

TECHNICAL DATA

Performance category	E-Series 1					E-Series 2					E-Series 3				
Device length [cm]	100	150	200	250	300	100	150	200	250	300	100	150	200	250	300
Performance data *															
Max. recommended installation height [m]	2.90					3.40					4.40				
Max. nominal flow rate [m³/h]	2,100	3,150	4,200	5,250	6,300	2,100	4,200	5,250	6,300	7,450	3,800	5,800	8,500	11,600	14,500
Max. actual flow rate [m³/h]	1,500	2,400	3,200	4,000	4,800	1,600	3,050	3,800	4,550	5,300	2,700	4,300	6,500	8,600	11,000
Average air discharge speed [m/s]	14.2					15.6					19.3				
Sound pressure level at a distance of 3 metres to the sound source (half space)															
Max. operating level dB(A)	57.0	59.0	61.0	63.0	64.0	58.4	60.4	62.4	64.4	66.4	60.0	62.0	63.0	64.0	65.0
Average operating level dB(A)	46.6	48.6	50.6	52.6	53.6	49.1	51.1	53.1	55.1	57.1	56.4	58.4	59.4	60.4	61.4
Min. operating level dB(A)	21.3	23.3	25.3	27.3	28.3	24.1	26.1	28.1	30.1	32.1	28.0	30.0	31.0	32.0	33.0
Sound power level *															
Max. operating level dB(A)	74.5	76.5	78.5	80.5	81.5	75.9	77.9	79.9	81.9	83.9	77.5	79.5	80.5	81.5	82.5
Average operating level dB(A)	64.1	66.1	68.1	70.1	71.1	66.6	68.6	70.6	72.6	74.6	73.9	75.9	76.9	77.9	78.9
Min. operating level dB(A)	38.8	40.8	42.8	44.8	45.8	41.6	43.6	45.6	47.6	49.6	45.5	47.5	48.5	49.5	50.5
Weights															
Model S [kg]	45	68	80	95	110	50	75	100	120	145	100	135	170	200	230
Model U/UDB [kg]	50	72	86	102	130	56	84	110	130	158	125	160	200	230	250
Model Z [kg]	52	75	90	108	135	60	90	115	150	176	132	167	208	238	260
Model R [kg]	48	70	83	98	120	53	80	105	125	152	117	148	185	215	240
Electrical data 230 V															
AC technology															
Performance [kW]	0.46	0.69	0.93	1.15	1.38	0.46	0.92	1.15	1.38	1.61	0.86	1.12	1.69	2.25	2.81
Power consumption [A]	2.00	3.00	4.03	5.00	6.00	2.00	4.00	5.00	6.00	7.00	3.76	4.88	7.33	9.77	12.21
EC technology															
Performance [kW]	0.34	0.51	0.68	0.85	1.01	0.34	0.68	0.85	1.01	1.18	0.69	1.38	2.07	2.76	3.45
Power consumption [A]	2.40	3.60	4.80	6.00	7.20	2.40	4.80	6.00	7.20	8.40	3.10	6.20	9.30	12.40	15.50
Technical data heater battery															
LTHW 70/50 at an air intake temperature of 20 °C and air discharge temperature of 35 °C (installation form air roll rotating inwards)															
Heat output [kW]	8.2	13.2	17.6	21.9	26.3	8.8	16.7	20.8	25.0	29.1	14.8	23.6	35.7	47.2	60.3
Flow rate [m³/h]	0.35	0.57	0.75	0.94	1.13	0.38	0.72	0.90	1.07	1.25	0.64	1.01	1.53	2.03	2.59
Water resistance [kPa]	0.73	0.90	0.92	0.92	0.92	1.95	2.75	1.80	1.76	1.83	1.62	2.11	2.22	3.12	2.91
LTHW 70/50 at an air intake temperature of 15 °C and air discharge temperature of 35 °C (installation form air roll rotating outwards)															
Heat output [kW]	11.0	17.6	23.4	29.3	35.1	11.7	22.3	27.8	33.3	38.8	19.7	31.4	47.5	62.9	80.4
Flow rate [m³/h]	0.47	0.75	1.01	1.26	1.51	0.50	0.96	1.19	1.43	1.67	0.85	1.35	2.04	2.70	3.46
Water resistance [kPa]	0.79	1.58	1.69	1.76	1.80	6.80	9.70	6.55	6.82	6.98	4.51	6.28	6.64	10.42	8.06
LTHW 70/50 at an air intake temperature of 5 °C and air discharge temperature of 32 °C (installation form air roll rotating outwards)															
Heat output [kW]	14.8	23.7	31.6	39.5	47.4	15.8	30.1	37.5	44.9	52.3	26.7	42.5	64.2	84.9	108.6
Flow rate [m³/h]	0.64	1.02	1.36	1.70	2.04	0.68	1.29	1.61	1.93	2.25	1.15	1.83	2.76	3.65	4.67
Water resistance [kPa]	0.79	2.45	2.62	2.70	2.77	10.13	14.40	9.76	10.12	10.35	6.75	9.35	9.89	15.37	12.00
LTHW 60/40 at an air intake temperature of 20 °C and air discharge temperature of 32 °C (installation form air roll rotating inwards)															
Heat output [kW]	5.3**	9.5	13.3	17.6	21.1	7.0	13.4	16.7	20.0	23.3	11.8	18.9	28.5	37.7	48.3
Flow rate [m³/h]	0.20	0.40	0.60	0.75	0.91	0.30	0.58	0.72	0.86	1.00	0.51	0.81	1.23	1.62	2.08
Water resistance [kPa]	0.42	0.57	0.63	0.62	0.61	1.38	1.98	1.35	1.26	1.24	1.19	1.51	1.59	2.22	1.94
LTHW 60/40 at an air intake temperature of 20 °C and max. air discharge temperature (installation form air roll rotating inwards)															
Heat output [kW]	5.3	9.5	13.3	17.5	21.0	10.5	19.9	25.5	31.5	37.6	15.4	26.2	38.9	57.8	65.3
Air discharge temperature [°C]	30.4	32.0	32.0	32.5	32.8	39.3	39.0	39.6	40.0	40.7	36.7	37.8	37.5	40.0	37.4
Flow rate [m³/h]	0.20	0.40	0.60	0.70	0.90	0.50	0.90	1.10	1.40	1.60	0.70	1.10	1.70	2.50	2.80
Water resistance [kPa]	0.42	0.57	0.63	0.67	0.69	3.01	4.35	2.93	3.08	3.17	1.90	2.80	2.96	4.83	3.61
LTHW 50/35 at an air intake temperature of 20 °C and max. air discharge temperature (installation form air roll rotating inwards)															
Heat output [kW]	0.7	6.7	9.5	12.3	15.0	7.8	14.6	18.7	23.4	27.7	11.3	19.3	28.7	42.8	48.2
Air discharge temperature [°C]	27.2	28.2	28.7	29.0	29.2	34.0	34.0	34.4	35.0	35.3	32.2	33.0	33.0	35.0	32.8
Flow rate [m³/h]	0.20	0.40	0.60	0.70	0.90	0.40	0.80	1.10	1.30	1.60	0.70	1.10	1.70	2.50	2.80
Water resistance [kPa]	0.28	0.54	0.60	0.63	0.66	2.90	4.35	2.91	3.07	3.77	1.90	2.78	2.95	4.86	3.61
Pipe connections															
Flow/return flow [inches]	¾	¾	¾	¾	¾	¾	¾	¾	¾	¾	¾	¾	¾	¾	¾
Electrical heater battery (three-stage. 400 V; 3 Ph. 50 Hz)															
Stage 1/2/3 [kW]	3/6/9	4.5/9/13	6/12/18	6/18/24	9/18/27	3/9/12	6/12/18	6/18/24	12/18/30	12/24/36	6/12/18	9/18/27	12/24/36	12/24/36	12/24/36
dt. max. [K]	17	15	16	17	16	21	17	18	18	19	19	18	16	12	10

* Data details are based on measurements in accordance with ISO 27327 by the Institute of Air Handling and Refrigeration (ILK) in Dresden

** the max. air discharge temperature is about 30°C

Subject to technical change.



Design

CNC manufactured sheet steel housing in modern design, powder coated in RAL 9016 (traffic white) or in a colour of choice.

Effective air conveyance by means of the **CONVERGO®** pressure chamber nozzle system, which generates a concentrated, low induction air flow across the entire air discharge width.

Energy savings of more than 40 % are possible compared to conventional lamella devices and even more than 80 % compared to entrances with no protection!

The screening efficiency is significantly boosted by the ability to move the nozzle and therefore the air discharge direction. Manufactured in accordance with DIN EN ISO 9001:2008.

Servicing

Inspection flap on the underside of the device, with hinges on one side, opened with quick release fasteners. Filter cassettes (Grade G2) with aluminium frame, easily removable via a separate flap, ensure a constantly high level of heat transfer and durability of the device.

Fans

Vibration-free mounted, double-sided air intake radial flow fans with 230 V/50 Hz AC motors, directly driven, multiple blades, quiet operation with high outlet pressure. Full motor protection via external thermal contacts. Actuation using a 5-stage transformer installed in the device as standard.

Optionally available with extremely efficient EC fans for maximum air output and minimum energy consumption.

Mounting

Simple mounting of the device by means of M 10 internal thread on the top of the housing and optional mounting material.

Water-heated model

Heat exchanger made of Cu/Al for hot water pumps, steel accumulator, connections with internal thread 3/4", secured to prevent twisting.

Electrically heated model

Electrical heater battery with resistant heating elements, corrosion-resistant with spiral lamella and thermal overheating protection.

Controller

A range of 5 different electronic controllers and extensive accessories for heat control are available to facilitate individual control comfort.

Order key for the E-Series

E = article

1 = Range (power setting)

2 = Range (power setting)

3 = Range (power setting)

S = Visible device

U = Visible device or Flush-mounted ceiling device

UDB = Flush-mounted ceiling device

Z = Flush-mounted ceiling device

R = Visible device with air intake at the backside

100, 150, 200, 250, 300 = overall width in cm

N = Hot water pump 70/50 °C

NT = Hot water pump 60/40 °C

E = Electrical heater battery

9016 = in RAL 9016. Other colours possible

E 1-S-100 N 9016 = Example