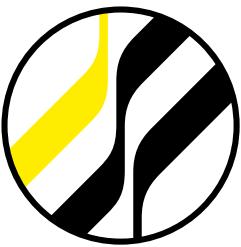


Kelvion

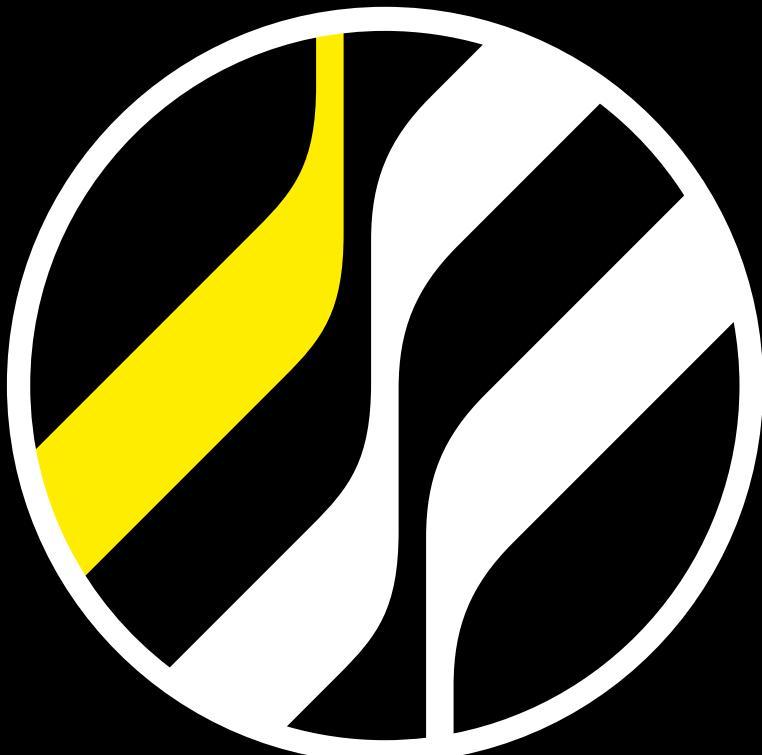


Commercial Air Coolers

Kelvion KDC

BEST CONDITIONS FOR WORKING ROOMS





EXPERTS IN HEAT EXCHANGE – SINCE 1920

Welcome to Kelvion! Where Heat Exchange is our Business. We are one of the leading global manufacturers of heat exchangers and have been providing solutions for almost every industrial application imaginable since the 1920s, specializing in customized solutions suitable for extreme environmental conditions - as of 2015 under the name of Kelvion.

With one of the most extensive selections of heat exchangers in the world, we are a well-known partner in many industries, including transportation, energy, oil and gas, the heavy industry, chemical and marine as well as sugar, food and beverage and the HVAC and refrigeration technology sector. Our products include Compact Fin Heat Exchangers, Plate Heat Exchangers, Single Tube Heat Exchangers, Transformer Cooling Systems, Cooling Towers and Shell & Tube Heat Exchangers.

Our many years of experience and in-depth expertise have made us specialists in this field. Our heat exchangers are designed specifically to meet the needs of the respective machine or equipment system, ensuring outstanding energy efficiency and reliability in any market segment. This gives our customers a cutting-edge over their competitors while also reducing operating costs over the long term.

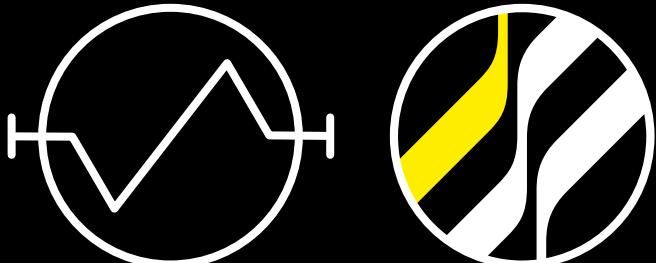
As your heat exchange partner, we understand that outstanding and reliable after-sales services are critical for you, our customer, and we work alongside with you in close partnership supporting you throughout the full life cycle of your plant and equipment to ensure lasting business success.

KELVION – A TRIBUTE TO LORD KELVIN (1824 - 1907)

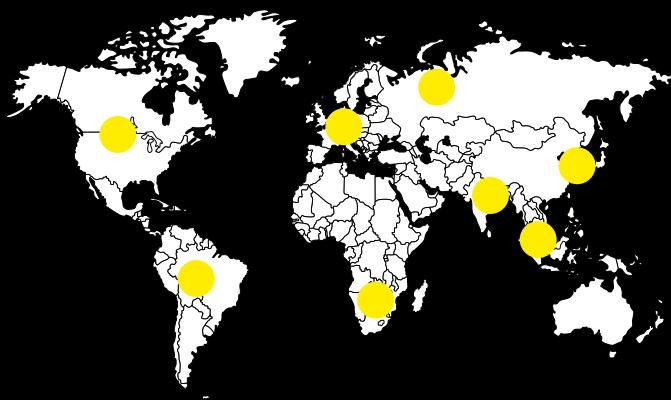


Lord Kelvin formulated the laws of thermodynamics and absolute units of temperature are stated in kelvin, in his honor.

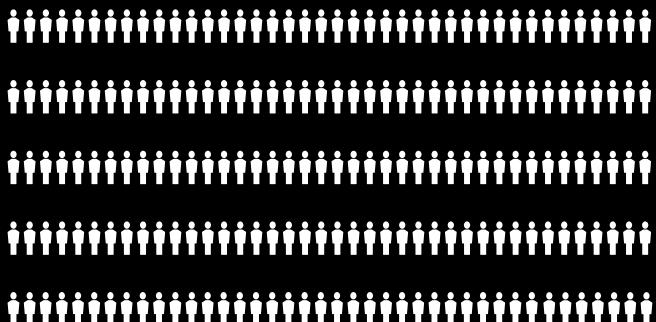
OUR LOGO – INSPIRED FROM THE SCHEMATIC FOR HEAT EXCHANGER



67 BRANCHES AND SALES PARTNERS WORLDWIDE



5,000 EMPLOYEES WORLDWIDE



YOUR MARKETS ARE OUR MARKETS



Chemicals



Data Center



Food & Beverage



HVAC



Refrigeration



Marine



Oil & Gas



Power



Transportation



... and more

KELVION HAS A LONG HISTORY





Kelvion KDC

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

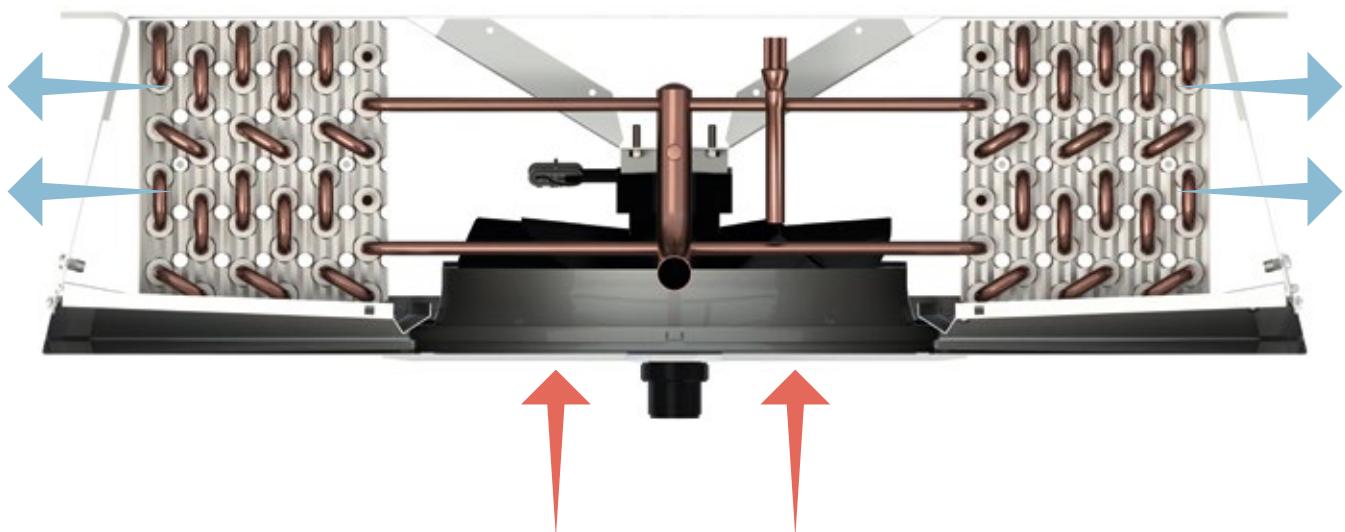
The technical cooling demands and spatial conditions are only one aspect. Safety and health are top priority as soon as people need to work in cold rooms.

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 Kelvion KDC guides the air towards the ceiling where the Coanda effect carries it far into the room. The Kelvion 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.



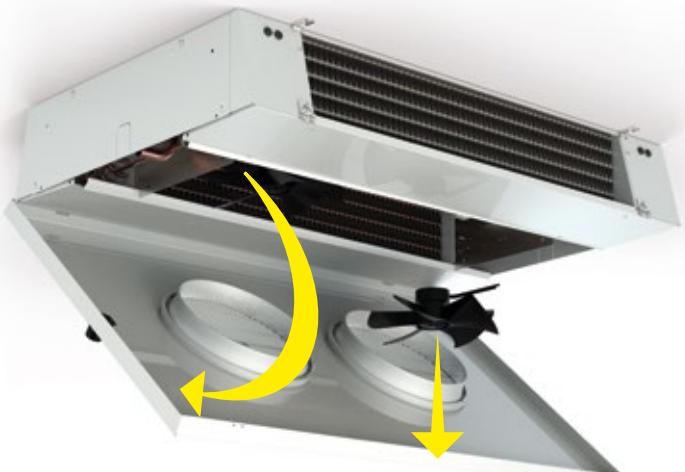
EASY INSTALLATION AND MAINTENANCE

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, Ø 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

- ▶ 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
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)	Fan	Fans (values at 50Hz)			Energy Class	
	SC1	SC2					In	Out			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	EEF
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)	Fan	Fans (values at 50Hz)			Energy Class	
	SC1	SC2					In	Out			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	EEF
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_{i1}	t_b	DT1	Injection via Venturi	Changes subject to modification
SC1	10	0	10		
SC2	0	-8	8	Multiple Injection via CAL-Distributor on demand	
SC3	-18	-25	7		
SC4	-25	-31	6	Air throw limit at 0.5 m/s	

TECHNICAL DATA

Kelvion KDC | Fin spacing 7 mm (B)

Sound level S1

Model	Capacities Q _o at 50Hz, R404A					Surface	Air Volume	Air Throw	Volume	Connections		Sound	Fans (values at 50Hz)					Energy Class
	SC1	SC2	SC3	SC4						In	Out		L _{WA} ±1dB(A)	Fan	Motor Voltage		Per Air Cooler	
	kW	kW	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	EEF	
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 _o at 50Hz, R404A					Surface	Air Volume	Air Throw	Volume	Connections		Sound	Fans (values at 50Hz)					Energy Class
	SC1	SC2	SC3	SC4						In	Out		L _{WA} ±1dB(A)	Fan	Motor Voltage		Per Air Cooler	
	kW	kW	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	EEF	
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

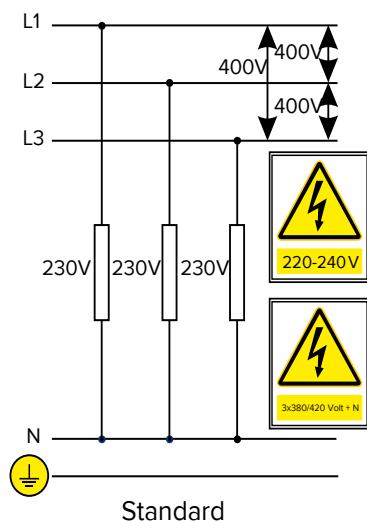
Kelvion KDC

Model	Dimensions							Electrical Defrost 230V-1 / 400V-3-Y				Weight (net)		Weight (net) with elec. defrost	
	B	T	H	L	E1	E2	E3	Standard	Add. defrost (V4.06)*	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	kW	kW	kW	kg	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 t_{Li} operation

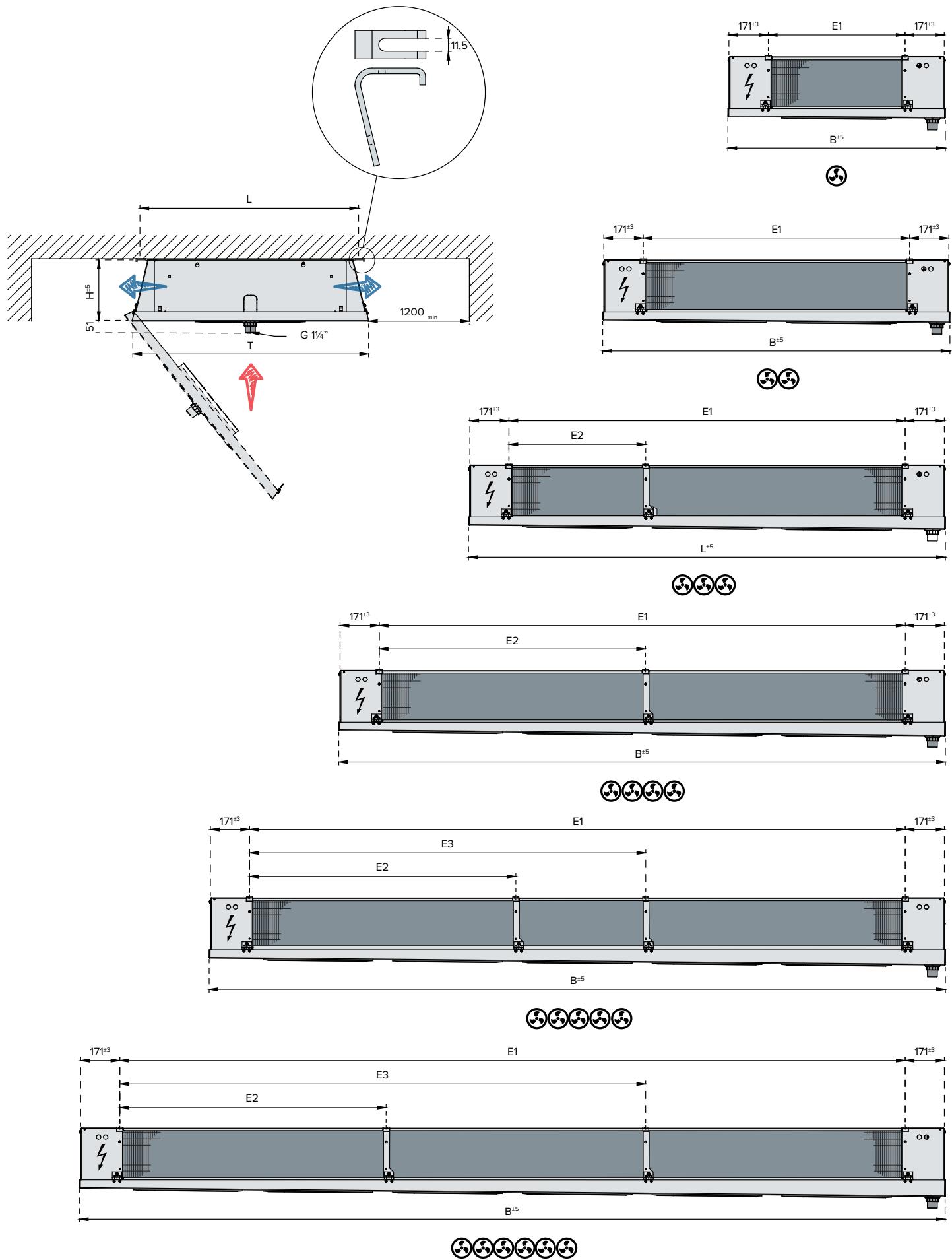
**When using V4.06 the electric drip tray defrost is added to the total Electrical Output

Electrical Connection at 1x230V and 3x400V

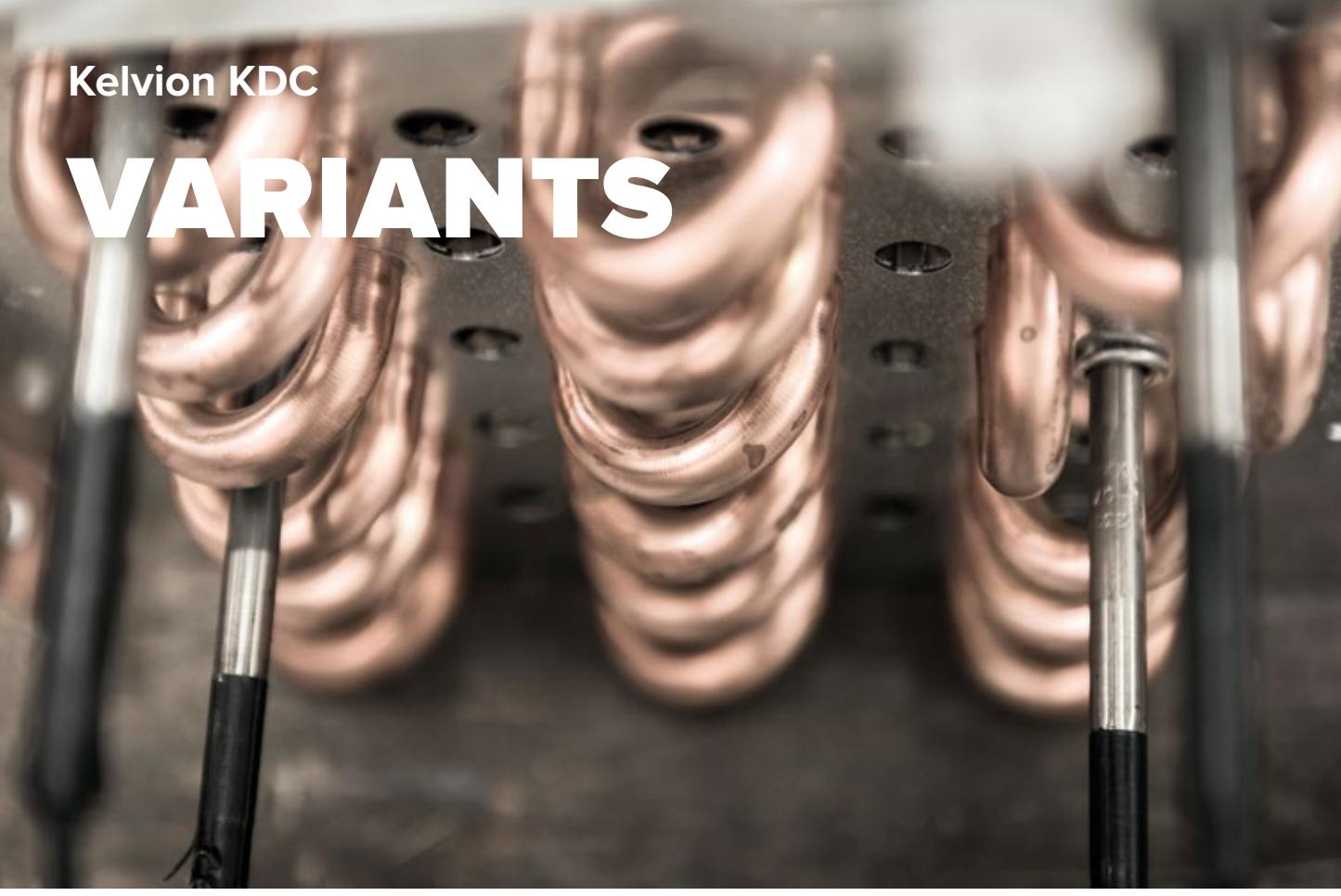


DRAWINGS

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 / 053.3 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

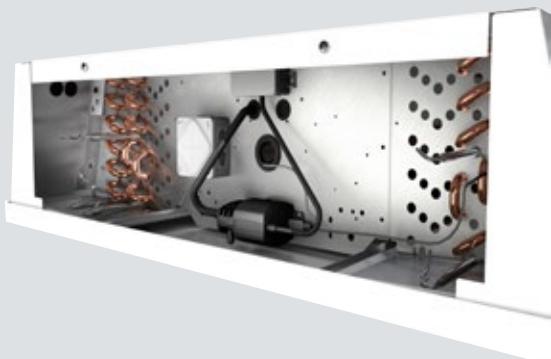
ACCESSORIES

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

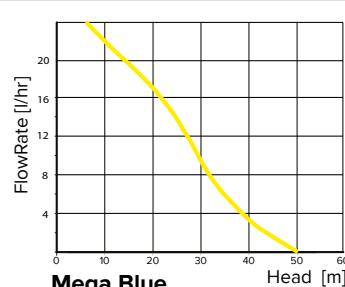
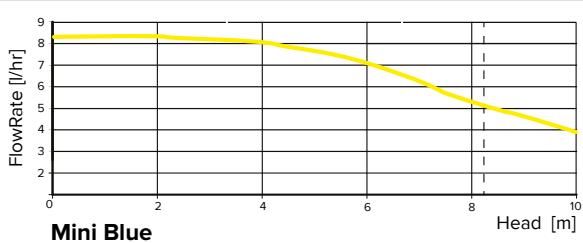
Need more performance? Working at lower temperatures?

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 °C	Application evap. temp °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

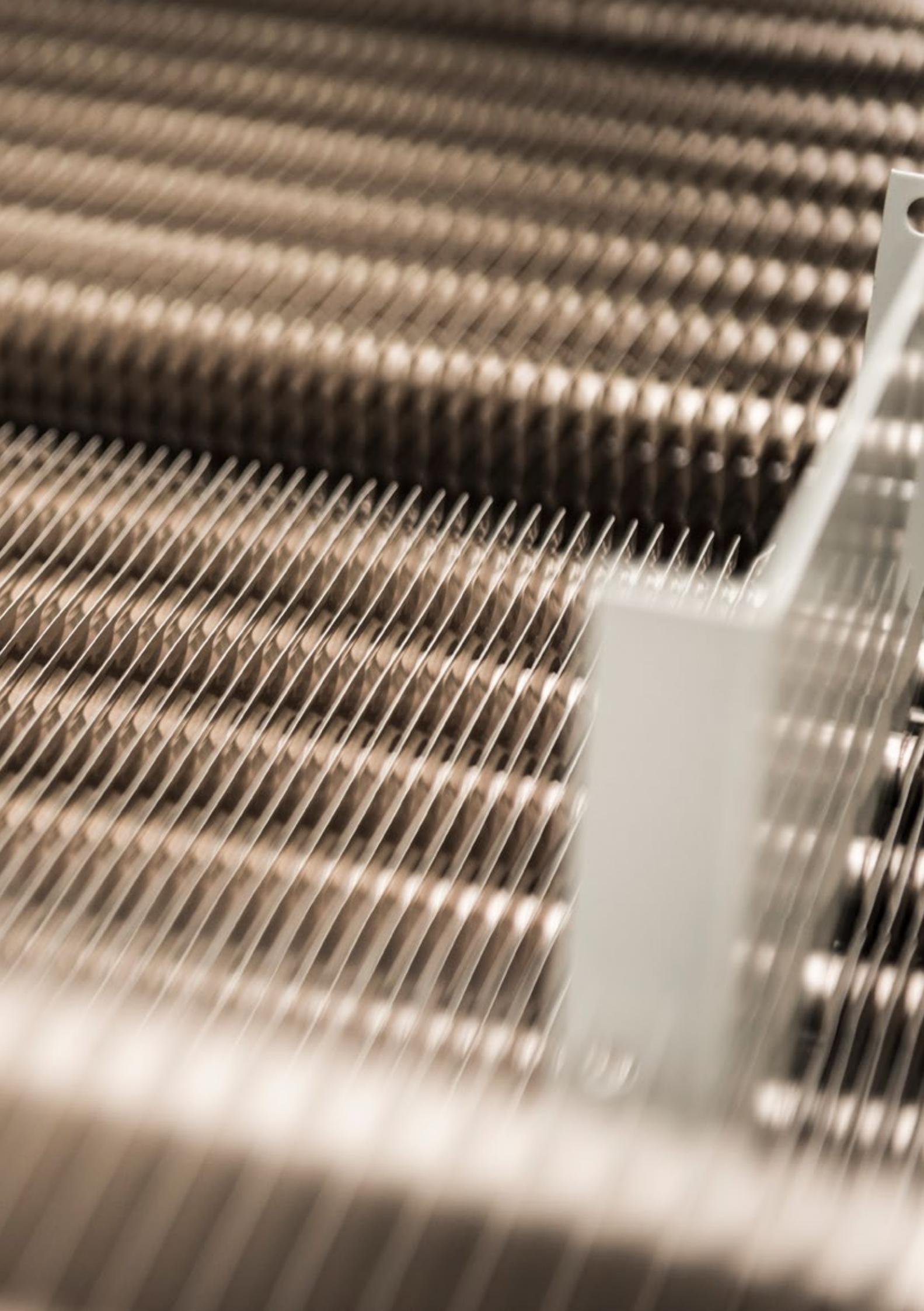
For air coolers with blow-through fans, for installation on site. Suitable for conditioning the air in the room or as heating in winter. For optimum heat transfer, the heating elements are mounted in copper tube sleeves.

- ▶ Complete powder coated (RAL 9010)
- ▶ $400 \pm 10\%$ 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	
			H	L	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	22,0	5,10	44,0	10,2



www.kelvion.com