











Dry coolers equipped with axial fans

KELVIN AIR CONDITIONING

KELVIN Clim D8

KELVIN CLIM D8: Dry coolers equipped with axial fans

Capacity: 8 ~ 172 kW





KELVIN AIR CONDITIONING







MAIN FEATURES

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

MAIN BENEFITS

- Designed for the perfect match with KELVIN water cooled liquid chillers.
- Availability of machine for the reduction and the extreme reduction of the noise.
- · Availability of support leg for vertical air flow.
- Easily of maintenance.
- Eurovent Certification.(pending)

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/ASTMB117 and ISO 7253, and painted with epoxy powders.
- · Colour: RAL 9002.

FANS SECTION

- · Centrifugal fans with backward curved blades with wing profile, single suction and without scroll housings (Plug-fan).
- Brushless type synchronous EC motor with integrated electronic commutated system and continuous variation of the rotation speed. The motor rotation control is obtained with the EC system (Electronic Commutation) that manage the motor according to the 0~10V proportional signal coming from the internal unit microprocessor control.
- Maintenance-free bearings.
- IP54 enclosure class.

REFRIGERANT CIRCUIT

• Valves on gas and liquid line for coupling to refrigerant pipe. The valves are supplied not installed. The condenser is supplied with nitrogen seal.

AIR/GAS HEAT EXCHANGERS

- Heat exchanger coil with internally corrugated 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,
- Minimum charge of refrigerant,
- 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).
- 380-480/3/50-60 for models "T"
- Terminals for $0\sim10\mathrm{V}$ signal for condensing control system (connect to indoor machine).
- Terminals for alarm signal (connect to indoor machine).

TECHNICAL DATA KELVIN Clim D8

	KELVIN Clim D8		M 14	M 20	M 35	M 45	M 60	M 70	M 110	M 140	T 210	T 280
	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									8
	Total air flow	m³/h	4500	6400	9100	12000	16000	18000	27200	36000	54000	72000
	Air circuits	n.	1									1
	Water flow	m³/h	1,5	2,1	4,0	4,7	5,7	7,2	11,1	15,4	22,1	30,8
ARD	Pressure drops	kPa	24	21	26	16	8	12	17	40	17	40
9	Water content	I	4,0	5,7	15,7	15,2	17,9	25,1	37,7	72,8	75,3	100,4
STAND/	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(*)
ဟ	Max unit operating current (FLA)	Α	0,7	1,8	2,9	3,6	5,7	5,7	8,5	11,4	17,1	22,8
	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 [Lpm] (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 1/7 – R	Ø	1 1/4"	1 1/4"	1 1/2"	1 1/2"	2"	2"	2"	2"	2 1/2"	3"
	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
%85	Total air flow	m³/h	3825	5440	7735	10200	13600	15300	23120	30600	45900	61200
	Water flow	m³/h	1,3	1,9	3,5	4,2	5,0	6,3	9,8	13,6	19,5	27,1
N N	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	84,2	84,9	86,2
	Average sound pressure level [Lpm] (3)	dB(A)	59,1	61,1	63,1	63,6	65,5	65,5	66,6	67,2	67,7	68,3
	Capacity (1)	kW	6,4	9,0	16,9	19,9	23,8	30,2	46,9	65,0	93,2	130,0
	Unit power input	kW	0,2	0,3	0,4	0,6	0,8	0,8	1,1	1,5	2,2	3,0
%70	Total air flow	m³/h	3150	4480	6370	8400	11200	12600	19040	25200	37800	50400
NO N	Water flow	m³/h	1,1	1,6	3,0	3,6	4,3	5,4	8,4	11,6	16,7	23,3
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 [Lpm] (3)	dB(A)	54,5	56,5	58,5	58,9	60,8	60,8	61,9	62,5	63,0	63,7

- Characteristics referred to entering air at °35C with hot water inlet temperature °45C %20 glycol. Sound power level [Lw] according to ISO EN 2 9614
 Average sound pressure level 個 1m far according to ISO EN 3744.
 Available also with 50/1/230 power supply. Refer to the wiring diagram of the unit.

DIMENSIONS (mm)

KELVIN Clim D8									
	а	b	С						
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





