



MCX 131 Kc



Series MCX Kc

Cooling capacity from 7 to 135 kW - 1 and 2 circuits

The air cooled condensing units of **MCX Kc series**, to be matched to close control units of ED.M series, are designed for outdoor installation. During their design, it has been given a particular care for dimensions and sound level, so to have compact and silent units at the same time.

They are all available with 1 or 2 refrigerant circuits. Thanks to their compact dimensions and to the several options available, these units are particularly easy to install in small spaces. They are completely assembled and tested in the factory and supplied with nitrogen charge.

The airflow is of horizontal type for sizes from 71 to 101 and of vertical type for all other sizes.

Operation limits: external air temperature from 15 to 45°C.

Main components:

Frame made of galvanized steel plate, suitably treated to resist to external agents and then painted in RAL 7035 colour. The compressor section is completely closed and suitably isolated from the air flow; inside of it, the compressor and the main components are placed so to facilitate also the service operations. The external panels, easy to be dismantled, allow the full access in case of service. For size from 71 to 101, the compressor section is still insulated with close-cell polyurethane foam material.

High-efficiency **scroll compressor** (EER 3.37 under ARI conditions), with low sound level, internal heat protection, installed on rubber vibration dampers, supplied with crankcase heater when necessary.

Heat-exchange external coil with copper tube and specially corrugated aluminium fins for a better efficiency. It is suitably sized with a wide exchange surface, so to allow the unit operation also at very high external air temperatures. On request, in case of installation in aggressive environments, several coil protection treatments are available.

Low rpm axial fans, of directly coupled type, with 6-8 pole electrical motor complete with in-built overload protection, electronic balance, low sound level blades with wing profile and safety protection grid. On request, it is available the modulating fans speed regulation (option BT).

Cooling circuit composed of: safety device, high and low pressure switches, high and low pressure gauges, liquid receiver, shut-off valve on liquid line, shut-off valve on compressor discharge.

Accessories

- AE** **Electrical power supply different from standard:** mainly, 230V three-phase, 460V three-phase. Frequency 50/60 Hz.
- BT** **Low temperature operation (-20°C):** electronic device for the continuous modulating voltage control of the condensing pressure through the variation of the fan rotation speed.
- GP** **Condensing coil protection grid:** metal protection grid against accidental impacts.
- IM** **Seawood packing:** fumigated seawood case and protection bag with hygroscopic salts, suitable for long sea transports.
- PA** **Rubber-type vibration dampers:** bell-shaped vibration dampers supports for insulating the unit (supplied in kit), made of base and bell in galvanized steel and natural rubber mixture.
- RM** **Condensing coil with pre-painted fins:** superficial treatment of the condensing coils with epoxy coating.
- RR** **Copper/copper condensing coils:** special execution of the condensing coils with copper pipe and fins.
- RV** **Personalized frame painting in RAL colour**

REMOTE CONDENSING UNITS FOR ED.E CLOSE CONTROL UNITS WITH SCROLL COMPRESSORS AND AXIAL FANS

REFRIGERANT R410A

Technical data - 1 circuit

MCX		71 Kc	81 Kc	101 Kc	131 Kc	161 Kc	211 Kc	271 Kc	331 Kc	421 Kc	501 Kc	591 Kc	771 Kc	991 Kc		
Cooling capacity																
Cooling capacity	kW	6,7	8,0	8,6	12,0	15,1	20,0	22,3	29,7	38,7	43,4	51,4	64,6	84,4		
Nominal input power	kW	1,7	2,1	2,4	2,8	3,9	5,1	6,0	7,4	9,9	11,4	12,4	18,1	23,0		
Axial fans																
Quantity	n.	1			2						1					
Rotation speed	rpm	900						895	860		885					
Air flow	m ³ /h	3'500	3'850		7'500		6'850		12'000	19'000		26'400		25'200		
Air flow	l/s	972	1'069		2'083		1'903		3'333	5'278		7'333		7'000		
Motor input power	kW	0,18			0,36			0,80		1,20		2,48				
Input current	A	1,80		1,10		2,20		3,60		5,24		5,15				
Scroll compressors																
Quantity	n.	1												2		
Circuits	n.	1														
Nominal input current	A	3,2	4,2	4,7	4,6	6,8	10,7	12,7	14,4	18,1	19,6	22,9	32,2	39,5		
Maximum input current	A	4,7	10,0		13,0	15,0	19,0		25,0	30,0	33,0	38,6	51,0	66,0		
Inrush current	A	28,0	45,0		60,0	70,0	87,0	100,0	110,0	147,0	158,0	197,0	215,0	191,0		
Sound pressure level																
Sound pressure at 1 m	dB(A)	57			59		61		63		64	68	72	68		
Dimensions																
Length	mm	980			1'100				1'600	2'000		1'360				
Width	mm	325			750						850		1'370			
Height	mm	715			1'100				1'260	1'650		2'420				
Weight	kg	60	75		145	150	165	170	280	360	365	680	720	770		
Indoor unit																
ED.E	Mod.	71	81	101	131	161	211	271	331	421	501	591	771	921 - 991		
Electrical power supply																
Electrical power supply	V / ph / Hz	400 / 3 / 50 + N + T														

REMARKS:

- Operating conditions: Evaporating temperature 8°C; External air temperature 35°C
 - Sound pressure level at 1 m in open field (ISO 3744).

Technical data - 2 circuits

MCX		332 Kc	422 Kc	502 Kc	642 Kc	852 Kc	922 Kc	1122 Kc	1462 Kc		
Cooling capacity											
Cooling capacity	kW	30,3	39,6	45,0	58,5	77,0	84,4	101,1	135,2		
Nominal input power	kW	8,0	10,1	12,0	16,0	20,0	23,0	24,8	33,9		
Axial fans											
Quantity	n.	2			1			2			
Rotation speed	rpm	895	860		885						
Air flow	m ³ /h	12'000	19'000		26'400	25'200		52'600	50'400		
Air flow	l/s	3'333	5'278		7'333	7'000		14'611	14'000		
Motor input power	kW	0,80	1,20		2,48			4,96			
Input current	A	3,60	5,24		5,15			10,30			
Sound pressure level											
Sound pressure at 1 m	dB(A)	61	64		68	67	68	71	75		
Dimensions											
Length	mm	1'600	2'000		1'360						
Width	mm	750	850		1'370						
Height	mm	1'260	1'650		2'420						
Weight	kg	315	370		700	765	780	1'020	1'100		
Indoor unit											
ED.E	Mod.	332	422	502	642	852	922	1122	1462		
Electrical power supply											
Electrical power supply	V / ph / Hz	400 / 3 / 50 + N + T									

REMARKS:

- Operating conditions: Evaporating temperature 8°C; External air temperature 35°C
 - Sound pressure level at 1 m in open field (ISO 3744).