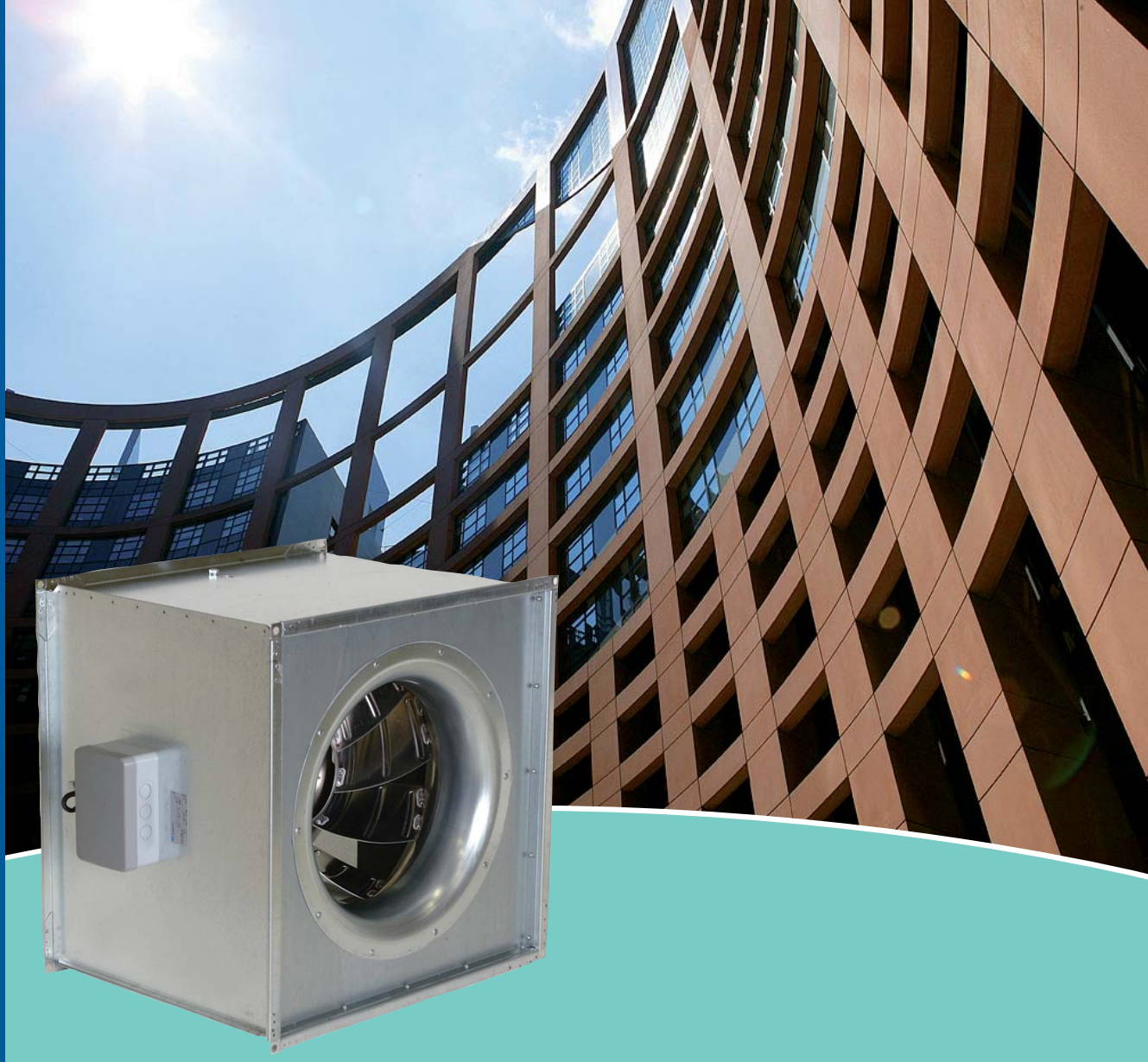
KDRE/KDRD



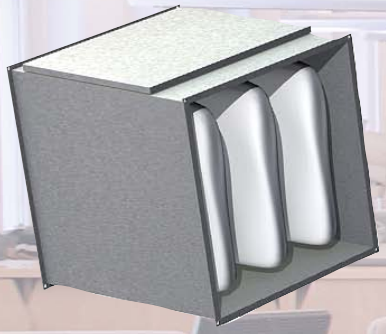
KDRE/KDRD

Supply/Exhaust fan for several purposes

740 - 2600 l/s (2660 - 9360 m³/h) at 100 Pa

Systemair

KDRE/KDRD



Filter box FFS

Fan KRDE/KDRD

Flexible connection DSK

Electronic accessories, KDRE

REE
Thyristor speed controller- Combined flush or surface mounting, 1 phase

REU
Manual five-step transformer, 1 phase, 2 speed

REV
Isolator mounted on a bracket, leads connected l max 16 A.

RTRE
Manual five-step transformer, 1 phase, with motor protection.

S-ET
Thermal motor protection relay, 1 phase.

Electronic accessories, KDRD

REV
Isolator mounted on a bracket, leads connected l max 16 A.

RTRD
Manual five-step transformer (with motor protection).

RTRDU
Manual five-step transformer (with motor protection).

STDT
Thermal contact motor protection.

- **Extensive range of accessories**
- **Speed-controllable**
- **Integral thermal contacts**
- **Can be installed in any positions**
- **Maintenance-free and reliable**

KDRE/KDRD fans have an external rotor motor with a mixed flow type impeller, i.e. the fan impeller is a combination between a radial and an axial impeller and provides the best from both impellers.

The result is a fan that gives considerably more airflow than radial fans and still provides relatively high static pressure with a high level of efficiency and a compact design.

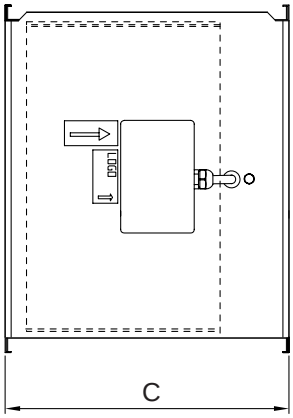
The casing is manufactured from galvanised sheet steel and provided with flanges for a fast and effective installation.

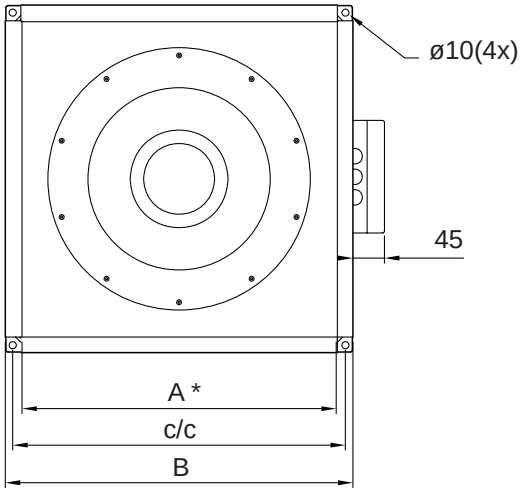
To protect the motor from overheating, the KDRE/KDRD fans have integral thermal contacts with leads for connection to a motor protection device.

The fans can be installed in any position and are easy to connect using the DS flexible connections.

KDRE/KDRD can be supplemented with a filter, silencer and heating battery and establish a simple air handling unit.

KDRE/KDRD



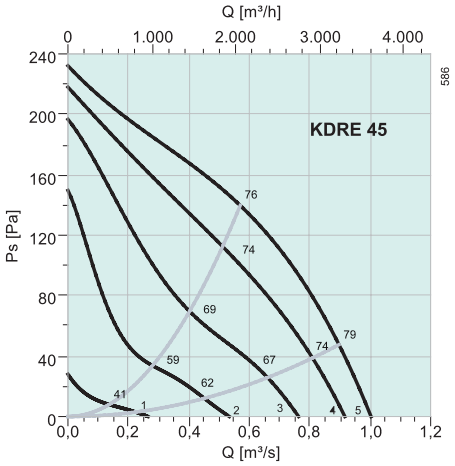


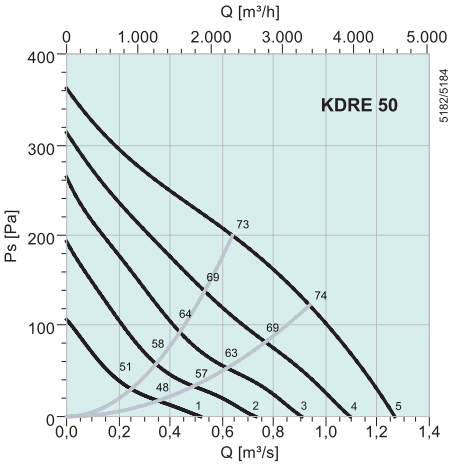
** Inner dimension*

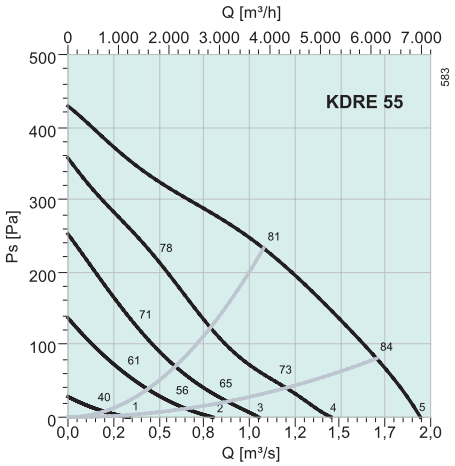
	A	c/c	B	C
KDRE 45	447	470	492	400
KDRE 50	502	520	547	450
KDRE 55	550	573	595	485
KDRE 65	661	680	707	510
KDRD 50	502	520	547	450
KDRD 55	550	573	595	485
KDRD 65	661	680	707	510
KDRD 70	696	720	740	530

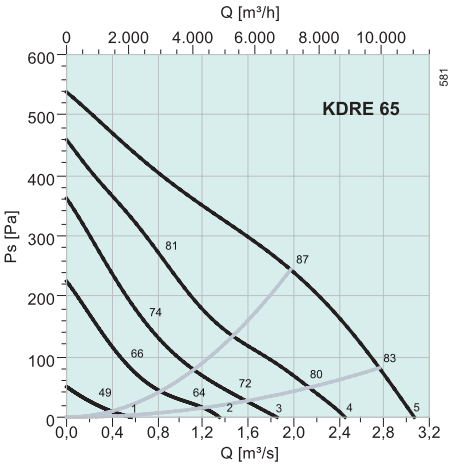
		KDRE 45	KDRE 50	KDRE 55	KDRE 65	KDRD 50	KDRD55	KDRD 65	KDRD 70
Voltage	V	230	230	230	230	400	400	400	400
Frequency	Hz	50	50	50	50	50	50	50	50
Phase	~	1	1	1	1	3	3	3	3
Power	W	325	442	861	1501	462	789	1250	2489
Current	A	1.55	1.94	4.1	6.61	0.962	1.52	2.23	4.67
Max. airflow	m^3/h	3611	4558	6997	11045	4338	6732	9803	14846
R.p.m.		1387	1297	1280	1315	1397	1315	1341	1383
Max. temperature of transported air	°C	70	70	45	70	70	49.1	70	70
Max. temperature of transported air when speed-controlled	°C	70	70	45	70	70	40.1	55.5	68.6
Sound pressure level at 3 m	dB(A)	45.4	52.3	51	61	54.4	55.4	53.1	61.8
Weight	kg	26	41	42	54	30	40	53	62
Insulation class, motor		F	F	F	F	F	F	F	F
Insulation class, motor	IP	54	54	54	54	54	54	54	54
Capacitor	µF	8	10	16	30	-	-	-	-

KDRE

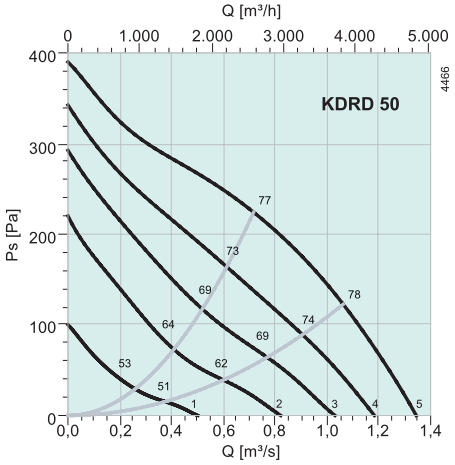

Q [m³/h]
0 1.000 2.000 3.000 4.000
240 200 160 120 80 40 0
Ps [Pa]
KDRE 45
586
76 74 69 79 74 67 59 62 41
1 2 3 4 5
0,0 0,2 0,4 0,6 0,8 1,0 1,2
Q [m³/s]

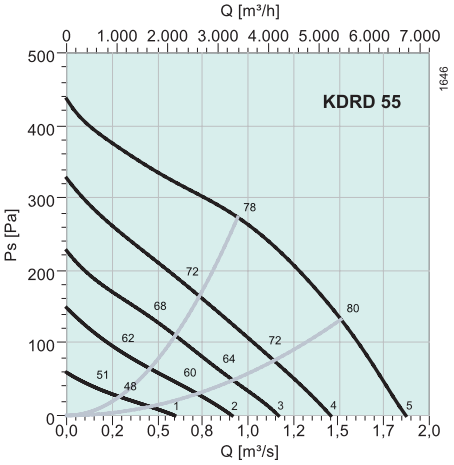

Q [m³/h]
0 1.000 2.000 3.000 4.000 5.000
400 300 200 100 0
Ps [Pa]
KDRE 50
5182/5184
73 69 74 64 69 58 63 51 57 48
1 2 3 4 5
0,0 0,2 0,4 0,6 0,8 1,0 1,2 1,4
Q [m³/s]

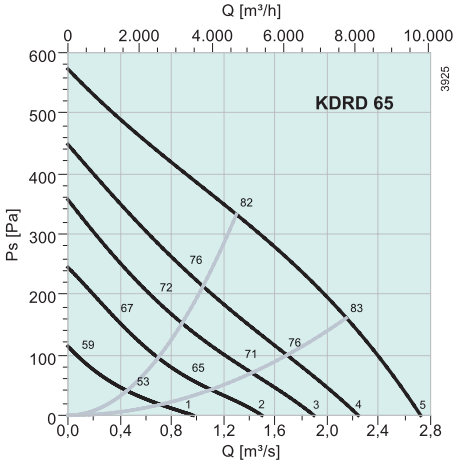

Q [m³/h]
0 1.000 2.000 3.000 4.000 5.000 6.000 7.000
500 400 300 200 100 0
Ps [Pa]
KDRE 55
583
81 78 84 71 73 61 65 56 40
1 2 3 4 5
0,0 0,2 0,5 0,8 1,0 1,2 1,5 1,7 2,0
Q [m³/s]

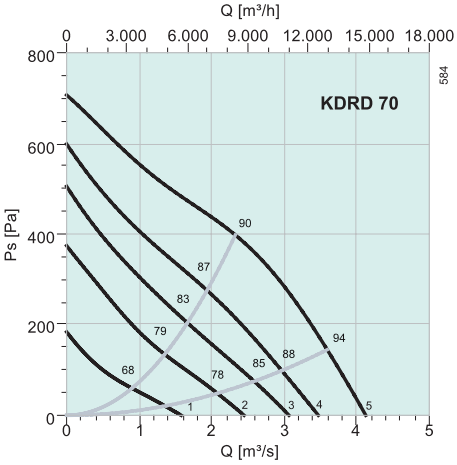

Q [m³/h]
0 2.000 4.000 6.000 8.000 10.000
600 500 400 300 200 100 0
Ps [Pa]
KDRE 65
581
81 87 74 83 66 80 72 64 49
1 2 3 4 5
0,0 0,4 0,8 1,2 1,6 2,0 2,4 2,8 3,2
Q [m³/s]

KDRD


Q [m³/h]
0 1.000 2.000 3.000 4.000 5.000
400 300 200 100 0
Ps [Pa]
KDRD 50
4466
77 73 78 69 74 64 69 53 62 51
1 2 3 4 5
0,0 0,2 0,4 0,6 0,8 1,0 1,2 1,4
Q [m³/s]

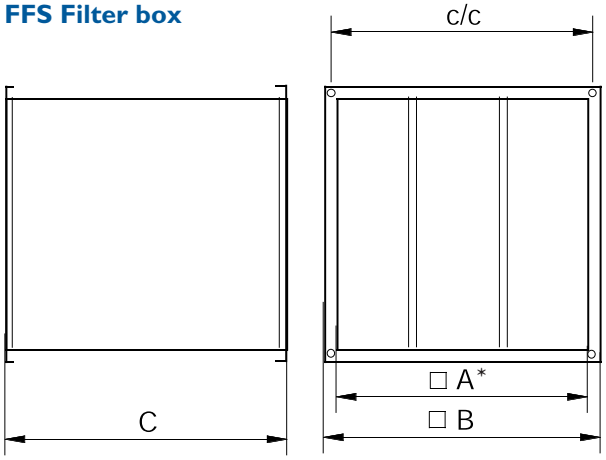

Q [m³/h]
0 1.000 2.000 3.000 4.000 5.000 6.000 7.000
500 400 300 200 100 0
Ps [Pa]
KDRD 55
1646
78 72 80 68 72 62 64 60 51 48
1 2 3 4 5
0,0 0,2 0,5 0,8 1,0 1,2 1,5 1,7 2,0
Q [m³/s]

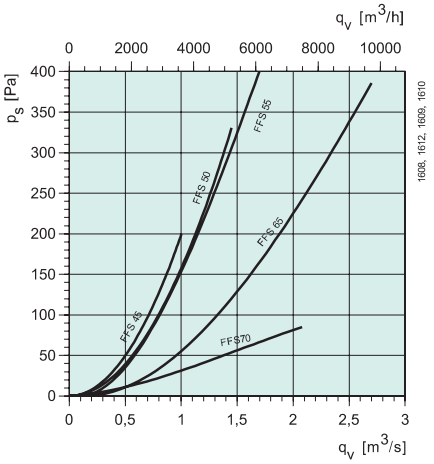

Q [m³/h]
0 2.000 4.000 6.000 8.000 10.000
600 500 400 300 200 100 0
Ps [Pa]
KDRD 65
3925
82 76 83 72 76 67 71 59 65 53
1 2 3 4 5
0,0 0,4 0,8 1,2 1,6 2,0 2,4 2,8
Q [m³/s]


Q [m³/h]
0 3.000 6.000 9.000 12.000 15.000 18.000
800 600 400 200 0
Ps [Pa]
KDRD 70
584
90 87 94 83 88 79 85 68 78
1 2 3 4 5
0 1 2 3 4 5
Q [m³/s]

Accessories KDRE/KDRD

FFS Filter box

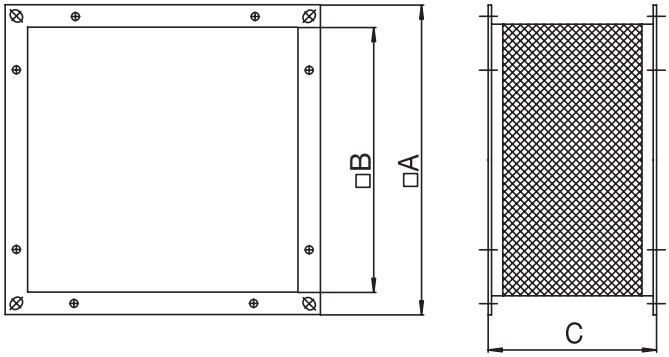




** Inner dimension*

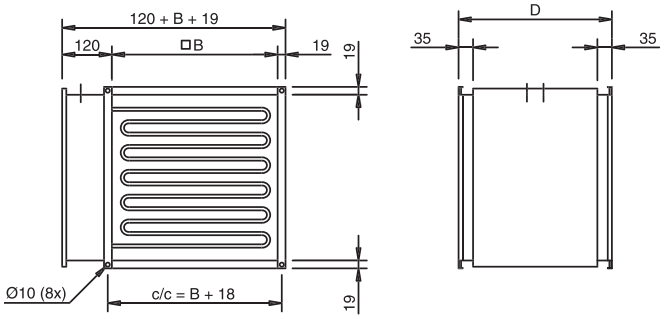
	□A	c/c	□B	C
FFS 45	447	470	492	502
FFS 50	502	520	547	532
FFS 55	550	573	595	562
FFS 65	661	680	707	642
FFS 70	697	720	742	642

DSK Flexible connection



	□A	□B	□C
DSK 45	492	447	120
DSK 50	547	502	120
DSK 55	595	550	120
DSK 65	707	661	120
DSK 70	742	696	120

RBK Electrical heater



	B	D
RBK 45	450	370
RBK 50	500	370
RBK 55	550	370
RBK 65	660	370

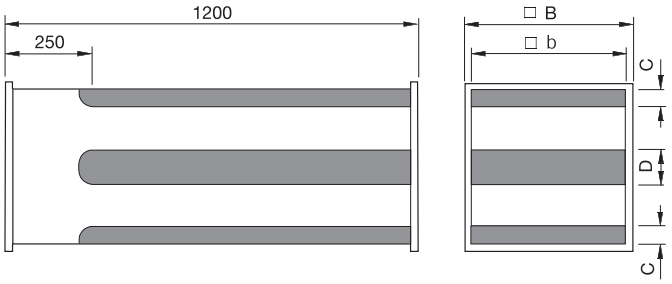
RBK	**45/17**	**50/21**	**55/33**	**66/39**
Power (kW)	17	21	33	39
Voltage (V)	400V 3~	400V 3~	400V 3~	400V 3~
Current (A)	24,5	30	48	56
Min. air flow (m³/h)	570	910	890	1650
Controlled by	TTC	TTC + TT-S1	TTC+M slave	TTC+M slave
Wiring diagr.	RBK-1	RBK-2	RBK-3	RBK-4

Duct heater for square ducts. Casing of alu-zink coated sheet metal with heating elements in stainless steel. The heater has built-in over-heating protection with manual reset.

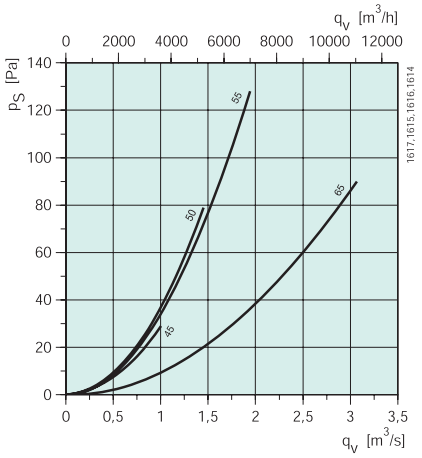
Heat control by means of a controller TTC together with a TT-Slave (TT-S1) or TTC together with a TT-M Slave. Min.airflow is based on a min.air velocity of 1.5 m/s. The duct heater is dimensioned for a maximum outgoing temp. of 40°C.

LDK Sound attenuator

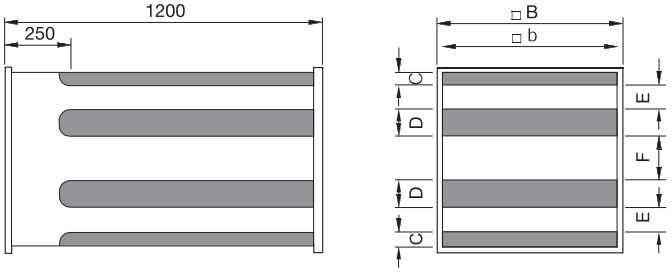
LDK 45-55



	□b	□B	C	D
LDK 45	450	490	50	100
LDK 50	502	546	50	150
LDK 55	661	594	50	200



LDK 65-70

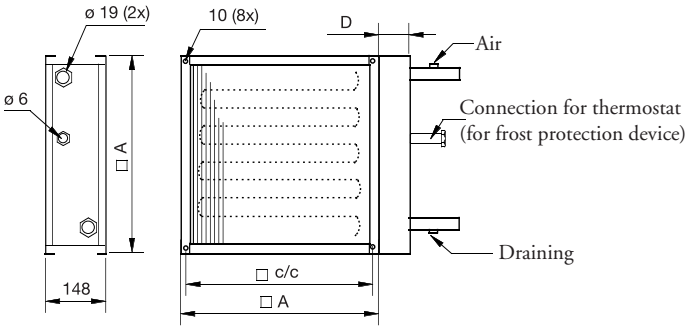


	□b	□B	C	D	E	F
LDK 65	661	703	50	100	93	175
LDK 70	696	740	50	100	110	176

Noise suppression dB frequency band Hz

LDK	125	250	500	1k	2k	4k	8k
45	5	8	13	12	8	7	7
50	7	8	13	12	9	8	7
55	9	9	13	12	10	9	8
65	6	7	14	13	9	8	7
70	5	7	19	24	23	15	10

VBK Water heater



	□A	c/c	□D	no. of rows
VBK 45	492	470	78	2
VBK 50	547	520	78	2
VBK 55	595	573	98	2
VBK 65	707	680	98	2

Water heating battery for square ducts The casing is made of galvanised steel, the heat transmission elements are copper tubes with aluminium fins, and with copper pipes for connecting water inlet and outlet.

If the VBK is to be used in very cold conditions it may be necessary to install a frost protection device. The VBK is designed for horistontal mounting with the water connection to the right. For best results the air and water must be going through the battery in opposit directions.

The water must be flowing upwards in order to facilitate airing of the battery. Software for determining the required dimensions for the desired output is available.

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