

Kelvion

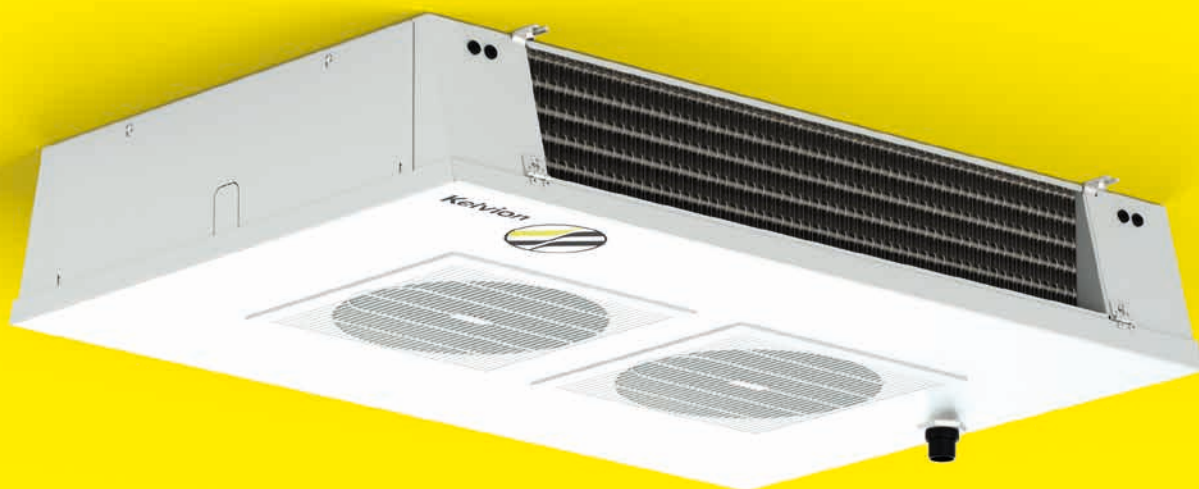


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Commercial Air Coolers

Kelvion KDC

BEST CONDITIONS FOR WORKING ROOMS







**Kelvion –
a tribute to
Lord Kelvin**

**70 branches and
sales partners
worldwide**

**More than 4,000
employees
worldwide**

Lord Kelvin (1824 – 1907) formulated
the laws of thermodynamics

EXPERTS IN HEAT EXCHANGE - SINCE 1920

Welcome to Kelvion. As successor to the GEA Heat Exchangers Group, we continue to break new ground, making discerning customers more successful than ever with our integrated heat exchanger solutions.

Our solutions for your applications:

We offer our customers one of the world's largest product portfolios in the field of heat exchangers. It includes individual solutions for practically all conceivable applications and complex environmental conditions: plate heat exchangers, shell and tube heat exchangers, finned tube heat exchangers, modular cooling tower systems, and refrigeration heat exchangers.

Your markets are our markets, too:

The markets in which you and we together operate are among the most important in the world: energy, the oil and gas industry, the chemical industry, marine applications, food and beverages, climate and environment. We provide every single market segment with solutions of outstanding efficiency, safety, and sustainability.

We are highly committed to earning your trust:

We want to win your trust with everything we do and convince you with the solutions we offer. With this high aim in mind, we invest our extensive know-how, our great precision, and our passion in everything we do: including product development, manufacturing, installation, and after-sales support.

Seeing things from the customer perspective:

Your specific requirements count – and nothing else. Whatever we offer you, it must meet these requirements. Our entire way of thinking and working is geared towards this aim. Our customers truly appreciate this: after all, this is how we make their companies more efficient.

We are at your service.

Kelvion – Experts in Heat Exchange.



DRAUGHT-FREE VENTILATION AND QUIET OPERATION



Capacity range (for SC2 | R404A)

1.4 kW    23 kW

Temperature range (t_{L1})

-25°C     +40°C

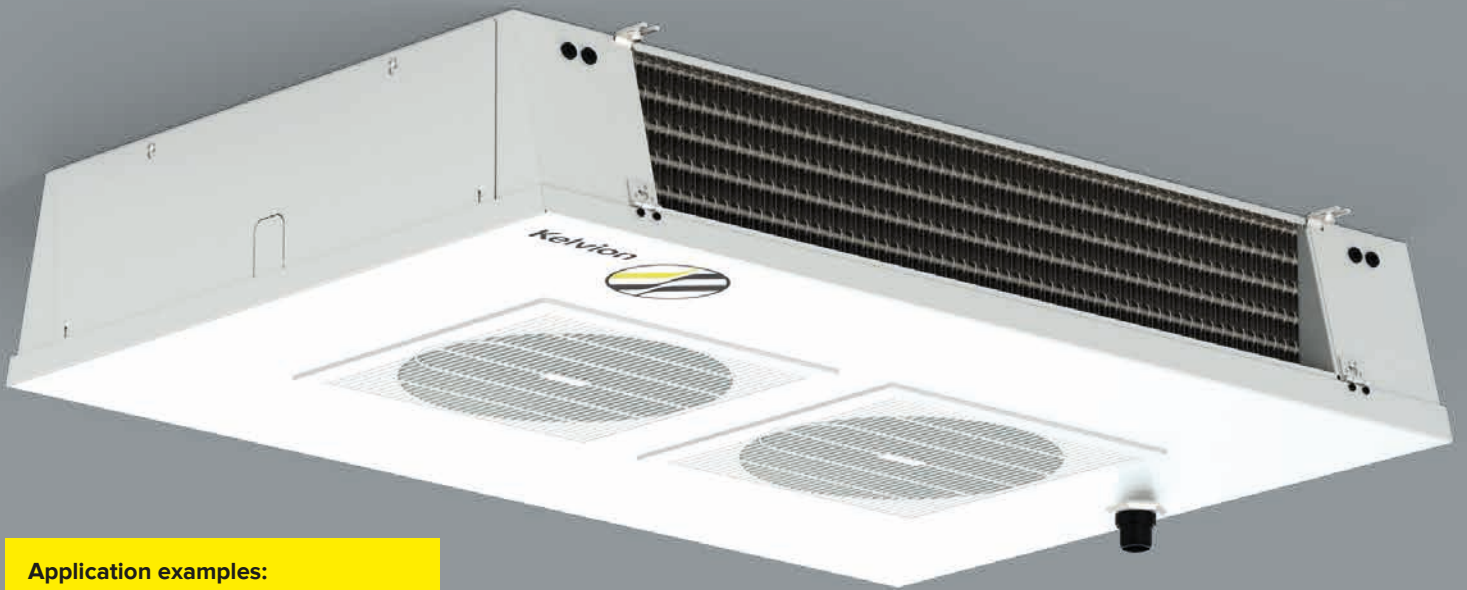
Nomenclature

1 2 3 4 5 6 7 8 9

K D C - 35 2 - 6 A N - -

- | | | | |
|---|-----------------------|---|------------------------|
| 1 | Size of product | 6 | Number of rows deep |
| 2 | Case style of product | 7 | Fin spacing |
| 3 | Coil block system | 8 | Defrost system |
| 4 | Fan diameter | 9 | Additional information |
| 5 | Number of fans | | |

APPLICATION BENEFITS FOR CONTRACTORS AND OPERATORS



Application examples:

- ▶ Working areas
- ▶ Sales areas for sensitive goods
- ▶ Cold rooms
- ▶ Laboratories

COOLING WHERE **PEOPLE** ARE WORKING

The Kelvion KDC provides gentle cooling and quiet operation for sensitive produce and/or area's where people are working

The dual discharge air coolers are suitable for high, medium and low temperature applications in the commercial refrigeration sector.

Better performance, easy installation, serviceability and high quality make this unit the perfect fit for your working area needs.

- ▶ Kelvion KDC: EC (Electronically Commutated) Fans offer considerable energy cost savings and long life
- ▶ Fans offer a choice of high or low speed
- ▶ Drip tray hinged on both sides to give access to the bottom for cleaning or maintenance
- ▶ CAL distributor as option
- ▶ Draft-free air circulation and quiet operation: pleasant conditions for people in working spaces
- ▶ Guides the air across the ceiling and far into the room
- ▶ Smooth surfaces: Easy to clean
- ▶ Optional 45/90Bar CO₂ / R744 version

DRAUGHT-FREE AIR MOVEMENT AND SILENT OPERATION

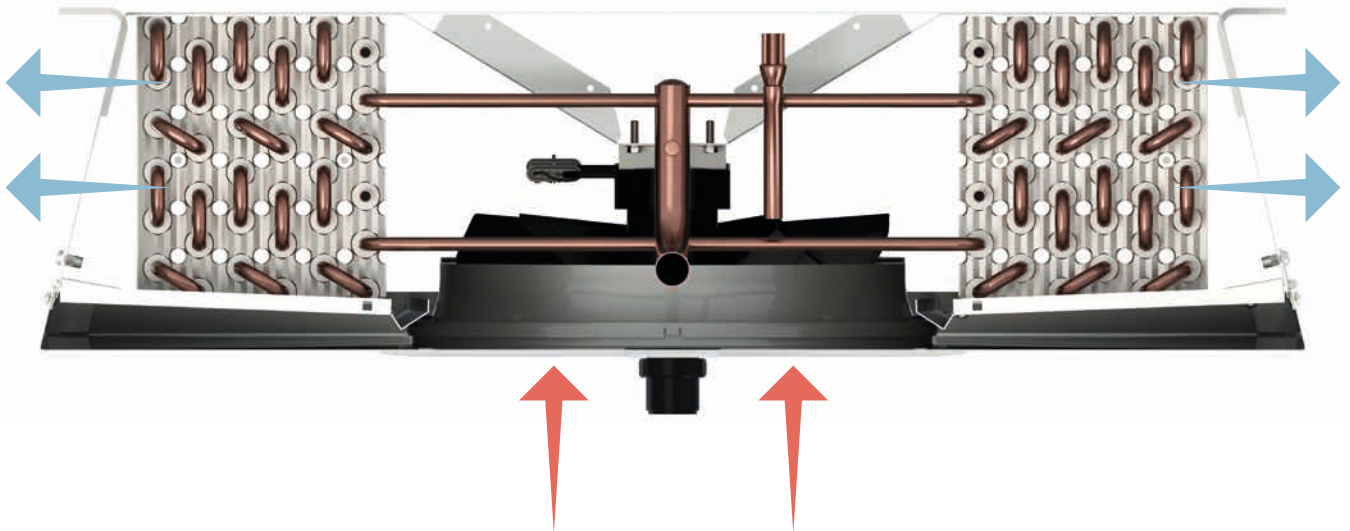
The technical cooling demands and spatial conditions are only one aspect. Safety and health are top priority as soon as people need to work in cold rooms.

For staff to perform their work without adverse effects their wellbeing must be assured.

Noise and air movement in such rooms are a significant contributing factor to a pleasant indoor climate. The demands made on equipment to ensure a constant temperature in rooms where sensitive goods such as cut flowers are exhibited for sale and where people also need to work of course, are high.

Draught-free air movement and extremely quiet operation create a pleasant indoor climate for the people and excellent conditions for the processing and short-time storage of sensitive products. The air in the room is drawn in by the fans and exhausted via the heat exchangers on both sides. The Kelvinion KDC guides the air towards the ceiling where the Coanda effect carries it far into the room. The Kelvinion KDC in this way creates optimal air flow at very low air velocity.

Power ratings range from 1.4 kW to 23 kW. The drip tray hinges down to facilitate comfortable cleaning.

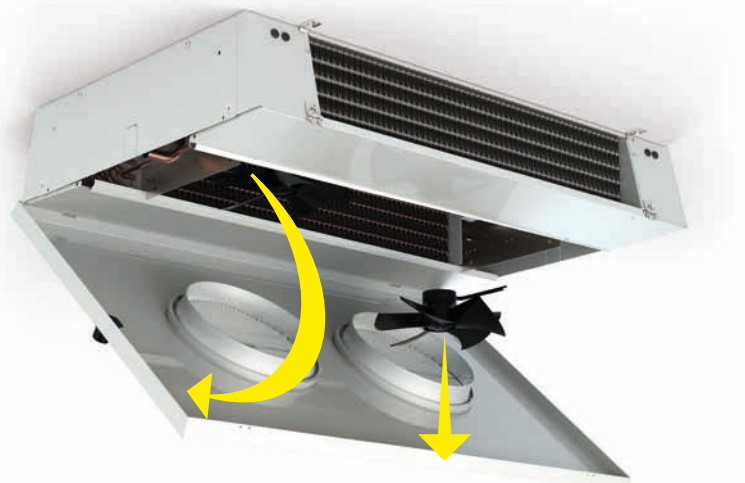


EASY INSTALLATION AND MAINTENANCE

All mounted parts are easily accessible. Cover plates and drip tray can be removed and mounted again quickly and easily. The use of bolts is reduced to a minimum.

The fan can be replaced with a flick of the wrist. The drip tray can be removed to inspect and clean the air cooler. It can be hinged on both sides.

When the optionally available condensate pump is installed, there is no need to dismantle the drain pipe.



Kelvion KDC

BASIC VERSION



CASING

- ▶ Sendzimir zinc-plated steel, smooth
- ▶ High-grade powder coating RAL 9010
- ▶ Food-safe
- ▶ Easy to clean
- ▶ Best quality powder coated edges
- ▶ Drip tray hinged on both sides to give access to the bottom for cleaning or maintenance
- ▶ Side cover plates removable
- ▶ Compact design

ELECTRICAL DEFROST

- ▶ Heating elements made from stainless steel
- ▶ Connections vapor-tight
- ▶ Connection voltage: 1/N/PE 230V 50/60Hz
- ▶ Wired to a terminal box, ready for connection
- ▶ An optimized heating element configuration ensure fast and even defrosting
- ▶ The stainless steel heating elements are fitted within aluminium tubes, which provides a highly conductive interface between the heaters and fins ensuring efficient defrost cycles with optimised life cycle

HEAT EXCHANGER

- ▶ Tube: Copper, internally finned, \varnothing 12 mm
- ▶ Fins: HFE-Fins® from Aluminium
- ▶ End plate: Aluminium
- ▶ Staggered tube system
- ▶ Fin spacing
 - A = 4,5 mm
 - B = 7,0 mm
- ▶ Copper tubes are mechanically expanded into fully collared aluminium fins.
- ▶ Internal purity according to EN 14276
- ▶ Inlet connections:
 - Distributor with copper tube for brazing connection,
 - Multiple injections via CAL® distributor as option
- ▶ Outlet connections:
 - Copper tube for brazing connection with Schrader valve
 - UNF 7/16", sealed



FAN UNIT

- ▶ EC-ESM technology
- ▶ 2 speed operation
- ▶ Fan diameter: 350 mm
- ▶ Permissible motor operating temperatures from -25°C to +40°C
- ▶ Connection voltage: 1/N/PE 230V 50/60Hz
- ▶ Motor protection: Internal thermocontact (not carried out)
- ▶ Protection class IP54
- ▶ Insulation class B
- ▶ Fans wired on 1 internal terminal box
- ▶ Optional extra V1.52: Fan adjustable via 0-10V interface (speed adjustable from 100% to at least 50%)

Please observe the manufacturer's information!

MOTOR LABEL DATA

Type	Fan	50/60Hz		
	ø mm	min ⁻¹	W	A
Sound Level S1*	350	1100	80	0,70
Sound Level S2**	350	800	32	0,28

Motor data per fan, provided by the fan manufacturer

* corresponds to the former N sound classification

** corresponds to the former L sound classification

TECHNICAL DATA

Kelvion KDC | Fin spacing 4.5 mm (A)

Sound level S1

Model	Capacities Q _o at 50Hz, R404A		Surface	Air Volume	Air Throw	Volume	Connections		Sound L _{WA} ±1dB(A)	Fans (values at 50Hz)					Energy Class EEF
	SC1	SC2					In	Out		Fan	Motor Voltage	Per Air Cooler			
	kW	kW	m ²	m ³ /h	m	dm ³	mm	mm	dB(A)	mm	230±10% V-1 50/60Hz	min ⁻¹	W	A	
KDC-351-2A	3,8	2,4	7,8	1.970	2x13	1,5	10x1.0	12x1.0	71	350	EC 230 V-1	1.085	78	0,73	C
KDC-351-4A	5,4	3,2	15,2	1.670	2x11	3,1	12x1.0	18x1.0	71	350	EC 230 V-1	1.085	78	0,73	B
KDC-351-6A	5,6	3,7	22,6	1.440	2x10	4,6	15x1.0	18x1.0	71	350	EC 230 V-1	1.085	78	0,73	A
KDC-351-SA	6,7	4,3	28,8	1.670	2x10	5,7	15x1.0	22x1.0	71	350	EC 230 V-1	1.085	78	0,73	A
KDC-352-2A	7,6	4,9	15,5	3.940	2x14	2,9	15x1.0	18x1.0	74	350	EC 230 V-1	1.085	156	1,46	C
KDC-352-4A	10,9	6,5	30,4	3.340	2x12	5,9	15x1.0	28x1.5	74	350	EC 230 V-1	1.085	156	1,46	B
KDC-352-6A	11,5	7,4	45,3	2.880	2x11	8,8	15x1.0	28x1.5	74	350	EC 230 V-1	1.085	156	1,46	A
KDC-352-SA	13,6	8,8	57,6	3.340	2x11	9,8	22x1.0	28x1.5	74	350	EC 230 V-1	1.085	156	1,46	A
KDC-353-2A	11,5	7,4	23,3	5.910	2x15	4,4	15x1.0	22x1.0	76	350	EC 230 V-1	1.085	233	2,19	C
KDC-353-4A	16,4	9,8	45,6	5.010	2x13	8,7	22x1.0	28x1.5	76	350	EC 230 V-1	1.085	233	2,19	B
KDC-353-6A	17,5	11,2	67,9	4.320	2x12	13,0	22x1.0	28x1.5	76	350	EC 230 V-1	1.085	233	2,19	A
KDC-353-SA	20,1	13,3	86,4	5.010	2x12	16,5	22x1.0	35x1.5	76	350	EC 230 V-1	1.085	233	2,19	A
KDC-354-2A	15,3	9,9	31,1	7.880	2x16	5,8	15x1.0	28x1.5	77	350	EC 230 V-1	1.085	311	2,92	C
KDC-354-4A	21,9	13,1	60,8	6.680	2x14	11,6	22x1.0	35x1.5	77	350	EC 230 V-1	1.085	311	2,92	B
KDC-354-6A	22,6	14,9	90,5	5.760	2x13	17,2	22x1.0	35x1.5	77	350	EC 230 V-1	1.085	311	2,92	A
KDC-355-2A	19,5	12,5	38,8	9.850	2x17	7,2	22x1.0	28x1.5	78	350	EC 230 V-1	1.085	389	3,65	C
KDC-355-4A	27,0	17,6	76,0	8.350	2x15	14,3	22x1.0	35x1.5	78	350	EC 230 V-1	1.085	389	3,65	B
KDC-355-6A	29,5	18,5	113,1	7.200	2x14	21,4	22x1.0	35x1.5	78	350	EC 230 V-1	1.085	389	3,65	A
KDC-356-2A	23,1	14,9	46,6	11.820	2x18	8,6	22x1.0	28x1.5	79	350	EC 230 V-1	1.085	467	4,38	C
KDC-356-4A	32,9	19,7	91,2	10.020	2x16	17,1	22x1.0	35x1.5	79	350	EC 230 V-1	1.085	467	4,38	B
KDC-356-6A	35,2	23,0	135,8	8.640	2x15	25,6	22x1.0	35x1.5	79	350	EC 230 V-1	1.085	467	4,38	A

Sound level S2

Model	Capacities Q _o at 50Hz, R404A		Surface	Air Volume	Air Throw	Volume	Connections		Sound L _{WA} ±1dB(A)	Fans (values at 50Hz)					Energy Class EEF
	SC1	SC2					In	Out		Fan	Motor Voltage	Per Air Cooler			
	kW	kW	m ²	m ³ /h	m	dm ³	mm	mm	dB(A)	mm	230±10% V-1 50/60Hz	min ⁻¹	W	A	
KDC-351-2A	3,1	1,9	7,8	1.360	2x9	1,5	10x1.0	12x1.0	64	350	EC 230 V-1	765	27	0,25	A
KDC-351-4A	3,9	2,6	15,2	1.150	2x8	3,1	12x1.0	18x1.0	64	350	EC 230 V-1	765	27	0,25	A+
KDC-351-6A	4,2	2,8	22,6	990	2x7	4,6	15x1.0	18x1.0	64	350	EC 230 V-1	765	27	0,25	A+
KDC-351-SA	5,0	3,3	28,8	1.150	2x7	5,7	15x1.0	22x1.0	64	350	EC 230 V-1	765	27	0,25	A+
KDC-352-2A	6,3	4,0	15,5	2.720	2x10	2,9	15x1.0	18x1.0	67	350	EC 230 V-1	765	54	0,50	A+
KDC-352-4A	7,9	5,2	30,4	2.300	2x9	5,9	15x1.0	28x1.5	67	350	EC 230 V-1	765	54	0,50	A+
KDC-352-6A	8,4	5,6	45,3	1.980	2x8	8,8	15x1.0	28x1.5	67	350	EC 230 V-1	765	54	0,50	A+
KDC-352-SA	10,1	6,7	57,6	2.300	2x8	9,8	22x1.0	28x1.6	67	350	EC 230 V-1	765	54	0,50	A+
KDC-353-2A	9,5	6,1	23,3	4.080	2x11	4,4	15x1.0	22x1.0	68	350	EC 230 V-1	765	81	0,75	A+
KDC-353-4A	11,9	7,8	45,6	3.450	2x10	8,7	22x1.0	28x1.5	68	350	EC 230 V-1	765	81	0,75	A+
KDC-353-6A	12,7	8,4	67,9	2.970	2x9	13,0	22x1.0	28x1.5	68	350	EC 230 V-1	765	81	0,75	A+
KDC-353-SA	15,2	10,0	86,4	3.450	2x9	16,5	22x1.0	35x1.5	68	350	EC 230 V-1	765	81	0,75	A+
KDC-354-2A	12,7	8,2	31,1	5.440	2x12	5,8	15x1.0	28x1.5	70	350	EC 230 V-1	765	108	1,00	A+
KDC-354-4A	15,9	10,4	60,8	4.600	2x11	11,6	22x1.0	35x1.5	70	350	EC 230 V-1	765	108	1,00	A+
KDC-354-6A	17,0	11,4	90,5	3.960	2x10	17,2	22x1.0	35x1.5	70	350	EC 230 V-1	765	108	1,00	A+
KDC-355-2A	15,7	9,2	38,8	6.800	2x13	7,2	22x1.0	28x1.5	71	350	EC 230 V-1	765	134	1,25	A
KDC-355-4A	21,0	12,9	76,0	5.750	2x12	14,3	22x1.0	35x1.5	71	350	EC 230 V-1	765	134	1,25	A+
KDC-355-6A	21,3	14,2	113,1	4.950	2x11	21,4	22x1.0	35x1.5	71	350	EC 230 V-1	765	134	1,25	A+
KDC-356-2A	19,0	12,3	46,6	8.160	2x14	8,6	22x1.0	28x1.5	72	350	EC 230 V-1	765	161	1,50	A+
KDC-356-4A	23,9	15,6	91,2	6.900	2x13	17,1	22x1.0	35x1.5	72	350	EC 230 V-1	765	161	1,50	A+
KDC-356-6A	25,4	16,9	135,8	5.940	2x12	25,6	22x1.0	35x1.5	72	350	EC 230 V-1	765	161	1,50	A+

Capacities	t ₁	t ₀	DT1	Injection via Venturi
SC1	10	0	10	Multiple Injection via CAL-Distributor on demand
SC2	0	-8	8	Air throw limit at 0.5 m/s
SC3	-18	-25	7	
SC4	-25	-31	6	

Changes subject to modification

TECHNICAL DATA

Kelvion KDC | Fin spacing 7 mm (B)

Sound level S1

Model	Capacities Q_0 at 50Hz, R404A				Surface m ²	Air Volume m ³ /h	Air Throw m	Volume dm ³	Connections		Sound L_{WA} ±1dB(A) dB(A) ±1	Fans (values at 50Hz)					Energy Class EEF
	SC1	SC2	SC3	SC4					In	Out		Fan mm	Motor Voltage 230±10% V-1 50/60Hz	Per Air Cooler			
	kW	kW	kW	kW					mm	mm				min ⁻¹	W	A	
KDC-351-2B	2,9	1,7	1,2	0,9	5,2	2.100	2x14	1,5	10x1.0	12x1.0	71	350	EC 230 V-1	1.085	78	0,73	D
KDC-351-4B	4,3	2,7	2,0	1,6	10,1	1.890	2x13	3,1	12x1.0	18x1.0	71	350	EC 230 V-1	1.085	78	0,73	B
KDC-351-6B	5,4	3,3	2,6	2,0	15,1	1.710	2x11	4,6	15x1.0	18x1.0	71	350	EC 230 V-1	1.085	78	0,73	B
KDC-351-SB	6,0	3,9	3,0	2,4	19,2	1.880	2x11	5,7	15x1.0	22x1.0	71	350	EC 230 V-1	1.085	78	0,73	A
KDC-352-2B	5,9	3,6	2,5	1,9	10,4	4.200	2x15	2,9	15x1.0	18x1.0	74	350	EC 230 V-1	1.085	156	1,46	D
KDC-352-4B	8,6	5,5	4,1	3,2	20,3	3.780	2x14	5,9	15x1.0	28x1.5	74	350	EC 230 V-1	1.085	156	1,46	B
KDC-352-6B	10,9	6,9	5,2	4,0	30,2	3.420	2x12	8,8	15x1.0	28x1.5	74	350	EC 230 V-1	1.085	156	1,46	B
KDC-352-SB	12,2	7,9	6,0	4,6	38,5	3.760	2x12	9,8	15x1.0	28x1.5	74	350	EC 230 V-1	1.085	156	1,46	A
KDC-353-2B	8,8	5,5	3,8	2,9	15,5	6.300	2x16	4,4	15x1.0	22x1.0	76	350	EC 230 V-1	1.085	233	2,19	D
KDC-353-4B	12,9	8,3	6,2	4,8	30,4	5.670	2x15	8,7	22x1.0	28x1.5	76	350	EC 230 V-1	1.085	233	2,19	B
KDC-353-6B	16,5	10,4	7,8	6,1	45,3	5.130	2x13	13,0	22x1.0	28x1.5	76	350	EC 230 V-1	1.085	233	2,19	B
KDC-353-SB	18,5	12,0	9,2	7,2	57,7	5.640	2x13	16,5	22x1.0	35x1.5	76	350	EC 230 V-1	1.085	233	2,19	A
KDC-354-2B	11,8	7,3	5,0	3,9	20,7	8.400	2x17	5,8	15x1.0	28x1.5	77	350	EC 230 V-1	1.085	311	2,92	D
KDC-354-4B	17,2	11,1	8,3	6,4	40,6	7.560	2x16	11,6	22x1.0	35x1.5	77	350	EC 230 V-1	1.085	311	2,92	B
KDC-354-6B	21,0	13,8	10,5	8,1	60,5	6.840	2x14	17,2	22x1.0	35x1.5	77	350	EC 230 V-1	1.085	311	2,92	B
KDC-355-2B	13,8	8,6	6,4	4,9	25,9	10.500	2x18	7,2	22x1.0	28x1.5	78	350	EC 230 V-1	1.085	389	3,65	D
KDC-355-4B	23,1	14,5	10,5	8,1	50,7	9.450	2x17	14,3	22x1.0	35x1.5	78	350	EC 230 V-1	1.085	389	3,65	B
KDC-355-6B	26,8	17,2	12,9	9,9	75,6	8.550	2x15	21,4	22x1.0	35x1.5	78	350	EC 230 V-1	1.085	389	3,65	B
KDC-356-2B	17,7	11,0	7,6	5,8	31,1	12.600	2x19	8,6	22x1.0	28x1.5	79	350	EC 230 V-1	1.085	467	4,38	D
KDC-356-4B	25,8	16,7	12,5	9,7	60,9	11.340	2x18	17,1	22x1.0	35x1.5	79	350	EC 230 V-1	1.085	467	4,38	B
KDC-356-6B	33,1	20,9	14,8	11,2	90,7	10.260	2x16	25,6	22x1.0	35x1.5	79	350	EC 230 V-1	1.085	467	4,38	B

Sound level S2

Model	Capacities Q_0 at 50Hz, R404A				Surface m ²	Air Volume m ³ /h	Air Throw m	Volume dm ³	Connections		Sound L_{WA} ±1dB(A) dB(A) ±1	Fans (values at 50Hz)					Energy Class EEF
	SC1	SC2	SC3	SC4					In	Out		Fan mm	Motor Voltage 230±10% V-1 50/60Hz	Per Air Cooler			
	kW	kW	kW	kW					mm	mm				min ⁻¹	W	A	
KDC-351-2B	2,3	1,4	1,0	0,8	5,2	1.460	2x10	1,5	10x1.0	12x1.0	64	350	EC 230 V-1	765	27	0,25	A
KDC-351-4B	3,4	2,2	1,7	1,3	10,1	1.300	2x9	3,1	12x1.0	18x1.0	64	350	EC 230 V-1	765	27	0,25	A+
KDC-351-6B	4,0	2,6	2,0	1,6	15,1	1.170	2x8	4,6	15x1.0	18x1.0	64	350	EC 230 V-1	765	27	0,25	A+
KDC-351-SB	4,7	3,0	2,4	1,9	19,2	1.300	2x8	5,7	15x1.0	22x1.0	64	350	EC 230 V-1	765	27	0,25	A+
KDC-352-2B	4,5	2,8	2,1	1,6	10,4	2.920	2x11	2,9	15x1.0	18x1.0	67	350	EC 230 V-1	765	54	0,50	A
KDC-352-4B	6,8	4,5	3,3	2,6	20,3	2.600	2x10	5,9	15x1.0	28x1.5	67	350	EC 230 V-1	765	54	0,50	A+
KDC-352-6B	8,1	5,3	4,1	3,3	30,2	2.340	2x9	8,8	15x1.0	28x1.5	67	350	EC 230 V-1	765	54	0,50	A+
KDC-352-SB	9,6	6,1	4,8	3,8	38,5	2.600	2x9	9,8	15x1.0	28x1.6	67	350	EC 230 V-1	765	54	0,50	A+
KDC-353-2B	6,8	4,3	3,2	2,5	15,5	4.380	2x12	4,4	15x1.0	22x1.0	68	350	EC 230 V-1	765	81	0,75	A
KDC-353-4B	10,3	6,7	5,1	4,0	30,4	3.900	2x11	8,7	22x1.0	28x1.5	68	350	EC 230 V-1	765	81	0,75	A+
KDC-353-6B	12,2	8,0	6,1	4,9	45,3	3.510	2x10	13,0	22x1.0	28x1.5	68	350	EC 230 V-1	765	81	0,75	A+
KDC-353-SB	14,4	9,2	7,2	5,7	57,7	3.900	2x10	16,5	22x1.0	35x1.5	68	350	EC 230 V-1	765	81	0,75	A+
KDC-354-2B	9,1	5,7	4,2	3,3	20,7	5.840	2x13	5,8	15x1.0	28x1.5	70	350	EC 230 V-1	765	108	1,00	A
KDC-354-4B	13,7	9,0	6,8	5,3	40,6	5.200	2x12	11,6	22x1.0	35x1.5	70	350	EC 230 V-1	765	108	1,00	A+
KDC-354-6B	16,3	10,7	8,3	6,6	60,5	4.680	2x11	17,2	22x1.0	35x1.5	70	350	EC 230 V-1	765	108	1,00	A+
KDC-355-2B	11,0	7,1	5,3	4,1	25,9	7.300	2x14	7,2	22x1.0	28x1.5	71	350	EC 230 V-1	765	134	1,25	A
KDC-355-4B	17,2	11,2	8,5	6,7	50,7	6.500	2x13	14,3	22x1.0	35x1.5	71	350	EC 230 V-1	765	134	1,25	A+
KDC-355-6B	20,4	13,5	10,3	8,1	75,6	5.850	2x12	21,4	22x1.0	35x1.5	71	350	EC 230 V-1	765	134	1,25	A+
KDC-356-2B	13,7	8,6	6,4	4,9	31,1	8.760	2x15	8,6	22x1.0	28x1.5	72	350	EC 230 V-1	765	161	1,50	A
KDC-356-4B	20,6	13,5	10,2	8,0	60,9	7.800	2x14	17,1	22x1.0	35x1.5	72	350	EC 230 V-1	765	161	1,50	A+
KDC-356-6B	24,4	16,1	12,1	9,4	90,7	7.020	2x13	25,6	22x1.0	35x1.5	72	350	EC 230 V-1	765	161	1,50	A+

DIMENSIONS, DEFROST, WEIGHTS

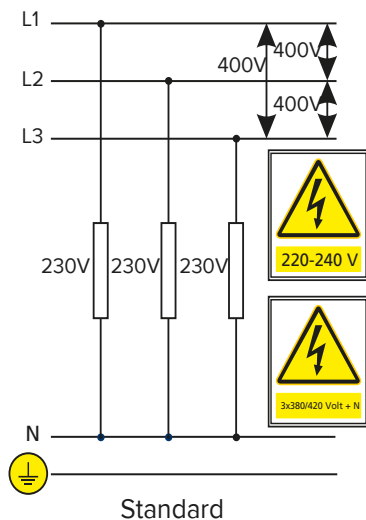
Kelvion KDC

Model	Dimensions							Electrical Defrost 230V-1 / 400V-3-Y			Weight (net)		Weight (net) with elec. defrost	
	B	T	H	L	E1	E2	E3	Standard Coil	Add. defrost (V4.06)* Drip tray	Standard + V4.06** Total	4.5 mm Fins (A)	7 mm Fins (B)	4.5 mm Fins (A)	7 mm Fins (B)
	mm	mm	mm	mm	mm	mm	mm	kW	kW	kW	kg	kg	kg	kg
KDC-351-2x	922	1003	266	930	580	-	-	1,1	0,3	1,4	40	39	42	41
KDC-351-4x	922	1003	266	930	580	-	-	2,2	0,3	2,5	43	42	46	45
KDC-351-6x	922	1003	266	930	580	-	-	2,2	0,3	2,5	48	46	51	49
KDC-351-Sx	1072	1004	268	930	730	-	-	2,8	0,3	3,1	52	50	55	53
KDC-352-2x	1472	1005	272	930	1130	-	-	1,9	0,5	2,4	51	51	54	53
KDC-352-4x	1472	1005	272	930	1130	-	-	3,8	0,5	4,3	59	59	63	62
KDC-352-6x	1472	1005	272	930	1130	-	-	3,8	0,5	4,3	67	66	71	70
KDC-352-Sx	1772	1006	274	930	1430	-	-	4,8	0,6	5,4	75	74	79	78
KDC-353-2x	2022	1007	278	930	1680	580	-	2,8	0,7	3,5	56	55	59	58
KDC-353-4x	2022	1007	278	930	1680	580	-	5,5	0,7	6,2	69	67	74	72
KDC-353-6x	2022	1007	278	930	1680	580	-	5,5	0,7	6,2	80	78	85	83
KDC-353-Sx	2472	1008	280	930	2130	730	-	6,9	0,9	7,8	92	89	97	95
KDC-354-2x	2572	1010	284	930	2230	1129	-	3,6	0,9	4,5	78	77	82	81
KDC-354-4x	2572	1010	284	930	2230	1129	-	7,2	0,9	8,1	94	90	100	96
KDC-354-6x	2572	1010	284	930	2230	1129	-	7,2	0,9	8,1	110	108	116	114
KDC-355-2x	3122	1013	290	930	2780	1129	1680	4,5	1,1	5,6	100	99	104	103
KDC-355-4x	3122	1013	290	930	2780	1129	1680	8,9	1,1	10,0	119	115	125	121
KDC-355-6x	3122	1013	290	930	2780	1129	1680	8,9	1,1	10,0	140	138	146	144
KDC-356-2x	3672	1016	296	930	3330	1129	2230	5,3	1,3	6,6	125	124	130	129
KDC-356-4x	3672	1016	296	930	3330	1129	2230	10,6	1,3	11,9	149	147	158	156
KDC-356-6x	3672	1016	296	930	3330	1129	2230	10,6	1,3	11,9	172	169	181	178

*V4.06: Additional defrost in drip tray is required for lower air inlet temperature into the air cooler than -18°C t₁ operation

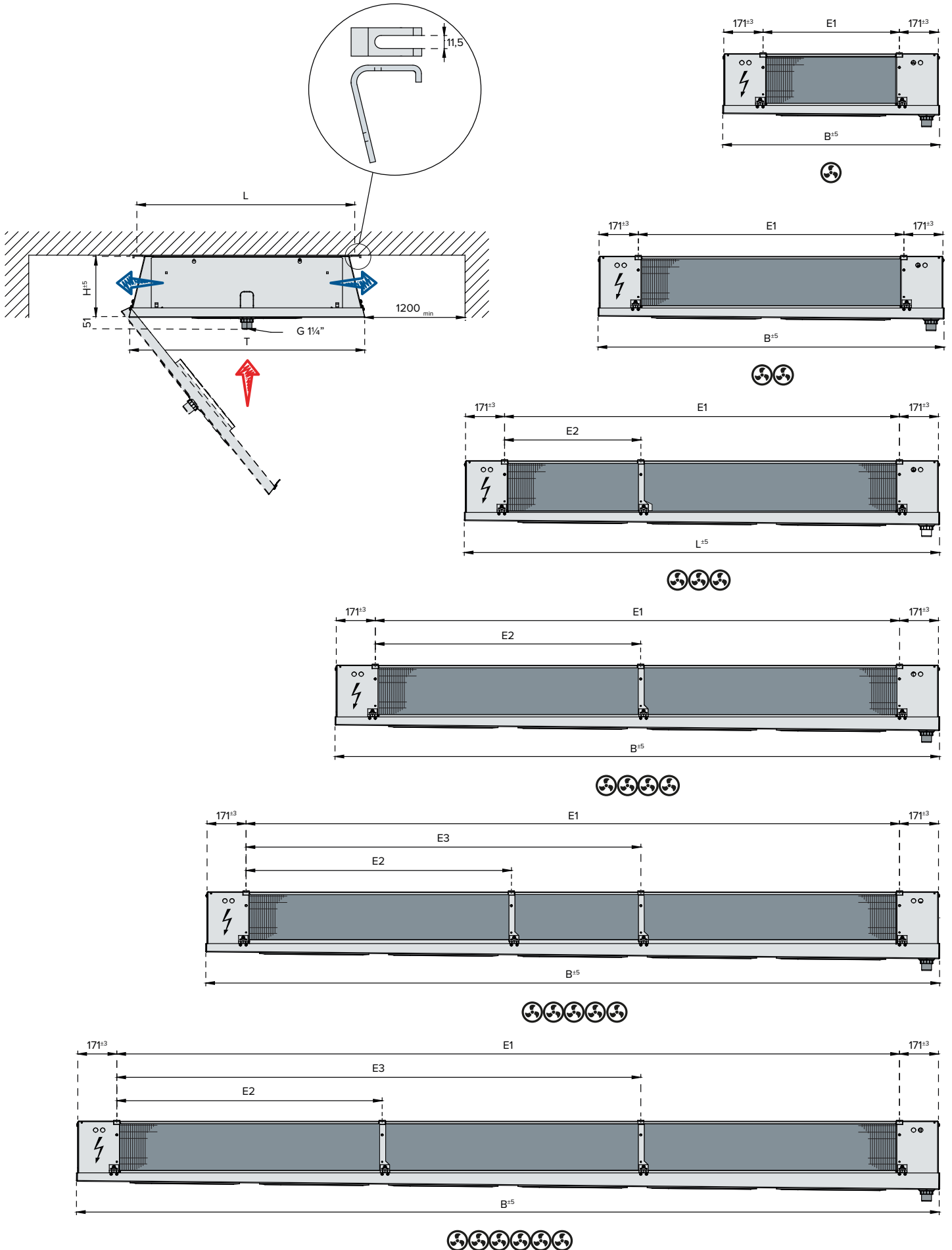
**When using V4.06 the electric drip tray defrost is added to the total Electrical Output

Electrical Connection at 1x230V and 3x400V



DRAWINGS

Kelvion KDC





Kelvion KDC

VARIANTS

FAN VARIANTS

V 1.52 VARIABLE SPEED 0-10V EC FAN

CASING VARIANTS

V 3.08 TOP PLATE COVER

To prevent dust and dirt accumulation

V 3.09 DOUBLE-WALLED, INSULATED DRIP TRAY

Prevents condensed water from forming on the bottom side of the tray, and it reduces the transfer of defrost heat into the cold rooms.

CONSTRUCTION VARIANTS

V 2.05 & V 2.06 WATER / BRINE CIRCULATION

Small and large pressure drop, 16 bar max pressure

V 4.06 ELECTRICAL DEFROST IN TRAY:

Necessary for units operating below -18°C air temperatures

V 6.22 MULTIPLE INJECTION WITH CAL-DISTRIBUTOR

PROTECTION AGAINST CORROSION

V 6.01 CORROSION PROTECTION 1

Tubing: Copper

Fins: Aluminum, epoxy-resin-coated

End plates: Aluminum protective coating

Casing: Aluminum/zinc coated steel, protective coating on both sides

V 6.04 CORROSION PROTECTION 4

Tubing: Copper

Fins: Aluminum, epoxy-resin-coated

End plates: Aluminum

Casing: Aluminum/zinc coated steel, protective coating on one side

CO₂ VARIANTS

V 7.45 CO₂-DIRECT EXPANSION

up to 45 bar operating pressure

V 7.90 CO₂-DIRECT EXPANSION

up to 90 bar operating pressure

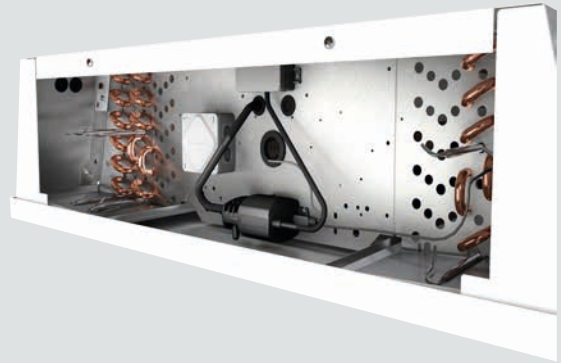
ACCESSORIES

CONDENSATE PUMP MINI & MEGA BLUE

Powerful, energy-efficient, silent and reliable drainage of condensate from the main condensate tray into upstream drainage pipework located higher up in the system.

Installation of a condensate pump **in the Connection Area** makes an Operator's Life a whole lot easier:

- ▶ Gives access for cleaning or maintenance
- ▶ Drip tray can be hinged, without removal of the pump parts



Mini pumps, huge benefits

- ▶ Condensation pipe can be installed in the false ceiling
- ▶ No danger that the pipe will be damaged by transport activities
- ▶ The hinged drip tray makes thorough cleaning and servicing of the heat exchanger and the fan easy, without dismantling
- ▶ Rotary diaphragm technology: Ensures pumping off even suspended solids in the condensate
- ▶ Maintenance free sensing technology (temperature sensor and drain stick). Delivers silent running and a longer pump life

MINI BLUE

Fits into the smallest of places.

- ▶ Applicable for Medium Temperature Cooling
- ▶ Evaporating and Air Inlet temperature $>0^{\circ}\text{C}$
(No frost formation on the fins)
- ▶ Incl. Temperature Sensors
- ▶ Simultaneous operation of air cooler and pump

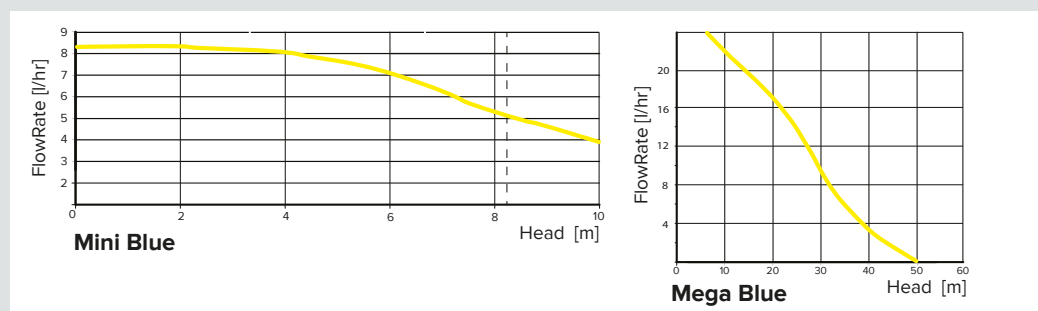
MEGA BLUE

Need more performance? Working at lower temperatures? The MEGA BLUE pump gives you the extra power when you need it.

- ▶ Applicable for Lower Temperature Cooling
- ▶ Evaporating temperature $<0^{\circ}\text{C}$ and Air Inlet temperature $>0^{\circ}\text{C}$ (incl. defrosting cycles)
- ▶ Scope of supply incl. DrainStik (electronic sensor), self priming

Condensate pump performance

Pump type	Application Air inlet $^{\circ}\text{C}$	Application evap. temp $^{\circ}\text{C}$	Max flow l/h	Max head m	Max suction lift m
MiniBlue	>0	>0	8	8	5
MegaBlue	>0	<0	50	20	7



ACCESSORIES

ELECTRICAL AIR HEATER

For air coolers with blow-through fans, for installation on site. Suitable for conditioning the air in the room or as heating in winter. For optimum heat transfer, the heating elements are mounted in copper tube sleeves.

- ▶ Complete powder coated (RAL 9010)
- ▶ 230 ± 10% V-1~ or 400 ± 10% V-3~ -Y
- ▶ Shell heating element from CrNi-steel
- ▶ Connections vapor-tight
- ▶ Casing: Steel-sendzimir
- ▶ Fins: aluminium
- ▶ Tube sleeves: Cu



Selection table & technical data:

Model	Description	Number	Dimensions		Connection value each heater		Connection value each air cooler	
					Current	Nominal power	Current	Nominal power
					A	kW	A	kW
KDC 351-x	KDHR 550	2	210	550	3,7	0,85	7,4	1,7
KDC 351-S	KDHR 700	2	210	700	5,0	1,15	10,0	2,3
KDC 352-x	KDHR 1100	2	210	1100	7,7	1,75	14,4	3,5
KDC 352-S	KDHR 1400	2	210	1400	9,3	2,15	18,6	4,3
KDC 353-x	KDHR 1650	2	210	1650	11,3	2,60	22,6	5,2
KDC 353-S	KDHR 2100	2	210	2100	17,1	3,95	34,2	7,9
KDC 354-x	KDHR 2200	2	210	2200	15,0	3,45	30,0	6,9
KDC 355-x	KDHR 2750	2	210	2750	18,1	4,15	36,2	8,3
KDC 356-x	KDHR 3300	2	210	3000	27,4	6,30	54,8	12,6

