KELVIN
Air Conditioning System
2016

Qualified for **Energy Technology List**
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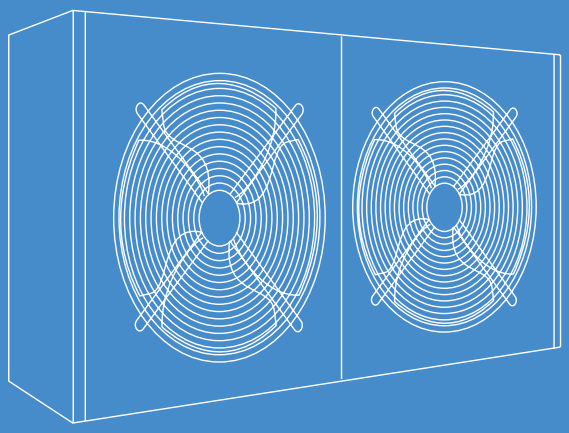
TM

bsi. ISO 9001 Quality Management | ISO 14001 Environmental Management

KELVIN Clim C12

Cooling Capacity: 12 ~ 307 kW



R410A R407A R134a AC SPLIT SYSTEM EU

Air cooled condensers equipped with axial fans

KELVIN AIR CONDITIONING

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Capacity: 12 ~ 307 kW

EUROVENT CERTIFIED PERFORMANCE Pending... www.eurovent-certification.com

KELVIN AIR CONDITIONING

R410A R407A R134a AC SPLIT SYSTEM EU

MAIN FEATURES

- Air cooled condensers.
- 19 models available, for a wide selection opportunity.
- Average step of 15kW.
- Multi-refrigerant charge.
- Supplied with seal charge.
- AC Axial fans.
- Horizontal air flow.
- Suitable for outdoor installation.

MAIN BENEFITS

- Designed for the perfect match with KELVIN motoevaporating units.
- Availability of machine for the reduction and the extreme reduction of the noise.
- Availability of support leg for vertical air fl ow.
- 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
- 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.

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.

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.

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 condensing control system (connect to indoor machine).
- Terminals for alarm signal (connect to indoor machine).
- Fans speed regulator for condensing control.

OPTIONAL ACCESSORY
- Support legs for vertical air flow.

TECHNICAL DATA KELVIN Clim C12

	KELVIN Clim C12		M 11	M 14	M 17	M 20	M 25	M 30	M 35	M 45
STANDARD	**Capacity (1)**									
	With refrigerant charge R410A	kW	12,1	14,7	18,4	20,7	24,2	32,7	37,4	47,6
	With refrigerant charge R407C	kW	12,0	14,7	18,2	20,4	24,2	32,3	37,1	47,1
	With refrigerant charge R134a	kW	11,7	14,4	17,9	20,0	23,7	31,7	36,6	46,5
	Unit power input	kW	0,3	0,3	0,3	0,4	0,5	0,5	0,5	0,8
	Axial fans	n.	1	1	1	1	1	1	1	2
	Total air flow	m³/h	4900	4500	5200	6400	9600	9500	9100	12000
	Air circuits	n.	1	1	1	1	1	1	1	1
	Total refrigerant charge (optional excluded)	kg	0,8	1,2	1,7	1,7	2,0	3,0	4,0	4,7
	Gas circuits	n.	1	1	1	1	1	1	1	1
	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
	Max unit operating current (FLA)	A	1,2	1,2	1,2	1,8	2,9	2,9	2,9	3,6
	Sound power level [Lw] (2)	dB(A)	76,8	76,8	77,1	79,1	81,8	81,8	81,8	82,4
	Average sound pressure level [Lpm] (3)	dB(A)	63,0	63,0	63,0	65,0	67,0	67,0	67,0	67,4
	Net weight	kg	51	55	66	72	102	111	120	153
	Refrigerant connections									
	Liquid line – ODS	Ø mm	12	12	12	12	16	16	16	16
	Gas line – ODS	Ø mm	16	16	16	16	18	18	18	18
TEAM MATE LNO	**Capacity (1)**									
	With refrigerant charge R410A	kW	10,9	13,1	16,4	18,5	21,8	29,1	32,9	42,0
	With refrigerant charge R407C	kW	10,8	13,1	16,2	18,2	21,8	28,7	32,6	41,6
	With refrigerant charge R134a	kW	10,6	12,9	15,9	17,9	21,3	28,3	32,3	41,1
	Unit power input	kW	0,2	0,2	0,2	0,3	0,5	0,5	0,5	0,7
	Total air flow	m³/h	4165	3825	4420	5440	8160	8075	7735	10200
	Sound power level [Lw] (2)	dB(A)	72,9	72,9	73,2	75,2	77,9	77,9	77,9	78,5
	Average sound pressure level [Lpm] (3)	dB(A)	59,1	59,1	59,1	61,1	63,1	63,1	63,1	63,6
TEAM MATE ELN	**Capacity (1)**									
	With refrigerant charge R410A	kW	9,6	11,4	14,1	16,1	19,2	25,2	28,2	36,1
	With refrigerant charge R407C	kW	9,5	11,4	14,0	15,8	19,2	24,9	27,9	35,7
	With refrigerant charge R134a	kW	9,3	11,2	13,8	15,6	18,8	24,5	27,6	35,3
	Unit power input	kW	0,2	0,2	0,2	0,3	0,4	0,4	0,4	0,6
	Total air flow	m³/h	3430	3150	3640	4480	6720	6650	6370	8400
	Sound power level [Lw] (2)	dB(A)	68,2	68,2	68,6	70,6	73,3	73,3	73,3	73,9
	Average sound pressure level [Lpm] (3)	dB(A)	54,5	54,5	54,5	56,5	58,5	58,5	58,5	58,9

1. Referred to condensation temperature 50°C; ambient temperature 35°C.
2. Sound power level [Lw] according to ISO EN 9614 - 2.
3. Average sound pressure level [LPm] 1m far according to ISO EN 3744.

TECHNICAL DATA KELVIN Clim C12

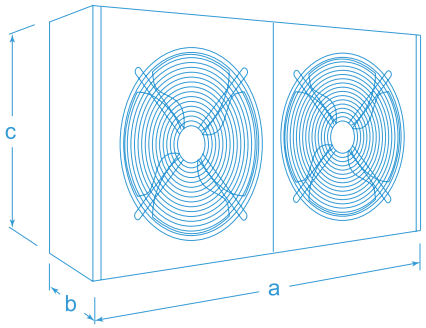
	KELVIN Clim C12		M 50	M 60	M 70	M 95	M 110	M 130	M 140	T 185
STANDARD	**Capacity (1)**									
	With refrigerant charge R410A	kW	**56,1**	**62,6**	**74,0**	**99,4**	**111,0**	**133,0**	**151,0**	**201,0**
	With refrigerant charge R407C	kW	**55,5**	**62,0**	**73,3**	**98,3**	**110,0**	**132,0**	**150,0**	**198,0**
	With refrigerant charge R134a	kW	**54,8**	**61,2**	**72,4**	**97,0**	**109,0**	**130,0**	**149,0**	**195,0**
	Unit power input	kW	1,1	1,1	1,1	1,6	1,6	2,1	2,1	3,2
	Axial fans	n.	2	2	2	3	3	4	4	6
	Total air flow	m³/h	17000	16000	18000	28200	27200	37800	36000	56000
	Air circuits	n.	1	1	1	1	1	1	1	1
	Total refrigerant charge (optional excluded)	kg	4,1	5,5	7,7	8,7	11,6	11,6	15,4	20,8
	Gas circuits	n.	1	1	1	1	1	1	1	1
	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	400/3/50+N
	Max unit operating current (FLA)	A	5,7	5,7	5,7	8,5	8,5	11,4	11,4	17,1
	Sound power level [Lw] (2)	dB(A)	84,5	84,5	85,0	86,9	86,9	88,1	88,1	88,8
	Average sound pressure level [Lpm] (3)	dB(A)	69,4	69,4	69,4	70,5	70,5	71,1	71,1	71,5
	Net weight	kg	175	188	214	240	270	320	350	470
	Refrigerant connections									
	Liquid line – ODS	Ø mm	18	18	18	22	22	28	28	35
	Gas line – ODS	Ø mm	22	22	22	35	35	35	35	42
TEAM MATE LNO	**Capacity (1)**									
	With refrigerant charge R410A	kW	**50,1**	**55,3**	**65,1**	**88,3**	**97,7**	**118,0**	**133,0**	**179,0**
	With refrigerant charge R407C	kW	**49,6**	**54,8**	**64,6**	**87,4**	**97,3**	**117,0**	**132,0**	**176,0**
	With refrigerant charge R134a	kW	**48,9**	**54,2**	**63,8**	**86,3**	**96,2**	**116,0**	**131,0**	**174,0**
	Unit power input	kW	0,9	0,9	0,9	1,4	1,4	1,8	1,8	2,7
	Total air flow	m³/h	14450	13600	15300	23970	23120	32130	30600	47600
	Sound power level [Lw] (2)	dB(A)	80,7	80,7	81,1	83,0	83,0	84,2	84,2	84,9
	Average sound pressure level [Lpm] (3)	dB(A)	65,5	65,5	65,5	66,6	66,6	67,2	67,2	67,7
TEAM MATE ELN	**Capacity (1)**									
	With refrigerant charge R410A	kW	**43,5**	**47,6**	**55,8**	**76,4**	**83,7**	**102,0**	**114,0**	**155,0**
	With refrigerant charge R407C	kW	**43,1**	**47,2**	**55,3**	**75,7**	**83,3**	**101,0**	**113,0**	**153,0**
	With refrigerant charge R134a	kW	**42,6**	**46,7**	**54,7**	**74,8**	**82,5**	**100,0**	**112,0**	**151,0**
	Unit power input	kW	0,8	0,8	0,8	1,1	1,1	1,5	1,5	2,2
	Total air flow	m³/h	11900	11200	12600	19740	19040	26460	25200	39200
	Sound power level [Lw] (2)	dB(A)	76,0	76,0	76,5	78,4	78,4	79,6	79,6	80,3
	Average sound pressure level [Lpm] (3)	dB(A)	60,8	60,8	60,8	61,9	61,9	62,5	62,5	63,0

	KELVIN Clim C12		T 210	T 250	T 280
STANDARD	**Capacity (1)**				
	With refrigerant charge R410A	kW	**232,0**	**276,0**	**307,0**
	With refrigerant charge R407C	kW	**231,0**	**273,0**	**304,0**
	With refrigerant charge R134a	kW	**228,0**	**270,0**	**301,0**
	Unit power input	kW	3,2	4,2	4,2
	Axial fans	n.	6	8	8
	Total air flow	m³/h	54000	74600	72000
	Air circuits	n.	1	1	1
	Total refrigerant charge (optional excluded)	kg	27,7	27,7	37,0
	Gas circuits	n.	1	1	1
	Power supply	V/Ph/Hz	400/3/50+N	400/3/50+N	400/3/50+N
	Max unit operating current (FLA)	A	17,1	22,8	22,8
	Sound power level [Lw] (2)	dB(A)	88,8	90,1	90,1
	Average sound pressure level [Lpm] (3)	dB(A)	71,5	72,2	72,2
	Net weight	kg	520	630	690
	Refrigerant connections				
	Liquid line – ODS	Ø mm	35	42	42
	Gas line – ODS	Ø mm	42	54	54
TEAM MATE LNO	**Capacity (1)**				
	With refrigerant charge R410A	kW	**205,0**	**245,0**	**270,0**
	With refrigerant charge R407C	kW	**203,0**	**243,0**	**268,0**
	With refrigerant charge R134a	kW	**201,0**	**240,0**	**265,0**
	Unit power input	kW	2,7	3,6	3,6
	Total air flow	m³/h	45900	63410	61200
	Sound power level [Lw] (2)	dB(A)	84,9	86,2	86,2
	Average sound pressure level [Lpm] (3)	dB(A)	67,7	68,3	68,3
TEAM MATE ELN	**Capacity (1)**				
	With refrigerant charge R410A	kW	**175,0**	**212,0**	**231,0**
	With refrigerant charge R407C	kW	**173,0**	**210,0**	**229,0**
	With refrigerant charge R134a	kW	**172,0**	**208,0**	**227,0**
	Unit power input	kW	2,2	3,0	3,0
	Total air flow	m³/h	37800	52220	50400
	Sound power level [Lw] (2)	dB(A)	80,3	81,5	81,5
	Average sound pressure level [Lpm] (3)	dB(A)	63,0	63,7	63,7

1. Referred to condensation temperature 50°C; ambient temperature 35°C.
2. Sound power level [Lw] according to ISO EN 9614 - 2.
3. Average sound pressure level [LPm] 1m far according to ISO EN 3744.

KELVIN Clim C12	a	b	c
M 11	875	540	727
M 14	875	540	727
M 17	1200	540	727
M 20	1200	540	727
M 25	1400	665	1027
M 30	1400	665	1027
M 35	1400	665	1027
M 45	1600	665	1027
M 50	1850	665	1027
M 60	1850	665	1027
M 70	2320	665	1140
M 95	3490	665	1150
M 110	3490	665	1150
M 130	4540	665	1150
M 140	4540	665	1150
T 185	3490	665	2200
T 210	3490	665	2200
T 250	4540	665	2200
T 280	4540	665	2200

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



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