

VBR 60-30-4 Water heating batt

Item Number: 5474

Water-heating battery

Water-heating battery for heating air in ventilation systems with rectangular ducts. Hot-zinc-coated casing, heat transmission element with copper tubes and aluminium fins. In cold conditions, a frost protection device with sensor should be fitted to reduce the risk of damage from freezing. The water-heating battery can be installed in a horizontal or vertical duct with an optional direction.



Technical parameters

Normal data

Maximum operating temperature	150 °C
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Dimensions and weights

Rectangular, height, inlet	300 x 600 mm
Rectangular, width, inlet	300 x 600 mm
Rectangular, height, outlet	300 x 600 mm
Rectangular, width, outlet	300 x 600 mm
Weight	10.4 kg

Others

Duct cooler/heater	Heater coil, water
Maximum operating pressure at water temperature 100 °C	1,600,000 Pa
Maximum operating pressure at water temperature 150 °C	1,000,000 Pa
Duct connection type	Rectangular

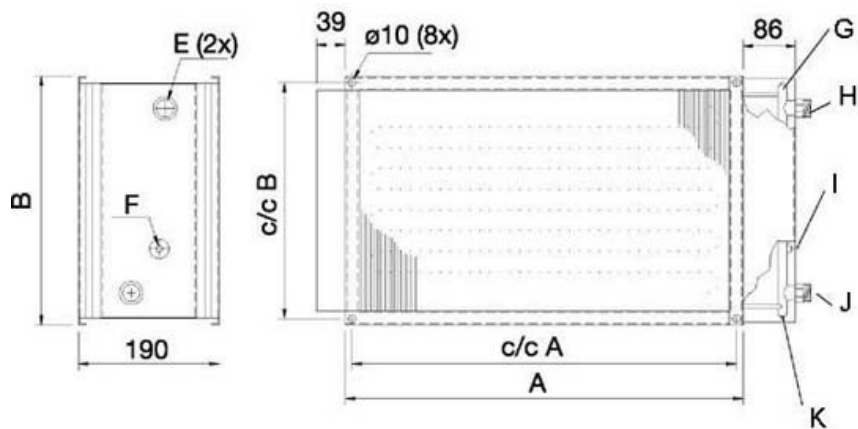
Calculation result	
Air flow	720 m³/h
Air velocity	1.11 m/s
Inlet air temperature	21.0 °C
Outlet air temperature	48.2 °C
Inlet air humidity	40 % r.H
Outlet air humidity	9 % r.H
Air pressure drop	17 Pa
Inlet water temperature	55 °C
Outlet water temperature	47 °C
Water flow	0.199 l/s
Water velocity	0.45 m/s
Water pressure drop	2.7 kPa
Power	6.6 kW
Rec. Kv value	4.36
Connection size in	R 1"
Connection size out	R 1"

Performances

V B R	Water temp. (in/out)	Air				Water	
		Flow (m ³ /h)	Pressure drop (Pa)	Δ T	Capacity (kW)	Flow (l/s)	Pressure drop (kPa)
40-20-2	60/40°C	400	9	18.5	2.7	0.03	0.5
		1000	48	12.7	4.6	0.06	1
40-20-4		400	18	29.5	4.3	0.05	0.5
		1000	96	19.5	7.1	0.09	0.5
40-20-2	80/60°C	400	9	32.8	4.7	0.06	1
		1000	48	24.5	8.9	0.11	2
40-20-4		400	18	46.3	6.7	0.08	0.5
		1000	96	38.9	14.0	0.17	1
50-25-2	60/40°C	600	8	21.7	4.7	0.06	1
		1200	29	18.2	7.9	0.10	2
50-25-4		600	16	33.1	7.2	0.09	0.5
		1200	59	28.4	12.3	0.15	1
50-25-2	80/60°C	600	8	36.5	7.9	0.10	2
		1200	29	28.6	12.4	0.15	4
50-25-4		600	16	54.5	11.8	0.14	1
		1200	59	45.9	19.9	0.24	3
50-30-2	60/40°C	800	10	18.2	5.3	0.06	0.5
		2000	54	13.5	9.8	0.12	1
50-30-4		800	20	32.5	9.4	0.11	1
		2000	109	27.2	19.7	0.24	2
50-30-2	80/60°C	800	10	33.6	9.7	0.12	1
		2000	54	24.3	17.5	0.21	2
50-30-4		800	20	53.8	15.5	0.19	1
		2000	109	41.7	30.1	0.37	4
60-30-2	60/40°C	1000	11	19.2	6.9	0.08	1
		2500	58	15.4	13.9	0.17	2
60-30-4		1000	22	34.1	12.3	0.15	1
		2500	117	28.2	25.5	0.31	4
60-30-2	80/60°C	1000	11	34.3	12.4	0.15	1
		2500	58	24.4	22.1	0.27	4
60-30-4		1000	22	53.9	19.5	0.24	2
		2500	117	41.8	37.8	0.46	7
60-35-2	60/40°C	1200	11	18.7	8.1	0.10	0.5
		3000	61	15.0	16.3	0.20	2
60-35-4		1200	23	34.2	14.8	0.18	1
		3000	123	28.1	30.4	0.37	4

60-35-2	80/60°C	1200	11	33.9	14.7	0.18	1
		3000	61	24.1	26.1	0.32	3
60-35-4		1200	23	53.6	23.2	0.28	3
		3000	123	41.5	45.0	0.55	8
70-40-2	60/40°C	2000	31	20.1	14.5	0.18	1
		4000	94	16.0	23.2	0.28	1
70-40-3		2000	46	24.7	17.8	0.22	0.5
		4000	139	21.1	30.5	0.37	1
70-40-2	80/60°C	2000	31	34.7	25.1	0.31	1
		4000	94	25.1	36.3	0.44	3
70-40-3		2000	46	45.4	32.8	0.40	1
		4000	139	34.4	49.7	0.61	2
80-50-2	60/40°C	2500	25	21.1	19.0	0.23	0.5
		5000	77	17.2	31.1	0.38	1
80-50-3		2500	37	28.0	25.3	0.31	0.5
		5000	113	24.0	43.4	0.52	1
80-50-2	80/60°C	2500	25	36.8	33.3	0.41	1
		5000	77	26.9	48.6	0.59	2
80-50-3		2500	37	48.4	43.7	0.53	1
		5000	113	37.1	67.0	0.82	2
100-50-2	60/40°C	3000	23	24.8	26.9	0.32	1
		6000	72	18.4	40.0	0.48	2
100-50-3		3000	35	32.3	35.0	0.42	1
		6000	106	25.6	55.4	0.67	2
100-50-2	80/60°C	3000	23	38.4	41.6	0.51	2
		6000	72	28.2	61.1	0.75	4
100-50-3		3000	35	50.1	54.3	0.66	2
		6000	106	38.7	83.8	1.02	4

Dimension



F= Thread G 1/4

G= Airing

H= Water out

I= Connection for immersion sensor

J= Water in

K= Draining

	A	c/c A	B	c/c B	E
VBR 40-20-2	438	420	238	220	R¾"
VBR 50-25-2	538	520	288	270	R¾"
VBR 50-30-2	538	520	338	320	R¾"
VBR 50-40-2	538	520	438	420	R¾"
VBR 60-30-2	638	620	338	320	R¾"
VBR 60-35-2	638	620	388	370	R¾"
VBR 70-40-2	738	720	438	420	R 1"
VBR 80-40-2	838	820	438	420	R 1"
VBR 80-50-2	838	820	538	520	R 1"
VBR 100-50-2	1038	1020	538	520	R 1"

	A	c/c A	B	c/c B	E
VBR 40-20-4	438	420	238	220	R¾"
VBR 50-25-4	538	520	288	270	R¾"
VBR 50-30-4	538	520	338	320	R 1"
VBR 50-40-4	538	520	438	420	R 1"
VBR 60-30-4	638	620	338	320	R 1"
VBR 60-35-4	638	620	388	370	R 1"

	A	c/c A	B	c/c B	E
VBR 70-40-3	738	720	438	420	R 1"
VBR 80-50-3	838	820	538	520	R 1"
VBR 100-50-3	1038	1020	538	520	R 1"

Accessories

- AQUA 24TF Heat Regulator (5136)
- TG-A130 Surface sensor 0-30°C (5159)
- Optigo OP 10-230 (7283)
- RVAZ4 24A Actuator 0-10V (9862)
- TG-D1/PT1000 Immersion sensor (6773)
- ZTV 20-4,0 2-way valve (9826)
- Optigo OP 10 (7282)
- TG-K330 Duct Sensor 0-30°C (5160)
- Optigo OP 5 (13891)
- RVAZ4-24 Actuator 3points (9798)
- ZTR 20-4,0 valve 3-way (9678)

Documents

- VBR IMO_172010.PDF
- Conformity_decl. PGK_VBR(PGV)_VBC(CWW)_CWK.pdf