CxM Series

AIR-COOLED CONDENSERS

- IMPROVED HEAT TRANSFER EFFICIENCY
- HFC, HFO, NH_3, AND CO_2 REFRIGERANTS
- MICROCHANNEL CONDENSER COILS
- QUIET OPERATION, COMPACT DESIGN

10-400kW

1- TO 8-FAN MODELS IN 7 FRAME SIZES WITH A BROAD SELECTION OF OPTIONS AND ACCESSORIES

HFO-HFC-NH_3-CO_2 EC-FANS MICROCHANNEL

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Best value and cost effectiveness

THE CXM SERIES IS A QUIET AND COMPACT AIR-COOLED CONDENSER RANGE FEATURING MICROCHANNEL CONDENSING COILS AND HIGH-PERFORMANCE ELECTRONICALLY COMMUTATED FANS. THE CXM CONDENSERS ARE BEST SUITED FOR COMMERCIAL AND INDUSTRIAL HVAC APPLICATIONS, AS WELL AS FOR USE IN MISSION-CRITICAL SYSTEMS.

Key advantages and benefits:

- BEST-IN-CLASS HEAT TRANSFER EFFICIENCY
- WIDE SELECTION OF REFRIGERANTS
- COMPACT DESIGN
- QUIET OPERATION
- LOW MAINTENANCE COSTS

HEAT REJECTION UP TO

50kW/m²

Low-energy fans

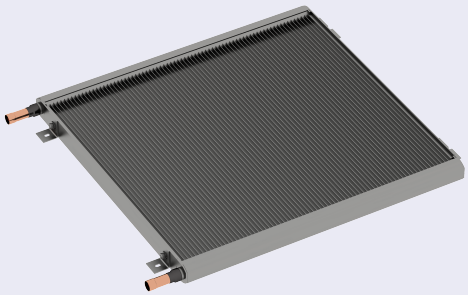
Variable speed control with EC motors

The CxM condenser range features axial fans driven by EC-motors with high energy-saving potential in particular, under part-load, where efficiency losses are significantly lower than those for fans with asynchronous motors. In combination with low air-resistant microchannel condensers, EC fans promote significant energy savings while remaining relatively quiet over the entire speed range.

When the head pressure gets too low, or the condensing temperature gets too cold under low ambient conditions, the EC-fan rotation speed is lowered to ensure the most efficient operation and avoid evaporator freezing, hydraulic lock-ups, and possible compressor damages. Head pressure control with a low ambient control valve (condenser flooding) is available as an option.

Model Identification			C	x	M	-	H	100
Noise level	N	Normal						
	L	Low						
	X	Extra-low						
Air discharge	H	Horizontal						
	V	Vertical						
Nominal capacity		kW						

Improved heat transfer performance



Microchannel condensing coils

Microchannel condensing coils used in CxM design are beneficial for improving the condenser performance and operating costs. The advantages include:

- 40% higher heat transfer efficiency compared to finned tube coils of the same face area
- Low air resistance which contributes to energy savings on fans and quiet operation
- Small internal volume and less refrigerant charge
- Improved corrosion resistance

Technical specifications

CxM Series		CNM15	CNM20	CNM25	CNM30	CNM35	CNM40	CNM50	CNM60	CNM70	CNM80
Orientation		H/V	H/V	H/V	H/V	H/V	H/V	H/V	H/V	H/V	H/V
Heat rejection[1]	kW	15.0	20.1	24.9	30.5	35.1	40.3	51.3	60.9	70.0	80.4
Power input	kW	0.08	0.17	0.31	0.31	0.46	0.69	0.51	0.72	1.05	1.57
No. of circuits		1	1	1	1	1	1	1	1	1	1
Fan(s)		EC-type axial									
Quantity		1	1	1	1	1	1	2	2	2	2
Fan diameter	mm	500	500	500	630	630	630	630	630	630	630
Airflow	m^3/h	3250	4500	5750	7000	8250	9750	11500	14000	16500	19500
Condenser(s)		Microchannel									
Quantity		1	1	1	1	1	1	1	1	1	1
Volume	L	2.3	2.3	2.3	2.8	2.8	2.8	5.6	5.6	5.6	5.6
Massflow	kg/h	294	390	486	594	684	786	1002	1188	1368	1572
Electrical data											
Mains supply	V/Ph/Hz	230/1/50	230/1/50	230/1/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
Dimensions											
Length	mm	895	895	895	1095	1095	1095	2095	2095	2095	2095
Width	mm	995	995	995	995	995	995	995	995	995	995
Height[2]	mm	495	495	495	495	495	495	495	495	495	495

(1) Refrigerant: R410a; Condensing temperature: 50°C; Ambient temperature: 35°C

(2) W/o support legs for horizontal design

CxM Series		CNM90	CNM100	CNM125	CNM150	CNM175	CNM200	CNM250	CNM300	CNM350	CNM400
Orientation		H/V	H/V	H/V	H/V	H/V	H/V	H/V	H/V	H/V	H/V
Heat rejection[1]	kW	90.3	102.3	123.1	147.2	174.0	202.4	246.2	303.5	354.6	398.6
Power input	kW	2.25	1.46	2.52	4.40	4.05	6.48	5.04	9.73	8.46	12.30
No. of circuits		1	1	1	1	1	1	2	2	2	2
Fan(s)		EC-type axial									
Quantity		2	3	3	3	4	4	6	6	8	8
Fan diameter	mm	630	630	630	630	630	630	630	630	630	630
Airflow	m^3/h	22500	24000	30000	37500	43000	52000	60000	78000	88000	102000
Condenser(s)		Microchannel									
Quantity		1	1	1	1	1	1	2	2	2	2
Volume	L	5.6	8.4	8.4	8.4	11.1	11.1	16.8	16.8	22.2	22.2
Massflow	kg/h	1764	1998	2406	2874	3396	3954	4812	5928	6924	7788
Electrical data											
Mains supply	V/Ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
Dimensions											
Length	mm	2095	3095	3095	3095	4095	4095	3095	3095	4095	4095
Width	mm	995	995	995	995	995	995	1945	1945	1945	1945
Height[2]	mm	495	495	495	495	495	495	495	495	495	495

(1) Refrigerant: R410a; Condensing temperature: 50°C; Ambient temperature: 35°C

(2) W/o support legs for horizontal design

Standard components and options					
General					
Horizontal design	■	Vertical design	□	Support legs	□
Coil mesh guard	□	High-sided paneling	□	Coil e-coating	□
Adiabatic spray system	□	Single-circuit design for 250-400kW units	□	Coil thermoguard	□
Refrigerant side					
Shut-off valves	■	Gas leakage detector	□	Head pressure control	□
Airside					
EC-type fans	■	AC-type fans	□	Fan diffusers	□
Electric and controls					
Speed control for AC-type fans	□	Wiring for AC-type fans	□	Modbus fan control	□

■ Standard feature

□ Optional feature

The development of Kaltra products and services is continuous and the information in this document may not be up to date. Please check the current position with Kaltra.