

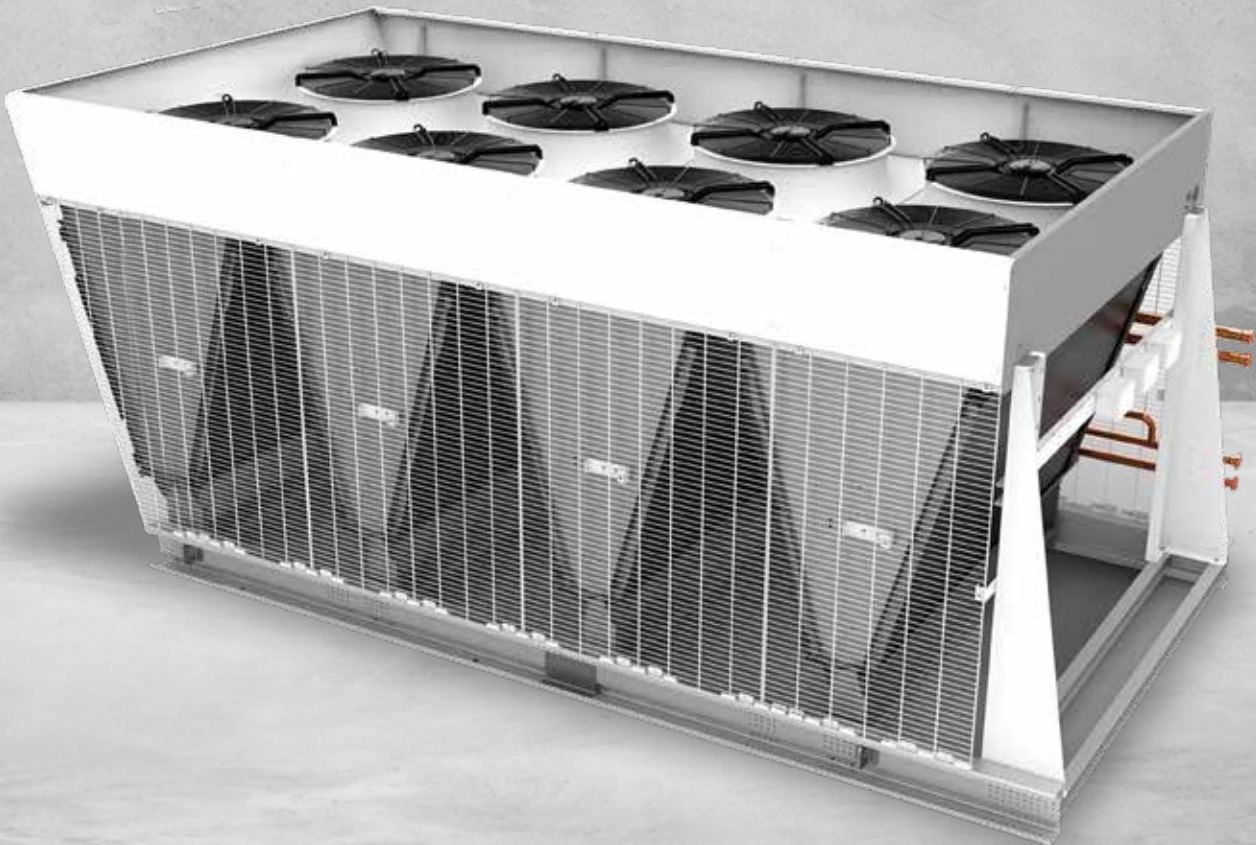
FRIGA-BOHN

MXW

Axial fan condenser
Commercial and industrial range



HFC



|||| 130 - 1670 kW



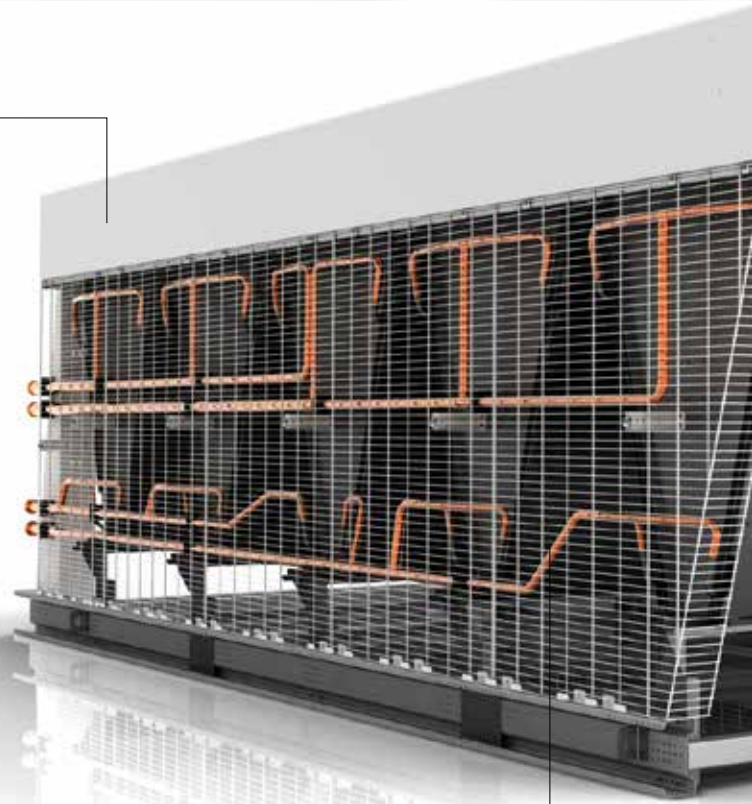
- # A range designed for installations where **space may be a problem**.
- # High performance density ensuring **optimized energy consumption**.
- # **Microchannel technology** allowing a significant reduction in refrigerant charge.
- # **State of the art aesthetics** for harmonious integration on the site.

CASING

- # Galvanized sheet steel covered with white polyester paint.
- # State-of-the-art aesthetics and reduced height (< 2 m) for harmonious integration on the site.

OPTIONS

- ACR** SilenTop (photo 1).
- G2F** Side protection grilles (2 sides).
- PAV** Anti-vibration pads.
- CON** Packaging for container



COILS

- # Aluminium microchannel coils, offering reliability and sturdiness.
- # Lightweight, they allow a significant reduction in the quantity of refrigerant and the weight of the condenser.
- # Intensive quality control to minimize the risk of leakage.

OPTIONS

- MCI** Multi-circuit..



REGULATION AND PROTECTION CASING

OPTIONS

- CMP** Motor protection cabinet.
- RP2** CMP + condensation pressure regulation by speed variation (voltage).
- RP3** CMP + condensation pressure regulation by speed variation (frequency).
- CSC** Signal comparators (multi-circuit configuration).

VENTILATION

- # The MXW range of air-cooled condensers is equipped with highly reliable external rotor motor fans.

EC motors

- # Highly reliable electronically commutated (EC) motor fans ensure optimized operation of your installation.
 - Ø 800 mm : EC1 (reinforced EC motor) = up to 1,020 rpm.
 - Ø 800 mm : EC2 = up to 730 rpm.
- # The use of EC motors helps to reduce energy consumption for a given power: a detailed comparison of the energy balance can be carried out for each study (contact us).
- # The EC motor fans are wired as standard and connected in the factory.

AC motors (option)

- Ø 800 mm : 06P (D/Y) (reinforced motor) = 910/730 rpm
- Ø 800 mm : 06P (D/Y) = 885/685 rpm
- Ø 800 mm : 08P (D/Y) = 660/485 rpm
- Ø 800 mm : 12P (D/Y) = 435/340 rpm
- Ø 800 mm : 16P (Y) = 255 rpm.
- # These motors are in 400V/3/50Hz, bi-speed (triangle and star coupling), protected by an enclosed casing, IP54, class F. When the heated air temperature exceeds 60 °C, contact us.

OPTIONS

CMU

Factory motor wiring. (AC motors).

SCM

Without EC motor wiring.

C2V

Factory wiring 2 speeds in one electrical box.

IRP

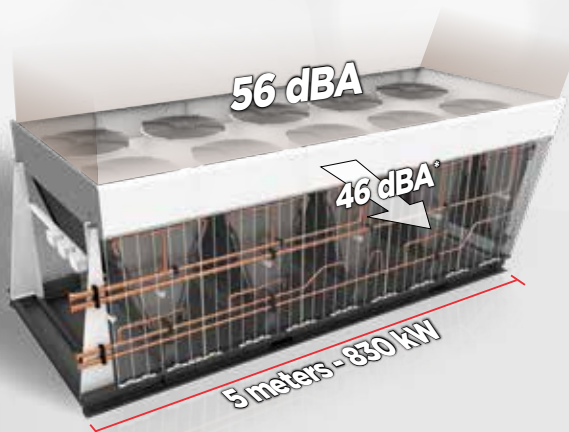
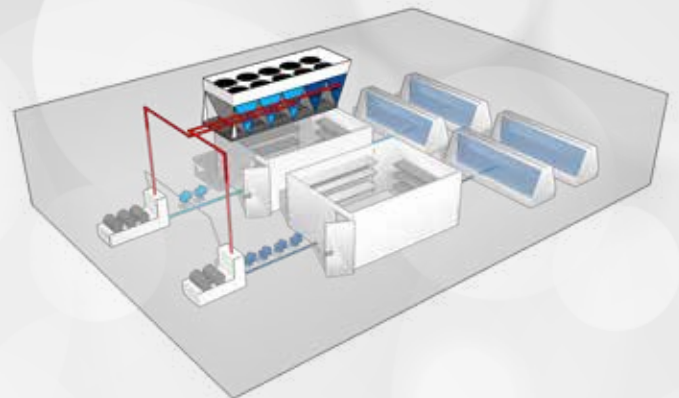
Rotary proximity switch(es).

MTH

Motors equipped with protection thermostat. Advise with high starting frequencies (more than 30 starts per hour) or use of variable speed drives.

PRODUCT ADVANTAGES

- # **Optimized installation costs:** The modular design allows the independent connection of modules for autonomous control of several compressor rack discharges. In this way, the user can have a single condenser, reducing installation cost. In addition, the reduced refrigerant charge ensures low maintenance costs. The modules are composed of two coils that can be easily removed for maintenance.



- # **Response to space constraints:** The MXW range responds to the problem of space by combining original architecture and innovative technology; the use of microchannel coils and their W-shaped arrangement allows for easy installation in a small space.

- # **Ideal integration in an urban environment:** Different ventilation solutions that help to reduce noise levels considerably and reach 19 dB(A) at 10 m per module. In addition, the **SilenTop** (optional) hides the motor fans and acts as an acoustic enclosure.

- # The high mechanical resistance of the microchannel coils allows easy and fast cleaning with the use of high pressure cleaners.

- # Easy access to the coil facilitates maintenance operations.

- # The modules are composed of two coils that can be easily removed for maintenance.

* Sound pressure level in dB(A) calculated at 10 m, level with the blades, in a free field over a reflecting plane.

MXW EC1_(A) 8_(D) P04_(E) MXW 06_(B) D_(C) 8_(D) P04_(E)

- (A) EC motors: **EC1** (reinforced EC motor) = up to 1,020 rpm. - **EC2** = up to 730 rpm.
- (B) AC motors: Number of poles
- (C) AC motors: **D** = triangle coupling - **Y** = star coupling
- (D) Fan diameter
- (E) Number of fans

The MXW is available with HFCs. For more information, please consult our software.

	CONDITIONS			REFRIGERANTS			MXW EC1 Reinforced EC motor									
	DT = 15K (1)	R449A	MXW EC1 ...	8P04	8P06	8P08	8P10	8P12	8P14	8P16	8P18	8P20	Microchannels			
1020 rpm	Power consumption	kW		358,5	537,8	717,0	896,2	1075,5	1254,8	1434,1	1613,3	1792,5				
	Airflow	m ³ /h		93360	140040	186720	233400	280080	326760	373440	420120	466800				
	Energy class			D	D	D	D	D	D	D	D	D				
	Acoustics	Lw (2)	dB(A)		95	97	98	99	100	100	101	102	102			
		Lp (3)	dB(A)		63	65	66	67	68	67	68	69	69			
	800 rpm	Power consumption	kW		4,26	6,39	8,52	10,65	12,78	14,91	17,04	19,17	21,30			
Airflow		m ³ /h		71880	107820	143770	179710	215650	251590	287530	323470	359420				
Energy class				D	D	D	D	D	D	D	D	D				
Acoustics		Lw (2)	dB(A)		89	91	92	93	94	94	95	96	96			
		Lp (3)	dB(A)		57	59	60	61	62	61	62	63	63			
500 rpm		Power consumption	kW		1,16	1,74	2,32	2,90	3,48	4,06	4,64	5,22	5,80			
	Airflow	m ³ /h		41380	62070	82760	103450	124140	144830	165520	186210	206900				
	Energy class			B	B	B	B	B	B	B	B	B				
	Acoustics	Lw (2)	dB(A)		73	75	76	77	78	78	79	80	80			
		Lp (3)	dB(A)		41	43	44	45	46	45	46	47	47			
	400 rpm	Power consumption	kW		0,65	0,98	1,30	1,63	1,95	2,28	2,60	2,93	3,25			
Airflow		m ³ /h		31740	47610	63470	79340	95210	111080	126950	142820	158680				
Energy class				A+	A+	A+	A+	A+	A+	A+	A+	A+				
Acoustics		Lw (2)	dB(A)		66	68	69	70	71	71	72	73	73			
		Lp (3)	dB(A)		34	36	37	38	39	38	39	40	40			
200 rpm		Power consumption	kW		0,17	0,26	0,34	0,43	0,52	0,60	0,69	0,77	0,86			
	Airflow	m ³ /h		14450	21680	28900	36130	43360	50580	57810	65030	72260				
	Energy class			A+	A+	A+	A+	A+	A+	A+	A+	A+				
	Acoustics	Lw (2)	dB(A)		48	50	51	52	53	53	54	55	55			
		Lp (3)	dB(A)		16	18	19	20	21	20	21	22	22			

MXW EC1^(A) 8^(D) P04^(E) MXW 06^(B) D^(C) 8^(D) P04^(E)

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MXW EC1 | Reinforced EC motor

Microchannels

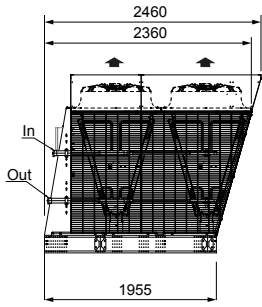
		MXW EC1 ...	8P04	8P06	8P08	8P10	8P12	8P14	8P16	8P18	8P20
Circuit volume		dm³	22,5	36,1	50,7	70,7	87,4	102,0	121,7	131,8	141,3
		Nb	4	6	8	10	12	14	16	18	20
Fan	400V/3	W max	9600	14400	19200	24000	28800	33600	38400	43200	48000
	50-60 Hz	A max	15,2	22,8	30,4	38,0	45,6	53,2	60,8	68,4	76,0
Inlet	Inlet 1	Ø	2"1/8	2"5/8	2"5/8	2"5/8	2"5/8	2"5/8	2"5/8	2"5/8	2"5/8
	Inlet 2	Ø	-	-	-	2"1/8	2"5/8	2"5/8	2"5/8	2"5/8	2"5/8
	Inlet 3	Ø	-	-	-	-	-	-	-	1"3/8	2"1/8
Outlet	Outlet 1	Ø	2"1/8	2"1/8	2"5/8	2"1/8	2"1/8	2"5/8	2"5/8	2"5/8	2"5/8
	Outlet 2	Ø	-	-	-	2"1/8	2"1/8	2"1/8	2"5/8	2"5/8	2"5/8
	Outlet 3	Ø	-	-	-	-	-	-	-	1" 3/8	2" 1/8
Net weight		kg	575	846	1117	1388	1659	1930	2201	2472	2743

(1) DT = difference between the ambient temperature and the condensing temperature considered to be equal to the pressure equivalent at the condenser inlet.

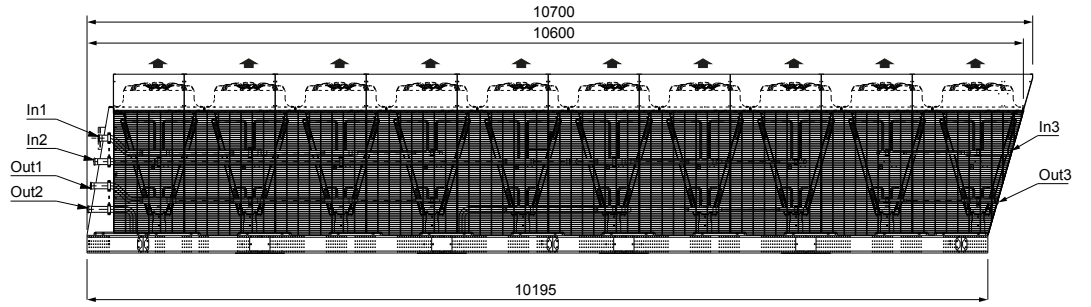
(2) Sound power level in dB(A), obtained in accordance with standard NF EN 13487 (parallelepiped reference surface).

(3) Sound pressure in dB(A) measured at 10 m, parallelepiped measuring surface, in a free field over a reflecting plane, given as an indication only.

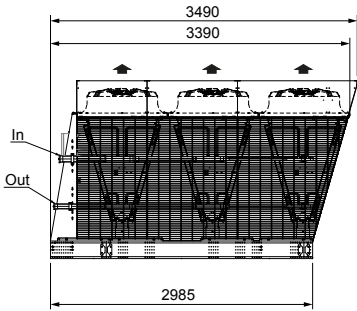
Values measured under nominal operating conditions, with clean coil, at rated voltage.



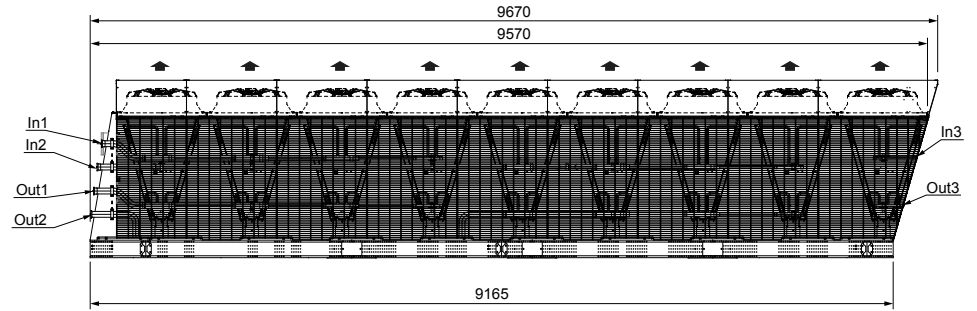
MXW EC1 8P04



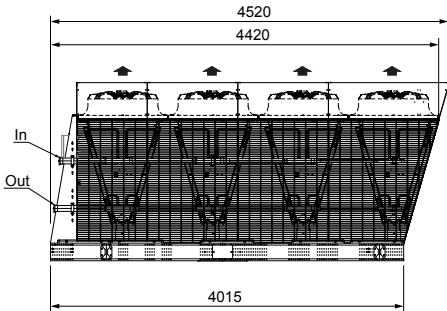
MXW EC1 8P20



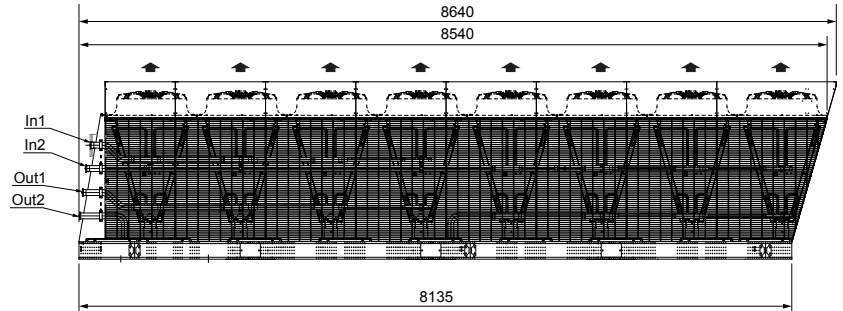
MXW EC1 8P06



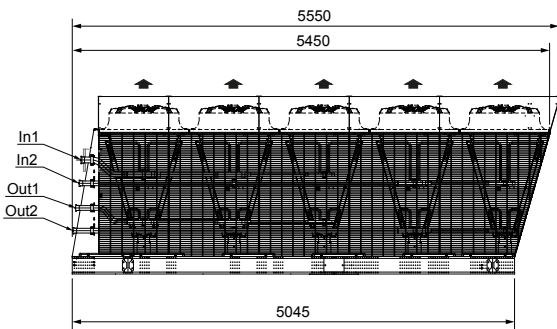
MXW EC1 8P18



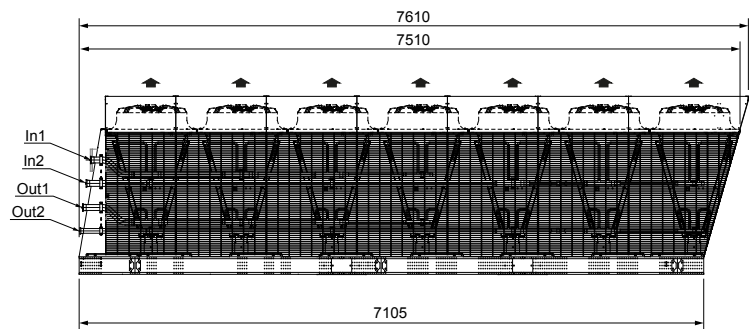
MXW EC1 8P08



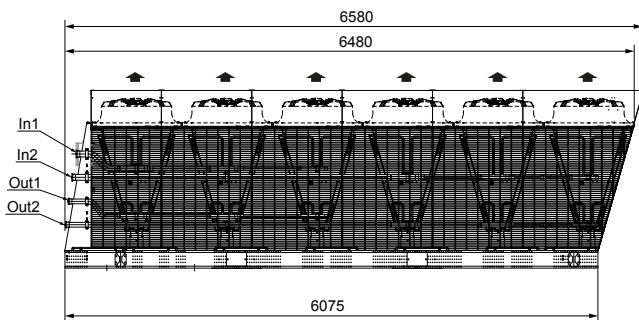
MXW EC1 8P16



MXW EC1 8P10



MXW EC1 8P14



MXW EC1 8P12

