

DRY COOLER: Dry coolers equipped with axial fans
Capacity: 8,3 ÷ 172,0 kW



dry cooler

rcgroupairconditioning



MAIN FEATURES

- Dry coolers.
- 10 models available, for a wide selection opportunity..
- Average step of 15kW.
- Water feeding.
- AC Axial fans.
- Horizontal air flow.
- Suitable for outdoor installation.

MAIN BENEFITS

- Designed for the perfect match with RC Group water cooled heat pump liquid chillers.
- Availability of kit for the reduction of the noise.
- Availability of support leg for vertical air flow.
- Easily of maintenance.

OUTDOOR INSTALLATION

The machines are made with weather resistant materials and suitable for outdoor installation.

MAIN COMPONENTS

FRAMEWORK

- Base, self supporting frame and panelling in steel plate with protective surfaces treatment in compliance with UNI ISO 9227/ASTM B117 and ISO 7253, and painted with epoxy powders.
- Colour: RAL 9002

FANS SECTION

- Axial fans with sickle-shaped blades, fan guard and optimized for low noise levels.
- External rotor electric motor, AC type, with stepless variable speed for condensing pressure control.
The motor rotation control is obtained according to the 0÷10V proportional signal coming from the internal unit microprocessor control.
- IP54 enclosure class.

DISSIPATIVE COIL

- Heat exchanger coil with copper tubes and high efficiency aluminium fins, specifically developed to provide high heat transfer and lower pressure drops.

The combination of two factors, special tubes and fins, allow to optimally combine the following aspects:

- Maximum capacity relative to the size of the exchanger.
 - Reduction of the air flow required for the heat exchange.
- Frame in galvanized steel.

ELECTRICAL PANEL

In accordance with EN60204-1 norms, suitable for outdoor installation, IP54 enclosure class, complete with:

- Terminals for power supply (from network).
 - 400/3/50+N for models "T"
 - 230/1/50 for models "M".
- Terminals for 0÷10V signal for fan speed control (connect to indoor machine).
- Terminals for alarm signal (connect to indoor machine).
- Fans speed regulator for fan speed control.

OPTIONAL ACCESSORY

- Support legs for vertical air flow

TECHNICAL DATA DRY COOLER

DRY COOLER		M 14	M 20	M 35	M 45	M 60	M 70	M 110	M 140	T 210	T 280	
STANDARD	Capacity (1)	kW	8,3	11,7	22,6	26,4	31,8	40,2	62,2	86,1	124,0	172,0
	Unit power input	kW	0,3	0,4	0,5	0,8	1,1	1,1	1,6	2,1	3,2	4,2
	Axial fans	n.	1	1	1	2	2	2	3	4	6	8
	Total air flow	m ³ /h	4500	6400	9100	12000	16000	18000	27200	36000	54000	72000
	Air circuits	n.	1	1	1	1	1	1	1	1	1	1
	Water flow	m ³ /h	1,5	2,1	4,0	4,7	5,7	7,2	11,1	15,4	22,1	30,8
	Pressure drops	kPa	24	21	26	16	8	12	17	40	17	40
	Water content	l	4,0	5,7	15,7	15,2	17,9	25,1	37,7	72,8	75,3	100,4
	Power supply	V/Ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	400/3/50+N(*)	400/3/50+N(*)
	Max unit operating current (FLA)	A	0,7	1,8	2,9	3,6	5,7	8,5	11,4	17,1	22,8	28,8
	Sound power level [Lw] (2)	dB(A)	76,8	79,1	81,8	82,4	84,5	85,0	86,9	88,1	88,8	90,1
	Average sound pressure level [Lp _m] (3)	dB(A)	63,0	65,0	67,0	67,4	69,4	69,4	70,5	71,1	71,5	72,2
	Net weight	kg	56	73	122	156	191	219	227	359	533	708
	Hydraulic connections											
Inlet / Outlet – ISO 7/1 – R	Ø	1 1/4"	1 1/4"	1 1/2"	1 1/2"	2"	2"	2"	2"	2 1/2"	3"	
LNO 85%	Capacity (1)	kW	7,3	10,4	19,8	23,3	28,0	35,3	54,8	75,9	109,0	152,0
	Unit power input	kW	0,3	0,4	0,5	0,8	1,1	0,9	1,4	1,8	2,7	3,6
	Total air flow	m ³ /h	3825	5440	7735	10200	13600	18000	27200	36000	54000	72000
	Water flow	m ³ /h	1,3	1,9	3,5	4,2	5,0	6,3	9,8	13,6	19,5	27,1
	Pressure drops	kPa	19	17	21	13	6	10	14	32	14	32
	Sound power level [Lw] (2)	dB(A)	72,9	75,2	77,9	78,5	80,7	81,1	83,0	84,2	84,9	86,2
	Average sound pressure level [Lp _m] (3)	dB(A)	59,1	61,1	63,1	63,6	65,5	65,5	66,6	67,2	67,7	68,3
LNO 70%	Capacity (1)	kW	6,4	9,0	16,9	19,9	23,8	40,2	62,2	86,1	124,0	172,0
	Unit power input	kW	0,2	0,3	0,4	0,6	0,8	0,8	1,1	1,5	2,2	3,0
	Total air flow	m ³ /h	3150	4480	6370	8400	11200	12600	19040	25200	37800	50400
	Water flow	m ³ /h	1,1	1,6	3,0	3,6	4,3	5,4	8,4	11,6	16,7	23,3
	Pressure drops	kPa	15	13	16	10	5	7	11	25	10	25
	Sound power level [Lw] (2)	dB(A)	68,2	70,6	73,3	73,9	76,0	76,5	78,4	79,6	80,3	81,5
	Average sound pressure level [Lp _m] (3)	dB(A)	54,5	56,5	58,5	58,9	60,8	60,8	61,9	62,5	63,0	63,7

1. Characteristics referred to entering air at 35°C with hot water inlet temperature 45°C – 20% glycol.

2. Sound power level [Lw] according to ISO EN 9614 - 2

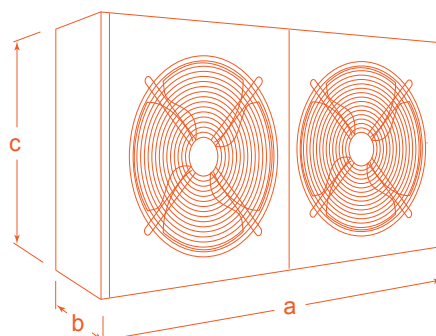
3. Average sound pressure level [Lp_m] 1m far according to ISO EN 3744.

(*) Available also with 230/1/50 power supply. Refer to the wiring diagram of the unit.

DIMENSIONS (mm)

DRY COOLER

	a	b	c
M 14	875	540	727
M 20	1200	540	727
M 35	1400	665	1027
M 45	1600	665	1027
M 60	1850	665	1027
M 70	2320	665	1140
M 110	3490	665	1150
M 140	4540	665	1150
T 210	3490	665	2200
T 280	4540	665	2200



(*) please refer to technical catalogues for further information about connections dimensions