281	305	330	346	363	283	308	334	362	380	392
	qw l/s	57.4	55.7	53.8	51.5	49.8	47.9	63.0	61.3	59.2	56.6	54.8	51.9
	dpw kPa	45	43	40	37	35	32	88	84	79	73	69	62
<b>15</b>	CC kW	1267	1231	1187	1135	1097	1048	1389	1350	1305	1248	1208	1123
	PI kW	267	291	315	340	357	372	292	318	345	373	392	393
	qw l/s	60.7	58.9	56.8	54.3	52.5	50.2	66.5	64.7	62.5	59.8	57.8	53.8
	dpw kPa	50	47	44	41	38	35	97	92	87	80	76	66

## EWAD C-PR

Twout	Ta	C11						C13					
		25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	1129	1097	1059	1011	977	936	1248	1212	1170	1117	1078	1033
	PI kW	274	299	325	353	371	390	302	329	358	389	408	429
	qw l/s	53.8	52.3	50.5	48.2	46.5	44.6	59.5	57.7	55.7	53.2	51.4	49.2
	dpw kPa	67	63	59	55	51	48	58	55	51	47	44	41
<b>7</b>	CC kW	1197	1163	1123	1072	1035	993	1324	1286	1241	1184	1143	1095
	PI kW	283	309	336	364	383	402	312	340	370	401	421	443
	qw l/s	57.1	55.5	53.6	51.2	49.4	47.4	63.2	61.4	59.2	56.5	54.5	52.3
	dpw kPa	74	70	66	61	57	53	64	61	57	52	49	46
<b>9</b>	CC kW	1268	1232	1189	1135	1096	1051	1403	1363	1314	1254	1210	1160
	PI kW	293	319	346	376	395	415	323	352	382	414	435	457
	qw l/s	60.5	58.8	56.8	54.2	52.3	50.2	67.0	65.1	62.8	59.9	57.8	55.4
	dpw kPa	82	78	73	67	63	59	71	68	63	58	55	51
<b>11</b>	CC kW	1341	1302	1256	1199	1157	1110	1485	1441	1390	1325	1279	1227
	PI kW	302	329	358	388	407	428	334	363	394	427	449	471
	qw l/s	64.1	62.2	60.0	57.3	55.3	53.1	71.0	68.9	66.4	63.3	61.1	58.6
	dpw kPa	91	86	81	74	70	65	79	75	70	64	60	56
<b>13</b>	CC kW	1414	1374	1325	1264	1220	1138	1568	1522	1467	1398	1349	1258
	PI kW	313	340	369	400	420	427	345	376	408	441	463	471
	qw l/s	67.7	65.7	63.4	60.5	58.4	54.5	75.0	72.8	70.2	66.9	64.6	60.2
	dpw kPa	100	95	89	82	77	68	87	83	77	71	67	59
<b>15</b>	CC kW	1489	1446	1395	1331	1285	1156	1652	1604	1546	1473	1421	1273
	PI kW	323	352	381	413	433	420	357	388	421	456	478	461
	qw l/s	71.3	69.2	66.8	63.7	61.5	55.3	79.1	76.8	74.0	70.5	68.0	60.9
	dpw kPa	110	105	98	90	85	70	96	91	85	78	73	60

Twout	Ta	C14											
		25	30	35	40	43	46	25	30	35	40	43	46
<b>5</b>	CC kW	1355	1316	1271	1214	1172	1123						
	PI kW	329	359	390	424	445	468						
	qw l/s	64.6	62.7	60.6	57.8	55.8	53.5						
	dpw kPa	67	63	60	55	51	48						
<b>7</b>	CC kW	1437	1397	1348	1287	1242	1191						
	PI kW	340	371	403	437	459	483						
	qw l/s	68.6	66.6	64.3	61.4	59.3	56.8						
	dpw kPa	74	71	66	61	57	53						
<b>9</b>	CC kW	1522	1479	1427	1363	1315	1261						
	PI kW	351	383	416	451	474	498						
	qw l/s	72.7	70.6	68.2	65.1	62.8	60.2						
	dpw kPa	83	78	74	68	64	59						
<b>11</b>	CC kW	1609	1563	1508	1439	1390	1333						
	PI kW	363	396	429	466	489	513						
	qw l/s	76.9	74.7	72.1	68.8	66.4	63.7						
	dpw kPa	91	87	81	75	70	65						
<b>13</b>	CC kW	1698	1650	1591	1517	1465	1367						
	PI kW	375	409	443	480	504	513						
	qw l/s	81.2	78.9	76.1	72.6	70.1	65.4						
	dpw kPa	101	96	90	82	77	68						
<b>15</b>	CC kW	1788	1737	1675	1598	1542	1388						
	PI kW	388	422	458	496	520	504						
	qw l/s	85.6	83.2	80.2	76.5	73.8	66.4						
	dpw kPa	111	105	99	90	85	70						

Fluid: Water

Heat Recovery OFF

Ta: Condenser inlet air temperature; Twout: Evaporator leaving water temperature ( $\Delta t 5.0^{\circ}\text{C}$ );

CC: Cooling capacity; PI: Power input; qw: Fluid flow rate; dpw: Fluid pressure drop

\* For working condition where dpw value is "Italic-Red Color" please contact factory

## EWAD C-SS

Twout	Twr	650				740				830			
		40	45	50	55	40	45	50	55	40	45	50	55
<b>5</b>	CC kW	594	549	495	495	711	679	635	635	812	775	724	724
	PI kW	211	228	247	254	241	262	288	296	267	290	317	327
	qw l/s	28.3	26.2	23.6	23.6	33.9	32.4	30.3	30.3	38.7	36.9	34.5	34.5
	dpw kPa	40	35	29	29	50	46	41	41	50	46	41	41
	<b>HRC kW</b>	<b>678</b>	<b>655</b>	<b>627</b>	<b>441</b>	<b>803</b>	<b>795</b>	<b>781</b>	<b>549</b>	<b>909</b>	<b>899</b>	<b>880</b>	<b>619</b>
	qwr l/s	32.6	31.6	30.4	21.4	38.7	38.4	37.7	26.6	43.8	43.4	42.6	30.0
<b>7</b>	CC kW	637	593	538	538	754	722	678	678	861	824	774	774
	PI kW	215	232	252	259	245	266	292	301	271	294	322	333
	qw l/s	30.4	28.3	25.7	25.7	36.0	34.4	32.3	32.3	41.1	39.3	36.9	36.9
	dpw kPa	45	40	33	33	56	51	46	46	56	52	46	46
	<b>HRC kW</b>	<b>718</b>	<b>696</b>	<b>668</b>	<b>469</b>	<b>842</b>	<b>834</b>	<b>820</b>	<b>577</b>	<b>954</b>	<b>944</b>	<b>926</b>	<b>651</b>
	dpwr kPa	38	35	33	16	44	43	42	21	30	29	28	14
<b>9</b>	CC kW	682	637	583	583	798	765	721	721	911	874	824	824
	PI kW	219	237	257	265	249	270	296	305	276	299	327	338
	qw l/s	32.6	30.4	27.8	27.8	38.1	36.5	34.4	34.4	43.5	41.8	39.4	39.4
	dpw kPa	51	45	39	39	62	57	51	51	62	58	52	52
	<b>HRC kW</b>	<b>760</b>	<b>737</b>	<b>710</b>	<b>499</b>	<b>883</b>	<b>875</b>	<b>860</b>	<b>605</b>	<b>1000</b>	<b>990</b>	<b>973</b>	<b>684</b>
	dpwr kPa	42	40	37	18	42.6	42.2	41.6	29.3	48.2	47.8	47.0	33.2
<b>11</b>	CC kW	729	682	627	627	843	810	766	766	963	926	876	876
	PI kW	224	241	261	270	253	274	300	310	280	304	331	342
	qw l/s	34.8	32.6	30.0	30.0	40.3	38.7	36.6	36.6	46.0	44.2	41.8	41.8
	dpw kPa	58	51	44	44	68	63	57	57	69	64	58	58
	<b>HRC kW</b>	<b>802</b>	<b>780</b>	<b>751</b>	<b>528</b>	<b>924</b>	<b>916</b>	<b>901</b>	<b>634</b>	<b>1047</b>	<b>1038</b>	<b>1020</b>	<b>717</b>
	dpwr kPa	47	44	41	20	53	52	51	25	36	35	34	17
<b>13</b>	CC kW	776	729	674	674	890	856	811	811	1016	978	928	928
	PI kW	228	245	266	275	257	278	304	314	285	308	336	346
	qw l/s	37.1	34.9	32.2	32.2	42.6	41.0	38.8	38.8	48.6	46.8	44.4	44.4
	dpw kPa	65	58	50	50	75	70	64	64	76	71	64	64
	<b>HRC kW</b>	<b>845</b>	<b>823</b>	<b>794</b>	<b>558</b>	<b>967</b>	<b>958</b>	<b>943</b>	<b>663</b>	<b>1096</b>	<b>1086</b>	<b>1068</b>	<b>751</b>
	dpwr kPa	52	49	46	23	58	57	56	28	52.8	52.4	51.6	36.4
<b>15</b>	CC kW	824	777	721	721	938	904	858	858	1071	1032	982	982
	PI kW	232	250	271	280	261	283	308	319	289	313	341	351
	qw l/s	39.5	37.2	34.5	34.5	44.9	43.3	41.1	41.1	51.3	49.4	47.0	47.0
	dpw kPa	72	65	57	57	83	77	70	70	83	78	71	71
	<b>HRC kW</b>	<b>889</b>	<b>866</b>	<b>838</b>	<b>589</b>	<b>1010</b>	<b>1002</b>	<b>987</b>	<b>694</b>	<b>1146</b>	<b>1135</b>	<b>1118</b>	<b>786</b>
	dpwr kPa	58	55	51	25	64	63	61	30	43	42	41	20

## EWAD C-SS

		910				970				C11			
Twout	Twr	40	45	50	55	40	45	50	55	40	45	50	55
<b>5</b>	CC kW	875	836	782	782	939	898	842	842	1022	977	915	915
	PI kW	291	316	347	357	316	343	377	388	345	375	412	424
	qw l/s	41.7	39.8	37.3	37.3	44.8	42.8	40.1	40.1	48.7	46.6	43.6	43.6
	dpw kPa	58	53	47	47	65	60	54	54	60	55	49	49
	<b>HRC kW</b>	<b>983</b>	<b>973</b>	<b>955</b>	<b>671</b>	<b>1057</b>	<b>1048</b>	<b>1030</b>	<b>724</b>	<b>1153</b>	<b>1142</b>	<b>1122</b>	<b>789</b>
	qwr l/s	47.4	47.0	46.2	32.5	51.0	50.6	49.8	35.0	55.6	55.2	54.2	38.2
<b>7</b>	dpwr kPa	36	36	34	17	36	36	34	17	48	47	46	23
	CC kW	927	888	834	834	994	952	896	896	1083	1037	974	974
	PI kW	296	321	352	362	321	348	382	394	350	381	418	430
	qw l/s	44.2	42.4	39.8	39.8	47.4	45.4	42.7	42.7	51.7	49.5	46.5	46.5
	dpw kPa	64	59	53	53	73	67	60	60	66	61	55	55
	<b>HRC kW</b>	<b>1031</b>	<b>1021</b>	<b>1003</b>	<b>705</b>	<b>1108</b>	<b>1098</b>	<b>1080</b>	<b>759</b>	<b>1208</b>	<b>1197</b>	<b>1177</b>	<b>828</b>
<b>9</b>	qwr l/s	49.7	49.3	48.5	34.2	53.4	53.0	52.2	36.8	58.2	57.8	56.9	40.1
	dpwr kPa	40	39	38	19	40	39	38	19	53	52	50	25
	CC kW	980	941	887	887	1051	1009	952	952	1145	1098	1036	1036
	PI kW	300	326	357	368	326	354	387	400	356	387	423	436
	qw l/s	46.8	44.9	42.4	42.4	50.2	48.2	45.5	45.5	54.7	52.5	49.5	49.5
	dpw kPa	71	66	59	59	80	75	67	67	73	68	61	61
<b>11</b>	<b>HRC kW</b>	<b>1080</b>	<b>1070</b>	<b>1052</b>	<b>740</b>	<b>1160</b>	<b>1150</b>	<b>1131</b>	<b>796</b>	<b>1265</b>	<b>1254</b>	<b>1234</b>	<b>868</b>
	qwr l/s	52.0	51.7	50.9	35.9	55.8	55.6	54.8	38.6	60.9	60.5	59.7	42.0
	dpwr kPa	43	43	41	21	43	43	41	21	58	57	55	27
	CC kW	1035	995	942	942	1109	1066	1009	1009	1209	1162	1099	1099
	PI kW	305	331	362	373	331	359	392	405	361	392	429	443
	qw l/s	49.5	47.6	45.0	45.0	53.0	51.0	48.2	48.2	57.8	55.5	52.5	52.5
<b>13</b>	dpw kPa	78	73	66	66	89	83	75	75	81	75	68	68
	<b>HRC kW</b>	<b>1130</b>	<b>1120</b>	<b>1102</b>	<b>775</b>	<b>1213</b>	<b>1203</b>	<b>1184</b>	<b>833</b>	<b>1324</b>	<b>1312</b>	<b>1292</b>	<b>908</b>
	qwr l/s	54.4	54.0	53.3	37.6	58.4	58.0	57.2	40.4	63.8	63.3	62.5	44.0
	dpwr kPa	47	47	45	23	47	47	45	23	63	62	61	30
	CC kW	1092	1051	997	997	1168	1125	1068	1068	1274	1227	1163	1163
	PI kW	310	336	366	379	336	364	397	410	367	398	435	449
<b>15</b>	qw l/s	52.2	50.3	47.7	47.7	55.9	53.8	51.1	51.1	61.0	58.7	55.6	55.6
	dpw kPa	86	81	73	73	98	91	83	83	89	83	76	76
	<b>HRC kW</b>	<b>1181</b>	<b>1171</b>	<b>1153</b>	<b>811</b>	<b>1267</b>	<b>1257</b>	<b>1238</b>	<b>871</b>	<b>1383</b>	<b>1372</b>	<b>1351</b>	<b>950</b>
	qwr l/s	56.9	56.5	55.7	39.3	61.0	60.6	59.8	42.2	66.6	66.2	65.4	46.0
	dpwr kPa	52	51	50	25	52	51	50	25	69	68	66	33
	CC kW	1150	1109	1054	1054	1230	1186	1128	1128	1342	1294	1230	1230
<b>15</b>	PI kW	314	340	371	384	341	369	403	415	372	404	441	455
	qw l/s	55.0	53.1	50.5	50.5	58.9	56.8	54.0	54.0	64.2	61.9	58.9	58.9
	dpw kPa	95	89	81	81	107	100	92	92	98	92	84	84
	<b>HRC kW</b>	<b>1234</b>	<b>1224</b>	<b>1205</b>	<b>848</b>	<b>1323</b>	<b>1313</b>	<b>1294</b>	<b>910</b>	<b>1445</b>	<b>1433</b>	<b>1412</b>	<b>993</b>
	qwr l/s	59.5	59.1	58.3	41.0	63.8	63.4	62.6	44.0	69.6	69.2	68.3	48.1
	dpwr kPa	56	56	54	27	57	56	54	27	75	74	72	36

## EWAD C-SS

Twout	Twr	C12				C15				C16			
		40	45	50	55	40	45	50	55	40	45	50	55
<b>5</b>	CC kW	1096	1047	981	981	1479	1412	1319	1319	1553	1482	1385	1385
	PI kW	377	410	450	464	504	548	601	620	535	581	637	658
	qw l/s	52.2	49.9	46.7	46.7	70.5	67.3	62.9	62.9	74.0	70.6	66.0	66.0
	dpw kPa	68	62	55	55	58	53	47	47	63	58	51	51
	<b>HRC kW</b>	<b>1240</b>	<b>1230</b>	<b>1209</b>	<b>850</b>	<b>1670</b>	<b>1653</b>	<b>1622</b>	<b>1141</b>	<b>1758</b>	<b>1740</b>	<b>1708</b>	<b>1201</b>
	qwr l/s	59.8	59.4	58.4	41.2	80.4	79.8	78.5	55.2	84.6	84.0	82.6	58.2
<b>7</b>	CC kW	1160	1111	1044	1044	1570	1501	1408	1408	1647	1575	1478	1478
	PI kW	382	416	456	470	512	556	609	630	543	590	646	668
	qw l/s	55.3	53.0	49.8	49.8	74.9	71.6	67.2	67.2	78.6	75.2	70.5	70.5
	dpw kPa	75	69	62	62	64	59	53	53	70	65	58	58
	<b>HRC kW</b>	<b>1299</b>	<b>1289</b>	<b>1268</b>	<b>892</b>	<b>1753</b>	<b>1736</b>	<b>1704</b>	<b>1198</b>	<b>1844</b>	<b>1827</b>	<b>1794</b>	<b>1262</b>
	qwr l/s	62.6	62.2	61.4	43.2	84.5	83.9	82.4	58.0	88.9	88.3	86.8	61.1
<b>9</b>	CC kW	1225	1176	1109	1109	1663	1593	1499	1499	1744	1671	1573	1573
	PI kW	388	422	462	477	521	565	618	639	552	599	655	678
	qw l/s	58.5	56.2	53.0	53.0	79.4	76.1	71.6	71.6	83.3	79.8	75.1	75.1
	dpw kPa	83	77	69	69	71	66	59	59	78	72	65	65
	<b>HRC kW</b>	<b>1359</b>	<b>1349</b>	<b>1328</b>	<b>934</b>	<b>1839</b>	<b>1821</b>	<b>1789</b>	<b>1258</b>	<b>1933</b>	<b>1915</b>	<b>1882</b>	<b>1324</b>
	qwr l/s	65.6	65.2	64.2	45.2	88.6	87.9	86.5	61.0	93.2	92.4	91.1	64.1
<b>11</b>	CC kW	1293	1243	1176	1176	1758	1688	1593	1593		1770	1671	1671
	PI kW	394	428	468	484	529	573	627	648		608	664	688
	qw l/s	61.8	59.4	56.2	56.2	84.1	80.7	76.2	76.2		84.6	79.9	79.9
	dpw kPa	91	85	77	77	79	74	66	66		80	72	72
	<b>HRC kW</b>	<b>1421</b>	<b>1410</b>	<b>1389</b>	<b>977</b>	<b>1926</b>	<b>1908</b>	<b>1876</b>	<b>1319</b>		<b>2006</b>	<b>1973</b>	<b>1387</b>
	qwr l/s	68.4	68.0	67.2	47.4	92.9	92.1	90.8	63.9		96.9	95.5	67.2
<b>13</b>	CC kW	1362	1312	1244	1244		1786	1690	1690			1772	1772
	PI kW	400	434	474	491		582	635	656			673	697
	qw l/s	65.2	62.7	59.5	59.5		85.4	80.9	80.9			84.8	84.8
	dpw kPa	101	94	85	85		81	74	74			80	80
	<b>HRC kW</b>	<b>1485</b>	<b>1474</b>	<b>1452</b>	<b>1021</b>		<b>1998</b>	<b>1965</b>	<b>1382</b>			<b>2066</b>	<b>1453</b>
	qwr l/s	71.6	71.2	70.2	49.4		96.4	94.9	67.0			99.8	70.4
<b>15</b>	CC kW		1382	1314	1314			1790	1790				
	PI kW		440	480	498			644	664				
	qw l/s		66.2	62.9	62.9			85.7	85.7				
	dpw kPa		103	94	94			82	82				
	<b>HRC kW</b>		<b>1538</b>	<b>1517</b>	<b>1067</b>			<b>2057</b>	<b>1446</b>				
	qwr l/s		74.2	73.4	51.6			99.5	70.1				
	dpwr kPa		74	72	36			72	36				

## EWAD C-SS

		C17					
Twout	Twr	40	45	50	55		
<b>5</b>	CC kW	1653	1579	1478	1478		
	PI kW	565	615	675	696		
	qw l/s	78.8	75.3	70.5	70.5		
	dpw kPa	70	64	57	57		
	<b>HRC kW</b>	<b>1868</b>	<b>1852</b>	<b>1819</b>	<b>1279</b>		
	qwr l/s	90.0	89.4	87.9	62.1		
<b>7</b>	CC kW	1750	1676	1574	1574		
	PI kW	574	624	684	706		
	qw l/s	83.5	80.0	75.1	75.1		
	dpw kPa	78	72	64	64		
	<b>HRC kW</b>	<b>1958</b>	<b>1941</b>	<b>1908</b>	<b>1342</b>		
	qwr l/s	94.2	93.6	92.4	65.1		
<b>9</b>	CC kW	1850	1775	1673	1673		
	PI kW	583	633	693	717		
	qw l/s	88.4	84.8	79.9	79.9		
	dpw kPa	86	80	72	72		
	<b>HRC kW</b>	<b>2050</b>	<b>2032</b>	<b>2000</b>	<b>1406</b>		
	qwr l/s	98.7	98.1	96.6	68.1		
<b>11</b>	CC kW	1953	1877	1775	1775		
	PI kW	592	642	703	726		
	qw l/s	93.4	89.7	84.8	84.8		
	dpw kPa	95	88	80	80		
	<b>HRC kW</b>	<b>2144</b>	<b>2126</b>	<b>2093</b>	<b>1472</b>		
	qwr l/s	103.2	102.6	101.1	71.4		
<b>13</b>	CC kW	2059	1982	1879	1879		
	PI kW	601	651	712	735		
	qw l/s	98.5	94.8	89.9	89.9		
	dpw kPa	104	97	88	88		
	<b>HRC kW</b>	<b>2240</b>	<b>2222</b>	<b>2189</b>	<b>1539</b>		
	qwr l/s	108.0	107.4	105.9	74.7		
<b>15</b>	CC kW		2090	1986	1986		
	PI kW		661	721	744		
	qw l/s		100.0	95.1	95.1		
	dpw kPa		107	98	98		
	<b>HRC kW</b>		<b>2321</b>	<b>2288</b>	<b>1609</b>		
	qwr l/s		111.9	110.7	78.0		
	dpwr kPa		75	73	36		

Fluid: Water

Ta: Condenser inlet air temperature 35.0°C; Twout: Evaporator leaving water temperature ( $\Delta t$  5.0°C);Twr: Heat Recovery leaving water temperature ( $\Delta t$  5.0°C)

CC: Cooling capacity; PI: Power input; qw: Fluid flow rate; dpw: Fluid pressure drop

HRC: Heat recovery capacity; qwr: Heat recovery fluid flow rate; dpwr: Heat recovery fluid pressure drop

\* For working condition where dpw value is "Italic-Red Color" please contact factory

## EWAD C-SL

Twout	Twr	650				740				830			
		40	45	50	55	40	45	50	55	40	45	50	55
<b>5</b>	CC kW	594	549	495	495	711	679	635	635	812	775	724	724
	PI kW	211	228	247	254	241	262	288	296	267	290	317	327
	qw l/s	28.3	26.2	23.6	23.6	33.9	32.4	30.3	30.3	38.7	36.9	34.5	34.5
	dpw kPa	40	35	29	29	50	46	41	41	50	46	41	41
	<b>HRC kW</b>	<b>678</b>	<b>655</b>	<b>627</b>	<b>441</b>	<b>803</b>	<b>795</b>	<b>781</b>	<b>549</b>	<b>909</b>	<b>899</b>	<b>880</b>	<b>619</b>
	qwr l/s	32.6	31.6	30.4	21.4	38.7	38.4	37.7	26.6	43.8	43.4	42.6	30.0
<b>7</b>	CC kW	637	593	538	538	754	722	678	678	861	824	774	774
	PI kW	215	232	252	259	245	266	292	301	271	294	322	333
	qw l/s	30.4	28.3	25.7	25.7	36.0	34.4	32.3	32.3	41.1	39.3	36.9	36.9
	dpw kPa	45	40	33	33	56	51	46	46	56	52	46	46
	<b>HRC kW</b>	<b>718</b>	<b>696</b>	<b>668</b>	<b>469</b>	<b>842</b>	<b>834</b>	<b>820</b>	<b>577</b>	<b>954</b>	<b>944</b>	<b>926</b>	<b>651</b>
	dpwr kPa	38	35	33	16	44	43	42	21	30	29	28	14
<b>9</b>	CC kW	682	637	583	583	798	765	721	721	911	874	824	824
	PI kW	219	237	257	265	249	270	296	305	276	299	327	338
	qw l/s	32.6	30.4	27.8	27.8	38.1	36.5	34.4	34.4	43.5	41.8	39.4	39.4
	dpw kPa	51	45	39	39	62	57	51	51	62	58	52	52
	<b>HRC kW</b>	<b>760</b>	<b>737</b>	<b>710</b>	<b>499</b>	<b>883</b>	<b>875</b>	<b>860</b>	<b>605</b>	<b>1000</b>	<b>990</b>	<b>973</b>	<b>684</b>
	qwr l/s	36.6	35.6	34.4	24.2	42.6	42.2	41.6	29.3	48.2	47.8	47.0	33.2
<b>11</b>	CC kW	729	682	627	627	843	810	766	766	963	926	876	876
	PI kW	224	241	261	270	253	274	300	310	280	304	331	342
	qw l/s	34.8	32.6	30.0	30.0	40.3	38.7	36.6	36.6	46.0	44.2	41.8	41.8
	dpw kPa	58	51	44	44	68	63	57	57	69	64	58	58
	<b>HRC kW</b>	<b>802</b>	<b>780</b>	<b>751</b>	<b>528</b>	<b>924</b>	<b>916</b>	<b>901</b>	<b>634</b>	<b>1047</b>	<b>1038</b>	<b>1020</b>	<b>717</b>
	dpwr kPa	47	44	41	20	53	52	51	25	36	35	34	17
<b>13</b>	CC kW	776	729	674	674	890	856	811	811	1016	978	928	928
	PI kW	228	245	266	275	257	278	304	314	285	308	336	346
	qw l/s	37.1	34.9	32.2	32.2	42.6	41.0	38.8	38.8	48.6	46.8	44.4	44.4
	dpw kPa	65	58	50	50	75	70	64	64	76	71	64	64
	<b>HRC kW</b>	<b>845</b>	<b>823</b>	<b>794</b>	<b>558</b>	<b>967</b>	<b>958</b>	<b>943</b>	<b>663</b>	<b>1096</b>	<b>1086</b>	<b>1068</b>	<b>751</b>
	qwr l/s	40.8	39.8	38.4	27.0	46.6	46.2	45.6	32.2	52.8	52.4	51.6	36.4
<b>15</b>	CC kW	824	777	721	721	938	904	858	858	1071	1032	982	982
	PI kW	232	250	271	280	261	283	308	319	289	313	341	351
	qw l/s	39.5	37.2	34.5	34.5	44.9	43.3	41.1	41.1	51.3	49.4	47.0	47.0
	dpw kPa	72	65	57	57	83	77	70	70	83	78	71	71
	<b>HRC kW</b>	<b>889</b>	<b>866</b>	<b>838</b>	<b>589</b>	<b>1010</b>	<b>1002</b>	<b>987</b>	<b>694</b>	<b>1146</b>	<b>1135</b>	<b>1118</b>	<b>786</b>
	dpwr kPa	58	55	51	25	64	63	61	30	43	42	41	20

## EWAD C-SL

		910				970				C11			
Twout	Twr	40	45	50	55	40	45	50	55	40	45	50	55
<b>5</b>	CC kW	875	836	782	782	939	898	842	842	1022	977	915	915
	PI kW	291	316	347	357	316	343	377	388	345	375	412	424
	qw l/s	41.7	39.8	37.3	37.3	44.8	42.8	40.1	40.1	48.7	46.6	43.6	43.6
	dpw kPa	58	53	47	47	65	60	54	54	60	55	49	49
	<b>HRC kW</b>	<b>983</b>	<b>973</b>	<b>955</b>	<b>671</b>	<b>1057</b>	<b>1048</b>	<b>1030</b>	<b>724</b>	<b>1153</b>	<b>1142</b>	<b>1122</b>	<b>789</b>
	qwr l/s	47.4	47.0	46.2	32.5	51.0	50.6	49.8	35.0	55.6	55.2	54.2	38.2
<b>7</b>	dpwr kPa	36	36	34	17	36	36	34	17	48	47	46	23
	CC kW	927	888	834	834	994	952	896	896	1083	1037	974	974
	PI kW	296	321	352	362	321	348	382	394	350	381	418	430
	qw l/s	44.2	42.4	39.8	39.8	47.4	45.4	42.7	42.7	51.7	49.5	46.5	46.5
	dpw kPa	64	59	53	53	73	67	60	60	66	61	55	55
	<b>HRC kW</b>	<b>1031</b>	<b>1021</b>	<b>1003</b>	<b>705</b>	<b>1108</b>	<b>1098</b>	<b>1080</b>	<b>759</b>	<b>1208</b>	<b>1197</b>	<b>1177</b>	<b>828</b>
<b>9</b>	qwr l/s	49.7	49.3	48.5	34.2	53.4	53.0	52.2	36.8	58.2	57.8	56.9	40.1
	dpwr kPa	40	39	38	19	40	39	38	19	53	52	50	25
	CC kW	980	941	887	887	1051	1009	952	952	1145	1098	1036	1036
	PI kW	300	326	357	368	326	354	387	400	356	387	423	436
	qw l/s	46.8	44.9	42.4	42.4	50.2	48.2	45.5	45.5	54.7	52.5	49.5	49.5
	dpw kPa	71	66	59	59	80	75	67	67	73	68	61	61
<b>11</b>	<b>HRC kW</b>	<b>1080</b>	<b>1070</b>	<b>1052</b>	<b>740</b>	<b>1160</b>	<b>1150</b>	<b>1131</b>	<b>796</b>	<b>1265</b>	<b>1254</b>	<b>1234</b>	<b>868</b>
	qwr l/s	52.0	51.7	50.9	35.9	55.8	55.6	54.8	38.6	60.9	60.5	59.7	42.0
	dpwr kPa	43	43	41	21	43	43	41	21	58	57	55	27
	CC kW	1035	995	942	942	1109	1066	1009	1009	1209	1162	1099	1099
	PI kW	305	331	362	373	331	359	392	405	361	392	429	443
	qw l/s	49.5	47.6	45.0	45.0	53.0	51.0	48.2	48.2	57.8	55.5	52.5	52.5
<b>13</b>	dpw kPa	78	73	66	66	89	83	75	75	81	75	68	68
	<b>HRC kW</b>	<b>1130</b>	<b>1120</b>	<b>1102</b>	<b>775</b>	<b>1213</b>	<b>1203</b>	<b>1184</b>	<b>833</b>	<b>1324</b>	<b>1312</b>	<b>1292</b>	<b>908</b>
	qwr l/s	54.4	54.0	53.3	37.6	58.4	58.0	57.2	40.4	63.8	63.3	62.5	44.0
	dpwr kPa	47	47	45	23	47	47	45	23	63	62	61	30
	CC kW	1092	1051	997	997	1168	1125	1068	1068	1274	1227	1163	1163
	PI kW	310	336	366	379	336	364	397	410	367	398	435	449
<b>15</b>	qw l/s	52.2	50.3	47.7	47.7	55.9	53.8	51.1	51.1	61.0	58.7	55.6	55.6
	dpw kPa	86	81	73	73	98	91	83	83	89	83	76	76
	<b>HRC kW</b>	<b>1181</b>	<b>1171</b>	<b>1153</b>	<b>811</b>	<b>1267</b>	<b>1257</b>	<b>1238</b>	<b>871</b>	<b>1383</b>	<b>1372</b>	<b>1351</b>	<b>950</b>
	qwr l/s	56.9	56.5	55.7	39.3	61.0	60.6	59.8	42.2	66.6	66.2	65.4	46.0
	dpwr kPa	52	51	50	25	52	51	50	25	69	68	66	33
	CC kW	1150	1109	1054	1054	1230	1186	1128	1128	1342	1294	1230	1230
<b>15</b>	PI kW	314	340	371	384	341	369	403	415	372	404	441	455
	qw l/s	55.0	53.1	50.5	50.5	58.9	56.8	54.0	54.0	64.2	61.9	58.9	58.9
	dpw kPa	95	89	81	81	107	100	92	92	98	92	84	84
	<b>HRC kW</b>	<b>1234</b>	<b>1224</b>	<b>1205</b>	<b>848</b>	<b>1323</b>	<b>1313</b>	<b>1294</b>	<b>910</b>	<b>1445</b>	<b>1433</b>	<b>1412</b>	<b>993</b>
	qwr l/s	59.5	59.1	58.3	41.0	63.8	63.4	62.6	44.0	69.6	69.2	68.3	48.1
	dpwr kPa	56	56	54	27	57	56	54	27	75	74	72	36

## EWAD C-SL

Twout	Twr	C12				C15				C16			
		40	45	50	55	40	45	50	55	40	45	50	55
<b>5</b>	CC kW	1096	1047	981	981	1479	1412	1319	1319	1553	1482	1385	1385
	PI kW	377	410	450	464	504	548	601	620	535	581	637	658
	qw l/s	52.2	49.9	46.7	46.7	70.5	67.3	62.9	62.9	74.0	70.6	66.0	66.0
	dpw kPa	68	62	55	55	58	53	47	47	63	58	51	51
	<b>HRC kW</b>	<b>1240</b>	<b>1230</b>	<b>1209</b>	<b>850</b>	<b>1670</b>	<b>1653</b>	<b>1622</b>	<b>1141</b>	<b>1758</b>	<b>1740</b>	<b>1708</b>	<b>1201</b>
	qwr l/s	59.8	59.4	58.4	41.2	80.4	79.8	78.5	55.2	84.6	84.0	82.6	58.2
	dpwr kPa	48	47	46	23	47	47	45	22	47	47	45	22
<b>7</b>	CC kW	1160	1111	1044	1044	1570	1501	1408	1408	1647	1575	1478	1478
	PI kW	382	416	456	470	512	556	609	630	543	590	646	668
	qw l/s	55.3	53.0	49.8	49.8	74.9	71.6	67.2	67.2	78.6	75.2	70.5	70.5
	dpw kPa	75	69	62	62	64	59	53	53	70	65	58	58
	<b>HRC kW</b>	<b>1299</b>	<b>1289</b>	<b>1268</b>	<b>892</b>	<b>1753</b>	<b>1736</b>	<b>1704</b>	<b>1198</b>	<b>1844</b>	<b>1827</b>	<b>1794</b>	<b>1262</b>
	qwr l/s	62.6	62.2	61.4	43.2	84.5	83.9	82.4	58.0	88.9	88.3	86.8	61.1
	dpwr kPa	53	52	51	25	52	51	50	25	52	51	50	25
<b>9</b>	CC kW	1225	1176	1109	1109	1663	1593	1499	1499	1744	1671	1573	1573
	PI kW	388	422	462	477	521	565	618	639	552	599	655	678
	qw l/s	58.5	56.2	53.0	53.0	79.4	76.1	71.6	71.6	83.3	79.8	75.1	75.1
	dpw kPa	83	77	69	69	71	66	59	59	78	72	65	65
	<b>HRC kW</b>	<b>1359</b>	<b>1349</b>	<b>1328</b>	<b>934</b>	<b>1839</b>	<b>1821</b>	<b>1789</b>	<b>1258</b>	<b>1933</b>	<b>1915</b>	<b>1882</b>	<b>1324</b>
	qwr l/s	65.6	65.2	64.2	45.2	88.6	87.9	86.5	61.0	93.2	92.4	91.1	64.1
	dpwr kPa	58	57	55	27	57	56	55	27	57	56	55	27
<b>11</b>	CC kW	1293	1243	1176	1176	1758	1688	1593	1593			1770	1671
	PI kW	394	428	468	484	529	573	627	648			608	664
	qw l/s	61.8	59.4	56.2	56.2	84.1	80.7	76.2	76.2			84.6	79.9
	dpw kPa	91	85	77	77	79	74	66	66			80	72
	<b>HRC kW</b>	<b>1421</b>	<b>1410</b>	<b>1389</b>	<b>977</b>	<b>1926</b>	<b>1908</b>	<b>1876</b>	<b>1319</b>			<b>2006</b>	<b>1973</b>
	qwr l/s	68.4	68.0	67.2	47.4	92.9	92.1	90.8	63.9			96.9	95.5
	dpwr kPa	63	62	61	30	63	62	60	30			62	60
<b>13</b>	CC kW	1362	1312	1244	1244							1772	1772
	PI kW	400	434	474	491							673	697
	qw l/s	65.2	62.7	59.5	59.5							84.8	84.8
	dpw kPa	101	94	85	85							80	80
	<b>HRC kW</b>	<b>1485</b>	<b>1474</b>	<b>1452</b>	<b>1021</b>							<b>2066</b>	<b>1453</b>
	qwr l/s	71.6	71.2	70.2	49.4							99.8	70.4
	dpwr kPa	69	68	66	33							66	33
<b>15</b>	CC kW		1382	1314	1314					1790	1790		
	PI kW		440	480	498					644	664		
	qw l/s		66.2	62.9	62.9					85.7	85.7		
	dpw kPa		103	94	94					82	82		
	<b>HRC kW</b>		<b>1538</b>	<b>1517</b>	<b>1067</b>					<b>2057</b>	<b>1446</b>		
	qwr l/s		74.2	73.4	51.6					99.5	70.1		
	dpwr kPa		74	72	36					72	36		

## EWAD C-SL

		C17					
Twout	Twr	40	45	50	55		
<b>5</b>	CC kW	1653	1579	1478	1478		
	PI kW	565	615	675	696		
	qw l/s	78.8	75.3	70.5	70.5		
	dpw kPa	70	64	57	57		
	<b>HRC kW</b>	<b>1868</b>	<b>1852</b>	<b>1819</b>	<b>1279</b>		
	qwr l/s	90.0	89.4	87.9	62.1		
<b>7</b>	CC kW	1750	1676	1574	1574		
	PI kW	574	624	684	706		
	qw l/s	83.5	80.0	75.1	75.1		
	dpw kPa	78	72	64	64		
	<b>HRC kW</b>	<b>1958</b>	<b>1941</b>	<b>1908</b>	<b>1342</b>		
	qwr l/s	94.2	93.6	92.4	65.1		
<b>9</b>	CC kW	1850	1775	1673	1673		
	PI kW	583	633	693	717		
	qw l/s	88.4	84.8	79.9	79.9		
	dpw kPa	86	80	72	72		
	<b>HRC kW</b>	<b>2050</b>	<b>2032</b>	<b>2000</b>	<b>1406</b>		
	qwr l/s	98.7	98.1	96.6	68.1		
<b>11</b>	CC kW	1953	1877	1775	1775		
	PI kW	592	642	703	726		
	qw l/s	93.4	89.7	84.8	84.8		
	dpw kPa	95	88	80	80		
	<b>HRC kW</b>	<b>2144</b>	<b>2126</b>	<b>2093</b>	<b>1472</b>		
	qwr l/s	103.2	102.6	101.1	71.4		
<b>13</b>	CC kW	2059	1982	1879	1879		
	PI kW	601	651	712	735		
	qw l/s	98.5	94.8	89.9	89.9		
	dpw kPa	104	97	88	88		
	<b>HRC kW</b>	<b>2240</b>	<b>2222</b>	<b>2189</b>	<b>1539</b>		
	qwr l/s	108.0	107.4	105.9	74.7		
<b>15</b>	CC kW		2090	1986	1986		
	PI kW		661	721	744		
	qw l/s		100.0	95.1	95.1		
	dpw kPa		107	98	98		
	<b>HRC kW</b>		<b>2321</b>	<b>2288</b>	<b>1609</b>		
	qwr l/s		111.9	110.7	78.0		
	dpwr kPa		75	73	36		

Fluid: Water

Ta: Condenser inlet air temperature 35.0°C; Twout: Evaporator leaving water temperature ( $\Delta t$  5.0°C);Twr: Heat Recovery leaving water temperature ( $\Delta t$  5.0°C)

CC: Cooling capacity; PI: Power input; qw: Fluid flow rate; dpw: Fluid pressure drop

HRC: Heat recovery capacity; qwr: Heat recovery fluid flow rate; dpwr: Heat recovery fluid pressure drop

\* For working condition where dpw value is "Italic-Red Color" please contact factory

## EWAD C-SR

Twout	Twr	620				720				790			
		40	45	50	55	40	45	50	55	40	45	50	55
<b>5</b>	CC kW	594	549	495	495	712	680	636	636	811	774	723	723
	PI kW	208	225	245	249	238	260	286	291	262	286	314	319
	qw l/s	28.3	26.2	23.6	23.6	33.9	32.4	30.3	30.3	38.7	36.9	34.5	34.5
	dpw kPa	40	35	29	29	50	46	41	41	50	46	41	41
	<b>HRC kW</b>	<b>678</b>	<b>656</b>	<b>627</b>	<b>441</b>	<b>804</b>	<b>796</b>	<b>781</b>	<b>550</b>	<b>908</b>	<b>898</b>	<b>879</b>	<b>618</b>
	qwr l/s	32.6	31.6	30.4	21.4	38.7	38.4	37.8	26.6	43.8	43.4	42.6	30.0
<b>7</b>	CC kW	637	593	538	538	755	722	678	678	860	824	773	773
	PI kW	212	230	250	254	242	264	290	295	266	290	319	323
	qw l/s	30.4	28.3	25.7	25.7	36.0	34.5	32.4	32.4	41.1	39.3	36.9	36.9
	dpw kPa	45	40	33	33	56	51	46	46	56	52	46	46
	<b>HRC kW</b>	<b>718</b>	<b>697</b>	<b>668</b>	<b>470</b>	<b>843</b>	<b>835</b>	<b>821</b>	<b>577</b>	<b>953</b>	<b>943</b>	<b>925</b>	<b>651</b>
	dpwr kPa	38	35	33	16	44	43	42	21	30	29	28	14
<b>9</b>	CC kW	682	637	583	583	799	766	721	721	911	874	824	824
	PI kW	216	234	255	259	246	268	294	299	270	295	323	327
	qw l/s	32.6	30.4	27.8	27.8	38.1	36.6	34.4	34.4	43.5	41.7	39.3	39.3
	dpw kPa	51	45	39	39	62	57	51	51	62	58	52	52
	<b>HRC kW</b>	<b>760</b>	<b>737</b>	<b>710</b>	<b>499</b>	<b>883</b>	<b>875</b>	<b>861</b>	<b>605</b>	<b>999</b>	<b>989</b>	<b>972</b>	<b>683</b>
	dpwr kPa	42	40	37	18	42.6	42.2	41.6	29.3	48.2	47.8	47.0	33.2
<b>11</b>	CC kW	729	682	627	627	844	811	766	766	962	925	875	875
	PI kW	220	238	259	264	249	272	298	303	275	299	328	332
	qw l/s	34.8	32.6	30.0	30.0	40.3	38.7	36.6	36.6	46.0	44.2	41.8	41.8
	dpw kPa	58	51	44	44	68	63	57	57	69	64	58	58
	<b>HRC kW</b>	<b>802</b>	<b>780</b>	<b>751</b>	<b>528</b>	<b>925</b>	<b>917</b>	<b>902</b>	<b>634</b>	<b>1046</b>	<b>1036</b>	<b>1019</b>	<b>716</b>
	dpwr kPa	47	44	41	20	53	52	51	25	36	35	34	17
<b>13</b>	CC kW	776	729	674	674	890	857	812	812	1015	977	927	927
	PI kW	224	242	264	269	253	276	302	307	279	303	332	336
	qw l/s	37.1	34.9	32.2	32.2	42.6	41.0	38.8	38.8	48.6	46.8	44.4	44.4
	dpw kPa	65	58	50	50	75	70	64	64	76	71	64	64
	<b>HRC kW</b>	<b>845</b>	<b>823</b>	<b>794</b>	<b>559</b>	<b>968</b>	<b>959</b>	<b>944</b>	<b>664</b>	<b>1095</b>	<b>1085</b>	<b>1067</b>	<b>750</b>
	dpwr kPa	52	49	46	23	59	57	56	28	39	39	37	19
<b>15</b>	CC kW	824	777	721	721	938	904	859	859	1070	1032	981	981
	PI kW	227	246	268	273	257	280	306	311	283	308	337	340
	qw l/s	39.5	37.2	34.5	34.5	44.9	43.3	41.1	41.1	51.2	49.4	47.0	47.0
	dpw kPa	72	65	57	57	83	77	70	70	83	78	71	71
	<b>HRC kW</b>	<b>890</b>	<b>866</b>	<b>838</b>	<b>590</b>	<b>1011</b>	<b>1003</b>	<b>987</b>	<b>694</b>	<b>1145</b>	<b>1134</b>	<b>1116</b>	<b>785</b>
	dpwr kPa	58	55	51	25	64	63	61	30	43	42	41	20

## EWAD C-SR

		880				920				C10			
Twout	Twr	40	45	50	55	40	45	50	55	40	45	50	55
<b>5</b>	CC kW	876	837	783	783	939	898	842	842	1022	977	915	915
	PI kW	286	313	344	349	311	340	374	380	340	372	409	416
	qw l/s	41.7	39.9	37.3	37.3	44.8	42.8	40.1	40.1	48.7	46.6	43.6	43.6
	dpw kPa	58	53	47	47	65	60	54	54	60	55	49	49
	<b>HRC kW</b>	<b>983</b>	<b>973</b>	<b>955</b>	<b>672</b>	<b>1058</b>	<b>1048</b>	<b>1030</b>	<b>724</b>	<b>1153</b>	<b>1142</b>	<b>1122</b>	<b>789</b>
	qwr l/s	47.4	47.0	46.2	32.5	51.0	50.6	49.8	35.0	55.6	55.2	54.3	38.2
<b>7</b>	dpwr kPa	36	36	34	17	36	36	34	17	48	47	46	23
	CC kW	928	889	835	835	994	953	896	896	1083	1037	974	974
	PI kW	291	317	349	354	316	345	379	384	345	377	415	421
	qw l/s	44.3	42.4	39.8	39.8	47.4	45.4	42.7	42.7	51.6	49.5	46.5	46.5
	dpw kPa	64	59	53	53	73	67	60	60	66	61	55	55
	<b>HRC kW</b>	<b>1031</b>	<b>1022</b>	<b>1003</b>	<b>705</b>	<b>1108</b>	<b>1099</b>	<b>1080</b>	<b>760</b>	<b>1208</b>	<b>1197</b>	<b>1177</b>	<b>828</b>
<b>9</b>	qwr l/s	49.7	49.3	48.5	34.2	53.4	53.0	52.2	36.8	58.2	57.8	56.9	40.1
	dpwr kPa	40	39	38	19	40	39	38	19	53	52	50	25
	CC kW	981	942	888	888	1051	1009	952	952	1145	1098	1036	1036
	PI kW	295	322	353	359	321	350	384	389	350	382	420	427
	qw l/s	46.9	45.0	42.4	42.4	50.2	48.2	45.5	45.5	54.7	52.4	49.5	49.5
	dpw kPa	71	66	59	59	80	75	67	67	73	68	61	61
<b>11</b>	<b>HRC kW</b>	<b>1080</b>	<b>1070</b>	<b>1052</b>	<b>740</b>	<b>1160</b>	<b>1150</b>	<b>1132</b>	<b>796</b>	<b>1265</b>	<b>1254</b>	<b>1234</b>	<b>868</b>
	qwr l/s	52.1	51.7	50.9	35.9	55.8	55.6	54.8	38.6	60.9	60.5	59.7	42.0
	dpwr kPa	43	43	42	21	43	43	41	21	58	57	55	27
	CC kW	1036	996	943	943	1109	1066	1009	1009	1209	1162	1099	1099
	PI kW	300	327	358	364	325	355	389	394	356	388	426	432
	qw l/s	49.5	47.6	45.1	45.1	53.0	51.0	48.2	48.2	57.8	55.5	52.5	52.5
<b>13</b>	dpw kPa	78	73	66	66	89	83	75	75	81	75	68	68
	<b>HRC kW</b>	<b>1130</b>	<b>1120</b>	<b>1102</b>	<b>775</b>	<b>1213</b>	<b>1203</b>	<b>1185</b>	<b>833</b>	<b>1324</b>	<b>1312</b>	<b>1292</b>	<b>908</b>
	qwr l/s	54.4	54.0	53.4	37.6	58.4	58.0	57.2	40.4	63.8	63.3	62.5	44.0
	dpwr kPa	48	47	45	23	48	47	45	23	63	62	61	30
	CC kW	1093	1052	998	998	1168	1125	1068	1068	1274	1227	1163	1163
	PI kW	304	331	363	368	330	360	394	399	361	393	431	438
<b>15</b>	qw l/s	52.3	50.3	47.8	47.8	55.9	53.8	51.1	51.1	61.0	58.7	55.6	55.6
	dpw kPa	86	81	73	73	98	91	83	83	89	83	76	76
	<b>HRC kW</b>	<b>1182</b>	<b>1172</b>	<b>1154</b>	<b>811</b>	<b>1268</b>	<b>1257</b>	<b>1239</b>	<b>871</b>	<b>1383</b>	<b>1372</b>	<b>1351</b>	<b>950</b>
	qwr l/s	56.9	56.6	55.8	39.3	61.0	60.6	60.0	42.2	66.6	66.2	65.4	46.0
	dpwr kPa	52	51	50	25	52	51	50	25	69	68	66	33
	CC kW	1151	1110	1055	1055	1230	1186	1128	1128	1342	1293	1230	1230
<b>15</b>	PI kW	309	336	368	373	335	364	399	404	366	399	437	443
	qw l/s	55.1	53.1	50.5	50.5	58.9	56.8	54.0	54.0	64.2	61.9	58.9	58.9
	dpw kPa	95	89	81	81	107	100	92	92	98	92	84	84
	<b>HRC kW</b>	<b>1235</b>	<b>1224</b>	<b>1206</b>	<b>848</b>	<b>1323</b>	<b>1313</b>	<b>1294</b>	<b>910</b>	<b>1445</b>	<b>1433</b>	<b>1412</b>	<b>993</b>
	qwr l/s	59.5	59.1	58.3	41.1	63.8	63.4	62.6	44.0	69.6	69.2	68.3	48.1
	dpwr kPa	57	56	54	27	57	56	54	27	75	74	72	36

## EWAD C-SR

Twout	Twr	C11				C13				C14			
		40	45	50	55	40	45	50	55	40	45	50	55
<b>5</b>	CC kW	1096	1048	981	981	1345	1283	1198	1198	1480	1412	1319	1319
	PI kW	370	405	446	453	461	504	555	564	497	542	597	606
	qw l/s	52.2	49.9	46.8	46.8	64.1	61.1	57.1	57.1	70.5	67.3	62.9	62.9
	dpw kPa	68	62	55	55	44	40	36	36	58	53	47	47
	<b>HRC kW</b>	<b>1240</b>	<b>1230</b>	<b>1209</b>	<b>850</b>	<b>1528</b>	<b>1513</b>	<b>1485</b>	<b>1045</b>	<b>1671</b>	<b>1654</b>	<b>1623</b>	<b>1141</b>
	qwr l/s	59.8	59.4	58.4	41.2	73.5	73.2	71.7	50.7	80.5	79.8	78.6	55.4
<b>7</b>	CC kW	1160	1111	1044	1044	1427	1364	1278	1278	1570	1501	1408	1408
	PI kW	376	410	451	459	468	511	563	572	504	550	605	614
	qw l/s	55.3	53.0	49.8	49.8	68.1	65.1	61.0	61.0	74.9	71.6	67.2	67.2
	dpw kPa	75	69	62	62	49	45	40	40	64	59	53	53
	<b>HRC kW</b>	<b>1299</b>	<b>1288</b>	<b>1268</b>	<b>891</b>	<b>1603</b>	<b>1588</b>	<b>1560</b>	<b>1097</b>	<b>1754</b>	<b>1737</b>	<b>1705</b>	<b>1199</b>
	qwr l/s	62.6	62.2	61.4	43.2	77.4	76.8	75.6	53.1	84.5	83.9	82.4	58.0
<b>9</b>	CC kW	1226	1176	1109	1109	1511	1447	1361	1361	1663	1593	1499	1499
	PI kW	381	416	457	465	475	519	570	580	512	559	613	622
	qw l/s	58.5	56.2	53.0	53.0	72.2	69.1	65.0	65.0	79.4	76.1	71.6	71.6
	dpw kPa	83	77	69	69	54	50	45	45	71	66	59	59
	<b>HRC kW</b>	<b>1359</b>	<b>1349</b>	<b>1328</b>	<b>934</b>	<b>1681</b>	<b>1665</b>	<b>1637</b>	<b>1151</b>	<b>1840</b>	<b>1822</b>	<b>1790</b>	<b>1259</b>
	qwr l/s	65.6	65.2	64.2	45.2	81.0	80.4	79.2	55.8	88.6	88.0	86.5	61.1
<b>11</b>	CC kW	1293	1243	1176	1176		1533	1447	1447	1759	1688	1594	1594
	PI kW	387	422	463	471		526	578	587	520	567	622	630
	qw l/s	61.8	59.4	56.2	56.2		73.3	69.1	69.1	84.1	80.7	76.2	76.2
	dpw kPa	91	85	77	77		56	50	50	79	74	66	66
	<b>HRC kW</b>	<b>1421</b>	<b>1410</b>	<b>1389</b>	<b>977</b>		<b>1744</b>	<b>1716</b>	<b>1206</b>	<b>1927</b>	<b>1909</b>	<b>1877</b>	<b>1320</b>
	qwr l/s	68.4	68.0	67.2	47.4		84.3	83.1	58.5	92.9	92.1	90.8	63.9
<b>13</b>	CC kW	1363	1312	1245	1245		1534	1534		1786	1691	1691	1691
	PI kW	392	428	469	476		585	595		575	630	638	638
	qw l/s	65.2	62.8	59.5	59.5		73.4	73.4		85.4	80.9	80.9	80.9
	dpw kPa	101	94	85	85		56	56		81	74	74	74
	<b>HRC kW</b>	<b>1485</b>	<b>1474</b>	<b>1452</b>	<b>1021</b>		<b>1797</b>	<b>1263</b>		<b>1999</b>	<b>1966</b>	<b>1383</b>	
	qwr l/s	71.6	71.2	70.2	49.4		87.0	61.2		96.4	95.2	67.0	
<b>15</b>	CC kW		1383	1315	1315					1791	1791		
	PI kW		434	475	482					638	646		
	qw l/s		66.2	63.0	63.0					85.7	85.7		
	dpw kPa		103	94	94					82	82		
	<b>HRC kW</b>		<b>1538</b>	<b>1517</b>	<b>1067</b>					<b>2058</b>	<b>1447</b>		
	qwr l/s		74.2	73.4	51.6					99.6	70.2		
	dpwr kPa		74	72	36					72	36		

## EWAD C-SR

Twout	Twr	C15				C16				
		40	45	50	55	40	45	50	55	
<b>5</b>	CC kW	1554	1483	1386	1386	1636	1563	1463	1463	
	PI kW	525	574	631	642	555	606	668	678	
	qw l/s	74.1	70.7	66.0	66.0	78.0	74.5	69.7	69.7	
	dpw kPa	63	58	51	51	70	64	57	57	
	<b>HRC kW</b>	<b>1758</b>	<b>1741</b>	<b>1709</b>	<b>1202</b>	<b>1853</b>	<b>1837</b>	<b>1806</b>	<b>1270</b>	
	qwr l/s	84.6	84.0	82.6	58.2	89.4	88.8	87.3	61.5	
	dpwr kPa	47	47	45	22	48	47	46	23	
<b>7</b>	CC kW	1648	1576	1478	1478	1733	1659	1559	1559	
	PI kW	534	582	640	650	563	615	677	687	
	qw l/s	78.6	75.2	70.5	70.5	82.7	79.2	74.4	74.4	
	dpw kPa	70	65	58	58	78	72	64	64	
	<b>HRC kW</b>	<b>1845</b>	<b>1827</b>	<b>1795</b>	<b>1262</b>	<b>1942</b>	<b>1925</b>	<b>1894</b>	<b>1332</b>	
	qwr l/s	88.9	88.3	86.8	61.1	93.6	93.0	91.5	64.5	
	dpwr kPa	52	51	50	25	53	52	50	25	
<b>9</b>	CC kW	1745	1672	1574	1574	1832	1757	1656	1656	
	PI kW	542	591	649	659	572	624	685	695	
	qw l/s	83.3	79.9	75.2	75.2	87.5	83.9	79.1	79.1	
	dpw kPa	78	72	65	65	86	80	72	72	
	<b>HRC kW</b>	<b>1934</b>	<b>1916</b>	<b>1883</b>	<b>1324</b>	<b>2033</b>	<b>2016</b>	<b>1984</b>	<b>1395</b>	
	qwr l/s	93.2	92.4	91.1	64.3	98.1	97.2	96.0	67.5	
	dpwr kPa	57	56	55	27	58	57	55	27	
<b>11</b>	CC kW		1771	1672	1672	1934	1858	1757	1757	
	PI kW		600	658	667	580	633	694	704	
	qw l/s		84.7	79.9	79.9	92.4	88.8	84.0	84.0	
	dpw kPa		80	72	72	95	88	80	80	
	<b>HRC kW</b>		<b>2007</b>	<b>1974</b>	<b>1388</b>	<b>2126</b>	<b>2109</b>	<b>2077</b>	<b>1460</b>	
	qwr l/s		96.9	95.5	67.2	102.6	101.7	100.5	70.8	
	dpwr kPa		62	60	30	63	62	60	30	
<b>13</b>	CC kW			1773	1773	2039	1962	1860	1860	
	PI kW			666	675	589	641	703	712	
	qw l/s			84.8	84.8	97.5	93.9	89.0	89.0	
	dpw kPa			80	80	104	97	88	88	
	<b>HRC kW</b>			<b>2067</b>	<b>1453</b>	<b>2222</b>	<b>2204</b>	<b>2172</b>	<b>1527</b>	
	qwr l/s			99.9	70.4	107.1	106.5	105.0	74.1	
	dpwr kPa			66	33	69	68	66	33	
<b>15</b>	CC kW					2069	1966	1966		
	PI kW					650	712	721		
	qw l/s					99.0	94.1	94.1		
	dpw kPa					107	98	98		
	<b>HRC kW</b>					<b>2302</b>	<b>2269</b>	<b>1596</b>		
	qwr l/s					111.0	109.8	77.4		
	dpwr kPa					74	72	36		

Fluid: Water

Ta: Condenser inlet air temperature 35.0°C; Twout: Evaporator leaving water temperature ( $\Delta t$  5.0°C);Twr: Heat Recovery leaving water temperature ( $\Delta t$  5.0°C)

CC: Cooling capacity; PI: Power input; qw: Fluid flow rate; dpw: Fluid pressure drop

HRC: Heat recovery capacity; qwr: Heat recovery fluid flow rate; dpwr: Heat recovery fluid pressure drop

\* For working condition where dpw value is "Italic-Red Color" please contact factory

## EWAD C-XS

Twout	Twr	760				830				890			
		40	45	50	55	40	45	50	55	40	45	50	55
<b>5</b>	CC kW	699	666	620	620	763	727	678	678	824	785	733	733
	PI kW	224	243	266	274	245	266	292	300	268	290	318	328
	qw l/s	33.3	31.7	29.6	29.6	36.4	34.6	32.3	32.3	39.3	37.4	34.9	34.9
	dpw kPa	70	64	56	56	49	45	39	39	56	51	45	45
	<b>HRC kW</b>	<b>778</b>	<b>767</b>	<b>749</b>	<b>527</b>	<b>850</b>	<b>839</b>	<b>820</b>	<b>576</b>	<b>919</b>	<b>908</b>	<b>888</b>	<b>624</b>
	qwr l/s	37.6	37.0	36.2	25.6	41.0	40.5	39.7	27.9	44.4	43.8	43.0	30.2
<b>7</b>	CC kW	744	711	665	665	812	775	726	726	877	837	784	784
	PI kW	228	247	270	279	250	271	296	305	272	295	323	333
	qw l/s	35.5	33.9	31.7	31.7	38.8	37.0	34.6	34.6	41.8	39.9	37.4	37.4
	dpw kPa	78	72	64	64	55	50	45	45	63	58	51	51
	<b>HRC kW</b>	<b>820</b>	<b>809</b>	<b>791</b>	<b>556</b>	<b>896</b>	<b>884</b>	<b>864</b>	<b>608</b>	<b>968</b>	<b>956</b>	<b>936</b>	<b>658</b>
	dpwr kPa	49	48	46	23	49	48	46	23	31	30	29	14
<b>9</b>	CC kW	791	757	712	712	864	826	776	776	932	891	837	837
	PI kW	232	252	274	284	254	275	301	310	277	300	327	338
	qw l/s	37.8	36.2	34.0	34.0	41.2	39.5	37.1	37.1	44.5	42.6	40.0	40.0
	dpw kPa	88	81	72	72	61	56	50	50	70	65	58	58
	<b>HRC kW</b>	<b>862</b>	<b>851</b>	<b>833</b>	<b>586</b>	<b>942</b>	<b>930</b>	<b>910</b>	<b>640</b>	<b>1018</b>	<b>1006</b>	<b>984</b>	<b>692</b>
	dpwr kPa	41.6	41.2	40.4	28.4	45.4	44.9	44.0	31.0	49.0	48.6	47.6	33.6
<b>11</b>	CC kW	838	804	759	759	913	878	828	828	981	946	893	893
	PI kW	236	256	279	288	258	280	305	315	281	305	332	344
	qw l/s	40.0	38.4	36.3	36.3	43.6	42.0	39.6	39.6	46.9	45.2	42.7	42.7
	dpw kPa	97	90	81	81	68	63	57	57	77	72	65	65
	<b>HRC kW</b>	<b>905</b>	<b>895</b>	<b>877</b>	<b>617</b>	<b>987</b>	<b>978</b>	<b>958</b>	<b>674</b>	<b>1064</b>	<b>1056</b>	<b>1036</b>	<b>728</b>
	dpwr kPa	43.6	43.2	42.4	29.8	47.6	47.2	46.3	32.6	51.2	51.0	50.0	35.2
<b>13</b>	CC kW	885	852	807	807	963	928	881	881	1031	996	949	949
	PI kW	240	260	283	293	262	284	310	320	285	309	337	349
	qw l/s	42.3	40.7	38.6	38.6	46.1	44.4	42.1	42.1	49.3	47.6	45.4	45.4
	dpw kPa	108	100	91	91	75	70	63	63	84	79	73	73
	<b>HRC kW</b>	<b>948</b>	<b>938</b>	<b>921</b>	<b>648</b>	<b>1033</b>	<b>1024</b>	<b>1007</b>	<b>708</b>	<b>1109</b>	<b>1102</b>	<b>1087</b>	<b>764</b>
	dpwr kPa	45.6	45.2	44.6	31.4	49.8	49.4	48.7	34.3	53.4	53.2	52.6	37.0
<b>15</b>	CC kW	933	899	855	855	1015	979	932	932	1081	1046	1000	1000
	PI kW	244	264	287	298	267	288	314	325	289	313	342	354
	qw l/s	44.7	43.1	41.0	41.0	48.6	46.9	44.6	44.6	51.8	50.1	47.9	47.9
	dpw kPa	118	111	101	101	82	77	70	70	92	87	80	80
	<b>HRC kW</b>	<b>992</b>	<b>982</b>	<b>966</b>	<b>679</b>	<b>1080</b>	<b>1070</b>	<b>1053</b>	<b>741</b>	<b>1155</b>	<b>1147</b>	<b>1133</b>	<b>797</b>
	dpwr kPa	47.8	47.4	46.6	32.8	52.0	51.7	50.9	35.9	55.6	55.4	54.8	38.6

## EWAD C-XS

		990				C10				C11			
Twout	Twr	40	45	50	55	40	45	50	55	40	45	50	55
<b>5</b>	CC kW	924	879	818	818	1000	952	886	886	1100	1047	976	976
	PI kW	295	320	350	360	321	349	381	393	352	382	418	431
	qw l/s	44.0	41.9	39.0	39.0	47.7	45.4	42.2	42.2	52.4	49.9	46.5	46.5
	dpw kPa	53	48	42	42	61	56	49	49	39	36	31	31
	<b>HRC kW</b>	<b>1027</b>	<b>1013</b>	<b>988</b>	<b>695</b>	<b>1114</b>	<b>1098</b>	<b>1071</b>	<b>753</b>	<b>1225</b>	<b>1208</b>	<b>1179</b>	<b>829</b>
	qwr l/s	49.5	48.9	47.8	33.6	53.6	53.0	51.8	36.4	59.0	58.3	57.0	40.2
	dpwr kPa	40	39	37	18	40	39	37	18	55	54	51	25
<b>7</b>	CC kW	985	940	878	878	1066	1017	951	951	1172	1119	1046	1046
	PI kW	300	325	355	366	327	355	387	400	359	389	425	438
	qw l/s	47.0	44.8	41.9	41.9	50.9	48.5	45.4	45.4	55.9	53.4	49.9	49.9
	dpw kPa	59	54	48	48	68	63	56	56	44	40	36	36
	<b>HRC kW</b>	<b>1084</b>	<b>1068</b>	<b>1043</b>	<b>734</b>	<b>1174</b>	<b>1158</b>	<b>1131</b>	<b>795</b>	<b>1290</b>	<b>1273</b>	<b>1244</b>	<b>875</b>
	qwr l/s	52.2	51.5	50.4	35.6	56.6	55.8	54.6	38.6	62.2	61.5	60.2	42.4
	dpwr kPa	45	43	41	21	45	43	41	21	61	60	57	28
<b>9</b>	CC kW	1049	1003	941	941	1135	1085	1018	1018	1245	1191	1119	1119
	PI kW	306	331	361	372	333	361	393	407	365	395	431	445
	qw l/s	50.1	47.9	44.9	44.9	54.2	51.8	48.6	48.6	59.5	56.9	53.5	53.5
	dpw kPa	66	61	55	55	76	71	63	63	49	45	40	40
	<b>HRC kW</b>	<b>1142</b>	<b>1126</b>	<b>1101</b>	<b>774</b>	<b>1237</b>	<b>1220</b>	<b>1193</b>	<b>839</b>	<b>1357</b>	<b>1340</b>	<b>1311</b>	<b>922</b>
	qwr l/s	55.1	54.4	53.2	37.5	59.6	59.0	57.6	40.6	65.4	64.7	63.4	44.7
	dpwr kPa	49	48	46	23	49	48	46	23	67	66	63	31
<b>11</b>	CC kW	1114	1067	1005	1005	1202	1154	1087	1087	1320	1266	1194	1194
	PI kW	311	337	367	379	339	367	399	414	371	402	438	452
	qw l/s	53.2	51.0	48.0	48.0	57.5	55.1	52.0	52.0	63.1	60.5	57.1	57.1
	dpw kPa	74	69	62	62	85	79	71	71	54	50	45	45
	<b>HRC kW</b>	<b>1201</b>	<b>1186</b>	<b>1160</b>	<b>816</b>	<b>1298</b>	<b>1283</b>	<b>1257</b>	<b>884</b>	<b>1425</b>	<b>1408</b>	<b>1380</b>	<b>970</b>
	qwr l/s	57.9	57.3	56.1	39.5	62.6	62.0	60.8	42.8	68.6	68.0	66.8	47.0
	dpwr kPa	54	53	51	25	54	53	51	25	74	73	70	35
<b>13</b>	CC kW	1180	1133	1072	1072	1271	1223	1158	1158	1396	1342	1270	1270
	PI kW	316	342	372	385	344	372	405	420	377	408	444	460
	qw l/s	56.5	54.2	51.3	51.3	60.8	58.5	55.4	55.4	66.8	64.2	60.8	60.8
	dpw kPa	82	76	69	69	94	88	79	79	60	56	51	51
	<b>HRC kW</b>	<b>1262</b>	<b>1246</b>	<b>1221</b>	<b>859</b>	<b>1361</b>	<b>1346</b>	<b>1321</b>	<b>929</b>	<b>1495</b>	<b>1478</b>	<b>1450</b>	<b>1020</b>
	qwr l/s	60.8	60.2	59.0	41.6	65.6	65.0	63.8	45.0	72.0	71.4	70.2	49.4
	dpwr kPa	60	59	57	28	60	59	57	28	81	80	77	38
<b>15</b>	CC kW	1248	1201	1139	1139	1342	1293	1228	1228	1475	1420	1348	1348
	PI kW	321	348	378	391	350	378	411	427	383	414	451	467
	qw l/s	59.7	57.5	54.5	54.5	64.2	61.9	58.8	58.8	70.6	68.0	64.5	64.5
	dpw kPa	91	85	77	77	104	97	88	88	66	62	56	56
	<b>HRC kW</b>	<b>1323</b>	<b>1308</b>	<b>1283</b>	<b>902</b>	<b>1425</b>	<b>1410</b>	<b>1386</b>	<b>974</b>	<b>1566</b>	<b>1549</b>	<b>1521</b>	<b>1070</b>
	qwr l/s	63.7	63.1	62.0	43.7	68.6	68.0	67.0	47.2	75.5	74.8	73.6	51.8
	dpwr kPa	66	64	62	31	66	64	62	31	89	87	85	42

## EWAD C-XS

Twout	Twr	C12				C13				C16			
		40	45	50	55	40	45	50	55	40	45	50	55
<b>5</b>	CC kW	1188	1132	1055	1055	1252	1189	1106	1106	1489	1420	1325	1325
	PI kW	385	418	457	471	390	422	460	475	481	522	571	589
	qw l/s	56.6	54.0	50.3	50.3	59.7	56.7	52.7	52.7	71.0	67.7	63.2	63.2
	dpw kPa	45	41	36	36	59	54	47	47	55	50	44	44
	<b>HRC kW</b>	<b>1325</b>	<b>1308</b>	<b>1278</b>	<b>899</b>	<b>1383</b>	<b>1360</b>	<b>1324</b>	<b>931</b>	<b>1660</b>	<b>1639</b>	<b>1602</b>	<b>1127</b>
	qwr l/s	63.8	63.2	61.8	43.6	66.6	65.6	64.0	45.2	80.1	79.2	77.4	54.6
<b>7</b>	dpwr kPa	55	54	51	25	60	58	55	27	40	39	37	18
	CC kW	1264	1208	1131	1131	1339	1275	1190	1190	1584	1514	1418	1418
	PI kW	392	425	464	479	397	429	468	484	489	530	579	598
	qw l/s	60.3	57.6	53.9	53.9	63.9	60.8	56.8	56.8	75.6	72.2	67.7	67.7
	dpw kPa	50	46	41	41	67	61	54	54	61	56	50	50
	<b>HRC kW</b>	<b>1395</b>	<b>1378</b>	<b>1348</b>	<b>948</b>	<b>1462</b>	<b>1439</b>	<b>1401</b>	<b>985</b>	<b>1746</b>	<b>1725</b>	<b>1688</b>	<b>1187</b>
<b>9</b>	qwr l/s	67.2	66.6	65.2	46.0	70.4	69.4	67.8	47.8	84.3	83.4	81.6	57.6
	dpwr kPa	61	60	57	28	67	65	62	31	44	43	41	20
	CC kW	1341	1284	1208	1208	1427	1363	1277	1277	1677	1609	1514	1514
	PI kW	398	431	471	487	404	437	476	493	497	539	588	608
	qw l/s	64.1	61.3	57.7	57.7	68.2	65.1	61.0	61.0	80.1	76.8	72.3	72.3
	dpw kPa	56	52	46	46	75	69	61	61	68	63	57	57
<b>11</b>	<b>HRC kW</b>	<b>1466</b>	<b>1448</b>	<b>1419</b>	<b>998</b>	<b>1543</b>	<b>1520</b>	<b>1482</b>	<b>1042</b>	<b>1832</b>	<b>1813</b>	<b>1777</b>	<b>1250</b>
	qwr l/s	70.6	70.0	68.6	48.4	74.4	73.4	71.6	50.4	88.2	87.6	85.8	60.6
	dpwr kPa	67	66	63	31	75	72	69	34	48	47	45	23
	CC kW	1419	1363	1287	1287	1520	1454	1368	1368	1774	1704	1612	1612
	PI kW	405	438	478	495	412	445	484	501	505	547	597	618
	qw l/s	67.8	65.2	61.5	61.5	72.6	69.5	65.4	65.4	84.8	81.5	77.0	77.0
<b>13</b>	dpw kPa	62	57	52	52	84	78	69	69	75	70	63	63
	<b>HRC kW</b>	<b>1537</b>	<b>1521</b>	<b>1491</b>	<b>1049</b>	<b>1627</b>	<b>1603</b>	<b>1565</b>	<b>1101</b>	<b>1920</b>	<b>1900</b>	<b>1866</b>	<b>1313</b>
	qwr l/s	74.0	73.4	72.2	50.8	78.4	77.4	75.6	53.4	92.4	91.8	90.3	63.6
	dpwr kPa	74	73	70	35	83	81	77	38	53	52	50	25
	CC kW	1500	1443	1367	1367	1616	1548	1461	1461	1874	1803	1710	1710
	PI kW	411	445	485	502	419	452	491	510	513	555	605	627
<b>15</b>	qw l/s	71.7	69.0	65.4	65.4	77.3	74.1	69.9	69.9	89.7	86.3	81.8	81.8
	dpw kPa	68	64	58	58	94	87	78	78	83	78	71	71
	<b>HRC kW</b>	<b>1610</b>	<b>1593</b>	<b>1565</b>	<b>1101</b>	<b>1714</b>	<b>1689</b>	<b>1650</b>	<b>1160</b>	<b>2011</b>	<b>1991</b>	<b>1956</b>	<b>1376</b>
	qwr l/s	77.6	77.0	75.8	53.4	82.6	81.6	79.8	56.2	96.9	96.0	94.5	66.6
	dpwr kPa	81	80	77	38	92	90	86	42	58	57	55	27
	CC kW	1583	1524	1448	1448	1713	1646	1558	1558	1977	1905	1810	1810
<b>15</b>	PI kW	418	452	492	510	426	460	499	519	521	563	613	637
	qw l/s	75.8	73.0	69.3	69.3	82.0	78.8	74.6	74.6	94.7	91.2	86.7	86.7
	dpw kPa	75	70	64	64	104	97	88	88	92	86	78	78
	<b>HRC kW</b>	<b>1685</b>	<b>1668</b>	<b>1640</b>	<b>1153</b>	<b>1802</b>	<b>1778</b>	<b>1739</b>	<b>1223</b>	<b>2105</b>	<b>2084</b>	<b>2049</b>	<b>1441</b>
	qwr l/s	81.2	80.6	79.4	55.8	86.8	85.8	84.0	59.2	101.4	100.5	99.0	69.9
	dpwr kPa	89	87	85	42	102	99	95	47	64	62	60	30

## EWAD C-XS

Twout	Twr	C17				C18				C19			
		40	45	50	55	40	45	50	55	40	45	50	55
<b>5</b>	CC kW	1570	1498	1400	1400	1642	1566	1463	1463	1723	1645	1538	1538
	PI kW	512	556	609	629	541	588	644	664	572	621	681	702
	qw l/s	74.8	71.4	66.7	66.7	78.3	74.7	69.7	69.7	82.1	78.4	73.3	73.3
	dpw kPa	60	55	49	49	59	55	48	48	65	60	53	53
	<b>HRC kW</b>	<b>1754</b>	<b>1734</b>	<b>1698</b>	<b>1194</b>	<b>1840</b>	<b>1819</b>	<b>1781</b>	<b>1252</b>	<b>1934</b>	<b>1913</b>	<b>1875</b>	<b>1319</b>
	qwr l/s	84.6	83.7	82.2	57.8	88.7	87.8	86.1	60.7	93.3	92.4	90.6	63.9
	dpwr kPa	52	52	50	25	52	51	49	24	52	51	49	24
<b>7</b>	CC kW	1667	1595	1496	1496	1744	1668	1564	1564	1829	1749	1642	1642
	PI kW	521	565	618	639	551	598	654	674	581	631	691	713
	qw l/s	79.6	76.1	71.4	71.4	83.2	79.6	74.6	74.6	87.3	83.5	78.3	78.3
	dpw kPa	67	62	55	55	66	61	55	55	72	67	60	60
	<b>HRC kW</b>	<b>1844</b>	<b>1823</b>	<b>1787</b>	<b>1256</b>	<b>1934</b>	<b>1913</b>	<b>1874</b>	<b>1318</b>	<b>2031</b>	<b>2009</b>	<b>1971</b>	<b>1386</b>
	qwr l/s	88.9	88.0	86.3	60.9	93.1	92.2	90.7	63.9	97.8	96.9	95.4	67.2
	dpwr kPa	58	57	55	27	57	56	54	27	57	56	54	27
<b>9</b>	CC kW	1765	1693	1595	1595	1849	1771	1668	1668	1938	1857	1749	1749
	PI kW	530	574	627	649	560	607	663	685	591	641	700	724
	qw l/s	84.3	80.9	76.2	76.2	88.3	84.6	79.6	79.6	92.5	88.7	83.5	83.5
	dpw kPa	75	69	62	62	74	68	61	61	80	74	67	67
	<b>HRC kW</b>	<b>1933</b>	<b>1914</b>	<b>1878</b>	<b>1321</b>	<b>2029</b>	<b>2008</b>	<b>1970</b>	<b>1386</b>	<b>2130</b>	<b>2108</b>	<b>2070</b>	<b>1456</b>
	qwr l/s	93.1	92.4	90.9	64.0	97.7	96.8	95.3	67.1	102.6	101.7	100.2	70.5
	dpwr kPa	63	62	60	30	63	62	60	30	63	62	60	30
<b>11</b>	CC kW	1866	1793	1696	1696	1957	1878	1774	1774	2050	1968	1859	1859
	PI kW	538	583	636	659	569	616	673	696	600	650	710	735
	qw l/s	89.2	85.7	81.1	81.1	93.5	89.8	84.8	84.8	98.0	94.1	88.9	88.9
	dpw kPa	83	77	69	69	82	76	69	69	89	83	75	75
	<b>HRC kW</b>	<b>2025</b>	<b>2005</b>	<b>1971</b>	<b>1386</b>	<b>2128</b>	<b>2106</b>	<b>2068</b>	<b>1454</b>	<b>2233</b>	<b>2211</b>	<b>2171</b>	<b>1527</b>
	qwr l/s	97.7	96.8	95.3	67.1	102.6	101.7	100.0	70.5	107.7	106.8	105.0	74.1
	dpwr kPa	69	68	66	33	70	68	66	33	69	68	66	33
<b>13</b>	CC kW	1971	1896	1798	1798	2068	1988	1883	1883	2166	2083	1973	1973
	PI kW	547	591	645	669	578	626	682	706	610	660	720	746
	qw l/s	94.3	90.7	86.0	86.0	98.9	95.1	90.1	90.1	103.6	99.6	94.4	94.4
	dpw kPa	91	85	77	77	91	84	76	76	98	92	83	83
	<b>HRC kW</b>	<b>2120</b>	<b>2100</b>	<b>2064</b>	<b>1452</b>	<b>2229</b>	<b>2207</b>	<b>2168</b>	<b>1525</b>	<b>2339</b>	<b>2316</b>	<b>2276</b>	<b>1600</b>
	qwr l/s	102.1	101.5	99.9	70.3	107.5	106.6	104.8	74.0	112.8	111.9	110.1	77.7
	dpwr kPa	76	75	73	36	76	75	72	36	76	75	72	36
<b>15</b>	CC kW	2078	2002	1903	1903	2183	2102	1995	1995	2286	2201	2090	2090
	PI kW	555	600	654	679	587	635	692	717	619	670	730	757
	qw l/s	99.5	95.9	91.1	91.1	104.5	100.6	95.5	95.5	109.4	105.4	100.0	100.0
	dpw kPa	100	94	86	86	100	93	85	85	109	101	92	92
	<b>HRC kW</b>	<b>2218</b>	<b>2196</b>	<b>2161</b>	<b>1520</b>	<b>2334</b>	<b>2310</b>	<b>2271</b>	<b>1597</b>	<b>2447</b>	<b>2424</b>	<b>2383</b>	<b>1676</b>
	qwr l/s	106.8	105.9	104.4	73.7	112.4	111.5	109.8	77.4	117.9	117.0	115.2	81.3
	dpwr kPa	83	82	79	39	83	82	79	39	83	82	79	39

Fluid: Water

Ta: Condenser inlet air temperature 35.0°C; Twout: Evaporator leaving water temperature ( $\Delta t$  5.0°C);Twr: Heat Recovery leaving water temperature ( $\Delta t$  5.0°C)

CC: Cooling capacity; PI: Power input; qw: Fluid flow rate; dpw: Fluid pressure drop

HRC: Heat recovery capacity; qwr: Heat recovery fluid flow rate; dpwr: Heat recovery fluid pressure drop

\* For working condition where dpw value is "Italic-Red Color" please contact factory

## EWAD C-XL

		760				830				890			
Twout	Twr	40	45	50	55	40	45	50	55	40	45	50	55
<b>5</b>	CC kW	699	666	620	620	763	727	678	678	824	785	733	733
	PI kW	224	243	266	274	245	266	292	300	268	290	318	328
	qw l/s	33.3	31.7	29.6	29.6	36.4	34.6	32.3	32.3	39.3	37.4	34.9	34.9
	dpw kPa	70	64	56	56	49	45	39	39	56	51	45	45
	<b>HRC kW</b>	<b>778</b>	<b>767</b>	<b>749</b>	<b>527</b>	<b>850</b>	<b>839</b>	<b>820</b>	<b>576</b>	<b>919</b>	<b>908</b>	<b>888</b>	<b>624</b>
	qwr l/s	37.6	37.0	36.2	25.6	41.0	40.5	39.7	27.9	44.4	43.8	43.0	30.2
<b>7</b>	dpwr kPa	44	43	41	20	44	43	41	20	28	27	26	13
	CC kW	744	711	665	665	812	775	726	726	877	837	784	784
	PI kW	228	247	270	279	250	271	296	305	272	295	323	333
	qw l/s	35.5	33.9	31.7	31.7	38.8	37.0	34.6	34.6	41.8	39.9	37.4	37.4
	dpw kPa	78	72	64	64	55	50	45	45	63	58	51	51
	<b>HRC kW</b>	<b>820</b>	<b>809</b>	<b>791</b>	<b>556</b>	<b>896</b>	<b>884</b>	<b>864</b>	<b>608</b>	<b>968</b>	<b>956</b>	<b>936</b>	<b>658</b>
<b>9</b>	qwr l/s	39.4	39.0	38.2	27.0	43.1	42.7	41.8	29.4	46.6	46.2	45.2	31.8
	dpwr kPa	49	48	46	23	49	48	46	23	31	30	29	14
	CC kW	791	757	712	712	864	826	776	776	932	891	837	837
	PI kW	232	252	274	284	254	275	301	310	277	300	327	338
	qw l/s	37.8	36.2	34.0	34.0	41.2	39.5	37.1	37.1	44.5	42.6	40.0	40.0
	dpw kPa	88	81	72	72	61	56	50	50	70	65	58	58
<b>11</b>	<b>HRC kW</b>	<b>862</b>	<b>851</b>	<b>833</b>	<b>586</b>	<b>942</b>	<b>930</b>	<b>910</b>	<b>640</b>	<b>1018</b>	<b>1006</b>	<b>984</b>	<b>692</b>
	qwr l/s	41.6	41.2	40.4	28.4	45.4	44.9	44.0	31.0	49.0	48.6	47.6	33.6
	dpwr kPa	54	53	51	25	55	53	51	25	34	33	32	16
	CC kW	838	804	759	759	913	878	828	828	981	946	893	893
	PI kW	236	256	279	288	258	280	305	315	281	305	332	344
	qw l/s	40.0	38.4	36.3	36.3	43.6	42.0	39.6	39.6	46.9	45.2	42.7	42.7
<b>13</b>	dpw kPa	97	90	81	81	68	63	57	57	77	72	65	65
	<b>HRC kW</b>	<b>905</b>	<b>895</b>	<b>877</b>	<b>617</b>	<b>987</b>	<b>978</b>	<b>958</b>	<b>674</b>	<b>1064</b>	<b>1056</b>	<b>1036</b>	<b>728</b>
	qwr l/s	43.6	43.2	42.4	29.8	47.6	47.2	46.3	32.6	51.2	51.0	50.0	35.2
	dpwr kPa	60	58	56	28	60	59	57	28	37	37	35	17
	CC kW	885	852	807	807	963	928	881	881	1031	996	949	949
	PI kW	240	260	283	293	262	284	310	320	285	309	337	349
<b>15</b>	qw l/s	42.3	40.7	38.6	38.6	46.1	44.4	42.1	42.1	49.3	47.6	45.4	45.4
	dpw kPa	108	100	91	91	75	70	63	63	84	79	73	73
	<b>HRC kW</b>	<b>948</b>	<b>938</b>	<b>921</b>	<b>648</b>	<b>1033</b>	<b>1024</b>	<b>1007</b>	<b>708</b>	<b>1109</b>	<b>1102</b>	<b>1087</b>	<b>764</b>
	qwr l/s	45.6	45.2	44.6	31.4	49.8	49.4	48.7	34.3	53.4	53.2	52.6	37.0
	dpwr kPa	65	64	62	31	67	65	63	31	40	40	39	19
	CC kW	933	899	855	855	1015	979	932	932	1081	1046	1000	1000
<b>17</b>	PI kW	244	264	287	298	267	288	314	325	289	313	342	354
	qw l/s	44.7	43.1	41.0	41.0	48.6	46.9	44.6	44.6	51.8	50.1	47.9	47.9
	dpw kPa	118	111	101	101	82	77	70	70	92	87	80	80
	<b>HRC kW</b>	<b>992</b>	<b>982</b>	<b>966</b>	<b>679</b>	<b>1080</b>	<b>1070</b>	<b>1053</b>	<b>741</b>	<b>1155</b>	<b>1147</b>	<b>1133</b>	<b>797</b>
	qwr l/s	47.8	47.4	46.6	32.8	52.0	51.7	50.9	35.9	55.6	55.4	54.8	38.6
	dpwr kPa	72	70	68	34	73	72	69	34	44	43	42	21

## EWAD C-XL

		990				C10				C11			
Twout	Twr	40	45	50	55	40	45	50	55	40	45	50	55
<b>5</b>	CC kW	924	879	818	818	1000	952	886	886	1100	1047	976	976
	PI kW	295	320	350	360	321	349	381	393	352	382	418	431
	qw l/s	44.0	41.9	39.0	39.0	47.7	45.4	42.2	42.2	52.4	49.9	46.5	46.5
	dpw kPa	53	48	42	42	61	56	49	49	39	36	31	31
	<b>HRC kW</b>	<b>1027</b>	<b>1013</b>	<b>988</b>	<b>695</b>	<b>1114</b>	<b>1098</b>	<b>1071</b>	<b>753</b>	<b>1225</b>	<b>1208</b>	<b>1179</b>	<b>829</b>
	qwr l/s	49.5	48.9	47.8	33.6	53.6	53.0	51.8	36.4	59.0	58.3	57.0	40.2
<b>7</b>	dpwr kPa	40	39	37	18	40	39	37	18	55	54	51	25
	CC kW	985	940	878	878	1066	1017	951	951	1172	1119	1046	1046
	PI kW	300	325	355	366	327	355	387	400	359	389	425	438
	qw l/s	47.0	44.8	41.9	41.9	50.9	48.5	45.4	45.4	55.9	53.4	49.9	49.9
	dpw kPa	59	54	48	48	68	63	56	56	44	40	36	36
	<b>HRC kW</b>	<b>1084</b>	<b>1068</b>	<b>1043</b>	<b>734</b>	<b>1174</b>	<b>1158</b>	<b>1131</b>	<b>795</b>	<b>1290</b>	<b>1273</b>	<b>1244</b>	<b>875</b>
<b>9</b>	qwr l/s	52.2	51.5	50.4	35.6	56.6	55.8	54.6	38.6	62.2	61.5	60.2	42.4
	dpwr kPa	45	43	41	21	45	43	41	21	61	60	57	28
	CC kW	1049	1003	941	941	1135	1085	1018	1018	1245	1191	1119	1119
	PI kW	306	331	361	372	333	361	393	407	365	395	431	445
	qw l/s	50.1	47.9	44.9	44.9	54.2	51.8	48.6	48.6	59.5	56.9	53.5	53.5
	dpw kPa	66	61	55	55	76	71	63	63	49	45	40	40
<b>11</b>	<b>HRC kW</b>	<b>1142</b>	<b>1126</b>	<b>1101</b>	<b>774</b>	<b>1237</b>	<b>1220</b>	<b>1193</b>	<b>839</b>	<b>1357</b>	<b>1340</b>	<b>1311</b>	<b>922</b>
	qwr l/s	55.1	54.4	53.2	37.5	59.6	59.0	57.6	40.6	65.4	64.7	63.4	44.7
	dpwr kPa	49	48	46	23	49	48	46	23	67	66	63	31
	CC kW	1114	1067	1005	1005	1202	1154	1087	1087	1320	1266	1194	1194
	PI kW	311	337	367	379	339	367	399	414	371	402	438	452
	qw l/s	53.2	51.0	48.0	48.0	57.5	55.1	52.0	52.0	63.1	60.5	57.1	57.1
<b>13</b>	dpw kPa	74	69	62	62	85	79	71	71	54	50	45	45
	<b>HRC kW</b>	<b>1201</b>	<b>1186</b>	<b>1160</b>	<b>816</b>	<b>1298</b>	<b>1283</b>	<b>1257</b>	<b>884</b>	<b>1425</b>	<b>1408</b>	<b>1380</b>	<b>970</b>
	qwr l/s	57.9	57.3	56.1	39.5	62.6	62.0	60.8	42.8	68.6	68.0	66.8	47.0
	dpwr kPa	54	53	51	25	54	53	51	25	74	73	70	35
	CC kW	1180	1133	1072	1072	1271	1223	1158	1158	1396	1342	1270	1270
	PI kW	316	342	372	385	344	372	405	420	377	408	444	460
<b>15</b>	qw l/s	56.5	54.2	51.3	51.3	60.8	58.5	55.4	55.4	66.8	64.2	60.8	60.8
	dpw kPa	82	76	69	69	94	88	79	79	60	56	51	51
	<b>HRC kW</b>	<b>1262</b>	<b>1246</b>	<b>1221</b>	<b>859</b>	<b>1361</b>	<b>1346</b>	<b>1321</b>	<b>929</b>	<b>1495</b>	<b>1478</b>	<b>1450</b>	<b>1020</b>
	qwr l/s	60.8	60.2	59.0	41.6	65.6	65.0	63.8	45.0	72.0	71.4	70.2	49.4
	dpwr kPa	60	59	57	28	60	59	57	28	81	80	77	38
	CC kW	1248	1201	1139	1139	1342	1293	1228	1228	1475	1420	1348	1348
<b>15</b>	PI kW	321	348	378	391	350	378	411	427	383	414	451	467
	qw l/s	59.7	57.5	54.5	54.5	64.2	61.9	58.8	58.8	70.6	68.0	64.5	64.5
	dpw kPa	91	85	77	77	104	97	88	88	66	62	56	56
	<b>HRC kW</b>	<b>1323</b>	<b>1308</b>	<b>1283</b>	<b>902</b>	<b>1425</b>	<b>1410</b>	<b>1386</b>	<b>974</b>	<b>1566</b>	<b>1549</b>	<b>1521</b>	<b>1070</b>
	qwr l/s	63.7	63.1	62.0	43.7	68.6	68.0	67.0	47.2	75.5	74.8	73.6	51.8
	dpwr kPa	66	64	62	31	66	64	62	31	89	87	85	42

## EWAD C-XL

Twout	Twr	C12				C13				C16			
		40	45	50	55	40	45	50	55	40	45	50	55
<b>5</b>	CC kW	1188	1132	1055	1055	1252	1189	1106	1106	1489	1420	1325	1325
	PI kW	385	418	457	471	390	422	460	475	481	522	571	589
	qw l/s	56.6	54.0	50.3	50.3	59.7	56.7	52.7	52.7	71.0	67.7	63.2	63.2
	dpw kPa	45	41	36	36	59	54	47	47	55	50	44	44
	<b>HRC kW</b>	<b>1325</b>	<b>1308</b>	<b>1278</b>	<b>899</b>	<b>1383</b>	<b>1360</b>	<b>1324</b>	<b>931</b>	<b>1660</b>	<b>1639</b>	<b>1602</b>	<b>1127</b>
	qwr l/s	63.8	63.2	61.8	43.6	66.6	65.6	64.0	45.2	80.1	79.2	77.4	54.6
<b>7</b>	dpwr kPa	55	54	51	25	60	58	55	27	40	39	37	18
	CC kW	1264	1208	1131	1131	1339	1275	1190	1190	1584	1514	1418	1418
	PI kW	392	425	464	479	397	429	468	484	489	530	579	598
	qw l/s	60.3	57.6	53.9	53.9	63.9	60.8	56.8	56.8	75.6	72.2	67.7	67.7
	dpw kPa	50	46	41	41	67	61	54	54	61	56	50	50
	<b>HRC kW</b>	<b>1395</b>	<b>1378</b>	<b>1348</b>	<b>948</b>	<b>1462</b>	<b>1439</b>	<b>1401</b>	<b>985</b>	<b>1746</b>	<b>1725</b>	<b>1688</b>	<b>1187</b>
<b>9</b>	qwr l/s	67.2	66.6	65.2	46.0	70.4	69.4	67.8	47.8	84.3	83.4	81.6	57.6
	dpwr kPa	61	60	57	28	67	65	62	31	44	43	41	20
	CC kW	1341	1284	1208	1208	1427	1363	1277	1277	1677	1609	1514	1514
	PI kW	398	431	471	487	404	437	476	493	497	539	588	608
	qw l/s	64.1	61.3	57.7	57.7	68.2	65.1	61.0	61.0	80.1	76.8	72.3	72.3
	dpw kPa	56	52	46	46	75	69	61	61	68	63	57	57
<b>11</b>	<b>HRC kW</b>	<b>1466</b>	<b>1448</b>	<b>1419</b>	<b>998</b>	<b>1543</b>	<b>1520</b>	<b>1482</b>	<b>1042</b>	<b>1832</b>	<b>1813</b>	<b>1777</b>	<b>1250</b>
	qwr l/s	70.6	70.0	68.6	48.4	74.4	73.4	71.6	50.4	88.2	87.6	85.8	60.6
	dpwr kPa	67	66	63	31	75	72	69	34	48	47	45	23
	CC kW	1419	1363	1287	1287	1520	1454	1368	1368	1774	1704	1612	1612
	PI kW	405	438	478	495	412	445	484	501	505	547	597	618
	qw l/s	67.8	65.2	61.5	61.5	72.6	69.5	65.4	65.4	84.8	81.5	77.0	77.0
<b>13</b>	dpw kPa	62	57	52	52	84	78	69	69	75	70	63	63
	<b>HRC kW</b>	<b>1537</b>	<b>1521</b>	<b>1491</b>	<b>1049</b>	<b>1627</b>	<b>1603</b>	<b>1565</b>	<b>1101</b>	<b>1920</b>	<b>1900</b>	<b>1866</b>	<b>1313</b>
	qwr l/s	74.0	73.4	72.2	50.8	78.4	77.4	75.6	53.4	92.4	91.8	90.3	63.6
	dpwr kPa	74	73	70	35	83	81	77	38	53	52	50	25
	CC kW	1500	1443	1367	1367	1616	1548	1461	1461	1874	1803	1710	1710
	PI kW	411	445	485	502	419	452	491	510	513	555	605	627
<b>15</b>	qw l/s	71.7	69.0	65.4	65.4	77.3	74.1	69.9	69.9	89.7	86.3	81.8	81.8
	dpw kPa	68	64	58	58	94	87	78	78	83	78	71	71
	<b>HRC kW</b>	<b>1610</b>	<b>1593</b>	<b>1565</b>	<b>1101</b>	<b>1714</b>	<b>1689</b>	<b>1650</b>	<b>1160</b>	<b>2011</b>	<b>1991</b>	<b>1956</b>	<b>1376</b>
	qwr l/s	77.6	77.0	75.8	53.4	82.6	81.6	79.8	56.2	96.9	96.0	94.5	66.6
	dpwr kPa	81	80	77	38	92	90	86	42	58	57	55	27
	CC kW	1583	1524	1448	1448	1713	1646	1558	1558	1977	1905	1810	1810
<b>15</b>	PI kW	418	452	492	510	426	460	499	519	521	563	613	637
	qw l/s	75.8	73.0	69.3	69.3	82.0	78.8	74.6	74.6	94.7	91.2	86.7	86.7
	dpw kPa	75	70	64	64	104	97	88	88	92	86	78	78
	<b>HRC kW</b>	<b>1685</b>	<b>1668</b>	<b>1640</b>	<b>1153</b>	<b>1802</b>	<b>1778</b>	<b>1739</b>	<b>1223</b>	<b>2105</b>	<b>2084</b>	<b>2049</b>	<b>1441</b>
	qwr l/s	81.2	80.6	79.4	55.8	86.8	85.8	84.0	59.2	101.4	100.5	99.0	69.9
	dpwr kPa	89	87	85	42	102	99	95	47	64	62	60	30

## EWAD C-XL

Twout	Twr	C17				C18				C19			
		40	45	50	55	40	45	50	55	40	45	50	55
<b>5</b>	CC kW	1570	1498	1400	1400	1642	1566	1463	1463	1723	1645	1538	1538
	PI kW	512	556	609	629	541	588	644	664	572	621	681	702
	qw l/s	74.8	71.4	66.7	66.7	78.3	74.7	69.7	69.7	82.1	78.4	73.3	73.3
	dpw kPa	60	55	49	49	59	55	48	48	65	60	53	53
	<b>HRC kW</b>	<b>1754</b>	<b>1734</b>	<b>1698</b>	<b>1194</b>	<b>1840</b>	<b>1819</b>	<b>1781</b>	<b>1252</b>	<b>1934</b>	<b>1913</b>	<b>1875</b>	<b>1319</b>
	qwr l/s	84.6	83.7	82.2	57.8	88.7	87.8	86.1	60.7	93.3	92.4	90.6	63.9
	dpwr kPa	52	52	50	25	52	51	49	24	52	51	49	24
<b>7</b>	CC kW	1667	1595	1496	1496	1744	1668	1564	1564	1829	1749	1642	1642
	PI kW	521	565	618	639	551	598	654	674	581	631	691	713
	qw l/s	79.6	76.1	71.4	71.4	83.2	79.6	74.6	74.6	87.3	83.5	78.3	78.3
	dpw kPa	67	62	55	55	66	61	55	55	72	67	60	60
	<b>HRC kW</b>	<b>1844</b>	<b>1823</b>	<b>1787</b>	<b>1256</b>	<b>1934</b>	<b>1913</b>	<b>1874</b>	<b>1318</b>	<b>2031</b>	<b>2009</b>	<b>1971</b>	<b>1386</b>
	qwr l/s	88.9	88.0	86.3	60.9	93.1	92.2	90.7	63.9	97.8	96.9	95.4	67.2
	dpwr kPa	58	57	55	27	57	56	54	27	57	56	54	27
<b>9</b>	CC kW	1765	1693	1595	1595	1849	1771	1668	1668	1938	1857	1749	1749
	PI kW	530	574	627	649	560	607	663	685	591	641	700	724
	qw l/s	84.3	80.9	76.2	76.2	88.3	84.6	79.6	79.6	92.5	88.7	83.5	83.5
	dpw kPa	75	69	62	62	74	68	61	61	80	74	67	67
	<b>HRC kW</b>	<b>1933</b>	<b>1914</b>	<b>1878</b>	<b>1321</b>	<b>2029</b>	<b>2008</b>	<b>1970</b>	<b>1386</b>	<b>2130</b>	<b>2108</b>	<b>2070</b>	<b>1456</b>
	qwr l/s	93.1	92.4	90.9	64.0	97.7	96.8	95.3	67.1	102.6	101.7	100.2	70.5
	dpwr kPa	63	62	60	30	63	62	60	30	63	62	60	30
<b>11</b>	CC kW	1866	1793	1696	1696	1957	1878	1774	1774	2050	1968	1859	1859
	PI kW	538	583	636	659	569	616	673	696	600	650	710	735
	qw l/s	89.2	85.7	81.1	81.1	93.5	89.8	84.8	84.8	98.0	94.1	88.9	88.9
	dpw kPa	83	77	69	69	82	76	69	69	89	83	75	75
	<b>HRC kW</b>	<b>2025</b>	<b>2005</b>	<b>1971</b>	<b>1386</b>	<b>2128</b>	<b>2106</b>	<b>2068</b>	<b>1454</b>	<b>2233</b>	<b>2211</b>	<b>2171</b>	<b>1527</b>
	qwr l/s	97.7	96.8	95.3	67.1	102.6	101.7	100.0	70.5	107.7	106.8	105.0	74.1
	dpwr kPa	69	68	66	33	70	68	66	33	69	68	66	33
<b>13</b>	CC kW	1971	1896	1798	1798	2068	1988	1883	1883	2166	2083	1973	1973
	PI kW	547	591	645	669	578	626	682	706	610	660	720	746
	qw l/s	94.3	90.7	86.0	86.0	98.9	95.1	90.1	90.1	103.6	99.6	94.4	94.4
	dpw kPa	91	85	77	77	91	84	76	76	98	92	83	83
	<b>HRC kW</b>	<b>2120</b>	<b>2100</b>	<b>2064</b>	<b>1452</b>	<b>2229</b>	<b>2207</b>	<b>2168</b>	<b>1525</b>	<b>2339</b>	<b>2316</b>	<b>2276</b>	<b>1600</b>
	qwr l/s	102.1	101.5	99.9	70.3	107.5	106.6	104.8	74.0	112.8	111.9	110.1	77.7
	dpwr kPa	76	75	73	36	76	75	72	36	76	75	72	36
<b>15</b>	CC kW	2078	2002	1903	1903	2183	2102	1995	1995	2286	2201	2090	2090
	PI kW	555	600	654	679	587	635	692	717	619	670	730	757
	qw l/s	99.5	95.9	91.1	91.1	104.5	100.6	95.5	95.5	109.4	105.4	100.0	100.0
	dpw kPa	100	94	86	86	100	93	85	85	109	101	92	92
	<b>HRC kW</b>	<b>2218</b>	<b>2196</b>	<b>2161</b>	<b>1520</b>	<b>2334</b>	<b>2310</b>	<b>2271</b>	<b>1597</b>	<b>2447</b>	<b>2424</b>	<b>2383</b>	<b>1676</b>
	qwr l/s	106.8	105.9	104.4	73.7	112.4	111.5	109.8	77.4	117.9	117.0	115.2	81.3
	dpwr kPa	83	82	79	39	83	82	79	39	83	82	79	39

Fluid: Water

Ta: Condenser inlet air temperature 35.0°C; Twout: Evaporator leaving water temperature ( $\Delta t$  5.0°C);Twr: Heat Recovery leaving water temperature ( $\Delta t$  5.0°C)

CC: Cooling capacity; PI: Power input; qw: Fluid flow rate; dpw: Fluid pressure drop

HRC: Heat recovery capacity; qwr: Heat recovery fluid flow rate; dpwr: Heat recovery fluid pressure drop

\* For working condition where dpw value is "Italic-Red Color" please contact factory

## EWAD C-XR

		740				810				870			
Twout	Twr	40	45	50	55	40	45	50	55	40	45	50	55
<b>5</b>	CC kW	699	665	620	620	763	727	678	678	824	786	733	733
	PI kW	221	240	264	268	242	264	289	294	264	287	316	321
	qw l/s	33.3	31.7	29.5	29.5	36.4	34.7	32.3	32.3	39.3	37.5	34.9	34.9
	dpw kPa	70	64	56	56	49	45	39	39	56	51	45	45
	<b>HRC kW</b>	<b>778</b>	<b>767</b>	<b>749</b>	<b>526</b>	<b>850</b>	<b>839</b>	<b>820</b>	<b>577</b>	<b>920</b>	<b>909</b>	<b>889</b>	<b>625</b>
	qwr l/s	37.4	37.0	36.2	25.6	41.0	40.5	39.7	27.9	44.4	43.8	43.0	30.2
<b>7</b>	dpwr kPa	44	43	41	20	44	43	41	20	28	27	26	13
	CC kW	744	711	665	665	813	776	727	727	877	838	785	785
	PI kW	224	244	268	272	246	268	294	299	268	292	320	326
	qw l/s	35.5	33.9	31.7	31.7	38.8	37.0	34.7	34.7	41.9	40.0	37.5	37.5
	dpw kPa	78	72	64	64	55	50	45	45	63	58	51	51
	<b>HRC kW</b>	<b>819</b>	<b>809</b>	<b>790</b>	<b>556</b>	<b>896</b>	<b>884</b>	<b>865</b>	<b>608</b>	<b>969</b>	<b>957</b>	<b>937</b>	<b>659</b>
<b>9</b>	qwr l/s	39.4	39.0	38.2	27.0	43.1	42.7	41.8	29.5	46.6	46.2	45.2	32.0
	dpwr kPa	49	48	46	23	49	48	46	23	31	30	29	14
	CC kW	791	757	711	711	864	827	777	777	932	892	838	838
	PI kW	228	248	272	277	250	272	298	303	273	297	325	331
	qw l/s	37.8	36.1	34.0	34.0	41.3	39.5	37.1	37.1	44.5	42.6	40.0	40.0
	dpw kPa	88	81	72	72	61	56	50	50	70	65	58	58
<b>11</b>	<b>HRC kW</b>	<b>862</b>	<b>851</b>	<b>833</b>	<b>586</b>	<b>943</b>	<b>931</b>	<b>911</b>	<b>641</b>	<b>1019</b>	<b>1007</b>	<b>985</b>	<b>693</b>
	qwr l/s	41.6	41.0	40.2	28.4	45.5	45.0	44.0	31.1	49.2	48.6	47.6	33.6
	dpwr kPa	54	53	51	25	55	53	51	25	34	33	32	16
	CC kW	837	804	758	758	913	878	829	829	982	947	894	894
	PI kW	232	252	276	281	254	277	303	308	277	301	330	336
	qw l/s	40.0	38.4	36.2	36.2	43.7	42.0	39.6	39.6	46.9	45.3	42.7	42.7
<b>13</b>	dpw kPa	97	90	81	81	68	63	57	57	77	72	65	65
	<b>HRC kW</b>	<b>904</b>	<b>894</b>	<b>876</b>	<b>616</b>	<b>988</b>	<b>978</b>	<b>959</b>	<b>674</b>	<b>1065</b>	<b>1057</b>	<b>1037</b>	<b>729</b>
	qwr l/s	43.6	43.2	42.4	29.8	47.6	47.2	46.4	32.7	51.4	51.0	50.2	35.4
	dpwr kPa	60	58	56	28	60	59	57	28	37	37	35	17
	CC kW	884	851	807	807	964	928	881	881	1032	997	950	950
	PI kW	236	256	280	285	258	281	307	313	281	306	335	341
<b>15</b>	qw l/s	42.3	40.7	38.6	38.6	46.1	44.4	42.2	42.2	49.4	47.7	45.4	45.4
	dpw kPa	108	100	91	91	75	70	63	63	84	79	73	73
	<b>HRC kW</b>	<b>947</b>	<b>938</b>	<b>921</b>	<b>647</b>	<b>1034</b>	<b>1024</b>	<b>1007</b>	<b>708</b>	<b>1110</b>	<b>1103</b>	<b>1088</b>	<b>765</b>
	qwr l/s	45.6	45.2	44.6	31.4	49.8	49.4	48.7	34.3	53.6	53.2	52.6	37.0
	dpwr kPa	65	64	62	31	67	65	63	31	40	40	39	19
	CC kW	932	899	855	855	1015	980	932	932	1082	1047	1000	1000
<b>17</b>	PI kW	239	260	284	290	262	285	311	317	284	310	339	346
	qw l/s	44.6	43.0	40.9	40.9	48.6	46.9	44.6	44.6	51.8	50.1	47.9	47.9
	dpw kPa	118	111	101	101	82	77	70	70	92	87	80	80
	<b>HRC kW</b>	<b>991</b>	<b>981</b>	<b>965</b>	<b>679</b>	<b>1081</b>	<b>1071</b>	<b>1054</b>	<b>741</b>	<b>1156</b>	<b>1149</b>	<b>1135</b>	<b>798</b>
	qwr l/s	47.8	47.4	46.6	32.8	52.0	51.7	50.9	35.9	55.8	55.4	54.8	38.6
	dpwr kPa	71	70	68	34	74	72	69	34	44	43	42	21

## EWAD C-XR

		970				C10				C11			
Twout	Twr	40	45	50	55	40	45	50	55	40	45	50	55
<b>5</b>	CC kW	924	879	818	818	1000	951	886	886	1100	1048	976	976
	PI kW	290	316	347	353	316	345	378	385	348	379	416	422
	qw l/s	44.0	41.9	39.0	39.0	47.7	45.3	42.2	42.2	52.4	49.9	46.5	46.5
	dpw kPa	53	48	42	42	61	56	49	49	39	36	31	31
	<b>HRC kW</b>	<b>1027</b>	<b>1012</b>	<b>987</b>	<b>694</b>	<b>1113</b>	<b>1098</b>	<b>1071</b>	<b>753</b>	<b>1225</b>	<b>1208</b>	<b>1180</b>	<b>829</b>
	qwr l/s	49.5	48.9	47.8	33.6	53.6	53.0	51.8	36.4	59.1	58.3	57.0	40.2
<b>7</b>	dpwr kPa	40	39	37	18	40	39	37	18	55	54	51	26
	CC kW	985	939	878	878	1066	1017	950	950	1172	1119	1047	1047
	PI kW	295	322	352	358	322	351	384	391	353	385	422	429
	qw l/s	47.0	44.8	41.9	41.9	50.9	48.5	45.3	45.3	55.9	53.4	49.9	49.9
	dpw kPa	59	54	48	48	68	63	56	56	44	40	36	36
	<b>HRC kW</b>	<b>1084</b>	<b>1068</b>	<b>1043</b>	<b>733</b>	<b>1174</b>	<b>1158</b>	<b>1131</b>	<b>795</b>	<b>1291</b>	<b>1274</b>	<b>1245</b>	<b>875</b>
<b>9</b>	qwr l/s	52.2	51.5	50.4	35.6	56.6	55.8	54.6	38.6	62.2	61.5	60.2	42.4
	dpwr kPa	44	43	41	21	45	43	41	21	61	60	57	28
	CC kW	1049	1002	940	940	1134	1084	1018	1018	1245	1192	1120	1120
	PI kW	301	327	358	364	327	356	390	397	359	391	429	436
	qw l/s	50.1	47.9	44.9	44.9	54.2	51.8	48.6	48.6	59.5	56.9	53.5	53.5
	dpw kPa	66	61	55	55	76	71	63	63	49	45	40	40
<b>11</b>	<b>HRC kW</b>	<b>1142</b>	<b>1126</b>	<b>1100</b>	<b>774</b>	<b>1236</b>	<b>1220</b>	<b>1193</b>	<b>839</b>	<b>1358</b>	<b>1341</b>	<b>1312</b>	<b>923</b>
	qwr l/s	55.0	54.3	53.2	37.5	59.6	58.8	57.6	40.6	65.4	64.7	63.4	44.7
	dpwr kPa	49	48	46	23	49	48	46	23	67	66	63	31
	CC kW	1114	1067	1005	1005	1202	1153	1087	1087	1320	1266	1194	1194
	PI kW	306	332	363	370	333	362	396	404	365	398	435	443
	qw l/s	53.2	51.0	48.0	48.0	57.4	55.1	52.0	52.0	63.1	60.5	57.1	57.1
<b>13</b>	dpw kPa	74	69	62	62	85	79	71	71	54	50	45	45
	<b>HRC kW</b>	<b>1201</b>	<b>1186</b>	<b>1160</b>	<b>816</b>	<b>1298</b>	<b>1283</b>	<b>1256</b>	<b>884</b>	<b>1426</b>	<b>1409</b>	<b>1381</b>	<b>971</b>
	qwr l/s	57.9	57.3	56.1	39.5	62.6	62.0	60.8	42.8	68.8	68.0	66.8	47.0
	dpwr kPa	54	53	51	25	54	53	51	25	74	73	70	35
	CC kW	1180	1133	1071	1071	1271	1222	1157	1157	1396	1342	1271	1271
	PI kW	311	338	369	376	338	367	402	409	371	404	441	449
<b>15</b>	qw l/s	56.5	54.2	51.2	51.2	60.8	58.5	55.4	55.4	66.8	64.2	60.8	60.8
	dpw kPa	82	76	69	69	94	88	79	79	60	56	51	51
	<b>HRC kW</b>	<b>1261</b>	<b>1246</b>	<b>1221</b>	<b>858</b>	<b>1361</b>	<b>1346</b>	<b>1321</b>	<b>929</b>	<b>1496</b>	<b>1479</b>	<b>1451</b>	<b>1020</b>
	qwr l/s	60.8	60.2	59.0	41.6	65.6	65.0	63.8	45.0	72.1	71.4	70.2	49.4
	dpwr kPa	60	59	56	28	60	59	56	28	81	80	77	38
	CC kW	1248	1201	1139	1139	1341	1292	1228	1228	1475	1420	1348	1348
<b>15</b>	PI kW	316	343	374	382	343	373	407	415	377	410	447	456
	qw l/s	59.7	57.5	54.5	54.5	64.2	61.9	58.8	58.8	70.6	68.0	64.5	64.5
	dpw kPa	91	85	77	77	104	97	88	88	66	62	56	56
	<b>HRC kW</b>	<b>1323</b>	<b>1308</b>	<b>1282</b>	<b>902</b>	<b>1425</b>	<b>1410</b>	<b>1386</b>	<b>974</b>	<b>1567</b>	<b>1550</b>	<b>1522</b>	<b>1070</b>
	qwr l/s	63.7	63.1	62.0	43.7	68.6	68.0	67.0	47.2	75.5	74.8	73.6	51.9
	dpwr kPa	66	64	62	31	66	64	62	31	89	87	85	42

## EWAD C-XR

		C12				C13				C16			
Twout	Twr	40	45	50	55	40	45	50	55	40	45	50	55
<b>5</b>	CC kW	1189	1133	1056	1056	1247	1185	1101	1101	1489	1419	1325	1325
	PI kW	379	413	453	461	382	416	455	463	472	515	565	575
	qw l/s	56.7	54.0	50.3	50.3	59.4	56.5	52.5	52.5	71.0	67.6	63.1	63.1
	dpw kPa	45	41	36	36	59	54	47	47	55	50	44	44
	<b>HRC kW</b>	<b>1326</b>	<b>1309</b>	<b>1279</b>	<b>899</b>	<b>1378</b>	<b>1355</b>	<b>1319</b>	<b>928</b>	<b>1659</b>	<b>1638</b>	<b>1601</b>	<b>1126</b>
	qwr l/s	64.0	63.2	61.8	43.6	66.4	65.4	63.8	45.0	79.8	79.2	77.4	54.6
<b>7</b>	dpwr kPa	55	54	51	26	60	58	55	27	39	39	37	18
	CC kW	1265	1209	1131	1131	1333	1270	1185	1185	1583	1513	1418	1418
	PI kW	385	420	460	468	389	423	463	471	480	523	574	584
	qw l/s	60.3	57.7	54.0	54.0	63.6	60.6	56.5	56.5	75.5	72.2	67.6	67.6
	dpw kPa	50	46	41	41	67	61	54	54	61	56	50	50
	<b>HRC kW</b>	<b>1395</b>	<b>1379</b>	<b>1349</b>	<b>948</b>	<b>1457</b>	<b>1434</b>	<b>1396</b>	<b>982</b>	<b>1745</b>	<b>1724</b>	<b>1687</b>	<b>1187</b>
<b>9</b>	qwr l/s	67.2	66.6	65.2	46.0	70.2	69.2	67.6	47.6	84.0	83.1	81.6	57.6
	dpwr kPa	61	60	57	28	67	64	61	30	44	43	41	20
	CC kW	1342	1285	1209	1209	1422	1358	1272	1272	1677	1608	1514	1514
	PI kW	391	426	467	476	396	430	470	479	488	531	582	593
	qw l/s	64.1	61.4	57.7	57.7	67.9	64.9	60.8	60.8	80.1	76.8	72.3	72.3
	dpw kPa	56	52	46	46	75	69	61	61	68	63	57	57
<b>11</b>	<b>HRC kW</b>	<b>1466</b>	<b>1449</b>	<b>1420</b>	<b>999</b>	<b>1538</b>	<b>1515</b>	<b>1476</b>	<b>1038</b>	<b>1831</b>	<b>1812</b>	<b>1776</b>	<b>1249</b>
	qwr l/s	70.6	70.0	68.6	48.4	74.2	73.2	71.4	50.4	88.2	87.6	85.8	60.6
	dpwr kPa	67	66	63	31	74	72	69	34	48	47	45	23
	CC kW	1420	1364	1288	1288	1514	1448	1363	1363	1774	1704	1611	1611
	PI kW	398	433	474	483	403	438	478	487	495	539	590	602
	qw l/s	67.9	65.2	61.6	61.6	72.4	69.2	65.1	65.1	84.8	81.4	77.0	77.0
<b>13</b>	dpw kPa	62	57	52	52	84	78	69	69	75	70	63	63
	<b>HRC kW</b>	<b>1538</b>	<b>1522</b>	<b>1492</b>	<b>1050</b>	<b>1621</b>	<b>1597</b>	<b>1560</b>	<b>1097</b>	<b>1919</b>	<b>1899</b>	<b>1865</b>	<b>1312</b>
	qwr l/s	74.2	73.4	72.2	50.8	78.2	77.2	75.4	53.2	92.4	91.8	90.3	63.6
	dpwr kPa	74	73	70	35	82	80	76	38	53	52	50	25
	CC kW	1501	1444	1368	1368	1609	1542	1455	1455	1873	1802	1709	1709
	PI kW	404	439	480	490	410	445	485	495	503	547	599	610
<b>15</b>	qw l/s	71.8	69.1	65.5	65.5	77.0	73.8	69.6	69.6	89.6	86.2	81.8	81.8
	dpw kPa	68	64	58	58	94	87	78	78	83	78	71	71
	<b>HRC kW</b>	<b>1611</b>	<b>1594</b>	<b>1566</b>	<b>1101</b>	<b>1708</b>	<b>1683</b>	<b>1644</b>	<b>1156</b>	<b>2010</b>	<b>1990</b>	<b>1955</b>	<b>1375</b>
	qwr l/s	77.6	77.0	75.8	53.4	82.4	81.2	79.6	56.0	96.9	96.0	94.5	66.6
	dpwr kPa	81	80	77	38	91	89	85	42	58	57	55	27
	CC kW	1584	1526	1449	1449	1706	1640	1552	1552	1976	1904	1810	1810
<b>15</b>	PI kW	410	446	487	497	417	452	493	502	511	555	607	618
	qw l/s	75.8	73.0	69.4	69.4	81.7	78.5	74.3	74.3	94.6	91.2	86.6	86.6
	dpw kPa	75	70	64	64	104	97	88	88	92	86	78	78
	<b>HRC kW</b>	<b>1686</b>	<b>1669</b>	<b>1641</b>	<b>1154</b>	<b>1796</b>	<b>1772</b>	<b>1732</b>	<b>1218</b>	<b>2104</b>	<b>2083</b>	<b>2048</b>	<b>1440</b>
	qwr l/s	81.2	80.6	79.4	56.0	86.6	85.6	83.8	59.0	101.4	100.5	99.0	69.9
	dpwr kPa	89	87	85	42	101	98	94	47	63	62	60	30

## EWAD C-XR

		C17				C18				C19			
Twout	Twr	40	45	50	55	40	45	50	55	40	45	50	55
<b>5</b>	CC kW	1569	1497	1399	1399	1642	1566	1462	1462	1724	1645	1538	1538
	PI kW	504	550	604	614	531	580	637	648	563	615	676	688
	qw l/s	74.8	71.4	66.7	66.7	78.3	74.6	69.7	69.7	82.2	78.4	73.3	73.3
	dpw kPa	60	55	49	49	59	55	48	48	65	60	53	53
	<b>HRC kW</b>	<b>1754</b>	<b>1733</b>	<b>1697</b>	<b>1193</b>	<b>1839</b>	<b>1817</b>	<b>1779</b>	<b>1251</b>	<b>1935</b>	<b>1914</b>	<b>1876</b>	<b>1319</b>
	qwr l/s	84.6	83.7	82.0	57.8	88.5	87.8	86.0	60.7	93.3	92.4	90.6	63.9
	dpwr kPa	52	52	50	25	52	51	49	24	52	51	49	24
<b>7</b>	CC kW	1667	1594	1495	1495	1743	1667	1563	1563	1829	1750	1642	1642
	PI kW	512	558	612	624	540	589	646	658	572	624	686	698
	qw l/s	79.5	76.0	71.3	71.3	83.2	79.6	74.6	74.6	87.3	83.5	78.3	78.3
	dpw kPa	67	62	55	55	66	61	55	55	72	67	60	60
	<b>HRC kW</b>	<b>1843</b>	<b>1822</b>	<b>1786</b>	<b>1256</b>	<b>1932</b>	<b>1911</b>	<b>1872</b>	<b>1317</b>	<b>2032</b>	<b>2010</b>	<b>1972</b>	<b>1387</b>
	qwr l/s	88.9	88.0	86.3	60.9	93.1	92.2	90.6	63.9	97.8	97.2	95.4	67.2
	dpwr kPa	58	57	55	27	57	56	54	27	57	56	54	27
<b>9</b>	CC kW	1765	1693	1594	1594	1848	1771	1667	1667	1938	1858	1749	1749
	PI kW	520	567	621	633	549	598	656	668	581	634	695	708
	qw l/s	84.3	80.8	76.1	76.1	88.3	84.6	79.6	79.6	92.6	88.7	83.5	83.5
	dpw kPa	75	69	62	62	74	68	61	61	80	74	67	67
	<b>HRC kW</b>	<b>1932</b>	<b>1913</b>	<b>1877</b>	<b>1320</b>	<b>2028</b>	<b>2006</b>	<b>1968</b>	<b>1384</b>	<b>2132</b>	<b>2110</b>	<b>2071</b>	<b>1457</b>
	qwr l/s	93.1	92.4	90.9	64.0	97.7	96.8	95.3	67.1	102.6	101.7	100.2	70.5
	dpwr kPa	63	62	60	30	63	62	60	30	63	62	60	30
<b>11</b>	CC kW	1865	1792	1695	1695	1956	1877	1773	1773	2051	1969	1860	1860
	PI kW	528	575	630	642	557	607	665	677	590	643	705	718
	qw l/s	89.2	85.7	81.0	81.0	93.5	89.7	84.7	84.7	98.0	94.1	88.9	88.9
	dpw kPa	83	77	69	69	82	76	69	69	89	83	75	75
	<b>HRC kW</b>	<b>2025</b>	<b>2005</b>	<b>1970</b>	<b>1385</b>	<b>2126</b>	<b>2104</b>	<b>2066</b>	<b>1453</b>	<b>2234</b>	<b>2212</b>	<b>2173</b>	<b>1528</b>
	qwr l/s	97.7	96.8	95.3	67.1	102.5	101.7	99.9	70.5	107.7	106.8	105.0	74.1
	dpwr kPa	69	68	66	33	69	68	66	33	70	68	66	33
<b>13</b>	CC kW	1970	1895	1797	1797	2067	1988	1882	1882	2167	2084	1973	1973
	PI kW	536	583	638	651	566	616	674	687	599	653	714	728
	qw l/s	94.2	90.7	86.0	86.0	98.9	95.1	90.0	90.0	103.7	99.7	94.4	94.4
	dpw kPa	91	85	77	77	91	84	76	76	98	92	83	83
	<b>HRC kW</b>	<b>2119</b>	<b>2099</b>	<b>2064</b>	<b>1451</b>	<b>2228</b>	<b>2205</b>	<b>2166</b>	<b>1523</b>	<b>2340</b>	<b>2317</b>	<b>2277</b>	<b>1601</b>
	qwr l/s	102.1	101.2	99.7	70.3	107.4	106.3	104.8	73.7	112.8	111.9	110.1	77.7
	dpwr kPa	76	75	72	36	76	75	72	36	76	75	72	36
<b>15</b>	CC kW	2077	2001	1902	1902	2182	2101	1995	1995	2286	2202	2091	2091
	PI kW	544	592	647	659	574	625	683	697	608	662	724	739
	qw l/s	99.4	95.8	91.1	91.1	104.5	100.6	95.5	95.5	109.5	105.4	100.1	100.1
	dpw kPa	100	94	86	86	100	93	85	85	109	101	92	92
	<b>HRC kW</b>	<b>2217</b>	<b>2196</b>	<b>2160</b>	<b>1519</b>	<b>2332</b>	<b>2308</b>	<b>2269</b>	<b>1596</b>	<b>2449</b>	<b>2425</b>	<b>2385</b>	<b>1677</b>
	qwr l/s	106.8	105.9	104.4	73.7	112.4	111.5	109.7	77.4	117.9	117.0	115.2	81.3
	dpwr kPa	83	82	79	39	83	82	79	39	84	82	79	39

Fluid: Water

Ta: Condenser inlet air temperature 35.0°C; Twout: Evaporator leaving water temperature ( $\Delta t$  5.0°C);Twr: Heat Recovery leaving water temperature ( $\Delta t$  5.0°C)

CC: Cooling capacity; PI: Power input; qw: Fluid flow rate; dpw: Fluid pressure drop

HRC: Heat recovery capacity; qwr: Heat recovery fluid flow rate; dpwr: Heat recovery fluid pressure drop

\* For working condition where dpw value is "Italic-Red Color" please contact factory

## EWAD C-PS

Twout	Twr	820				890				980			
		40	45	50	55	40	45	50	55	40	45	50	55
<b>5</b>	CC kW	732	696	646	646	800	760	707	707	881	837	778	778
	PI kW	225	243	266	274	246	266	291	299	269	292	318	329
	qw l/s	34.9	33.2	30.8	30.8	38.1	36.2	33.7	33.7	42.0	39.9	37.1	37.1
	dpw kPa	47	43	37	37	55	50	44	44	26	23	21	21
	<b>HRC kW</b>	<b>806</b>	<b>793</b>	<b>771</b>	<b>542</b>	<b>881</b>	<b>867</b>	<b>844</b>	<b>593</b>	<b>969</b>	<b>953</b>	<b>927</b>	<b>652</b>
	qwr l/s	38.8	38.2	37.2	26.2	42.5	41.8	40.8	28.7	46.8	46.0	44.8	31.6
<b>7</b>	CC kW	783	746	696	696	854	814	760	760	942	897	837	837
	PI kW	229	248	270	279	250	271	296	305	275	297	324	335
	qw l/s	37.3	35.6	33.2	33.2	40.8	38.8	36.3	36.3	44.9	42.8	39.9	39.9
	dpw kPa	53	48	43	43	62	57	50	50	29	27	23	23
	<b>HRC kW</b>	<b>852</b>	<b>839</b>	<b>816</b>	<b>574</b>	<b>931</b>	<b>917</b>	<b>893</b>	<b>628</b>	<b>1025</b>	<b>1008</b>	<b>981</b>	<b>690</b>
	qwr l/s	41.0	40.4	39.4	27.8	44.9	44.2	43.2	30.4	49.4	48.6	47.4	33.4
<b>9</b>	CC kW	835	797	747	747	911	870	816	816	1006	960	899	899
	PI kW	233	252	275	284	255	276	300	310	280	302	329	341
	qw l/s	39.9	38.1	35.7	35.7	43.5	41.5	39.0	39.0	48.0	45.8	42.9	42.9
	dpw kPa	59	55	49	49	69	64	57	57	33	30	27	27
	<b>HRC kW</b>	<b>900</b>	<b>886</b>	<b>864</b>	<b>607</b>	<b>983</b>	<b>968</b>	<b>944</b>	<b>664</b>	<b>1083</b>	<b>1065</b>	<b>1038</b>	<b>730</b>
	qwr l/s	43.4	42.8	41.8	29.4	47.4	46.7	45.7	32.2	52.2	51.4	50.2	35.4
<b>11</b>	CC kW	889	851	800	800	969	927	873	873	1072	1025	963	963
	PI kW	238	257	279	289	260	281	305	316	285	308	335	347
	qw l/s	42.5	40.7	38.2	38.2	46.3	44.3	41.7	41.7	51.2	49.0	46.0	46.0
	dpw kPa	67	61	55	55	78	72	64	64	37	34	30	30
	<b>HRC kW</b>	<b>950</b>	<b>935</b>	<b>912</b>	<b>641</b>	<b>1036</b>	<b>1020</b>	<b>996</b>	<b>701</b>	<b>1144</b>	<b>1125</b>	<b>1097</b>	<b>771</b>
	qwr l/s	45.8	45.2	44.2	31.0	49.9	49.2	48.1	33.9	55.2	54.4	53.0	37.4
<b>13</b>	CC kW	946	906	855	855	1028	987	932	932	1142	1093	1030	1030
	PI kW	242	261	284	294	264	285	310	321	291	313	340	353
	qw l/s	45.2	43.3	40.9	40.9	49.2	47.2	44.6	44.6	54.6	52.3	49.3	49.3
	dpw kPa	74	69	62	62	87	80	73	73	41	38	34	34
	<b>HRC kW</b>	<b>1001</b>	<b>986</b>	<b>962</b>	<b>677</b>	<b>1090</b>	<b>1074</b>	<b>1050</b>	<b>738</b>	<b>1207</b>	<b>1187</b>	<b>1158</b>	<b>814</b>
	qwr l/s	48.2	47.6	46.6	32.8	52.5	51.9	50.8	35.8	58.2	57.4	56.0	39.4
<b>15</b>	CC kW	1004	964	912	912	1090	1048	992	992	1214	1164	1100	1100
	PI kW	247	266	288	300	269	290	315	327	296	319	346	360
	qw l/s	48.1	46.2	43.6	43.6	52.2	50.2	47.5	47.5	58.1	55.7	52.7	52.7
	dpw kPa	83	77	70	70	96	90	81	81	46	43	38	38
	<b>HRC kW</b>	<b>1053</b>	<b>1038</b>	<b>1014</b>	<b>713</b>	<b>1146</b>	<b>1130</b>	<b>1106</b>	<b>777</b>	<b>1273</b>	<b>1252</b>	<b>1222</b>	<b>859</b>
	qwr l/s	50.8	50.2	49.0	34.6	55.2	54.5	53.5	37.7	61.4	60.4	59.2	41.6
	dpwr kPa	81	79	75	37	81	78	75	37	53	51	49	24

## EWAD C-PS

Twout	Twr	C11				C12				C13			
		40	45	50	55	40	45	50	55	40	45	50	55
<b>5</b>	CC kW	970	922	856	856	1054	1002	931	931	1163	1105	1027	1027
	PI kW	296	321	350	360	322	349	381	393	355	384	419	433
	qw l/s	46.2	43.9	40.8	40.8	50.2	47.7	44.4	44.4	55.4	52.7	48.9	48.9
	dpw kPa	51	46	40	40	59	54	47	47	51	46	41	41
	<b>HRC kW</b>	<b>1067</b>	<b>1049</b>	<b>1020</b>	<b>717</b>	<b>1160</b>	<b>1140</b>	<b>1109</b>	<b>780</b>	<b>1279</b>	<b>1257</b>	<b>1222</b>	<b>860</b>
	qwr l/s	51.5	50.6	49.3	34.8	55.8	55.0	53.6	37.8	61.6	60.7	59.2	41.7
	dpwr kPa	43	42	40	20	43	42	40	20	61	59	56	28
<b>7</b>	CC kW	1037	988	922	922	1126	1073	1002	1002	1244	1185	1105	1105
	PI kW	301	326	356	367	329	355	387	401	362	391	426	441
	qw l/s	49.5	47.1	44.0	44.0	53.7	51.2	47.8	47.8	59.4	56.5	52.7	52.7
	dpw kPa	57	52	46	46	66	61	54	54	57	53	46	46
	<b>HRC kW</b>	<b>1129</b>	<b>1110</b>	<b>1080</b>	<b>760</b>	<b>1226</b>	<b>1206</b>	<b>1174</b>	<b>826</b>	<b>1353</b>	<b>1330</b>	<b>1294</b>	<b>910</b>
	qwr l/s	54.4	53.6	52.2	36.8	59.0	58.2	56.8	40.0	65.2	64.2	62.6	44.1
	dpwr kPa	49	47	45	22	49	47	45	22	68	66	62	31
<b>9</b>	CC kW	1107	1057	990	990	1201	1147	1075	1075	1328	1268	1187	1187
	PI kW	307	332	362	373	335	362	394	408	368	398	433	449
	qw l/s	52.9	50.5	47.3	47.3	57.4	54.8	51.3	51.3	63.4	60.5	56.7	56.7
	dpw kPa	64	59	53	53	75	69	61	61	65	59	53	53
	<b>HRC kW</b>	<b>1192</b>	<b>1173</b>	<b>1143</b>	<b>804</b>	<b>1294</b>	<b>1274</b>	<b>1241</b>	<b>873</b>	<b>1429</b>	<b>1406</b>	<b>1370</b>	<b>963</b>
	qwr l/s	57.5	56.7	55.2	39.0	62.4	61.4	60.0	42.4	68.9	67.9	66.2	46.7
	dpwr kPa	54	53	50	25	54	52	50	25	76	73	70	35
<b>11</b>	CC kW	1179	1128	1061	1061	1279	1223	1151	1151	1415	1353	1272	1272
	PI kW	313	338	368	380	341	368	400	415	375	405	440	457
	qw l/s	56.4	53.9	50.7	50.7	61.1	58.5	55.0	55.0	67.6	64.7	60.8	60.8
	dpw kPa	72	67	60	60	84	77	69	69	73	67	60	60
	<b>HRC kW</b>	<b>1258</b>	<b>1238</b>	<b>1208</b>	<b>849</b>	<b>1364</b>	<b>1343</b>	<b>1311</b>	<b>922</b>	<b>1508</b>	<b>1484</b>	<b>1447</b>	<b>1018</b>
	qwr l/s	60.6	59.8	58.4	41.2	65.8	64.8	63.4	44.6	72.6	71.6	70.0	49.3
	dpwr kPa	60	58	56	28	60	58	56	28	84	82	78	39
<b>13</b>	CC kW	1255	1202	1134	1134	1359	1303	1229	1229	1505	1442	1360	1360
	PI kW	319	344	374	387	347	374	407	422	382	412	448	465
	qw l/s	60.0	57.5	54.2	54.2	65.0	62.3	58.8	58.8	72.0	69.0	65.0	65.0
	dpw kPa	81	75	67	67	93	87	78	78	81	75	68	68
	<b>HRC kW</b>	<b>1327</b>	<b>1306</b>	<b>1275</b>	<b>896</b>	<b>1438</b>	<b>1416</b>	<b>1383</b>	<b>972</b>	<b>1590</b>	<b>1565</b>	<b>1528</b>	<b>1074</b>
	qwr l/s	64.0	63.0	61.7	43.5	69.2	68.4	66.8	47.2	76.7	75.6	73.9	52.1
	dpwr kPa	67	65	62	31	67	65	62	31	93	91	87	43
<b>15</b>	CC kW	1332	1279	1210	1210	1441	1385	1311	1311	1598	1534	1451	1451
	PI kW	324	350	380	394	353	381	413	429	389	419	455	473
	qw l/s	63.7	61.2	57.9	57.9	69.0	66.3	62.7	62.7	76.5	73.5	69.5	69.5
	dpw kPa	90	84	76	76	104	97	88	88	90	84	76	76
	<b>HRC kW</b>	<b>1396</b>	<b>1376</b>	<b>1344</b>	<b>945</b>	<b>1511</b>	<b>1490</b>	<b>1457</b>	<b>1025</b>	<b>1674</b>	<b>1649</b>	<b>1611</b>	<b>1133</b>
	qwr l/s	67.2	66.4	65.0	45.8	72.8	72.0	70.4	49.6	80.6	79.6	77.9	54.9
	dpwr kPa	74	72	69	34	74	72	69	34	103	100	96	48

## EWAD C-PS

		C14					
Twout	Twr	40	45	50	55		
<b>5</b>	CC kW	1264	1201	1117	1117		
	PI kW	387	419	457	472		
	qw l/s	60.3	57.3	53.2	53.2		
	dpw kPa	59	54	47	47		
	<b>HRC kW</b>	<b>1391</b>	<b>1368</b>	<b>1330</b>	<b>936</b>		
	qwr l/s	67.0	66.0	64.4	45.4		
<b>7</b>	CC kW	1352	1287	1202	1202		
	PI kW	394	427	465	481		
	qw l/s	64.5	61.4	57.3	57.3		
	dpw kPa	67	61	54	54		
	<b>HRC kW</b>	<b>1471</b>	<b>1447</b>	<b>1408</b>	<b>990</b>		
	qwr l/s	71.0	69.8	68.2	48.0		
<b>9</b>	CC kW	1442	1377	1290	1290		
	PI kW	402	434	473	489		
	qw l/s	68.8	65.8	61.6	61.6		
	dpw kPa	75	69	61	61		
	<b>HRC kW</b>	<b>1553</b>	<b>1529</b>	<b>1490</b>	<b>1048</b>		
	qwr l/s	74.8	73.8	72.0	50.8		
<b>11</b>	CC kW	1535	1469	1382	1382		
	PI kW	409	442	480	498		
	qw l/s	73.4	70.2	66.0	66.0		
	dpw kPa	84	78	69	69		
	<b>HRC kW</b>	<b>1638</b>	<b>1613</b>	<b>1574</b>	<b>1107</b>		
	qwr l/s	79.0	77.8	76.2	53.6		
<b>13</b>	CC kW	1632	1564	1476	1476		
	PI kW	416	449	488	507		
	qw l/s	78.1	74.8	70.6	70.6		
	dpw kPa	94	87	78	78		
	<b>HRC kW</b>	<b>1726</b>	<b>1700</b>	<b>1660</b>	<b>1167</b>		
	qwr l/s	83.2	82.0	80.2	56.6		
<b>15</b>	CC kW	1730	1663	1573	1573		
	PI kW	423	457	496	515		
	qw l/s	82.8	79.6	75.3	75.3		
	dpw kPa	104	97	88	88		
	<b>HRC kW</b>	<b>1814</b>	<b>1789</b>	<b>1749</b>	<b>1230</b>		
	qwr l/s	87.4	86.4	84.6	59.6		
	dpwr kPa	<b>103</b>	<b>100</b>	96	48		

Fluid: Water

Ta: Condenser inlet air temperature 35.0°C; Twout: Evaporator leaving water temperature ( $\Delta t$  5.0°C);Twr: Heat Recovery leaving water temperature ( $\Delta t$  5.0°C)

CC: Cooling capacity; PI: Power input; qw: Fluid flow rate; dpw: Fluid pressure drop

HRC: Heat recovery capacity; qwr: Heat recovery fluid flow rate; dpwr: Heat recovery fluid pressure drop

\* For working condition where dpw value is "Italic-Red Color" please contact factory

## EWAD C-PL

Twout	Twr	820				890				980			
		40	45	50	55	40	45	50	55	40	45	50	55
<b>5</b>	CC kW	732	696	646	646	800	760	707	707	881	837	778	778
	PI kW	225	243	266	274	246	266	291	299	269	292	318	329
	qw l/s	34.9	33.2	30.8	30.8	38.1	36.2	33.7	33.7	42.0	39.9	37.1	37.1
	dpw kPa	47	43	37	37	55	50	44	44	26	23	21	21
	<b>HRC kW</b>	<b>806</b>	<b>793</b>	<b>771</b>	<b>542</b>	<b>881</b>	<b>867</b>	<b>844</b>	<b>593</b>	<b>969</b>	<b>953</b>	<b>927</b>	<b>652</b>
	qwr l/s	38.8	38.2	37.2	26.2	42.5	41.8	40.8	28.7	46.8	46.0	44.8	31.6
<b>7</b>	CC kW	783	746	696	696	854	814	760	760	942	897	837	837
	PI kW	229	248	270	279	250	271	296	305	275	297	324	335
	qw l/s	37.3	35.6	33.2	33.2	40.8	38.8	36.3	36.3	44.9	42.8	39.9	39.9
	dpw kPa	53	48	43	43	62	57	50	50	29	27	23	23
	<b>HRC kW</b>	<b>852</b>	<b>839</b>	<b>816</b>	<b>574</b>	<b>931</b>	<b>917</b>	<b>893</b>	<b>628</b>	<b>1025</b>	<b>1008</b>	<b>981</b>	<b>690</b>
	qwr l/s	41.0	40.4	39.4	27.8	44.9	44.2	43.2	30.4	49.4	48.6	47.4	33.4
<b>9</b>	CC kW	835	797	747	747	911	870	816	816	1006	960	899	899
	PI kW	233	252	275	284	255	276	300	310	280	302	329	341
	qw l/s	39.9	38.1	35.7	35.7	43.5	41.5	39.0	39.0	48.0	45.8	42.9	42.9
	dpw kPa	59	55	49	49	69	64	57	57	33	30	27	27
	<b>HRC kW</b>	<b>900</b>	<b>886</b>	<b>864</b>	<b>607</b>	<b>983</b>	<b>968</b>	<b>944</b>	<b>664</b>	<b>1083</b>	<b>1065</b>	<b>1038</b>	<b>730</b>
	qwr l/s	43.4	42.8	41.8	29.4	47.4	46.7	45.7	32.2	52.2	51.4	50.2	35.4
<b>11</b>	CC kW	889	851	800	800	969	927	873	873	1072	1025	963	963
	PI kW	238	257	279	289	260	281	305	316	285	308	335	347
	qw l/s	42.5	40.7	38.2	38.2	46.3	44.3	41.7	41.7	51.2	49.0	46.0	46.0
	dpw kPa	67	61	55	55	78	72	64	64	37	34	30	30
	<b>HRC kW</b>	<b>950</b>	<b>935</b>	<b>912</b>	<b>641</b>	<b>1036</b>	<b>1020</b>	<b>996</b>	<b>701</b>	<b>1144</b>	<b>1125</b>	<b>1097</b>	<b>771</b>
	qwr l/s	45.8	45.2	44.2	31.0	49.9	49.2	48.1	33.9	55.2	54.4	53.0	37.4
<b>13</b>	CC kW	946	906	855	855	1028	987	932	932	1142	1093	1030	1030
	PI kW	242	261	284	294	264	285	310	321	291	313	340	353
	qw l/s	45.2	43.3	40.9	40.9	49.2	47.2	44.6	44.6	54.6	52.3	49.3	49.3
	dpw kPa	74	69	62	62	87	80	73	73	41	38	34	34
	<b>HRC kW</b>	<b>1001</b>	<b>986</b>	<b>962</b>	<b>677</b>	<b>1090</b>	<b>1074</b>	<b>1050</b>	<b>738</b>	<b>1207</b>	<b>1187</b>	<b>1158</b>	<b>814</b>
	qwr l/s	48.2	47.6	46.6	32.8	52.5	51.9	50.8	35.8	58.2	57.4	56.0	39.4
<b>15</b>	CC kW	1004	964	912	912	1090	1048	992	992	1214	1164	1100	1100
	PI kW	247	266	288	300	269	290	315	327	296	319	346	360
	qw l/s	48.1	46.2	43.6	43.6	52.2	50.2	47.5	47.5	58.1	55.7	52.7	52.7
	dpw kPa	83	77	70	70	96	90	81	81	46	43	38	38
	<b>HRC kW</b>	<b>1053</b>	<b>1038</b>	<b>1014</b>	<b>713</b>	<b>1146</b>	<b>1130</b>	<b>1106</b>	<b>777</b>	<b>1273</b>	<b>1252</b>	<b>1222</b>	<b>859</b>
	qwr l/s	50.8	50.2	49.0	34.6	55.2	54.5	53.5	37.7	61.4	60.4	59.2	41.6
	dpwr kPa	81	79	75	37	81	78	75	37	53	51	49	24

## EWAD C-PL

Twout	Twr	C11				C12				C13			
		40	45	50	55	40	45	50	55	40	45	50	55
<b>5</b>	CC kW	970	922	856	856	1054	1002	931	931	1163	1105	1027	1027
	PI kW	296	321	350	360	322	349	381	393	355	384	419	433
	qw l/s	46.2	43.9	40.8	40.8	50.2	47.7	44.4	44.4	55.4	52.7	48.9	48.9
	dpw kPa	51	46	40	40	59	54	47	47	51	46	41	41
	<b>HRC kW</b>	<b>1067</b>	<b>1049</b>	<b>1020</b>	<b>717</b>	<b>1160</b>	<b>1140</b>	<b>1109</b>	<b>780</b>	<b>1279</b>	<b>1257</b>	<b>1222</b>	<b>860</b>
	qwr l/s	51.5	50.6	49.3	34.8	55.8	55.0	53.6	37.8	61.6	60.7	59.2	41.7
	dpwr kPa	43	42	40	20	43	42	40	20	61	59	56	28
<b>7</b>	CC kW	1037	988	922	922	1126	1073	1002	1002	1244	1185	1105	1105
	PI kW	301	326	356	367	329	355	387	401	362	391	426	441
	qw l/s	49.5	47.1	44.0	44.0	53.7	51.2	47.8	47.8	59.4	56.5	52.7	52.7
	dpw kPa	57	52	46	46	66	61	54	54	57	53	46	46
	<b>HRC kW</b>	<b>1129</b>	<b>1110</b>	<b>1080</b>	<b>760</b>	<b>1226</b>	<b>1206</b>	<b>1174</b>	<b>826</b>	<b>1353</b>	<b>1330</b>	<b>1294</b>	<b>910</b>
	qwr l/s	54.4	53.6	52.2	36.8	59.0	58.2	56.8	40.0	65.2	64.2	62.6	44.1
	dpwr kPa	49	47	45	22	49	47	45	22	68	66	62	31
<b>9</b>	CC kW	1107	1057	990	990	1201	1147	1075	1075	1328	1268	1187	1187
	PI kW	307	332	362	373	335	362	394	408	368	398	433	449
	qw l/s	52.9	50.5	47.3	47.3	57.4	54.8	51.3	51.3	63.4	60.5	56.7	56.7
	dpw kPa	64	59	53	53	75	69	61	61	65	59	53	53
	<b>HRC kW</b>	<b>1192</b>	<b>1173</b>	<b>1143</b>	<b>804</b>	<b>1294</b>	<b>1274</b>	<b>1241</b>	<b>873</b>	<b>1429</b>	<b>1406</b>	<b>1370</b>	<b>963</b>
	qwr l/s	57.5	56.7	55.2	39.0	62.4	61.4	60.0	42.4	68.9	67.9	66.2	46.7
	dpwr kPa	54	53	50	25	54	52	50	25	76	73	70	35
<b>11</b>	CC kW	1179	1128	1061	1061	1279	1223	1151	1151	1415	1353	1272	1272
	PI kW	313	338	368	380	341	368	400	415	375	405	440	457
	qw l/s	56.4	53.9	50.7	50.7	61.1	58.5	55.0	55.0	67.6	64.7	60.8	60.8
	dpw kPa	72	67	60	60	84	77	69	69	73	67	60	60
	<b>HRC kW</b>	<b>1258</b>	<b>1238</b>	<b>1208</b>	<b>849</b>	<b>1364</b>	<b>1343</b>	<b>1311</b>	<b>922</b>	<b>1508</b>	<b>1484</b>	<b>1447</b>	<b>1018</b>
	qwr l/s	60.6	59.8	58.4	41.2	65.8	64.8	63.4	44.6	72.6	71.6	70.0	49.3
	dpwr kPa	60	58	56	28	60	58	56	28	84	82	78	39
<b>13</b>	CC kW	1255	1202	1134	1134	1359	1303	1229	1229	1505	1442	1360	1360
	PI kW	319	344	374	387	347	374	407	422	382	412	448	465
	qw l/s	60.0	57.5	54.2	54.2	65.0	62.3	58.8	58.8	72.0	69.0	65.0	65.0
	dpw kPa	81	75	67	67	93	87	78	78	81	75	68	68
	<b>HRC kW</b>	<b>1327</b>	<b>1306</b>	<b>1275</b>	<b>896</b>	<b>1438</b>	<b>1416</b>	<b>1383</b>	<b>972</b>	<b>1590</b>	<b>1565</b>	<b>1528</b>	<b>1074</b>
	qwr l/s	64.0	63.0	61.7	43.5	69.2	68.4	66.8	47.2	76.7	75.6	73.9	52.1
	dpwr kPa	67	65	62	31	67	65	62	31	93	91	87	43
<b>15</b>	CC kW	1332	1279	1210	1210	1441	1385	1311	1311	1598	1534	1451	1451
	PI kW	324	350	380	394	353	381	413	429	389	419	455	473
	qw l/s	63.7	61.2	57.9	57.9	69.0	66.3	62.7	62.7	76.5	73.5	69.5	69.5
	dpw kPa	90	84	76	76	104	97	88	88	90	84	76	76
	<b>HRC kW</b>	<b>1396</b>	<b>1376</b>	<b>1344</b>	<b>945</b>	<b>1511</b>	<b>1490</b>	<b>1457</b>	<b>1025</b>	<b>1674</b>	<b>1649</b>	<b>1611</b>	<b>1133</b>
	qwr l/s	67.2	66.4	65.0	45.8	72.8	72.0	70.4	49.6	80.6	79.6	77.9	54.9
	dpwr kPa	74	72	69	34	74	72	69	34	103	100	96	48

## EWAD C-PL

		C14					
Twout	Twr	40	45	50	55		
<b>5</b>	CC kW	1264	1201	1117	1117		
	PI kW	387	419	457	472		
	qw l/s	60.3	57.3	53.2	53.2		
	dpw kPa	59	54	47	47		
	<b>HRC kW</b>	<b>1391</b>	<b>1368</b>	<b>1330</b>	<b>936</b>		
	qwr l/s	67.0	66.0	64.4	45.4		
<b>7</b>	CC kW	1352	1287	1202	1202		
	PI kW	394	427	465	481		
	qw l/s	64.5	61.4	57.3	57.3		
	dpw kPa	67	61	54	54		
	<b>HRC kW</b>	<b>1471</b>	<b>1447</b>	<b>1408</b>	<b>990</b>		
	qwr l/s	71.0	69.8	68.2	48.0		
<b>9</b>	CC kW	1442	1377	1290	1290		
	PI kW	402	434	473	489		
	qw l/s	68.8	65.8	61.6	61.6		
	dpw kPa	75	69	61	61		
	<b>HRC kW</b>	<b>1553</b>	<b>1529</b>	<b>1490</b>	<b>1048</b>		
	qwr l/s	74.8	73.8	72.0	50.8		
<b>11</b>	CC kW	1535	1469	1382	1382		
	PI kW	409	442	480	498		
	qw l/s	73.4	70.2	66.0	66.0		
	dpw kPa	84	78	69	69		
	<b>HRC kW</b>	<b>1638</b>	<b>1613</b>	<b>1574</b>	<b>1107</b>		
	qwr l/s	79.0	77.8	76.2	53.6		
<b>13</b>	CC kW	1632	1564	1476	1476		
	PI kW	416	449	488	507		
	qw l/s	78.1	74.8	70.6	70.6		
	dpw kPa	94	87	78	78		
	<b>HRC kW</b>	<b>1726</b>	<b>1700</b>	<b>1660</b>	<b>1167</b>		
	qwr l/s	83.2	82.0	80.2	56.6		
<b>15</b>	CC kW	1730	1663	1573	1573		
	PI kW	423	457	496	515		
	qw l/s	82.8	79.6	75.3	75.3		
	dpw kPa	104	97	88	88		
	<b>HRC kW</b>	<b>1814</b>	<b>1789</b>	<b>1749</b>	<b>1230</b>		
	qwr l/s	87.4	86.4	84.6	59.6		
	dpwr kPa	<b>103</b>	<b>100</b>	96	48		

Fluid: Water

Ta: Condenser inlet air temperature 35.0°C; Twout: Evaporator leaving water temperature ( $\Delta t$  5.0°C);Twr: Heat Recovery leaving water temperature ( $\Delta t$  5.0°C)

CC: Cooling capacity; PI: Power input; qw: Fluid flow rate; dpw: Fluid pressure drop

HRC: Heat recovery capacity; qwr: Heat recovery fluid flow rate; dpwr: Heat recovery fluid pressure drop

\* For working condition where dpw value is "Italic-Red Color" please contact factory

## EWAD C-PR

		810				880				960			
Twout	Twr	40	45	50	55	40	45	50	55	40	45	50	55
<b>5</b>	CC kW	732	696	646	646	800	760	707	707	881	837	778	778
	PI kW	223	242	265	270	244	266	292	296	268	292	319	325
	qw l/s	34.9	33.2	30.8	30.8	38.1	36.2	33.7	33.7	42.0	39.9	37.1	37.1
	dpw kPa	47	43	37	37	55	50	44	44	26	23	21	21
	<b>HRC kW</b>	<b>808</b>	<b>794</b>	<b>773</b>	<b>543</b>	<b>884</b>	<b>869</b>	<b>847</b>	<b>595</b>	<b>972</b>	<b>956</b>	<b>930</b>	<b>654</b>
	qwr l/s	39.0	38.4	37.4	26.4	42.6	42.0	41.0	28.9	46.8	46.2	45.0	31.6
<b>7</b>	CC kW	783	746	696	696	854	814	760	760	942	897	837	837
	PI kW	227	247	270	275	249	271	296	301	273	297	324	330
	qw l/s	37.3	35.6	33.2	33.2	40.8	38.8	36.3	36.3	44.9	42.8	39.9	39.9
	dpw kPa	53	48	43	43	62	57	50	50	29	27	23	23
	<b>HRC kW</b>	<b>854</b>	<b>841</b>	<b>818</b>	<b>575</b>	<b>934</b>	<b>919</b>	<b>896</b>	<b>630</b>	<b>1028</b>	<b>1011</b>	<b>984</b>	<b>692</b>
	qwr l/s	41.2	40.6	39.6	27.8	45.0	44.4	43.3	30.5	49.6	48.8	47.6	33.6
<b>9</b>	CC kW	835	797	747	747	910	870	816	816	1006	960	899	899
	PI kW	231	251	274	280	253	276	301	306	278	302	330	336
	qw l/s	39.9	38.1	35.7	35.7	43.5	41.5	39.0	39.0	48.0	45.8	42.9	42.9
	dpw kPa	59	55	49	49	69	64	57	57	33	30	27	27
	<b>HRC kW</b>	<b>902</b>	<b>888</b>	<b>866</b>	<b>609</b>	<b>985</b>	<b>970</b>	<b>947</b>	<b>666</b>	<b>1086</b>	<b>1068</b>	<b>1041</b>	<b>732</b>
	qwr l/s	43.4	42.8	41.8	29.4	47.4	46.8	45.7	32.2	52.4	51.6	50.4	35.4
<b>11</b>	CC kW	889	851	800	800	969	927	873	873	1072	1025	963	963
	PI kW	235	255	279	284	258	280	306	312	283	307	335	342
	qw l/s	42.5	40.7	38.2	38.2	46.3	44.3	41.7	41.7	51.2	49.0	46.0	46.0
	dpw kPa	67	61	55	55	78	72	64	64	37	34	30	30
	<b>HRC kW</b>	<b>951</b>	<b>937</b>	<b>914</b>	<b>643</b>	<b>1038</b>	<b>1023</b>	<b>999</b>	<b>703</b>	<b>1146</b>	<b>1128</b>	<b>1100</b>	<b>774</b>
	qwr l/s	45.8	45.2	44.2	31.2	50.0	49.4	48.3	34.1	55.2	54.4	53.2	37.4
<b>13</b>	CC kW	946	906	855	855	1028	987	932	932	1142	1093	1030	1030
	PI kW	240	260	283	289	262	285	311	317	288	313	341	348
	qw l/s	45.2	43.4	40.9	40.9	49.2	47.2	44.6	44.6	54.6	52.3	49.3	49.3
	dpw kPa	74	69	62	62	87	80	73	73	41	38	34	34
	<b>HRC kW</b>	<b>1003</b>	<b>987</b>	<b>964</b>	<b>678</b>	<b>1092</b>	<b>1077</b>	<b>1053</b>	<b>740</b>	<b>1210</b>	<b>1190</b>	<b>1162</b>	<b>817</b>
	qwr l/s	48.4	47.6	46.6	32.8	52.7	52.0	50.9	35.9	58.2	57.4	56.2	39.6
<b>15</b>	CC kW	1004	964	912	912	1090	1048	992	992	1214	1164	1100	1100
	PI kW	244	264	288	294	267	290	316	322	294	318	346	354
	qw l/s	48.1	46.2	43.6	43.6	52.2	50.2	47.5	47.5	58.1	55.7	52.7	52.7
	dpw kPa	83	77	70	70	96	90	81	81	46	43	38	38
	<b>HRC kW</b>	<b>1055</b>	<b>1040</b>	<b>1016</b>	<b>715</b>	<b>1148</b>	<b>1133</b>	<b>1108</b>	<b>779</b>	<b>1275</b>	<b>1255</b>	<b>1225</b>	<b>862</b>
	qwr l/s	50.8	50.2	49.2	34.6	55.3	54.7	53.6	37.8	61.4	60.6	59.2	41.8
	dpwr kPa	81	79	75	37	81	79	75	37	53	52	49	24

## EWAD C-PR

Twout	Twr	C10				C11				C13			
		40	45	50	55	40	45	50	55	40	45	50	55
<b>5</b>	CC kW	970	922	856	856	1053	1001	930	930	1164	1106	1027	1027
	PI kW	294	320	350	356	320	348	381	388	352	383	419	427
	qw l/s	46.2	43.9	40.8	40.8	50.2	47.7	44.3	44.3	55.5	52.7	49.0	49.0
	dpw kPa	51	46	40	40	59	54	47	47	51	46	41	41
	<b>HRC kW</b>	<b>1070</b>	<b>1052</b>	<b>1023</b>	<b>719</b>	<b>1161</b>	<b>1142</b>	<b>1111</b>	<b>781</b>	<b>1282</b>	<b>1260</b>	<b>1226</b>	<b>862</b>
	qwr l/s	51.5	50.8	49.5	34.9	56.0	55.2	53.8	37.8	61.8	60.9	59.2	41.7
	dpwr kPa	44	42	40	20	44	42	40	20	61	59	56	28
<b>7</b>	CC kW	1037	988	922	922	1126	1072	1001	1001	1245	1185	1106	1106
	PI kW	299	326	356	362	325	354	387	394	358	390	426	434
	qw l/s	49.5	47.1	44.0	44.0	53.7	51.2	47.8	47.8	59.4	56.5	52.8	52.8
	dpw kPa	57	52	46	46	66	61	54	54	57	53	46	46
	<b>HRC kW</b>	<b>1131</b>	<b>1113</b>	<b>1083</b>	<b>762</b>	<b>1228</b>	<b>1208</b>	<b>1176</b>	<b>827</b>	<b>1356</b>	<b>1333</b>	<b>1298</b>	<b>913</b>
	qwr l/s	54.5	53.7	52.4	36.9	59.2	58.4	56.8	40.0	65.3	64.4	62.7	44.3
	dpwr kPa	49	47	45	22	49	47	45	22	68	66	63	31
<b>9</b>	CC kW	1107	1057	990	990	1200	1146	1074	1074	1328	1268	1188	1188
	PI kW	305	331	362	368	331	360	393	401	365	396	433	441
	qw l/s	52.9	50.5	47.3	47.3	57.3	54.7	51.3	51.3	63.4	60.6	56.7	56.7
	dpw kPa	64	59	53	53	75	69	61	61	65	59	53	53
	<b>HRC kW</b>	<b>1195</b>	<b>1176</b>	<b>1146</b>	<b>806</b>	<b>1295</b>	<b>1276</b>	<b>1244</b>	<b>875</b>	<b>1432</b>	<b>1409</b>	<b>1373</b>	<b>966</b>
	qwr l/s	57.6	56.7	55.4	39.0	62.4	61.6	60.2	42.4	69.0	68.1	66.4	46.8
	dpwr kPa	54	53	50	25	54	53	50	25	76	74	70	35
<b>11</b>	CC kW	1179	1128	1061	1061	1278	1223	1150	1150	1415	1353	1273	1273
	PI kW	310	337	368	375	337	366	400	408	371	403	440	449
	qw l/s	56.4	53.9	50.7	50.7	61.1	58.4	55.0	55.0	67.6	64.7	60.8	60.8
	dpw kPa	72	67	60	60	84	77	69	69	73	67	60	60
	<b>HRC kW</b>	<b>1261</b>	<b>1241</b>	<b>1211</b>	<b>851</b>	<b>1366</b>	<b>1345</b>	<b>1313</b>	<b>924</b>	<b>1511</b>	<b>1488</b>	<b>1451</b>	<b>1020</b>
	qwr l/s	60.8	59.9	58.6	41.2	65.8	65.0	63.6	44.8	72.8	71.8	70.1	49.5
	dpwr kPa	60	59	56	28	60	59	56	28	84	82	78	39
<b>13</b>	CC kW	1255	1202	1134	1134	1358	1302	1228	1228	1506	1443	1360	1360
	PI kW	316	343	374	381	343	372	406	414	378	410	447	456
	qw l/s	60.0	57.5	54.2	54.2	65.0	62.3	58.8	58.8	72.0	69.0	65.1	65.1
	dpw kPa	81	75	67	67	93	87	78	78	81	75	68	68
	<b>HRC kW</b>	<b>1329</b>	<b>1309</b>	<b>1278</b>	<b>898</b>	<b>1439</b>	<b>1418</b>	<b>1385</b>	<b>974</b>	<b>1593</b>	<b>1569</b>	<b>1531</b>	<b>1077</b>
	qwr l/s	64.0	63.2	61.7	43.5	69.4	68.4	67.0	47.2	76.8	75.7	74.0	52.1
	dpwr kPa	67	65	62	31	67	65	62	31	94	91	87	43
<b>15</b>	CC kW	1331	1279	1210	1210	1440	1384	1310	1310	1598	1535	1452	1452
	PI kW	321	349	380	387	349	378	412	421	384	417	454	464
	qw l/s	63.7	61.2	57.9	57.9	68.9	66.3	62.7	62.7	76.5	73.5	69.5	69.5
	dpw kPa	90	84	76	76	104	97	88	88	90	84	76	76
	<b>HRC kW</b>	<b>1399</b>	<b>1378</b>	<b>1347</b>	<b>947</b>	<b>1513</b>	<b>1492</b>	<b>1459</b>	<b>1026</b>	<b>1677</b>	<b>1653</b>	<b>1615</b>	<b>1136</b>
	qwr l/s	67.4	66.6	65.1	45.9	73.0	72.0	70.6	49.8	80.8	79.8	78.1	55.1
	dpwr kPa	74	72	69	34	74	72	69	34	103	101	97	48

## EWAD C-PR

		C14					
Twout	Twr	40	45	50	55		
<b>5</b>	CC kW	1264	1201	1116	1116		
	PI kW	384	417	457	465		
	qw l/s	60.2	57.2	53.2	53.2		
	dpw kPa	59	54	47	47		
	<b>HRC kW</b>	<b>1394</b>	<b>1370</b>	<b>1333</b>	<b>938</b>		
	qwr l/s	67.2	66.2	64.4	45.4		
<b>7</b>	CC kW	1351	1287	1201	1201		
	PI kW	391	425	465	473		
	qw l/s	64.5	61.4	57.3	57.3		
	dpw kPa	67	61	54	54		
	<b>HRC kW</b>	<b>1474</b>	<b>1449</b>	<b>1411</b>	<b>992</b>		
	qwr l/s	71.0	70.0	68.2	48.0		
<b>9</b>	CC kW	1441	1376	1289	1289		
	PI kW	398	432	472	481		
	qw l/s	68.8	65.7	61.6	61.6		
	dpw kPa	75	69	61	61		
	<b>HRC kW</b>	<b>1555</b>	<b>1532</b>	<b>1493</b>	<b>1050</b>		
	qwr l/s	75.0	74.0	72.2	50.8		
<b>11</b>	CC kW	1534	1468	1381	1381		
	PI kW	405	439	480	489		
	qw l/s	73.3	70.2	66.0	66.0		
	dpw kPa	84	78	69	69		
	<b>HRC kW</b>	<b>1640</b>	<b>1615</b>	<b>1577</b>	<b>1109</b>		
	qwr l/s	79.0	78.0	76.2	53.8		
<b>13</b>	CC kW	1631	1563	1475	1475		
	PI kW	412	447	487	497		
	qw l/s	78.0	74.8	70.6	70.6		
	dpw kPa	94	87	78	78		
	<b>HRC kW</b>	<b>1728</b>	<b>1702</b>	<b>1663</b>	<b>1169</b>		
	qwr l/s	83.2	82.2	80.4	56.6		
<b>15</b>	CC kW	1729	1662	1573	1573		
	PI kW	418	454	495	506		
	qw l/s	82.8	79.6	75.3	75.3		
	dpw kPa	104	97	88	88		
	<b>HRC kW</b>	<b>1817</b>	<b>1792</b>	<b>1752</b>	<b>1232</b>		
	qwr l/s	87.6	86.6	84.8	59.6		
	dpwr kPa	<b>103</b>	<b>101</b>	96	48		

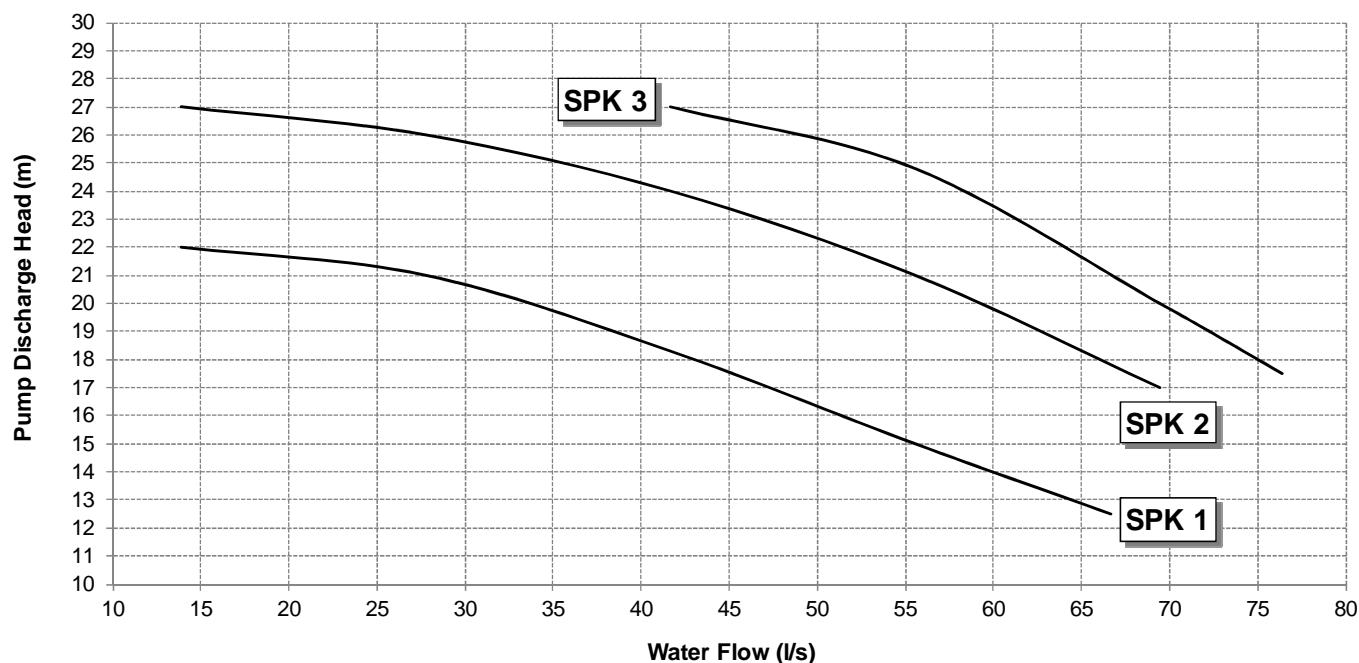
Fluid: Water

Ta: Condenser inlet air temperature 35.0°C; Twout: Evaporator leaving water temperature ( $\Delta t$  5.0°C);Twr: Heat Recovery leaving water temperature ( $\Delta t$  5.0°C)

CC: Cooling capacity; PI: Power input; qw: Fluid flow rate; dpw: Fluid pressure drop

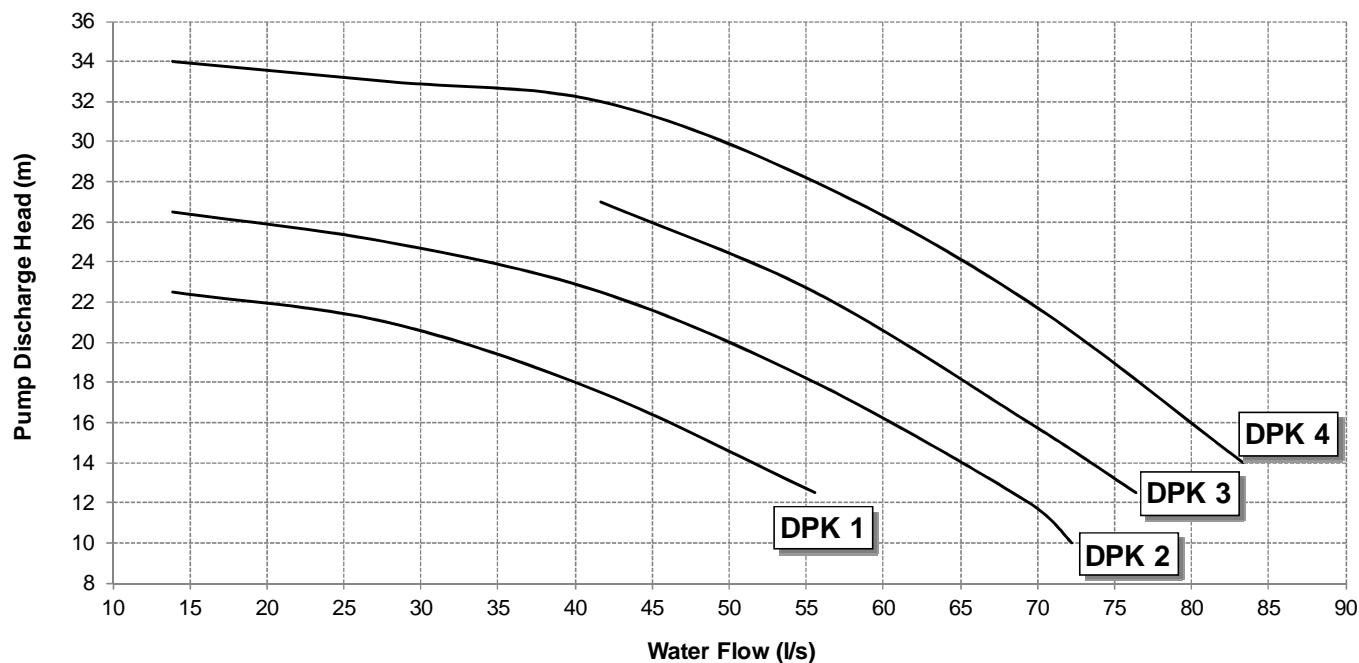
HRC: Heat recovery capacity; qwr: Heat recovery fluid flow rate; dpwr: Heat recovery fluid pressure drop

\* For working condition where dpw value is "Italic-Red Color" please contact factory

**Discharge Head****Single Pump (2 poles) - Discharge Head**

## Notes

- the above curves are referred to the discharge head of the pump only
- when selecting the pump you have to consider the installation and evaporator pressure drops
- when using mixture of water and glycol please contact the factory as above specification can change

**Twin Pump (2 poles) - Discharge Head**

## Notes

- the above curves are referred to the discharge head of the pump only
- when selecting the pump you have to consider the installation and evaporator pressure drops
- when using mixture of water and glycol please contact the factory as above specification can change

## Water pump kit combination matrix

		Single Pump			Double Pump			
		SPK 1	SPK 2	SPK 3	DPK 1	DPK 2	DPK 3	DPK 4
EWAD~C-S EWAD~C-SSL	650	EWAD~C-SR	620		X	X		
	740		720		X	X		
	830		790	X	X	X		
	910		880	X	X	X		
	970		920	X	X	X		
	C11		C10	X	X	X		
	C12		C11	X	X	X	X	X
	C13		C12		X	X	X	X
	H14		H14		X			X
EWAD~C-XS EWAD~C-XL	760	EWAD~C-XR	740		X	X		
	830		810	X	X	X	X	
	890		870	X	X	X	X	
	990		970	X	X	X	X	X
	C10		C10	X	X	X	X	X
	C11		C11	X	X	X	X	X
	C12		C12	X	X	X	X	X
	C13		C13	X	X	X	X	X
	H14		H14		X			X
	H15		H15		X			X
EWAD~C-PS EWAD~C-PL	820	EWAD~C-PR	810		X	X		
	890		880	X	X	X	X	
	980		960	X	X	X	X	
	C11		C10	X	X	X	X	X
	C12		C11	X	X	X	X	X
	C13		C13	X	X	X	X	X
	C14		C14		X	X	X	X
	C15		C15		X			X
	C16		C16					

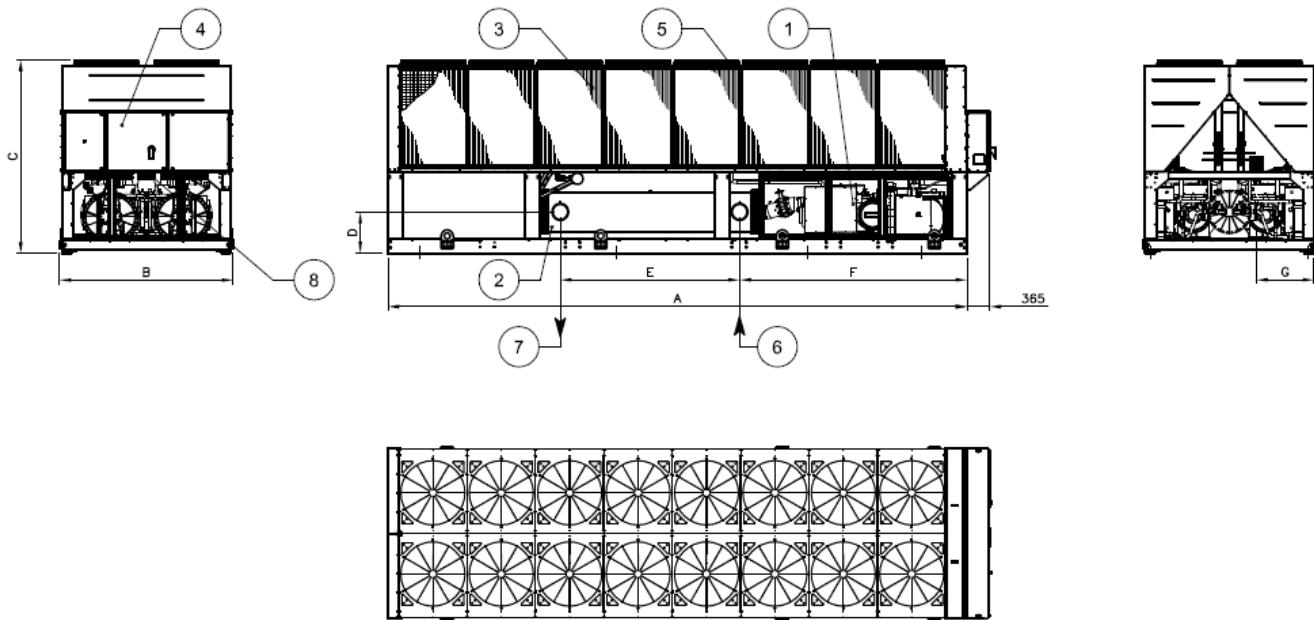
## Water pump kit technical information

	Pump Motor Power (kW)	Pump Motor Current (A)	Power supply (V-ph-Hz)	PN	Motor Protection	Insulation (Class)	Working Temp. (°C)
Single Pump	SPK 1	11.0	20.0	400V-3ph-50hz	16	IP55	class F
	SPK 2	15.0	26.5	400V-3ph-50hz	16	IP55	class F
	SPK 3	18.5	32.5	400V-3ph-50hz	16	IP55	class F
Double Pump	DPK 1	11.0	20.0	400V-3ph-50hz	16	IP55	class F
	DPK 2	15.0	26.5	400V-3ph-50hz	16	IP55	class F
	DPK 3	18.5	32.5	400V-3ph-50hz	16	IP55	class F
	DPK 4	22.0	39.0	400V-3ph-50hz	16	IP55	class F

### Note

- when using mixture of water and glycol please contact the factory as above specification can change

## EWAD-C- (2 circuits)



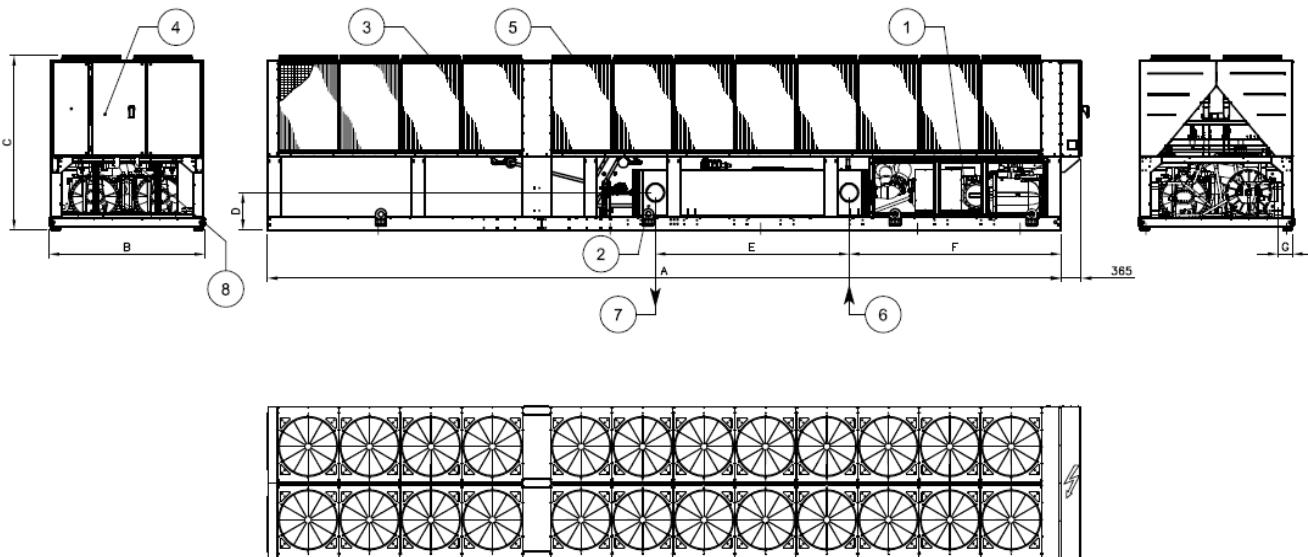
*Drawing is for illustration only. Please refer to the table below for unit dimensions.*

EWAD~C-		Dimensions (mm)							Fans
Size	Size	A	B	C	D	E	F	G	
EWAD650÷830C-SS/SL	EWAD620÷720C-SR	2285	6185	2540	450	2412	435	810	Nr 10
EWAD910÷970C-SS/SL	EWAD880÷920C-SR	2285	6185	2540	450	2412	435	810	Nr 12
EWADC11C-SS/SL	EWADC10C-SR	2285	7085	2540	1350	2412	435	810	Nr 14
EWADC12C-SS/SL	EWADC11C-SR	2285	7985	2540	2250	2412	435	810	Nr 16
EWAD760C-XS/XL	EWAD740C-XR	2285	6185	2540	470	2412	435	810	Nr 12
EWAD830÷890C-XS/XL	EWAD810÷870C-XR	2285	7085	2540	1370	2412	435	810	Nr 14
EWAD990÷C10C-XS/XL	EWAD970÷C10C-XR	2285	7985	2540	2270	2360	540	760	Nr 16
EWADC11÷C13C-XS/XL	EWADC11÷C13C-XR	2285	9785	2540	4070	2360	540	760	Nr 20
EWAD820÷890C-PS/PL	EWAD810÷880C-PR	2285	8885	2540	2020	3510	540	760	Nr 18
EWAD980C-PS/PL	EWAD960C-PR	2285	8885	2540	2020	3440	540	685	Nr 18
EWADC11÷C12C-PS/PL	EWADC10÷C11C-PR	2285	9785	2540	2920	3440	540	685	Nr 20
EWADC13C-PS/PL	EWADC13C-PR	2285	11085	2540	4205	3440	540	685	Nr 22
EWADC14C-PS/PL	EWADC14C-PR	2285	11985	2540	5105	3440	540	685	Nr 24

**LEGEND**

1. Compressor
2. Evaporator
3. Condenser coil
4. Electrical panel
5. Fan
6. Evaporator Water inlet
7. Evaporator Water outlet
8. Slot for power and control connection

## EWAD-C- (3 circuits)



Drawing is for illustration only. Please refer to the table below for unit dimensions.

EWAD~C-		Dimensions (mm)							Fans
Size	Size	A	B	C	D	E	F	G	
EWADC14÷C15C-SS/SL	EWADC13÷C14C-SR	2285	10185	2540	4440	2360	540	285	Nr 20
EWADC16÷C17C-SS/SL	EWADC15÷C16C-SR	2285	11085	2540	5340	2360	540	285	Nr 22
EWADC14C-XS/XL	EWADC14C-XR	2285	11985	2540	5680	2910	540	285	Nr 24
EWADC15÷C16C-XS/XL	EWADC15÷C16C-XR	2285	11985	2540	5680	2840	540	210	Nr 24
EWADC17C-XS/XL	EWADC17C-XR	2285	12885	2540	6580	2840	540	210	Nr 26
EWADC18C-XS/XL	EWADC18C-XR	2285	13785	2540	7480	2840	540	210	Nr 28
EWADC19C-XS/XL	EWADC19C-XR	2285	14685	2540	8380	2840	540	210	Nr 30

## LEGEND

1. Compressor
2. Evaporator
3. Condenser coil
4. Electrical panel
5. Fan
6. Evaporator Water inlet
7. Evaporator Water outlet
8. Slot for power and control connection

**Warning** Installation and maintenance of the unit must be performed only by qualified personnel who have knowledge with local codes and regulations, and experience with this type of equipment. Must be avoided the unit installation in places that could be considered dangerous for all the maintenance operations.

**Handling** Care should be taken to avoid rough handling or shock due to dropping the unit. Do not push or pull the unit from anything other than the base frame. Never allow the unit to fall during unloading or moving as this may result in serious damage. To lift the unit, rings are provided in the base frame of the unit. Spreader bar and cables should be arranged to prevent damage to the condenser coil or unit cabinet.

**Location** The units are produced for outside installation on roofs, floors or below ground level on condition that the area is free from obstacles for the passage of the condenser air. The unit should be positioned on solid foundations and perfectly level; in the case of installation on roofs or floors, it may be advisable to arrange the use of suitable weight distribution beams. When the units are installed on the ground, a concrete base at least 250 mm wider and longer than the unit's footprint should be laid. Furthermore, this base should withstand the unit weight mentioned in the technical data table.

**Space requirements** The units are air-cooled, then it is important to respect the minimum distances which guarantee the best ventilation of the condenser coils. Limitations of space reducing the air flow could cause significant reductions in cooling capacity and an increase in electricity consumption.

To determinate unit placement, careful consideration must be given to assure a sufficient air flow across the condenser heat transfer surface. Two conditions must be avoided to achieve the best performance: warm air recirculation and coil starvation.

Both these conditions cause an increase of condensing pressures that results in reductions in unit efficiency and capacity.

Moreover the unique microprocessor has the ability to calculate the operating environment of the air cooled chiller and the capacity to optimize its performance staying on-line during abnormal conditions.

Each side of the unit must be accessible after installation for periodic service. Fig.1 shows you minimum recommended clearance requirements.

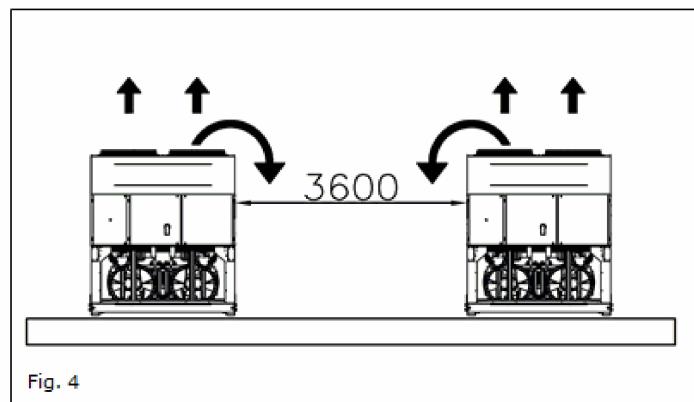
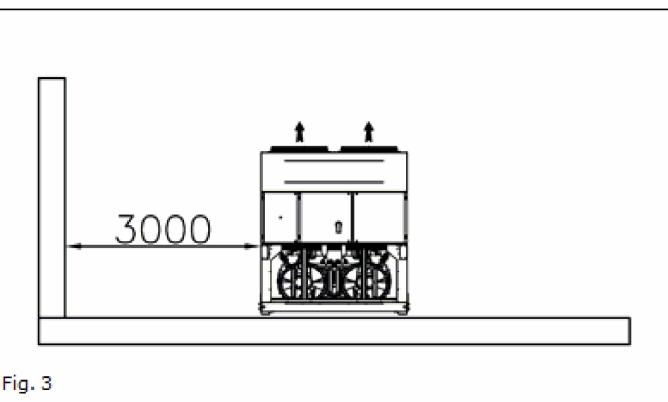
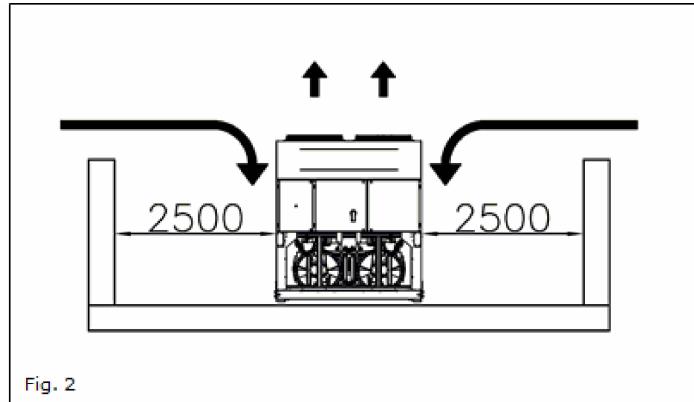
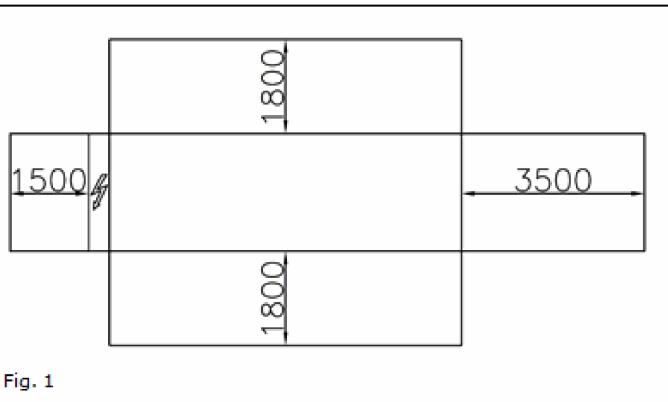
Vertical condenser air discharge must be unobstructed because the unit would have its capacity and efficiency significantly reduced.

If the units are positioned in places surrounded by walls or obstacles of the same height as the units, the units should be at least 2500 mm from obstacles (Fig.2). In the event the obstacles are higher than the units, the units should be at least 3000 mm from the obstacle (Fig.3). Units installed closer than the minimum recommended distance to a wall or other vertical riser may experience a combination of coil starvation and warm air recirculation, thus causing reduction in unit capacity and efficiency reductions. The microprocessor control is proactive in response "of design condition". In the case of single or compounded influences restricting airflow to the unit, the microprocessor will act to keep the compressor(s) running (at reduced capacity) rather than allowing a shut-off on high discharge pressure.

When two or more units are positioned side by side it is recommended that the condenser coils are at least 3600 mm distance from one another (Fig.4); strong wind could be the cause of air warm recirculation.

For other installation solutions, consult our technicians.

The above recommended information are representative of general installation. A specific evaluation should be done by contractor depending on the case.



**Acoustic protection** When noise level must meet special requirements, it is necessary to pay the maximum attention to ensure the perfect insulation of the unit from the support base by applying appropriate vibration-dampening devices on the unit, on the water pipes and on the electrical connections.

**Storage** The environment conditions have to be in the following limits:

Minimum ambient temperature:	-20°C
Maximum ambient temperature:	+57°C
Maximum R.H.:	95% not condensing

**General** The chiller will be designed and manufactured in accordance with the following European directives:

- Construction of pressure vessel 97/23/EC (PED)
- Machinery Directive 2006/42/EC
- Low Voltage 2006/95/EC
- Electromagnetic Compatibility 2004/108/EC
- Electrical & Safety codes EN 60204-1 / EN 60335-2-40
- Manufacturing Quality Standards UNI – EN ISO 9001:2004

To avoid any losses, the unit will be tested at full load in the factory (at the nominal working conditions and water temperatures). The chiller will be delivered to the job site completely assembled and charged with refrigerant and oil. The installation of the chiller 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** Only HFC 134a can be used.

**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 : ..... l/s
- Nominal outside working ambient temperature in cooling mode : ..... °C

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 as standard not less than: two or three independent refrigerant circuits (depending on the size), semi-hermetic asymmetric type rotary single screw compressors, electronic expansion device (EEXV), refrigerant direct expansion 'shell&tube' heat exchanger, air-cooled condenser section, R-134a refrigerant, lubrication system, motor starting components, discharge line shut-off valve, 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 pressure level at 1 meter distance in free field, semispheric conditions, shall not exceed .....dB(A). The sound pressure levels must be rated in accordance to ISO 3744 (other types of rating can not 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 (Asymmetric)** The unit shall be equipped with:

- Semi-hermetic, single-screw asymmetric type with one main helical rotor meshing with two diametrical opposed gaterotors. The gaterotors' contact elements shall be constructed of composite material designed for extended life. Electrical motor shall be 2-pole, semi-hermetic, squirrel-cage induction type and cooled by suction gas.
- The oil injection shall be used in order to get high EER (Energy Efficiency Ratio) also at high condensing pressure and low sound pressure levels in each load condition.
- The compressor shall be provided with a built in, high efficiency, mesh type oil separator and oil filter.
- Refrigerant system differential pressure shall provide oil injection on all moving compressor parts to correctly lubricate them. Electrical oil pump lubricating system is not allowed.
- Compressor cooling must be done by refrigerant liquid injection. An external dedicated heat exchanger and additional piping to carry the oil from compressor to heat exchanger and viceversa is not allowed.
- The compressor shall be direct electrical driven, without gear transmission between the screw and the electrical motor.
- The compressor casing shall be provided with ports to realize economized refrigerant cycles.
- The compressor must be protected by a temperature sensor for high discharge temperature and an electrical motor thermistor for high winding temperature.
- The compressor shall be equipped with an electric oil heater.
- The compressor shall be fully field serviceable. Compressor that must be removed and returned to the factory for service shall be unacceptable.

**Evaporator** The units shall be equipped with a direct expansion shell&tube evaporator with copper tubes rolled into steel tubesheets. The evaporator shall be single-pass on both the refrigerant and water sides for pure counter-flow heat exchange and low refrigerant pressure drops.

- The external shell shall be linked with an electrical heater to prevent freezing down to -28°C ambient temperature, controlled by a thermostat and shall be insulated with flexible, closed cell polyurethane insulation material (20-mm thick).
- The evaporator will have 2 or 3 circuits, one for each compressor and shall be single refrigerant pass.
- The water connections shall be VICTAULIC type connections as standard to ensure quick mechanical disconnection between the unit and the hydronic network.
- The evaporator will be manufactured in accordance to PED approval.

**Condenser coil** The unit shall be equipped with condenser coils constructed with internally finned seamless copper tubes and arranged in a staggered row pattern and mechanically expanded into lanced and rippled aluminium fins with full fin collars for higher efficiencies. The space between the fins is given by a collar that will increase the surface area in connection with the tubes, protecting them from ambient corrosion.

- The condenser coils will have an integral subcooler circuit that provides sufficient subcooling to effectively eliminate the possibility of liquid flashing and increase the unit's efficiency with 5% to 7% without increasing in energy consumption.
- The condenser coils shall be leak-tested and submitted to a pressure test with dry air.

**Condenser fans** The condenser fans used in conjunction with the condenser coils, shall be propeller type with glass reinforced resin blades for higher efficiencies and lower sound. Each fan shall be protected by a fan guard.

- The air discharge shall be vertical and each fan must be coupled to the electrical motor, supplied as standard to IP54 and capable to work to ambient temperatures of - 20°C to + 65°C.
- The condenser fans shall have as a standard a thermally protection by internal thermal motor protection and protected by circuit breaker installed inside the electrical panel as a standard.

**Heat Recovery Exchanger** The unit shall be equipped with a plate to plate type heat exchanger for each circuit made of stainless steel brazed plates and manufactured in accordance to PED approval.

**Refrigerant circuit** The unit shall have two or three refrigerant circuits (depending on the size).

- The circuit shall include as standard: electronic expansion device piloted by unit's microprocessor control, compressor discharge shut-off valve, liquid line shut-off valve, sight glass with moisture indicator, replaceable filter drier, charging valves, high pressure switch, high and low pressure transducers, oil pressure transducer and insulated suction line.

**Condensation control** The units will be provided with an automatic control for condensing pressure which ensures the working at low external temperatures down to - ..... °C, to maintain condensing pressure.

- The compressor 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.

**Low sound unit configurations (on request)** The unit compressor shall be connected with unit's metal base frame by rubber antivibration supports to prevent the transmission of vibrations to all metal unit structure, in order to control the unit sound.

- The chiller shall be provided with an acoustical compressor enclosure. This enclosure shall be realized with a light, corrosion resisting aluminium structure and metal panels. The compressor sound-proof enclosure shall be internally fitted with flexible, multi-layer, high density materials.

**Hydronic kit options (on request)** The hydronic module shall be integrated in the chiller chassis without increasing its dimensions and includes the following elements: centrifugal pump with motor protected by a circuit breaker installed in control panel, water filling system with pressure gauge, safety valve, drain valve.

- The hydronic module shall be assembled and wired to the control panel.
- The water piping shall be protected against corrosion and freezing and insulated to prevent condensation.
- A choice of two pump types shall be available:
  - in-line single pump
  - in-line twin pumps.

**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 IP54 and (when opening the doors) internally protected with plexiglas panel against possible accidental contact with electrical components (IP20).
- The main panel shall be fitted with a main switch interlocked door.
- The power section will include compressors and fans protection devices, compressors and fans starters and control circuit power supply.

- Controller** The controller will be installed as standard and it will be used to modify unit set-points and check control parameters.
- A built-in display will show chiller operating status plus temperatures and pressures of water, refrigerant and air, programmable values, set-points.
  - 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 maximise chiller energy efficiency and reliability.
  - The controller will be able to protect critical components based on external signs from its system (such as motor temperatures, refrigerant gas and oil pressures, correct phase sequence, pressure switches and evaporator). The input coming from the high pressure switch cuts all digital output from the controller in less than 50ms, this will be an additional security for the equipment.
  - Fast program cycle (200ms) for a precise monitoring of the system.
  - Floating point calculations supported for increased accuracy in P/T conversions.

**Controller main features** Controller shall be guaranteed following minimum functions:

- Management of the compressor stepless capacity and fans modulation.
- 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)
- Display of evaporator entering/leaving water temperature.
- Display of Outdoor Ambient Temperature.
- Display of condensing-evaporating temperature and pressure, suction and discharge superheat for each circuit.
- Leaving water evaporator temperature regulation (temperature tolerance = 0,1°C).
- Compressor and evaporator pumps hours counter.
- Display of Status Safety Devices.
- Number of starts and compressor working hours.
- Optimized management of compressor load.
- Fan management according to condensing pressure.
- Re-start in case of power failure (automatic / manual).
- Soft Load (optimized management of the compressor load during the start-up).
- Start at high evaporator water temperature.
- Return Reset (Set Point Reset based on return water temperature).
- OAT (Outside Ambient temperature) Reset.
- Set point Reset (optional).
- Application and system upgrade with commercial SD cards.
- Ethernet port for remote or local servicing using standard web browsers.
- Two different sets of default parameters could be stored for easy restore.

**High Level Communications Interface (on request)** The chiller shall be able to communicate to BMS (Building Management System) based on the most common protocols as:

- ModbusRTU
- LonWorks, now also based on the international 8040 Standard Chiller Profile and LonMark Technology
- BacNet BTP certified over IP and MS/TP (class 4) (Native)
- Ethernet TCP/IP.









Daikin's unique position as a manufacturer of air conditioning equipment, compressors and refrigerants has led to its close involvement in environmental issues. 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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