

CoolAer
HEATING & COOLING SYSTEMS

Marine HVAC Catalogue



Chiller Module



Chiller Module

CoolAer water-cooled chiller product range provides solutions with modular, efficient, high quality and wide capacity range.

- Scroll and Screw compressor options
- High energy efficiency thanks to partial capacity control (25-100%) in the screw compressor chiller
- Over temperature, current, pressure protection
- Built-in thermal protection
- Electronic Expansion Valve
- Soft Starter
- Optional ModBUS RTU, Modbus TCP, BACnet MS/TP, BACnet IP, CAN-Bus, Embedded web server
- On-Off and Inverter compressor support
- Optional sub-zero water production
- Ability to work in fresh water and salt water
- Ability to work at sea water temperature of 50 °C



Material

- 316L lehimli plakalı eşanjör (Tatlı Su)
- Cu-Ni 90-10 shell and tube kondanseri (Deniz Suyu)

Available Refrigerants

- R-134A
- R-410A

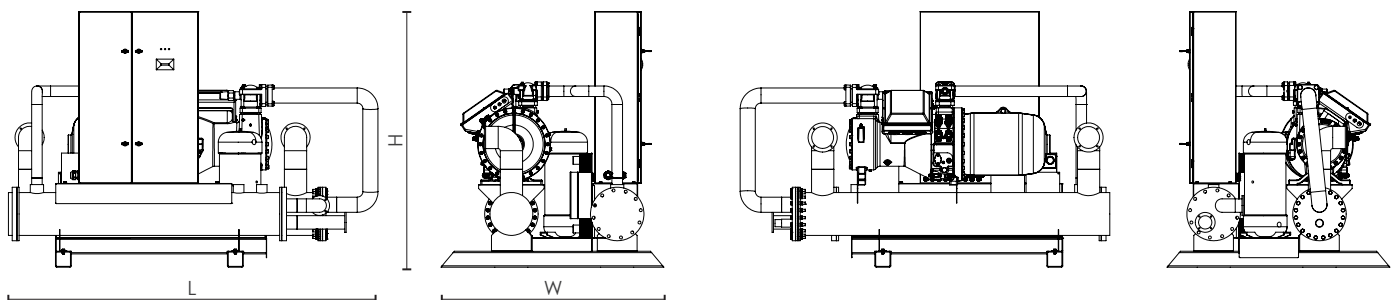
Typical Applications

System cooling and ambient air conditioning

Technical Table

Model	Capacity	Dimensions (LxWxH)	Voltage	Fla/Lra	Power KW Heating	Weight (Dry/Wet kg)
CCW 170 Scroll	170	2300 x 2200 x 2400	380V / 3P / 50-60Hz		42	1552
CCW 260 Scroll	255	3300 x 2200 x 2400	380V / 3P / 50-60Hz		100	2328
CCW 415 Scroll	415	4300 x 2200 x 2400	380V / 3P / 50-60Hz		100	3042
CCW 560 Scroll	557	5300 x 2200 x 2400	380V / 3P / 50-60Hz		239	3518
CWW 300 Screw	301	3300 x 2200 x 2400	380V / 3P / 50-60Hz		72	3538
CWW 625 Screw	622	6300 x 2200 x 2400	380V / 3P / 50-60Hz		144	5041
CWW 990 Screw	984	10300 x 2200 x 2400	380V / 3P / 50-60Hz		220	6340
CWW 1200 Screw	1206	11300 x 2200 x 2400	380V / 3P / 50-60Hz		287	7540

Technical Drawing





Heat Pump Module

Heat Pump Module

CoolAer water source heat pump product range provides solutions with modular, efficient, high quality and wide capacity range. You can heat and cool in a single unit.

- Scroll and Screw compressor options
- High energy efficiency thanks to partial capacity control (25-100%) in the screw compressor chiller
- Over temperature, current, pressure protection
- Built-in thermal protection
- Electronic Expansion Valve
- Soft Starter
- Optional ModBUS RTU, Modbus TCP, BACnet MS/TP, BACnet IP, CAN-Bus, Embedded web server
- Touch screen screen
- It can cool up to 7 °C and heat up to 55 °C.
- Resistance support at low water temperature



Material

- 316L brazed plate heat exchanger (Fresh Water)
- Cu-Ni 90-10 shell and tube condenser (Sea Water)

Available Refrigerants

- R-134A
- R-407C
- R-410A

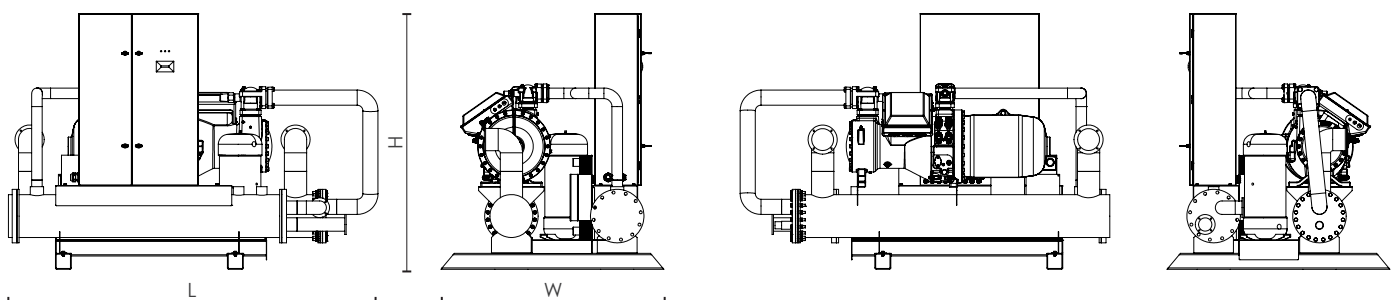
Typical Applications

System cooling/heating operation and ambient air conditioning

Technical Table

Model	Capacity Heating	Capacity Cooling	Dimensions (LxWxH)	Voltage	Fla/ Lra	Power Kw Heating	Power KW Cooling	Weight (Dry/Wet kg)
W/W 60 Scroll	63	51	1550 x 1200 x 1200	380V / 3P / 50-60Hz		12,3	10	500
W/W 130 Scroll	132	107	1550 X 1200 X 1200	380V / 3P / 50-60Hz		27,3	22	600
W/W 240 Scroll	241	196	2000 X 2250 X 2500	380V / 3P / 50-60Hz		47,1	40	1050
W/W 350 Scroll	353	289	2000 X 2250 X 2500	380V / 3P / 50-60Hz		67	56	1200
W/WS 450 Screw	450	370	2500 x 2250 x 2500	380V / 3P / 50-60Hz		85,2	72	1500
W/WS 650 Screw	652	538	2500 x 2250 x 2500	380V / 3P / 50-60Hz		123	103	1600
W/WS 1000 Screw	998	820	2500 x 4500 x 2500	380V / 3P / 50-60Hz		190	158	2100
W/WS 1200 Screw	1188	980	2500 x 5000 x 2500	380V / 3P / 50-60Hz		225	188	2200

Technical Drawing





Package Type Cooling Unit

Package Type Cooling Unit

Coolaer Precision Controlled Package Type It is a marine type high efficient and sensitive air conditioning device used in applications where temperature and humidity control is required.

Precisely controlled air conditioners, designed on the basis of 365 days and 24 hours of operation a year, provide the necessary temperature, humidity and filtration of dust in the environment, thus maximizing the working life and efficiency of electronic equipment.

- Cooling capacity range from 10 kW to 38 kW
- Remote access and control
- All equipment can be intervened from the front of the unit
- Safe and easy maintenance with the sliding structure of the fan and filter
- EC smart radial fan
- Humidity control option
- Suitability for air duct systems fire alarm input
- Ability to work in fresh and salt water
- Front, Top and Bottom blowing options
- Capacity is calculated based on sea water temperature 38°C.
- Allowable water temperature up to 45°C
- On-Off and Inverter compressor options
- Heating feature with resistance



Material

- 316L brazed plate heat exchanger (Fresh Water)
- Cu-Ni 90-10 shell and tube condenser (Sea Water)
- Hydrophilic coated finned tube heat exchanger

Available Refrigerants

- R-134A
- R-410A

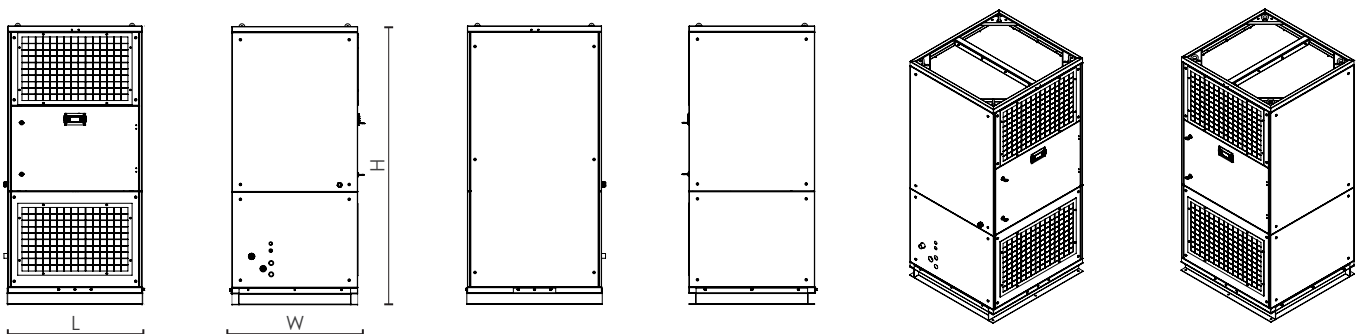
Typical Applications

Air-conditioning of electrical rooms, air-conditioning of engine rooms

Technical Table

Model	Capacity Cooling	Dimensions (LxWxH)	Voltage	Air Flow	Power KW Cooling	Weight (Dry/Wet kg)
SEA10	12	950 x 890 x 1970	380V / 3P / 50-60Hz	5000	3,30	259
SEA19	21	950 x 890 x 1970	380V / 3P / 50-60Hz	7500	5,62	296
SEA26	28	950 x 890 x 1970	380V / 3P / 50-60Hz	8500	7,18	334
SEA38	41	1250 x 890 x 1970	380V / 3P / 50-60Hz	12000	11,03	442

Technical Drawing





Fan Coil Unit-Inrow FCU

Fan Coil Unit-Inrow FCU

In row cooling allows slim vertical fan coil units to be installed between computer radar racks to bring exhaust air from rear to front or front to rear across the full height of racks saving space. These units are variable air flow and do not require external valves.

- Modular construction
- Horizontal, overhead mounting, vertical bulkhead mounting
- Proportional control possibility with three-way motorized valve
- Proportional fan control
- 15-30-60 kW cooling capacity
- Hot-swappable fans
- Skid panel design
- Chiller water (CHW) connection
 - Left or right hand
- Heater options



Materials

- Hydrophilic coating finned tubular heat exchanger

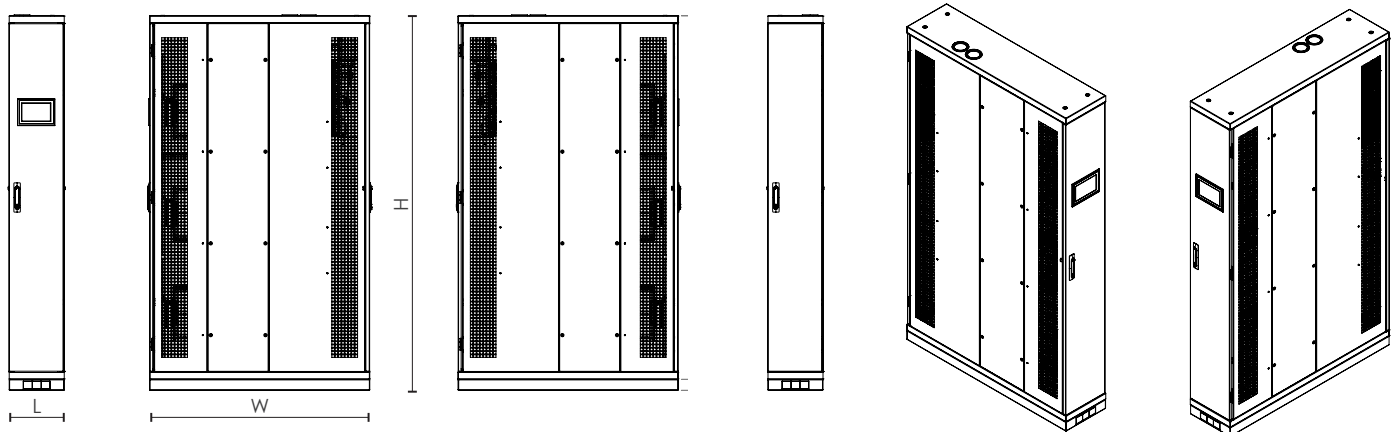
Typical Applications

Radar room cooling, electronics room, CSE

Technical Table

Model	Capacity Cooling	Dimensions (LXWXH)	Voltage	Air Flow	Power kg Cooling	Weight (DRY/WET kg)
SEA15 inrow	15	300 x 1200 x 1982	380V / 3P / 50-60Hz	3500	300 watt	204
SEA30 inrow	30	300 x 1200 x 1982	380V / 3P / 50-60Hz	5000	600 watt	210
SEA60 inrow	60	600 x 1200 x 1982	380V / 3P / 50-60Hz	88500	720 watt	350

Technical Drawing

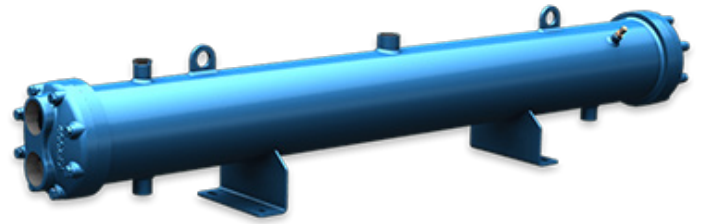




Shell & Tube Heat Exchangers

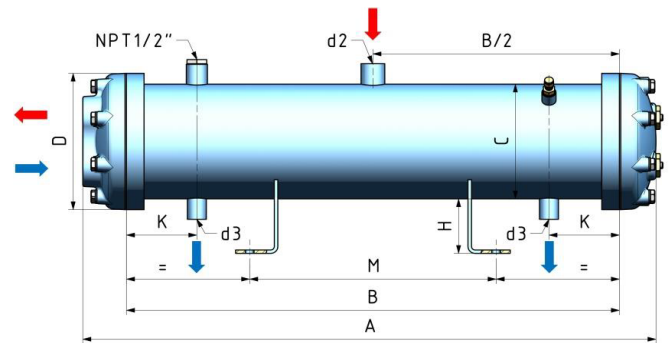
Shell & Tube Heat Exchangers

CoolAer Shell&Tube Condensers from 20 kW cooling capacity under standard operating conditions high efficiency and low pressure loss up to 1680 kW cooling capacity manufactured to provide Our condensers serve cooling applications using sea water.



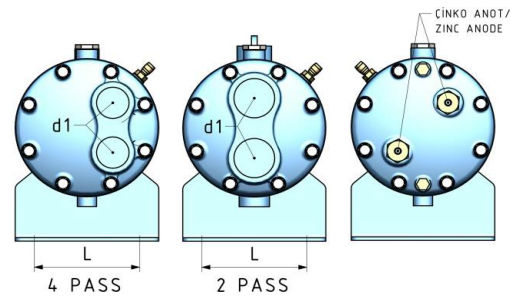
Materials

- The heat in the special geometry with internal and external grooves that provides heat transfer transfer pipes 90/10 copper nickel alloy
- Mirror sheet AISI 316 L stainless steel
- Body steel
- Caps cast iron
- Gaskets are produced from asbestos-free materials compatible with HCFC and HCF refrigerants.



Available Refrigerants

- R-134A



Model	Capacity Cooling	Dimensions (LXWXH)	Condensing Temperature Bubble °C	Sea Water Temperature °C	Pressure Drop kPa	Flow Rate m3/h	Weight kg
20	20	790 x 120 x 250	42 °C	28 °C	16	3,46	32
35	30	790 x 120 x 250			29	6,05	34
55	46	815 x 150 x 280			33	9,51	46
200	185	1915 x 180 x 330			33	34,6	124
285	266	1910 x 200 x 330			55	49,3	147
340	311	1925 x 240 x 395			59	58,8	185
675	632	1940 x 280 x 450			49	117	283
940	1039	2415 x 370 x 580			49	163	466
1100	1243	2415 X 370 X 580			54	190	503



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