

OMEGA TECHNOLOGY

Engineered to elevate efficiency and comfort
..... to the next level!!

ACML SERIES

MODULAR AIR COOLED SCROLL CHILLERS

Module Cooling Capacity: 17.06 ~ 41.23 Tons (60 ~ 145 kW)
Module Heating Capacity: 18.48 ~ 48.34 Tons (64 ~ 170 kW)
Max. Cooling Available: 341 Tons (1,200 kW)

Product Features

- ✓ Cooling & Heating.
- ✓ Up to 4 Stages of Capacity Control per Module.
- ✓ Modular Construction with up to 16 Modules per System.
- ✓ Danfoss Scroll Compressors.
- ✓ Compressor Alternation Operation Technology.
- ✓ Condenser with Gold Lance Fins & Inner Groove Copper Tubes.
- ✓ Electronic Expansion Valves.
- ✓ Crank Case Heater.
- ✓ Self Diagnostics.
- ✓ Running Conditions Real Time Display.
- ✓ Power Delay Control for Low Start-Up Current.
- ✓ Double Flow Design Shell & Tube Heat Exchanger.
- ✓ Microprocessor Controller with Human Interface Panel.
- ✓ Memory Function with 24 hours Clock Timer.
- ✓ Long Distance Monitoring & BMS (Optional).



CMLA-MCC100A
Modular Chiller System
Controller

Standard Protective Devices

- ✓ High & Low Pressure.
- ✓ Compressor Discharge Temperature.
- ✓ Compressor Overload.
- ✓ Anti-Freeze.
- ✓ Water Flow Switch Error.
- ✓ Phase Loss & Phase Reverse.
- ✓ Temperature Sensor.
- ✓ Communication Error.



ACML 020-025



ACML 035-045

OMEGA



OTEC
AIR CONDITIONING

A Product of
OMEGA
Environmental
Technologies LLC.

ISO 14001 ISO 9001



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MODULAR AIR COOLED SCROLL CHILLER					
MODEL NO.	ACML	020P4 A-RDC065	025P4 A-RDC080	035P4 A-RDC130	045P4 A-RDC160
Cooling Capacity	Tons (kW)	17.06 (60)	21.33 (75)	34.12 (120)	41.23 (145)
Heating Capacity	Tons (kW)	18.48 (65)	24.17 (85)	38.39 (135)	48.34 (170)
EER @ 100%	Btuh/W (W/W)	10.4 (3.04)	10.1 (2.96)	10.4 (3.04)	10.3 (3.02)
COP	(W/W)	3.15	3.15	3.15	3.15
Capacity Adjustment Range	%	0-50-100	0-50-100	0-25-50-75-100	0-25-50-75-100
Max. Total No of Modules	Qty	16	16	8	8
Max. Total Capacity Available	Cooling Tons (kW)	273 (960)	341 (1,200)	273 (960)	330 (1,160)
	Heating Tons (kW)	296 (1,040)	387 (1,360)	307 (1,080)	387 (1,360)
Total Number of Outdoor Modules Connectable		16	16	8	8
Condenser	Coil Type	Grooved Copper tube - Aluminum Gold Fins			
	Fan Type	Axial Fan			
	Motor Qty (FLA) each	2 x (2.10)	2 x (4.20)	4 x (2.10)	4 x (2.10)
	Air Flow CFM (m³/hr) (Hi)	15,900 (27,000)	17,650 (30,000)	31,800 (54,000)	35,300 (60,000)
	Fan Qty	2	2	4	4
	Power Input (W) each	480	960	480	480
	Noise Level Hi (dba)	70	71	72	74
Evaporator	Heat Exchanger Type	High Efficiency Shell & Tube			
	Water Flow GPM (m³/hr)	45 (10.3)	57 (12.9)	91 (20.6)	110 (24.9)
	Wtr Pressure Drop ft.w(kPa)	4.92 (15)	6.56 (20)	9.84 (30)	11.48 (35)
	Type Connection	Flange			
	Water Pipe Ø in/out (in)	2 1/2	2 1/2	3	3
Water Pipe Ø in/out (DN)	DN65	DN65	DN80	DN80	
Compressor	Type / Brand	Constant Speed Scroll / Danfoss			
	Qty	2	2	4	4
	Capacity Btuh (kW) each	120,000 (34.1)	160,000 (47.0)	120,000 (34.1)	160,000 (47.0)
	Power Input (kW) each	11.2	14.4	11.2	14.4
	Rated Amps (RLA) each	33.6	43.3	33.6	43.3
	Crankcase Heater (W)	2 x 40	2 x 40	4 x 40	4 x 40
Refrigerant Charge R410A (lbs / kgs)		2 x (13.4 / 6.1)	2 x (14.8 / 7.4)	4 x (13.4 / 6.1)	4 x (14.8 / 7.4)
Electrical	Voltage/Phase/Frequency	208~230 / 3 / 60Hz			
	Voltage Min~Max.	187 ~ 253			
	Rated Input / Cooling (kW)	21.8	27.6	43.0	53.7
	Rated Input / Heating (kW)	21.7	28.0	45.0	56.0
	Min. Circuit Amps (MCA)	79.7	105.9	151.1	192.6
Max. Fuse Amps (MOCP)	110	125	175	225	
Dimensions inches (mm)	Height	85 (2160)	85 (2160)	85 (2160)	85 (2160)
	Width	39 3/8 (1000)	39 3/8 (1000)	67 (1650)	67 (1650)
	Depth	80 1/4 (2040)	80 1/4 (2040)	87 5/8 (2226)	87 5/8 (2226)
Net Weight Lbs (kgs)		1565.3 (710)	1675.5 (760)	2769.0 (1256)	3174.7 (1440)

Notes: 1. Nominal cooling capacities are based in, water Inlet / Outlet 13° C (55° F) / 7° C (45° F) and Outdoor Ambient DB/WB 35° C (95° F) / 24° C (75° F).
Nominal Heating capacities are based in, water Inlet / Outlet 40° C (104° F) / 45° C (113° F) and Outdoor Ambient DB/WB 7° C (45° F) / 6° C (43° F).

2. Up to 16 of 020/025 Tons modules and 8 of 035/045Tons Modules could be connected for Max 341Tons of cooling.
3. 0-50-100% capacity control for 020/025Models and 0-25-75-100% capacity control for the 035/045 Models, @ 208~230V/3/60Hz
4. For details of model number nomenclature, please refer to publication OGMNM-0515.



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ISO 14001 ISO 9001



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