# Databook

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EWAD~C-

# Air cooled screw chillers

ECOLOGICAL HFC 134a REFRIGERANT

## EWAD~C-

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


CE

DAIKIN

## 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

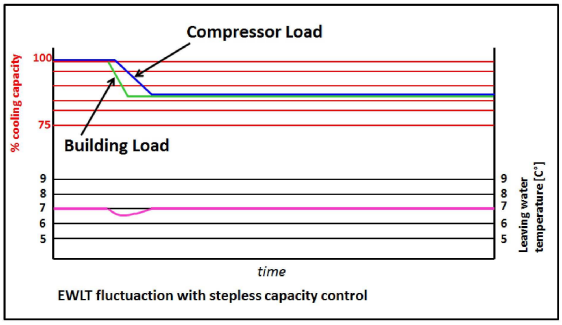
Very low sound levels both at full load and part load conditions are achieved by the latest compressor design and by a unique new fan that moves large volume of air at exceptionally low sound levels and by the virtually vibration-free operation.

## 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.

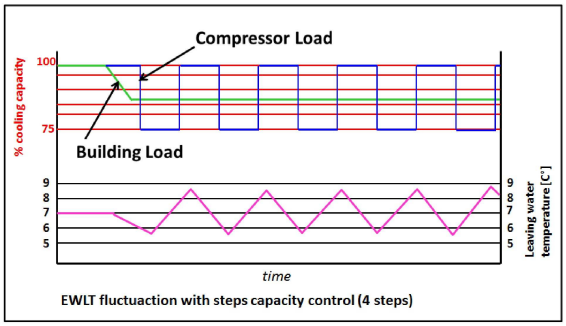
## Infinite capacity control

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.



EWLT fluctuaction with stepless capacity 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.



EWLT fluctuaction with steps capacity control (4 steps)

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 Efficieny

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.

ESEER = A x EER100% + B x EER75% + C x EER50% + D x 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.

**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) (±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-Δ) 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 ΔP 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 certifief 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 Δt. - (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**

**Total heat recovery -** Produced with plate to plate or Shell&Tube heat exchangers to produce hot water.

**Partial heat recovery -** Produced with plate to plate heat exchangers to produce hot water.

**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 reliefe valve.

**Transport kit**

| E | W | A | D | 6 | 5 | 0 | C | - | X | S | 0 | 0 | 1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |

**Machine type**

| | |
|---|---|
| EWA | = Air cooled chiller, cooling only |
| EWY | = Air chilled chiller, heat pump |
| ERA | = Air cooled condensing unit |
| . . . . | |

**Refrigerant**

| | |
|---|---|
| D | = R-134a |
| P | = R-407C |
| Q | = R-410A |

**Capacity class in kW (Cooling)**

Always 3-digit code

**Model series**

A, B, …..

**Inverter**

| | |
|---|---|
| - | = Non inverter |
| Z | = Inverter |
| F | = Non inverter free cooling (standard) |
| G | = Non inverter free cooling (glycol free) |

**Efficiency level**

| | |
|---|---|
| S | = Standard efficiency |
| X | = High efficiency |
| P | = Premium efficiency |

**Sound level**

| | |
|---|---|
| S | = Standard sound |
| L | = Low sound |
| R | = Reduced sound |

**Warranty**

| | |
|---|---|
| 0 | = 1 year of warranty |
| B | = 2 years |

**Sequential number**

| | |
|---|---|
| 01, 02, …. | = sequential for each new order |

## EWAD C-SS

| MODEL | | 650 | 740 | 830 | 910 | 970 | C11 | C12 | C13 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity - Cooling (1) | kW | 647 | 744 | 832 | 912 | 967 | 1064 | 1152 | 1319 |
| Capacity control - Type | --- | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | 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 | 221 | 262 | 299 | 318 | 350 | 377 | 403 | 441 |
| EER (1) | --- | 2.93 | 2.84 | 2.78 | 2.87 | 2.76 | 2.82 | 2.86 | 2.99 |
| ESEER | --- | 3.95 | 3.87 | 3.89 | 3.84 | 3.80 | 3.88 | 3.84 | 4.06 |
| IPLV | --- | 4.30 | 4.17 | 4.16 | 4.23 | 4.14 | 4.17 | 4.19 | 4.42 |
| **CASING** | | | | | | | | | |
| Colour | --- | IW | IW | IW | IW | IW | IW | IW | IW |
| Material (2) | --- | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS | 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 | 8885 |
| **WEIGHT** | | | | | | | | | |
| Unit Weight | kg | 5630 | 5740 | 5760 | 6280 | 6560 | 7010 | 7280 | 7900 |
| Operating Weight | kg | 5910 | 5990 | 6010 | 6530 | 6810 | 7250 | 7520 | 8280 |
| **WATER HEAT EXCHANGER** | | | | | | | | | |
| Type (3) | --- | S&T | S&T | S&T | S&T | S&T | S&T | S&T | S&T |
| Water Volume | l | 266 | 266 | 251 | 251 | 251 | 243 | 243 | 386 |
| Nominal water flow rate - Cooling | l/s | 30.9 | 35.5 | 39.7 | 43.5 | 46.1 | 50.8 | 55.0 | 62.9 |
| Nominal Water pressure drop - Cooling | kPa | 47 | 54 | 53 | 62 | 69 | 64 | 74 | 54 |
| Insulation material (4) | | CC | CC | CC | CC | CC | CC | CC | CC |
| **AIR HEAT EXCHANGER** | | | | | | | | | |
| Type (5) | --- | HFP | HFP | HFP | HFP | HFP | HFP | HFP | HFP |
| **FAN** | | | | | | | | | |
| Type (6) | --- | DPT | DPT | DPT | DPT | DPT | DPT | DPT | DPT |
| Drive (7) | --- | DOL | DOL | DOL | DOL | DOL | DOL | DOL | DOL |
| Diameter | mm | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| Nominal air flow | l/s | 53442 | 53442 | 53442 | 64131 | 64131 | 74819 | 85508 | 96196 |
| Quantity | No. | 10 | 10 | 10 | 12 | 12 | 14 | 16 | 18 |
| 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 | 31.5 |
| **COMPRESSOR** | | | | | | | | | |
| Type | --- | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | 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) | 100 | 100 | 100 | 101 | 101 | 102 | 102 | 102 |
| Sound Pressure - Cooling (8) | dB(A) | 79 | 80 | 80 | 80 | 81 | 81 | 81 | 81 |
| **REFRIGERANT CIRCUIT** | | | | | | | | | |
| Refrigerant type | --- | R134a | R134a | R134a | R134a | R134a | R134a | R134a | R134a |
| Refrigerant charge | kg | 128 | 128 | 128 | 146 | 144 | 162 | 178 | 196 |
| 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 | 168.3 mm | 168.3 mm | 168.3 mm | 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

| MODEL | | H14 | C15 | C16 | C17 | C18 | C19 | C20 |
|---|---|---|---|---|---|---|---|---|
| Capacity - Cooling (1) | kW | 1418 | 1538 | 1622 | 1714 | 1802 | 1875 | 1922 |
| Capacity control - Type | --- | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless |
| Capacity control - Minimum capacity | % | 12.5 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Unit power input - Cooling (1) | kW | 474 | 551 | 579 | 619 | 665 | 682 | 716 |
| EER (1) | --- | 2.99 | 2.79 | 2.80 | 2.77 | 2.71 | 2.75 | 2.69 |
| ESEER | --- | 4.05 | 3.90 | 3.87 | 3.78 | 3.78 | 3.79 | 3.76 |
| IPLV | --- | 4.42 | 4.22 | 4.18 | 4.13 | 4.18 | 4.18 | 4.15 |
| **CASING** | | | | | | | | |
| Colour | --- | IW | IW | IW | IW | IW | IW | IW |
| Material (2) | --- | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS |
| **DIMENSIONS** | | | | | | | | |
| Height | mm | 2540 | 2540 | 2540 | 2540 | 2540 | 2540 | 2540 |
| Width | mm | 2285 | 2285 | 2285 | 2285 | 2285 | 2285 | 2285 |
| Length | mm | 8885 | 10185 | 11085 | 11085 | 11085 | 11985 | 11985 |
| **WEIGHT** | | | | | | | | |
| Unit Weight | kg | 7900 | 10320 | 10710 | 10770 | 11240 | 11600 | 11600 |
| Operating Weight | kg | 8280 | 10730 | 11110 | 11260 | 12110 | 12480 | 12480 |
| **WATER HEAT EXCHANGER** | | | | | | | | |
| Type (3) | --- | S&T | S&T | S&T | S&T | S&T | S&T | S&T |
| Water Volume | l | 386 | 408 | 408 | 474 | 850 | 850 | 850 |
| Nominal water flow rate - Cooling | l/s | 67.6 | 73.4 | 77.4 | 81.8 | 86.0 | 89.5 | 91.7 |
| Nominal Water pressure drop - Cooling | kPa | 58 | 62 | 68 | 75 | 36 | 39 | 40 |
| Insulation material (4) | | CC | CC | CC | CC | CC | CC | CC |
| **AIR HEAT EXCHANGER** | | | | | | | | |
| Type (5) | --- | HFP | HFP | HFP | HFP | HFP | HFP | HFP |
| **FAN** | | | | | | | | |
| Type (6) | --- | DPT | DPT | DPT | DPT | DPT | DPT | DPT |
| Drive (7) | --- | DOL | DOL | DOL | DOL | DOL | DOL | DOL |
| Diameter | mm | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| Nominal air flow | l/s | 96196 | 106885 | 117573 | 117573 | 117573 | 128262 | 128262 |
| Quantity | No. | 18 | 20 | 22 | 22 | 22 | 24 | 24 |
| Speed | rpm | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| Motor input | kW | 31.5 | 35.0 | 38.5 | 38.5 | 38.5 | 42.0 | 42.0 |
| **COMPRESSOR** | | | | | | | | |
| Type | --- | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw |
| Oil charge | l | 50 | 75 | 75 | 75 | 75 | 75 | 75 |
| Quantity | No. | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| **SOUND LEVEL** | | | | | | | | |
| Sound Power - Cooling | dB(A) | 102 | 103 | 103 | 103 | 104 | 104 | 104 |
| Sound Pressure - Cooling (8) | dB(A) | 81 | 81 | 81 | 81 | 82 | 82 | 82 |
| **REFRIGERANT CIRCUIT** | | | | | | | | |
| Refrigerant type | --- | R134a | R134a | R134a | R134a | R134a | R134a | R134a |
| Refrigerant charge | kg | 196 | 260 | 261 | 261 | 275 | 305 | 305 |
| N. of circuits | No. | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| **PIPING CONNECTIONS** | | | | | | | | |
| Evaporator water inlet/outlet | | 219.1 mm | 219.1 mm | 219.1 mm | 219.1 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-SL

| MODEL | | 650 | 740 | 830 | 910 | 970 | C11 | C12 | C13 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity - Cooling (1) | kW | 647 | 744 | 832 | 912 | 967 | 1064 | 1152 | 1319 |
| Capacity control - Type | --- | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | 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 | 221 | 262 | 299 | 318 | 350 | 377 | 403 | 441 |
| EER (1) | --- | 2.93 | 2.84 | 2.78 | 2.87 | 2.76 | 2.82 | 2.86 | 2.99 |
| ESEER | --- | 3.95 | 3.87 | 3.89 | 3.84 | 3.80 | 3.88 | 3.84 | 4.06 |
| IPLV | --- | 4.30 | 4.17 | 4.16 | 4.23 | 4.14 | 4.17 | 4.19 | 4.42 |
| **CASING** | | | | | | | | | |
| Colour | --- | IW | IW | IW | IW | IW | IW | IW | IW |
| Material (2) | --- | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS | 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 | 8885 |
| **WEIGHT** | | | | | | | | | |
| Unit Weight | kg | 5920 | 6030 | 6050 | 6570 | 6850 | 7300 | 7570 | 8190 |
| Operating Weight | kg | 6200 | 6280 | 6300 | 6820 | 7100 | 7540 | 7810 | 8570 |
| **WATER HEAT EXCHANGER** | | | | | | | | | |
| Type (3) | --- | S&T | S&T | S&T | S&T | S&T | S&T | S&T | S&T |
| Water Volume | l | 266 | 266 | 251 | 251 | 251 | 243 | 243 | 386 |
| Nominal water flow rate - Cooling | l/s | 30.9 | 35.5 | 39.7 | 43.5 | 46.1 | 50.8 | 55.0 | 62.9 |
| Nominal Water pressure drop - Cooling | kPa | 47 | 54 | 53 | 62 | 69 | 64 | 74 | 54 |
| Insulation material (4) | | CC | CC | CC | CC | CC | CC | CC | CC |
| **AIR HEAT EXCHANGER** | | | | | | | | | |
| Type (5) | --- | HFP | HFP | HFP | HFP | HFP | HFP | HFP | HFP |
| **FAN** | | | | | | | | | |
| Type (6) | --- | DPT | DPT | DPT | DPT | DPT | DPT | DPT | DPT |
| Drive (7) | --- | DOL | DOL | DOL | DOL | DOL | DOL | DOL | DOL |
| Diameter | mm | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| Nominal air flow | l/s | 53442 | 53442 | 53442 | 64131 | 64131 | 74819 | 85508 | 96196 |
| Quantity | No. | 10 | 10 | 10 | 12 | 12 | 14 | 16 | 18 |
| 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 | 31.5 |
| **COMPRESSOR** | | | | | | | | | |
| Type | --- | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | 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) | 96 | 96 | 96 | 98 | 97 | 98 | 98 | 98 |
| Sound Pressure - Cooling (8) | dB(A) | 76 | 76 | 76 | 77 | 77 | 77 | 77 | 77 |
| **REFRIGERANT CIRCUIT** | | | | | | | | | |
| Refrigerant type | --- | R134a | R134a | R134a | R134a | R134a | R134a | R134a | R134a |
| Refrigerant charge | kg | 128 | 128 | 128 | 146 | 144 | 162 | 178 | 196 |
| 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 | 168.3 mm | 168.3 mm | 168.3 mm | 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

| MODEL | | H14 | C15 | C16 | C17 | C18 | C19 | C20 |
|---|---|---|---|---|---|---|---|---|
| Capacity - Cooling (1) | kW | 1418 | 1538 | 1622 | 1714 | 1802 | 1875 | 1922 |
| Capacity control - Type | --- | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless |
| Capacity control - Minimum capacity | % | 12.5 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Unit power input - Cooling (1) | kW | 474 | 551 | 579 | 619 | 665 | 682 | 716 |
| EER (1) | --- | 2.99 | 2.79 | 2.80 | 2.77 | 2.71 | 2.75 | 2.69 |
| ESEER | --- | 4.05 | 3.90 | 3.87 | 3.78 | 3.78 | 3.79 | 3.76 |
| IPLV | --- | 4.42 | 4.22 | 4.18 | 4.13 | 4.18 | 4.18 | 4.15 |
| **CASING** | | | | | | | | |
| Colour | --- | IW | IW | IW | IW | IW | IW | IW |
| Material (2) | --- | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS |
| **DIMENSIONS** | | | | | | | | |
| Height | mm | 2540 | 2540 | 2540 | 2540 | 2540 | 2540 | 2540 |
| Width | mm | 2285 | 2285 | 2285 | 2285 | 2285 | 2285 | 2285 |
| Length | mm | 8885 | 10185 | 11085 | 11085 | 11085 | 11985 | 11985 |
| **WEIGHT** | | | | | | | | |
| Unit Weight | kg | 8190 | 10770 | 11150 | 11210 | 11680 | 12040 | 12040 |
| Operating Weight | kg | 8570 | 11170 | 11550 | 11700 | 12560 | 12920 | 12920 |
| **WATER HEAT EXCHANGER** | | | | | | | | |
| Type (3) | --- | S&T | S&T | S&T | S&T | S&T | S&T | S&T |
| Water Volume | l | 386 | 408 | 408 | 474 | 850 | 850 | 850 |
| Nominal water flow rate - Cooling | l/s | 67.6 | 73.4 | 77.4 | 81.8 | 86.0 | 89.5 | 91.7 |
| Nominal Water pressure drop - Cooling | kPa | 58 | 62 | 68 | 75 | 36 | 39 | 40 |
| Insulation material (4) | | CC | CC | CC | CC | CC | CC | CC |
| **AIR HEAT EXCHANGER** | | | | | | | | |
| Type (5) | --- | HFP | HFP | HFP | HFP | HFP | HFP | HFP |
| **FAN** | | | | | | | | |
| Type (6) | --- | DPT | DPT | DPT | DPT | DPT | DPT | DPT |
| Drive (7) | --- | DOL | DOL | DOL | DOL | DOL | DOL | DOL |
| Diameter | mm | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| Nominal air flow | l/s | 96196 | 106885 | 117573 | 117573 | 117573 | 128262 | 128262 |
| Quantity | No. | 18 | 20 | 22 | 22 | 22 | 24 | 24 |
| Speed | rpm | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| Motor input | kW | 31.5 | 35.0 | 38.5 | 38.5 | 38.5 | 42.0 | 42.0 |
| **COMPRESSOR** | | | | | | | | |
| Type | --- | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw |
| Oil charge | l | 50 | 75 | 75 | 75 | 75 | 75 | 75 |
| Quantity | No. | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| **SOUND LEVEL** | | | | | | | | |
| Sound Power - Cooling | dB(A) | 98 | 99 | 100 | 100 | 100 | 101 | 101 |
| Sound Pressure - Cooling (8) | dB(A) | 77 | 77 | 77 | 77 | 78 | 78 | 78 |
| **REFRIGERANT CIRCUIT** | | | | | | | | |
| Refrigerant type | --- | R134a | R134a | R134a | R134a | R134a | R134a | R134a |
| Refrigerant charge | kg | 196 | 260 | 261 | 261 | 275 | 305 | 305 |
| N. of circuits | No. | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| **PIPING CONNECTIONS** | | | | | | | | |
| Evaporator water inlet/outlet | | 219.1 mm | 219.1 mm | 219.1 mm | 219.1 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-SR

| MODEL | | 620 | 720 | 790 | 880 | 920 | C10 | C11 | C12 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity - Cooling (1) | kW | 619 | 715 | 789 | 876 | 922 | 1020 | 1112 | 1270 |
| Capacity control - Type | --- | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | 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 | 223 | 273 | 314 | 331 | 369 | 394 | 416 | 456 |
| EER (1) | --- | 2.77 | 2.62 | 2.51 | 2.65 | 2.50 | 2.59 | 2.67 | 2.78 |
| ESEER | --- | 4.08 | 3.96 | 3.98 | 3.99 | 4.00 | 3.96 | 3.96 | 4.10 |
| IPLV | --- | 4.37 | 4.23 | 4.19 | 4.29 | 4.21 | 4.20 | 4.29 | 4.47 |
| **CASING** | | | | | | | | | |
| Colour | --- | IW | IW | IW | IW | IW | IW | IW | IW |
| Material (2) | --- | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS | 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 | 8885 |
| **WEIGHT** | | | | | | | | | |
| Unit Weight | kg | 5920 | 6030 | 6050 | 6570 | 6850 | 7300 | 7570 | 8190 |
| Operating Weight | kg | 6200 | 6280 | 6300 | 6820 | 7100 | 7540 | 7810 | 8570 |
| **WATER HEAT EXCHANGER** | | | | | | | | | |
| Type (3) | --- | S&T | S&T | S&T | S&T | S&T | S&T | S&T | S&T |
| Water Volume | l | 266 | 266 | 251 | 251 | 251 | 243 | 243 | 386 |
| Nominal water flow rate - Cooling | l/s | 29.5 | 34.1 | 37.6 | 41.8 | 44.0 | 48.7 | 53.1 | 60.6 |
| Nominal Water pressure drop - Cooling | kPa | 43 | 50 | 48 | 58 | 63 | 60 | 69 | 50 |
| Insulation material (4) | | CC | CC | CC | CC | CC | CC | CC | CC |
| **AIR HEAT EXCHANGER** | | | | | | | | | |
| Type (5) | --- | HFP | HFP | HFP | HFP | HFP | HFP | HFP | HFP |
| **FAN** | | | | | | | | | |
| Type (6) | --- | DPT | DPT | DPT | DPT | DPT | DPT | DPT | DPT |
| Drive (7) | --- | DOL | DOL | DOL | DOL | DOL | DOL | DOL | DOL |
| Diameter | mm | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| Nominal air flow | l/s | 41007 | 41007 | 41007 | 49209 | 49209 | 57410 | 65611 | 73813 |
| Quantity | No. | 10 | 10 | 10 | 12 | 12 | 14 | 16 | 18 |
| 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 | 14.1 |
| **COMPRESSOR** | | | | | | | | | |
| Type | --- | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | 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 | 93 | 93 | 94 | 94 | 94 |
| Sound Pressure - Cooling (8) | dB(A) | 71 | 72 | 72 | 72 | 73 | 73 | 73 | 73 |
| **REFRIGERANT CIRCUIT** | | | | | | | | | |
| Refrigerant type | --- | R134a | R134a | R134a | R134a | R134a | R134a | R134a | R134a |
| Refrigerant charge | kg | 128 | 128 | 128 | 146 | 144 | 162 | 178 | 196 |
| 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 | 168.3 mm | 168.3 mm | 168.3 mm | 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

| MODEL | | H14 | C13 | C14 | C15 | C16 | C17 | C18 | C19 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity - Cooling (1) | kW | 1321 | 1367 | 1471 | 1556 | 1623 | 1714 | 1795 | 1833 |
| Capacity control - Type | --- | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless |
| Capacity control - Minimum capacity | % | 12.5 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Unit power input - Cooling (1) | kW | 495 | 518 | 577 | 603 | 647 | 702 | 718 | 758 |
| EER (1) | --- | 2.67 | 2.64 | 2.55 | 2.58 | 2.51 | 2.44 | 2.50 | 2.42 |
| ESEER | --- | 3.98 | 3.90 | 3.87 | 3.90 | 3.83 | 3.78 | 3.81 | 3.75 |
| IPLV | --- | 4.35 | 4.24 | 4.22 | 4.24 | 4.18 | 4.23 | 4.20 | 4.16 |
| **CASING** | | | | | | | | | |
| Colour | --- | IW | IW | IW | IW | IW | IW | IW | IW |
| Material (2) | --- | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS |
| **DIMENSIONS** | | | | | | | | | |
| Height | mm | 2540 | 2540 | 2540 | 2540 | 2540 | 2540 | 2540 | 2540 |
| Width | mm | 2285 | 2285 | 2285 | 2285 | 2285 | 2285 | 2285 | 2285 |
| Length | mm | 8885 | 10185 | 10185 | 11085 | 11085 | 11085 | 11985 | 11985 |
| **WEIGHT** | | | | | | | | | |
| Unit Weight | kg | 8190 | 10750 | 10770 | 11150 | 11210 | 11680 | 12040 | 12040 |
| Operating Weight | kg | 8570 | 11170 | 11170 | 11550 | 11700 | 12560 | 12920 | 12920 |
| **WATER HEAT EXCHANGER** | | | | | | | | | |
| Type (3) | --- | S&T | S&T | S&T | S&T | S&T | S&T | S&T | S&T |
| Water Volume | l | 386 | 421 | 408 | 408 | 474 | 850 | 850 | 850 |
| Nominal water flow rate - Cooling | l/s | 63.0 | 65.2 | 70.2 | 74.2 | 77.4 | 81.8 | 85.6 | 87.5 |
| Nominal Water pressure drop - Cooling | kPa | 54 | 45 | 57 | 63 | 69 | 33 | 36 | 37 |
| Insulation material (4) | | CC | CC | CC | CC | CC | CC | CC | CC |
| **AIR HEAT EXCHANGER** | | | | | | | | | |
| Type (5) | --- | HFP | HFP | HFP | HFP | HFP | HFP | HFP | HFP |
| **FAN** | | | | | | | | | |
| Type (6) | --- | DPT | DPT | DPT | DPT | DPT | DPT | DPT | DPT |
| Drive (7) | --- | DOL | DOL | DOL | DOL | DOL | DOL | DOL | DOL |
| Diameter | mm | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| Nominal air flow | l/s | 73813 | 82014 | 82014 | 90216 | 90216 | 90216 | 98417 | 98417 |
| Quantity | No. | 18 | 20 | 20 | 22 | 22 | 22 | 24 | 24 |
| Speed | rpm | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 |
| Motor input | kW | 14.1 | 15.7 | 15.7 | 17.3 | 17.3 | 17.3 | 18.8 | 18.8 |
| **COMPRESSOR** | | | | | | | | | |
| Type | --- | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw |
| Oil charge | l | 50 | 75 | 75 | 75 | 75 | 75 | 75 | 75 |
| Quantity | No. | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| **SOUND LEVEL** | | | | | | | | | |
| Sound Power - Cooling | dB(A) | 94 | 95 | 95 | 95 | 95 | 96 | 96 | 96 |
| Sound Pressure - Cooling (8) | dB(A) | 73 | 73 | 73 | 73 | 73 | 74 | 74 | 74 |
| **REFRIGERANT CIRCUIT** | | | | | | | | | |
| Refrigerant type | --- | R134a | R134a | R134a | R134a | R134a | R134a | R134a | R134a |
| Refrigerant charge | kg | 196 | 260 | 260 | 261 | 261 | 275 | 305 | 305 |
| N. of circuits | No. | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| **PIPING CONNECTIONS** | | | | | | | | | |
| Evaporator water inlet/outlet | | 219.1 mm | 219.1 mm | 219.1 mm | 219.1 mm | 219.1 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-XS

| MODEL | | 760 | 830 | 890 | 990 | C10 | C11 | C12 | C13 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity - Cooling (1) | kW | 756 | 830 | 889 | 1001 | 1074 | 1196 | 1280 | 1349 |
| Capacity control - Type | --- | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | 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 | 233 | 253 | 278 | 307 | 338 | 364 | 400 | 410 |
| EER (1) | --- | 3.25 | 3.28 | 3.20 | 3.26 | 3.18 | 3.29 | 3.20 | 3.29 |
| ESEER | --- | 4.02 | 4.11 | 4.02 | 4.11 | 4.05 | 4.14 | 4.02 | 4.28 |
| IPLV | --- | 4.48 | 4.48 | 4.44 | 4.48 | 4.44 | 4.51 | 4.47 | 4.59 |
| **CASING** | | | | | | | | | |
| Colour | --- | IW | IW | IW | IW | IW | IW | IW | IW |
| Material (2) | --- | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS | 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 | 5990 | 6340 | 6360 | 7190 | 7470 | 8220 | 8240 | 8900 |
| Operating Weight | kg | 6240 | 6580 | 6600 | 7600 | 7870 | 8610 | 8630 | 9890 |
| **WATER HEAT EXCHANGER** | | | | | | | | | |
| Type (3) | --- | S&T | S&T | S&T | S&T | S&T | S&T | S&T | S&T |
| Water Volume | l | 251 | 243 | 243 | 403 | 403 | 386 | 386 | 979 |
| Nominal water flow rate - Cooling | l/s | 36.1 | 39.6 | 42.4 | 47.8 | 51.2 | 57.1 | 61.1 | 64.4 |
| Nominal Water pressure drop - Cooling | kPa | 81 | 57 | 64 | 61 | 69 | 45 | 51 | 68 |
| Insulation material (4) | | CC | CC | CC | CC | CC | CC | CC | CC |
| **AIR HEAT EXCHANGER** | | | | | | | | | |
| Type (5) | --- | HFP | HFP | HFP | HFP | HFP | HFP | HFP | HFP |
| **FAN** | | | | | | | | | |
| Type (6) | --- | DPT | DPT | DPT | DPT | DPT | DPT | DPT | DPT |
| Drive (7) | --- | DOL | DOL | DOL | DOL | DOL | DOL | DOL | 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 | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | 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) | 100 | 101 | 101 | 101 | 102 | 102 | 103 | 103 |
| Sound Pressure - Cooling (8) | dB(A) | 80 | 80 | 80 | 80 | 81 | 80 | 80 | 80 |
| **REFRIGERANT CIRCUIT** | | | | | | | | | |
| Refrigerant type | --- | R134a | R134a | R134a | R134a | R134a | R134a | R134a | 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-XS

| MODEL | | H14 | H15 | C16 | C17 | C18 | C19 | C20 | C21 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity - Cooling (1) | kW | 1415 | 1525 | 1596 | 1685 | 1768 | 1858 | 1901 | 1953 |
| Capacity control - Type | --- | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless |
| Capacity control - Minimum capacity | % | 12.5 | 12.5 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Unit power input - Cooling (1) | kW | 443 | 475 | 503 | 533 | 561 | 590 | 614 | 643 |
| EER (1) | --- | 3.19 | 3.21 | 3.17 | 3.16 | 3.15 | 3.15 | 3.09 | 3.04 |
| ESEER | --- | 4.30 | 4.33 | 4.17 | 4.16 | 4.13 | 4.13 | 4.11 | 4.02 |
| IPLV | --- | 4.71 | 4.81 | 4.52 | 4.52 | 4.47 | 4.47 | 4.48 | 4.39 |
| **CASING** | | | | | | | | | |
| Colour | --- | IW | IW | IW | IW | IW | IW | IW | IW |
| Material (2) | --- | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS |
| **DIMENSIONS** | | | | | | | | | |
| Height | mm | 2540 | 2540 | 2540 | 2540 | 2540 | 2540 | 2540 | 2540 |
| Width | mm | 2285 | 2285 | 2285 | 2285 | 2285 | 2285 | 2285 | 2285 |
| Length | mm | 9785 | 9785 | 11985 | 12885 | 13785 | 14685 | 14685 | 14685 |
| **WEIGHT** | | | | | | | | | |
| Unit Weight | kg | 8900 | 8900 | 11570 | 11900 | 12260 | 12600 | 12600 | 12600 |
| Operating Weight | kg | 9890 | 9890 | 12430 | 12760 | 13140 | 13470 | 13470 | 13470 |
| **WATER HEAT EXCHANGER** | | | | | | | | | |
| Type (3) | --- | S&T | S&T | S&T | S&T | S&T | S&T | S&T | S&T |
| Water Volume | l | 979 | 979 | 850 | 850 | 871 | 850 | 850 | 850 |
| Nominal water flow rate - Cooling | l/s | 67.5 | 72.8 | 76.1 | 80.4 | 84.4 | 88.6 | 90.7 | 93.2 |
| Nominal Water pressure drop - Cooling | kPa | 77 | 84 | 62 | 68 | 68 | 74 | 39 | 41 |
| Insulation material (4) | | CC | CC | CC | CC | CC | CC | CC | CC |
| **AIR HEAT EXCHANGER** | | | | | | | | | |
| Type (5) | --- | HFP | HFP | HFP | HFP | HFP | HFP | HFP | HFP |
| **FAN** | | | | | | | | | |
| Type (6) | --- | DPT | DPT | DPT | DPT | DPT | DPT | DPT | DPT |
| Drive (7) | --- | DOL | DOL | DOL | DOL | DOL | DOL | DOL | DOL |
| Diameter | mm | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| Nominal air flow | l/s | 106885 | 106885 | 128262 | 138950 | 149639 | 160327 | 160327 | 160327 |
| Quantity | No. | 20 | 20 | 24 | 26 | 28 | 30 | 30 | 30 |
| Speed | rpm | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| Motor input | kW | 35.0 | 35.0 | 42.0 | 45.5 | 49.0 | 52.5 | 52.5 | 52.5 |
| **COMPRESSOR** | | | | | | | | | |
| Type | --- | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw |
| Oil charge | l | 50 | 50 | 75 | 75 | 75 | 75 | 75 | 75 |
| Quantity | No. | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| **SOUND LEVEL** | | | | | | | | | |
| Sound Power - Cooling | dB(A) | 103 | 103 | 103 | 104 | 104 | 104 | 104 | 104 |
| Sound Pressure - Cooling (8) | dB(A) | 80 | 80 | 81 | 81 | 81 | 81 | 81 | 81 |
| **REFRIGERANT CIRCUIT** | | | | | | | | | |
| Refrigerant type | --- | R134a | R134a | R134a | R134a | R134a | R134a | R134a | R134a |
| Refrigerant charge | kg | 248 | 248 | 297 | 312 | 328 | 343 | 343 | 343 |
| N. of circuits | No. | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| **PIPING CONNECTIONS** | | | | | | | | | |
| Evaporator water inlet/outlet | | 273 mm | 273 mm | 273 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-XS

| MODEL | | C22 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Capacity - Cooling (1) | kW | 2008 | | | | | | | |
| Capacity control - Type | --- | Stepless | | | | | | | |
| Capacity control - Minimum capacity | % | 7.0 | | | | | | | |
| Unit power input - Cooling (1) | kW | 672 | | | | | | | |
| EER (1) | --- | 2.99 | | | | | | | |
| ESEER | --- | 3.99 | | | | | | | |
| IPLV | --- | 4.39 | | | | | | | |
| **CASING** | | | | | | | | | |
| Colour | --- | IW | | | | | | | |
| Material (2) | --- | GPSS | | | | | | | |
| **DIMENSIONS** | | | | | | | | | |
| Height | mm | 2540 | | | | | | | |
| Width | mm | 2285 | | | | | | | |
| Length | mm | 14685 | | | | | | | |
| **WEIGHT** | | | | | | | | | |
| Unit Weight | kg | 12600 | | | | | | | |
| Operating Weight | kg | 13470 | | | | | | | |
| **WATER HEAT EXCHANGER** | | | | | | | | | |
| Type (3) | --- | S&T | | | | | | | |
| Water Volume | l | 850 | | | | | | | |
| Nominal water flow rate - Cooling | l/s | 95.8 | | | | | | | |
| Nominal Water pressure drop - Cooling | kPa | 43 | | | | | | | |
| Insulation material (4) | | CC | | | | | | | |
| **AIR HEAT EXCHANGER** | | | | | | | | | |
| Type (5) | --- | HFP | | | | | | | |
| **FAN** | | | | | | | | | |
| Type (6) | --- | DPT | | | | | | | |
| Drive (7) | --- | DOL | | | | | | | |
| Diameter | mm | 800 | | | | | | | |
| Nominal air flow | l/s | 160327 | | | | | | | |
| Quantity | No. | 30 | | | | | | | |
| Speed | rpm | 900 | | | | | | | |
| Motor input | kW | 52.5 | | | | | | | |
| **COMPRESSOR** | | | | | | | | | |
| Type | --- | Asymm Single Screw | | | | | | | |
| Oil charge | l | 75 | | | | | | | |
| Quantity | No. | 3 | | | | | | | |
| **SOUND LEVEL** | | | | | | | | | |
| Sound Power - Cooling | dB(A) | 104 | | | | | | | |
| Sound Pressure - Cooling (8) | dB(A) | 81 | | | | | | | |
| **REFRIGERANT CIRCUIT** | | | | | | | | | |
| Refrigerant type | --- | R134a | | | | | | | |
| Refrigerant charge | kg | 343 | | | | | | | |
| N. of circuits | No. | 3 | | | | | | | |
| **PIPING CONNECTIONS** | | | | | | | | | |
| Evaporator water inlet/outlet | | 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

| MODEL | | 760 | 830 | 890 | 990 | C10 | C11 | C12 | C13 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity - Cooling (1) | kW | 756 | 830 | 889 | 1001 | 1074 | 1196 | 1280 | 1349 |
| Capacity control - Type | --- | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | 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 | 233 | 253 | 278 | 307 | 338 | 364 | 400 | 410 |
| EER (1) | --- | 3.25 | 3.28 | 3.20 | 3.26 | 3.18 | 3.29 | 3.20 | 3.29 |
| ESEER | --- | 4.02 | 4.11 | 4.02 | 4.11 | 4.05 | 4.14 | 4.02 | 4.28 |
| IPLV | --- | 4.48 | 4.48 | 4.44 | 4.48 | 4.44 | 4.51 | 4.47 | 4.59 |
| **CASING** | | | | | | | | | |
| Colour | --- | IW | IW | IW | IW | IW | IW | IW | IW |
| Material (2) | --- | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS | 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 | S&T | S&T | S&T | S&T | S&T | S&T | S&T |
| Water Volume | l | 251 | 243 | 243 | 403 | 403 | 386 | 386 | 979 |
| Nominal water flow rate - Cooling | l/s | 36.1 | 39.6 | 42.4 | 47.8 | 51.2 | 57.1 | 61.1 | 64.4 |
| Nominal Water pressure drop - Cooling | kPa | 81 | 57 | 64 | 61 | 69 | 45 | 51 | 68 |
| Insulation material (4) | | CC | CC | CC | CC | CC | CC | CC | CC |
| **AIR HEAT EXCHANGER** | | | | | | | | | |
| Type (5) | --- | HFP | HFP | HFP | HFP | HFP | HFP | HFP | HFP |
| **FAN** | | | | | | | | | |
| Type (6) | --- | DPT | DPT | DPT | DPT | DPT | DPT | DPT | DPT |
| Drive (7) | --- | DOL | DOL | DOL | DOL | DOL | DOL | DOL | 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 | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | 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 | R134a | R134a | R134a | R134a | R134a | R134a | 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

| MODEL | | H14 | H15 | C16 | C17 | C18 | C19 | C20 | C21 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity - Cooling (1) | kW | 1415 | 1525 | 1596 | 1685 | 1768 | 1858 | 1901 | 1953 |
| Capacity control - Type | --- | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless |
| Capacity control - Minimum capacity | % | 12.5 | 12.5 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Unit power input - Cooling (1) | kW | 443 | 475 | 503 | 533 | 561 | 590 | 614 | 643 |
| EER (1) | --- | 3.19 | 3.21 | 3.17 | 3.16 | 3.15 | 3.15 | 3.09 | 3.04 |
| ESEER | --- | 4.30 | 4.33 | 4.17 | 4.16 | 4.13 | 4.13 | 4.11 | 4.02 |
| IPLV | --- | 4.71 | 4.81 | 4.52 | 4.52 | 4.47 | 4.47 | 4.48 | 4.39 |
| **CASING** | | | | | | | | | |
| Colour | --- | IW | IW | IW | IW | IW | IW | IW | IW |
| Material (2) | --- | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS |
| **DIMENSIONS** | | | | | | | | | |
| Height | mm | 2540 | 2540 | 2540 | 2540 | 2540 | 2540 | 2540 | 2540 |
| Width | mm | 2285 | 2285 | 2285 | 2285 | 2285 | 2285 | 2285 | 2285 |
| Length | mm | 9785 | 9785 | 11985 | 12885 | 13785 | 14685 | 14685 | 14685 |
| **WEIGHT** | | | | | | | | | |
| Unit Weight | kg | 9190 | 9190 | 12010 | 12350 | 12700 | 13040 | 13040 | 13040 |
| Operating Weight | kg | 10180 | 10180 | 12870 | 13200 | 13580 | 13910 | 13910 | 13910 |
| **WATER HEAT EXCHANGER** | | | | | | | | | |
| Type (3) | --- | S&T | S&T | S&T | S&T | S&T | S&T | S&T | S&T |
| Water Volume | l | 979 | 979 | 850 | 850 | 871 | 850 | 850 | 850 |
| Nominal water flow rate - Cooling | l/s | 67.5 | 72.8 | 76.1 | 80.4 | 84.4 | 88.6 | 90.7 | 93.2 |
| Nominal Water pressure drop - Cooling | kPa | 77 | 84 | 62 | 68 | 68 | 74 | 39 | 41 |
| Insulation material (4) | | CC | CC | CC | CC | CC | CC | CC | CC |
| **AIR HEAT EXCHANGER** | | | | | | | | | |
| Type (5) | --- | HFP | HFP | HFP | HFP | HFP | HFP | HFP | HFP |
| **FAN** | | | | | | | | | |
| Type (6) | --- | DPT | DPT | DPT | DPT | DPT | DPT | DPT | DPT |
| Drive (7) | --- | DOL | DOL | DOL | DOL | DOL | DOL | DOL | DOL |
| Diameter | mm | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| Nominal air flow | l/s | 106885 | 106885 | 128262 | 138950 | 149639 | 160327 | 160327 | 160327 |
| Quantity | No. | 20 | 20 | 24 | 26 | 28 | 30 | 30 | 30 |
| Speed | rpm | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| Motor input | kW | 35.0 | 35.0 | 42.0 | 45.5 | 49.0 | 52.5 | 52.5 | 52.5 |
| **COMPRESSOR** | | | | | | | | | |
| Type | --- | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw |
| Oil charge | l | 50 | 50 | 75 | 75 | 75 | 75 | 75 | 75 |
| Quantity | No. | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| **SOUND LEVEL** | | | | | | | | | |
| Sound Power - Cooling | dB(A) | 99 | 99 | 100 | 100 | 100 | 100 | 100 | 100 |
| Sound Pressure - Cooling (8) | dB(A) | 77 | 77 | 77 | 77 | 78 | 78 | 78 | 78 |
| **REFRIGERANT CIRCUIT** | | | | | | | | | |
| Refrigerant type | --- | R134a | R134a | R134a | R134a | R134a | R134a | R134a | R134a |
| Refrigerant charge | kg | 248 | 248 | 297 | 312 | 328 | 343 | 343 | 343 |
| N. of circuits | No. | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| **PIPING CONNECTIONS** | | | | | | | | | |
| Evaporator water inlet/outlet | | 273 mm | 273 mm | 273 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-XL

| MODEL | | C22 |
|---|---|---|
| Capacity - Cooling (1) | kW | 2008 |
| Capacity control - Type | --- | Stepless |
| Capacity control - Minimum capacity | % | 7.0 |
| Unit power input - Cooling (1) | kW | 672 |
| EER (1) | --- | 2.99 |
| ESEER | --- | 3.99 |
| IPLV | --- | 4.39 |
| **CASING** | | |
| Colour | --- | IW |
| Material (2) | --- | GPSS |
| **DIMENSIONS** | | |
| Height | mm | 2540 |
| Width | mm | 2285 |
| Length | mm | 14685 |
| **WEIGHT** | | |
| Unit Weight | kg | 13040 |
| Operating Weight | kg | 13910 |
| **WATER HEAT EXCHANGER** | | |
| Type (3) | --- | S&T |
| Water Volume | l | 850 |
| Nominal water flow rate - Cooling | l/s | 95.8 |
| Nominal Water pressure drop - Cooling | kPa | 43 |
| Insulation material (4) | | CC |
| **AIR HEAT EXCHANGER** | | |
| Type (5) | --- | HFP |
| **FAN** | | |
| Type (6) | --- | DPT |
| Drive (7) | --- | DOL |
| Diameter | mm | 800 |
| Nominal air flow | l/s | 160327 |
| Quantity | No. | 30 |
| Speed | rpm | 900 |
| Motor input | kW | 52.5 |
| **COMPRESSOR** | | |
| Type | --- | Asymm Single Screw |
| Oil charge | l | 75 |
| Quantity | No. | 3 |
| **SOUND LEVEL** | | |
| Sound Power - Cooling | dB(A) | 100 |
| Sound Pressure - Cooling (8) | dB(A) | 78 |
| **REFRIGERANT CIRCUIT** | | |
| Refrigerant type | --- | R134a |
| Refrigerant charge | kg | 343 |
| N. of circuits | No. | 3 |
| **PIPING CONNECTIONS** | | |
| Evaporator water inlet/outlet | | 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

| MODEL | | 740 | 810 | 870 | 970 | C10 | C11 | C12 | C13 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity - Cooling (1) | kW | 736 | 811 | 866 | 974 | 1041 | 1168 | 1247 | 1302 |
| Capacity control - Type | --- | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | 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 | 234 | 253 | 281 | 309 | 344 | 365 | 405 | 415 |
| EER (1) | --- | 3.14 | 3.20 | 3.08 | 3.15 | 3.03 | 3.20 | 3.08 | 3.14 |
| ESEER | --- | 4.28 | 4.36 | 4.23 | 4.34 | 4.24 | 4.38 | 4.25 | 4.33 |
| IPLV | --- | 4.55 | 4.62 | 4.51 | 4.63 | 4.54 | 4.65 | 4.54 | 4.58 |
| **CASING** | | | | | | | | | |
| Colour | --- | IW | IW | IW | IW | IW | IW | IW | IW |
| Material (2) | --- | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS | 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 | S&T | S&T | S&T | S&T | S&T | S&T | S&T |
| Water Volume | l | 251 | 243 | 243 | 403 | 403 | 386 | 386 | 979 |
| Nominal water flow rate - Cooling | l/s | 35.1 | 38.7 | 41.3 | 46.5 | 49.7 | 55.7 | 59.5 | 62.1 |
| Nominal Water pressure drop - Cooling | kPa | 77 | 54 | 61 | 58 | 65 | 43 | 49 | 64 |
| Insulation material (4) | | CC | CC | CC | CC | CC | CC | CC | CC |
| **AIR HEAT EXCHANGER** | | | | | | | | | |
| Type (5) | --- | HFP | HFP | HFP | HFP | HFP | HFP | HFP | HFP |
| **FAN** | | | | | | | | | |
| Type (6) | --- | DPT | DPT | DPT | DPT | DPT | DPT | DPT | DPT |
| Drive (7) | --- | DOL | DOL | DOL | DOL | DOL | DOL | DOL | 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 | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | 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 | R134a | R134a | R134a | R134a | R134a | R134a | 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

| MODEL | | H14 | H15 | C16 | C17 | C18 | C19 | C20 | C21 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity - Cooling (1) | kW | 1367 | 1468 | 1550 | 1639 | 1722 | 1813 | 1854 | 1902 |
| Capacity control - Type | --- | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless |
| Capacity control - Minimum capacity | % | 12.5 | 12.5 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Unit power input - Cooling (1) | kW | 454 | 491 | 512 | 541 | 566 | 596 | 624 | 657 |
| EER (1) | --- | 3.01 | 2.99 | 3.03 | 3.03 | 3.04 | 3.04 | 2.97 | 2.89 |
| ESEER | --- | 4.36 | 4.40 | 4.26 | 4.20 | 4.21 | 4.20 | 4.18 | 4.09 |
| IPLV | --- | 4.68 | 4.77 | 4.60 | 4.59 | 4.59 | 4.57 | 4.58 | 4.51 |
| **CASING** | | | | | | | | | |
| Colour | --- | IW | IW | IW | IW | IW | IW | IW | IW |
| Material (2) | --- | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS |
| **DIMENSIONS** | | | | | | | | | |
| Height | mm | 2540 | 2540 | 2540 | 2540 | 2540 | 2540 | 2540 | 2540 |
| Width | mm | 2285 | 2285 | 2285 | 2285 | 2285 | 2285 | 2285 | 2285 |
| Length | mm | 9785 | 9785 | 11985 | 12885 | 13785 | 14685 | 14685 | 14685 |
| **WEIGHT** | | | | | | | | | |
| Unit Weight | kg | 9190 | 9190 | 12010 | 12350 | 12700 | 13040 | 13040 | 13040 |
| Operating Weight | kg | 10180 | 10180 | 12870 | 13200 | 13580 | 13910 | 13910 | 13910 |
| **WATER HEAT EXCHANGER** | | | | | | | | | |
| Type (3) | --- | S&T | S&T | S&T | S&T | S&T | S&T | S&T | S&T |
| Water Volume | l | 979 | 979 | 850 | 850 | 871 | 850 | 850 | 850 |
| Nominal water flow rate - Cooling | l/s | 65.2 | 70.0 | 74.0 | 78.2 | 82.2 | 86.5 | 88.5 | 90.7 |
| Nominal Water pressure drop - Cooling | kPa | 73 | 79 | 59 | 65 | 65 | 71 | 37 | 39 |
| Insulation material (4) | | CC | CC | CC | CC | CC | CC | CC | CC |
| **AIR HEAT EXCHANGER** | | | | | | | | | |
| Type (5) | --- | HFP | HFP | HFP | HFP | HFP | HFP | HFP | HFP |
| **FAN** | | | | | | | | | |
| Type (6) | --- | DPT | DPT | DPT | DPT | DPT | DPT | DPT | DPT |
| Drive (7) | --- | DOL | DOL | DOL | DOL | DOL | DOL | DOL | DOL |
| Diameter | mm | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| Nominal air flow | l/s | 82014 | 82014 | 98417 | 106619 | 114820 | 123021 | 123021 | 123021 |
| Quantity | No. | 20 | 20 | 24 | 26 | 28 | 30 | 30 | 30 |
| Speed | rpm | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 |
| Motor input | kW | 15.7 | 15.7 | 18.8 | 20.4 | 22.0 | 23.5 | 23.5 | 23.5 |
| **COMPRESSOR** | | | | | | | | | |
| Type | --- | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw |
| Oil charge | l | 50 | 50 | 75 | 75 | 75 | 75 | 75 | 75 |
| Quantity | No. | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| **SOUND LEVEL** | | | | | | | | | |
| Sound Power - Cooling | dB(A) | 95 | 95 | 95 | 96 | 96 | 96 | 96 | 97 |
| Sound Pressure - Cooling (8) | dB(A) | 73 | 73 | 73 | 73 | 73 | 73 | 73 | 74 |
| **REFRIGERANT CIRCUIT** | | | | | | | | | |
| Refrigerant type | --- | R134a | R134a | R134a | R134a | R134a | R134a | R134a | R134a |
| Refrigerant charge | kg | 248 | 248 | 297 | 312 | 328 | 343 | 343 | 343 |
| N. of circuits | No. | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| **PIPING CONNECTIONS** | | | | | | | | | |
| Evaporator water inlet/outlet | | 273 mm | 273 mm | 273 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-XR

| MODEL | | C22 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Capacity - Cooling (1) | kW | 1952 | | | | | | | |
| Capacity control - Type | --- | Stepless | | | | | | | |
| Capacity control - Minimum capacity | % | 7.0 | | | | | | | |
| Unit power input - Cooling (1) | kW | 691 | | | | | | | |
| EER (1) | --- | 2.83 | | | | | | | |
| ESEER | --- | 4.06 | | | | | | | |
| IPLV | --- | 4.49 | | | | | | | |
| **CASING** | | | | | | | | | |
| Colour | --- | IW | | | | | | | |
| Material (2) | --- | GPSS | | | | | | | |
| **DIMENSIONS** | | | | | | | | | |
| Height | mm | 2540 | | | | | | | |
| Width | mm | 2285 | | | | | | | |
| Length | mm | 14685 | | | | | | | |
| **WEIGHT** | | | | | | | | | |
| Unit Weight | kg | 13040 | | | | | | | |
| Operating Weight | kg | 13910 | | | | | | | |
| **WATER HEAT EXCHANGER** | | | | | | | | | |
| Type (3) | --- | S&T | | | | | | | |
| Water Volume | l | 850 | | | | | | | |
| Nominal water flow rate - Cooling | l/s | 93.1 | | | | | | | |
| Nominal Water pressure drop - Cooling | kPa | 41 | | | | | | | |
| Insulation material (4) | | CC | | | | | | | |
| **AIR HEAT EXCHANGER** | | | | | | | | | |
| Type (5) | --- | HFP | | | | | | | |
| **FAN** | | | | | | | | | |
| Type (6) | --- | DPT | | | | | | | |
| Drive (7) | --- | DOL | | | | | | | |
| Diameter | mm | 800 | | | | | | | |
| Nominal air flow | l/s | 123021 | | | | | | | |
| Quantity | No. | 30 | | | | | | | |
| Speed | rpm | 700 | | | | | | | |
| Motor input | kW | 23.5 | | | | | | | |
| **COMPRESSOR** | | | | | | | | | |
| Type | --- | Asymm Single Screw | | | | | | | |
| Oil charge | l | 75 | | | | | | | |
| Quantity | No. | 3 | | | | | | | |
| **SOUND LEVEL** | | | | | | | | | |
| Sound Power - Cooling | dB(A) | 97 | | | | | | | |
| Sound Pressure - Cooling (8) | dB(A) | 74 | | | | | | | |
| **REFRIGERANT CIRCUIT** | | | | | | | | | |
| Refrigerant type | --- | R134a | | | | | | | |
| Refrigerant charge | kg | 343 | | | | | | | |
| N. of circuits | No. | 3 | | | | | | | |
| **PIPING CONNECTIONS** | | | | | | | | | |
| Evaporator water inlet/outlet | | 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

| MODEL | | 820 | 890 | 980 | C11 | C12 | C13 | C14 | C15 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity - Cooling (1) | kW | 821 | 890 | 975 | 1074 | 1158 | 1279 | 1390 | 1474 |
| Capacity control - Type | --- | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | 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 | 226 | 249 | 274 | 302 | 330 | 363 | 396 | 424 |
| EER (1) | --- | 3.64 | 3.58 | 3.56 | 3.56 | 3.51 | 3.52 | 3.51 | 3.48 |
| ESEER | --- | 4.44 | 4.50 | 4.41 | 4.53 | 4.39 | 4.44 | 4.31 | 4.33 |
| IPLV | --- | 4.78 | 4.67 | 4.71 | 4.69 | 4.73 | 4.65 | 4.73 | 4.73 |
| **CASING** | | | | | | | | | |
| Colour | --- | IW | IW | IW | IW | IW | IW | IW | IW |
| Material (2) | --- | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS |
| **DIMENSIONS** | | | | | | | | | |
| Height | mm | 2540 | 2540 | 2540 | 2540 | 2540 | 2540 | 2540 | 2540 |
| Width | mm | 2285 | 2285 | 2285 | 2285 | 2285 | 2285 | 2285 | 2285 |
| Length | mm | 8885 | 8885 | 8885 | 9785 | 9785 | 11085 | 11985 | 11985 |
| **WEIGHT** | | | | | | | | | |
| Unit Weight | kg | 7530 | 7530 | 7660 | 8290 | 8550 | 9390 | 9730 | 9730 |
| Operating Weight | kg | 8130 | 8130 | 8700 | 9330 | 9590 | 10380 | 10720 | 10720 |
| **WATER HEAT EXCHANGER** | | | | | | | | | |
| Type (3) | --- | S&T | S&T | S&T | S&T | S&T | S&T | S&T | S&T |
| Water Volume | l | 599 | 599 | 1043 | 1027 | 1027 | 995 | 979 | 979 |
| Nominal water flow rate - Cooling | l/s | 39.2 | 42.5 | 46.5 | 51.2 | 55.2 | 61.0 | 66.3 | 70.3 |
| Nominal Water pressure drop - Cooling | kPa | 58 | 67 | 31 | 61 | 70 | 60 | 70 | 81 |
| Insulation material (4) | | CC | CC | CC | CC | CC | CC | CC | CC |
| **AIR HEAT EXCHANGER** | | | | | | | | | |
| Type (5) | --- | HFP | HFP | HFP | HFP | HFP | HFP | HFP | HFP |
| **FAN** | | | | | | | | | |
| Type (6) | --- | DPT | DPT | DPT | DPT | DPT | DPT | DPT | DPT |
| Drive (7) | --- | DOL | DOL | DOL | DOL | DOL | DOL | DOL | DOL |
| Diameter | mm | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| Nominal air flow | l/s | 96196 | 96196 | 96196 | 106885 | 106885 | 117573 | 128262 | 128262 |
| Quantity | No. | 18 | 18 | 18 | 20 | 20 | 22 | 24 | 24 |
| Speed | rpm | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| Motor input | kW | 31.5 | 31.5 | 31.5 | 35.0 | 35.0 | 38.5 | 42.0 | 42.0 |
| **COMPRESSOR** | | | | | | | | | |
| Type | --- | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | 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) | 101 | 101 | 101 | 102 | 102 | 103 | 103 | 103 |
| Sound Pressure - Cooling (8) | dB(A) | 80 | 80 | 80 | 80 | 81 | 80 | 81 | 81 |
| **REFRIGERANT CIRCUIT** | | | | | | | | | |
| Refrigerant type | --- | R134a | R134a | R134a | R134a | R134a | R134a | R134a | R134a |
| Refrigerant charge | kg | 204 | 202 | 204 | 220 | 220 | 252 | 254 | 254 |
| N. of circuits | No. | 2 | 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 | 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

| MODEL | | C16 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Capacity - Cooling (1) | kW | 1562 | | | | | | | |
| Capacity control - Type | --- | Stepless | | | | | | | |
| Capacity control - Minimum capacity | % | 12.5 | | | | | | | |
| Unit power input - Cooling (1) | kW | 453 | | | | | | | |
| EER (1) | --- | 3.45 | | | | | | | |
| ESEER | --- | 4.30 | | | | | | | |
| IPLV | --- | 4.71 | | | | | | | |
| **CASING** | | | | | | | | | |
| Colour | --- | IW | | | | | | | |
| Material (2) | --- | GPSS | | | | | | | |
| **DIMENSIONS** | | | | | | | | | |
| Height | mm | 2540 | | | | | | | |
| Width | mm | 2285 | | | | | | | |
| Length | mm | 11985 | | | | | | | |
| **WEIGHT** | | | | | | | | | |
| Unit Weight | kg | 9730 | | | | | | | |
| Operating Weight | kg | 10720 | | | | | | | |
| **WATER HEAT EXCHANGER** | | | | | | | | | |
| Type (3) | --- | S&T | | | | | | | |
| Water Volume | l | 979 | | | | | | | |
| Nominal water flow rate - Cooling | l/s | 74.5 | | | | | | | |
| Nominal Water pressure drop - Cooling | kPa | 88 | | | | | | | |
| Insulation material (4) | | CC | | | | | | | |
| **AIR HEAT EXCHANGER** | | | | | | | | | |
| Type (5) | --- | HFP | | | | | | | |
| **FAN** | | | | | | | | | |
| Type (6) | --- | DPT | | | | | | | |
| Drive (7) | --- | DOL | | | | | | | |
| Diameter | mm | 800 | | | | | | | |
| Nominal air flow | l/s | 128262 | | | | | | | |
| Quantity | No. | 24 | | | | | | | |
| Speed | rpm | 900 | | | | | | | |
| Motor input | kW | 42.0 | | | | | | | |
| **COMPRESSOR** | | | | | | | | | |
| Type | --- | Asymm Single Screw | | | | | | | |
| Oil charge | l | 50 | | | | | | | |
| Quantity | No. | 2 | | | | | | | |
| **SOUND LEVEL** | | | | | | | | | |
| Sound Power - Cooling | dB(A) | 104 | | | | | | | |
| Sound Pressure - Cooling (8) | dB(A) | 81 | | | | | | | |
| **REFRIGERANT CIRCUIT** | | | | | | | | | |
| Refrigerant type | --- | R134a | | | | | | | |
| Refrigerant charge | kg | 254 | | | | | | | |
| N. of circuits | No. | 2 | | | | | | | |
| **PIPING CONNECTIONS** | | | | | | | | | |
| Evaporator water inlet/outlet | | 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-PL

| MODEL | | 820 | 890 | 980 | C11 | C12 | C13 | C14 | C15 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity - Cooling (1) | kW | 821 | 890 | 975 | 1074 | 1158 | 1279 | 1390 | 1474 |
| Capacity control - Type | --- | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | 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 | 226 | 249 | 274 | 302 | 330 | 363 | 396 | 424 |
| EER (1) | --- | 3.64 | 3.58 | 3.56 | 3.56 | 3.51 | 3.52 | 3.51 | 3.48 |
| ESEER | --- | 4.44 | 4.50 | 4.41 | 4.53 | 4.39 | 4.44 | 4.31 | 4.33 |
| IPLV | --- | 4.78 | 4.67 | 4.71 | 4.69 | 4.73 | 4.65 | 4.73 | 4.73 |
| **CASING** | | | | | | | | | |
| Colour | --- | IW | IW | IW | IW | IW | IW | IW | IW |
| Material (2) | --- | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS |
| **DIMENSIONS** | | | | | | | | | |
| Height | mm | 2540 | 2540 | 2540 | 2540 | 2540 | 2540 | 2540 | 2540 |
| Width | mm | 2285 | 2285 | 2285 | 2285 | 2285 | 2285 | 2285 | 2285 |
| Length | mm | 8885 | 8885 | 8885 | 9785 | 9785 | 11085 | 11985 | 11985 |
| **WEIGHT** | | | | | | | | | |
| Unit Weight | kg | 7820 | 7820 | 7950 | 8580 | 8840 | 10380 | 10720 | 10720 |
| Operating Weight | kg | 8420 | 8420 | 8990 | 9620 | 9880 | 10670 | 11010 | 11010 |
| **WATER HEAT EXCHANGER** | | | | | | | | | |
| Type (3) | --- | S&T | S&T | S&T | S&T | S&T | S&T | S&T | S&T |
| Water Volume | l | 599 | 599 | 1043 | 1027 | 1027 | 995 | 979 | 979 |
| Nominal water flow rate - Cooling | l/s | 39.2 | 42.5 | 46.5 | 51.2 | 55.2 | 61.0 | 66.3 | 70.3 |
| Nominal Water pressure drop - Cooling | kPa | 58 | 67 | 31 | 61 | 70 | 60 | 70 | 81 |
| Insulation material (4) | | CC | CC | CC | CC | CC | CC | CC | CC |
| **AIR HEAT EXCHANGER** | | | | | | | | | |
| Type (5) | --- | HFP | HFP | HFP | HFP | HFP | HFP | HFP | HFP |
| **FAN** | | | | | | | | | |
| Type (6) | --- | DPT | DPT | DPT | DPT | DPT | DPT | DPT | DPT |
| Drive (7) | --- | DOL | DOL | DOL | DOL | DOL | DOL | DOL | DOL |
| Diameter | mm | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| Nominal air flow | l/s | 96196 | 96196 | 96196 | 106885 | 106885 | 117573 | 128262 | 128262 |
| Quantity | No. | 18 | 18 | 18 | 20 | 20 | 22 | 24 | 24 |
| Speed | rpm | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| Motor input | kW | 31.5 | 31.5 | 31.5 | 35.0 | 35.0 | 38.5 | 42.0 | 42.0 |
| **COMPRESSOR** | | | | | | | | | |
| Type | --- | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | 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) | 98 | 98 | 98 | 99 | 100 | 99 | 100 | 100 |
| Sound Pressure - Cooling (8) | dB(A) | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 78 |
| **REFRIGERANT CIRCUIT** | | | | | | | | | |
| Refrigerant type | --- | R134a | R134a | R134a | R134a | R134a | R134a | R134a | R134a |
| Refrigerant charge | kg | 204 | 202 | 204 | 220 | 220 | 252 | 254 | 254 |
| N. of circuits | No. | 2 | 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 | 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-PL

| MODEL | | C16 |
|---|---|---|
| Capacity - Cooling (1) | kW | 1562 |
| Capacity control - Type | --- | Stepless |
| Capacity control - Minimum capacity | % | 12.5 |
| Unit power input - Cooling (1) | kW | 453 |
| EER (1) | --- | 3.45 |
| ESEER | --- | 4.30 |
| IPLV | --- | 4.71 |
| **CASING** | | |
| Colour | --- | IW |
| Material (2) | --- | GPSS |
| **DIMENSIONS** | | |
| Height | mm | 2540 |
| Width | mm | 2285 |
| Length | mm | 11985 |
| **WEIGHT** | | |
| Unit Weight | kg | 10720 |
| Operating Weight | kg | 11010 |
| **WATER HEAT EXCHANGER** | | |
| Type (3) | --- | S&T |
| Water Volume | l | 979 |
| Nominal water flow rate - Cooling | l/s | 74.5 |
| Nominal Water pressure drop - Cooling | kPa | 88 |
| Insulation material (4) | | CC |
| **AIR HEAT EXCHANGER** | | |
| Type (5) | --- | HFP |
| **FAN** | | |
| Type (6) | --- | DPT |
| Drive (7) | --- | DOL |
| Diameter | mm | 800 |
| Nominal air flow | l/s | 128262 |
| Quantity | No. | 24 |
| Speed | rpm | 900 |
| Motor input | kW | 42.0 |
| **COMPRESSOR** | | |
| Type | --- | Asymm Single Screw |
| Oil charge | l | 50 |
| Quantity | No. | 2 |
| **SOUND LEVEL** | | |
| Sound Power - Cooling | dB(A) | 100 |
| Sound Pressure - Cooling (8) | dB(A) | 78 |
| **REFRIGERANT CIRCUIT** | | |
| Refrigerant type | --- | R134a |
| Refrigerant charge | kg | 254 |
| N. of circuits | No. | 2 |
| **PIPING CONNECTIONS** | | |
| Evaporator water inlet/outlet | | 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

| MODEL | | 810 | 880 | 960 | C10 | C11 | C13 | C14 | C15 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity - Cooling (1) | kW | 809 | 875 | 956 | 1053 | 1132 | 1251 | 1359 | 1439 |
| Capacity control - Type | --- | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | Stepless | 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 | 219 | 244 | 272 | 299 | 330 | 364 | 396 | 425 |
| EER (1) | --- | 3.70 | 3.58 | 3.51 | 3.52 | 3.43 | 3.44 | 3.43 | 3.39 |
| ESEER | --- | 4.63 | 4.59 | 4.54 | 4.59 | 4.50 | 4.53 | 4.51 | 4.49 |
| IPLV | --- | 5.04 | 4.89 | 4.89 | 4.86 | 4.82 | 4.81 | 4.82 | 4.83 |
| **CASING** | | | | | | | | | |
| Colour | --- | IW | IW | IW | IW | IW | IW | IW | IW |
| Material (2) | --- | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS | GPSS |
| **DIMENSIONS** | | | | | | | | | |
| Height | mm | 2540 | 2540 | 2540 | 2540 | 2540 | 2540 | 2540 | 2540 |
| Width | mm | 2285 | 2285 | 2285 | 2285 | 2285 | 2285 | 2285 | 2285 |
| Length | mm | 8885 | 8885 | 8885 | 9785 | 9785 | 11085 | 11985 | 11985 |
| **WEIGHT** | | | | | | | | | |
| Unit Weight | kg | 7820 | 7820 | 7950 | 8580 | 8840 | 10380 | 10720 | 10720 |
| Operating Weight | kg | 8420 | 8420 | 8990 | 9620 | 9880 | 10670 | 11010 | 11010 |
| **WATER HEAT EXCHANGER** | | | | | | | | | |
| Type (3) | --- | S&T | S&T | S&T | S&T | S&T | S&T | S&T | S&T |
| Water Volume | l | 599 | 599 | 1043 | 1027 | 1027 | 995 | 979 | 979 |
| Nominal water flow rate - Cooling | l/s | 38.6 | 41.7 | 45.6 | 50.2 | 54.0 | 59.7 | 64.8 | 68.7 |
| Nominal Water pressure drop - Cooling | kPa | 56 | 65 | 30 | 59 | 67 | 58 | 67 | 77 |
| Insulation material (4) | | CC | CC | CC | CC | CC | CC | CC | CC |
| **AIR HEAT EXCHANGER** | | | | | | | | | |
| Type (5) | --- | HFP | HFP | HFP | HFP | HFP | HFP | HFP | HFP |
| **FAN** | | | | | | | | | |
| Type (6) | --- | DPT | DPT | DPT | DPT | DPT | DPT | DPT | DPT |
| Drive (7) | --- | DOL | DOL | DOL | DOL | DOL | DOL | DOL | DOL |
| Diameter | mm | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| Nominal air flow | l/s | 73813 | 73813 | 73813 | 82014 | 82014 | 90216 | 98417 | 98417 |
| Quantity | No. | 18 | 18 | 18 | 20 | 20 | 22 | 24 | 24 |
| Speed | rpm | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 |
| Motor input | kW | 14.1 | 14.1 | 14.1 | 15.7 | 15.7 | 17.3 | 18.8 | 18.8 |
| **COMPRESSOR** | | | | | | | | | |
| Type | --- | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | Asymm Single Screw | 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) | 93 | 93 | 93 | 93 | 94 | 94 | 94 | 95 |
| Sound Pressure - Cooling (8) | dB(A) | 71 | 71 | 71 | 72 | 72 | 72 | 72 | 72 |
| **REFRIGERANT CIRCUIT** | | | | | | | | | |
| Refrigerant type | --- | R134a | R134a | R134a | R134a | R134a | R134a | R134a | R134a |
| Refrigerant charge | kg | 204 | 202 | 204 | 220 | 220 | 252 | 254 | 254 |
| N. of circuits | No. | 2 | 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 | 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

| MODEL | | C16 |
|---|---|---|
| Capacity - Cooling (1) | kW | 1521 |
| Capacity control - Type | --- | Stepless |
| Capacity control - Minimum capacity | % | 12.5 |
| Unit power input - Cooling (1) | kW | 457 |
| EER (1) | --- | 3.33 |
| ESEER | --- | 4.44 |
| IPLV | --- | 4.79 |
| **CASING** | | |
| Colour | --- | IW |
| Material (2) | --- | GPSS |
| **DIMENSIONS** | | |
| Height | mm | 2540 |
| Width | mm | 2285 |
| Length | mm | 11985 |
| **WEIGHT** | | |
| Unit Weight | kg | 10720 |
| Operating Weight | kg | 11010 |
| **WATER HEAT EXCHANGER** | | |
| Type (3) | --- | S&T |
| Water Volume | l | 979 |
| Nominal water flow rate - Cooling | l/s | 72.6 |
| Nominal Water pressure drop - Cooling | kPa | 84 |
| Insulation material (4) | | CC |
| **AIR HEAT EXCHANGER** | | |
| Type (5) | --- | HFP |
| **FAN** | | |
| Type (6) | --- | DPT |
| Drive (7) | --- | DOL |
| Diameter | mm | 800 |
| Nominal air flow | l/s | 98417 |
| Quantity | No. | 24 |
| Speed | rpm | 700 |
| Motor input | kW | 18.8 |
| **COMPRESSOR** | | |
| Type | --- | Asymm Single Screw |
| Oil charge | l | 50 |
| Quantity | No. | 2 |
| **SOUND LEVEL** | | |
| Sound Power - Cooling | dB(A) | 95 |
| Sound Pressure - Cooling (8) | dB(A) | 73 |
| **REFRIGERANT CIRCUIT** | | |
| Refrigerant type | --- | R134a |
| Refrigerant charge | kg | 254 |
| N. of circuits | No. | 2 |
| **PIPING CONNECTIONS** | | |
| Evaporator water inlet/outlet | | 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-SS

| MODEL | | 650 | 740 | 830 | 910 | 970 | C11 | C12 | C13 |
|---|---|---|---|---|---|---|---|---|---|
| **POWER SUPPLY** | | | | | | | | | |
| 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% |
| **UNIT** | | | | | | | | | |
| Maximum starting current | A | 604 | 649 | 649 | 915 | 962 | 1017 | 1021 | 1068 |
| Nominal running current cooling | A | 366 | 432 | 492 | 524 | 577 | 624 | 667 | 726 |
| Mximum running current | A | 476 | 545 | 589 | 656 | 715 | 787 | 859 | 921 |
| Maximum current for wires sizing | A | 520 | 596 | 644 | 717 | 781 | 860 | 939 | 1005 |
| **FANS** | | | | | | | | | |
| Nominal running current cooling | A | 40 | 40 | 40 | 48 | 48 | 56 | 64 | 72 |
| **COMPRESSORS** | | | | | | | | | |
| 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<br>218 | 231<br>274 | 274<br>274 | 274<br>333 | 333<br>333 | 333<br>398 | 398<br>398 | 398<br>451 |
| Starting method | --- | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ |

## EWAD C-SS

| MODEL | | H14 | C15 | C16 | C17 | C18 | C19 | C20 | |
|---|---|---|---|---|---|---|---|---|---|
| **POWER SUPPLY** | | | | | | | | | |
| 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% | |
| **UNIT** | | | | | | | | | |
| Maximum starting current | A | 1081 | 1312 | 1363 | 1367 | 1410 | 1456 | 1470 | |
| Nominal running current cooling | A | 773 | 909 | 959 | 1023 | 1092 | 1116 | 1164 | |
| Mximum running current | A | 974 | 1144 | 1217 | 1281 | 1334 | 1395 | 1449 | |
| Maximum current for wires sizing | A | 1064 | 1251 | 1330 | 1400 | 1459 | 1525 | 1584 | |
| **FANS** | | | | | | | | | |
| Nominal running current cooling | A | 72 | 80 | 88 | 88 | 88 | 96 | 96 | |
| **COMPRESSORS** | | | | | | | | | |
| 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 | 451<br>451 | 398<br>333<br>333 | 398<br>398<br>333 | 398<br>398<br>398 | 398<br>398<br>451 | 451<br>451<br>398 | 451<br>451<br>451 | |
| Starting method | --- | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | |

*Fluid: Water*
*Allowed voltage tolerance ± 10%. Voltage unbalance between phases must be within ± 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) x 1,1.*

## EWAD C-SL

| MODEL | | 650 | 740 | 830 | 910 | 970 | C11 | C12 | C13 |
|---|---|---|---|---|---|---|---|---|---|
| **POWER SUPPLY** | | | | | | | | | |
| 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% |
| **UNIT** | | | | | | | | | |
| Maximum starting current | A | 604 | 649 | 649 | 915 | 962 | 1017 | 1021 | 1068 |
| Nominal running current cooling | A | 366 | 432 | 492 | 524 | 577 | 624 | 667 | 726 |
| Mximum running current | A | 476 | 545 | 589 | 656 | 715 | 787 | 859 | 921 |
| Maximum current for wires sizing | A | 520 | 596 | 644 | 717 | 781 | 860 | 939 | 1005 |
| **FANS** | | | | | | | | | |
| Nominal running current cooling | A | 40 | 40 | 40 | 48 | 48 | 56 | 64 | 72 |
| **COMPRESSORS** | | | | | | | | | |
| 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<br>218 | 231<br>274 | 274<br>274 | 274<br>333 | 333<br>333 | 333<br>398 | 398<br>398 | 398<br>451 |
| Starting method | --- | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ |

## EWAD C-SL

| MODEL | | H14 | C15 | C16 | C17 | C18 | C19 | C20 | |
|---|---|---|---|---|---|---|---|---|---|
| **POWER SUPPLY** | | | | | | | | | |
| 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% | |
| **UNIT** | | | | | | | | | |
| Maximum starting current | A | 1081 | 1312 | 1363 | 1367 | 1410 | 1456 | 1470 | |
| Nominal running current cooling | A | 773 | 909 | 959 | 1023 | 1092 | 1116 | 1164 | |
| Mximum running current | A | 974 | 1144 | 1217 | 1281 | 1334 | 1395 | 1449 | |
| Maximum current for wires sizing | A | 1064 | 1251 | 1330 | 1400 | 1459 | 1525 | 1584 | |
| **FANS** | | | | | | | | | |
| Nominal running current cooling | A | 72 | 80 | 88 | 88 | 88 | 96 | 96 | |
| **COMPRESSORS** | | | | | | | | | |
| 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 | 451<br>451 | 398<br>333<br>333 | 398<br>398<br>333 | 398<br>398<br>398 | 398<br>398<br>451 | 451<br>451<br>398 | 451<br>451<br>451 | |
| Starting method | --- | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | |

*Fluid: Water*
*Allowed voltage tolerance ± 10%. Voltage unbalance between phases must be within ± 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) x 1,1.*

## EWAD C-SR

| MODEL | | 620 | 720 | 790 | 880 | 920 | C10 | C11 | C12 |
|---|---|---|---|---|---|---|---|---|---|
| **POWER SUPPLY** | | | | | | | | | |
| 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% |
| **UNIT** | | | | | | | | | |
| Maximum starting current | A | 597 | 642 | 642 | 906 | 953 | 1007 | 1010 | 1055 |
| Nominal running current cooling | A | 371 | 450 | 518 | 548 | 609 | 654 | 694 | 755 |
| Mximum running current | A | 462 | 531 | 575 | 639 | 698 | 767 | 837 | 895 |
| Maximum current for wires sizing | A | 506 | 582 | 630 | 700 | 765 | 841 | 916 | 980 |
| **FANS** | | | | | | | | | |
| Nominal running current cooling | A | 26 | 26 | 26 | 31 | 31 | 36 | 42 | 47 |
| **COMPRESSORS** | | | | | | | | | |
| 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<br>218 | 231<br>274 | 274<br>274 | 274<br>333 | 333<br>333 | 333<br>398 | 398<br>398 | 398<br>451 |
| Starting method | --- | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ |

## EWAD C-SR

| MODEL | | H14 | C13 | C14 | C15 | C16 | C17 | C18 | C19 |
|---|---|---|---|---|---|---|---|---|---|
| **POWER SUPPLY** | | | | | | | | | |
| 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% |
| **UNIT** | | | | | | | | | |
| Maximum starting current | A | 1068 | 1241 | 1292 | 1344 | 1346 | 1389 | 1434 | 1447 |
| Nominal running current cooling | A | 811 | 857 | 954 | 1002 | 1075 | 1158 | 1179 | 1238 |
| Mximum running current | A | 949 | 1052 | 1116 | 1186 | 1250 | 1303 | 1362 | 1415 |
| Maximum current for wires sizing | A | 1039 | 1152 | 1223 | 1299 | 1369 | 1428 | 1492 | 1550 |
| **FANS** | | | | | | | | | |
| Nominal running current cooling | A | 47 | 52 | 52 | 57 | 57 | 57 | 62 | 62 |
| **COMPRESSORS** | | | | | | | | | |
| 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 | 451<br>451 | 333<br>333<br>333 | 398<br>333<br>333 | 398<br>398<br>333 | 398<br>398<br>398 | 398<br>398<br>451 | 451<br>451<br>398 | 451<br>451<br>451 |
| Starting method | --- | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ |

*Fluid: Water*
*Allowed voltage tolerance ± 10%. Voltage unbalance between phases must be within ± 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) x 1,1.*

## EWAD C-XS

| MODEL | | 760 | 830 | 890 | 990 | C10 | C11 | C12 | C13 |
|---|---|---|---|---|---|---|---|---|---|
| **POWER SUPPLY** | | | | | | | | | |
| 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% |
| **UNIT** | | | | | | | | | |
| 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 |
| Mximum 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 |
| **FANS** | | | | | | | | | |
| Nominal running current cooling | A | 48 | 56 | 56 | 64 | 64 | 80 | 80 | 80 |
| **COMPRESSORS** | | | | | | | | | |
| 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<br>231 | 231<br>274 | 274<br>274 | 274<br>333 | 333<br>333 | 333<br>398 | 398<br>398 | 398<br>398 |
| Starting method | --- | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ |

## EWAD C-XS

| MODEL | | H14 | H15 | C16 | C17 | C18 | C19 | C20 | C21 |
|---|---|---|---|---|---|---|---|---|---|
| **POWER SUPPLY** | | | | | | | | | |
| 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% |
| **UNIT** | | | | | | | | | |
| Maximum starting current | A | 1072 | 1085 | 1268 | 1328 | 1387 | 1387 | 1430 | 1472 |
| Nominal running current cooling | A | 731 | 778 | 835 | 885 | 934 | 984 | 1018 | 1059 |
| Mximum running current | A | 929 | 982 | 1096 | 1168 | 1241 | 1313 | 1366 | 1419 |
| Maximum current for wires sizing | A | 1013 | 1072 | 1196 | 1275 | 1354 | 1432 | 1491 | 1549 |
| **FANS** | | | | | | | | | |
| Nominal running current cooling | A | 80 | 80 | 96 | 104 | 112 | 120 | 120 | 120 |
| **COMPRESSORS** | | | | | | | | | |
| 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 | 398<br>451 | 451<br>451 | 333<br>333<br>333 | 333<br>333<br>398 | 398<br>398<br>333 | 398<br>398<br>398 | 398<br>398<br>451 | 451<br>451<br>398 |
| Starting method | --- | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ |

## EWAD C-XS

| MODEL | | C22 |
|---|---|---|
| **POWER SUPPLY** | | |
| Phases | Nr | 3 |
| Frequency | Hz | 50 |
| Voltage | V | 400 |
| Voltage tolerance Minimum | % | -10% |
| Voltage tolerance Maximum | % | +10% |
| **UNIT** | | |
| Maximum starting current | A | 1486 |
| Nominal running current cooling | A | 1100 |
| Mximum running current | A | 1473 |
| Maximum current for wires sizing | A | 1608 |
| **FANS** | | |
| Nominal running current cooling | A | 120 |
| **COMPRESSORS** | | |
| Phases | Nr | 3 |
| Voltage | V | 400 |
| Voltage tolerance Minimum | % | -10% |
| Voltage tolerance Maximum | % | +10% |
| Maximum running current | A | 451<br>451<br>451 |
| Starting method | --- | Y-Δ |

*Fluid: Water*
*Allowed voltage tolerance ± 10%. Voltage unbalance between phases must be within ± 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) x 1,1.*

## EWAD C-XL

| MODEL | | 760 | 830 | 890 | 990 | C10 | C11 | C12 | C13 |
|---|---|---|---|---|---|---|---|---|---|
| **POWER SUPPLY** | | | | | | | | | |
| 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% |
| **UNIT** | | | | | | | | | |
| 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 |
| Mximum 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 |
| **FANS** | | | | | | | | | |
| Nominal running current cooling | A | 48 | 56 | 56 | 64 | 64 | 80 | 80 | 80 |
| **COMPRESSORS** | | | | | | | | | |
| 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<br>231 | 231<br>274 | 274<br>274 | 274<br>333 | 333<br>333 | 333<br>398 | 398<br>398 | 398<br>398 |
| Starting method | --- | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ |

## EWAD C-XL

| MODEL | | H14 | H15 | C16 | C17 | C18 | C19 | C20 | C21 |
|---|---|---|---|---|---|---|---|---|---|
| **POWER SUPPLY** | | | | | | | | | |
| 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% |
| **UNIT** | | | | | | | | | |
| Maximum starting current | A | 1072 | 1085 | 1268 | 1328 | 1387 | 1387 | 1430 | 1472 |
| Nominal running current cooling | A | 731 | 778 | 835 | 885 | 934 | 984 | 1018 | 1059 |
| Mximum running current | A | 929 | 982 | 1096 | 1168 | 1241 | 1313 | 1366 | 1419 |
| Maximum current for wires sizing | A | 1013 | 1072 | 1196 | 1275 | 1354 | 1432 | 1491 | 1549 |
| **FANS** | | | | | | | | | |
| Nominal running current cooling | A | 80 | 80 | 96 | 104 | 112 | 120 | 120 | 120 |
| **COMPRESSORS** | | | | | | | | | |
| 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 | 398<br>451 | 451<br>451 | 333<br>333<br>333 | 333<br>333<br>398 | 398<br>398<br>333 | 398<br>398<br>398 | 398<br>398<br>451 | 451<br>451<br>398 |
| Starting method | --- | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ |

## EWAD C-XL

| MODEL | | C22 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **POWER SUPPLY** | | | | | | | | | |
| Phases | Nr | 3 | | | | | | | |
| Frequency | Hz | 50 | | | | | | | |
| Voltage | V | 400 | | | | | | | |
| Voltage tolerance Minimum | % | -10% | | | | | | | |
| Voltage tolerance Maximum | % | +10% | | | | | | | |
| **UNIT** | | | | | | | | | |
| Maximum starting current | A | 1486 | | | | | | | |
| Nominal running current cooling | A | 1100 | | | | | | | |
| Mximum running current | A | 1473 | | | | | | | |
| Maximum current for wires sizing | A | 1608 | | | | | | | |
| **FANS** | | | | | | | | | |
| Nominal running current cooling | A | 120 | | | | | | | |
| **COMPRESSORS** | | | | | | | | | |
| Phases | Nr | 3 | | | | | | | |
| Voltage | V | 400 | | | | | | | |
| Voltage tolerance Minimum | % | -10% | | | | | | | |
| Voltage tolerance Maximum | % | +10% | | | | | | | |
| Maximum running current | A | 451<br>451<br>451 | | | | | | | |
| Starting method | --- | Y-Δ | | | | | | | |

*Fluid: Water*
*Allowed voltage tolerance ± 10%. Voltage unbalance between phases must be within ± 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) x 1,1.*

## EWAD C-XR

| MODEL | | 740 | 810 | 870 | 970 | C10 | C11 | C12 | C13 |
|---|---|---|---|---|---|---|---|---|---|
| **POWER SUPPLY** | | | | | | | | | |
| 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% |
| **UNIT** | | | | | | | | | |
| 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 |
| Mximum 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 |
| **FANS** | | | | | | | | | |
| Nominal running current cooling | A | 31 | 36 | 36 | 42 | 42 | 52 | 52 | 52 |
| **COMPRESSORS** | | | | | | | | | |
| 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<br>231 | 231<br>274 | 274<br>274 | 274<br>333 | 333<br>333 | 333<br>398 | 398<br>398 | 398<br>398 |
| Starting method | --- | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ |

## EWAD C-XR

| MODEL | | H14 | H15 | C16 | C17 | C18 | C19 | C20 | C21 |
|---|---|---|---|---|---|---|---|---|---|
| **POWER SUPPLY** | | | | | | | | | |
| 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% |
| **UNIT** | | | | | | | | | |
| Maximum starting current | A | 1058 | 1071 | 1246 | 1303 | 1359 | 1359 | 1402 | 1444 |
| Nominal running current cooling | A | 753 | 807 | 854 | 903 | 951 | 1000 | 1040 | 1087 |
| Mximum running current | A | 901 | 954 | 1063 | 1132 | 1201 | 1271 | 1324 | 1377 |
| Maximum current for wires sizing | A | 985 | 1044 | 1163 | 1238 | 1314 | 1390 | 1449 | 1507 |
| **FANS** | | | | | | | | | |
| Nominal running current cooling | A | 52 | 52 | 62 | 68 | 73 | 78 | 78 | 78 |
| **COMPRESSORS** | | | | | | | | | |
| 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 | 398<br>451 | 451<br>451 | 333<br>333<br>333 | 333<br>333<br>398 | 398<br>398<br>333 | 398<br>398<br>398 | 398<br>398<br>451 | 451<br>451<br>398 |
| Starting method | --- | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ |

## EWAD C-XR

| MODEL | | C22 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **POWER SUPPLY** | | | | | | | | | |
| Phases | Nr | 3 | | | | | | | |
| Frequency | Hz | 50 | | | | | | | |
| Voltage | V | 400 | | | | | | | |
| Voltage tolerance Minimum | % | -10% | | | | | | | |
| Voltage tolerance Maximum | % | +10% | | | | | | | |
| **UNIT** | | | | | | | | | |
| Maximum starting current | A | 1458 | | | | | | | |
| Nominal running current cooling | A | 1136 | | | | | | | |
| Mximum running current | A | 1431 | | | | | | | |
| Maximum current for wires sizing | A | 1566 | | | | | | | |
| **FANS** | | | | | | | | | |
| Nominal running current cooling | A | 78 | | | | | | | |
| **COMPRESSORS** | | | | | | | | | |
| Phases | Nr | 3 | | | | | | | |
| Voltage | V | 400 | | | | | | | |
| Voltage tolerance Minimum | % | -10% | | | | | | | |
| Voltage tolerance Maximum | % | +10% | | | | | | | |
| Maximum running current | A | 451<br>451<br>451 | | | | | | | |
| Starting method | --- | Y-Δ | | | | | | | |

*Fluid: Water*
*Allowed voltage tolerance ± 10%. Voltage unbalance between phases must be within ± 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) x 1,1.*

## EWAD C-PS

| MODEL | | 820 | 890 | 980 | C11 | C12 | C13 | C14 | C15 |
|---|---|---|---|---|---|---|---|---|---|
| **POWER SUPPLY** | | | | | | | | | |
| 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% |
| **UNIT** | | | | | | | | | |
| Maximum starting current | A | 630 | 665 | 665 | 702 | 978 | 1037 | 1037 | 1080 |
| Nominal running current cooling | A | 386 | 424 | 465 | 511 | 555 | 614 | 671 | 711 |
| Mximum running current | A | 534 | 577 | 621 | 670 | 747 | 819 | 891 | 945 |
| Maximum current for wires sizing | A | 580 | 628 | 676 | 729 | 813 | 892 | 971 | 1029 |
| **FANS** | | | | | | | | | |
| Nominal running current cooling | A | 72 | 72 | 72 | 80 | 80 | 88 | 96 | 96 |
| **COMPRESSORS** | | | | | | | | | |
| 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<br>231 | 231<br>274 | 274<br>274 | 274<br>316 | 333<br>333 | 333<br>398 | 398<br>398 | 398<br>451 |
| Starting method | --- | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ |

## EWAD C-PS

| MODEL | | C16 |
|---|---|---|
| **POWER SUPPLY** | | |
| Phases | Nr | 3 |
| Frequency | Hz | 50 |
| Voltage | V | 400 |
| Voltage tolerance Minimum | % | -10% |
| Voltage tolerance Maximum | % | +10% |
| **UNIT** | | |
| Maximum starting current | A | 1093 |
| Nominal running current cooling | A | 752 |
| Mximum running current | A | 998 |
| Maximum current for wires sizing | A | 1088 |
| **FANS** | | |
| Nominal running current cooling | A | 96 |
| **COMPRESSORS** | | |
| Phases | Nr | 3 |
| Voltage | V | 400 |
| Voltage tolerance Minimum | % | -10% |
| Voltage tolerance Maximum | % | +10% |
| Maximum running current | A | 451<br>451 |
| Starting method | --- | Y-Δ |

*Fluid: Water*
*Allowed voltage tolerance ± 10%. Voltage unbalance between phases must be within ± 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) x 1,1.*

## EWAD C-PL

| MODEL | | 820 | 890 | 980 | C11 | C12 | C13 | C14 | C15 |
|---|---|---|---|---|---|---|---|---|---|
| **POWER SUPPLY** | | | | | | | | | |
| 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% |
| **UNIT** | | | | | | | | | |
| Maximum starting current | A | 630 | 665 | 665 | 702 | 978 | 1037 | 1037 | 1080 |
| Nominal running current cooling | A | 386 | 424 | 465 | 511 | 555 | 614 | 671 | 711 |
| Mximum running current | A | 534 | 577 | 621 | 670 | 747 | 819 | 891 | 945 |
| Maximum current for wires sizing | A | 580 | 628 | 676 | 729 | 813 | 892 | 971 | 1029 |
| **FANS** | | | | | | | | | |
| Nominal running current cooling | A | 72 | 72 | 72 | 80 | 80 | 88 | 96 | 96 |
| **COMPRESSORS** | | | | | | | | | |
| 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<br>231 | 231<br>274 | 274<br>274 | 274<br>316 | 333<br>333 | 333<br>398 | 398<br>398 | 398<br>451 |
| Starting method | --- | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ |

## EWAD C-PL

| MODEL | | C16 |
|---|---|---|
| **POWER SUPPLY** | | |
| Phases | Nr | 3 |
| Frequency | Hz | 50 |
| Voltage | V | 400 |
| Voltage tolerance Minimum | % | -10% |
| Voltage tolerance Maximum | % | +10% |
| **UNIT** | | |
| Maximum starting current | A | 1093 |
| Nominal running current cooling | A | 752 |
| Mximum running current | A | 998 |
| Maximum current for wires sizing | A | 1088 |
| **FANS** | | |
| Nominal running current cooling | A | 96 |
| **COMPRESSORS** | | |
| Phases | Nr | 3 |
| Voltage | V | 400 |
| Voltage tolerance Minimum | % | -10% |
| Voltage tolerance Maximum | % | +10% |
| Maximum running current | A | 451<br>451 |
| Starting method | --- | Y-Δ |

*Fluid: Water*
*Allowed voltage tolerance ± 10%. Voltage unbalance between phases must be within ± 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) x 1,1.*

## EWAD C-PR

| MODEL | | 810 | 880 | 960 | C10 | C11 | C13 | C14 | C15 |
|---|---|---|---|---|---|---|---|---|---|
| **POWER SUPPLY** | | | | | | | | | |
| 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% |
| **UNIT** | | | | | | | | | |
| Maximum starting current | A | 618 | 653 | 653 | 917 | 964 | 1020 | 1020 | 1063 |
| Nominal running current cooling | A | 375 | 416 | 461 | 506 | 555 | 614 | 671 | 717 |
| Mximum running current | A | 509 | 552 | 596 | 660 | 719 | 788 | 858 | 911 |
| Maximum current for wires sizing | A | 555 | 603 | 651 | 721 | 785 | 861 | 937 | 996 |
| **FANS** | | | | | | | | | |
| Nominal running current cooling | A | 47 | 47 | 47 | 52 | 52 | 57 | 62 | 62 |
| **COMPRESSORS** | | | | | | | | | |
| 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<br>231 | 231<br>274 | 274<br>274 | 274<br>333 | 333<br>333 | 333<br>398 | 398<br>398 | 398<br>451 |
| Starting method | --- | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ | Y-Δ |

## EWAD C-PR

| MODEL | | C16 |
|---|---|---|
| **POWER SUPPLY** | | |
| Phases | Nr | 3 |
| Frequency | Hz | 50 |
| Voltage | V | 400 |
| Voltage tolerance Minimum | % | -10% |
| Voltage tolerance Maximum | % | +10% |
| **UNIT** | | |
| Maximum starting current | A | 1076 |
| Nominal running current cooling | A | 764 |
| Mximum running current | A | 964 |
| Maximum current for wires sizing | A | 1054 |
| **FANS** | | |
| Nominal running current cooling | A | 62 |
| **COMPRESSORS** | | |
| Phases | Nr | 3 |
| Voltage | V | 400 |
| Voltage tolerance Minimum | % | -10% |
| Voltage tolerance Maximum | % | +10% |
| Maximum running current | A | 451<br>451 |
| Starting method | --- | Y-Δ |

*Fluid: Water*
*Allowed voltage tolerance ± 10%. Voltage unbalance between phases must be within ± 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) x 1,1.*

## EWAD C-SS

| | Sound pressure level at 1 m from the unit (rif. 2 x 10-5 Pa) | | | | | | | | Power |
|---|---|---|---|---|---|---|---|---|---|
| MODEL | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | dB(A) | dB(A) |
| 650 | 73.9 | 76.0 | 78.8 | 78.0 | 73.9 | 69.4 | 59.8 | 50.7 | 79.0 | 99.5 |
| 740 | 74.4 | 76.5 | 79.3 | 78.5 | 74.4 | 69.9 | 60.3 | 51.2 | 79.5 | 100.0 |
| 830 | 74.4 | 76.5 | 79.3 | 78.5 | 74.4 | 69.9 | 60.3 | 51.2 | 79.5 | 100.0 |
| 910 | 75.3 | 77.4 | 80.2 | 79.4 | 75.3 | 70.8 | 61.2 | 52.1 | 80.4 | 100.9 |
| 970 | 75.5 | 77.6 | 80.4 | 79.6 | 75.5 | 71.0 | 61.4 | 52.3 | 80.6 | 101.1 |
| C11 | 75.5 | 77.6 | 80.4 | 79.6 | 75.5 | 71.0 | 61.4 | 52.3 | 80.6 | 101.5 |
| C12 | 75.5 | 77.6 | 80.4 | 79.6 | 75.5 | 71.0 | 61.4 | 52.3 | 80.6 | 101.7 |
| C13 | 75.6 | 77.7 | 80.5 | 79.7 | 75.6 | 71.1 | 61.5 | 52.4 | 80.7 | 101.9 |
| H14 | 75.6 | 77.7 | 80.5 | 79.7 | 75.6 | 71.1 | 61.5 | 52.4 | 80.7 | 101.9 |
| C15 | 76.0 | 78.1 | 80.9 | 80.1 | 76.0 | 71.5 | 61.9 | 52.8 | 81.1 | 103.0 |
| C16 | 76.0 | 78.1 | 80.9 | 80.1 | 76.0 | 71.5 | 61.9 | 52.8 | 81.1 | 103.2 |
| C17 | 76.1 | 78.2 | 81.0 | 80.2 | 76.1 | 71.6 | 62.0 | 52.9 | 81.2 | 103.3 |
| C18 | 76.4 | 78.5 | 81.3 | 80.5 | 76.4 | 71.9 | 62.3 | 53.2 | 81.5 | 103.5 |
| C19 | 76.8 | 78.9 | 81.7 | 80.9 | 76.8 | 72.3 | 62.7 | 53.6 | 81.9 | 103.7 |
| C20 | 76.8 | 78.9 | 81.7 | 80.9 | 76.8 | 72.3 | 62.7 | 53.6 | 81.9 | 103.7 |

## EWAD C-SL

| | Sound pressure level at 1 m from the unit (rif. 2 x 10-5 Pa) | | | | | | | | Power |
|---|---|---|---|---|---|---|---|---|---|
| MODEL | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | dB(A) | dB(A) |
| 650 | 70.4 | 72.5 | 75.3 | 74.5 | 70.4 | 65.9 | 56.3 | 47.2 | 75.5 | 96.0 |
| 740 | 70.5 | 72.6 | 75.4 | 74.6 | 70.5 | 66.0 | 56.4 | 47.3 | 75.6 | 96.1 |
| 830 | 70.5 | 72.6 | 75.4 | 74.6 | 70.5 | 66.0 | 56.4 | 47.3 | 75.6 | 96.1 |
| 910 | 71.4 | 73.5 | 76.3 | 75.5 | 71.4 | 66.9 | 57.3 | 48.2 | 76.5 | 97.5 |
| 970 | 71.5 | 73.6 | 76.4 | 75.6 | 71.5 | 67.0 | 57.4 | 48.3 | 76.6 | 97.1 |
| C11 | 71.7 | 73.8 | 76.6 | 75.8 | 71.7 | 67.2 | 57.6 | 48.5 | 76.8 | 97.6 |
| C12 | 71.8 | 73.9 | 76.7 | 75.9 | 71.8 | 67.3 | 57.7 | 48.6 | 76.9 | 98.1 |
| C13 | 71.9 | 74.0 | 76.8 | 76.0 | 71.9 | 67.4 | 57.8 | 48.7 | 77.0 | 98.2 |
| H14 | 71.9 | 74.0 | 76.8 | 76.0 | 71.9 | 67.4 | 57.8 | 48.7 | 77.0 | 98.2 |
| C15 | 72.1 | 74.2 | 77.0 | 76.2 | 72.1 | 67.6 | 58.0 | 48.9 | 77.2 | 99.1 |
| C16 | 72.2 | 74.3 | 77.1 | 76.3 | 72.2 | 67.7 | 58.1 | 49.0 | 77.3 | 99.5 |
| C17 | 72.3 | 74.4 | 77.2 | 76.4 | 72.3 | 67.8 | 58.2 | 49.1 | 77.4 | 99.5 |
| C18 | 72.8 | 74.9 | 77.7 | 76.9 | 72.8 | 68.3 | 58.7 | 49.6 | 77.9 | 99.9 |
| C19 | 72.9 | 75.0 | 77.8 | 77.0 | 72.9 | 68.4 | 58.8 | 49.7 | 78.0 | 101.0 |
| C20 | 72.9 | 75.0 | 77.8 | 77.0 | 72.9 | 68.4 | 58.8 | 49.7 | 78.0 | 101.0 |

*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

| | Sound pressure level at 1 m from the unit (rif. 2 x 10-5 Pa) | | | | | | | | Power |
|---|---|---|---|---|---|---|---|---|---|
| MODEL | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | dB(A) | dB(A) |
| 620 | 67.6 | 60.8 | 67.9 | 73.1 | 60.5 | 56.9 | 48.6 | 36.0 | 71.0 | 91.5 |
| 720 | 68.1 | 61.3 | 68.4 | 73.6 | 61.0 | 57.4 | 49.1 | 36.5 | 71.5 | 92.0 |
| 790 | 68.1 | 61.3 | 68.4 | 73.6 | 61.0 | 57.4 | 49.1 | 36.5 | 71.5 | 92.0 |
| 880 | 68.6 | 61.8 | 68.9 | 74.1 | 61.5 | 57.9 | 49.6 | 37.0 | 72.0 | 92.5 |
| 920 | 69.1 | 62.3 | 69.4 | 74.6 | 62.0 | 58.4 | 50.1 | 37.5 | 72.5 | 93.0 |
| C10 | 69.2 | 62.4 | 69.5 | 74.7 | 62.1 | 58.5 | 50.2 | 37.6 | 72.6 | 93.5 |
| C11 | 69.3 | 62.5 | 69.6 | 74.8 | 62.2 | 58.6 | 50.3 | 37.7 | 72.7 | 93.8 |
| C12 | 69.4 | 62.6 | 69.7 | 74.9 | 62.3 | 58.7 | 50.4 | 37.8 | 72.9 | 94.0 |
| H14 | 69.4 | 62.6 | 69.7 | 74.9 | 62.3 | 58.7 | 50.4 | 37.8 | 72.9 | 94.0 |
| C13 | 69.5 | 62.7 | 69.8 | 75.0 | 62.4 | 58.8 | 50.5 | 37.9 | 72.9 | 94.8 |
| C14 | 69.6 | 62.8 | 69.9 | 75.1 | 62.5 | 58.9 | 50.6 | 38.0 | 73.0 | 94.9 |
| C15 | 69.6 | 62.8 | 69.9 | 75.1 | 62.5 | 58.9 | 50.6 | 38.0 | 73.0 | 95.1 |
| C16 | 69.7 | 62.9 | 70.0 | 75.2 | 62.6 | 59.0 | 50.7 | 38.1 | 73.1 | 95.2 |
| C17 | 70.2 | 63.4 | 70.5 | 75.7 | 63.1 | 59.5 | 51.2 | 38.6 | 73.6 | 95.7 |
| C18 | 70.3 | 63.5 | 70.6 | 75.8 | 63.2 | 59.6 | 51.3 | 38.7 | 73.7 | 95.8 |
| C19 | 70.3 | 63.5 | 70.6 | 75.8 | 63.2 | 59.6 | 51.3 | 38.7 | 73.7 | 95.8 |

## EWAD C-XS

| | Sound pressure level at 1 m from the unit (rif. 2 x 10-5 Pa) | | | | | | | | Power |
|---|---|---|---|---|---|---|---|---|---|
| MODEL | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | dB(A) | dB(A) |
| 760 | 74.6 | 76.7 | 79.5 | 78.7 | 74.6 | 70.1 | 60.5 | 51.4 | 79.7 | 100.2 |
| 830 | 74.6 | 76.7 | 79.5 | 78.7 | 74.6 | 70.1 | 60.5 | 51.4 | 79.7 | 100.5 |
| 890 | 74.6 | 76.7 | 79.5 | 78.7 | 74.6 | 70.1 | 60.5 | 51.4 | 79.7 | 100.5 |
| 990 | 75.1 | 77.2 | 80.0 | 79.2 | 75.1 | 70.6 | 61.0 | 51.9 | 80.2 | 101.4 |
| C10 | 75.6 | 77.7 | 80.5 | 79.7 | 75.6 | 71.1 | 61.5 | 52.4 | 80.7 | 101.9 |
| C11 | 75.2 | 77.3 | 80.1 | 79.3 | 75.2 | 70.7 | 61.1 | 52.0 | 80.3 | 102.4 |
| C12 | 75.3 | 77.4 | 80.2 | 79.4 | 75.3 | 70.8 | 61.2 | 52.1 | 80.4 | 102.5 |
| C13 | 75.3 | 77.4 | 80.2 | 79.4 | 75.3 | 70.8 | 61.2 | 52.1 | 80.4 | 102.5 |
| H14 | 75.3 | 77.4 | 80.2 | 79.4 | 75.3 | 70.8 | 61.2 | 52.1 | 80.4 | 102.5 |
| H15 | 75.3 | 77.4 | 80.2 | 79.4 | 75.3 | 70.8 | 61.2 | 52.1 | 80.4 | 102.5 |
| C16 | 75.8 | 77.9 | 80.7 | 79.9 | 75.8 | 71.3 | 61.7 | 52.6 | 80.9 | 103.2 |
| C17 | 75.7 | 77.8 | 80.6 | 79.8 | 75.7 | 71.2 | 61.6 | 52.5 | 80.8 | 103.5 |
| C18 | 75.9 | 78.0 | 80.8 | 80.0 | 75.9 | 71.4 | 61.8 | 52.7 | 81.0 | 103.7 |
| C19 | 75.9 | 78.0 | 80.8 | 80.0 | 75.9 | 71.4 | 61.8 | 52.7 | 81.0 | 103.9 |
| C20 | 75.9 | 78.0 | 80.8 | 80.0 | 75.9 | 71.4 | 61.8 | 52.7 | 81.0 | 103.9 |
| C21 | 75.9 | 78.0 | 80.8 | 80.0 | 75.9 | 71.4 | 61.8 | 52.7 | 81.0 | 103.9 |
| C22 | 75.9 | 78.0 | 80.8 | 80.0 | 75.9 | 71.4 | 61.8 | 52.7 | 81.0 | 103.9 |

## EWAD C-XL

| | Sound pressure level at 1 m from the unit (rif. 2 x 10-5 Pa) | | | | | | | | Power |
|---|---|---|---|---|---|---|---|---|---|
| MODEL | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | dB(A) | dB(A) |
| **760** | 71.2 | 73.3 | 76.1 | 75.3 | 71.2 | 66.7 | 57.1 | 48.0 | **76.3** | **96.8** |
| **830** | 71.4 | 73.5 | 76.3 | 75.5 | 71.4 | 66.9 | 57.3 | 48.2 | **76.5** | **97.4** |
| **890** | 71.4 | 73.5 | 76.3 | 75.5 | 71.4 | 66.9 | 57.3 | 48.2 | **76.5** | **97.4** |
| **990** | 71.8 | 73.9 | 76.7 | 75.9 | 71.8 | 67.3 | 57.7 | 48.6 | **76.9** | **98.0** |
| **C10** | 72.0 | 74.1 | 76.9 | 76.1 | 72.0 | 67.5 | 57.9 | 48.8 | **77.1** | **98.2** |
| **C11** | 71.6 | 73.7 | 76.5 | 75.7 | 71.6 | 67.1 | 57.5 | 48.4 | **76.7** | **98.8** |
| **C12** | 71.7 | 73.8 | 76.6 | 75.8 | 71.7 | 67.2 | 57.6 | 48.5 | **76.8** | **98.9** |
| **C13** | 71.7 | 73.8 | 76.6 | 75.8 | 71.7 | 67.2 | 57.6 | 48.5 | **76.8** | **98.9** |
| **H14** | 71.7 | 73.8 | 76.6 | 75.8 | 71.7 | 67.2 | 57.6 | 48.5 | **76.8** | **98.9** |
| **H15** | 71.7 | 73.8 | 76.6 | 75.8 | 71.7 | 67.2 | 57.6 | 48.5 | **76.8** | **98.9** |
| **C16** | 72.2 | 74.3 | 77.1 | 76.3 | 72.2 | 67.7 | 58.1 | 49.0 | **77.3** | **99.6** |
| **C17** | 72.3 | 74.4 | 77.2 | 76.4 | 72.3 | 67.8 | 58.2 | 49.1 | **77.4** | **100.0** |
| **C18** | 72.4 | 74.5 | 77.3 | 76.5 | 72.4 | 67.9 | 58.3 | 49.2 | **77.5** | **100.2** |
| **C19** | 72.4 | 74.5 | 77.3 | 76.5 | 72.4 | 67.9 | 58.3 | 49.2 | **77.5** | **100.4** |
| **C20** | 72.4 | 74.5 | 77.3 | 76.5 | 72.4 | 67.9 | 58.3 | 49.2 | **77.5** | **100.4** |
| **C21** | 72.4 | 74.5 | 77.3 | 76.5 | 72.4 | 67.9 | 58.3 | 49.2 | **77.5** | **100.4** |
| **C22** | 72.4 | 74.5 | 77.3 | 76.5 | 72.4 | 67.9 | 58.3 | 49.2 | **77.5** | **100.4** |

*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

| | Sound pressure level at 1 m from the unit (rif. 2 x 10-5 Pa) | | | | | | | | Power |
|---|---|---|---|---|---|---|---|---|---|
| MODEL | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | dB(A) | dB(A) |
| **740** | 68.1 | 61.3 | 68.4 | 73.6 | 61.0 | 57.4 | 49.1 | 36.5 | **71.5** | **92.0** |
| **810** | 68.1 | 61.3 | 68.4 | 73.6 | 61.0 | 57.4 | 49.1 | 36.5 | **71.5** | **92.3** |
| **870** | 68.1 | 61.3 | 68.4 | 73.6 | 61.0 | 57.4 | 49.1 | 36.5 | **71.5** | **92.3** |
| **970** | 68.9 | 62.1 | 69.2 | 74.4 | 61.8 | 58.2 | 49.9 | 37.3 | **72.3** | **93.5** |
| **C10** | 69.1 | 62.3 | 69.4 | 74.6 | 62.0 | 58.4 | 50.1 | 37.5 | **72.5** | **93.7** |
| **C11** | 68.8 | 62.0 | 69.1 | 74.3 | 61.7 | 58.1 | 49.8 | 37.2 | **72.2** | **94.3** |
| **C12** | 68.9 | 62.1 | 69.2 | 74.4 | 61.8 | 58.2 | 49.9 | 37.3 | **72.3** | **94.5** |
| **C13** | 68.9 | 62.1 | 69.2 | 74.4 | 61.8 | 58.2 | 49.9 | 37.3 | **72.3** | **94.5** |
| **H14** | 69.1 | 62.3 | 69.4 | 74.6 | 62.0 | 58.4 | 50.1 | 37.5 | **72.5** | **94.6** |
| **H15** | 69.1 | 62.3 | 69.4 | 74.6 | 62.0 | 58.4 | 50.1 | 37.5 | **72.5** | **94.6** |
| **C16** | 69.5 | 62.7 | 69.8 | 75.0 | 62.4 | 58.8 | 50.5 | 37.9 | **72.9** | **95.3** |
| **C17** | 69.5 | 62.7 | 69.8 | 75.0 | 62.4 | 58.8 | 50.5 | 37.9 | **72.9** | **95.6** |
| **C18** | 69.6 | 62.8 | 69.9 | 75.1 | 62.5 | 58.9 | 50.6 | 38.0 | **73.0** | **95.7** |
| **C19** | 69.6 | 62.8 | 69.9 | 75.1 | 62.5 | 58.9 | 50.6 | 38.0 | **73.0** | **95.9** |
| **C20** | 69.9 | 63.1 | 70.2 | 75.4 | 62.8 | 59.2 | 50.9 | 38.3 | **73.3** | **96.2** |
| **C21** | 70.3 | 63.5 | 70.6 | 75.8 | 63.2 | 59.6 | 51.3 | 38.7 | **73.7** | **96.6** |
| **C22** | 70.3 | 63.5 | 70.6 | 75.8 | 63.2 | 59.6 | 51.3 | 38.7 | **73.7** | **96.6** |

## EWAD C-PS

| | Sound pressure level at 1 m from the unit (rif. 2 x 10-5 Pa) | | | | | | | | Power |
|---|---|---|---|---|---|---|---|---|---|
| MODEL | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | dB(A) | dB(A) |
| **820** | 74.4 | 76.5 | 79.3 | 78.5 | 74.4 | 69.9 | 60.3 | 51.2 | **79.5** | **101.0** |
| **890** | 74.4 | 76.5 | 79.3 | 78.5 | 74.4 | 69.9 | 60.3 | 51.2 | **79.5** | **101.0** |
| **980** | 74.4 | 76.5 | 79.3 | 78.5 | 74.4 | 69.9 | 60.3 | 51.2 | **79.5** | **101.0** |
| **C11** | 74.9 | 77.0 | 79.8 | 79.0 | 74.9 | 70.4 | 60.8 | 51.7 | **80.0** | **101.8** |
| **C12** | 75.4 | 77.5 | 80.3 | 79.5 | 75.4 | 70.9 | 61.3 | 52.2 | **80.5** | **102.3** |
| **C13** | 75.3 | 77.4 | 80.2 | 79.4 | 75.3 | 70.8 | 61.2 | 52.1 | **80.4** | **102.6** |
| **C14** | 75.4 | 77.5 | 80.3 | 79.5 | 75.4 | 70.9 | 61.3 | 52.2 | **80.5** | **102.9** |
| **C15** | 75.7 | 77.8 | 80.6 | 79.8 | 75.7 | 71.2 | 61.6 | 52.5 | **80.8** | **103.2** |
| **C16** | 76.0 | 78.1 | 80.9 | 80.1 | 76.0 | 71.5 | 61.9 | 52.8 | **81.1** | **103.5** |

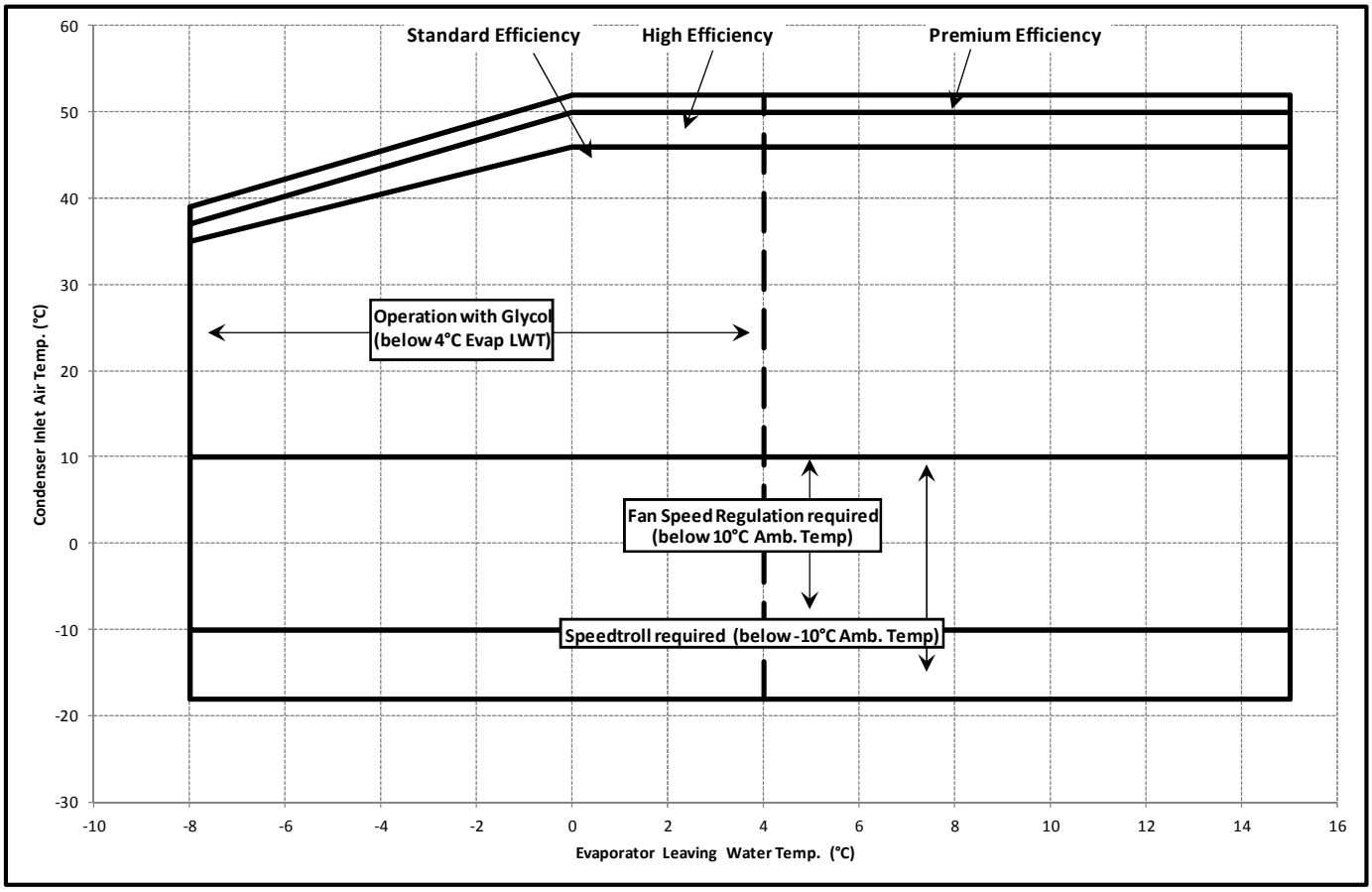
## EWAD C-PL

| | Sound pressure level at 1 m from the unit (rif. 2 x 10-5 Pa) | | | | | | | | Power |
|---|---|---|---|---|---|---|---|---|---|
| MODEL | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | dB(A) | dB(A) |
| **820** | 71.8 | 73.9 | 76.7 | 75.9 | 71.8 | 67.3 | 57.7 | 48.6 | **76.9** | **98.4** |
| **890** | 71.8 | 73.9 | 76.7 | 75.9 | 71.8 | 67.3 | 57.7 | 48.6 | **76.9** | **98.4** |
| **980** | 71.8 | 73.9 | 76.7 | 75.9 | 71.8 | 67.3 | 57.7 | 48.6 | **76.9** | **98.4** |
| **C11** | 71.9 | 74.0 | 76.8 | 76.0 | 71.9 | 67.4 | 57.8 | 48.7 | **77.0** | **98.8** |
| **C12** | 72.0 | 74.1 | 76.9 | 76.1 | 72.0 | 67.5 | 57.9 | 48.8 | **77.1** | **99.9** |
| **C13** | 72.0 | 74.1 | 76.9 | 76.1 | 72.0 | 67.5 | 57.9 | 48.8 | **77.1** | **99.3** |
| **C14** | 72.1 | 74.2 | 77.0 | 76.2 | 72.1 | 67.6 | 58.0 | 48.9 | **77.2** | **99.6** |
| **C15** | 72.4 | 74.5 | 77.3 | 76.5 | 72.4 | 67.9 | 58.3 | 49.2 | **77.5** | **99.9** |
| **C16** | 72.7 | 74.8 | 77.6 | 76.8 | 72.7 | 68.2 | 58.6 | 49.5 | **77.8** | **100.2** |

## EWAD C-PR

| | Sound pressure level at 1 m from the unit (rif. 2 x 10-5 Pa) | | | | | | | | Power |
|---|---|---|---|---|---|---|---|---|---|
| **MODEL** | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | **dB(A)** | **dB(A)** |
| **810** | 67.8 | 61.0 | 68.1 | 73.3 | 60.7 | 57.1 | 48.8 | 36.2 | **71.2** | **92.7** |
| **880** | 67.8 | 61.0 | 68.1 | 73.3 | 60.7 | 57.1 | 48.8 | 36.2 | **71.2** | **92.7** |
| **960** | 67.8 | 61.0 | 68.1 | 73.3 | 60.7 | 57.1 | 48.8 | 36.2 | **71.2** | **92.7** |
| **C10** | 68.3 | 61.5 | 68.6 | 73.8 | 61.2 | 57.6 | 49.3 | 36.7 | **71.7** | **93.4** |
| **C11** | 68.6 | 61.8 | 68.9 | 74.1 | 61.5 | 57.9 | 49.6 | 37.0 | **72.0** | **93.8** |
| **C13** | 68.6 | 61.8 | 68.9 | 74.1 | 61.5 | 57.9 | 49.6 | 37.0 | **72.0** | **94.1** |
| **C14** | 68.6 | 61.8 | 68.9 | 74.1 | 61.5 | 57.9 | 49.6 | 37.0 | **72.0** | **94.4** |
| **C15** | 68.9 | 62.1 | 69.2 | 74.4 | 61.8 | 58.2 | 49.9 | 37.3 | **72.3** | **94.7** |
| **C16** | 69.2 | 62.4 | 69.5 | 74.7 | 62.1 | 58.5 | 50.2 | 37.6 | **72.6** | **95.0** |

*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*




## 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 (liters) = ( 0.1595 x ΔT(°C) + 3.0825 ) x P(kW)

For 3 compressors unit
M (liters) = (0.0443 x ΔT(°C) + 1.6202) x P(kW)

where:

| | |
|---|---|
| M | minimum water content per unit expressed in litres |
| P | Cooling Capacity of the unit expressed in kW |
| ΔT | 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.

| Items (1) (6) | | | Cooling Water | | | Cooled Water | | Heated water (2) | | | | Tendency if out of criteria |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Circulating System | | Once Flow | | | Low temperature | | High temperature | | |
| | | | Circulating water | Supply water (4) | Flowing water | Circulating water [Below 20℃] | Supply water (4) | Circulating water [20℃ ~ 60℃] | Supply water (4) | Circulating water [60℃ ~ 80℃] | Supply water (4) | |
| Items to be controlled: | pH | at 25℃ | 6.5 ~ 8.2 | 6.0 ~ 8.0 | 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 | Corrosion + Scale |
| | Electrical conductivity | [mS/m] at 25℃ | Below 80 | Below 30 | Below 40 | Below 80 | Below 80 | Below 30 | Below 30 | Below 30 | Below 30 | Corrosion + Scale |
| | | (μS/cm) at 25℃ | (Below 800) | (Below 300) | (Below 400) | (Below 800) | (Below 800) | (Below 300) | (Below 300) | (Below 300) | (Below 300) | Corrosion + Scale |
| | Chloride ion | [mg$Cl^{2-}$/l] | Below 200 | Below 50 | Below 50 | Below 200 | Below 50 | Below 50 | Below 50 | Below 30 | Below 30 | Corrosion |
| | Sulfate ion | [mg$SO^{2-}_4$/l] | Below 200 | Below 50 | Below 50 | Below 200 | Below 50 | Below 50 | Below 50 | Below 30 | Below 30 | Corrosion |
| | M-alkalinity (pH4.8) | [mg$CaCO_3$/l] | Below 100 | Below 50 | Below 50 | Below 100 | Below 50 | Below 50 | Below 50 | Below 50 | Below 50 | Scale |
| | Total hardness | [mg$CaCO_3$/l] | Below 200 | Below 70 | Below 70 | Below 200 | Below 70 | Below 70 | Below 70 | Below 70 | Below 70 | Scale |
| | Calcium harness | [mg$CaCO_3$/l] | Below 150 | Below 50 | Below 50 | Below 50 | Below 50 | Below 50 | Below 50 | Below 50 | Below 50 | Scale |
| | Silca ion | [mg$SiO_2$/l] | Below 50 | Below 30 | Below 30 | Below 30 | Below 30 | Below 30 | Below 30 | Below 30 | Below 30 | Scale |
| | Oxygen | (mg O2 /l) | Below 1.0 | Below 1.0 | Below 1.0 | Below 1.0 | Below 1.0 | Below 1.0 | Below 1.0 | Below 1.0 | Below 1.0 | Corrosion |
| | Particole size | (mm) | Below 0.5 | Below 0.5 | Below 0.5 | Below 0.5 | Below 0.6 | Below 0.5 | Below 0.6 | Below 0.5 | Below 0.6 | Erosion |
| | Total dissolved solids | (mg / l) | Below 1000 | Below 1000 | Below 1000 | Below 1000 | Below 1001 | Below 1000 | Below 1001 | Below 1000 | Below 1001 | Erosion |
| | Ethykene, Propylene Glycol (weight conc.) | | Below 60% | Below 60% | --- | Below 60% | Below 60% | Below 60% | Below 60% | Below 60% | Below 60% | – |
| Items to be referred to: | Nitrate ion | (mg NO3- /l) | Below 100 | Below 100 | Below 100 | Below 100 | Below 101 | Below 100 | Below 101 | Below 100 | Below 101 | 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 | Below 1.0 | Below 1.0 | Scale |
| | Iron | [mgFe/l] | Below 1.0 | Below 0.3 | Below 1.0 | Below 1.0 | Below 0.3 | Below 1.0 | Below 0.3 | Below 1.0 | Below 0.3 | Corrosion + Scale |
| | Copper | [mgCu/l] | Below 0.3 | Below 0.1 | Below 1.0 | Below 1.0 | Below 1.0 | Below 1.0 | Below 0.1 | Below 1.0 | Below 0.1 | Corrosion |
| | Sulfite ion | [mg$S^{2-}$/l] | Not detectable | Not detectable | Not detectable | Not detectable | Not detectable | Not detectable | Not detectable | Not detectable | Not detectable | Corrosion |
| | Ammonium ion | [mg$NH^{+}_4$/l] | Below 1.0 | Below 0.1 | Below 1.0 | Below 1.0 | Below 0.1 | Below 0.3 | Below 0.1 | Below 0.1 | Below 0.1 | Corrosion |
| | Remaining chloride | [mgCL/l] | Below 0.3 | Below 0.3 | Below 0.3 | Below 0.3 | Below 0.3 | Below 0.25 | Below 0.3 | Below 0.1 | Below 0.3 | Corrosion |
| | Free carbide | [mg$CO_2$/l] | Below 4.0 | Below 4.0 | Below 4.0 | Below 4.0 | Below 4.0 | Below 0.4 | Below 4.0 | 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℃), corrosion is generally noticeable.
Especially when the iron materials is in direct contact with water without any protection shields, it is desireable 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 con not totallu assure the absence of corrossion 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** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 673 | 643 | 630 | 610 | 573 | 547 | 752 | 732 | 722 | 707 | 675 | 650 |
| | PI | kW | 185 | 199 | 205 | 214 | 230 | 240 | 215 | 234 | 242 | 254 | 277 | 292 |
| | qw | l/s | 32.1 | 30.6 | 30.0 | 29.1 | 27.3 | 26.1 | 35.8 | 34.9 | 34.4 | 33.7 | 32.1 | 31.0 |
| | dpw | kPa | 50 | 46 | 44 | 42 | 37 | 34 | 55 | 52 | 51 | 49 | 45 | 42 |
| **7** | CC | kW | 713 | 682 | 668 | 647 | 608 | 582 | 792 | 770 | 761 | 744 | 710 | 684 |
| | PI | kW | 191 | 205 | 211 | 221 | 238 | 248 | 221 | 241 | 249 | 262 | 285 | 301 |
| | qw | l/s | 34.0 | 32.5 | 31.9 | 30.9 | 29.0 | 27.8 | 37.8 | 36.8 | 36.3 | 35.5 | 33.9 | 32.7 |
| | dpw | kPa | 55 | 51 | 49 | 47 | 42 | 39 | 61 | 58 | 56 | 54 | 50 | 47 |
| **9** | CC | kW | 753 | 721 | 708 | 685 | 644 | 617 | 833 | 810 | 800 | 782 | 746 | 719 |
| | PI | kW | 197 | 212 | 218 | 228 | 245 | 256 | 228 | 248 | 257 | 270 | 294 | 309 |
| | qw | l/s | 36.0 | 34.4 | 33.8 | 32.7 | 30.8 | 29.5 | 39.8 | 38.7 | 38.2 | 37.3 | 35.6 | 34.3 |
| | dpw | kPa | 61 | 57 | 55 | 52 | 46 | 43 | 66 | 63 | 62 | 59 | 54 | 51 |
| **11** | CC | kW | 794 | 761 | 746 | 724 | 681 | 653 | 874 | 850 | 839 | 820 | 782 | 743 |
| | PI | kW | 203 | 218 | 225 | 235 | 253 | 264 | 235 | 256 | 264 | 278 | 302 | 312 |
| | qw | l/s | 38.0 | 36.4 | 35.7 | 34.6 | 32.6 | 31.2 | 41.8 | 40.6 | 40.1 | 39.2 | 37.4 | 35.5 |
| | dpw | kPa | 68 | 62 | 60 | 57 | 51 | 47 | 73 | 69 | 67 | 65 | 59 | 54 |
| **13** | CC | kW | 836 | 801 | 786 | 762 | 719 | 689 | 917 | 892 | 880 | 860 | 819 | 764 |
| | PI | kW | 209 | 225 | 232 | 242 | 260 | 272 | 243 | 264 | 273 | 286 | 312 | 312 |
| | qw | l/s | 40.0 | 38.3 | 37.6 | 36.5 | 34.4 | 33.0 | 43.9 | 42.7 | 42.1 | 41.1 | 39.2 | 36.5 |
| | dpw | kPa | 74 | 69 | 66 | 63 | 56 | 52 | 79 | 75 | 74 | 71 | 65 | 57 |
| **15** | CC | kW | 879 | 842 | 827 | 802 | 756 | 726 | 961 | 933 | 921 | 899 | 856 | 786 |
| | PI | kW | 215 | 232 | 239 | 249 | 268 | 280 | 250 | 272 | 281 | 295 | 321 | 312 |
| | qw | l/s | 42.1 | 40.3 | 39.6 | 38.4 | 36.2 | 34.8 | 46.0 | 44.7 | 44.1 | 43.1 | 41.0 | 37.6 |
| | dpw | kPa | 81 | 75 | 73 | 69 | 62 | 58 | *86* | 82 | 80 | 77 | 70 | 60 |

| | | | 830 | | | | | | 910 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 847 | 822 | 811 | 791 | 749 | 718 | 922 | 898 | 886 | 867 | 827 | 797 |
| | PI | kW | 245 | 267 | 276 | 290 | 315 | 332 | 261 | 284 | 293 | 308 | 336 | 354 |
| | qw | l/s | 40.4 | 39.2 | 38.6 | 37.7 | 35.7 | 34.2 | 43.9 | 42.8 | 42.2 | 41.3 | 39.4 | 38.0 |
| | dpw | kPa | 54 | 52 | 50 | 48 | 44 | 40 | 63 | 60 | 59 | 57 | 52 | 49 |
| **7** | CC | kW | 892 | 866 | 853 | 832 | 788 | 756 | 971 | 944 | 932 | 912 | 870 | 838 |
| | PI | kW | 253 | 275 | 285 | 299 | 326 | 343 | 269 | 292 | 302 | 318 | 346 | 364 |
| | qw | l/s | 42.6 | 41.3 | 40.7 | 39.7 | 37.6 | 36.1 | 46.3 | 45.1 | 44.5 | 43.5 | 41.5 | 40.0 |
| | dpw | kPa | 60 | 57 | 55 | 53 | 48 | 44 | 70 | 66 | 65 | 62 | 57 | 54 |
| **9** | CC | kW | 938 | 909 | 896 | 873 | 827 | 770 | 1020 | 992 | 980 | 958 | 913 | 875 |
| | PI | kW | 262 | 284 | 294 | 309 | 336 | 340 | 277 | 301 | 311 | 327 | 356 | 373 |
| | qw | l/s | 44.8 | 43.4 | 42.8 | 41.7 | 39.5 | 36.8 | 48.7 | 47.4 | 46.8 | 45.7 | 43.6 | 41.8 |
| | dpw | kPa | 65 | 62 | 60 | 58 | 52 | 46 | 76 | 73 | 71 | 68 | 62 | 58 |
| **11** | CC | kW | 984 | 954 | 939 | 915 | 867 | 778 | 1071 | 1041 | 1027 | 1004 | 957 | 901 |
| | PI | kW | 270 | 294 | 303 | 319 | 347 | 332 | 285 | 310 | 321 | 337 | 367 | 373 |
| | qw | l/s | 47.0 | 45.6 | 44.9 | 43.8 | 41.4 | 37.2 | 51.2 | 49.8 | 49.1 | 48.0 | 45.7 | 43.1 |
| | dpw | kPa | 71 | 68 | 66 | 63 | 57 | 47 | 83 | 79 | 77 | 74 | 68 | 61 |
| **13** | CC | kW | 1031 | 999 | 983 | 958 | 901 | 782 | 1122 | 1091 | 1076 | 1052 | 1002 | 929 |
| | PI | kW | 279 | 303 | 313 | 329 | 356 | 321 | 294 | 320 | 330 | 347 | 378 | 374 |
| | qw | l/s | 49.3 | 47.8 | 47.0 | 45.8 | 43.1 | 37.4 | 53.7 | 52.2 | 51.5 | 50.3 | 47.9 | 44.4 |
| | dpw | kPa | 78 | 73 | 71 | 68 | 61 | 47 | 91 | 86 | 84 | 81 | 74 | 65 |
| **15** | CC | kW | 1079 | 1044 | 1028 | 1001 | 909 | 796 | 1175 | 1141 | 1126 | 1100 | 1041 | 955 |
| | PI | kW | 289 | 313 | 324 | 340 | 348 | 316 | 303 | 329 | 341 | 358 | 386 | 374 |
| | qw | l/s | 51.7 | 50.0 | 49.2 | 47.9 | 43.5 | 38.1 | 56.2 | 54.6 | 53.9 | 52.6 | 49.8 | 45.7 |
| | dpw | kPa | 85 | 80 | 77 | 74 | 62 | 49 | 99 | 94 | 91 | 88 | 79 | 68 |

## EWAD C-SS

| | | | 970 | | | | | | C11 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 982 | 955 | 942 | 920 | 875 | 841 | 1076 | 1048 | 1034 | 1012 | 965 | 930 |
| | PI | kW | 287 | 312 | 323 | 340 | 371 | 391 | 309 | 337 | 348 | 366 | 399 | 421 |
| | qw | l/s | 46.8 | 45.5 | 44.9 | 43.9 | 41.7 | 40.1 | 51.3 | 49.9 | 49.3 | 48.2 | 46.0 | 44.3 |
| | dpw | kPa | 71 | 67 | 66 | 63 | 58 | 54 | 65 | 62 | 61 | 59 | 54 | 50 |
| **7** | CC | kW | 1033 | 1004 | 990 | 967 | 919 | 883 | 1133 | 1102 | 1088 | 1064 | 1014 | 977 |
| | PI | kW | 296 | 322 | 333 | 350 | 382 | 403 | 319 | 347 | 359 | 377 | 411 | 433 |
| | qw | l/s | 49.3 | 47.9 | 47.3 | 46.1 | 43.8 | 42.1 | 54.0 | 52.6 | 51.9 | 50.8 | 48.4 | 46.6 |
| | dpw | kPa | 78 | 74 | 72 | 69 | 63 | 59 | 72 | 68 | 67 | 64 | 59 | 55 |
| **9** | CC | kW | 1085 | 1054 | 1039 | 1014 | 963 | 916 | 1190 | 1158 | 1143 | 1117 | 1064 | 1020 |
| | PI | kW | 305 | 332 | 343 | 361 | 394 | 410 | 328 | 357 | 369 | 389 | 423 | 443 |
| | qw | l/s | 51.8 | 50.3 | 49.6 | 48.4 | 46.0 | 43.7 | 56.9 | 55.3 | 54.6 | 53.4 | 50.8 | 48.7 |
| | dpw | kPa | 85 | 81 | 79 | 75 | 69 | 63 | 79 | 75 | 73 | 70 | 64 | 60 |
| **11** | CC | kW | 1138 | 1104 | 1089 | 1062 | 1008 | 926 | 1249 | 1215 | 1199 | 1171 | 1115 | 1047 |
| | PI | kW | 315 | 342 | 354 | 372 | 406 | 401 | 338 | 368 | 381 | 400 | 436 | 441 |
| | qw | l/s | 54.4 | 52.8 | 52.0 | 50.8 | 48.2 | 44.2 | 59.7 | 58.1 | 57.3 | 56.0 | 53.3 | 50.0 |
| | dpw | kPa | 93 | 88 | 86 | 82 | 75 | 64 | 86 | 82 | 80 | 77 | 70 | 63 |
| **13** | CC | kW | 1191 | 1156 | 1139 | 1111 | 1054 | 939 | 1309 | 1272 | 1255 | 1226 | 1167 | 1079 |
| | PI | kW | 324 | 353 | 365 | 384 | 418 | 393 | 349 | 379 | 392 | 412 | 449 | 442 |
| | qw | l/s | 57.0 | 55.3 | 54.5 | 53.1 | 50.4 | 44.9 | 62.6 | 60.9 | 60.0 | 58.7 | 55.8 | 51.6 |
| | dpw | kPa | 101 | 96 | 93 | 89 | 81 | 66 | 94 | 89 | 87 | 83 | 76 | 66 |
| **15** | CC | kW | 1246 | 1208 | 1190 | 1160 | 1088 | 949 | 1370 | 1331 | 1313 | 1282 | 1209 | 1110 |
| | PI | kW | 335 | 364 | 376 | 396 | 425 | 383 | 359 | 391 | 404 | 425 | 456 | 442 |
| | qw | l/s | 59.6 | 57.8 | 57.0 | 55.5 | 52.1 | 45.4 | 65.6 | 63.7 | 62.8 | 61.4 | 57.9 | 53.1 |
| | dpw | kPa | 110 | 104 | 101 | 96 | 86 | 67 | 102 | 97 | 94 | 90 | 81 | 70 |

| | | | C12 | | | | | | C13 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1160 | 1131 | 1118 | 1095 | 1048 | 1013 | 1329 | 1294 | 1278 | 1250 | 1194 | 1152 |
| | PI | kW | 331 | 360 | 372 | 392 | 427 | 450 | 361 | 393 | 407 | 428 | 466 | 491 |
| | qw | l/s | 55.3 | 53.9 | 53.3 | 52.2 | 50.0 | 48.3 | 63.4 | 61.7 | 60.9 | 59.6 | 56.9 | 54.9 |
| | dpw | kPa | 75 | 72 | 70 | 68 | 62 | 59 | 55 | 52 | 51 | 49 | 45 | 42 |
| **7** | CC | kW | 1221 | 1190 | 1176 | 1152 | 1102 | 1065 | 1403 | 1365 | 1348 | 1319 | 1260 | 1216 |
| | PI | kW | 340 | 370 | 383 | 403 | 439 | 463 | 371 | 405 | 419 | 441 | 480 | 505 |
| | qw | l/s | 58.2 | 56.8 | 56.1 | 55.0 | 52.6 | 50.8 | 66.9 | 65.1 | 64.3 | 62.9 | 60.1 | 58.0 |
| | dpw | kPa | 82 | 79 | 77 | 74 | 68 | 64 | 60 | 57 | 56 | 54 | 50 | 47 |
| **9** | CC | kW | 1283 | 1250 | 1235 | 1210 | 1157 | 1118 | 1477 | 1438 | 1420 | 1390 | 1327 | 1281 |
| | PI | kW | 350 | 381 | 394 | 414 | 451 | 476 | 382 | 417 | 432 | 454 | 494 | 520 |
| | qw | l/s | 61.3 | 59.7 | 59.0 | 57.8 | 55.3 | 53.4 | 70.5 | 68.7 | 67.8 | 66.4 | 63.4 | 61.2 |
| | dpw | kPa | 90 | 86 | 84 | 81 | 75 | 70 | 66 | 63 | 62 | 59 | 55 | 51 |
| **11** | CC | kW | 1346 | 1311 | 1295 | 1268 | 1213 | 1172 | 1552 | 1511 | 1492 | 1460 | 1395 | 1346 |
| | PI | kW | 360 | 392 | 405 | 426 | 464 | 489 | 394 | 429 | 444 | 467 | 509 | 536 |
| | qw | l/s | 64.3 | 62.7 | 61.9 | 60.6 | 58.0 | 56.0 | 74.2 | 72.2 | 71.3 | 69.8 | 66.7 | 64.4 |
| | dpw | kPa | 98 | 94 | 92 | 88 | 81 | 77 | 73 | 69 | 68 | 65 | 60 | 56 |
| **13** | CC | kW | 1410 | 1374 | 1357 | 1328 | 1270 | 1227 | 1629 | 1585 | 1565 | 1531 | 1462 | 1391 |
| | PI | kW | 370 | 403 | 417 | 438 | 477 | 503 | 406 | 442 | 457 | 481 | 524 | 540 |
| | qw | l/s | 67.5 | 65.7 | 64.9 | 63.5 | 60.7 | 58.7 | 77.9 | 75.8 | 74.9 | 73.2 | 69.9 | 66.5 |
| | dpw | kPa | *107* | 102 | 100 | 96 | 89 | 83 | 79 | 75 | 74 | 71 | 65 | 60 |
| **15** | CC | kW | 1476 | 1437 | 1419 | 1389 | 1327 | 1268 | 1708 | 1661 | 1639 | 1603 | 1530 | 1433 |
| | PI | kW | 381 | 415 | 429 | 451 | 491 | 510 | 418 | 455 | 471 | 495 | 539 | 542 |
| | qw | l/s | 70.7 | 68.8 | 67.9 | 66.5 | 63.5 | 60.7 | 81.8 | 79.5 | 78.5 | 76.7 | 73.3 | 68.6 |
| | dpw | kPa | *116* | *111* | *108* | 104 | 96 | 88 | 86 | 82 | 80 | 77 | 71 | 63 |

## EWAD C-SS

| | | | H14 | | | | | | C15 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1432 | 1393 | 1376 | 1344 | 1279 | 1233 | 1558 | 1515 | 1495 | 1461 | 1390 | 1337 |
| | PI | kW | 386 | 422 | 437 | 460 | 502 | 530 | 452 | 492 | 508 | 535 | 582 | 614 |
| | qw | l/s | 68.3 | 66.4 | 65.6 | 64.1 | 61.0 | 58.7 | 74.3 | 72.2 | 71.2 | 69.6 | 66.2 | 63.7 |
| | dpw | kPa | 59 | 56 | 55 | 53 | 48 | 45 | 63 | 60 | 59 | 56 | 52 | 48 |
| **7** | CC | kW | 1509 | 1468 | 1449 | 1418 | 1350 | 1299 | 1642 | 1596 | 1575 | 1538 | 1463 | 1407 |
| | PI | kW | 397 | 434 | 450 | 474 | 517 | 546 | 466 | 507 | 524 | 551 | 600 | 632 |
| | qw | l/s | 72.0 | 70.0 | 69.2 | 67.6 | 64.4 | 62.0 | 78.3 | 76.1 | 75.1 | 73.4 | 69.8 | 67.1 |
| | dpw | kPa | 65 | 62 | 61 | 58 | 53 | 50 | 70 | 66 | 65 | 62 | 57 | 53 |
| **9** | CC | kW | 1587 | 1543 | 1524 | 1490 | 1420 | 1368 | 1728 | 1679 | 1656 | 1617 | 1537 | 1473 |
| | PI | kW | 409 | 447 | 463 | 488 | 533 | 562 | 481 | 523 | 541 | 568 | 619 | 649 |
| | qw | l/s | 75.8 | 73.7 | 72.8 | 71.1 | 67.8 | 65.4 | 82.5 | 80.2 | 79.1 | 77.2 | 73.4 | 70.3 |
| | dpw | kPa | 72 | 68 | 66 | 64 | 59 | 55 | 77 | 73 | 71 | 68 | 62 | 57 |
| **11** | CC | kW | 1667 | 1620 | 1599 | 1563 | 1490 | 1437 | 1816 | 1763 | 1739 | 1697 | 1612 | 1503 |
| | PI | kW | 421 | 460 | 477 | 502 | 548 | 579 | 496 | 539 | 557 | 586 | 638 | 642 |
| | qw | l/s | 79.7 | 77.5 | 76.4 | 74.7 | 71.2 | 68.7 | 86.8 | 84.3 | 83.1 | 81.1 | 77.1 | 71.8 |
| | dpw | kPa | 78 | 74 | 73 | 70 | 64 | 60 | 84 | 80 | 78 | 74 | 68 | 60 |
| **13** | CC | kW | 1748 | 1699 | 1676 | 1638 | 1560 | 1460 | 1905 | 1849 | 1823 | 1778 | 1688 | 1542 |
| | PI | kW | 434 | 474 | 491 | 517 | 564 | 572 | 512 | 556 | 575 | 604 | 657 | 640 |
| | qw | l/s | 83.6 | 81.3 | 80.2 | 78.3 | 74.6 | 69.8 | 91.1 | 88.4 | 87.2 | 85.1 | 80.8 | 73.8 |
| | dpw | kPa | 85 | 81 | 79 | 76 | 70 | 62 | *92* | *87* | 85 | 81 | 74 | 63 |
| **15** | CC | kW | 1832 | 1779 | 1754 | 1713 | 1631 | 1480 | 1996 | 1936 | 1908 | 1861 | 1746 | 1580 |
| | PI | kW | 447 | 488 | 505 | 532 | 581 | 561 | 528 | 574 | 593 | 623 | 667 | 635 |
| | qw | l/s | 87.7 | 85.2 | 84.0 | 82.0 | 78.1 | 70.9 | 95.6 | 92.7 | 91.4 | 89.1 | 83.6 | 75.6 |
| | dpw | kPa | 93 | 88 | 86 | 82 | 75 | 63 | *100* | *94* | *92* | *88* | 78 | 65 |

| | | | C16 | | | | | | C17 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1641 | 1596 | 1575 | 1541 | 1468 | 1415 | 1737 | 1690 | 1668 | 1630 | 1552 | 1494 |
| | PI | kW | 475 | 517 | 535 | 562 | 613 | 646 | 507 | 552 | 571 | 601 | 655 | 691 |
| | qw | l/s | 78.2 | 76.1 | 75.1 | 73.4 | 70.0 | 67.4 | 82.8 | 80.5 | 79.5 | 77.7 | 74.0 | 71.2 |
| | dpw | kPa | 70 | 66 | 65 | 62 | 57 | 53 | 76 | 73 | 71 | 68 | 62 | 58 |
| **7** | CC | kW | 1729 | 1681 | 1659 | 1622 | 1545 | 1489 | 1828 | 1777 | 1754 | 1714 | 1631 | 1570 |
| | PI | kW | 489 | 533 | 551 | 579 | 631 | 665 | 522 | 568 | 588 | 619 | 675 | 712 |
| | qw | l/s | 82.5 | 80.2 | 79.2 | 77.4 | 73.7 | 71.0 | 87.2 | 84.8 | 83.7 | 81.8 | 77.8 | 74.9 |
| | dpw | kPa | 77 | 73 | 71 | 68 | 63 | 59 | 84 | 80 | 78 | 75 | 68 | 64 |
| **9** | CC | kW | 1819 | 1768 | 1745 | 1705 | 1624 | 1558 | 1920 | 1867 | 1842 | 1799 | 1711 | 1635 |
| | PI | kW | 504 | 549 | 568 | 597 | 650 | 682 | 538 | 586 | 606 | 638 | 695 | 727 |
| | qw | l/s | 86.9 | 84.4 | 83.3 | 81.4 | 77.5 | 74.4 | 91.7 | 89.1 | 88.0 | 85.9 | 81.7 | 78.1 |
| | dpw | kPa | 84 | 80 | 78 | 75 | 68 | 64 | 92 | 87 | 85 | 82 | 75 | 69 |
| **11** | CC | kW | 1911 | 1857 | 1832 | 1789 | 1703 | 1590 | 2014 | 1957 | 1931 | 1885 | 1792 | 1674 |
| | PI | kW | 520 | 566 | 585 | 615 | 669 | 673 | 555 | 604 | 624 | 657 | 716 | 723 |
| | qw | l/s | 91.3 | 88.8 | 87.6 | 85.5 | 81.4 | 76.0 | 96.3 | 93.6 | 92.3 | 90.1 | 85.7 | 80.0 |
| | dpw | kPa | *92* | *87* | 85 | 82 | 75 | 66 | 100 | 95 | 93 | 89 | 81 | 72 |
| **13** | CC | kW | 2005 | 1947 | 1920 | 1875 | 1784 | 1632 | 2110 | 2050 | 2021 | 1973 | 1875 | 1711 |
| | PI | kW | 536 | 583 | 603 | 634 | 690 | 670 | 572 | 622 | 643 | 677 | 737 | 716 |
| | qw | l/s | 95.9 | 93.1 | 91.9 | 89.7 | 85.3 | 78.1 | 101.0 | 98.1 | 96.7 | 94.4 | 89.7 | 81.8 |
| | dpw | kPa | *100* | *95* | *93* | *89* | 81 | 69 | 109 | 103 | 101 | 97 | 88 | 75 |
| **15** | CC | kW | 2100 | 2039 | 2011 | 1963 | 1845 | 1672 | 2208 | 2143 | 2113 | 2062 | 1937 | 1744 |
| | PI | kW | 552 | 601 | 621 | 653 | 699 | 664 | 589 | 641 | 663 | 697 | 748 | 708 |
| | qw | l/s | 100.5 | 97.6 | 96.3 | 94.0 | 88.3 | 80.1 | 105.7 | 102.6 | 101.2 | 98.7 | 92.7 | 83.5 |
| | dpw | kPa | *109* | *104* | *101* | *97* | *87* | 72 | *118* | 112 | 109 | 105 | 94 | 77 |

## EWAD C-SS

| | | | C18 | | | | | | C19 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1833 | 1783 | 1759 | 1717 | 1628 | 1563 | 1900 | 1851 | 1827 | 1787 | 1702 | 1638 |
| | PI | kW | 542 | 591 | 612 | 645 | 705 | 744 | 555 | 607 | 628 | 663 | 726 | 767 |
| | qw | l/s | 87.4 | 85.0 | 83.8 | 81.8 | 77.6 | 74.5 | 90.6 | 88.2 | 87.1 | 85.2 | 81.1 | 78.1 |
| | dpw | kPa | 37 | 35 | 34 | 33 | 30 | 28 | 40 | 38 | 37 | 35 | 32 | 30 |
| **7** | CC | kW | 1925 | 1871 | 1846 | 1802 | 1710 | 1642 | 1996 | 1943 | 1918 | 1875 | 1787 | 1720 |
| | PI | kW | 559 | 609 | 631 | 665 | 726 | 767 | 571 | 624 | 646 | 682 | 746 | 789 |
| | qw | l/s | 91.9 | 89.3 | 88.1 | 86.0 | 81.6 | 78.3 | 95.2 | 92.7 | 91.5 | 89.5 | 85.2 | 82.1 |
| | dpw | kPa | 41 | 38 | 38 | 36 | 33 | 30 | 43 | 41 | 40 | 39 | 35 | 33 |
| **9** | CC | kW | 2019 | 1961 | 1934 | 1887 | 1791 | 1676 | 2093 | 2037 | 2010 | 1965 | 1871 | 1790 |
| | PI | kW | 575 | 628 | 650 | 685 | 748 | 763 | 588 | 642 | 665 | 701 | 768 | 804 |
| | qw | l/s | 96.4 | 93.7 | 92.4 | 90.1 | 85.6 | 80.1 | 100.0 | 97.3 | 96.0 | 93.8 | 89.4 | 85.5 |
| | dpw | kPa | 44 | 42 | 41 | 39 | 36 | 32 | 47 | 45 | 44 | 42 | 39 | 36 |
| **11** | CC | kW | 2114 | 2053 | 2024 | 1974 | 1873 | 1694 | 2192 | 2132 | 2104 | 2056 | 1957 | 1830 |
| | PI | kW | 593 | 647 | 669 | 705 | 770 | 744 | 605 | 661 | 684 | 722 | 789 | 797 |
| | qw | l/s | 101.0 | 98.1 | 96.7 | 94.4 | 89.5 | 81.0 | 104.8 | 101.9 | 100.6 | 98.3 | 93.6 | 87.5 |
| | dpw | kPa | 48 | 46 | 44 | 42 | 39 | 32 | 51 | 49 | 48 | 46 | 42 | 37 |
| **13** | CC | kW | 2211 | 2145 | 2114 | 2062 | 1948 | 1712 | 2293 | 2229 | 2199 | 2148 | 2044 | 1867 |
| | PI | kW | 611 | 666 | 690 | 727 | 790 | 724 | 622 | 680 | 704 | 742 | 812 | 787 |
| | qw | l/s | 105.8 | 102.6 | 101.1 | 98.6 | 93.2 | 81.9 | 109.7 | 106.6 | 105.2 | 102.8 | 97.8 | 89.3 |
| | dpw | kPa | 52 | 49 | 48 | 46 | 42 | 33 | 56 | 53 | 52 | 50 | 45 | 38 |
| **15** | CC | kW | 2309 | 2239 | 2206 | 2150 | 1981 | 1729 | 2395 | 2327 | 2295 | 2241 | 2117 | 1886 |
| | PI | kW | 630 | 687 | 711 | 749 | 783 | 704 | 641 | 700 | 725 | 764 | 827 | 768 |
| | qw | l/s | 110.5 | 107.2 | 105.6 | 102.9 | 94.8 | 82.8 | 114.7 | 111.4 | 109.9 | 107.3 | 101.3 | 90.3 |
| | dpw | kPa | 56 | 53 | 52 | 50 | 43 | 34 | 60 | 57 | 56 | 54 | 48 | 39 |

| | | | C20 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | |
| **5** | CC | kW | 1952 | 1900 | 1875 | 1832 | 1743 | 1675 | |
| | PI | kW | 581 | 635 | 659 | 696 | 764 | 809 | |
| | qw | l/s | 93.0 | 90.5 | 89.4 | 87.3 | 83.0 | 79.8 | |
| | dpw | kPa | 41 | 39 | 39 | 37 | 34 | 31 | |
| **7** | CC | kW | 2049 | 1993 | 1967 | 1922 | 1827 | 1757 | |
| | PI | kW | 597 | 654 | 678 | 716 | 785 | 831 | |
| | qw | l/s | 97.8 | 95.1 | 93.9 | 91.7 | 87.2 | 83.8 | |
| | dpw | kPa | 45 | 43 | 42 | 40 | 37 | 34 | |
| **9** | CC | kW | 2148 | 2089 | 2061 | 2013 | 1913 | 1820 | |
| | PI | kW | 615 | 673 | 697 | 736 | 807 | 844 | |
| | qw | l/s | 102.6 | 99.8 | 98.4 | 96.1 | 91.4 | 86.9 | |
| | dpw | kPa | 49 | 47 | 46 | 44 | 40 | 37 | |
| **11** | CC | kW | 2249 | 2185 | 2156 | 2105 | 2000 | 1841 | |
| | PI | kW | 633 | 692 | 717 | 757 | 830 | 823 | |
| | qw | l/s | 107.5 | 104.5 | 103.0 | 100.6 | 95.6 | 88.0 | |
| | dpw | kPa | 54 | 51 | 50 | 48 | 43 | 37 | |
| **13** | CC | kW | 2351 | 2284 | 2252 | 2198 | 2087 | 1855 | |
| | PI | kW | 651 | 712 | 738 | 779 | 854 | 798 | |
| | qw | l/s | 112.5 | 109.2 | 107.7 | 105.1 | 99.8 | 88.7 | |
| | dpw | kPa | 58 | 55 | 54 | 52 | 47 | 38 | |
| **15** | CC | kW | 2455 | 2383 | 2349 | 2292 | 2153 | 1875 | |
| | PI | kW | 670 | 733 | 760 | 802 | 866 | 776 | |
| | qw | l/s | 117.5 | 114.1 | 112.5 | 109.7 | 103.1 | 89.8 | |
| | dpw | kPa | 63 | 60 | 58 | 56 | 50 | 39 | |

*Fluid: Water*
*Ta: Condenser inlet air temperature; Twout: Evaporator leaving water temperature (Δt 5°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 contac factory*

## EWAD C-SL

| | | | 650 | | | | | | 740 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 673 | 643 | 630 | 610 | 573 | 547 | 752 | 732 | 722 | 707 | 675 | 650 |
| | PI | kW | 185 | 199 | 205 | 214 | 230 | 240 | 215 | 234 | 242 | 254 | 277 | 292 |
| | qw | l/s | 32.1 | 30.6 | 30.0 | 29.1 | 27.3 | 26.1 | 35.8 | 34.9 | 34.4 | 33.7 | 32.1 | 31.0 |
| | dpw | kPa | 50 | 46 | 44 | 42 | 37 | 34 | 55 | 52 | 51 | 49 | 45 | 42 |
| **7** | CC | kW | 713 | 682 | 668 | 647 | 608 | 582 | 792 | 770 | 761 | 744 | 710 | 684 |
| | PI | kW | 191 | 205 | 211 | 221 | 238 | 248 | 221 | 241 | 249 | 262 | 285 | 301 |
| | qw | l/s | 34.0 | 32.5 | 31.9 | 30.9 | 29.0 | 27.8 | 37.8 | 36.8 | 36.3 | 35.5 | 33.9 | 32.7 |
| | dpw | kPa | 55 | 51 | 49 | 47 | 42 | 39 | 61 | 58 | 56 | 54 | 50 | 47 |
| **9** | CC | kW | 753 | 721 | 708 | 685 | 644 | 617 | 833 | 810 | 800 | 782 | 746 | 719 |
| | PI | kW | 197 | 212 | 218 | 228 | 245 | 256 | 228 | 248 | 257 | 270 | 294 | 309 |
| | qw | l/s | 36.0 | 34.4 | 33.8 | 32.7 | 30.8 | 29.5 | 39.8 | 38.7 | 38.2 | 37.3 | 35.6 | 34.3 |
| | dpw | kPa | 61 | 57 | 55 | 52 | 46 | 43 | 66 | 63 | 62 | 59 | 54 | 51 |
| **11** | CC | kW | 794 | 761 | 746 | 724 | 681 | 653 | 874 | 850 | 839 | 820 | 782 | 743 |
| | PI | kW | 203 | 218 | 225 | 235 | 253 | 264 | 235 | 256 | 264 | 278 | 302 | 312 |
| | qw | l/s | 38.0 | 36.4 | 35.7 | 34.6 | 32.6 | 31.2 | 41.8 | 40.6 | 40.1 | 39.2 | 37.4 | 35.5 |
| | dpw | kPa | 68 | 62 | 60 | 57 | 51 | 47 | 73 | 69 | 67 | 65 | 59 | 54 |
| **13** | CC | kW | 836 | 801 | 786 | 762 | 719 | 689 | 917 | 892 | 880 | 860 | 819 | 764 |
| | PI | kW | 209 | 225 | 232 | 242 | 260 | 272 | 243 | 264 | 273 | 286 | 312 | 312 |
| | qw | l/s | 40.0 | 38.3 | 37.6 | 36.5 | 34.4 | 33.0 | 43.9 | 42.7 | 42.1 | 41.1 | 39.2 | 36.5 |
| | dpw | kPa | 74 | 69 | 66 | 63 | 56 | 52 | 79 | 75 | 74 | 71 | 65 | 57 |
| **15** | CC | kW | 879 | 842 | 827 | 802 | 756 | 726 | 961 | 933 | 921 | 899 | 856 | 786 |
| | PI | kW | 215 | 232 | 239 | 249 | 268 | 280 | 250 | 272 | 281 | 295 | 321 | 312 |
| | qw | l/s | 42.1 | 40.3 | 39.6 | 38.4 | 36.2 | 34.8 | 46.0 | 44.7 | 44.1 | 43.1 | 41.0 | 37.6 |
| | dpw | kPa | 81 | 75 | 73 | 69 | 62 | 58 | *86* | 82 | 80 | 77 | 70 | 60 |

| | | | 830 | | | | | | 910 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 847 | 822 | 811 | 791 | 749 | 718 | 922 | 898 | 886 | 867 | 827 | 797 |
| | PI | kW | 245 | 267 | 276 | 290 | 315 | 332 | 261 | 284 | 293 | 308 | 336 | 354 |
| | qw | l/s | 40.4 | 39.2 | 38.6 | 37.7 | 35.7 | 34.2 | 43.9 | 42.8 | 42.2 | 41.3 | 39.4 | 38.0 |
| | dpw | kPa | 54 | 52 | 50 | 48 | 44 | 40 | 63 | 60 | 59 | 57 | 52 | 49 |
| **7** | CC | kW | 892 | 866 | 853 | 832 | 788 | 756 | 971 | 944 | 932 | 912 | 870 | 838 |
| | PI | kW | 253 | 275 | 285 | 299 | 326 | 343 | 269 | 292 | 302 | 318 | 346 | 364 |
| | qw | l/s | 42.6 | 41.3 | 40.7 | 39.7 | 37.6 | 36.1 | 46.3 | 45.1 | 44.5 | 43.5 | 41.5 | 40.0 |
| | dpw | kPa | 60 | 57 | 55 | 53 | 48 | 44 | 70 | 66 | 65 | 62 | 57 | 54 |
| **9** | CC | kW | 938 | 909 | 896 | 873 | 827 | 770 | 1020 | 992 | 980 | 958 | 913 | 875 |
| | PI | kW | 262 | 284 | 294 | 309 | 336 | 340 | 277 | 301 | 311 | 327 | 356 | 373 |
| | qw | l/s | 44.8 | 43.4 | 42.8 | 41.7 | 39.5 | 36.8 | 48.7 | 47.4 | 46.8 | 45.7 | 43.6 | 41.8 |
| | dpw | kPa | 65 | 62 | 60 | 58 | 52 | 46 | 76 | 73 | 71 | 68 | 62 | 58 |
| **11** | CC | kW | 984 | 954 | 939 | 915 | 867 | 778 | 1071 | 1041 | 1027 | 1004 | 957 | 901 |
| | PI | kW | 270 | 294 | 303 | 319 | 347 | 332 | 285 | 310 | 321 | 337 | 367 | 373 |
| | qw | l/s | 47.0 | 45.6 | 44.9 | 43.8 | 41.4 | 37.2 | 51.2 | 49.8 | 49.1 | 48.0 | 45.7 | 43.1 |
| | dpw | kPa | 71 | 68 | 66 | 63 | 57 | 47 | 83 | 79 | 77 | 74 | 68 | 61 |
| **13** | CC | kW | 1031 | 999 | 983 | 958 | 901 | 782 | 1122 | 1091 | 1076 | 1052 | 1002 | 929 |
| | PI | kW | 279 | 303 | 313 | 329 | 356 | 321 | 294 | 320 | 330 | 347 | 378 | 374 |
| | qw | l/s | 49.3 | 47.8 | 47.0 | 45.8 | 43.1 | 37.4 | 53.7 | 52.2 | 51.5 | 50.3 | 47.9 | 44.4 |
| | dpw | kPa | 78 | 73 | 71 | 68 | 61 | 47 | 91 | 86 | 84 | 81 | 74 | 65 |
| **15** | CC | kW | 1079 | 1044 | 1028 | 1001 | 909 | 796 | 1175 | 1141 | 1126 | 1100 | 1041 | 955 |
| | PI | kW | 289 | 313 | 324 | 340 | 348 | 316 | 303 | 329 | 341 | 358 | 386 | 374 |
| | qw | l/s | 51.7 | 50.0 | 49.2 | 47.9 | 43.5 | 38.1 | 56.2 | 54.6 | 53.9 | 52.6 | 49.8 | 45.7 |
| | dpw | kPa | 85 | 80 | 77 | 74 | 62 | 49 | 99 | 94 | 91 | 88 | 79 | 68 |

## EWAD C-SL

| | | | 970 | | | | | | C11 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 982 | 955 | 942 | 920 | 875 | 841 | 1076 | 1048 | 1034 | 1012 | 965 | 930 |
| | PI | kW | 287 | 312 | 323 | 340 | 371 | 391 | 309 | 337 | 348 | 366 | 399 | 421 |
| | qw | l/s | 46.8 | 45.5 | 44.9 | 43.9 | 41.7 | 40.1 | 51.3 | 49.9 | 49.3 | 48.2 | 46.0 | 44.3 |
| | dpw | kPa | 71 | 67 | 66 | 63 | 58 | 54 | 65 | 62 | 61 | 59 | 54 | 50 |
| **7** | CC | kW | 1033 | 1004 | 990 | 967 | 919 | 883 | 1133 | 1102 | 1088 | 1064 | 1014 | 977 |
| | PI | kW | 296 | 322 | 333 | 350 | 382 | 403 | 319 | 347 | 359 | 377 | 411 | 433 |
| | qw | l/s | 49.3 | 47.9 | 47.3 | 46.1 | 43.8 | 42.1 | 54.0 | 52.6 | 51.9 | 50.8 | 48.4 | 46.6 |
| | dpw | kPa | 78 | 74 | 72 | 69 | 63 | 59 | 72 | 68 | 67 | 64 | 59 | 55 |
| **9** | CC | kW | 1085 | 1054 | 1039 | 1014 | 963 | 916 | 1190 | 1158 | 1143 | 1117 | 1064 | 1020 |
| | PI | kW | 305 | 332 | 343 | 361 | 394 | 410 | 328 | 357 | 369 | 389 | 423 | 443 |
| | qw | l/s | 51.8 | 50.3 | 49.6 | 48.4 | 46.0 | 43.7 | 56.9 | 55.3 | 54.6 | 53.4 | 50.8 | 48.7 |
| | dpw | kPa | 85 | 81 | 79 | 75 | 69 | 63 | 79 | 75 | 73 | 70 | 64 | 60 |
| **11** | CC | kW | 1138 | 1104 | 1089 | 1062 | 1008 | 926 | 1249 | 1215 | 1199 | 1171 | 1115 | 1047 |
| | PI | kW | 315 | 342 | 354 | 372 | 406 | 401 | 338 | 368 | 381 | 400 | 436 | 441 |
| | qw | l/s | 54.4 | 52.8 | 52.0 | 50.8 | 48.2 | 44.2 | 59.7 | 58.1 | 57.3 | 56.0 | 53.3 | 50.0 |
| | dpw | kPa | 93 | 88 | 86 | 82 | 75 | 64 | 86 | 82 | 80 | 77 | 70 | 63 |
| **13** | CC | kW | 1191 | 1156 | 1139 | 1111 | 1054 | 939 | 1309 | 1272 | 1255 | 1226 | 1167 | 1079 |
| | PI | kW | 324 | 353 | 365 | 384 | 418 | 393 | 349 | 379 | 392 | 412 | 449 | 442 |
| | qw | l/s | 57.0 | 55.3 | 54.5 | 53.1 | 50.4 | 44.9 | 62.6 | 60.9 | 60.0 | 58.7 | 55.8 | 51.6 |
| | dpw | kPa | 101 | 96 | 93 | 89 | 81 | 66 | 94 | 89 | 87 | 83 | 76 | 66 |
| **15** | CC | kW | 1246 | 1208 | 1190 | 1160 | 1088 | 949 | 1370 | 1331 | 1313 | 1282 | 1209 | 1110 |
| | PI | kW | 335 | 364 | 376 | 396 | 425 | 383 | 359 | 391 | 404 | 425 | 456 | 442 |
| | qw | l/s | 59.6 | 57.8 | 57.0 | 55.5 | 52.1 | 45.4 | 65.6 | 63.7 | 62.8 | 61.4 | 57.9 | 53.1 |
| | dpw | kPa | 110 | 104 | 101 | 96 | 86 | 67 | 102 | 97 | 94 | 90 | 81 | 70 |

| | | | C12 | | | | | | C13 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1160 | 1131 | 1118 | 1095 | 1048 | 1013 | 1329 | 1294 | 1278 | 1250 | 1194 | 1152 |
| | PI | kW | 331 | 360 | 372 | 392 | 427 | 450 | 361 | 393 | 407 | 428 | 466 | 491 |
| | qw | l/s | 55.3 | 53.9 | 53.3 | 52.2 | 50.0 | 48.3 | 63.4 | 61.7 | 60.9 | 59.6 | 56.9 | 54.9 |
| | dpw | kPa | 75 | 72 | 70 | 68 | 62 | 59 | 55 | 52 | 51 | 49 | 45 | 42 |
| **7** | CC | kW | 1221 | 1190 | 1176 | 1152 | 1102 | 1065 | 1403 | 1365 | 1348 | 1319 | 1260 | 1216 |
| | PI | kW | 340 | 370 | 383 | 403 | 439 | 463 | 371 | 405 | 419 | 441 | 480 | 505 |
| | qw | l/s | 58.2 | 56.8 | 56.1 | 55.0 | 52.6 | 50.8 | 66.9 | 65.1 | 64.3 | 62.9 | 60.1 | 58.0 |
| | dpw | kPa | 82 | 79 | 77 | 74 | 68 | 64 | 60 | 57 | 56 | 54 | 50 | 47 |
| **9** | CC | kW | 1283 | 1250 | 1235 | 1210 | 1157 | 1118 | 1477 | 1438 | 1420 | 1390 | 1327 | 1281 |
| | PI | kW | 350 | 381 | 394 | 414 | 451 | 476 | 382 | 417 | 432 | 454 | 494 | 520 |
| | qw | l/s | 61.3 | 59.7 | 59.0 | 57.8 | 55.3 | 53.4 | 70.5 | 68.7 | 67.8 | 66.4 | 63.4 | 61.2 |
| | dpw | kPa | 90 | 86 | 84 | 81 | 75 | 70 | 66 | 63 | 62 | 59 | 55 | 51 |
| **11** | CC | kW | 1346 | 1311 | 1295 | 1268 | 1213 | 1172 | 1552 | 1511 | 1492 | 1460 | 1395 | 1346 |
| | PI | kW | 360 | 392 | 405 | 426 | 464 | 489 | 394 | 429 | 444 | 467 | 509 | 536 |
| | qw | l/s | 64.3 | 62.7 | 61.9 | 60.6 | 58.0 | 56.0 | 74.2 | 72.2 | 71.3 | 69.8 | 66.7 | 64.4 |
| | dpw | kPa | 98 | 94 | 92 | 88 | 81 | 77 | 73 | 69 | 68 | 65 | 60 | 56 |
| **13** | CC | kW | 1410 | 1374 | 1357 | 1328 | 1270 | 1227 | 1629 | 1585 | 1565 | 1531 | 1462 | 1391 |
| | PI | kW | 370 | 403 | 417 | 438 | 477 | 503 | 406 | 442 | 457 | 481 | 524 | 540 |
| | qw | l/s | 67.5 | 65.7 | 64.9 | 63.5 | 60.7 | 58.7 | 77.9 | 75.8 | 74.9 | 73.2 | 69.9 | 66.5 |
| | dpw | kPa | *107* | 102 | 100 | 96 | 89 | 83 | 79 | 75 | 74 | 71 | 65 | 60 |
| **15** | CC | kW | 1476 | 1437 | 1419 | 1389 | 1327 | 1268 | 1708 | 1661 | 1639 | 1603 | 1530 | 1433 |
| | PI | kW | 381 | 415 | 429 | 451 | 491 | 510 | 418 | 455 | 471 | 495 | 539 | 542 |
| | qw | l/s | 70.7 | 68.8 | 67.9 | 66.5 | 63.5 | 60.7 | 81.8 | 79.5 | 78.5 | 76.7 | 73.3 | 68.6 |
| | dpw | kPa | *116* | *111* | *108* | 104 | 96 | 88 | 86 | 82 | 80 | 77 | 71 | 63 |

## EWAD C-SL

| | | | H14 | | | | | | C15 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1432 | 1393 | 1376 | 1344 | 1279 | 1233 | 1558 | 1515 | 1495 | 1461 | 1390 | 1337 |
| | PI | kW | 386 | 422 | 437 | 460 | 502 | 530 | 452 | 492 | 508 | 535 | 582 | 614 |
| | qw | l/s | 68.3 | 66.4 | 65.6 | 64.1 | 61.0 | 58.7 | 74.3 | 72.2 | 71.2 | 69.6 | 66.2 | 63.7 |
| | dpw | kPa | 59 | 56 | 55 | 53 | 48 | 45 | 63 | 60 | 59 | 56 | 52 | 48 |
| **7** | CC | kW | 1509 | 1468 | 1449 | 1418 | 1350 | 1299 | 1642 | 1596 | 1575 | 1538 | 1463 | 1407 |
| | PI | kW | 397 | 434 | 450 | 474 | 517 | 546 | 466 | 507 | 524 | 551 | 600 | 632 |
| | qw | l/s | 72.0 | 70.0 | 69.2 | 67.6 | 64.4 | 62.0 | 78.3 | 76.1 | 75.1 | 73.4 | 69.8 | 67.1 |
| | dpw | kPa | 65 | 62 | 61 | 58 | 53 | 50 | 70 | 66 | 65 | 62 | 57 | 53 |
| **9** | CC | kW | 1587 | 1543 | 1524 | 1490 | 1420 | 1368 | 1728 | 1679 | 1656 | 1617 | 1537 | 1473 |
| | PI | kW | 409 | 447 | 463 | 488 | 533 | 562 | 481 | 523 | 541 | 568 | 619 | 649 |
| | qw | l/s | 75.8 | 73.7 | 72.8 | 71.1 | 67.8 | 65.4 | 82.5 | 80.2 | 79.1 | 77.2 | 73.4 | 70.3 |
| | dpw | kPa | 72 | 68 | 66 | 64 | 59 | 55 | 77 | 73 | 71 | 68 | 62 | 57 |
| **11** | CC | kW | 1667 | 1620 | 1599 | 1563 | 1490 | 1437 | 1816 | 1763 | 1739 | 1697 | 1612 | 1503 |
| | PI | kW | 421 | 460 | 477 | 502 | 548 | 579 | 496 | 539 | 557 | 586 | 638 | 642 |
| | qw | l/s | 79.7 | 77.5 | 76.4 | 74.7 | 71.2 | 68.7 | 86.8 | 84.3 | 83.1 | 81.1 | 77.1 | 71.8 |
| | dpw | kPa | 78 | 74 | 73 | 70 | 64 | 60 | 84 | 80 | 78 | 74 | 68 | 60 |
| **13** | CC | kW | 1748 | 1699 | 1676 | 1638 | 1560 | 1460 | 1905 | 1849 | 1823 | 1778 | 1688 | 1542 |
| | PI | kW | 434 | 474 | 491 | 517 | 564 | 572 | 512 | 556 | 575 | 604 | 657 | 640 |
| | qw | l/s | 83.6 | 81.3 | 80.2 | 78.3 | 74.6 | 69.8 | 91.1 | 88.4 | 87.2 | 85.1 | 80.8 | 73.8 |
| | dpw | kPa | 85 | 81 | 79 | 76 | 70 | 62 | *92* | *87* | 85 | 81 | 74 | 63 |
| **15** | CC | kW | 1832 | 1779 | 1754 | 1713 | 1631 | 1480 | 1996 | 1936 | 1908 | 1861 | 1746 | 1580 |
| | PI | kW | 447 | 488 | 505 | 532 | 581 | 561 | 528 | 574 | 593 | 623 | 667 | 635 |
| | qw | l/s | 87.7 | 85.2 | 84.0 | 82.0 | 78.1 | 70.9 | 95.6 | 92.7 | 91.4 | 89.1 | 83.6 | 75.6 |
| | dpw | kPa | 93 | 88 | 86 | 82 | 75 | 63 | *100* | *94* | *92* | *88* | 78 | 65 |

| | | | C16 | | | | | | C17 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1641 | 1596 | 1575 | 1541 | 1468 | 1415 | 1737 | 1690 | 1668 | 1630 | 1552 | 1494 |
| | PI | kW | 475 | 517 | 535 | 562 | 613 | 646 | 507 | 552 | 571 | 601 | 655 | 691 |
| | qw | l/s | 78.2 | 76.1 | 75.1 | 73.4 | 70.0 | 67.4 | 82.8 | 80.5 | 79.5 | 77.7 | 74.0 | 71.2 |
| | dpw | kPa | 70 | 66 | 65 | 62 | 57 | 53 | 76 | 73 | 71 | 68 | 62 | 58 |
| **7** | CC | kW | 1729 | 1681 | 1659 | 1622 | 1545 | 1489 | 1828 | 1777 | 1754 | 1714 | 1631 | 1570 |
| | PI | kW | 489 | 533 | 551 | 579 | 631 | 665 | 522 | 568 | 588 | 619 | 675 | 712 |
| | qw | l/s | 82.5 | 80.2 | 79.2 | 77.4 | 73.7 | 71.0 | 87.2 | 84.8 | 83.7 | 81.8 | 77.8 | 74.9 |
| | dpw | kPa | 77 | 73 | 71 | 68 | 63 | 59 | 84 | 80 | 78 | 75 | 68 | 64 |
| **9** | CC | kW | 1819 | 1768 | 1745 | 1705 | 1624 | 1558 | 1920 | 1867 | 1842 | 1799 | 1711 | 1635 |
| | PI | kW | 504 | 549 | 568 | 597 | 650 | 682 | 538 | 586 | 606 | 638 | 695 | 727 |
| | qw | l/s | 86.9 | 84.4 | 83.3 | 81.4 | 77.5 | 74.4 | 91.7 | 89.1 | 88.0 | 85.9 | 81.7 | 78.1 |
| | dpw | kPa | 84 | 80 | 78 | 75 | 68 | 64 | 92 | 87 | 85 | 82 | 75 | 69 |
| **11** | CC | kW | 1911 | 1857 | 1832 | 1789 | 1703 | 1590 | 2014 | 1957 | 1931 | 1885 | 1792 | 1674 |
| | PI | kW | 520 | 566 | 585 | 615 | 669 | 673 | 555 | 604 | 624 | 657 | 716 | 723 |
| | qw | l/s | 91.3 | 88.8 | 87.6 | 85.5 | 81.4 | 76.0 | 96.3 | 93.6 | 92.3 | 90.1 | 85.7 | 80.0 |
| | dpw | kPa | *92* | *87* | 85 | 82 | 75 | 66 | 100 | 95 | 93 | 89 | 81 | 72 |
| **13** | CC | kW | 2005 | 1947 | 1920 | 1875 | 1784 | 1632 | 2110 | 2050 | 2021 | 1973 | 1875 | 1711 |
| | PI | kW | 536 | 583 | 603 | 634 | 690 | 670 | 572 | 622 | 643 | 677 | 737 | 716 |
| | qw | l/s | 95.9 | 93.1 | 91.9 | 89.7 | 85.3 | 78.1 | 101.0 | 98.1 | 96.7 | 94.4 | 89.7 | 81.8 |
| | dpw | kPa | *100* | *95* | *93* | *89* | 81 | 69 | 109 | 103 | 101 | 97 | 88 | 75 |
| **15** | CC | kW | 2100 | 2039 | 2011 | 1963 | 1845 | 1672 | 2208 | 2143 | 2113 | 2062 | 1937 | 1744 |
| | PI | kW | 552 | 601 | 621 | 653 | 699 | 664 | 589 | 641 | 663 | 697 | 748 | 708 |
| | qw | l/s | 100.5 | 97.6 | 96.3 | 94.0 | 88.3 | 80.1 | 105.7 | 102.6 | 101.2 | 98.7 | 92.7 | 83.5 |
| | dpw | kPa | *109* | *104* | *101* | *97* | *87* | 72 | *118* | 112 | 109 | 105 | 94 | 77 |

## EWAD C-SL

| | | | C18 | | | | | | C19 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1833 | 1783 | 1759 | 1717 | 1628 | 1563 | 1900 | 1851 | 1827 | 1787 | 1702 | 1638 |
| | PI | kW | 542 | 591 | 612 | 645 | 705 | 744 | 555 | 607 | 628 | 663 | 726 | 767 |
| | qw | l/s | 87.4 | 85.0 | 83.8 | 81.8 | 77.6 | 74.5 | 90.6 | 88.2 | 87.1 | 85.2 | 81.1 | 78.1 |
| | dpw | kPa | 37 | 35 | 34 | 33 | 30 | 28 | 40 | 38 | 37 | 35 | 32 | 30 |
| **7** | CC | kW | 1925 | 1871 | 1846 | 1802 | 1710 | 1642 | 1996 | 1943 | 1918 | 1875 | 1787 | 1720 |
| | PI | kW | 559 | 609 | 631 | 665 | 726 | 767 | 571 | 624 | 646 | 682 | 746 | 789 |
| | qw | l/s | 91.9 | 89.3 | 88.1 | 86.0 | 81.6 | 78.3 | 95.2 | 92.7 | 91.5 | 89.5 | 85.2 | 82.1 |
| | dpw | kPa | 41 | 38 | 38 | 36 | 33 | 30 | 43 | 41 | 40 | 39 | 35 | 33 |
| **9** | CC | kW | 2019 | 1961 | 1934 | 1887 | 1791 | 1676 | 2093 | 2037 | 2010 | 1965 | 1871 | 1790 |
| | PI | kW | 575 | 628 | 650 | 685 | 748 | 763 | 588 | 642 | 665 | 701 | 768 | 804 |
| | qw | l/s | 96.4 | 93.7 | 92.4 | 90.1 | 85.6 | 80.1 | 100.0 | 97.3 | 96.0 | 93.8 | 89.4 | 85.5 |
| | dpw | kPa | 44 | 42 | 41 | 39 | 36 | 32 | 47 | 45 | 44 | 42 | 39 | 36 |
| **11** | CC | kW | 2114 | 2053 | 2024 | 1974 | 1873 | 1694 | 2192 | 2132 | 2104 | 2056 | 1957 | 1830 |
| | PI | kW | 593 | 647 | 669 | 705 | 770 | 744 | 605 | 661 | 684 | 722 | 789 | 797 |
| | qw | l/s | 101.0 | 98.1 | 96.7 | 94.4 | 89.5 | 81.0 | 104.8 | 101.9 | 100.6 | 98.3 | 93.6 | 87.5 |
| | dpw | kPa | 48 | 46 | 44 | 42 | 39 | 32 | 51 | 49 | 48 | 46 | 42 | 37 |
| **13** | CC | kW | 2211 | 2145 | 2114 | 2062 | 1948 | 1712 | 2293 | 2229 | 2199 | 2148 | 2044 | 1867 |
| | PI | kW | 611 | 666 | 690 | 727 | 790 | 724 | 622 | 680 | 704 | 742 | 812 | 787 |
| | qw | l/s | 105.8 | 102.6 | 101.1 | 98.6 | 93.2 | 81.9 | 109.7 | 106.6 | 105.2 | 102.8 | 97.8 | 89.3 |
| | dpw | kPa | 52 | 49 | 48 | 46 | 42 | 33 | 56 | 53 | 52 | 50 | 45 | 38 |
| **15** | CC | kW | 2309 | 2239 | 2206 | 2150 | 1981 | 1729 | 2395 | 2327 | 2295 | 2241 | 2117 | 1886 |
| | PI | kW | 630 | 687 | 711 | 749 | 783 | 704 | 641 | 700 | 725 | 764 | 827 | 768 |
| | qw | l/s | 110.5 | 107.2 | 105.6 | 102.9 | 94.8 | 82.8 | 114.7 | 111.4 | 109.9 | 107.3 | 101.3 | 90.3 |
| | dpw | kPa | 56 | 53 | 52 | 50 | 43 | 34 | 60 | 57 | 56 | 54 | 48 | 39 |

| | | | C20 | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1952 | 1900 | 1875 | 1832 | 1743 | 1675 |
| | PI | kW | 581 | 635 | 659 | 696 | 764 | 809 |
| | qw | l/s | 93.0 | 90.5 | 89.4 | 87.3 | 83.0 | 79.8 |
| | dpw | kPa | 41 | 39 | 39 | 37 | 34 | 31 |
| **7** | CC | kW | 2049 | 1993 | 1967 | 1922 | 1827 | 1757 |
| | PI | kW | 597 | 654 | 678 | 716 | 785 | 831 |
| | qw | l/s | 97.8 | 95.1 | 93.9 | 91.7 | 87.2 | 83.8 |
| | dpw | kPa | 45 | 43 | 42 | 40 | 37 | 34 |
| **9** | CC | kW | 2148 | 2089 | 2061 | 2013 | 1913 | 1820 |
| | PI | kW | 615 | 673 | 697 | 736 | 807 | 844 |
| | qw | l/s | 102.6 | 99.8 | 98.4 | 96.1 | 91.4 | 86.9 |
| | dpw | kPa | 49 | 47 | 46 | 44 | 40 | 37 |
| **11** | CC | kW | 2249 | 2185 | 2156 | 2105 | 2000 | 1841 |
| | PI | kW | 633 | 692 | 717 | 757 | 830 | 823 |
| | qw | l/s | 107.5 | 104.5 | 103.0 | 100.6 | 95.6 | 88.0 |
| | dpw | kPa | 54 | 51 | 50 | 48 | 43 | 37 |
| **13** | CC | kW | 2351 | 2284 | 2252 | 2198 | 2087 | 1855 |
| | PI | kW | 651 | 712 | 738 | 779 | 854 | 798 |
| | qw | l/s | 112.5 | 109.2 | 107.7 | 105.1 | 99.8 | 88.7 |
| | dpw | kPa | 58 | 55 | 54 | 52 | 47 | 38 |
| **15** | CC | kW | 2455 | 2383 | 2349 | 2292 | 2153 | 1875 |
| | PI | kW | 670 | 733 | 760 | 802 | 866 | 776 |
| | qw | l/s | 117.5 | 114.1 | 112.5 | 109.7 | 103.1 | 89.8 |
| | dpw | kPa | 63 | 60 | 58 | 56 | 50 | 39 |

*Fluid: Water*
*Ta: Condenser inlet air temperature; Twout: Evaporator leaving water temperature (Δt 5°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 contac factory*

## EWAD C-SR

| | | | 620 | | | | | | 720 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 651 | 620 | 606 | 585 | 544 | 516 | 735 | 712 | 700 | 681 | 641 | 590 |
| | PI | kW | 186 | 200 | 206 | 216 | 232 | 243 | 222 | 242 | 250 | 264 | 289 | 286 |
| | qw | l/s | 31.0 | 29.5 | 28.9 | 27.9 | 25.9 | 24.6 | 35.0 | 33.9 | 33.4 | 32.5 | 30.5 | 28.1 |
| | dpw | kPa | 47 | 43 | 41 | 39 | 34 | 31 | 53 | 50 | 48 | 46 | 41 | 36 |
| **7** | CC | kW | 689 | 656 | 642 | 619 | 577 | 548 | 773 | 748 | 736 | 715 | 669 | 610 |
| | PI | kW | 192 | 207 | 214 | 223 | 241 | 252 | 229 | 250 | 259 | 273 | 296 | 287 |
| | qw | l/s | 32.9 | 31.3 | 30.6 | 29.5 | 27.5 | 26.2 | 36.9 | 35.7 | 35.1 | 34.1 | 31.9 | 29.1 |
| | dpw | kPa | 52 | 48 | 46 | 43 | 38 | 35 | 58 | 55 | 53 | 50 | 45 | 38 |
| **9** | CC | kW | 728 | 693 | 678 | 654 | 610 | 581 | 812 | 785 | 772 | 750 | 687 | 620 |
| | PI | kW | 199 | 215 | 221 | 231 | 249 | 261 | 237 | 259 | 268 | 282 | 295 | 282 |
| | qw | l/s | 34.8 | 33.1 | 32.4 | 31.2 | 29.1 | 27.7 | 38.8 | 37.5 | 36.9 | 35.8 | 32.8 | 29.6 |
| | dpw | kPa | 58 | 53 | 51 | 48 | 42 | 38 | 63 | 60 | 58 | 55 | 47 | 39 |
| **11** | CC | kW | 766 | 730 | 715 | 690 | 644 | 613 | 852 | 822 | 808 | 785 | 709 | 619 |
| | PI | kW | 206 | 222 | 229 | 240 | 258 | 270 | 246 | 268 | 277 | 292 | 297 | 282 |
| | qw | l/s | 36.6 | 34.9 | 34.2 | 33.0 | 30.8 | 29.3 | 40.7 | 39.3 | 38.6 | 37.5 | 33.9 | 29.6 |
| | dpw | kPa | 63 | 58 | 56 | 52 | 46 | 42 | 69 | 65 | 63 | 60 | 50 | 39 |
| **13** | CC | kW | 805 | 768 | 751 | 726 | 678 | 632 | 892 | 860 | 845 | 820 | 730 | 627 |
| | PI | kW | 214 | 230 | 237 | 248 | 267 | 271 | 255 | 277 | 287 | 302 | 297 | 274 |
| | qw | l/s | 38.5 | 36.7 | 35.9 | 34.7 | 32.4 | 30.2 | 42.7 | 41.1 | 40.4 | 39.2 | 34.9 | 30.0 |
| | dpw | kPa | 69 | 64 | 61 | 57 | 51 | 45 | 75 | 71 | 68 | 65 | 52 | 40 |
| **15** | CC | kW | 845 | 806 | 789 | 762 | 712 | 638 | 932 | 898 | 882 | 851 | 734 | 636 |
| | PI | kW | 221 | 238 | 245 | 257 | 277 | 263 | 264 | 287 | 297 | 310 | 288 | 267 |
| | qw | l/s | 40.5 | 38.6 | 37.7 | 36.5 | 34.1 | 30.5 | 44.6 | 43.0 | 42.2 | 40.7 | 35.1 | 30.4 |
| | dpw | kPa | 76 | 69 | 67 | 63 | 56 | 46 | 82 | 76 | 74 | 69 | 53 | 41 |

| | | | 790 | | | | | | 880 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 823 | 792 | 777 | 752 | 696 | 602 | 902 | 873 | 859 | 834 | 785 | 718 |
| | PI | kW | 255 | 278 | 288 | 303 | 329 | 299 | 268 | 293 | 303 | 320 | 349 | 344 |
| | qw | l/s | 39.2 | 37.8 | 37.1 | 35.8 | 33.2 | 28.7 | 43.0 | 41.6 | 40.9 | 39.8 | 37.4 | 34.2 |
| | dpw | kPa | 52 | 48 | 47 | 44 | 38 | 29 | 61 | 57 | 56 | 53 | 47 | 40 |
| **7** | CC | kW | 865 | 832 | 816 | 789 | 702 | 607 | 948 | 917 | 902 | 876 | 812 | 738 |
| | PI | kW | 265 | 289 | 299 | 314 | 319 | 288 | 278 | 303 | 314 | 331 | 353 | 342 |
| | qw | l/s | 41.3 | 39.7 | 38.9 | 37.6 | 33.5 | 29.0 | 45.2 | 43.7 | 43.0 | 41.8 | 38.8 | 35.2 |
| | dpw | kPa | 57 | 53 | 51 | 48 | 39 | 30 | 67 | 63 | 61 | 58 | 50 | 42 |
| **9** | CC | kW | 908 | 872 | 855 | 826 | 709 | 601 | 995 | 961 | 945 | 918 | 837 | 748 |
| | PI | kW | 275 | 299 | 310 | 326 | 310 | 296 | 288 | 314 | 325 | 342 | 354 | 334 |
| | qw | l/s | 43.3 | 41.6 | 40.8 | 39.5 | 33.9 | 28.7 | 47.5 | 45.9 | 45.1 | 43.8 | 40.0 | 35.7 |
| | dpw | kPa | 62 | 57 | 55 | 52 | 40 | 29 | 73 | 68 | 66 | 63 | 53 | 44 |
| **11** | CC | kW | 950 | 912 | 894 | 863 | 718 | 611 | 1043 | 1006 | 989 | 960 | 862 | 747 |
| | PI | kW | 285 | 310 | 321 | 338 | 303 | 288 | 298 | 325 | 336 | 354 | 355 | 334 |
| | qw | l/s | 45.4 | 43.6 | 42.7 | 41.3 | 34.3 | 29.2 | 49.8 | 48.1 | 47.3 | 45.9 | 41.2 | 35.7 |
| | dpw | kPa | 67 | 62 | 60 | 57 | 41 | 30 | 79 | 74 | 72 | 68 | 56 | 44 |
| **13** | CC | kW | 993 | 952 | 932 | 886 | 725 | 618 | 1091 | 1052 | 1033 | 1002 | 879 | 757 |
| | PI | kW | 296 | 322 | 333 | 342 | 293 | 278 | 308 | 336 | 348 | 366 | 351 | 324 |
| | qw | l/s | 47.5 | 45.5 | 44.6 | 42.4 | 34.7 | 29.6 | 52.2 | 50.3 | 49.4 | 48.0 | 42.0 | 36.2 |
| | dpw | kPa | 73 | 67 | 65 | 59 | 41 | 31 | 86 | 81 | 78 | 74 | 58 | 45 |
| **15** | CC | kW | 1037 | 992 | 971 | 893 | 724 | 627 | 1140 | 1098 | 1078 | 1031 | 879 | 766 |
| | PI | kW | 307 | 334 | 345 | 333 | 302 | 269 | 319 | 348 | 360 | 369 | 351 | 314 |
| | qw | l/s | 49.6 | 47.5 | 46.5 | 42.8 | 34.7 | 30.0 | 54.6 | 52.6 | 51.6 | 49.4 | 42.1 | 36.7 |
| | dpw | kPa | 79 | 73 | 70 | 60 | 41 | 32 | 93 | 87 | 84 | 78 | 58 | 46 |

## EWAD C-SR

| | | | 920 | | | | | | C10 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 958 | 924 | 908 | 880 | 823 | 722 | 1052 | 1017 | 1001 | 972 | 914 | 833 |
| | PI | kW | 299 | 326 | 338 | 356 | 390 | 363 | 319 | 349 | 361 | 381 | 417 | 407 |
| | qw | l/s | 45.6 | 44.0 | 43.3 | 41.9 | 39.2 | 34.4 | 50.1 | 48.5 | 47.7 | 46.3 | 43.6 | 39.7 |
| | dpw | kPa | 68 | 64 | 62 | 58 | 52 | 41 | 63 | 59 | 57 | 55 | 49 | 41 |
| **7** | CC | kW | 1005 | 969 | 952 | 922 | 840 | 729 | 1105 | 1068 | 1050 | 1020 | 943 | 856 |
| | PI | kW | 310 | 338 | 350 | 369 | 388 | 350 | 331 | 361 | 374 | 394 | 419 | 405 |
| | qw | l/s | 48.0 | 46.2 | 45.4 | 44.0 | 40.1 | 34.8 | 52.7 | 51.0 | 50.1 | 48.7 | 45.0 | 40.8 |
| | dpw | kPa | 74 | 69 | 67 | 63 | 54 | 42 | 69 | 65 | 63 | 60 | 52 | 43 |
| **9** | CC | kW | 1054 | 1015 | 996 | 964 | 849 | 738 | 1160 | 1120 | 1101 | 1068 | 971 | 857 |
| | PI | kW | 321 | 350 | 362 | 382 | 378 | 340 | 342 | 373 | 386 | 407 | 420 | 407 |
| | qw | l/s | 50.3 | 48.5 | 47.6 | 46.1 | 40.5 | 35.2 | 55.4 | 53.5 | 52.6 | 51.0 | 46.4 | 40.9 |
| | dpw | kPa | 81 | 75 | 73 | 69 | 55 | 43 | 75 | 71 | 68 | 65 | 55 | 44 |
| **11** | CC | kW | 1103 | 1061 | 1041 | 1007 | 861 | 731 | 1215 | 1172 | 1152 | 1117 | 1000 | 866 |
| | PI | kW | 332 | 362 | 375 | 395 | 370 | 349 | 354 | 386 | 400 | 421 | 421 | 394 |
| | qw | l/s | 52.7 | 50.7 | 49.7 | 48.1 | 41.2 | 34.9 | 58.1 | 56.0 | 55.0 | 53.4 | 47.8 | 41.4 |
| | dpw | kPa | 88 | 82 | 79 | 75 | 56 | 42 | 82 | 77 | 74 | 70 | 58 | 44 |
| **13** | CC | kW | 1152 | 1107 | 1086 | 1050 | 871 | 740 | 1271 | 1225 | 1203 | 1166 | 1017 | 877 |
| | PI | kW | 344 | 375 | 388 | 409 | 359 | 337 | 367 | 400 | 414 | 436 | 415 | 382 |
| | qw | l/s | 55.1 | 53.0 | 51.9 | 50.2 | 41.7 | 35.4 | 60.8 | 58.6 | 57.5 | 55.8 | 48.6 | 41.9 |
| | dpw | kPa | 95 | 88 | 85 | 80 | 57 | 43 | 89 | 83 | 80 | 76 | 59 | 46 |
| **15** | CC | kW | 1202 | 1154 | 1131 | 1065 | 864 | 752 | 1328 | 1278 | 1255 | 1200 | 1016 | 887 |
| | PI | kW | 357 | 389 | 402 | 405 | 367 | 328 | 380 | 414 | 428 | 440 | 414 | 371 |
| | qw | l/s | 57.6 | 55.2 | 54.1 | 51.0 | 41.4 | 36.0 | 63.6 | 61.2 | 60.1 | 57.4 | 48.7 | 42.5 |
| | dpw | kPa | 103 | 95 | 92 | 83 | 57 | 44 | 96 | 90 | 87 | 80 | 59 | 47 |

| | | | C11 | | | | | | C12 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1138 | 1104 | 1087 | 1059 | 1001 | 959 | 1301 | 1259 | 1240 | 1206 | 1137 | 1071 |
| | PI | kW | 338 | 369 | 382 | 403 | 441 | 467 | 370 | 404 | 418 | 441 | 482 | 498 |
| | qw | l/s | 54.2 | 52.6 | 51.8 | 50.5 | 47.7 | 45.7 | 62.0 | 60.0 | 59.1 | 57.5 | 54.2 | 51.0 |
| | dpw | kPa | 72 | 68 | 67 | 64 | 57 | 53 | 53 | 50 | 48 | 46 | 41 | 37 |
| **7** | CC | kW | 1196 | 1159 | 1142 | 1112 | 1051 | 978 | 1371 | 1327 | 1306 | 1270 | 1197 | 1107 |
| | PI | kW | 349 | 381 | 395 | 416 | 456 | 464 | 383 | 418 | 433 | 456 | 498 | 499 |
| | qw | l/s | 57.0 | 55.3 | 54.5 | 53.1 | 50.1 | 46.7 | 65.4 | 63.3 | 62.3 | 60.6 | 57.1 | 52.8 |
| | dpw | kPa | 79 | 75 | 73 | 69 | 63 | 55 | 58 | 55 | 53 | 50 | 45 | 39 |
| **9** | CC | kW | 1255 | 1216 | 1197 | 1165 | 1100 | 990 | 1442 | 1396 | 1373 | 1335 | 1250 | 1130 |
| | PI | kW | 361 | 394 | 408 | 430 | 470 | 452 | 396 | 433 | 448 | 472 | 511 | 492 |
| | qw | l/s | 59.9 | 58.1 | 57.2 | 55.6 | 52.5 | 47.3 | 68.9 | 66.7 | 65.6 | 63.8 | 59.7 | 54.0 |
| | dpw | kPa | 86 | 82 | 79 | 76 | 68 | 56 | 63 | 60 | 58 | 55 | 49 | 41 |
| **11** | CC | kW | 1315 | 1273 | 1253 | 1219 | 1150 | 1005 | 1514 | 1464 | 1440 | 1400 | 1288 | 1139 |
| | PI | kW | 373 | 407 | 422 | 444 | 486 | 442 | 410 | 447 | 463 | 488 | 512 | 477 |
| | qw | l/s | 62.9 | 60.8 | 59.9 | 58.3 | 55.0 | 48.0 | 72.4 | 70.0 | 68.8 | 66.9 | 61.5 | 54.5 |
| | dpw | kPa | 94 | 89 | 86 | 82 | 74 | 58 | 69 | 65 | 63 | 60 | 52 | 42 |
| **13** | CC | kW | 1376 | 1331 | 1310 | 1274 | 1163 | 1016 | 1586 | 1532 | 1507 | 1465 | 1328 | 1145 |
| | PI | kW | 386 | 421 | 436 | 459 | 477 | 430 | 424 | 463 | 479 | 505 | 515 | 476 |
| | qw | l/s | 65.8 | 63.7 | 62.7 | 60.9 | 55.6 | 48.6 | 75.9 | 73.3 | 72.1 | 70.1 | 63.6 | 54.8 |
| | dpw | kPa | 102 | 96 | 94 | 89 | 76 | 59 | 75 | 71 | 69 | 65 | 55 | 42 |
| **15** | CC | kW | 1438 | 1390 | 1367 | 1329 | 1172 | 1006 | 1659 | 1602 | 1575 | 1530 | 1342 | 1158 |
| | PI | kW | 399 | 435 | 450 | 474 | 464 | 439 | 439 | 479 | 495 | 522 | 503 | 463 |
| | qw | l/s | 68.8 | 66.5 | 65.4 | 63.6 | 56.1 | 48.2 | 79.4 | 76.7 | 75.4 | 73.3 | 64.2 | 55.5 |
| | dpw | kPa | *111* | 104 | 101 | 96 | 77 | 58 | 82 | 77 | 75 | 71 | 56 | 43 |

## EWAD C-SR

| | | | H14 | | | | | | C13 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1360 | 1314 | 1292 | 1254 | 1179 | 1090 | 1399 | 1356 | 1336 | 1300 | 1227 | 1153 |
| | PI | kW | 399 | 437 | 453 | 478 | 524 | 532 | 420 | 459 | 475 | 501 | 548 | 563 |
| | qw | l/s | 64.8 | 62.6 | 61.6 | 59.8 | 56.2 | 52.0 | 66.7 | 64.6 | 63.7 | 62.0 | 58.5 | 55.0 |
| | dpw | kPa | 57 | 53 | 52 | 49 | 44 | 38 | 47 | 44 | 43 | 41 | 37 | 33 |
| **7** | CC | kW | 1431 | 1383 | 1360 | 1321 | 1238 | 1105 | 1473 | 1427 | 1405 | 1367 | 1289 | 1199 |
| | PI | kW | 413 | 452 | 469 | 495 | 541 | 518 | 435 | 474 | 491 | 518 | 566 | 570 |
| | qw | l/s | 68.3 | 66.0 | 64.9 | 63.0 | 59.1 | 52.7 | 70.3 | 68.1 | 67.0 | 65.2 | 61.5 | 57.2 |
| | dpw | kPa | 62 | 59 | 57 | 54 | 48 | 39 | 52 | 49 | 47 | 45 | 41 | 36 |
| **9** | CC | kW | 1503 | 1452 | 1427 | 1386 | 1285 | 1116 | 1549 | 1499 | 1475 | 1435 | 1338 | 1231 |
| | PI | kW | 427 | 468 | 485 | 512 | 552 | 500 | 450 | 491 | 508 | 535 | 575 | 569 |
| | qw | l/s | 71.8 | 69.3 | 68.2 | 66.2 | 61.4 | 53.3 | 74.0 | 71.6 | 70.4 | 68.5 | 63.9 | 58.8 |
| | dpw | kPa | 68 | 64 | 62 | 59 | 52 | 40 | 57 | 53 | 52 | 49 | 44 | 37 |
| **11** | CC | kW | 1576 | 1520 | 1494 | 1451 | 1300 | 1130 | 1626 | 1572 | 1546 | 1503 | 1387 | 1237 |
| | PI | kW | 442 | 484 | 501 | 529 | 538 | 485 | 465 | 507 | 525 | 553 | 582 | 564 |
| | qw | l/s | 75.3 | 72.7 | 71.4 | 69.3 | 62.1 | 54.0 | 77.7 | 75.1 | 73.9 | 71.9 | 66.3 | 59.1 |
| | dpw | kPa | 74 | 70 | 68 | 64 | 53 | 41 | *62* | 58 | 56 | 54 | 46 | 38 |
| **13** | CC | kW | 1650 | 1590 | 1562 | 1516 | 1319 | 1125 | 1704 | 1646 | 1619 | 1573 | 1437 | 1256 |
| | PI | kW | 458 | 500 | 519 | 547 | 527 | 495 | 482 | 525 | 543 | 572 | 591 | 552 |
| | qw | l/s | 78.9 | 76.1 | 74.7 | 72.5 | 63.1 | 53.8 | 81.5 | 78.7 | 77.4 | 75.2 | 68.8 | 60.1 |
| | dpw | kPa | 81 | 76 | 73 | 70 | 54 | 41 | *67* | *63* | *61* | 58 | 50 | 39 |
| **15** | CC | kW | 1725 | 1661 | 1631 | 1581 | 1334 | 1141 | 1783 | 1721 | 1692 | 1643 | 1464 | 1271 |
| | PI | kW | 474 | 518 | 536 | 566 | 513 | 480 | 498 | 543 | 562 | 592 | 585 | 536 |
| | qw | l/s | 82.6 | 79.5 | 78.1 | 75.7 | 63.9 | 54.6 | 85.3 | 82.4 | 81.0 | 78.6 | 70.1 | 60.8 |
| | dpw | kPa | 88 | 82 | 79 | 75 | 55 | 42 | *73* | *69* | *67* | *63* | 51 | 40 |

| | | | C14 | | | | | | C15 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1521 | 1469 | 1444 | 1401 | 1313 | 1187 | 1604 | 1550 | 1525 | 1481 | 1392 | 1261 |
| | PI | kW | 468 | 510 | 528 | 557 | 609 | 590 | 489 | 534 | 553 | 583 | 638 | 617 |
| | qw | l/s | 72.5 | 70.0 | 68.8 | 66.8 | 62.6 | 56.6 | 76.4 | 73.9 | 72.7 | 70.6 | 66.4 | 60.1 |
| | dpw | kPa | 61 | 57 | 55 | 52 | 47 | 39 | 67 | 63 | 61 | 58 | 52 | 43 |
| **7** | CC | kW | 1600 | 1544 | 1517 | 1471 | 1358 | 1218 | 1688 | 1630 | 1603 | 1556 | 1441 | 1293 |
| | PI | kW | 485 | 529 | 547 | 577 | 617 | 585 | 506 | 553 | 572 | 603 | 645 | 607 |
| | qw | l/s | 76.4 | 73.7 | 72.4 | 70.2 | 64.8 | 58.1 | 80.5 | 77.8 | 76.5 | 74.2 | 68.7 | 61.7 |
| | dpw | kPa | 67 | 62 | 60 | 57 | 50 | 41 | 73 | 69 | 67 | 63 | 55 | 45 |
| **9** | CC | kW | 1681 | 1620 | 1591 | 1542 | 1389 | 1232 | 1773 | 1711 | 1681 | 1631 | 1471 | 1327 |
| | PI | kW | 503 | 548 | 567 | 597 | 611 | 569 | 524 | 572 | 592 | 624 | 635 | 601 |
| | qw | l/s | 80.3 | 77.4 | 76.0 | 73.6 | 66.4 | 58.8 | 84.7 | 81.7 | 80.3 | 77.9 | 70.3 | 63.4 |
| | dpw | kPa | 73 | 68 | 66 | 62 | 52 | 42 | 80 | 75 | 73 | 69 | 57 | 48 |
| **11** | CC | kW | 1763 | 1697 | 1666 | 1614 | 1423 | 1229 | 1859 | 1792 | 1761 | 1708 | 1511 | 1345 |
| | PI | kW | 521 | 568 | 587 | 619 | 606 | 574 | 543 | 592 | 613 | 646 | 631 | 620 |
| | qw | l/s | 84.3 | 81.1 | 79.6 | 77.1 | 68.0 | 58.7 | 88.9 | 85.7 | 84.2 | 81.6 | 72.2 | 64.3 |
| | dpw | kPa | 80 | 74 | 72 | 68 | 54 | 42 | *87* | 82 | 79 | 75 | 60 | 49 |
| **13** | CC | kW | 1846 | 1775 | 1742 | 1686 | 1448 | 1245 | 1947 | 1875 | 1841 | 1785 | 1548 | 1374 |
| | PI | kW | 540 | 588 | 608 | 640 | 597 | 557 | 563 | 613 | 635 | 668 | 625 | 610 |
| | qw | l/s | 88.3 | 84.9 | 83.3 | 80.7 | 69.3 | 59.6 | 93.1 | 89.7 | 88.1 | 85.4 | 74.0 | 65.8 |
| | dpw | kPa | *86* | 81 | 78 | 73 | 56 | 43 | *95* | *89* | *86* | 81 | 63 | 51 |
| **15** | CC | kW | 1930 | 1854 | 1818 | 1728 | 1454 | 1260 | 2035 | 1958 | 1922 | 1830 | 1562 | 1387 |
| | PI | kW | 560 | 609 | 630 | 643 | 593 | 539 | 583 | 635 | 657 | 670 | 639 | 589 |
| | qw | l/s | 92.4 | 88.7 | 87.0 | 82.7 | 69.6 | 60.3 | 97.4 | 93.8 | 92.0 | 87.6 | 74.8 | 66.4 |
| | dpw | kPa | *94* | *87* | 84 | 77 | 56 | 44 | *103* | *96* | *93* | 85 | 64 | 52 |

## EWAD C-SR

| | | | C16 | | | | | | C17 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1679 | 1622 | 1595 | 1548 | 1452 | 1311 | 1786 | 1722 | 1690 | 1636 | 1510 | 1308 |
| | PI | kW | 524 | 572 | 592 | 625 | 684 | 662 | 567 | 620 | 643 | 679 | 734 | 667 |
| | qw | l/s | 80.0 | 77.3 | 76.0 | 73.8 | 69.2 | 62.5 | 85.1 | 82.1 | 80.6 | 78.0 | 72.0 | 62.3 |
| | dpw | kPa | 73 | 69 | 67 | 63 | 56 | 47 | 35 | 33 | 32 | 30 | 26 | 20 |
| **7** | CC | kW | 1764 | 1703 | 1673 | 1623 | 1495 | 1331 | 1872 | 1804 | 1771 | 1714 | 1532 | 1329 |
| | PI | kW | 542 | 592 | 613 | 647 | 689 | 647 | 587 | 642 | 665 | 702 | 719 | 648 |
| | qw | l/s | 84.2 | 81.2 | 79.8 | 77.4 | 71.3 | 63.5 | 89.3 | 86.1 | 84.5 | 81.8 | 73.1 | 63.4 |
| | dpw | kPa | 80 | 75 | 73 | 69 | 60 | 48 | 39 | 36 | 35 | 33 | 27 | 21 |
| **9** | CC | kW | 1850 | 1784 | 1752 | 1699 | 1532 | 1351 | 1960 | 1886 | 1851 | 1791 | 1548 | 1314 |
| | PI | kW | 561 | 613 | 635 | 669 | 685 | 631 | 607 | 664 | 688 | 727 | 698 | 662 |
| | qw | l/s | 88.4 | 85.2 | 83.7 | 81.1 | 73.2 | 64.5 | 93.6 | 90.1 | 88.4 | 85.5 | 73.9 | 62.8 |
| | dpw | kPa | 87 | 82 | 79 | 75 | 62 | 50 | 42 | 39 | 38 | 36 | 27 | 20 |
| **11** | CC | kW | 1937 | 1866 | 1833 | 1775 | 1565 | 1348 | 2048 | 1969 | 1931 | 1868 | 1569 | 1336 |
| | PI | kW | 581 | 634 | 657 | 692 | 678 | 636 | 629 | 687 | 712 | 752 | 680 | 645 |
| | qw | l/s | 92.6 | 89.2 | 87.6 | 84.9 | 74.8 | 64.4 | 97.9 | 94.1 | 92.3 | 89.3 | 75.0 | 63.9 |
| | dpw | kPa | 95 | 89 | 86 | 81 | 65 | 50 | 45 | 42 | 41 | 38 | 28 | 21 |
| **13** | CC | kW | 2026 | 1949 | 1913 | 1853 | 1583 | 1365 | 2137 | 2052 | 2012 | 1926 | 1592 | 1353 |
| | PI | kW | 602 | 657 | 680 | 716 | 661 | 617 | 651 | 712 | 737 | 766 | 664 | 622 |
| | qw | l/s | 96.9 | 93.2 | 91.5 | 88.6 | 75.7 | 65.3 | 102.2 | 98.2 | 96.2 | 92.1 | 76.2 | 64.7 |
| | dpw | kPa | 103 | 96 | 93 | 88 | 66 | 51 | 49 | 46 | 44 | 41 | 29 | 22 |
| **15** | CC | kW | 2115 | 2033 | 1994 | 1898 | 1587 | 1374 | 2227 | 2136 | 2093 | 1950 | 1577 | 1375 |
| | PI | kW | 624 | 680 | 704 | 719 | 670 | 609 | 675 | 737 | 763 | 753 | 674 | 603 |
| | qw | l/s | 101.2 | 97.3 | 95.5 | 90.9 | 76.0 | 65.8 | 106.6 | 102.2 | 100.2 | 93.3 | 75.5 | 65.8 |
| | dpw | kPa | 112 | 104 | 100 | 92 | 67 | 51 | 53 | 49 | 47 | 42 | 28 | 22 |

| | | | C18 | | | | | | C19 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1857 | 1795 | 1765 | 1713 | 1606 | 1433 | 1904 | 1839 | 1807 | 1752 | 1637 | 1421 |
| | PI | kW | 578 | 633 | 657 | 695 | 764 | 726 | 607 | 667 | 693 | 734 | 808 | 737 |
| | qw | l/s | 88.5 | 85.6 | 84.1 | 81.7 | 76.5 | 68.3 | 90.8 | 87.6 | 86.1 | 83.5 | 78.0 | 67.7 |
| | dpw | kPa | 38 | 36 | 35 | 33 | 29 | 24 | 40 | 37 | 36 | 34 | 30 | 23 |
| **7** | CC | kW | 1947 | 1881 | 1849 | 1795 | 1648 | 1456 | 1996 | 1926 | 1891 | 1833 | 1662 | 1445 |
| | PI | kW | 597 | 654 | 679 | 718 | 762 | 707 | 628 | 689 | 716 | 758 | 794 | 716 |
| | qw | l/s | 92.9 | 89.7 | 88.2 | 85.6 | 78.6 | 69.5 | 95.2 | 91.9 | 90.2 | 87.5 | 79.3 | 68.9 |
| | dpw | kPa | 41 | 39 | 38 | 36 | 31 | 25 | 43 | 41 | 39 | 37 | 31 | 24 |
| **9** | CC | kW | 2038 | 1968 | 1934 | 1876 | 1687 | 1452 | 2089 | 2013 | 1977 | 1915 | 1682 | 1431 |
| | PI | kW | 617 | 676 | 701 | 742 | 754 | 707 | 649 | 712 | 740 | 783 | 771 | 726 |
| | qw | l/s | 97.3 | 94.0 | 92.3 | 89.6 | 80.6 | 69.3 | 99.8 | 96.1 | 94.4 | 91.4 | 80.3 | 68.3 |
| | dpw | kPa | 45 | 42 | 41 | 39 | 32 | 24 | 47 | 44 | 43 | 40 | 32 | 24 |
| **11** | CC | kW | 2131 | 2055 | 2019 | 1957 | 1715 | 1475 | 2183 | 2101 | 2062 | 1997 | 1706 | 1456 |
| | PI | kW | 638 | 699 | 725 | 766 | 741 | 689 | 671 | 737 | 765 | 809 | 752 | 708 |
| | qw | l/s | 101.9 | 98.2 | 96.5 | 93.6 | 82.0 | 70.5 | 104.3 | 100.4 | 98.6 | 95.4 | 81.5 | 69.6 |
| | dpw | kPa | 49 | 46 | 44 | 42 | 33 | 25 | 51 | 48 | 46 | 43 | 33 | 25 |
| **13** | CC | kW | 2225 | 2143 | 2105 | 2040 | 1733 | 1494 | 2277 | 2190 | 2149 | 2079 | 1724 | 1477 |
| | PI | kW | 660 | 722 | 749 | 792 | 720 | 667 | 694 | 762 | 790 | 836 | 728 | 685 |
| | qw | l/s | 106.4 | 102.5 | 100.7 | 97.6 | 82.9 | 71.5 | 108.9 | 104.8 | 102.8 | 99.5 | 82.5 | 70.6 |
| | dpw | kPa | 53 | 49 | 48 | 45 | 34 | 26 | 55 | 51 | 50 | 47 | 33 | 25 |
| **15** | CC | kW | 2320 | 2232 | 2191 | 2094 | 1731 | 1505 | 2373 | 2279 | 2235 | 2120 | 1711 | 1501 |
| | PI | kW | 683 | 747 | 774 | 798 | 720 | 658 | 718 | 788 | 817 | 835 | 737 | 665 |
| | qw | l/s | 111.0 | 106.9 | 104.9 | 100.3 | 82.9 | 72.1 | 113.6 | 109.1 | 107.0 | 101.5 | 81.9 | 71.9 |
| | dpw | kPa | 57 | 53 | 51 | 47 | 34 | 26 | 59 | 55 | 53 | 48 | 33 | 26 |

*Fluid: Water*
*Ta: Condenser inlet air temperature; Twout: Evaporator leaving water temperature (Δt 5°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 contac factory*

## EWAD C-XS

| | | | 760 | | | | | | 830 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 756 | 736 | 728 | 715 | 687 | 667 | 829 | 807 | 798 | 784 | 755 | 735 |
| | PI | kW | 192 | 209 | 216 | 226 | 245 | 257 | 208 | 227 | 235 | 246 | 267 | 280 |
| | qw | l/s | 36.0 | 35.1 | 34.7 | 34.1 | 32.8 | 31.8 | 39.5 | 38.5 | 38.0 | 37.4 | 36.0 | 35.0 |
| | dpw | kPa | 80 | 77 | 75 | 73 | 68 | 64 | 57 | 54 | 53 | 51 | 48 | 46 |
| **7** | CC | kW | 799 | 779 | 770 | 756 | 727 | 706 | 877 | 855 | 845 | 830 | 800 | 777 |
| | PI | kW | 197 | 215 | 222 | 233 | 252 | 265 | 214 | 233 | 241 | 253 | 274 | 288 |
| | qw | l/s | 38.1 | 37.2 | 36.8 | 36.1 | 34.7 | 33.7 | 41.8 | 40.8 | 40.3 | 39.6 | 38.2 | 37.1 |
| | dpw | kPa | 89 | 85 | 83 | 81 | 75 | 71 | 63 | 60 | 59 | 57 | 53 | 50 |
| **9** | CC | kW | 843 | 822 | 813 | 798 | 768 | 746 | 923 | 901 | 892 | 877 | 845 | 822 |
| | PI | kW | 203 | 221 | 228 | 239 | 259 | 272 | 220 | 240 | 248 | 260 | 282 | 295 |
| | qw | l/s | 40.2 | 39.3 | 38.8 | 38.1 | 36.7 | 35.6 | 44.1 | 43.0 | 42.6 | 41.9 | 40.4 | 39.2 |
| | dpw | kPa | 98 | 94 | 92 | 89 | 83 | 79 | 69 | 66 | 65 | 63 | 59 | 56 |
| **11** | CC | kW | 887 | 865 | 856 | 840 | 809 | 786 | 970 | 948 | 938 | 922 | 891 | 867 |
| | PI | kW | 208 | 227 | 234 | 246 | 266 | 280 | 225 | 246 | 254 | 267 | 289 | 304 |
| | qw | l/s | 42.4 | 41.4 | 40.9 | 40.2 | 38.7 | 37.6 | 46.4 | 45.3 | 44.8 | 44.1 | 42.6 | 41.4 |
| | dpw | kPa | 108 | 103 | 101 | 98 | 91 | 87 | 75 | 72 | 71 | 69 | 65 | 62 |
| **13** | CC | kW | 931 | 909 | 899 | 883 | 850 | 826 | 1018 | 995 | 985 | 968 | 935 | 911 |
| | PI | kW | 214 | 233 | 241 | 253 | 274 | 287 | 231 | 252 | 261 | 274 | 297 | 312 |
| | qw | l/s | 44.5 | 43.5 | 43.0 | 42.2 | 40.7 | 39.5 | 48.7 | 47.6 | 47.1 | 46.3 | 44.7 | 43.6 |
| | dpw | kPa | 118 | 113 | 111 | 107 | 100 | 95 | 82 | 79 | 78 | 75 | 71 | 67 |
| **15** | CC | kW | 977 | 953 | 943 | 926 | 892 | 867 | 1064 | 1041 | 1031 | 1014 | 980 | 955 |
| | PI | kW | 220 | 239 | 247 | 260 | 281 | 295 | 237 | 259 | 267 | 281 | 304 | 320 |
| | qw | l/s | 46.8 | 45.6 | 45.1 | 44.3 | 42.7 | 41.5 | 50.9 | 49.8 | 49.4 | 48.6 | 46.9 | 45.7 |
| | dpw | kPa | 129 | 123 | 121 | 117 | 109 | 104 | 89 | 86 | 84 | 82 | 77 | 73 |

| | | | 890 | | | | | | 990 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 889 | 866 | 856 | 840 | 808 | 785 | 1001 | 974 | 963 | 945 | 908 | 881 |
| | PI | kW | 229 | 249 | 257 | 270 | 293 | 308 | 253 | 275 | 284 | 298 | 323 | 339 |
| | qw | l/s | 42.4 | 41.3 | 40.8 | 40.1 | 38.5 | 37.4 | 47.7 | 46.4 | 45.9 | 45.0 | 43.3 | 42.0 |
| | dpw | kPa | 64 | 61 | 60 | 58 | 54 | 51 | 61 | 58 | 57 | 55 | 51 | 48 |
| **7** | CC | kW | 940 | 916 | 906 | 889 | 855 | 829 | 1060 | 1033 | 1021 | 1001 | 962 | 933 |
| | PI | kW | 235 | 256 | 265 | 278 | 301 | 316 | 260 | 283 | 293 | 307 | 332 | 349 |
| | qw | l/s | 44.9 | 43.7 | 43.2 | 42.4 | 40.8 | 39.6 | 50.6 | 49.3 | 48.7 | 47.8 | 45.9 | 44.5 |
| | dpw | kPa | 71 | 68 | 66 | 64 | 60 | 57 | 68 | 64 | 63 | 61 | 57 | 54 |
| **9** | CC | kW | 986 | 964 | 955 | 939 | 902 | 876 | 1121 | 1092 | 1079 | 1059 | 1017 | 987 |
| | PI | kW | 241 | 263 | 272 | 286 | 310 | 325 | 268 | 292 | 301 | 316 | 342 | 359 |
| | qw | l/s | 47.1 | 46.0 | 45.6 | 44.8 | 43.1 | 41.8 | 53.5 | 52.1 | 51.6 | 50.6 | 48.6 | 47.1 |
| | dpw | kPa | 77 | 74 | 73 | 71 | 66 | 63 | 75 | 71 | 70 | 68 | 63 | 59 |
| **11** | CC | kW | 1032 | 1010 | 1000 | 983 | 950 | 923 | 1182 | 1152 | 1139 | 1117 | 1074 | 1042 |
| | PI | kW | 247 | 270 | 279 | 293 | 318 | 334 | 276 | 300 | 310 | 325 | 352 | 369 |
| | qw | l/s | 49.3 | 48.3 | 47.8 | 47.0 | 45.4 | 44.1 | 56.5 | 55.1 | 54.4 | 53.4 | 51.3 | 49.8 |
| | dpw | kPa | 84 | 81 | 80 | 77 | 73 | 69 | 82 | 79 | 77 | 74 | 69 | 66 |
| **13** | CC | kW | 1079 | 1056 | 1046 | 1028 | 993 | 968 | 1245 | 1214 | 1200 | 1177 | 1131 | 1098 |
| | PI | kW | 254 | 276 | 286 | 300 | 326 | 343 | 283 | 309 | 319 | 335 | 362 | 380 |
| | qw | l/s | 51.6 | 50.5 | 50.0 | 49.2 | 47.5 | 46.3 | 59.5 | 58.1 | 57.4 | 56.3 | 54.1 | 52.5 |
| | dpw | kPa | 91 | 88 | 86 | 84 | 79 | 75 | 90 | 86 | 85 | 82 | 76 | 72 |
| **15** | CC | kW | 1127 | 1103 | 1092 | 1074 | 1037 | 1010 | 1308 | 1275 | 1261 | 1237 | 1189 | 1155 |
| | PI | kW | 260 | 283 | 293 | 308 | 334 | 351 | 292 | 318 | 328 | 344 | 373 | 391 |
| | qw | l/s | 54.0 | 52.8 | 52.3 | 51.4 | 49.7 | 48.4 | 62.6 | 61.0 | 60.4 | 59.2 | 56.9 | 55.3 |
| | dpw | kPa | 99 | 95 | 93 | 91 | 85 | 81 | 99 | 95 | 93 | 90 | 83 | 79 |

## EWAD C-XS

| | | | C10 | | | | | | C11 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1076 | 1047 | 1035 | 1014 | 973 | 942 | 1194 | 1164 | 1151 | 1130 | 1088 | 1058 |
| | PI | kW | 278 | 302 | 312 | 328 | 355 | 373 | 299 | 326 | 337 | 354 | 383 | 402 |
| | qw | l/s | 51.3 | 49.9 | 49.3 | 48.3 | 46.4 | 44.9 | 56.9 | 55.5 | 54.9 | 53.9 | 51.9 | 50.4 |
| | dpw | kPa | 69 | 66 | 65 | 62 | 58 | 54 | 45 | 43 | 42 | 41 | 38 | 36 |
| **7** | CC | kW | 1139 | 1109 | 1096 | 1074 | 1029 | 997 | 1263 | 1231 | 1218 | 1196 | 1152 | 1120 |
| | PI | kW | 286 | 312 | 322 | 338 | 366 | 384 | 307 | 335 | 346 | 364 | 394 | 413 |
| | qw | l/s | 54.4 | 52.9 | 52.3 | 51.2 | 49.1 | 47.6 | 60.3 | 58.7 | 58.1 | 57.1 | 55.0 | 53.4 |
| | dpw | kPa | 77 | 73 | 72 | 69 | 64 | 60 | 50 | 48 | 47 | 45 | 42 | 40 |
| **9** | CC | kW | 1202 | 1171 | 1158 | 1135 | 1088 | 1053 | 1333 | 1300 | 1286 | 1264 | 1217 | 1184 |
| | PI | kW | 295 | 321 | 331 | 348 | 377 | 396 | 316 | 344 | 356 | 374 | 405 | 425 |
| | qw | l/s | 57.4 | 55.9 | 55.3 | 54.2 | 51.9 | 50.3 | 63.7 | 62.1 | 61.4 | 60.3 | 58.1 | 56.5 |
| | dpw | kPa | 85 | 81 | 79 | 76 | 71 | 67 | 55 | 53 | 52 | 50 | 47 | 44 |
| **11** | CC | kW | 1266 | 1234 | 1219 | 1195 | 1147 | 1111 | 1405 | 1370 | 1356 | 1332 | 1284 | 1248 |
| | PI | kW | 303 | 330 | 341 | 358 | 388 | 407 | 324 | 354 | 365 | 384 | 416 | 436 |
| | qw | l/s | 60.5 | 59.0 | 58.3 | 57.1 | 54.8 | 53.1 | 67.1 | 65.5 | 64.8 | 63.7 | 61.4 | 59.7 |
| | dpw | kPa | 93 | 89 | 87 | 84 | 78 | 74 | 61 | 58 | 57 | 55 | 51 | 49 |
| **13** | CC | kW | 1330 | 1296 | 1281 | 1256 | 1205 | 1168 | 1478 | 1442 | 1427 | 1401 | 1350 | 1314 |
| | PI | kW | 312 | 340 | 351 | 368 | 399 | 419 | 333 | 363 | 375 | 394 | 427 | 448 |
| | qw | l/s | 63.6 | 62.0 | 61.3 | 60.1 | 57.7 | 55.9 | 70.7 | 69.0 | 68.3 | 67.0 | 64.6 | 62.8 |
| | dpw | kPa | 102 | 97 | 95 | 92 | 85 | 81 | 66 | 64 | 62 | 60 | 56 | 54 |
| **15** | CC | kW | 1395 | 1360 | 1344 | 1318 | 1264 | 1226 | 1552 | 1515 | 1499 | 1472 | 1419 | 1380 |
| | PI | kW | 321 | 349 | 361 | 379 | 411 | 431 | 342 | 373 | 386 | 405 | 438 | 460 |
| | qw | l/s | 66.8 | 65.1 | 64.3 | 63.1 | 60.5 | 58.7 | 74.3 | 72.5 | 71.8 | 70.5 | 67.9 | 66.1 |
| | dpw | kPa | 111 | 106 | 104 | 100 | 93 | 88 | 73 | 70 | 68 | 66 | 62 | 59 |

| | | | C12 | | | | | | C13 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1280 | 1248 | 1234 | 1211 | 1165 | 1130 | 1352 | 1314 | 1298 | 1271 | 1218 | 1179 |
| | PI | kW | 329 | 359 | 371 | 389 | 422 | 443 | 337 | 367 | 379 | 398 | 430 | 451 |
| | qw | l/s | 61.0 | 59.5 | 58.8 | 57.7 | 55.5 | 53.9 | 64.4 | 62.6 | 61.9 | 60.6 | 58.0 | 56.2 |
| | dpw | kPa | 51 | 49 | 48 | 46 | 43 | 41 | 68 | 64 | 63 | 61 | 56 | 53 |
| **7** | CC | kW | 1353 | 1319 | 1304 | 1280 | 1231 | 1195 | 1433 | 1394 | 1377 | 1349 | 1292 | 1250 |
| | PI | kW | 338 | 369 | 381 | 400 | 434 | 456 | 348 | 378 | 391 | 410 | 444 | 465 |
| | qw | l/s | 64.5 | 62.9 | 62.2 | 61.1 | 58.7 | 57.0 | 68.4 | 66.5 | 65.7 | 64.4 | 61.6 | 59.6 |
| | dpw | kPa | 56 | 54 | 53 | 51 | 48 | 45 | 75 | 72 | 70 | 68 | 62 | 59 |
| **9** | CC | kW | 1425 | 1391 | 1375 | 1350 | 1299 | 1261 | 1518 | 1476 | 1458 | 1428 | 1368 | 1324 |
| | PI | kW | 348 | 379 | 392 | 411 | 446 | 468 | 359 | 390 | 403 | 423 | 457 | 479 |
| | qw | l/s | 68.1 | 66.4 | 65.7 | 64.5 | 62.0 | 60.2 | 72.5 | 70.5 | 69.6 | 68.2 | 65.3 | 63.2 |
| | dpw | kPa | 62 | 59 | 58 | 56 | 53 | 50 | 84 | 80 | 78 | 75 | 69 | 65 |
| **11** | CC | kW | 1500 | 1463 | 1447 | 1421 | 1367 | 1327 | 1605 | 1561 | 1541 | 1509 | 1445 | 1398 |
| | PI | kW | 357 | 389 | 402 | 423 | 458 | 481 | 370 | 403 | 416 | 436 | 471 | 494 |
| | qw | l/s | 71.7 | 70.0 | 69.2 | 67.9 | 65.3 | 63.5 | 76.7 | 74.6 | 73.7 | 72.1 | 69.1 | 66.8 |
| | dpw | kPa | 68 | 65 | 64 | 62 | 58 | 55 | 93 | 88 | 86 | 83 | 77 | 72 |
| **13** | CC | kW | 1576 | 1538 | 1521 | 1493 | 1436 | 1395 | 1694 | 1648 | 1627 | 1592 | 1524 | 1475 |
| | PI | kW | 367 | 400 | 414 | 434 | 471 | 495 | 382 | 415 | 429 | 450 | 486 | 509 |
| | qw | l/s | 75.4 | 73.6 | 72.8 | 71.4 | 68.7 | 66.7 | 81.0 | 78.8 | 77.8 | 76.2 | 72.9 | 70.5 |
| | dpw | kPa | 75 | 71 | 70 | 68 | 63 | 60 | 102 | 97 | 95 | 91 | 84 | 80 |
| **15** | CC | kW | 1655 | 1614 | 1596 | 1566 | 1506 | 1463 | 1784 | 1735 | 1713 | 1677 | 1605 | 1553 |
| | PI | kW | 378 | 411 | 425 | 446 | 484 | 508 | 394 | 428 | 442 | 464 | 501 | 525 |
| | qw | l/s | 79.2 | 77.3 | 76.4 | 75.0 | 72.1 | 70.0 | 85.4 | 83.1 | 82.0 | 80.3 | 76.8 | 74.3 |
| | dpw | kPa | 82 | 78 | 76 | 74 | 69 | 65 | 112 | 107 | 104 | 100 | 93 | 87 |

## EWAD C-XS

| | | | H14 | | | | | | H15 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1422 | 1382 | 1365 | 1337 | 1279 | 1236 | 1536 | 1493 | 1474 | 1442 | 1376 | 1328 |
| | PI | kW | 363 | 396 | 409 | 430 | 467 | 491 | 388 | 424 | 438 | 461 | 502 | 529 |
| | qw | l/s | 67.8 | 65.9 | 65.1 | 63.7 | 61.0 | 58.9 | 73.2 | 71.2 | 70.2 | 68.7 | 65.6 | 63.3 |
| | dpw | kPa | 78 | 74 | 73 | 70 | 65 | 61 | 85 | 81 | 79 | 76 | 70 | 66 |
| **7** | CC | kW | 1505 | 1464 | 1445 | 1415 | 1353 | 1308 | 1626 | 1580 | 1559 | 1525 | 1455 | 1404 |
| | PI | kW | 374 | 408 | 421 | 443 | 481 | 505 | 400 | 437 | 452 | 475 | 517 | 545 |
| | qw | l/s | 71.8 | 69.8 | 69.0 | 67.5 | 64.6 | 62.4 | 77.6 | 75.4 | 74.4 | 72.8 | 69.4 | 67.0 |
| | dpw | kPa | 87 | 82 | 81 | 77 | 72 | 67 | 95 | 90 | 88 | 84 | 77 | 73 |
| **9** | CC | kW | 1590 | 1547 | 1527 | 1495 | 1429 | 1382 | 1714 | 1667 | 1647 | 1610 | 1536 | 1482 |
| | PI | kW | 385 | 420 | 434 | 456 | 495 | 521 | 412 | 450 | 466 | 490 | 533 | 561 |
| | qw | l/s | 75.9 | 73.9 | 72.9 | 71.4 | 68.3 | 66.0 | 81.9 | 79.6 | 78.6 | 76.9 | 73.3 | 70.8 |
| | dpw | kPa | 96 | 91 | 89 | 86 | 79 | 74 | 104 | 99 | 97 | 93 | 85 | 80 |
| **11** | CC | kW | 1676 | 1630 | 1610 | 1576 | 1507 | 1457 | 1804 | 1754 | 1731 | 1694 | 1618 | 1561 |
| | PI | kW | 397 | 433 | 448 | 470 | 511 | 536 | 424 | 463 | 479 | 505 | 550 | 578 |
| | qw | l/s | 80.1 | 77.9 | 76.9 | 75.3 | 72.0 | 69.6 | 86.2 | 83.8 | 82.8 | 81.0 | 77.3 | 74.6 |
| | dpw | kPa | 105 | 100 | 98 | 94 | 87 | 82 | 114 | 109 | 106 | 102 | 94 | 88 |
| **13** | CC | kW | 1762 | 1714 | 1693 | 1657 | 1585 | 1533 | 1896 | 1842 | 1818 | 1778 | 1698 | 1641 |
| | PI | kW | 409 | 446 | 461 | 484 | 526 | 552 | 437 | 477 | 494 | 520 | 566 | 596 |
| | qw | l/s | 84.3 | 82.0 | 81.0 | 79.3 | 75.8 | 73.3 | 90.7 | 88.1 | 87.0 | 85.1 | 81.2 | 78.5 |
| | dpw | kPa | 115 | 110 | 107 | 103 | 95 | 90 | 125 | 119 | 116 | 111 | 103 | 97 |
| **15** | CC | kW | 1850 | 1799 | 1776 | 1738 | 1664 | 1609 | 1990 | 1932 | 1907 | 1864 | 1779 | 1719 |
| | PI | kW | 421 | 459 | 475 | 499 | 542 | 569 | 450 | 491 | 509 | 535 | 583 | 613 |
| | qw | l/s | 88.6 | 86.1 | 85.0 | 83.2 | 79.6 | 77.1 | 95.3 | 92.5 | 91.3 | 89.2 | 85.2 | 82.3 |
| | dpw | kPa | 126 | 120 | 117 | 113 | 104 | 98 | 137 | 130 | 127 | 121 | 112 | 105 |

| | | | C16 | | | | | | C17 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1599 | 1559 | 1541 | 1511 | 1451 | 1406 | 1686 | 1645 | 1627 | 1597 | 1535 | 1490 |
| | PI | kW | 414 | 451 | 466 | 489 | 531 | 558 | 439 | 478 | 494 | 519 | 563 | 592 |
| | qw | l/s | 76.2 | 74.3 | 73.4 | 72.0 | 69.2 | 67.0 | 80.4 | 78.4 | 77.5 | 76.1 | 73.2 | 71.0 |
| | dpw | kPa | 62 | 59 | 58 | 56 | 52 | 49 | 68 | 65 | 64 | 62 | 58 | 55 |
| **7** | CC | kW | 1686 | 1645 | 1626 | 1596 | 1533 | 1486 | 1778 | 1735 | 1716 | 1685 | 1621 | 1573 |
| | PI | kW | 426 | 464 | 479 | 503 | 546 | 574 | 451 | 491 | 508 | 533 | 579 | 608 |
| | qw | l/s | 80.4 | 78.5 | 77.6 | 76.1 | 73.1 | 70.9 | 84.8 | 82.8 | 81.9 | 80.4 | 77.3 | 75.0 |
| | dpw | kPa | 69 | 66 | 64 | 62 | 58 | 55 | 75 | 72 | 71 | 68 | 64 | 60 |
| **9** | CC | kW | 1776 | 1732 | 1713 | 1681 | 1615 | 1568 | 1872 | 1827 | 1807 | 1774 | 1707 | 1658 |
| | PI | kW | 438 | 477 | 493 | 518 | 562 | 590 | 463 | 505 | 522 | 548 | 595 | 625 |
| | qw | l/s | 84.8 | 82.7 | 81.8 | 80.3 | 77.1 | 74.9 | 89.4 | 87.2 | 86.3 | 84.7 | 81.5 | 79.2 |
| | dpw | kPa | 75 | 72 | 71 | 68 | 64 | 60 | 83 | 79 | 78 | 75 | 70 | 67 |
| **11** | CC | kW | 1868 | 1822 | 1801 | 1767 | 1698 | 1648 | 1969 | 1921 | 1900 | 1865 | 1794 | 1742 |
| | PI | kW | 450 | 490 | 507 | 532 | 577 | 607 | 476 | 518 | 536 | 563 | 611 | 642 |
| | qw | l/s | 89.3 | 87.1 | 86.1 | 84.5 | 81.2 | 78.8 | 94.1 | 91.8 | 90.8 | 89.1 | 85.8 | 83.3 |
| | dpw | kPa | 83 | 79 | 77 | 75 | 70 | 66 | 91 | 87 | 85 | 82 | 77 | 73 |
| **13** | CC | kW | 1962 | 1914 | 1892 | 1856 | 1783 | 1730 | 2067 | 2017 | 1995 | 1958 | 1883 | 1828 |
| | PI | kW | 463 | 504 | 521 | 547 | 593 | 623 | 489 | 533 | 551 | 578 | 627 | 659 |
| | qw | l/s | 93.9 | 91.5 | 90.5 | 88.8 | 85.3 | 82.7 | 98.9 | 96.5 | 95.4 | 93.7 | 90.1 | 87.5 |
| | dpw | kPa | 90 | 86 | 85 | 82 | 76 | 72 | 99 | 95 | 93 | 90 | 84 | 80 |
| **15** | CC | kW | 2059 | 2007 | 1984 | 1946 | 1869 | 1813 | 2168 | 2116 | 2092 | 2052 | 1973 | 1916 |
| | PI | kW | 476 | 518 | 536 | 562 | 610 | 641 | 503 | 548 | 566 | 594 | 645 | 677 |
| | qw | l/s | 98.6 | 96.1 | 95.0 | 93.2 | 89.5 | 86.8 | 103.8 | 101.3 | 100.1 | 98.3 | 94.5 | 91.7 |
| | dpw | kPa | 99 | 94 | 92 | 89 | 83 | 78 | 108 | 104 | 102 | 98 | 91 | 87 |

## EWAD C-XS

| | | | C18 | | | | | | C19 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1768 | 1724 | 1706 | 1675 | 1612 | 1565 | 1857 | 1812 | 1792 | 1761 | 1696 | 1649 |
| | PI | kW | 462 | 503 | 520 | 546 | 593 | 623 | 485 | 529 | 547 | 574 | 624 | 656 |
| | qw | l/s | 84.3 | 82.2 | 81.3 | 79.8 | 76.8 | 74.6 | 88.5 | 86.3 | 85.4 | 83.9 | 80.9 | 78.6 |
| | dpw | kPa | 68 | 65 | 64 | 62 | 58 | 55 | 74 | 71 | 70 | 67 | 63 | 60 |
| **7** | CC | kW | 1866 | 1820 | 1801 | 1768 | 1702 | 1653 | 1959 | 1912 | 1892 | 1858 | 1790 | 1740 |
| | PI | kW | 474 | 517 | 534 | 561 | 609 | 640 | 498 | 543 | 562 | 590 | 640 | 673 |
| | qw | l/s | 89.0 | 86.9 | 85.9 | 84.4 | 81.2 | 78.8 | 93.5 | 91.2 | 90.2 | 88.6 | 85.4 | 83.0 |
| | dpw | kPa | 75 | 72 | 70 | 68 | 64 | 60 | 82 | 78 | 77 | 74 | 70 | 66 |
| **9** | CC | kW | 1967 | 1919 | 1898 | 1863 | 1793 | 1742 | 2065 | 2015 | 1993 | 1958 | 1886 | 1833 |
| | PI | kW | 487 | 531 | 549 | 577 | 626 | 658 | 512 | 558 | 577 | 606 | 657 | 691 |
| | qw | l/s | 93.9 | 91.6 | 90.6 | 89.0 | 85.6 | 83.2 | 98.6 | 96.2 | 95.2 | 93.5 | 90.1 | 87.5 |
| | dpw | kPa | 83 | 79 | 77 | 75 | 70 | 66 | 90 | 86 | 85 | 82 | 77 | 73 |
| **11** | CC | kW | 2070 | 2020 | 1998 | 1961 | 1887 | 1832 | 2173 | 2121 | 2098 | 2060 | 1984 | 1928 |
| | PI | kW | 501 | 546 | 564 | 592 | 643 | 675 | 526 | 573 | 592 | 622 | 675 | 709 |
| | qw | l/s | 99.0 | 96.5 | 95.5 | 93.7 | 90.2 | 87.6 | 103.8 | 101.4 | 100.3 | 98.5 | 94.8 | 92.2 |
| | dpw | kPa | 91 | 87 | 85 | 82 | 77 | 73 | 99 | 95 | 93 | 90 | 84 | 80 |
| **13** | CC | kW | 2176 | 2123 | 2100 | 2061 | 1982 | 1925 | 2283 | 2229 | 2205 | 2165 | 2084 | 2025 |
| | PI | kW | 515 | 561 | 580 | 609 | 660 | 694 | 540 | 589 | 608 | 639 | 693 | 728 |
| | qw | l/s | 104.1 | 101.6 | 100.5 | 98.6 | 94.8 | 92.1 | 109.2 | 106.6 | 105.5 | 103.6 | 99.7 | 96.9 |
| | dpw | kPa | 99 | 95 | 93 | 90 | 84 | 80 | 108 | 104 | 102 | 98 | 92 | 87 |
| **15** | CC | kW | 2285 | 2229 | 2204 | 2163 | 2080 | 2020 | 2397 | 2339 | 2314 | 2271 | 2186 | 2125 |
| | PI | kW | 530 | 577 | 596 | 626 | 679 | 713 | 555 | 605 | 625 | 656 | 712 | 748 |
| | qw | l/s | 109.4 | 106.7 | 105.5 | 103.5 | 99.6 | 96.7 | 114.8 | 112.0 | 110.8 | 108.7 | 104.7 | 101.7 |
| | dpw | kPa | 108 | 104 | 102 | 98 | 92 | 87 | *118* | 113 | 111 | 107 | 100 | 95 |

| | | | C20 | | | | | | C21 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1901 | 1857 | 1839 | 1808 | 1743 | 1694 | 1955 | 1910 | 1891 | 1858 | 1790 | 1738 |
| | PI | kW | 504 | 550 | 569 | 599 | 653 | 688 | 526 | 575 | 596 | 627 | 685 | 723 |
| | qw | l/s | 90.6 | 88.5 | 87.6 | 86.2 | 83.1 | 80.7 | 93.2 | 91.0 | 90.1 | 88.6 | 85.3 | 82.8 |
| | dpw | kPa | 39 | 37 | 37 | 35 | 33 | 32 | 41 | 39 | 38 | 37 | 35 | 33 |
| **7** | CC | kW | 1999 | 1953 | 1933 | 1901 | 1833 | 1783 | 2055 | 2008 | 1987 | 1953 | 1882 | 1828 |
| | PI | kW | 516 | 564 | 584 | 614 | 669 | 705 | 539 | 590 | 610 | 643 | 702 | 741 |
| | qw | l/s | 95.4 | 93.2 | 92.2 | 90.7 | 87.5 | 85.1 | 98.0 | 95.8 | 94.8 | 93.2 | 89.8 | 87.2 |
| | dpw | kPa | 43 | 41 | 40 | 39 | 36 | 35 | 45 | 43 | 42 | 41 | 38 | 36 |
| **9** | CC | kW | 2098 | 2051 | 2030 | 1996 | 1925 | 1872 | 2157 | 2108 | 2086 | 2049 | 1974 | 1918 |
| | PI | kW | 529 | 578 | 598 | 629 | 686 | 722 | 552 | 604 | 626 | 659 | 719 | 759 |
| | qw | l/s | 100.2 | 97.9 | 96.9 | 95.3 | 91.9 | 89.4 | 103.0 | 100.6 | 99.6 | 97.9 | 94.3 | 91.6 |
| | dpw | kPa | 47 | 45 | 44 | 43 | 40 | 38 | 49 | 47 | 46 | 45 | 42 | 40 |
| **11** | CC | kW | 2200 | 2151 | 2129 | 2092 | 2018 | 1963 | 2261 | 2209 | 2186 | 2148 | 2069 | 2010 |
| | PI | kW | 542 | 593 | 613 | 645 | 703 | 740 | 566 | 619 | 641 | 676 | 737 | 778 |
| | qw | l/s | 105.2 | 102.8 | 101.8 | 100.0 | 96.4 | 93.8 | 108.1 | 105.6 | 104.5 | 102.7 | 98.9 | 96.1 |
| | dpw | kPa | 51 | 49 | 48 | 46 | 43 | 41 | 53 | 51 | 50 | 49 | 45 | 43 |
| **13** | CC | kW | 2304 | 2252 | 2229 | 2191 | 2113 | 2055 | 2367 | 2313 | 2289 | 2248 | 2165 | 2104 |
| | PI | kW | 556 | 607 | 629 | 661 | 720 | 759 | 580 | 635 | 657 | 693 | 756 | 797 |
| | qw | l/s | 110.2 | 107.8 | 106.7 | 104.8 | 101.1 | 98.3 | 113.2 | 110.6 | 109.5 | 107.5 | 103.6 | 100.6 |
| | dpw | kPa | 55 | 53 | 52 | 50 | 47 | 45 | 58 | 56 | 55 | 53 | 49 | 47 |
| **15** | CC | kW | 2411 | 2356 | 2332 | 2291 | 2209 | 2149 | 2476 | 2419 | 2393 | 2350 | 2263 | 2199 |
| | PI | kW | 570 | 623 | 644 | 678 | 738 | 778 | 595 | 651 | 674 | 710 | 775 | 817 |
| | qw | l/s | 115.4 | 112.8 | 111.6 | 109.7 | 105.8 | 102.9 | 118.5 | 115.8 | 114.6 | 112.5 | 108.3 | 105.3 |
| | dpw | kPa | 60 | 58 | 56 | 55 | 51 | 49 | 63 | 60 | 59 | 57 | 53 | 51 |

## EWAD C-XS

| | | | C22 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | |
| **5** | CC | kW | 2013 | 1966 | 1946 | 1912 | 1840 | 1786 | |
| | PI | kW | 549 | 601 | 622 | 656 | 718 | 758 | |
| | qw | l/s | 95.9 | 93.7 | 92.7 | 91.1 | 87.7 | 85.1 | |
| | dpw | kPa | 43 | 41 | 41 | 39 | 37 | 35 | |
| **7** | CC | kW | 2115 | 2066 | 2044 | 2008 | 1933 | 1876 | |
| | PI | kW | 562 | 616 | 638 | 672 | 735 | 777 | |
| | qw | l/s | 100.9 | 98.6 | 97.5 | 95.8 | 92.2 | 89.5 | |
| | dpw | kPa | 47 | 45 | 44 | 43 | 40 | 38 | |
| **9** | CC | kW | 2219 | 2168 | 2145 | 2106 | 2027 | 1968 | |
| | PI | kW | 576 | 631 | 654 | 689 | 754 | 796 | |
| | qw | l/s | 106.0 | 103.5 | 102.4 | 100.6 | 96.8 | 94.0 | |
| | dpw | kPa | 51 | 49 | 48 | 47 | 44 | 41 | |
| **11** | CC | kW | 2325 | 2271 | 2247 | 2207 | 2123 | 2061 | |
| | PI | kW | 590 | 647 | 670 | 706 | 772 | 816 | |
| | qw | l/s | 111.1 | 108.6 | 107.4 | 105.5 | 101.5 | 98.5 | |
| | dpw | kPa | 56 | 54 | 53 | 51 | 48 | 45 | |
| **13** | CC | kW | 2434 | 2377 | 2352 | 2309 | 2221 | 2156 | |
| | PI | kW | 605 | 663 | 687 | 724 | 792 | 836 | |
| | qw | l/s | 116.4 | 113.7 | 112.5 | 110.4 | 106.2 | 103.1 | |
| | dpw | kPa | 61 | 58 | 57 | 55 | 52 | 49 | |
| **15** | CC | kW | 2545 | 2485 | 2458 | 2412 | 2320 | 2252 | |
| | PI | kW | 620 | 680 | 704 | 743 | 812 | 857 | |
| | qw | l/s | 121.8 | 119.0 | 117.7 | 115.5 | 111.1 | 107.8 | |
| | dpw | kPa | 66 | 63 | 62 | 60 | 56 | 53 | |

*Fluid: Water*
*Ta: Condenser inlet air temperature;  Twout: Evaporator leaving water temperature (Δt 5°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 contac factory*

## EWAD C-XL

| | | | 760 | | | | | | 830 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 756 | 736 | 728 | 715 | 687 | 667 | 829 | 807 | 798 | 784 | 755 | 735 |
| | PI | kW | 192 | 209 | 216 | 226 | 245 | 257 | 208 | 227 | 235 | 246 | 267 | 280 |
| | qw | l/s | 36.0 | 35.1 | 34.7 | 34.1 | 32.8 | 31.8 | 39.5 | 38.5 | 38.0 | 37.4 | 36.0 | 35.0 |
| | dpw | kPa | 80 | 77 | 75 | 73 | 68 | 64 | 57 | 54 | 53 | 51 | 48 | 46 |
| **7** | CC | kW | 799 | 779 | 770 | 756 | 727 | 706 | 877 | 855 | 845 | 830 | 800 | 777 |
| | PI | kW | 197 | 215 | 222 | 233 | 252 | 265 | 214 | 233 | 241 | 253 | 274 | 288 |
| | qw | l/s | 38.1 | 37.2 | 36.8 | 36.1 | 34.7 | 33.7 | 41.8 | 40.8 | 40.3 | 39.6 | 38.2 | 37.1 |
| | dpw | kPa | 89 | 85 | 83 | 81 | 75 | 71 | 63 | 60 | 59 | 57 | 53 | 50 |
| **9** | CC | kW | 843 | 822 | 813 | 798 | 768 | 746 | 923 | 901 | 892 | 877 | 845 | 822 |
| | PI | kW | 203 | 221 | 228 | 239 | 259 | 272 | 220 | 240 | 248 | 260 | 282 | 295 |
| | qw | l/s | 40.2 | 39.3 | 38.8 | 38.1 | 36.7 | 35.6 | 44.1 | 43.0 | 42.6 | 41.9 | 40.4 | 39.2 |
| | dpw | kPa | 98 | 94 | 92 | 89 | 83 | 79 | 69 | 66 | 65 | 63 | 59 | 56 |
| **11** | CC | kW | 887 | 865 | 856 | 840 | 809 | 786 | 970 | 948 | 938 | 922 | 891 | 867 |
| | PI | kW | 208 | 227 | 234 | 246 | 266 | 280 | 225 | 246 | 254 | 267 | 289 | 304 |
| | qw | l/s | 42.4 | 41.4 | 40.9 | 40.2 | 38.7 | 37.6 | 46.4 | 45.3 | 44.8 | 44.1 | 42.6 | 41.4 |
| | dpw | kPa | 108 | 103 | 101 | 98 | 91 | 87 | 75 | 72 | 71 | 69 | 65 | 62 |
| **13** | CC | kW | 931 | 909 | 899 | 883 | 850 | 826 | 1018 | 995 | 985 | 968 | 935 | 911 |
| | PI | kW | 214 | 233 | 241 | 253 | 274 | 287 | 231 | 252 | 261 | 274 | 297 | 312 |
| | qw | l/s | 44.5 | 43.5 | 43.0 | 42.2 | 40.7 | 39.5 | 48.7 | 47.6 | 47.1 | 46.3 | 44.7 | 43.6 |
| | dpw | kPa | 118 | 113 | 111 | 107 | 100 | 95 | 82 | 79 | 78 | 75 | 71 | 67 |
| **15** | CC | kW | 977 | 953 | 943 | 926 | 892 | 867 | 1064 | 1041 | 1031 | 1014 | 980 | 955 |
| | PI | kW | 220 | 239 | 247 | 260 | 281 | 295 | 237 | 259 | 267 | 281 | 304 | 320 |
| | qw | l/s | 46.8 | 45.6 | 45.1 | 44.3 | 42.7 | 41.5 | 50.9 | 49.8 | 49.4 | 48.6 | 46.9 | 45.7 |
| | dpw | kPa | 129 | 123 | 121 | 117 | 109 | 104 | 89 | 86 | 84 | 82 | 77 | 73 |

| | | | 890 | | | | | | 990 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 889 | 866 | 856 | 840 | 808 | 785 | 1001 | 974 | 963 | 945 | 908 | 881 |
| | PI | kW | 229 | 249 | 257 | 270 | 293 | 308 | 253 | 275 | 284 | 298 | 323 | 339 |
| | qw | l/s | 42.4 | 41.3 | 40.8 | 40.1 | 38.5 | 37.4 | 47.7 | 46.4 | 45.9 | 45.0 | 43.3 | 42.0 |
| | dpw | kPa | 64 | 61 | 60 | 58 | 54 | 51 | 61 | 58 | 57 | 55 | 51 | 48 |
| **7** | CC | kW | 940 | 916 | 906 | 889 | 855 | 829 | 1060 | 1033 | 1021 | 1001 | 962 | 933 |
| | PI | kW | 235 | 256 | 265 | 278 | 301 | 316 | 260 | 283 | 293 | 307 | 332 | 349 |
| | qw | l/s | 44.9 | 43.7 | 43.2 | 42.4 | 40.8 | 39.6 | 50.6 | 49.3 | 48.7 | 47.8 | 45.9 | 44.5 |
| | dpw | kPa | 71 | 68 | 66 | 64 | 60 | 57 | 68 | 64 | 63 | 61 | 57 | 54 |
| **9** | CC | kW | 986 | 964 | 955 | 939 | 902 | 876 | 1121 | 1092 | 1079 | 1059 | 1017 | 987 |
| | PI | kW | 241 | 263 | 272 | 286 | 310 | 325 | 268 | 292 | 301 | 316 | 342 | 359 |
| | qw | l/s | 47.1 | 46.0 | 45.6 | 44.8 | 43.1 | 41.8 | 53.5 | 52.1 | 51.6 | 50.6 | 48.6 | 47.1 |
| | dpw | kPa | 77 | 74 | 73 | 71 | 66 | 63 | 75 | 71 | 70 | 68 | 63 | 59 |
| **11** | CC | kW | 1032 | 1010 | 1000 | 983 | 950 | 923 | 1182 | 1152 | 1139 | 1117 | 1074 | 1042 |
| | PI | kW | 247 | 270 | 279 | 293 | 318 | 334 | 276 | 300 | 310 | 325 | 352 | 369 |
| | qw | l/s | 49.3 | 48.3 | 47.8 | 47.0 | 45.4 | 44.1 | 56.5 | 55.1 | 54.4 | 53.4 | 51.3 | 49.8 |
| | dpw | kPa | 84 | 81 | 80 | 77 | 73 | 69 | 82 | 79 | 77 | 74 | 69 | 66 |
| **13** | CC | kW | 1079 | 1056 | 1046 | 1028 | 993 | 968 | 1245 | 1214 | 1200 | 1177 | 1131 | 1098 |
| | PI | kW | 254 | 276 | 286 | 300 | 326 | 343 | 283 | 309 | 319 | 335 | 362 | 380 |
| | qw | l/s | 51.6 | 50.5 | 50.0 | 49.2 | 47.5 | 46.3 | 59.5 | 58.1 | 57.4 | 56.3 | 54.1 | 52.5 |
| | dpw | kPa | 91 | 88 | 86 | 84 | 79 | 75 | 90 | 86 | 85 | 82 | 76 | 72 |
| **15** | CC | kW | 1127 | 1103 | 1092 | 1074 | 1037 | 1010 | 1308 | 1275 | 1261 | 1237 | 1189 | 1155 |
| | PI | kW | 260 | 283 | 293 | 308 | 334 | 351 | 292 | 318 | 328 | 344 | 373 | 391 |
| | qw | l/s | 54.0 | 52.8 | 52.3 | 51.4 | 49.7 | 48.4 | 62.6 | 61.0 | 60.4 | 59.2 | 56.9 | 55.3 |
| | dpw | kPa | 99 | 95 | 93 | 91 | 85 | 81 | 99 | 95 | 93 | 90 | 83 | 79 |

## EWAD C-XL

| | | | C10 | | | | | | C11 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1076 | 1047 | 1035 | 1014 | 973 | 942 | 1194 | 1164 | 1151 | 1130 | 1088 | 1058 |
| | PI | kW | 278 | 302 | 312 | 328 | 355 | 373 | 299 | 326 | 337 | 354 | 383 | 402 |
| | qw | l/s | 51.3 | 49.9 | 49.3 | 48.3 | 46.4 | 44.9 | 56.9 | 55.5 | 54.9 | 53.9 | 51.9 | 50.4 |
| | dpw | kPa | 69 | 66 | 65 | 62 | 58 | 54 | 45 | 43 | 42 | 41 | 38 | 36 |
| **7** | CC | kW | 1139 | 1109 | 1096 | 1074 | 1029 | 997 | 1263 | 1231 | 1218 | 1196 | 1152 | 1120 |
| | PI | kW | 286 | 312 | 322 | 338 | 366 | 384 | 307 | 335 | 346 | 364 | 394 | 413 |
| | qw | l/s | 54.4 | 52.9 | 52.3 | 51.2 | 49.1 | 47.6 | 60.3 | 58.7 | 58.1 | 57.1 | 55.0 | 53.4 |
| | dpw | kPa | 77 | 73 | 72 | 69 | 64 | 60 | 50 | 48 | 47 | 45 | 42 | 40 |
| **9** | CC | kW | 1202 | 1171 | 1158 | 1135 | 1088 | 1053 | 1333 | 1300 | 1286 | 1264 | 1217 | 1184 |
| | PI | kW | 295 | 321 | 331 | 348 | 377 | 396 | 316 | 344 | 356 | 374 | 405 | 425 |
| | qw | l/s | 57.4 | 55.9 | 55.3 | 54.2 | 51.9 | 50.3 | 63.7 | 62.1 | 61.4 | 60.3 | 58.1 | 56.5 |
| | dpw | kPa | 85 | 81 | 79 | 76 | 71 | 67 | 55 | 53 | 52 | 50 | 47 | 44 |
| **11** | CC | kW | 1266 | 1234 | 1219 | 1195 | 1147 | 1111 | 1405 | 1370 | 1356 | 1332 | 1284 | 1248 |
| | PI | kW | 303 | 330 | 341 | 358 | 388 | 407 | 324 | 354 | 365 | 384 | 416 | 436 |
| | qw | l/s | 60.5 | 59.0 | 58.3 | 57.1 | 54.8 | 53.1 | 67.1 | 65.5 | 64.8 | 63.7 | 61.4 | 59.7 |
| | dpw | kPa | 93 | 89 | 87 | 84 | 78 | 74 | 61 | 58 | 57 | 55 | 51 | 49 |
| **13** | CC | kW | 1330 | 1296 | 1281 | 1256 | 1205 | 1168 | 1478 | 1442 | 1427 | 1401 | 1350 | 1314 |
| | PI | kW | 312 | 340 | 351 | 368 | 399 | 419 | 333 | 363 | 375 | 394 | 427 | 448 |
| | qw | l/s | 63.6 | 62.0 | 61.3 | 60.1 | 57.7 | 55.9 | 70.7 | 69.0 | 68.3 | 67.0 | 64.6 | 62.8 |
| | dpw | kPa | 102 | 97 | 95 | 92 | 85 | 81 | 66 | 64 | 62 | 60 | 56 | 54 |
| **15** | CC | kW | 1395 | 1360 | 1344 | 1318 | 1264 | 1226 | 1552 | 1515 | 1499 | 1472 | 1419 | 1380 |
| | PI | kW | 321 | 349 | 361 | 379 | 411 | 431 | 342 | 373 | 386 | 405 | 438 | 460 |
| | qw | l/s | 66.8 | 65.1 | 64.3 | 63.1 | 60.5 | 58.7 | 74.3 | 72.5 | 71.8 | 70.5 | 67.9 | 66.1 |
| | dpw | kPa | 111 | 106 | 104 | 100 | 93 | 88 | 73 | 70 | 68 | 66 | 62 | 59 |

| | | | C12 | | | | | | C13 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1280 | 1248 | 1234 | 1211 | 1165 | 1130 | 1352 | 1314 | 1298 | 1271 | 1218 | 1179 |
| | PI | kW | 329 | 359 | 371 | 389 | 422 | 443 | 337 | 367 | 379 | 398 | 430 | 451 |
| | qw | l/s | 61.0 | 59.5 | 58.8 | 57.7 | 55.5 | 53.9 | 64.4 | 62.6 | 61.9 | 60.6 | 58.0 | 56.2 |
| | dpw | kPa | 51 | 49 | 48 | 46 | 43 | 41 | 68 | 64 | 63 | 61 | 56 | 53 |
| **7** | CC | kW | 1353 | 1319 | 1304 | 1280 | 1231 | 1195 | 1433 | 1394 | 1377 | 1349 | 1292 | 1250 |
| | PI | kW | 338 | 369 | 381 | 400 | 434 | 456 | 348 | 378 | 391 | 410 | 444 | 465 |
| | qw | l/s | 64.5 | 62.9 | 62.2 | 61.1 | 58.7 | 57.0 | 68.4 | 66.5 | 65.7 | 64.4 | 61.6 | 59.6 |
| | dpw | kPa | 56 | 54 | 53 | 51 | 48 | 45 | 75 | 72 | 70 | 68 | 62 | 59 |
| **9** | CC | kW | 1425 | 1391 | 1375 | 1350 | 1299 | 1261 | 1518 | 1476 | 1458 | 1428 | 1368 | 1324 |
| | PI | kW | 348 | 379 | 392 | 411 | 446 | 468 | 359 | 390 | 403 | 423 | 457 | 479 |
| | qw | l/s | 68.1 | 66.4 | 65.7 | 64.5 | 62.0 | 60.2 | 72.5 | 70.5 | 69.6 | 68.2 | 65.3 | 63.2 |
| | dpw | kPa | 62 | 59 | 58 | 56 | 53 | 50 | 84 | 80 | 78 | 75 | 69 | 65 |
| **11** | CC | kW | 1500 | 1463 | 1447 | 1421 | 1367 | 1327 | 1605 | 1561 | 1541 | 1509 | 1445 | 1398 |
| | PI | kW | 357 | 389 | 402 | 423 | 458 | 481 | 370 | 403 | 416 | 436 | 471 | 494 |
| | qw | l/s | 71.7 | 70.0 | 69.2 | 67.9 | 65.3 | 63.5 | 76.7 | 74.6 | 73.7 | 72.1 | 69.1 | 66.8 |
| | dpw | kPa | 68 | 65 | 64 | 62 | 58 | 55 | 93 | 88 | 86 | 83 | 77 | 72 |
| **13** | CC | kW | 1576 | 1538 | 1521 | 1493 | 1436 | 1395 | 1694 | 1648 | 1627 | 1592 | 1524 | 1475 |
| | PI | kW | 367 | 400 | 414 | 434 | 471 | 495 | 382 | 415 | 429 | 450 | 486 | 509 |
| | qw | l/s | 75.4 | 73.6 | 72.8 | 71.4 | 68.7 | 66.7 | 81.0 | 78.8 | 77.8 | 76.2 | 72.9 | 70.5 |
| | dpw | kPa | 75 | 71 | 70 | 68 | 63 | 60 | 102 | 97 | 95 | 91 | 84 | 80 |
| **15** | CC | kW | 1655 | 1614 | 1596 | 1566 | 1506 | 1463 | 1784 | 1735 | 1713 | 1677 | 1605 | 1553 |
| | PI | kW | 378 | 411 | 425 | 446 | 484 | 508 | 394 | 428 | 442 | 464 | 501 | 525 |
| | qw | l/s | 79.2 | 77.3 | 76.4 | 75.0 | 72.1 | 70.0 | 85.4 | 83.1 | 82.0 | 80.3 | 76.8 | 74.3 |
| | dpw | kPa | 82 | 78 | 76 | 74 | 69 | 65 | 112 | 107 | 104 | 100 | 93 | 87 |

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| | | | H14 | | | | | | H15 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1422 | 1382 | 1365 | 1337 | 1279 | 1236 | 1536 | 1493 | 1474 | 1442 | 1376 | 1328 |
| | PI | kW | 363 | 396 | 409 | 430 | 467 | 491 | 388 | 424 | 438 | 461 | 502 | 529 |
| | qw | l/s | 67.8 | 65.9 | 65.1 | 63.7 | 61.0 | 58.9 | 73.2 | 71.2 | 70.2 | 68.7 | 65.6 | 63.3 |
| | dpw | kPa | 78 | 74 | 73 | 70 | 65 | 61 | 85 | 81 | 79 | 76 | 70 | 66 |
| **7** | CC | kW | 1505 | 1464 | 1445 | 1415 | 1353 | 1308 | 1626 | 1580 | 1559 | 1525 | 1455 | 1404 |
| | PI | kW | 374 | 408 | 421 | 443 | 481 | 505 | 400 | 437 | 452 | 475 | 517 | 545 |
| | qw | l/s | 71.8 | 69.8 | 69.0 | 67.5 | 64.6 | 62.4 | 77.6 | 75.4 | 74.4 | 72.8 | 69.4 | 67.0 |
| | dpw | kPa | 87 | 82 | 81 | 77 | 72 | 67 | 95 | 90 | 88 | 84 | 77 | 73 |
| **9** | CC | kW | 1590 | 1547 | 1527 | 1495 | 1429 | 1382 | 1714 | 1667 | 1647 | 1610 | 1536 | 1482 |
| | PI | kW | 385 | 420 | 434 | 456 | 495 | 521 | 412 | 450 | 466 | 490 | 533 | 561 |
| | qw | l/s | 75.9 | 73.9 | 72.9 | 71.4 | 68.3 | 66.0 | 81.9 | 79.6 | 78.6 | 76.9 | 73.3 | 70.8 |
| | dpw | kPa | 96 | 91 | 89 | 86 | 79 | 74 | 104 | 99 | 97 | 93 | 85 | 80 |
| **11** | CC | kW | 1676 | 1630 | 1610 | 1576 | 1507 | 1457 | 1804 | 1754 | 1731 | 1694 | 1618 | 1561 |
| | PI | kW | 397 | 433 | 448 | 470 | 511 | 536 | 424 | 463 | 479 | 505 | 550 | 578 |
| | qw | l/s | 80.1 | 77.9 | 76.9 | 75.3 | 72.0 | 69.6 | 86.2 | 83.8 | 82.8 | 81.0 | 77.3 | 74.6 |
| | dpw | kPa | 105 | 100 | 98 | 94 | 87 | 82 | 114 | 109 | 106 | 102 | 94 | 88 |
| **13** | CC | kW | 1762 | 1714 | 1693 | 1657 | 1585 | 1533 | 1896 | 1842 | 1818 | 1778 | 1698 | 1641 |
| | PI | kW | 409 | 446 | 461 | 484 | 526 | 552 | 437 | 477 | 494 | 520 | 566 | 596 |
| | qw | l/s | 84.3 | 82.0 | 81.0 | 79.3 | 75.8 | 73.3 | 90.7 | 88.1 | 87.0 | 85.1 | 81.2 | 78.5 |
| | dpw | kPa | 115 | 110 | 107 | 103 | 95 | 90 | 125 | 119 | 116 | 111 | 103 | 97 |
| **15** | CC | kW | 1850 | 1799 | 1776 | 1738 | 1664 | 1609 | 1990 | 1932 | 1907 | 1864 | 1779 | 1719 |
| | PI | kW | 421 | 459 | 475 | 499 | 542 | 569 | 450 | 491 | 509 | 535 | 583 | 613 |
| | qw | l/s | 88.6 | 86.1 | 85.0 | 83.2 | 79.6 | 77.1 | 95.3 | 92.5 | 91.3 | 89.2 | 85.2 | 82.3 |
| | dpw | kPa | 126 | 120 | 117 | 113 | 104 | 98 | 137 | 130 | 127 | 121 | 112 | 105 |

| | | | C16 | | | | | | C17 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1599 | 1559 | 1541 | 1511 | 1451 | 1406 | 1686 | 1645 | 1627 | 1597 | 1535 | 1490 |
| | PI | kW | 414 | 451 | 466 | 489 | 531 | 558 | 439 | 478 | 494 | 519 | 563 | 592 |
| | qw | l/s | 76.2 | 74.3 | 73.4 | 72.0 | 69.2 | 67.0 | 80.4 | 78.4 | 77.5 | 76.1 | 73.2 | 71.0 |
| | dpw | kPa | 62 | 59 | 58 | 56 | 52 | 49 | 68 | 65 | 64 | 62 | 58 | 55 |
| **7** | CC | kW | 1686 | 1645 | 1626 | 1596 | 1533 | 1486 | 1778 | 1735 | 1716 | 1685 | 1621 | 1573 |
| | PI | kW | 426 | 464 | 479 | 503 | 546 | 574 | 451 | 491 | 508 | 533 | 579 | 608 |
| | qw | l/s | 80.4 | 78.5 | 77.6 | 76.1 | 73.1 | 70.9 | 84.8 | 82.8 | 81.9 | 80.4 | 77.3 | 75.0 |
| | dpw | kPa | 69 | 66 | 64 | 62 | 58 | 55 | 75 | 72 | 71 | 68 | 64 | 60 |
| **9** | CC | kW | 1776 | 1732 | 1713 | 1681 | 1615 | 1568 | 1872 | 1827 | 1807 | 1774 | 1707 | 1658 |
| | PI | kW | 438 | 477 | 493 | 518 | 562 | 590 | 463 | 505 | 522 | 548 | 595 | 625 |
| | qw | l/s | 84.8 | 82.7 | 81.8 | 80.3 | 77.1 | 74.9 | 89.4 | 87.2 | 86.3 | 84.7 | 81.5 | 79.2 |
| | dpw | kPa | 75 | 72 | 71 | 68 | 64 | 60 | 83 | 79 | 78 | 75 | 70 | 67 |
| **11** | CC | kW | 1868 | 1822 | 1801 | 1767 | 1698 | 1648 | 1969 | 1921 | 1900 | 1865 | 1794 | 1742 |
| | PI | kW | 450 | 490 | 507 | 532 | 577 | 607 | 476 | 518 | 536 | 563 | 611 | 642 |
| | qw | l/s | 89.3 | 87.1 | 86.1 | 84.5 | 81.2 | 78.8 | 94.1 | 91.8 | 90.8 | 89.1 | 85.8 | 83.3 |
| | dpw | kPa | 83 | 79 | 77 | 75 | 70 | 66 | 91 | 87 | 85 | 82 | 77 | 73 |
| **13** | CC | kW | 1962 | 1914 | 1892 | 1856 | 1783 | 1730 | 2067 | 2017 | 1995 | 1958 | 1883 | 1828 |
| | PI | kW | 463 | 504 | 521 | 547 | 593 | 623 | 489 | 533 | 551 | 578 | 627 | 659 |
| | qw | l/s | 93.9 | 91.5 | 90.5 | 88.8 | 85.3 | 82.7 | 98.9 | 96.5 | 95.4 | 93.7 | 90.1 | 87.5 |
| | dpw | kPa | 90 | 86 | 85 | 82 | 76 | 72 | 99 | 95 | 93 | 90 | 84 | 80 |
| **15** | CC | kW | 2059 | 2007 | 1984 | 1946 | 1869 | 1813 | 2168 | 2116 | 2092 | 2052 | 1973 | 1916 |
| | PI | kW | 476 | 518 | 536 | 562 | 610 | 641 | 503 | 548 | 566 | 594 | 645 | 677 |
| | qw | l/s | 98.6 | 96.1 | 95.0 | 93.2 | 89.5 | 86.8 | 103.8 | 101.3 | 100.1 | 98.3 | 94.5 | 91.7 |
| | dpw | kPa | 99 | 94 | 92 | 89 | 83 | 78 | 108 | 104 | 102 | 98 | 91 | 87 |

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| | | | C18 | | | | | | C19 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1768 | 1724 | 1706 | 1675 | 1612 | 1565 | 1857 | 1812 | 1792 | 1761 | 1696 | 1649 |
| | PI | kW | 462 | 503 | 520 | 546 | 593 | 623 | 485 | 529 | 547 | 574 | 624 | 656 |
| | qw | l/s | 84.3 | 82.2 | 81.3 | 79.8 | 76.8 | 74.6 | 88.5 | 86.3 | 85.4 | 83.9 | 80.9 | 78.6 |
| | dpw | kPa | 68 | 65 | 64 | 62 | 58 | 55 | 74 | 71 | 70 | 67 | 63 | 60 |
| **7** | CC | kW | 1866 | 1820 | 1801 | 1768 | 1702 | 1653 | 1959 | 1912 | 1892 | 1858 | 1790 | 1740 |
| | PI | kW | 474 | 517 | 534 | 561 | 609 | 640 | 498 | 543 | 562 | 590 | 640 | 673 |
| | qw | l/s | 89.0 | 86.9 | 85.9 | 84.4 | 81.2 | 78.8 | 93.5 | 91.2 | 90.2 | 88.6 | 85.4 | 83.0 |
| | dpw | kPa | 75 | 72 | 70 | 68 | 64 | 60 | 82 | 78 | 77 | 74 | 70 | 66 |
| **9** | CC | kW | 1967 | 1919 | 1898 | 1863 | 1793 | 1742 | 2065 | 2015 | 1993 | 1958 | 1886 | 1833 |
| | PI | kW | 487 | 531 | 549 | 577 | 626 | 658 | 512 | 558 | 577 | 606 | 657 | 691 |
| | qw | l/s | 93.9 | 91.6 | 90.6 | 89.0 | 85.6 | 83.2 | 98.6 | 96.2 | 95.2 | 93.5 | 90.1 | 87.5 |
| | dpw | kPa | 83 | 79 | 77 | 75 | 70 | 66 | 90 | 86 | 85 | 82 | 77 | 73 |
| **11** | CC | kW | 2070 | 2020 | 1998 | 1961 | 1887 | 1832 | 2173 | 2121 | 2098 | 2060 | 1984 | 1928 |
| | PI | kW | 501 | 546 | 564 | 592 | 643 | 675 | 526 | 573 | 592 | 622 | 675 | 709 |
| | qw | l/s | 99.0 | 96.5 | 95.5 | 93.7 | 90.2 | 87.6 | 103.8 | 101.4 | 100.3 | 98.5 | 94.8 | 92.2 |
| | dpw | kPa | 91 | 87 | 85 | 82 | 77 | 73 | 99 | 95 | 93 | 90 | 84 | 80 |
| **13** | CC | kW | 2176 | 2123 | 2100 | 2061 | 1982 | 1925 | 2283 | 2229 | 2205 | 2165 | 2084 | 2025 |
| | PI | kW | 515 | 561 | 580 | 609 | 660 | 694 | 540 | 589 | 608 | 639 | 693 | 728 |
| | qw | l/s | 104.1 | 101.6 | 100.5 | 98.6 | 94.8 | 92.1 | 109.2 | 106.6 | 105.5 | 103.6 | 99.7 | 96.9 |
| | dpw | kPa | 99 | 95 | 93 | 90 | 84 | 80 | 108 | 104 | 102 | 98 | 92 | 87 |
| **15** | CC | kW | 2285 | 2229 | 2204 | 2163 | 2080 | 2020 | 2397 | 2339 | 2314 | 2271 | 2186 | 2125 |
| | PI | kW | 530 | 577 | 596 | 626 | 679 | 713 | 555 | 605 | 625 | 656 | 712 | 748 |
| | qw | l/s | 109.4 | 106.7 | 105.5 | 103.5 | 99.6 | 96.7 | 114.8 | 112.0 | 110.8 | 108.7 | 104.7 | 101.7 |
| | dpw | kPa | 108 | 104 | 102 | 98 | 92 | 87 | *118* | 113 | 111 | 107 | 100 | 95 |

| | | | C20 | | | | | | C21 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1901 | 1857 | 1839 | 1808 | 1743 | 1694 | 1955 | 1910 | 1891 | 1858 | 1790 | 1738 |
| | PI | kW | 504 | 550 | 569 | 599 | 653 | 688 | 526 | 575 | 596 | 627 | 685 | 723 |
| | qw | l/s | 90.6 | 88.5 | 87.6 | 86.2 | 83.1 | 80.7 | 93.2 | 91.0 | 90.1 | 88.6 | 85.3 | 82.8 |
| | dpw | kPa | 39 | 37 | 37 | 35 | 33 | 32 | 41 | 39 | 38 | 37 | 35 | 33 |
| **7** | CC | kW | 1999 | 1953 | 1933 | 1901 | 1833 | 1783 | 2055 | 2008 | 1987 | 1953 | 1882 | 1828 |
| | PI | kW | 516 | 564 | 584 | 614 | 669 | 705 | 539 | 590 | 610 | 643 | 702 | 741 |
| | qw | l/s | 95.4 | 93.2 | 92.2 | 90.7 | 87.5 | 85.1 | 98.0 | 95.8 | 94.8 | 93.2 | 89.8 | 87.2 |
| | dpw | kPa | 43 | 41 | 40 | 39 | 36 | 35 | 45 | 43 | 42 | 41 | 38 | 36 |
| **9** | CC | kW | 2098 | 2051 | 2030 | 1996 | 1925 | 1872 | 2157 | 2108 | 2086 | 2049 | 1974 | 1918 |
| | PI | kW | 529 | 578 | 598 | 629 | 686 | 722 | 552 | 604 | 626 | 659 | 719 | 759 |
| | qw | l/s | 100.2 | 97.9 | 96.9 | 95.3 | 91.9 | 89.4 | 103.0 | 100.6 | 99.6 | 97.9 | 94.3 | 91.6 |
| | dpw | kPa | 47 | 45 | 44 | 43 | 40 | 38 | 49 | 47 | 46 | 45 | 42 | 40 |
| **11** | CC | kW | 2200 | 2151 | 2129 | 2092 | 2018 | 1963 | 2261 | 2209 | 2186 | 2148 | 2069 | 2010 |
| | PI | kW | 542 | 593 | 613 | 645 | 703 | 740 | 566 | 619 | 641 | 676 | 737 | 778 |
| | qw | l/s | 105.2 | 102.8 | 101.8 | 100.0 | 96.4 | 93.8 | 108.1 | 105.6 | 104.5 | 102.7 | 98.9 | 96.1 |
| | dpw | kPa | 51 | 49 | 48 | 46 | 43 | 41 | 53 | 51 | 50 | 49 | 45 | 43 |
| **13** | CC | kW | 2304 | 2252 | 2229 | 2191 | 2113 | 2055 | 2367 | 2313 | 2289 | 2248 | 2165 | 2104 |
| | PI | kW | 556 | 607 | 629 | 661 | 720 | 759 | 580 | 635 | 657 | 693 | 756 | 797 |
| | qw | l/s | 110.2 | 107.8 | 106.7 | 104.8 | 101.1 | 98.3 | 113.2 | 110.6 | 109.5 | 107.5 | 103.6 | 100.6 |
| | dpw | kPa | 55 | 53 | 52 | 50 | 47 | 45 | 58 | 56 | 55 | 53 | 49 | 47 |
| **15** | CC | kW | 2411 | 2356 | 2332 | 2291 | 2209 | 2149 | 2476 | 2419 | 2393 | 2350 | 2263 | 2199 |
| | PI | kW | 570 | 623 | 644 | 678 | 738 | 778 | 595 | 651 | 674 | 710 | 775 | 817 |
| | qw | l/s | 115.4 | 112.8 | 111.6 | 109.7 | 105.8 | 102.9 | 118.5 | 115.8 | 114.6 | 112.5 | 108.3 | 105.3 |
| | dpw | kPa | 60 | 58 | 56 | 55 | 51 | 49 | 63 | 60 | 59 | 57 | 53 | 51 |

## EWAD C-XL

| | | | C22 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | |
| **5** | CC | kW | 2013 | 1966 | 1946 | 1912 | 1840 | 1786 | |
| | PI | kW | 549 | 601 | 622 | 656 | 718 | 758 | |
| | qw | l/s | 95.9 | 93.7 | 92.7 | 91.1 | 87.7 | 85.1 | |
| | dpw | kPa | 43 | 41 | 41 | 39 | 37 | 35 | |
| **7** | CC | kW | 2115 | 2066 | 2044 | 2008 | 1933 | 1876 | |
| | PI | kW | 562 | 616 | 638 | 672 | 735 | 777 | |
| | qw | l/s | 100.9 | 98.6 | 97.5 | 95.8 | 92.2 | 89.5 | |
| | dpw | kPa | 47 | 45 | 44 | 43 | 40 | 38 | |
| **9** | CC | kW | 2219 | 2168 | 2145 | 2106 | 2027 | 1968 | |
| | PI | kW | 576 | 631 | 654 | 689 | 754 | 796 | |
| | qw | l/s | 106.0 | 103.5 | 102.4 | 100.6 | 96.8 | 94.0 | |
| | dpw | kPa | 51 | 49 | 48 | 47 | 44 | 41 | |
| **11** | CC | kW | 2325 | 2271 | 2247 | 2207 | 2123 | 2061 | |
| | PI | kW | 590 | 647 | 670 | 706 | 772 | 816 | |
| | qw | l/s | 111.1 | 108.6 | 107.4 | 105.5 | 101.5 | 98.5 | |
| | dpw | kPa | 56 | 54 | 53 | 51 | 48 | 45 | |
| **13** | CC | kW | 2434 | 2377 | 2352 | 2309 | 2221 | 2156 | |
| | PI | kW | 605 | 663 | 687 | 724 | 792 | 836 | |
| | qw | l/s | 116.4 | 113.7 | 112.5 | 110.4 | 106.2 | 103.1 | |
| | dpw | kPa | 61 | 58 | 57 | 55 | 52 | 49 | |
| **15** | CC | kW | 2545 | 2485 | 2458 | 2412 | 2320 | 2252 | |
| | PI | kW | 620 | 680 | 704 | 743 | 812 | 857 | |
| | qw | l/s | 121.8 | 119.0 | 117.7 | 115.5 | 111.1 | 107.8 | |
| | dpw | kPa | 66 | 63 | 62 | 60 | 56 | 53 | |

*Fluid: Water*
*Ta: Condenser inlet air temperature;  Twout: Evaporator leaving water temperature (Δt 5°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 contac factory*

## EWAD C-XR

| | | | 740 | | | | | | 810 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 742 | 722 | 712 | 697 | 664 | 640 | 816 | 793 | 783 | 767 | 734 | 709 |
| | PI | kW | 191 | 209 | 216 | 227 | 247 | 260 | 207 | 226 | 234 | 246 | 267 | 281 |
| | qw | l/s | 35.4 | 34.4 | 34.0 | 33.2 | 31.7 | 30.5 | 38.9 | 37.8 | 37.3 | 36.6 | 35.0 | 33.8 |
| | dpw | kPa | 78 | 74 | 72 | 70 | 64 | 60 | 55 | 52 | 51 | 49 | 45 | 43 |
| **7** | CC | kW | 784 | 763 | 753 | 736 | 702 | 677 | 862 | 839 | 829 | 811 | 775 | 749 |
| | PI | kW | 198 | 216 | 223 | 234 | 255 | 268 | 214 | 233 | 241 | 253 | 276 | 290 |
| | qw | l/s | 37.4 | 36.4 | 35.9 | 35.1 | 33.5 | 32.3 | 41.1 | 40.0 | 39.5 | 38.7 | 37.0 | 35.8 |
| | dpw | kPa | 86 | 82 | 80 | 77 | 71 | 66 | 61 | 58 | 57 | 54 | 50 | 47 |
| **9** | CC | kW | 827 | 804 | 794 | 776 | 740 | 714 | 908 | 885 | 875 | 856 | 818 | 790 |
| | PI | kW | 204 | 223 | 230 | 242 | 263 | 277 | 220 | 241 | 249 | 262 | 284 | 299 |
| | qw | l/s | 39.5 | 38.4 | 37.9 | 37.1 | 35.3 | 34.1 | 43.4 | 42.3 | 41.8 | 40.9 | 39.1 | 37.7 |
| | dpw | kPa | 95 | 90 | 88 | 85 | 78 | 73 | 67 | 64 | 62 | 60 | 55 | 52 |
| **11** | CC | kW | 870 | 846 | 835 | 816 | 779 | 751 | 954 | 930 | 919 | 900 | 861 | 832 |
| | PI | kW | 211 | 230 | 238 | 250 | 272 | 286 | 227 | 248 | 256 | 270 | 293 | 308 |
| | qw | l/s | 41.6 | 40.4 | 39.9 | 39.0 | 37.2 | 35.9 | 45.6 | 44.4 | 43.9 | 43.0 | 41.2 | 39.8 |
| | dpw | kPa | 104 | 99 | 97 | 93 | 85 | 80 | 73 | 70 | 68 | 66 | 61 | 57 |
| **13** | CC | kW | 912 | 888 | 876 | 857 | 817 | 789 | 1001 | 976 | 964 | 944 | 905 | 869 |
| | PI | kW | 218 | 237 | 245 | 258 | 280 | 295 | 234 | 255 | 264 | 278 | 302 | 315 |
| | qw | l/s | 43.6 | 42.5 | 41.9 | 41.0 | 39.1 | 37.7 | 47.9 | 46.7 | 46.1 | 45.2 | 43.3 | 41.6 |
| | dpw | kPa | 114 | 108 | 106 | 102 | 93 | 88 | 80 | 76 | 75 | 72 | 66 | 62 |
| **15** | CC | kW | 956 | 930 | 918 | 897 | 856 | 796 | 1046 | 1021 | 1009 | 989 | 947 | 894 |
| | PI | kW | 225 | 245 | 253 | 266 | 289 | 289 | 241 | 263 | 272 | 286 | 311 | 316 |
| | qw | l/s | 45.8 | 44.5 | 43.9 | 42.9 | 41.0 | 38.1 | 50.1 | 48.9 | 48.3 | 47.3 | 45.3 | 42.8 |
| | dpw | kPa | 124 | 118 | 115 | 110 | 102 | 89 | 86 | 83 | 81 | 78 | 72 | 65 |

| | | | 870 | | | | | | 970 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 874 | 850 | 839 | 820 | 782 | 754 | 983 | 954 | 942 | 921 | 877 | 846 |
| | PI | kW | 230 | 250 | 259 | 272 | 296 | 312 | 252 | 275 | 285 | 299 | 325 | 342 |
| | qw | l/s | 41.7 | 40.5 | 40.0 | 39.1 | 37.3 | 36.0 | 46.8 | 45.5 | 44.9 | 43.9 | 41.8 | 40.3 |
| | dpw | kPa | 62 | 59 | 58 | 55 | 51 | 48 | 59 | 56 | 55 | 52 | 48 | 45 |
| **7** | CC | kW | 924 | 898 | 886 | 866 | 825 | 796 | 1041 | 1010 | 997 | 974 | 928 | 894 |
| | PI | kW | 237 | 259 | 267 | 281 | 306 | 322 | 261 | 285 | 294 | 309 | 336 | 353 |
| | qw | l/s | 44.1 | 42.8 | 42.3 | 41.3 | 39.4 | 38.0 | 49.6 | 48.2 | 47.6 | 46.5 | 44.3 | 42.7 |
| | dpw | kPa | 69 | 65 | 64 | 61 | 56 | 53 | 65 | 62 | 60 | 58 | 53 | 50 |
| **9** | CC | kW | 971 | 947 | 935 | 913 | 870 | 838 | 1099 | 1068 | 1053 | 1029 | 979 | 944 |
| | PI | kW | 245 | 267 | 276 | 290 | 316 | 332 | 270 | 294 | 304 | 320 | 347 | 365 |
| | qw | l/s | 46.3 | 45.2 | 44.6 | 43.6 | 41.5 | 40.0 | 52.5 | 51.0 | 50.3 | 49.1 | 46.8 | 45.1 |
| | dpw | kPa | 75 | 72 | 70 | 67 | 62 | 58 | 72 | 69 | 67 | 64 | 59 | 55 |
| **11** | CC | kW | 1015 | 990 | 978 | 959 | 915 | 882 | 1159 | 1125 | 1110 | 1084 | 1032 | 984 |
| | PI | kW | 252 | 275 | 285 | 300 | 326 | 343 | 279 | 304 | 314 | 330 | 359 | 372 |
| | qw | l/s | 48.5 | 47.3 | 46.8 | 45.8 | 43.7 | 42.1 | 55.4 | 53.8 | 53.0 | 51.8 | 49.3 | 47.0 |
| | dpw | kPa | 82 | 78 | 76 | 74 | 68 | 63 | 79 | 75 | 74 | 71 | 65 | 59 |
| **13** | CC | kW | 1061 | 1034 | 1022 | 1001 | 959 | 914 | 1219 | 1184 | 1168 | 1140 | 1085 | 1014 |
| | PI | kW | 259 | 283 | 293 | 308 | 336 | 349 | 289 | 314 | 325 | 341 | 370 | 372 |
| | qw | l/s | 50.8 | 49.5 | 48.9 | 47.9 | 45.9 | 43.7 | 58.3 | 56.6 | 55.9 | 54.5 | 51.9 | 48.5 |
| | dpw | kPa | 89 | 85 | 83 | 80 | 74 | 68 | 87 | 83 | 81 | 77 | 71 | 63 |
| **15** | CC | kW | 1107 | 1079 | 1066 | 1044 | 999 | 922 | 1279 | 1242 | 1225 | 1197 | 1139 | 1046 |
| | PI | kW | 267 | 291 | 301 | 317 | 346 | 341 | 298 | 325 | 336 | 353 | 383 | 374 |
| | qw | l/s | 53.0 | 51.7 | 51.0 | 50.0 | 47.8 | 44.1 | 61.3 | 59.5 | 58.7 | 57.3 | 54.5 | 50.1 |
| | dpw | kPa | 96 | 91 | 89 | 86 | 80 | 69 | 95 | 90 | 88 | 84 | 77 | 66 |

## EWAD C-XR

| | | | C10 | | | | | | C11 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1055 | 1024 | 1009 | 985 | 935 | 899 | 1175 | 1143 | 1129 | 1105 | 1056 | 1020 |
| | PI | kW | 280 | 305 | 316 | 332 | 361 | 380 | 298 | 325 | 336 | 354 | 385 | 405 |
| | qw | l/s | 50.3 | 48.8 | 48.1 | 46.9 | 44.6 | 42.8 | 56.0 | 54.5 | 53.8 | 52.7 | 50.3 | 48.6 |
| | dpw | kPa | 67 | 63 | 62 | 59 | 54 | 50 | 44 | 42 | 41 | 39 | 36 | 34 |
| **7** | CC | kW | 1116 | 1083 | 1067 | 1041 | 988 | 949 | 1242 | 1208 | 1193 | 1168 | 1116 | 1078 |
| | PI | kW | 290 | 316 | 327 | 344 | 374 | 393 | 307 | 335 | 347 | 365 | 397 | 418 |
| | qw | l/s | 53.3 | 51.7 | 50.9 | 49.7 | 47.1 | 45.3 | 59.3 | 57.6 | 56.9 | 55.7 | 53.3 | 51.4 |
| | dpw | kPa | 74 | 70 | 68 | 65 | 60 | 55 | 48 | 46 | 45 | 43 | 40 | 38 |
| **9** | CC | kW | 1177 | 1142 | 1126 | 1098 | 1041 | 1001 | 1310 | 1275 | 1259 | 1232 | 1178 | 1138 |
| | PI | kW | 300 | 327 | 338 | 355 | 386 | 406 | 317 | 346 | 358 | 377 | 409 | 431 |
| | qw | l/s | 56.2 | 54.6 | 53.8 | 52.4 | 49.7 | 47.8 | 62.6 | 60.9 | 60.1 | 58.8 | 56.2 | 54.3 |
| | dpw | kPa | 82 | 77 | 75 | 72 | 66 | 61 | 53 | 51 | 50 | 48 | 44 | 41 |
| **11** | CC | kW | 1238 | 1201 | 1184 | 1155 | 1096 | 1032 | 1380 | 1342 | 1326 | 1297 | 1240 | 1198 |
| | PI | kW | 311 | 338 | 350 | 368 | 399 | 410 | 327 | 357 | 369 | 389 | 422 | 444 |
| | qw | l/s | 59.2 | 57.4 | 56.6 | 55.2 | 52.4 | 49.3 | 65.9 | 64.2 | 63.4 | 62.0 | 59.3 | 57.3 |
| | dpw | kPa | 90 | 85 | 83 | 79 | 72 | 65 | 59 | 56 | 55 | 52 | 48 | 45 |
| **13** | CC | kW | 1300 | 1261 | 1243 | 1212 | 1150 | 1042 | 1451 | 1411 | 1393 | 1363 | 1303 | 1247 |
| | PI | kW | 321 | 350 | 361 | 380 | 413 | 400 | 338 | 368 | 381 | 401 | 435 | 452 |
| | qw | l/s | 62.2 | 60.3 | 59.5 | 58.0 | 55.0 | 49.8 | 69.4 | 67.5 | 66.6 | 65.2 | 62.3 | 59.6 |
| | dpw | kPa | 98 | 93 | 90 | 86 | 79 | 66 | 64 | 61 | 60 | 57 | 53 | 49 |
| **15** | CC | kW | 1362 | 1321 | 1302 | 1269 | 1205 | 1055 | 1522 | 1481 | 1462 | 1430 | 1366 | 1282 |
| | PI | kW | 332 | 361 | 373 | 392 | 426 | 392 | 349 | 380 | 393 | 413 | 449 | 452 |
| | qw | l/s | 65.2 | 63.2 | 62.3 | 60.8 | 57.7 | 50.5 | 72.9 | 70.9 | 70.0 | 68.5 | 65.4 | 61.4 |
| | dpw | kPa | 107 | 101 | 98 | 94 | 85 | 67 | 70 | 67 | 65 | 63 | 58 | 51 |

| | | | C12 | | | | | | C13 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1259 | 1224 | 1209 | 1181 | 1126 | 1085 | 1319 | 1279 | 1260 | 1229 | 1167 | 1121 |
| | PI | kW | 330 | 360 | 373 | 392 | 427 | 450 | 339 | 369 | 381 | 400 | 435 | 457 |
| | qw | l/s | 60.0 | 58.4 | 57.6 | 56.3 | 53.7 | 51.7 | 62.9 | 60.9 | 60.1 | 58.6 | 55.6 | 53.4 |
| | dpw | kPa | 49 | 47 | 46 | 44 | 40 | 38 | 65 | 62 | 60 | 57 | 52 | 49 |
| **7** | CC | kW | 1329 | 1292 | 1276 | 1247 | 1188 | 1145 | 1398 | 1355 | 1336 | 1302 | 1235 | 1186 |
| | PI | kW | 341 | 372 | 385 | 405 | 441 | 464 | 351 | 382 | 395 | 415 | 450 | 473 |
| | qw | l/s | 63.4 | 61.7 | 60.9 | 59.5 | 56.7 | 54.6 | 66.7 | 64.7 | 63.7 | 62.1 | 58.9 | 56.6 |
| | dpw | kPa | 55 | 52 | 51 | 49 | 45 | 42 | 73 | 69 | 67 | 64 | 58 | 54 |
| **9** | CC | kW | 1400 | 1362 | 1344 | 1313 | 1251 | 1206 | 1479 | 1433 | 1412 | 1376 | 1304 | 1253 |
| | PI | kW | 352 | 384 | 397 | 418 | 455 | 479 | 364 | 396 | 409 | 429 | 466 | 489 |
| | qw | l/s | 66.9 | 65.0 | 64.2 | 62.7 | 59.8 | 57.6 | 70.6 | 68.4 | 67.4 | 65.7 | 62.3 | 59.8 |
| | dpw | kPa | 60 | 57 | 56 | 54 | 49 | 46 | 80 | 76 | 74 | 71 | 64 | 60 |
| **11** | CC | kW | 1472 | 1431 | 1412 | 1381 | 1315 | 1268 | 1562 | 1512 | 1489 | 1451 | 1375 | 1303 |
| | PI | kW | 364 | 397 | 410 | 431 | 469 | 494 | 377 | 410 | 424 | 445 | 482 | 498 |
| | qw | l/s | 70.4 | 68.4 | 67.5 | 66.0 | 62.9 | 60.6 | 74.7 | 72.3 | 71.2 | 69.4 | 65.7 | 62.3 |
| | dpw | kPa | 66 | 63 | 61 | 59 | 54 | 50 | 89 | 84 | 81 | 78 | 71 | 64 |
| **13** | CC | kW | 1546 | 1502 | 1482 | 1448 | 1380 | 1305 | 1647 | 1593 | 1569 | 1527 | 1446 | 1315 |
| | PI | kW | 376 | 409 | 423 | 445 | 484 | 498 | 392 | 425 | 439 | 461 | 499 | 487 |
| | qw | l/s | 73.9 | 71.9 | 70.9 | 69.3 | 66.0 | 62.5 | 78.8 | 76.2 | 75.0 | 73.1 | 69.2 | 62.9 |
| | dpw | kPa | 72 | 68 | 67 | 64 | 59 | 53 | 98 | 92 | 90 | 85 | 77 | 65 |
| **15** | CC | kW | 1621 | 1574 | 1553 | 1516 | 1444 | 1316 | 1732 | 1675 | 1649 | 1605 | 1519 | 1321 |
| | PI | kW | 388 | 423 | 437 | 459 | 499 | 485 | 406 | 441 | 455 | 477 | 516 | 472 |
| | qw | l/s | 77.6 | 75.4 | 74.3 | 72.6 | 69.1 | 63.0 | 82.9 | 80.2 | 79.0 | 76.9 | 72.7 | 63.2 |
| | dpw | kPa | 78 | 74 | 73 | 70 | 64 | 54 | 107 | 101 | 98 | 94 | 85 | 66 |

## EWAD C-XR

| | | | H14 | | | | | | H15 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1392 | 1348 | 1328 | 1294 | 1225 | 1174 | 1502 | 1453 | 1430 | 1391 | 1312 | 1255 |
| | PI | kW | 369 | 402 | 416 | 438 | 478 | 503 | 397 | 434 | 450 | 474 | 518 | 547 |
| | qw | l/s | 66.3 | 64.2 | 63.3 | 61.7 | 58.4 | 56.0 | 71.6 | 69.2 | 68.1 | 66.3 | 62.5 | 59.8 |
| | dpw | kPa | 75 | 71 | 69 | 66 | 60 | 55 | 82 | 77 | 75 | 71 | 64 | 59 |
| **7** | CC | kW | 1472 | 1425 | 1403 | 1367 | 1293 | 1223 | 1587 | 1534 | 1509 | 1468 | 1384 | 1290 |
| | PI | kW | 382 | 417 | 431 | 454 | 494 | 511 | 412 | 450 | 466 | 491 | 536 | 547 |
| | qw | l/s | 70.2 | 68.0 | 66.9 | 65.2 | 61.7 | 58.4 | 75.7 | 73.2 | 72.0 | 70.0 | 66.0 | 61.5 |
| | dpw | kPa | 83 | 78 | 76 | 73 | 66 | 60 | 91 | 85 | 83 | 79 | 71 | 62 |
| **9** | CC | kW | 1553 | 1504 | 1480 | 1441 | 1362 | 1263 | 1673 | 1617 | 1591 | 1546 | 1456 | 1304 |
| | PI | kW | 396 | 432 | 446 | 470 | 511 | 512 | 426 | 466 | 483 | 508 | 554 | 533 |
| | qw | l/s | 74.2 | 71.8 | 70.7 | 68.8 | 65.1 | 60.3 | 79.9 | 77.2 | 76.0 | 73.8 | 69.5 | 62.3 |
| | dpw | kPa | 92 | 87 | 84 | 80 | 72 | 63 | 100 | 94 | 91 | 86 | 78 | 64 |
| **11** | CC | kW | 1635 | 1582 | 1558 | 1516 | 1428 | 1297 | 1757 | 1699 | 1671 | 1625 | 1520 | 1323 |
| | PI | kW | 410 | 447 | 462 | 486 | 527 | 510 | 441 | 482 | 500 | 526 | 570 | 521 |
| | qw | l/s | 78.2 | 75.6 | 74.5 | 72.5 | 68.2 | 62.0 | 84.0 | 81.2 | 79.9 | 77.7 | 72.7 | 63.2 |
| | dpw | kPa | 101 | 95 | 92 | 88 | 79 | 66 | 109 | 103 | 100 | 95 | 84 | 65 |
| **13** | CC | kW | 1717 | 1662 | 1635 | 1591 | 1470 | 1310 | 1843 | 1780 | 1751 | 1702 | 1534 | 1338 |
| | PI | kW | 424 | 462 | 478 | 503 | 528 | 497 | 457 | 499 | 517 | 545 | 556 | 506 |
| | qw | l/s | 82.1 | 79.5 | 78.2 | 76.1 | 70.3 | 62.7 | 88.2 | 85.2 | 83.8 | 81.4 | 73.4 | 64.0 |
| | dpw | kPa | 110 | 104 | 101 | 96 | 83 | 68 | 119 | 112 | 108 | 103 | 85 | 67 |
| **15** | CC | kW | 1800 | 1740 | 1713 | 1667 | 1516 | 1318 | 1931 | 1863 | 1831 | 1779 | 1554 | 1348 |
| | PI | kW | 439 | 478 | 495 | 520 | 531 | 481 | 473 | 517 | 535 | 563 | 545 | 488 |
| | qw | l/s | 86.2 | 83.3 | 82.0 | 79.8 | 72.6 | 63.1 | 92.4 | 89.2 | 87.7 | 85.2 | 74.4 | 64.5 |
| | dpw | kPa | 120 | 113 | 110 | 105 | 88 | 69 | 129 | 121 | 118 | 112 | 88 | 68 |

| | | | C16 | | | | | | C17 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1570 | 1525 | 1504 | 1469 | 1397 | 1344 | 1657 | 1611 | 1590 | 1555 | 1482 | 1428 |
| | PI | kW | 417 | 455 | 471 | 495 | 539 | 568 | 441 | 481 | 498 | 524 | 571 | 602 |
| | qw | l/s | 74.8 | 72.7 | 71.7 | 70.0 | 66.6 | 64.1 | 79.0 | 76.8 | 75.8 | 74.1 | 70.6 | 68.1 |
| | dpw | kPa | 60 | 57 | 56 | 53 | 49 | 46 | 66 | 63 | 62 | 59 | 54 | 51 |
| **7** | CC | kW | 1654 | 1608 | 1587 | 1550 | 1473 | 1418 | 1746 | 1698 | 1676 | 1639 | 1561 | 1505 |
| | PI | kW | 431 | 470 | 486 | 512 | 557 | 586 | 455 | 497 | 514 | 541 | 589 | 621 |
| | qw | l/s | 78.9 | 76.7 | 75.7 | 74.0 | 70.3 | 67.6 | 83.3 | 81.0 | 80.0 | 78.2 | 74.5 | 71.8 |
| | dpw | kPa | 66 | 63 | 62 | 59 | 54 | 50 | 73 | 69 | 68 | 65 | 60 | 56 |
| **9** | CC | kW | 1741 | 1692 | 1669 | 1630 | 1551 | 1492 | 1837 | 1786 | 1763 | 1723 | 1642 | 1582 |
| | PI | kW | 445 | 485 | 502 | 528 | 575 | 605 | 470 | 512 | 530 | 558 | 608 | 640 |
| | qw | l/s | 83.1 | 80.8 | 79.7 | 77.9 | 74.1 | 71.3 | 87.7 | 85.3 | 84.2 | 82.3 | 78.4 | 75.6 |
| | dpw | kPa | 73 | 69 | 67 | 65 | 59 | 55 | 80 | 76 | 74 | 71 | 66 | 61 |
| **11** | CC | kW | 1829 | 1777 | 1752 | 1711 | 1628 | 1548 | 1929 | 1876 | 1851 | 1809 | 1723 | 1649 |
| | PI | kW | 460 | 501 | 518 | 545 | 593 | 616 | 485 | 529 | 547 | 576 | 627 | 654 |
| | qw | l/s | 87.4 | 84.9 | 83.8 | 81.8 | 77.8 | 74.0 | 92.2 | 89.7 | 88.5 | 86.4 | 82.4 | 78.8 |
| | dpw | kPa | 80 | 76 | 74 | 71 | 65 | 59 | 88 | 83 | 81 | 78 | 72 | 66 |
| **13** | CC | kW | 1920 | 1863 | 1837 | 1793 | 1705 | 1563 | 2024 | 1967 | 1940 | 1895 | 1805 | 1687 |
| | PI | kW | 475 | 517 | 535 | 563 | 612 | 602 | 501 | 546 | 565 | 594 | 646 | 652 |
| | qw | l/s | 91.8 | 89.1 | 87.9 | 85.8 | 81.6 | 74.8 | 96.8 | 94.1 | 92.8 | 90.7 | 86.3 | 80.7 |
| | dpw | kPa | 87 | 82 | 80 | 77 | 70 | 60 | 96 | 91 | 89 | 85 | 78 | 69 |
| **15** | CC | kW | 2012 | 1951 | 1924 | 1877 | 1783 | 1571 | 2121 | 2060 | 2031 | 1983 | 1888 | 1703 |
| | PI | kW | 491 | 534 | 553 | 581 | 632 | 583 | 517 | 563 | 583 | 613 | 667 | 637 |
| | qw | l/s | 96.3 | 93.4 | 92.1 | 89.8 | 85.4 | 75.2 | 101.5 | 98.6 | 97.2 | 95.0 | 90.4 | 81.5 |
| | dpw | kPa | 95 | 90 | 87 | 84 | 76 | 61 | 104 | 99 | 96 | 92 | 85 | 70 |

## EWAD C-XR

| | | | C18 | | | | | | C19 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1738 | 1691 | 1670 | 1633 | 1558 | 1502 | 1827 | 1779 | 1757 | 1720 | 1644 | 1587 |
| | PI | kW | 462 | 504 | 522 | 549 | 598 | 631 | 486 | 531 | 549 | 578 | 631 | 665 |
| | qw | l/s | 82.8 | 80.6 | 79.6 | 77.8 | 74.3 | 71.6 | 87.1 | 84.8 | 83.8 | 82.0 | 78.3 | 75.6 |
| | dpw | kPa | 66 | 63 | 61 | 59 | 54 | 51 | 72 | 69 | 67 | 65 | 60 | 56 |
| **7** | CC | kW | 1833 | 1783 | 1761 | 1722 | 1642 | 1584 | 1927 | 1876 | 1853 | 1813 | 1732 | 1672 |
| | PI | kW | 477 | 520 | 538 | 566 | 617 | 650 | 502 | 547 | 567 | 596 | 650 | 685 |
| | qw | l/s | 87.5 | 85.1 | 84.0 | 82.2 | 78.4 | 75.6 | 91.9 | 89.5 | 88.4 | 86.5 | 82.6 | 79.8 |
| | dpw | kPa | 73 | 69 | 68 | 65 | 60 | 56 | 79 | 76 | 74 | 71 | 66 | 62 |
| **9** | CC | kW | 1930 | 1878 | 1853 | 1812 | 1728 | 1667 | 2029 | 1975 | 1950 | 1908 | 1821 | 1758 |
| | PI | kW | 492 | 537 | 555 | 584 | 637 | 671 | 517 | 565 | 584 | 615 | 670 | 706 |
| | qw | l/s | 92.2 | 89.7 | 88.5 | 86.5 | 82.5 | 79.6 | 96.9 | 94.3 | 93.1 | 91.1 | 87.0 | 84.0 |
| | dpw | kPa | 80 | 76 | 74 | 71 | 65 | 61 | 87 | 83 | 81 | 78 | 72 | 67 |
| **11** | CC | kW | 2030 | 1974 | 1948 | 1904 | 1815 | 1747 | 2134 | 2076 | 2049 | 2004 | 1913 | 1846 |
| | PI | kW | 508 | 554 | 573 | 603 | 656 | 690 | 534 | 582 | 603 | 634 | 691 | 727 |
| | qw | l/s | 97.0 | 94.3 | 93.1 | 91.0 | 86.7 | 83.5 | 102.0 | 99.2 | 97.9 | 95.8 | 91.4 | 88.2 |
| | dpw | kPa | 88 | 83 | 81 | 78 | 72 | 67 | 96 | 91 | 89 | 85 | 79 | 74 |
| **13** | CC | kW | 2132 | 2072 | 2044 | 1997 | 1903 | 1812 | 2240 | 2179 | 2150 | 2102 | 2006 | 1936 |
| | PI | kW | 525 | 572 | 591 | 622 | 677 | 700 | 551 | 601 | 622 | 654 | 712 | 750 |
| | qw | l/s | 102.0 | 99.1 | 97.8 | 95.5 | 91.0 | 86.7 | 107.2 | 104.2 | 102.9 | 100.6 | 95.9 | 92.6 |
| | dpw | kPa | 96 | 91 | 89 | 85 | 78 | 71 | 105 | 99 | 97 | 93 | 86 | 80 |
| **15** | CC | kW | 2236 | 2172 | 2142 | 2092 | 1992 | 1835 | 2350 | 2284 | 2254 | 2203 | 2100 | 1966 |
| | PI | kW | 542 | 590 | 610 | 642 | 698 | 689 | 569 | 620 | 641 | 674 | 734 | 742 |
| | qw | l/s | 107.1 | 104.0 | 102.6 | 100.2 | 95.4 | 87.8 | 112.5 | 109.3 | 107.9 | 105.4 | 100.5 | 94.1 |
| | dpw | kPa | 104 | 99 | 97 | 93 | 85 | 73 | 114 | 108 | 106 | 102 | 93 | 83 |

| | | | C20 | | | | | | C21 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1871 | 1824 | 1802 | 1765 | 1686 | 1627 | 1923 | 1874 | 1851 | 1812 | 1728 | 1666 |
| | PI | kW | 507 | 555 | 575 | 606 | 664 | 701 | 532 | 583 | 604 | 638 | 701 | 742 |
| | qw | l/s | 89.2 | 86.9 | 85.9 | 84.1 | 80.4 | 77.6 | 91.7 | 89.3 | 88.2 | 86.3 | 82.4 | 79.4 |
| | dpw | kPa | 38 | 36 | 35 | 34 | 31 | 29 | 40 | 38 | 37 | 36 | 33 | 31 |
| **7** | CC | kW | 1966 | 1916 | 1893 | 1854 | 1772 | 1711 | 2020 | 1968 | 1943 | 1902 | 1814 | 1749 |
| | PI | kW | 521 | 571 | 591 | 624 | 683 | 722 | 547 | 600 | 622 | 657 | 721 | 763 |
| | qw | l/s | 93.8 | 91.4 | 90.3 | 88.5 | 84.6 | 81.6 | 96.4 | 93.9 | 92.7 | 90.7 | 86.6 | 83.5 |
| | dpw | kPa | 41 | 39 | 39 | 37 | 34 | 32 | 43 | 41 | 40 | 39 | 36 | 34 |
| **9** | CC | kW | 2063 | 2010 | 1986 | 1944 | 1858 | 1795 | 2119 | 2063 | 2037 | 1993 | 1901 | 1833 |
| | PI | kW | 537 | 587 | 609 | 642 | 703 | 743 | 563 | 617 | 640 | 676 | 742 | 785 |
| | qw | l/s | 98.5 | 96.0 | 94.8 | 92.8 | 88.7 | 85.7 | 101.2 | 98.5 | 97.3 | 95.2 | 90.8 | 87.6 |
| | dpw | kPa | 45 | 43 | 42 | 41 | 37 | 35 | 47 | 45 | 44 | 42 | 39 | 37 |
| **11** | CC | kW | 2162 | 2106 | 2080 | 2035 | 1945 | 1861 | 2219 | 2160 | 2133 | 2086 | 1989 | 1883 |
| | PI | kW | 553 | 605 | 626 | 661 | 723 | 753 | 580 | 636 | 659 | 696 | 763 | 785 |
| | qw | l/s | 103.3 | 100.7 | 99.4 | 97.3 | 93.0 | 88.9 | 106.1 | 103.3 | 101.9 | 99.7 | 95.1 | 90.0 |
| | dpw | kPa | 49 | 47 | 46 | 44 | 41 | 38 | 52 | 49 | 48 | 46 | 42 | 38 |
| **13** | CC | kW | 2262 | 2203 | 2175 | 2128 | 2033 | 1923 | 2322 | 2259 | 2230 | 2180 | 2078 | 1922 |
| | PI | kW | 569 | 622 | 645 | 680 | 744 | 759 | 597 | 654 | 678 | 716 | 785 | 777 |
| | qw | l/s | 108.2 | 105.4 | 104.1 | 101.8 | 97.2 | 92.0 | 111.1 | 108.1 | 106.7 | 104.3 | 99.4 | 92.0 |
| | dpw | kPa | 53 | 51 | 50 | 48 | 44 | 40 | 56 | 53 | 52 | 50 | 46 | 40 |
| **15** | CC | kW | 2365 | 2302 | 2272 | 2223 | 2122 | 1965 | 2426 | 2359 | 2328 | 2275 | 2167 | 1955 |
| | PI | kW | 586 | 641 | 664 | 700 | 765 | 755 | 615 | 674 | 698 | 737 | 808 | 765 |
| | qw | l/s | 113.2 | 110.2 | 108.8 | 106.4 | 101.6 | 94.1 | 116.1 | 112.9 | 111.4 | 108.9 | 103.8 | 93.6 |
| | dpw | kPa | 58 | 55 | 54 | 52 | 48 | 42 | 61 | 58 | 56 | 54 | 50 | 41 |

## EWAD C-XR

| | | | C22 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | |
| **5** | CC | kW | 1979 | 1927 | 1903 | 1861 | 1773 | 1707 | |
| | PI | kW | 557 | 612 | 635 | 671 | 738 | 783 | |
| | qw | l/s | 94.3 | 91.9 | 90.7 | 88.7 | 84.5 | 81.3 | |
| | dpw | kPa | 42 | 40 | 39 | 37 | 34 | 32 | |
| **7** | CC | kW | 2078 | 2023 | 1997 | 1952 | 1859 | 1790 | |
| | PI | kW | 574 | 630 | 653 | 691 | 760 | 805 | |
| | qw | l/s | 99.1 | 96.5 | 95.3 | 93.1 | 88.7 | 85.4 | |
| | dpw | kPa | 46 | 44 | 43 | 41 | 37 | 35 | |
| **9** | CC | kW | 2178 | 2120 | 2092 | 2045 | 1947 | 1875 | |
| | PI | kW | 591 | 648 | 672 | 711 | 781 | 828 | |
| | qw | l/s | 104.0 | 101.2 | 99.9 | 97.7 | 93.0 | 89.5 | |
| | dpw | kPa | 50 | 47 | 46 | 44 | 41 | 38 | |
| **11** | CC | kW | 2281 | 2218 | 2189 | 2139 | 2036 | 1904 | |
| | PI | kW | 608 | 667 | 692 | 732 | 804 | 816 | |
| | qw | l/s | 109.0 | 106.0 | 104.6 | 102.2 | 97.3 | 91.0 | |
| | dpw | kPa | 54 | 52 | 50 | 48 | 44 | 39 | |
| **13** | CC | kW | 2385 | 2318 | 2287 | 2234 | 2125 | 1925 | |
| | PI | kW | 626 | 687 | 713 | 753 | 827 | 796 | |
| | qw | l/s | 114.1 | 110.9 | 109.4 | 106.9 | 101.7 | 92.1 | |
| | dpw | kPa | 59 | 56 | 54 | 52 | 48 | 40 | |
| **15** | CC | kW | 2491 | 2420 | 2387 | 2330 | 2216 | 1948 | |
| | PI | kW | 645 | 707 | 734 | 775 | 851 | 776 | |
| | qw | l/s | 119.2 | 115.8 | 114.3 | 111.6 | 106.1 | 93.2 | |
| | dpw | kPa | 64 | 60 | 59 | 56 | 52 | 41 | |

*Fluid: Water*
*Ta: Condenser inlet air temperature;  Twout: Evaporator leaving water temperature (Δt 5°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 contac factory*

## EWAD C-PS

| | | | 820 | | | | | | 890 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 817 | 794 | 785 | 772 | 748 | 731 | 886 | 862 | 852 | 838 | 810 | 791 |
| | PI | kW | 186 | 203 | 210 | 220 | 238 | 249 | 205 | 224 | 231 | 242 | 262 | 274 |
| | qw | l/s | 38.9 | 37.8 | 37.4 | 36.8 | 35.7 | 34.8 | 42.2 | 41.1 | 40.6 | 39.9 | 38.6 | 37.7 |
| | dpw | kPa | 57 | 54 | 53 | 51 | 49 | 47 | 66 | 63 | 61 | 60 | 56 | 54 |
| **7** | CC | kW | 868 | 844 | 835 | 821 | 795 | 777 | 940 | 915 | 905 | 890 | 861 | 840 |
| | PI | kW | 190 | 208 | 215 | 226 | 244 | 255 | 210 | 229 | 237 | 249 | 269 | 281 |
| | qw | l/s | 41.4 | 40.3 | 39.8 | 39.2 | 37.9 | 37.1 | 44.8 | 43.7 | 43.2 | 42.5 | 41.1 | 40.1 |
| | dpw | kPa | 64 | 60 | 59 | 58 | 54 | 52 | 73 | 70 | 69 | 67 | 63 | 60 |
| **9** | CC | kW | 920 | 896 | 886 | 871 | 844 | 825 | 996 | 970 | 960 | 943 | 913 | 891 |
| | PI | kW | 195 | 213 | 220 | 231 | 250 | 261 | 215 | 235 | 243 | 255 | 276 | 288 |
| | qw | l/s | 44.0 | 42.8 | 42.3 | 41.6 | 40.3 | 39.4 | 47.5 | 46.3 | 45.8 | 45.1 | 43.6 | 42.6 |
| | dpw | kPa | 71 | 67 | 66 | 64 | 61 | 58 | 82 | 78 | 76 | 74 | 70 | 67 |
| **11** | CC | kW | 975 | 949 | 939 | 924 | 895 | 875 | 1053 | 1026 | 1015 | 998 | 966 | 943 |
| | PI | kW | 199 | 218 | 226 | 237 | 256 | 268 | 221 | 241 | 249 | 262 | 283 | 296 |
| | qw | l/s | 46.6 | 45.4 | 44.9 | 44.2 | 42.8 | 41.8 | 50.3 | 49.0 | 48.5 | 47.7 | 46.2 | 45.1 |
| | dpw | kPa | 79 | 75 | 73 | 71 | 67 | 65 | 90 | 86 | 85 | 82 | 77 | 74 |
| **13** | CC | kW | 1030 | 1004 | 994 | 978 | 947 | 926 | 1111 | 1084 | 1072 | 1055 | 1021 | 997 |
| | PI | kW | 204 | 224 | 231 | 243 | 262 | 274 | 226 | 247 | 256 | 268 | 290 | 303 |
| | qw | l/s | 49.3 | 48.0 | 47.5 | 46.8 | 45.3 | 44.3 | 53.1 | 51.8 | 51.3 | 50.5 | 48.8 | 47.7 |
| | dpw | kPa | 87 | 83 | 81 | 79 | 75 | 72 | 100 | 95 | 93 | 91 | 86 | 82 |
| **15** | CC | kW | 1087 | 1060 | 1049 | 1032 | 1001 | 979 | 1171 | 1142 | 1131 | 1112 | 1077 | 1052 |
| | PI | kW | 210 | 229 | 237 | 249 | 269 | 281 | 232 | 254 | 262 | 275 | 297 | 311 |
| | qw | l/s | 52.0 | 50.8 | 50.2 | 49.4 | 47.9 | 46.8 | 56.0 | 54.7 | 54.1 | 53.3 | 51.5 | 50.3 |
| | dpw | kPa | 96 | 92 | 90 | 87 | 83 | 79 | 109 | 105 | 103 | 100 | 94 | 90 |

| | | | 980 | | | | | | C11 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 971 | 944 | 934 | 917 | 885 | 862 | 1070 | 1040 | 1029 | 1010 | 975 | 950 |
| | PI | kW | 226 | 246 | 254 | 267 | 288 | 302 | 248 | 271 | 280 | 294 | 317 | 332 |
| | qw | l/s | 46.3 | 45.0 | 44.5 | 43.7 | 42.2 | 41.1 | 51.0 | 49.6 | 49.0 | 48.1 | 46.5 | 45.3 |
| | dpw | kPa | 31 | 29 | 28 | 28 | 26 | 25 | 60 | 57 | 56 | 54 | 51 | 49 |
| **7** | CC | kW | 1032 | 1004 | 993 | 975 | 941 | 916 | 1136 | 1106 | 1093 | 1074 | 1037 | 1010 |
| | PI | kW | 232 | 253 | 261 | 274 | 296 | 310 | 255 | 278 | 288 | 302 | 326 | 341 |
| | qw | l/s | 49.2 | 47.9 | 47.4 | 46.5 | 44.9 | 43.7 | 54.2 | 52.7 | 52.2 | 51.2 | 49.5 | 48.2 |
| | dpw | kPa | 34 | 32 | 32 | 31 | 29 | 28 | 67 | 64 | 63 | 61 | 57 | 54 |
| **9** | CC | kW | 1095 | 1066 | 1054 | 1035 | 999 | 973 | 1205 | 1173 | 1160 | 1140 | 1100 | 1072 |
| | PI | kW | 238 | 260 | 268 | 282 | 304 | 318 | 262 | 286 | 295 | 310 | 335 | 351 |
| | qw | l/s | 52.3 | 50.9 | 50.3 | 49.4 | 47.7 | 46.4 | 57.6 | 56.0 | 55.4 | 54.4 | 52.5 | 51.2 |
| | dpw | kPa | 38 | 36 | 36 | 34 | 32 | 31 | 75 | 71 | 70 | 68 | 64 | 61 |
| **11** | CC | kW | 1161 | 1130 | 1117 | 1097 | 1058 | 1031 | 1276 | 1243 | 1229 | 1207 | 1165 | 1135 |
| | PI | kW | 245 | 267 | 276 | 289 | 313 | 327 | 269 | 294 | 304 | 318 | 344 | 360 |
| | qw | l/s | 55.5 | 54.0 | 53.4 | 52.4 | 50.6 | 49.3 | 61.0 | 59.4 | 58.8 | 57.7 | 55.7 | 54.2 |
| | dpw | kPa | 42 | 40 | 40 | 38 | 36 | 34 | 83 | 79 | 78 | 75 | 71 | 67 |
| **13** | CC | kW | 1229 | 1197 | 1183 | 1162 | 1120 | 1091 | 1348 | 1314 | 1300 | 1277 | 1232 | 1200 |
| | PI | kW | 252 | 275 | 284 | 298 | 321 | 336 | 277 | 302 | 312 | 327 | 354 | 370 |
| | qw | l/s | 58.8 | 57.2 | 56.6 | 55.6 | 53.6 | 52.2 | 64.5 | 62.9 | 62.2 | 61.1 | 58.9 | 57.4 |
| | dpw | kPa | 47 | 45 | 44 | 42 | 40 | 38 | 92 | 88 | 86 | 83 | 78 | 75 |
| **15** | CC | kW | 1299 | 1265 | 1251 | 1228 | 1184 | 1153 | 1423 | 1387 | 1372 | 1347 | 1301 | 1267 |
| | PI | kW | 260 | 283 | 292 | 306 | 330 | 346 | 284 | 310 | 321 | 336 | 363 | 380 |
| | qw | l/s | 62.2 | 60.6 | 59.9 | 58.8 | 56.7 | 55.2 | 68.1 | 66.4 | 65.7 | 64.5 | 62.3 | 60.7 |
| | dpw | kPa | 52 | 50 | 49 | 47 | 44 | 42 | 101 | 97 | 95 | 92 | 86 | 82 |

## EWAD C-PS

| | | | C12 | | | | | | C13 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1155 | 1123 | 1111 | 1090 | 1051 | 1022 | 1275 | 1240 | 1226 | 1203 | 1159 | 1127 |
| | PI | kW | 271 | 296 | 306 | 321 | 347 | 364 | 299 | 326 | 337 | 353 | 382 | 400 |
| | qw | l/s | 55.0 | 53.5 | 52.9 | 52.0 | 50.1 | 48.7 | 60.8 | 59.1 | 58.4 | 57.4 | 55.3 | 53.7 |
| | dpw | kPa | 69 | 66 | 65 | 62 | 58 | 56 | 60 | 57 | 56 | 54 | 50 | 48 |
| **7** | CC | kW | 1225 | 1193 | 1179 | 1158 | 1116 | 1085 | 1354 | 1318 | 1303 | 1279 | 1232 | 1198 |
| | PI | kW | 279 | 304 | 314 | 330 | 357 | 374 | 307 | 335 | 346 | 363 | 393 | 412 |
| | qw | l/s | 58.5 | 56.9 | 56.3 | 55.2 | 53.2 | 51.8 | 64.6 | 62.9 | 62.2 | 61.0 | 58.8 | 57.2 |
| | dpw | kPa | 77 | 74 | 72 | 70 | 65 | 62 | 67 | 64 | 62 | 60 | 56 | 54 |
| **9** | CC | kW | 1298 | 1264 | 1250 | 1227 | 1183 | 1151 | 1436 | 1398 | 1382 | 1357 | 1307 | 1271 |
| | PI | kW | 287 | 313 | 323 | 339 | 367 | 384 | 316 | 345 | 356 | 374 | 404 | 423 |
| | qw | l/s | 62.0 | 60.4 | 59.7 | 58.6 | 56.5 | 55.0 | 68.6 | 66.8 | 66.0 | 64.8 | 62.4 | 60.7 |
| | dpw | kPa | 86 | 82 | 80 | 78 | 73 | 69 | 74 | 71 | 69 | 67 | 63 | 60 |
| **11** | CC | kW | 1374 | 1338 | 1323 | 1299 | 1252 | 1218 | 1521 | 1481 | 1464 | 1437 | 1384 | 1346 |
| | PI | kW | 295 | 322 | 332 | 349 | 377 | 395 | 325 | 355 | 367 | 384 | 415 | 435 |
| | qw | l/s | 65.7 | 64.0 | 63.3 | 62.1 | 59.8 | 58.2 | 72.7 | 70.8 | 70.0 | 68.7 | 66.1 | 64.3 |
| | dpw | kPa | 95 | 91 | 89 | 86 | 80 | 77 | 83 | 79 | 77 | 75 | 70 | 66 |
| **13** | CC | kW | 1450 | 1413 | 1398 | 1373 | 1322 | 1286 | 1607 | 1565 | 1548 | 1519 | 1463 | 1422 |
| | PI | kW | 303 | 331 | 342 | 359 | 388 | 406 | 335 | 365 | 377 | 396 | 427 | 448 |
| | qw | l/s | 69.4 | 67.6 | 66.9 | 65.7 | 63.3 | 61.5 | 76.9 | 74.9 | 74.0 | 72.7 | 70.0 | 68.0 |
| | dpw | kPa | 105 | 100 | 98 | 95 | 89 | 85 | 91 | 87 | 85 | 83 | 77 | 73 |
| **15** | CC | kW | 1528 | 1490 | 1473 | 1446 | 1394 | 1357 | 1695 | 1651 | 1633 | 1602 | 1543 | 1501 |
| | PI | kW | 312 | 340 | 352 | 369 | 399 | 418 | 345 | 376 | 388 | 407 | 440 | 460 |
| | qw | l/s | 73.1 | 71.3 | 70.5 | 69.2 | 66.8 | 65.0 | 81.1 | 79.1 | 78.2 | 76.7 | 73.9 | 71.9 |
| | dpw | kPa | 115 | 110 | 108 | 105 | 98 | 93 | 101 | 96 | 94 | 91 | 85 | 81 |

| | | | C14 | | | | | | C15 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1386 | 1348 | 1333 | 1308 | 1261 | 1226 | 1472 | 1433 | 1417 | 1391 | 1340 | 1302 |
| | PI | kW | 326 | 355 | 367 | 385 | 416 | 437 | 347 | 380 | 393 | 413 | 448 | 470 |
| | qw | l/s | 66.0 | 64.3 | 63.5 | 62.4 | 60.1 | 58.4 | 70.2 | 68.3 | 67.5 | 66.3 | 63.9 | 62.1 |
| | dpw | kPa | 70 | 66 | 65 | 63 | 59 | 56 | 80 | 76 | 75 | 72 | 68 | 64 |
| **7** | CC | kW | 1471 | 1432 | 1416 | 1390 | 1339 | 1302 | 1560 | 1519 | 1502 | 1474 | 1420 | 1380 |
| | PI | kW | 335 | 365 | 377 | 396 | 428 | 449 | 357 | 390 | 404 | 424 | 460 | 483 |
| | qw | l/s | 70.2 | 68.3 | 67.5 | 66.3 | 63.9 | 62.1 | 74.4 | 72.5 | 71.7 | 70.3 | 67.7 | 65.8 |
| | dpw | kPa | 77 | 74 | 72 | 70 | 66 | 62 | 89 | 85 | 83 | 81 | 75 | 72 |
| **9** | CC | kW | 1559 | 1518 | 1501 | 1473 | 1420 | 1382 | 1648 | 1606 | 1588 | 1559 | 1502 | 1460 |
| | PI | kW | 344 | 376 | 388 | 407 | 440 | 461 | 366 | 401 | 415 | 436 | 473 | 496 |
| | qw | l/s | 74.4 | 72.5 | 71.7 | 70.4 | 67.8 | 66.0 | 78.7 | 76.7 | 75.8 | 74.5 | 71.7 | 69.7 |
| | dpw | kPa | 86 | 82 | 80 | 78 | 73 | 69 | 99 | 94 | 92 | 89 | 83 | 79 |
| **11** | CC | kW | 1649 | 1606 | 1588 | 1559 | 1502 | 1462 | 1737 | 1694 | 1675 | 1645 | 1585 | 1542 |
| | PI | kW | 354 | 386 | 399 | 419 | 453 | 474 | 376 | 411 | 426 | 447 | 486 | 510 |
| | qw | l/s | 78.8 | 76.8 | 75.9 | 74.5 | 71.8 | 69.9 | 83.0 | 81.0 | 80.1 | 78.6 | 75.8 | 73.7 |
| | dpw | kPa | 96 | 91 | 89 | 86 | 81 | 77 | 109 | 104 | 102 | 98 | 92 | 88 |
| **13** | CC | kW | 1741 | 1697 | 1678 | 1648 | 1587 | 1544 | 1828 | 1783 | 1763 | 1732 | 1669 | 1624 |
| | PI | kW | 364 | 397 | 410 | 431 | 465 | 487 | 386 | 422 | 437 | 459 | 499 | 524 |
| | qw | l/s | 83.3 | 81.2 | 80.3 | 78.8 | 75.9 | 73.9 | 87.4 | 85.3 | 84.4 | 82.8 | 79.9 | 77.7 |
| | dpw | kPa | 105 | 101 | 99 | 95 | 89 | 85 | 119 | 114 | 112 | 108 | 101 | 96 |
| **15** | CC | kW | 1834 | 1788 | 1769 | 1737 | 1674 | 1629 | 1921 | 1873 | 1853 | 1819 | 1754 | 1707 |
| | PI | kW | 375 | 408 | 422 | 443 | 479 | 501 | 396 | 434 | 449 | 472 | 512 | 538 |
| | qw | l/s | 87.8 | 85.6 | 84.7 | 83.1 | 80.1 | 78.0 | 92.0 | 89.7 | 88.7 | 87.1 | 84.0 | 81.7 |
| | dpw | kPa | 116 | 111 | 109 | 105 | 98 | 94 | 130 | 125 | 122 | 118 | 111 | 105 |

## EWAD C-PS

| | | | C16 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | |
| **5** | CC | kW | 1562 | 1520 | 1503 | 1475 | 1418 | 1377 | |
| | PI | kW | 370 | 405 | 419 | 441 | 479 | 504 | |
| | qw | l/s | 74.5 | 72.5 | 71.6 | 70.3 | 67.6 | 65.6 | |
| | dpw | kPa | 88 | 84 | 82 | 79 | 74 | 70 | |
| **7** | CC | kW | 1654 | 1611 | 1592 | 1562 | 1502 | 1458 | |
| | PI | kW | 379 | 416 | 430 | 453 | 492 | 518 | |
| | qw | l/s | 78.9 | 76.9 | 76.0 | 74.5 | 71.7 | 69.6 | |
| | dpw | kPa | 97 | 93 | 91 | 88 | 82 | 78 | |
| **9** | CC | kW | 1744 | 1700 | 1681 | 1651 | 1588 | 1541 | |
| | PI | kW | 389 | 427 | 442 | 465 | 506 | 532 | |
| | qw | l/s | 83.3 | 81.2 | 80.3 | 78.8 | 75.8 | 73.6 | |
| | dpw | kPa | 107 | 103 | 101 | 97 | 91 | 86 | |
| **11** | CC | kW | 1837 | 1790 | 1770 | 1738 | 1674 | 1627 | |
| | PI | kW | 399 | 438 | 453 | 477 | 520 | 547 | |
| | qw | l/s | 87.8 | 85.6 | 84.6 | 83.1 | 80.0 | 77.8 | |
| | dpw | kPa | 118 | 113 | 110 | 107 | 100 | 95 | |
| **13** | CC | kW | 1933 | 1883 | 1862 | 1827 | 1759 | 1710 | |
| | PI | kW | 410 | 449 | 465 | 490 | 533 | 561 | |
| | qw | l/s | 92.5 | 90.1 | 89.1 | 87.4 | 84.1 | 81.8 | |
| | dpw | kPa | 129 | 124 | 121 | 117 | 109 | 104 | |
| **15** | CC | kW | 2031 | 1978 | 1955 | 1918 | 1846 | 1795 | |
| | PI | kW | 421 | 461 | 478 | 503 | 548 | 576 | |
| | qw | l/s | 97.2 | 94.7 | 93.6 | 91.8 | 88.4 | 85.9 | |
| | dpw | kPa | 142 | 135 | 132 | 128 | 119 | 113 | |

*Fluid: Water*
*Ta: Condenser inlet air temperature;  Twout: Evaporator leaving water temperature (Δt 5°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 contac factory*

## EWAD C-PL

| | | | 820 | | | | | | 890 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 817 | 794 | 785 | 772 | 748 | 731 | 886 | 862 | 852 | 838 | 810 | 791 |
| | PI | kW | 186 | 203 | 210 | 220 | 238 | 249 | 205 | 224 | 231 | 242 | 262 | 274 |
| | qw | l/s | 38.9 | 37.8 | 37.4 | 36.8 | 35.7 | 34.8 | 42.2 | 41.1 | 40.6 | 39.9 | 38.6 | 37.7 |
| | dpw | kPa | 57 | 54 | 53 | 51 | 49 | 47 | 66 | 63 | 61 | 60 | 56 | 54 |
| **7** | CC | kW | 868 | 844 | 835 | 821 | 795 | 777 | 940 | 915 | 905 | 890 | 861 | 840 |
| | PI | kW | 190 | 208 | 215 | 226 | 244 | 255 | 210 | 229 | 237 | 249 | 269 | 281 |
| | qw | l/s | 41.4 | 40.3 | 39.8 | 39.2 | 37.9 | 37.1 | 44.8 | 43.7 | 43.2 | 42.5 | 41.1 | 40.1 |
| | dpw | kPa | 64 | 60 | 59 | 58 | 54 | 52 | 73 | 70 | 69 | 67 | 63 | 60 |
| **9** | CC | kW | 920 | 896 | 886 | 871 | 844 | 825 | 996 | 970 | 960 | 943 | 913 | 891 |
| | PI | kW | 195 | 213 | 220 | 231 | 250 | 261 | 215 | 235 | 243 | 255 | 276 | 288 |
| | qw | l/s | 44.0 | 42.8 | 42.3 | 41.6 | 40.3 | 39.4 | 47.5 | 46.3 | 45.8 | 45.1 | 43.6 | 42.6 |
| | dpw | kPa | 71 | 67 | 66 | 64 | 61 | 58 | 82 | 78 | 76 | 74 | 70 | 67 |
| **11** | CC | kW | 975 | 949 | 939 | 924 | 895 | 875 | 1053 | 1026 | 1015 | 998 | 966 | 943 |
| | PI | kW | 199 | 218 | 226 | 237 | 256 | 268 | 221 | 241 | 249 | 262 | 283 | 296 |
| | qw | l/s | 46.6 | 45.4 | 44.9 | 44.2 | 42.8 | 41.8 | 50.3 | 49.0 | 48.5 | 47.7 | 46.2 | 45.1 |
| | dpw | kPa | 79 | 75 | 73 | 71 | 67 | 65 | 90 | 86 | 85 | 82 | 77 | 74 |
| **13** | CC | kW | 1030 | 1004 | 994 | 978 | 947 | 926 | 1111 | 1084 | 1072 | 1055 | 1021 | 997 |
| | PI | kW | 204 | 224 | 231 | 243 | 262 | 274 | 226 | 247 | 256 | 268 | 290 | 303 |
| | qw | l/s | 49.3 | 48.0 | 47.5 | 46.8 | 45.3 | 44.3 | 53.1 | 51.8 | 51.3 | 50.5 | 48.8 | 47.7 |
| | dpw | kPa | 87 | 83 | 81 | 79 | 75 | 72 | 100 | 95 | 93 | 91 | 86 | 82 |
| **15** | CC | kW | 1087 | 1060 | 1049 | 1032 | 1001 | 979 | 1171 | 1142 | 1131 | 1112 | 1077 | 1052 |
| | PI | kW | 210 | 229 | 237 | 249 | 269 | 281 | 232 | 254 | 262 | 275 | 297 | 311 |
| | qw | l/s | 52.0 | 50.8 | 50.2 | 49.4 | 47.9 | 46.8 | 56.0 | 54.7 | 54.1 | 53.3 | 51.5 | 50.3 |
| | dpw | kPa | 96 | 92 | 90 | 87 | 83 | 79 | 109 | 105 | 103 | 100 | 94 | 90 |

| | | | 980 | | | | | | C11 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 971 | 944 | 934 | 917 | 885 | 862 | 1070 | 1040 | 1029 | 1010 | 975 | 950 |
| | PI | kW | 226 | 246 | 254 | 267 | 288 | 302 | 248 | 271 | 280 | 294 | 317 | 332 |
| | qw | l/s | 46.3 | 45.0 | 44.5 | 43.7 | 42.2 | 41.1 | 51.0 | 49.6 | 49.0 | 48.1 | 46.5 | 45.3 |
| | dpw | kPa | 31 | 29 | 28 | 28 | 26 | 25 | 60 | 57 | 56 | 54 | 51 | 49 |
| **7** | CC | kW | 1032 | 1004 | 993 | 975 | 941 | 916 | 1136 | 1106 | 1093 | 1074 | 1037 | 1010 |
| | PI | kW | 232 | 253 | 261 | 274 | 296 | 310 | 255 | 278 | 288 | 302 | 326 | 341 |
| | qw | l/s | 49.2 | 47.9 | 47.4 | 46.5 | 44.9 | 43.7 | 54.2 | 52.7 | 52.2 | 51.2 | 49.5 | 48.2 |
| | dpw | kPa | 34 | 32 | 32 | 31 | 29 | 28 | 67 | 64 | 63 | 61 | 57 | 54 |
| **9** | CC | kW | 1095 | 1066 | 1054 | 1035 | 999 | 973 | 1205 | 1173 | 1160 | 1140 | 1100 | 1072 |
| | PI | kW | 238 | 260 | 268 | 282 | 304 | 318 | 262 | 286 | 295 | 310 | 335 | 351 |
| | qw | l/s | 52.3 | 50.9 | 50.3 | 49.4 | 47.7 | 46.4 | 57.6 | 56.0 | 55.4 | 54.4 | 52.5 | 51.2 |
| | dpw | kPa | 38 | 36 | 36 | 34 | 32 | 31 | 75 | 71 | 70 | 68 | 64 | 61 |
| **11** | CC | kW | 1161 | 1130 | 1117 | 1097 | 1058 | 1031 | 1276 | 1243 | 1229 | 1207 | 1165 | 1135 |
| | PI | kW | 245 | 267 | 276 | 289 | 313 | 327 | 269 | 294 | 304 | 318 | 344 | 360 |
| | qw | l/s | 55.5 | 54.0 | 53.4 | 52.4 | 50.6 | 49.3 | 61.0 | 59.4 | 58.8 | 57.7 | 55.7 | 54.2 |
| | dpw | kPa | 42 | 40 | 40 | 38 | 36 | 34 | 83 | 79 | 78 | 75 | 71 | 67 |
| **13** | CC | kW | 1229 | 1197 | 1183 | 1162 | 1120 | 1091 | 1348 | 1314 | 1300 | 1277 | 1232 | 1200 |
| | PI | kW | 252 | 275 | 284 | 298 | 321 | 336 | 277 | 302 | 312 | 327 | 354 | 370 |
| | qw | l/s | 58.8 | 57.2 | 56.6 | 55.6 | 53.6 | 52.2 | 64.5 | 62.9 | 62.2 | 61.1 | 58.9 | 57.4 |
| | dpw | kPa | 47 | 45 | 44 | 42 | 40 | 38 | 92 | 88 | 86 | 83 | 78 | 75 |
| **15** | CC | kW | 1299 | 1265 | 1251 | 1228 | 1184 | 1153 | 1423 | 1387 | 1372 | 1347 | 1301 | 1267 |
| | PI | kW | 260 | 283 | 292 | 306 | 330 | 346 | 284 | 310 | 321 | 336 | 363 | 380 |
| | qw | l/s | 62.2 | 60.6 | 59.9 | 58.8 | 56.7 | 55.2 | 68.1 | 66.4 | 65.7 | 64.5 | 62.3 | 60.7 |
| | dpw | kPa | 52 | 50 | 49 | 47 | 44 | 42 | 101 | 97 | 95 | 92 | 86 | 82 |

## EWAD C-PL

| | | | C12 | | | | | | C13 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1155 | 1123 | 1111 | 1090 | 1051 | 1022 | 1275 | 1240 | 1226 | 1203 | 1159 | 1127 |
| | PI | kW | 271 | 296 | 306 | 321 | 347 | 364 | 299 | 326 | 337 | 353 | 382 | 400 |
| | qw | l/s | 55.0 | 53.5 | 52.9 | 52.0 | 50.1 | 48.7 | 60.8 | 59.1 | 58.4 | 57.4 | 55.3 | 53.7 |
| | dpw | kPa | 69 | 66 | 65 | 62 | 58 | 56 | 60 | 57 | 56 | 54 | 50 | 48 |
| **7** | CC | kW | 1225 | 1193 | 1179 | 1158 | 1116 | 1085 | 1354 | 1318 | 1303 | 1279 | 1232 | 1198 |
| | PI | kW | 279 | 304 | 314 | 330 | 357 | 374 | 307 | 335 | 346 | 363 | 393 | 412 |
| | qw | l/s | 58.5 | 56.9 | 56.3 | 55.2 | 53.2 | 51.8 | 64.6 | 62.9 | 62.2 | 61.0 | 58.8 | 57.2 |
| | dpw | kPa | 77 | 74 | 72 | 70 | 65 | 62 | 67 | 64 | 62 | 60 | 56 | 54 |
| **9** | CC | kW | 1298 | 1264 | 1250 | 1227 | 1183 | 1151 | 1436 | 1398 | 1382 | 1357 | 1307 | 1271 |
| | PI | kW | 287 | 313 | 323 | 339 | 367 | 384 | 316 | 345 | 356 | 374 | 404 | 423 |
| | qw | l/s | 62.0 | 60.4 | 59.7 | 58.6 | 56.5 | 55.0 | 68.6 | 66.8 | 66.0 | 64.8 | 62.4 | 60.7 |
| | dpw | kPa | 86 | 82 | 80 | 78 | 73 | 69 | 74 | 71 | 69 | 67 | 63 | 60 |
| **11** | CC | kW | 1374 | 1338 | 1323 | 1299 | 1252 | 1218 | 1521 | 1481 | 1464 | 1437 | 1384 | 1346 |
| | PI | kW | 295 | 322 | 332 | 349 | 377 | 395 | 325 | 355 | 367 | 384 | 415 | 435 |
| | qw | l/s | 65.7 | 64.0 | 63.3 | 62.1 | 59.8 | 58.2 | 72.7 | 70.8 | 70.0 | 68.7 | 66.1 | 64.3 |
| | dpw | kPa | 95 | 91 | 89 | 86 | 80 | 77 | 83 | 79 | 77 | 75 | 70 | 66 |
| **13** | CC | kW | 1450 | 1413 | 1398 | 1373 | 1322 | 1286 | 1607 | 1565 | 1548 | 1519 | 1463 | 1422 |
| | PI | kW | 303 | 331 | 342 | 359 | 388 | 406 | 335 | 365 | 377 | 396 | 427 | 448 |
| | qw | l/s | 69.4 | 67.6 | 66.9 | 65.7 | 63.3 | 61.5 | 76.9 | 74.9 | 74.0 | 72.7 | 70.0 | 68.0 |
| | dpw | kPa | 105 | 100 | 98 | 95 | 89 | 85 | 91 | 87 | 85 | 83 | 77 | 73 |
| **15** | CC | kW | 1528 | 1490 | 1473 | 1446 | 1394 | 1357 | 1695 | 1651 | 1633 | 1602 | 1543 | 1501 |
| | PI | kW | 312 | 340 | 352 | 369 | 399 | 418 | 345 | 376 | 388 | 407 | 440 | 460 |
| | qw | l/s | 73.1 | 71.3 | 70.5 | 69.2 | 66.8 | 65.0 | 81.1 | 79.1 | 78.2 | 76.7 | 73.9 | 71.9 |
| | dpw | kPa | 115 | 110 | 108 | 105 | 98 | 93 | 101 | 96 | 94 | 91 | 85 | 81 |

| | | | C14 | | | | | | C15 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1386 | 1348 | 1333 | 1308 | 1261 | 1226 | 1472 | 1433 | 1417 | 1391 | 1340 | 1302 |
| | PI | kW | 326 | 355 | 367 | 385 | 416 | 437 | 347 | 380 | 393 | 413 | 448 | 470 |
| | qw | l/s | 66.0 | 64.3 | 63.5 | 62.4 | 60.1 | 58.4 | 70.2 | 68.3 | 67.5 | 66.3 | 63.9 | 62.1 |
| | dpw | kPa | 70 | 66 | 65 | 63 | 59 | 56 | 80 | 76 | 75 | 72 | 68 | 64 |
| **7** | CC | kW | 1471 | 1432 | 1416 | 1390 | 1339 | 1302 | 1560 | 1519 | 1502 | 1474 | 1420 | 1380 |
| | PI | kW | 335 | 365 | 377 | 396 | 428 | 449 | 357 | 390 | 404 | 424 | 460 | 483 |
| | qw | l/s | 70.2 | 68.3 | 67.5 | 66.3 | 63.9 | 62.1 | 74.4 | 72.5 | 71.7 | 70.3 | 67.7 | 65.8 |
| | dpw | kPa | 77 | 74 | 72 | 70 | 66 | 62 | 89 | 85 | 83 | 81 | 75 | 72 |
| **9** | CC | kW | 1559 | 1518 | 1501 | 1473 | 1420 | 1382 | 1648 | 1606 | 1588 | 1559 | 1502 | 1460 |
| | PI | kW | 344 | 376 | 388 | 407 | 440 | 461 | 366 | 401 | 415 | 436 | 473 | 496 |
| | qw | l/s | 74.4 | 72.5 | 71.7 | 70.4 | 67.8 | 66.0 | 78.7 | 76.7 | 75.8 | 74.5 | 71.7 | 69.7 |
| | dpw | kPa | 86 | 82 | 80 | 78 | 73 | 69 | 99 | 94 | 92 | 89 | 83 | 79 |
| **11** | CC | kW | 1649 | 1606 | 1588 | 1559 | 1502 | 1462 | 1737 | 1694 | 1675 | 1645 | 1585 | 1542 |
| | PI | kW | 354 | 386 | 399 | 419 | 453 | 474 | 376 | 411 | 426 | 447 | 486 | 510 |
| | qw | l/s | 78.8 | 76.8 | 75.9 | 74.5 | 71.8 | 69.9 | 83.0 | 81.0 | 80.1 | 78.6 | 75.8 | 73.7 |
| | dpw | kPa | 96 | 91 | 89 | 86 | 81 | 77 | 109 | 104 | 102 | 98 | 92 | 88 |
| **13** | CC | kW | 1741 | 1697 | 1678 | 1648 | 1587 | 1544 | 1828 | 1783 | 1763 | 1732 | 1669 | 1624 |
| | PI | kW | 364 | 397 | 410 | 431 | 465 | 487 | 386 | 422 | 437 | 459 | 499 | 524 |
| | qw | l/s | 83.3 | 81.2 | 80.3 | 78.8 | 75.9 | 73.9 | 87.4 | 85.3 | 84.4 | 82.8 | 79.9 | 77.7 |
| | dpw | kPa | 105 | 101 | 99 | 95 | 89 | 85 | 119 | 114 | 112 | 108 | 101 | 96 |
| **15** | CC | kW | 1834 | 1788 | 1769 | 1737 | 1674 | 1629 | 1921 | 1873 | 1853 | 1819 | 1754 | 1707 |
| | PI | kW | 375 | 408 | 422 | 443 | 479 | 501 | 396 | 434 | 449 | 472 | 512 | 538 |
| | qw | l/s | 87.8 | 85.6 | 84.7 | 83.1 | 80.1 | 78.0 | 92.0 | 89.7 | 88.7 | 87.1 | 84.0 | 81.7 |
| | dpw | kPa | 116 | 111 | 109 | 105 | 98 | 94 | 130 | 125 | 122 | 118 | 111 | 105 |

## EWAD C-PL

| | | | C16 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | |
| **5** | CC | kW | 1562 | 1520 | 1503 | 1475 | 1418 | 1377 | |
| | PI | kW | 370 | 405 | 419 | 441 | 479 | 504 | |
| | qw | l/s | 74.5 | 72.5 | 71.6 | 70.3 | 67.6 | 65.6 | |
| | dpw | kPa | 88 | 84 | 82 | 79 | 74 | 70 | |
| **7** | CC | kW | 1654 | 1611 | 1592 | 1562 | 1502 | 1458 | |
| | PI | kW | 379 | 416 | 430 | 453 | 492 | 518 | |
| | qw | l/s | 78.9 | 76.9 | 76.0 | 74.5 | 71.7 | 69.6 | |
| | dpw | kPa | 97 | 93 | 91 | 88 | 82 | 78 | |
| **9** | CC | kW | 1744 | 1700 | 1681 | 1651 | 1588 | 1541 | |
| | PI | kW | 389 | 427 | 442 | 465 | 506 | 532 | |
| | qw | l/s | 83.3 | 81.2 | 80.3 | 78.8 | 75.8 | 73.6 | |
| | dpw | kPa | 107 | 103 | 101 | 97 | 91 | 86 | |
| **11** | CC | kW | 1837 | 1790 | 1770 | 1738 | 1674 | 1627 | |
| | PI | kW | 399 | 438 | 453 | 477 | 520 | 547 | |
| | qw | l/s | 87.8 | 85.6 | 84.6 | 83.1 | 80.0 | 77.8 | |
| | dpw | kPa | 118 | 113 | 110 | 107 | 100 | 95 | |
| **13** | CC | kW | 1933 | 1883 | 1862 | 1827 | 1759 | 1710 | |
| | PI | kW | 410 | 449 | 465 | 490 | 533 | 561 | |
| | qw | l/s | 92.5 | 90.1 | 89.1 | 87.4 | 84.1 | 81.8 | |
| | dpw | kPa | 129 | 124 | 121 | 117 | 109 | 104 | |
| **15** | CC | kW | 2031 | 1978 | 1955 | 1918 | 1846 | 1795 | |
| | PI | kW | 421 | 461 | 478 | 503 | 548 | 576 | |
| | qw | l/s | 97.2 | 94.7 | 93.6 | 91.8 | 88.4 | 85.9 | |
| | dpw | kPa | 142 | 135 | 132 | 128 | 119 | 113 | |

*Fluid: Water*
*Ta: Condenser inlet air temperature;  Twout: Evaporator leaving water temperature (Δt 5°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 contac factory*

## EWAD C-PR

| | | | 810 | | | | | | 880 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 806 | 784 | 775 | 762 | 735 | 715 | 873 | 850 | 840 | 824 | 794 | 771 |
| | PI | kW | 178 | 195 | 202 | 213 | 231 | 242 | 199 | 218 | 226 | 237 | 258 | 271 |
| | qw | l/s | 38.4 | 37.4 | 37.0 | 36.3 | 35.0 | 34.1 | 41.6 | 40.5 | 40.0 | 39.3 | 37.8 | 36.8 |
| | dpw | kPa | 56 | 53 | 52 | 50 | 47 | 45 | 64 | 61 | 60 | 58 | 54 | 51 |
| **7** | CC | kW | 856 | 833 | 824 | 809 | 781 | 761 | 926 | 902 | 892 | 875 | 842 | 819 |
| | PI | kW | 183 | 201 | 208 | 219 | 237 | 249 | 205 | 225 | 233 | 244 | 265 | 279 |
| | qw | l/s | 40.8 | 39.7 | 39.3 | 38.6 | 37.3 | 36.3 | 44.2 | 43.0 | 42.5 | 41.7 | 40.2 | 39.1 |
| | dpw | kPa | 62 | 59 | 58 | 56 | 53 | 50 | 71 | 68 | 67 | 65 | 60 | 57 |
| **9** | CC | kW | 907 | 883 | 874 | 858 | 828 | 807 | 981 | 955 | 944 | 927 | 893 | 867 |
| | PI | kW | 189 | 207 | 214 | 225 | 244 | 256 | 211 | 231 | 240 | 252 | 273 | 287 |
| | qw | l/s | 43.3 | 42.2 | 41.7 | 41.0 | 39.5 | 38.5 | 46.8 | 45.6 | 45.1 | 44.3 | 42.6 | 41.4 |
| | dpw | kPa | 69 | 66 | 64 | 62 | 58 | 56 | 79 | 76 | 74 | 72 | 67 | 64 |
| **11** | CC | kW | 961 | 936 | 925 | 909 | 877 | 854 | 1037 | 1010 | 999 | 980 | 944 | 917 |
| | PI | kW | 194 | 213 | 220 | 232 | 251 | 264 | 218 | 239 | 247 | 259 | 281 | 295 |
| | qw | l/s | 45.9 | 44.7 | 44.2 | 43.4 | 41.9 | 40.8 | 49.5 | 48.3 | 47.7 | 46.8 | 45.1 | 43.8 |
| | dpw | kPa | 77 | 73 | 72 | 69 | 65 | 62 | 88 | 84 | 82 | 79 | 74 | 70 |
| **13** | CC | kW | 1015 | 989 | 979 | 961 | 927 | 903 | 1094 | 1066 | 1054 | 1034 | 996 | 968 |
| | PI | kW | 200 | 219 | 227 | 239 | 259 | 271 | 225 | 246 | 254 | 267 | 290 | 304 |
| | qw | l/s | 48.6 | 47.3 | 46.8 | 46.0 | 44.4 | 43.2 | 52.3 | 51.0 | 50.4 | 49.5 | 47.6 | 46.3 |
| | dpw | kPa | 85 | 81 | 79 | 77 | 72 | 69 | 97 | 92 | 91 | 88 | 82 | 78 |
| **15** | CC | kW | 1070 | 1044 | 1032 | 1014 | 979 | 953 | 1152 | 1123 | 1110 | 1090 | 1049 | 1020 |
| | PI | kW | 206 | 226 | 234 | 246 | 266 | 279 | 232 | 253 | 262 | 275 | 298 | 313 |
| | qw | l/s | 51.2 | 50.0 | 49.4 | 48.5 | 46.9 | 45.6 | 55.1 | 53.8 | 53.1 | 52.2 | 50.2 | 48.8 |
| | dpw | kPa | 93 | 89 | 87 | 85 | 79 | 76 | 106 | 102 | 100 | 96 | 90 | 85 |

| | | | 960 | | | | | | C10 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 956 | 929 | 918 | 900 | 864 | 838 | 1053 | 1024 | 1012 | 992 | 952 | 923 |
| | PI | kW | 222 | 243 | 251 | 264 | 286 | 301 | 244 | 267 | 276 | 290 | 315 | 331 |
| | qw | l/s | 45.6 | 44.3 | 43.8 | 42.9 | 41.2 | 39.9 | 50.2 | 48.8 | 48.2 | 47.3 | 45.4 | 44.0 |
| | dpw | kPa | 30 | 28 | 28 | 27 | 25 | 23 | 59 | 56 | 55 | 53 | 49 | 46 |
| **7** | CC | kW | 1015 | 987 | 975 | 956 | 917 | 889 | 1118 | 1087 | 1074 | 1053 | 1010 | 979 |
| | PI | kW | 230 | 251 | 259 | 272 | 295 | 310 | 252 | 275 | 285 | 299 | 325 | 341 |
| | qw | l/s | 48.4 | 47.1 | 46.5 | 45.6 | 43.8 | 42.4 | 53.3 | 51.9 | 51.3 | 50.2 | 48.2 | 46.7 |
| | dpw | kPa | 33 | 32 | 31 | 30 | 28 | 26 | 65 | 62 | 61 | 59 | 54 | 52 |
| **9** | CC | kW | 1076 | 1047 | 1034 | 1013 | 972 | 942 | 1185 | 1153 | 1139 | 1116 | 1071 | 1038 |
| | PI | kW | 237 | 259 | 268 | 281 | 305 | 320 | 260 | 284 | 294 | 309 | 335 | 351 |
| | qw | l/s | 51.4 | 50.0 | 49.4 | 48.4 | 46.4 | 45.0 | 56.6 | 55.0 | 54.4 | 53.3 | 51.1 | 49.6 |
| | dpw | kPa | 37 | 35 | 34 | 33 | 31 | 29 | 73 | 69 | 68 | 65 | 61 | 57 |
| **11** | CC | kW | 1140 | 1109 | 1095 | 1073 | 1028 | 997 | 1254 | 1220 | 1205 | 1181 | 1132 | 1098 |
| | PI | kW | 245 | 267 | 276 | 290 | 314 | 330 | 269 | 293 | 303 | 319 | 345 | 362 |
| | qw | l/s | 54.5 | 53.0 | 52.3 | 51.3 | 49.2 | 47.6 | 59.9 | 58.3 | 57.6 | 56.4 | 54.1 | 52.5 |
| | dpw | kPa | 41 | 39 | 38 | 37 | 34 | 32 | 81 | 77 | 75 | 72 | 67 | 63 |
| **13** | CC | kW | 1206 | 1172 | 1158 | 1134 | 1086 | 1053 | 1324 | 1289 | 1273 | 1247 | 1196 | 1159 |
| | PI | kW | 254 | 276 | 286 | 300 | 325 | 340 | 277 | 303 | 313 | 329 | 356 | 374 |
| | qw | l/s | 57.7 | 56.1 | 55.4 | 54.2 | 52.0 | 50.4 | 63.4 | 61.6 | 60.9 | 59.7 | 57.2 | 55.4 |
| | dpw | kPa | 45 | 43 | 42 | 41 | 38 | 36 | 89 | 85 | 83 | 80 | 74 | 70 |
| **15** | CC | kW | 1274 | 1238 | 1223 | 1197 | 1146 | 1110 | 1396 | 1359 | 1342 | 1315 | 1261 | 1222 |
| | PI | kW | 263 | 286 | 295 | 310 | 335 | 351 | 287 | 313 | 323 | 339 | 367 | 385 |
| | qw | l/s | 61.0 | 59.3 | 58.5 | 57.3 | 54.9 | 53.2 | 66.9 | 65.0 | 64.2 | 62.9 | 60.3 | 58.5 |
| | dpw | kPa | 50 | 48 | 47 | 45 | 41 | 39 | 98 | 93 | 91 | 88 | 82 | 77 |

## EWAD C-PR

| | | | C11 | | | | | | C13 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1135 | 1103 | 1090 | 1067 | 1022 | 989 | 1255 | 1219 | 1204 | 1179 | 1128 | 1091 |
| | PI | kW | 269 | 294 | 304 | 320 | 347 | 365 | 297 | 324 | 335 | 352 | 382 | 402 |
| | qw | l/s | 54.1 | 52.6 | 51.9 | 50.9 | 48.7 | 47.1 | 59.8 | 58.1 | 57.4 | 56.2 | 53.8 | 52.0 |
| | dpw | kPa | 67 | 64 | 62 | 60 | 56 | 52 | 58 | 55 | 54 | 52 | 48 | 45 |
| **7** | CC | kW | 1204 | 1170 | 1156 | 1132 | 1083 | 1048 | 1331 | 1294 | 1278 | 1251 | 1197 | 1157 |
| | PI | kW | 278 | 304 | 314 | 330 | 358 | 376 | 307 | 335 | 346 | 364 | 395 | 414 |
| | qw | l/s | 57.4 | 55.8 | 55.1 | 54.0 | 51.7 | 50.0 | 63.5 | 61.7 | 61.0 | 59.7 | 57.1 | 55.2 |
| | dpw | kPa | 75 | 71 | 70 | 67 | 62 | 58 | 65 | 62 | 60 | 58 | 53 | 50 |
| **9** | CC | kW | 1274 | 1239 | 1224 | 1198 | 1147 | 1109 | 1411 | 1371 | 1354 | 1325 | 1267 | 1226 |
| | PI | kW | 287 | 314 | 324 | 341 | 370 | 388 | 317 | 346 | 358 | 376 | 407 | 428 |
| | qw | l/s | 60.9 | 59.2 | 58.4 | 57.2 | 54.8 | 53.0 | 67.4 | 65.5 | 64.6 | 63.3 | 60.5 | 58.5 |
| | dpw | kPa | 83 | 79 | 77 | 74 | 69 | 65 | 72 | 68 | 67 | 64 | 59 | 56 |
| **11** | CC | kW | 1348 | 1310 | 1293 | 1266 | 1211 | 1172 | 1493 | 1451 | 1432 | 1401 | 1339 | 1295 |
| | PI | kW | 297 | 324 | 335 | 352 | 382 | 401 | 328 | 357 | 370 | 388 | 421 | 441 |
| | qw | l/s | 64.4 | 62.6 | 61.8 | 60.5 | 57.9 | 56.0 | 71.4 | 69.3 | 68.4 | 67.0 | 64.0 | 61.9 |
| | dpw | kPa | 92 | 87 | 85 | 82 | 76 | 72 | 80 | 76 | 74 | 71 | 66 | 62 |
| **13** | CC | kW | 1422 | 1383 | 1365 | 1336 | 1277 | 1235 | 1576 | 1532 | 1512 | 1479 | 1413 | 1366 |
| | PI | kW | 307 | 335 | 346 | 363 | 394 | 413 | 339 | 370 | 382 | 401 | 434 | 456 |
| | qw | l/s | 68.0 | 66.1 | 65.3 | 63.9 | 61.1 | 59.1 | 75.4 | 73.3 | 72.3 | 70.8 | 67.6 | 65.4 |
| | dpw | kPa | 101 | 96 | 94 | 91 | 84 | 79 | 88 | 84 | 82 | 79 | 72 | 68 |
| **15** | CC | kW | 1497 | 1456 | 1437 | 1406 | 1345 | 1301 | 1661 | 1614 | 1593 | 1558 | 1489 | 1439 |
| | PI | kW | 317 | 346 | 357 | 375 | 407 | 426 | 351 | 382 | 395 | 414 | 449 | 470 |
| | qw | l/s | 71.7 | 69.7 | 68.8 | 67.3 | 64.4 | 62.3 | 79.5 | 77.3 | 76.3 | 74.6 | 71.3 | 68.9 |
| | dpw | kPa | 111 | 106 | 103 | 100 | 92 | 86 | 97 | 92 | 90 | 86 | 80 | 75 |

| | | | C14 | | | | | | C15 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | **25** | **30** | **32** | **35** | **40** | **43** |
| **5** | CC | kW | 1363 | 1324 | 1308 | 1281 | 1226 | 1186 | 1447 | 1407 | 1389 | 1360 | 1300 | 1256 |
| | PI | kW | 323 | 353 | 365 | 384 | 417 | 438 | 345 | 378 | 391 | 412 | 449 | 472 |
| | qw | l/s | 64.9 | 63.1 | 62.3 | 61.0 | 58.4 | 56.5 | 69.0 | 67.0 | 66.2 | 64.8 | 62.0 | 59.9 |
| | dpw | kPa | 67 | 64 | 63 | 60 | 56 | 53 | 78 | 74 | 72 | 70 | 64 | 60 |
| **7** | CC | kW | 1445 | 1405 | 1388 | 1359 | 1300 | 1258 | 1532 | 1489 | 1470 | 1439 | 1375 | 1329 |
| | PI | kW | 334 | 365 | 377 | 396 | 430 | 452 | 356 | 390 | 403 | 425 | 463 | 487 |
| | qw | l/s | 68.9 | 67.0 | 66.2 | 64.8 | 62.0 | 60.0 | 73.1 | 71.1 | 70.2 | 68.7 | 65.6 | 63.4 |
| | dpw | kPa | 75 | 71 | 70 | 67 | 62 | 59 | 86 | 82 | 80 | 77 | 71 | 67 |
| **9** | CC | kW | 1530 | 1488 | 1469 | 1438 | 1377 | 1332 | 1618 | 1574 | 1554 | 1520 | 1452 | 1403 |
| | PI | kW | 345 | 377 | 389 | 409 | 444 | 466 | 368 | 402 | 416 | 438 | 477 | 502 |
| | qw | l/s | 73.1 | 71.1 | 70.2 | 68.7 | 65.8 | 63.6 | 77.3 | 75.1 | 74.2 | 72.6 | 69.4 | 67.0 |
| | dpw | kPa | 83 | 79 | 78 | 75 | 69 | 65 | 95 | 91 | 89 | 85 | 79 | 74 |
| **11** | CC | kW | 1618 | 1573 | 1553 | 1520 | 1454 | 1407 | 1705 | 1658 | 1637 | 1602 | 1531 | 1479 |
| | PI | kW | 357 | 389 | 402 | 422 | 458 | 481 | 379 | 415 | 430 | 452 | 492 | 518 |
| | qw | l/s | 77.3 | 75.2 | 74.2 | 72.6 | 69.5 | 67.2 | 81.5 | 79.3 | 78.3 | 76.6 | 73.2 | 70.7 |
| | dpw | kPa | 92 | 88 | 86 | 83 | 76 | 72 | 105 | 100 | 98 | 94 | 87 | 81 |
| **13** | CC | kW | 1707 | 1660 | 1639 | 1604 | 1533 | 1483 | 1793 | 1744 | 1722 | 1685 | 1610 | 1557 |
| | PI | kW | 369 | 402 | 416 | 436 | 473 | 496 | 391 | 428 | 443 | 466 | 508 | 534 |
| | qw | l/s | 81.7 | 79.4 | 78.4 | 76.7 | 73.4 | 71.0 | 85.8 | 83.4 | 82.4 | 80.6 | 77.0 | 74.5 |
| | dpw | kPa | 102 | 97 | 95 | 91 | 84 | 79 | 115 | 109 | 107 | 103 | 95 | 89 |
| **15** | CC | kW | 1798 | 1748 | 1726 | 1689 | 1615 | 1562 | 1882 | 1830 | 1806 | 1767 | 1690 | 1602 |
| | PI | kW | 381 | 415 | 429 | 451 | 488 | 512 | 404 | 441 | 457 | 481 | 523 | 536 |
| | qw | l/s | 86.1 | 83.7 | 82.6 | 80.8 | 77.3 | 74.8 | 90.1 | 87.6 | 86.5 | 84.6 | 80.9 | 76.7 |
| | dpw | kPa | 112 | 106 | 104 | 100 | 92 | 87 | 126 | 120 | 117 | 112 | 104 | 94 |

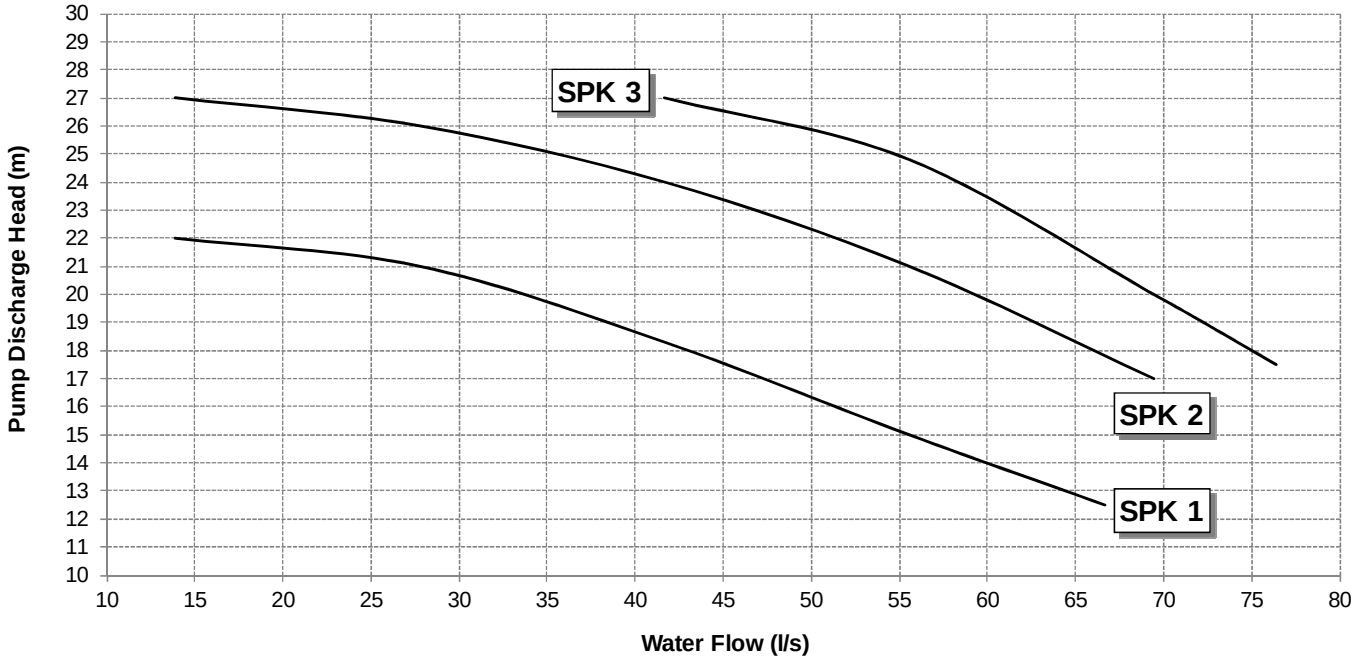
## EWAD C-PR

| | | | C16 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Twout** | | **Ta** | **25** | **30** | **32** | **35** | **40** | **43** | |
| **5** | CC | kW | 1534 | 1490 | 1471 | 1438 | 1372 | 1323 | |
| | PI | kW | 370 | 406 | 420 | 443 | 484 | 511 | |
| | qw | l/s | 73.1 | 71.0 | 70.1 | 68.6 | 65.4 | 63.1 | |
| | dpw | kPa | 85 | 81 | 79 | 76 | 70 | 65 | |
| **7** | CC | kW | 1624 | 1577 | 1556 | 1521 | 1450 | 1399 | |
| | PI | kW | 382 | 419 | 434 | 457 | 499 | 526 | |
| | qw | l/s | 77.5 | 75.2 | 74.2 | 72.6 | 69.2 | 66.7 | |
| | dpw | kPa | 94 | 89 | 87 | 84 | 77 | 72 | |
| **9** | CC | kW | 1711 | 1664 | 1643 | 1606 | 1530 | 1476 | |
| | PI | kW | 394 | 432 | 448 | 472 | 515 | 543 | |
| | qw | l/s | 81.7 | 79.5 | 78.5 | 76.7 | 73.1 | 70.5 | |
| | dpw | kPa | 104 | 99 | 96 | 93 | 85 | 80 | |
| **11** | CC | kW | 1801 | 1750 | 1727 | 1689 | 1612 | 1554 | |
| | PI | kW | 406 | 445 | 462 | 487 | 531 | 560 | |
| | qw | l/s | 86.1 | 83.7 | 82.6 | 80.8 | 77.1 | 74.3 | |
| | dpw | kPa | 114 | 108 | 106 | 102 | 93 | 87 | |
| **13** | CC | kW | 1892 | 1838 | 1814 | 1773 | 1692 | 1634 | |
| | PI | kW | 419 | 459 | 476 | 502 | 548 | 577 | |
| | qw | l/s | 90.5 | 87.9 | 86.8 | 84.8 | 81.0 | 78.2 | |
| | dpw | kPa | 125 | 118 | 116 | 111 | 102 | 96 | |
| **15** | CC | kW | 1986 | 1928 | 1902 | 1858 | 1772 | 1648 | |
| | PI | kW | 432 | 474 | 491 | 517 | 564 | 565 | |
| | qw | l/s | 95.1 | 92.3 | 91.0 | 89.0 | 84.9 | 78.9 | |
| | dpw | kPa | 136 | 129 | 126 | 121 | 111 | 97 | |

*Fluid: Water*
*Ta: Condenser inlet air temperature;  Twout: Evaporator leaving water temperature (Δt 5°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 contac factory*

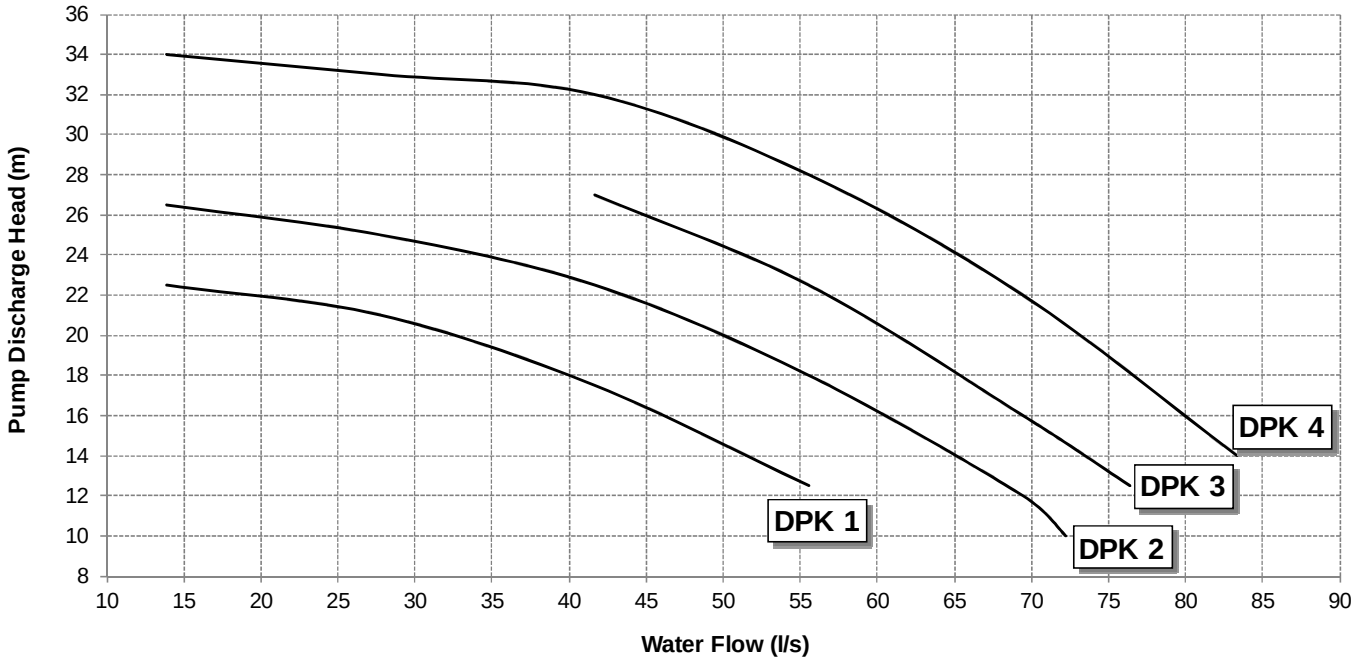
## Discharge Head

### 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-SS EWAD~C-SL | 650 | EWAD~C-SR | 620 | X | X | | X | X | | |
| | 740 | | 720 | X | X | | X | X | | |
| | 830 | | 790 | X | X | | X | X | | |
| | 910 | | 880 | X | X | | X | X | | |
| | 970 | | 920 | X | X | X | X | X | | |
| | C11 | | C10 | X | X | X | X | X | | |
| | C12 | | C11 | X | X | 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 | | X | X | | |
| | 830 | | 810 | X | X | | X | X | | |
| | 890 | | 870 | X | X | | X | X | | |
| | 990 | | 970 | X | X | X | X | X | X | X |
| | C10 | | C10 | X | X | X | X | X | X | X |
| | C11 | | C11 | X | X | X | | X | X | X |
| | C12 | | C12 | X | X | X | | X | X | X |
| | C13 | | C13 | X | 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 | | X | X | | |
| | 890 | | 880 | X | X | | X | X | | |
| | 980 | | 960 | X | X | X | X | X | | |
| | C11 | | C10 | X | X | X | X | X | X | X |
| | C12 | | C11 | X | X | X | | X | X | X |
| | C13 | | C13 | X | X | X | | X | X | X |
| | C14 | | C14 | | X | X | | X | X | X |
| | C15 | | C15 | | | X | | | | X |
| | C16 | | C16 | | | | | | | |

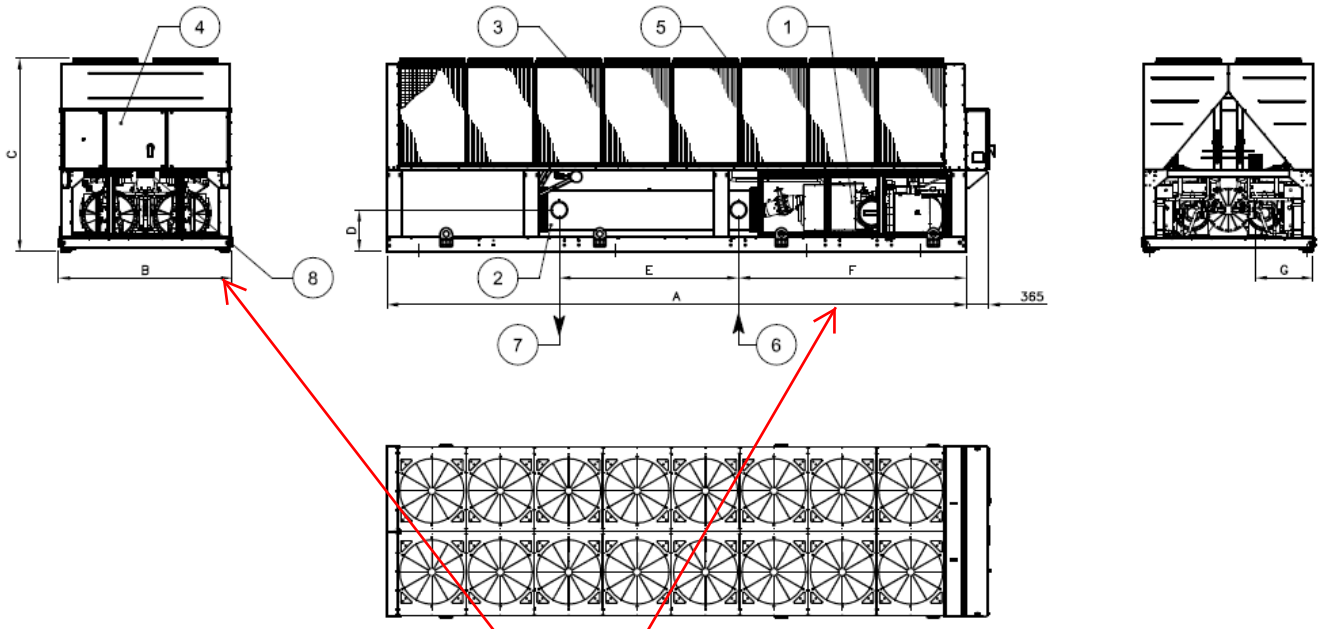
## Water pump kit technical information

| | | Pump Motor Power (kW) | Pump Motor Current (A) | Power supply (V-ph-Hz) | PN | Motor Protection | Insulation (Class) | Working Temp. (℃) |
|---|---|---|---|---|---|---|---|---|
| Single Pump | SPK 1 | 11.0 | 20.0 | 400V-3ph-50hz | 16 | IP55 | class F | -20 +140 |
| | SPK 2 | 15.0 | 26.5 | 400V-3ph-50hz | 16 | IP55 | class F | -20 +140 |
| | SPK 3 | 18.5 | 32.5 | 400V-3ph-50hz | 16 | IP55 | class F | -20 +140 |
| Double Pump | DPK 1 | 11.0 | 20.0 | 400V-3ph-50hz | 16 | IP55 | class F | -20 +140 |
| | DPK 2 | 15.0 | 26.5 | 400V-3ph-50hz | 16 | IP55 | class F | -20 +140 |
| | DPK 3 | 18.5 | 32.5 | 400V-3ph-50hz | 16 | IP55 | class F | -20 +140 |
| | DPK 4 | 22.0 | 39.0 | 400V-3ph-50hz | 16 | IP55 | class F | -20 +140 |

Note

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

## EWAD-C- (2 circuits)



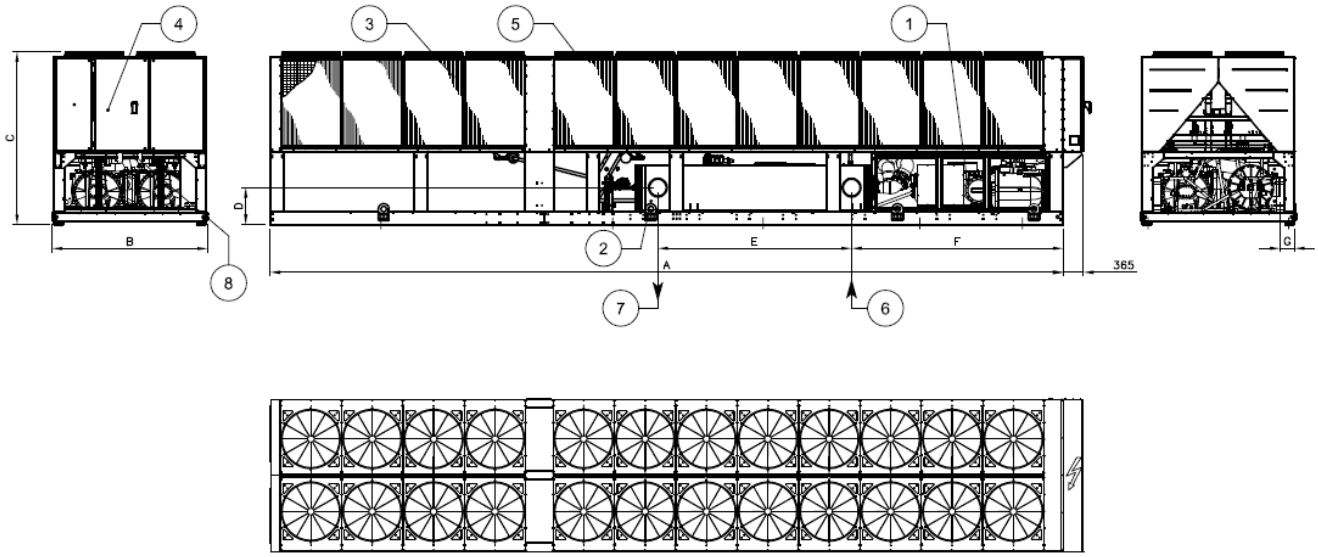

*Drawing is for illustration only. Please refer to the table below for unit dimensions.*

| 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 |
| EWADC13÷H14C-SS/SL | EWADC12÷H14C-SR | 2285 | 8885 | 2540 | 3170 | 2360 | 540 | 760 | Nr 18 |
| 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 |
| EWADH14÷H15C-XS/XL/XR | | 2285 | 9785 | 2540 | 2920 | 3440 | 540 | 685 | 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 |
| EWADC15÷C16C-PS/PL/PR | | 2285 | 11985 | 2540 | 5130 | 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 |
| EWADC18C-SS/SL | EWADC17C-SR | 2285 | 11085 | 2540 | 4780 | 2840 | 540 | 210 | Nr 22 |
| EWADC19÷C20C-SS/SL | EWADC18÷C19C-SR | 2285 | 11985 | 2540 | 5680 | 2840 | 540 | 210 | Nr 24 |
| 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 |
| EWADH14÷H15C-XS/XL/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 to 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.

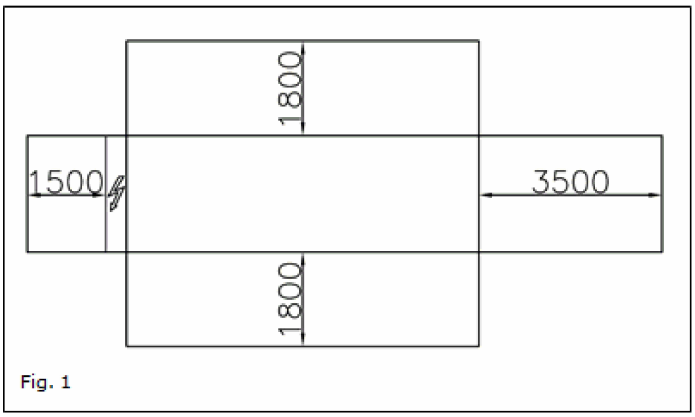


Fig. 1

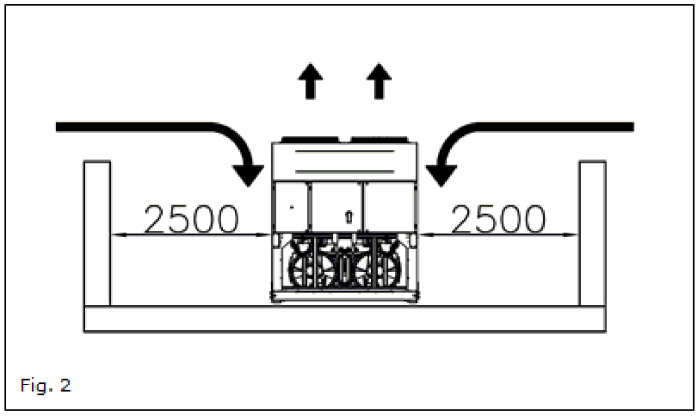


Fig. 2

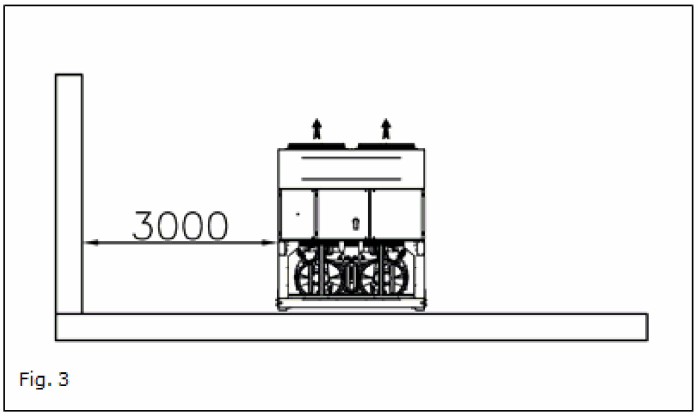


Fig. 3

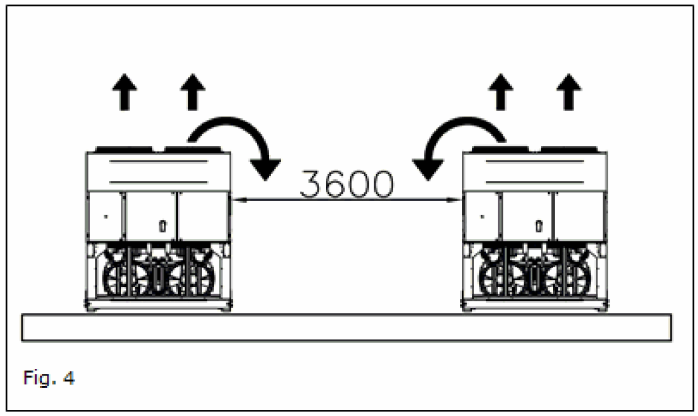


Fig. 4

**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℃ |
| Maximum ambient temperature: | +57℃ |
| 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 braker installed inside the electrical panel as a standard.

**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 funs 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 shows 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 garantee following minimu 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 certifief 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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