

Application

IBF/EC fans are used in a wide variety of mechanical ventilation systems, combining the benefits of axial fans (flow direction) and radial (stable compression, low noise, high efficiency). Thanks to the use of modern, high performance electronic commutation (EC) drives, fans are characterized by low power consumption. Examples of applications are supply ventilation and exhaust:

- apartments,
- offices, shops, bars, cafes, restaurants.

Construction

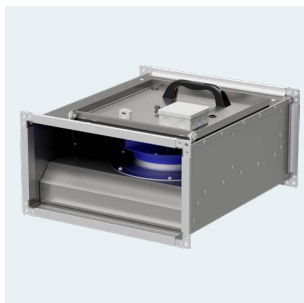
- housing made of galvanized steel sheet,
- flanges on the inlet and outlet sides assembly,
- inspection hatch,
- rotors with backward curved blades,
- rotors are made of plastic,
- working temperature $-30^{\circ}\text{C} + 60^{\circ}\text{C}$ (depending on the model),
- terminal box (single-phase model), box connected with the motor-rotor (three-phase model),
- installation in any rectangular position ventilation ducts.

Electric motor

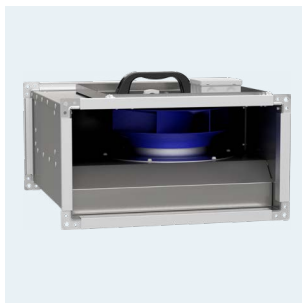
- high efficiency motors with integrated EC technology, single-phase 200-240V 50Hz and three-phase 380-480V 50Hz, with external rotor,
- 0-10VDC control input for smooth rotation control,
- insulation class - F,
- protection rating - IP54.

Special versions

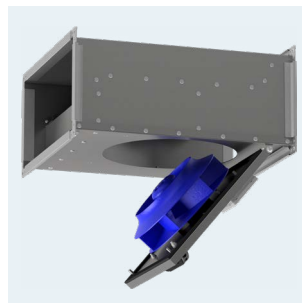
- painting in a color other than the standard,
- painting in a higher corrosivity category.



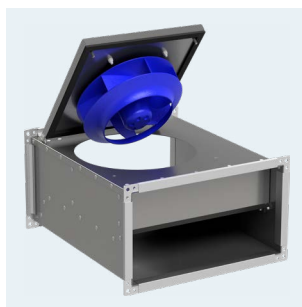
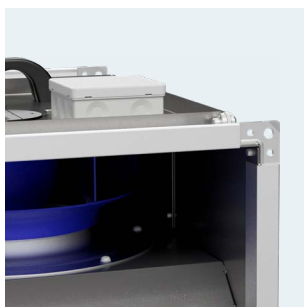
Easy assembly
Standard rectangular flanges for easy installation.



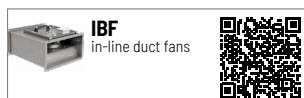
Inspection flap
For ease of use.



Rotor
with sloped blades backward.



RELATED PRODUCTS



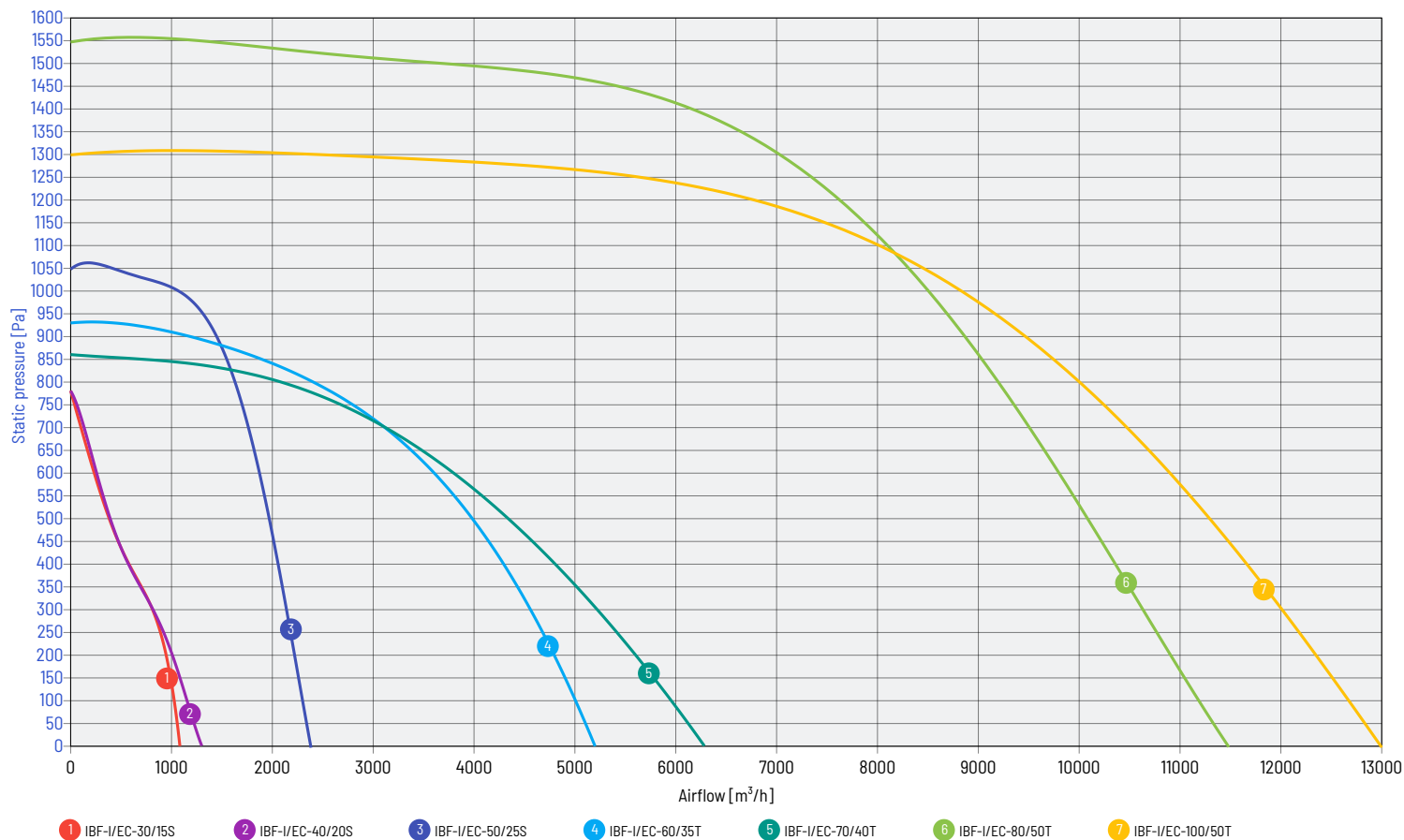


NOMINAL DATA

type	airflow max	pressure max	speed	voltage rated	current max abs.**	power max abs.	sound pressure level*	temperature operating min / max	weight	article number
IBF/EC-30/15S	1 050 m ³ /h	780 Pa	2 860 rpm	230 V	1,45 A	170 W	56 dB(A)	-30 / 60 °C	7,5 kg	41010808
IBF/EC-40/20S	1 300 m ³ /h	780 Pa	2 520 rpm	230 V	1,35 A	170 W	58 dB(A)	-30 / 60 °C	10,5 kg	41010818
IBF/EC-50/25S	2 400 m ³ /h	1050 Pa	3 600 rpm	230 V	4 A	780 W	65 dB(A)	-20 / 40 °C	21,0 kg	41010828
IBF/EC-60/35T	5 200 m ³ /h	930 Pa	2 100 rpm	400 V	2,4 A	1 350 W	66 dB(A)	-15 / 60 °C	37,0 kg	41010838
IBF/EC-70/40T	6 300 m ³ /h	860 Pa	1 800 rpm	400 V	2,5 A	1 450 W	72 dB(A)	-15 / 60 °C	44,0 kg	41010848
IBF/EC-80/50T	11 500 m ³ /h	1550 Pa	2 130 rpm	400 V	8 A	5 400 W	74 dB(A)	-20 / 40 °C	80,0 kg	41010858
IBF/EC-100/50T	13 000 m ³ /h	1250 Pa	1 750 rpm	400 V	8 A	5 000 W	73 dB(A)	-20 / 40 °C	92,0 kg	41010868

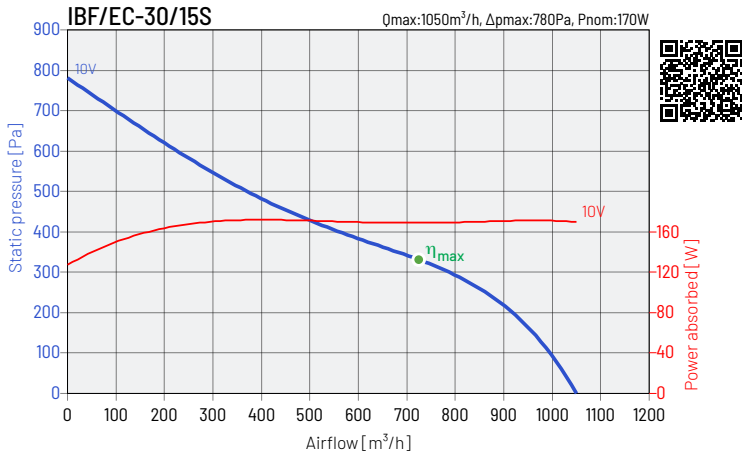
* Measurement made at a distance of 1.5m from the outlet, for $Q = 2/3 * Q_{max}$
 ** value of the rated current may vary depending on the manufacturer of the electric motor used.

PERFORMANCE CHARACTERISTICS OF THE FANS

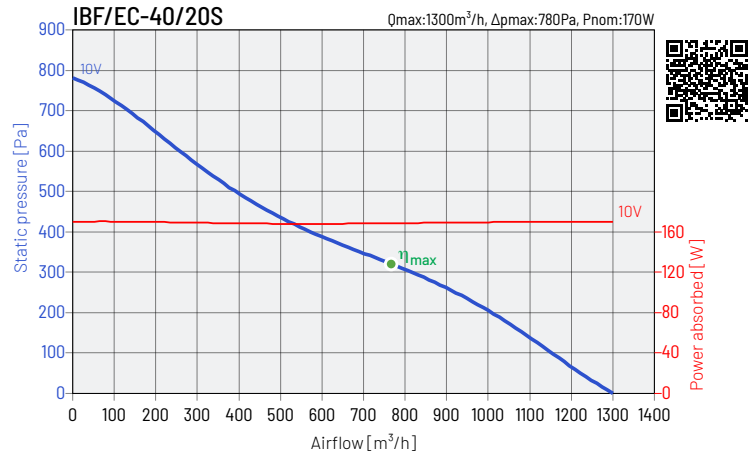




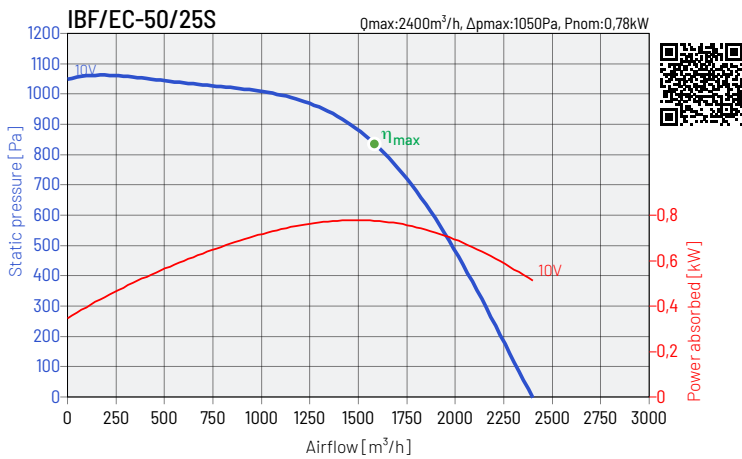
PERFORMANCE CHARACTERISTICS OF THE FANS



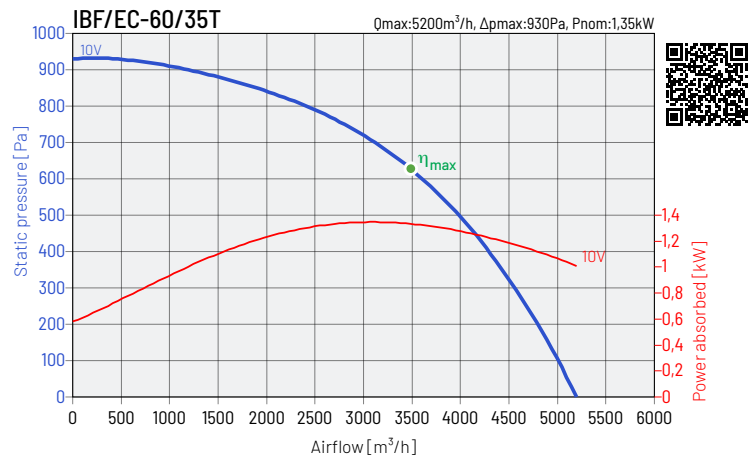
Hz / dB(A)	125	250	500	1000	2000	4000	8000	L_{WA}	L_{PA}
inlet	42	62	69	75	75	73	68	80	68
outlet	48	63	73	81	82	77	66	85	74
emitted	38	53	58	64	61	60	55	68	56



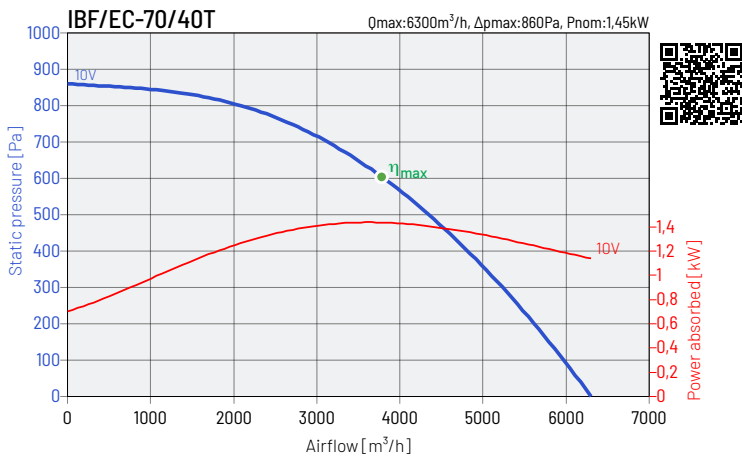
Hz / dB(A)	125	250	500	1000	2000	4000	8000	L_{WA}	L_{PA}
inlet	49	58	62	65	65	66	67	72	61
outlet	50	60	65	70	73	69	68	77	65
emitted	44	56	59	62	63	64	61	69	58



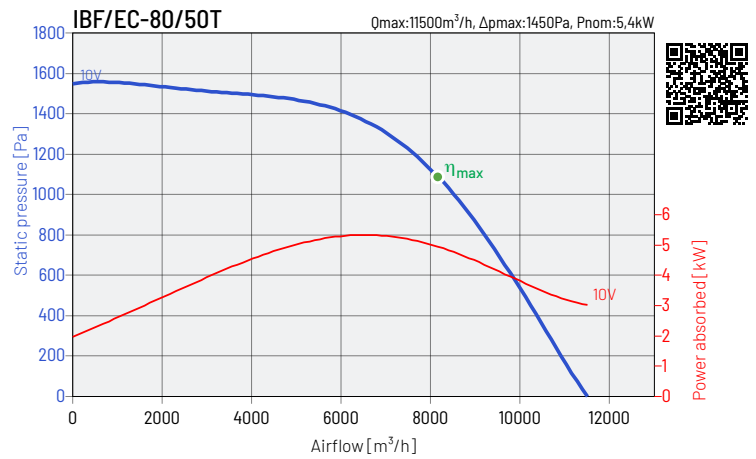
Hz / dB(A)	125	250	500	1000	2000	4000	8000	L_{WA}	L_{PA}
inlet	68	70	73	77	74	71	66	81	70
outlet	69	72	75	79	77	74	68	83	72
emitted	60	65	70	72	69	66	59	76	65



Hz / dB(A)	125	250	500	1000	2000	4000	8000	L_{WA}	L_{PA}
inlet	62	72	76	72	69	66	61	79	68
outlet	68	75	81	83	79	74	66	87	75
emitted	59	71	72	71	70	59	57	77	66



Hz / dB(A)	125	250	500	1000	2000	4000	8000	L_{WA}	L_{PA}
inlet	71	83	81	77	74	71	67	86	75
outlet	70	82	85	86	80	74	67	90	79
emitted	68	79	80	74	68	66	59	83	72

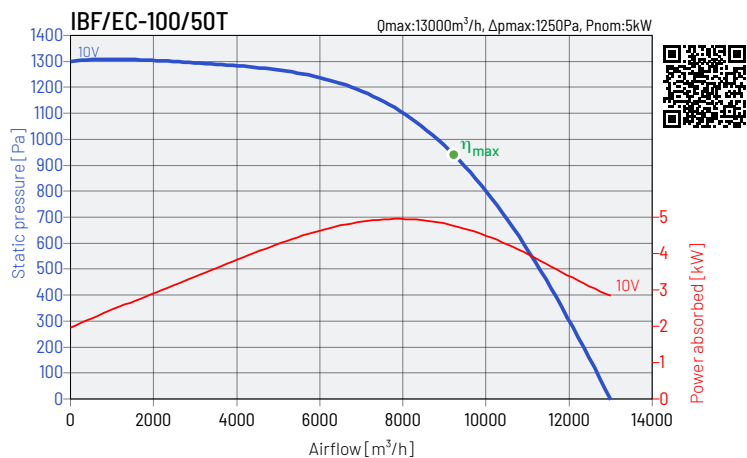


Hz / dB(A)	125	250	500	1000	2000	4000	8000	L_{WA}	L_{PA}
inlet	71	83	84	82	79	76	72	89	77
outlet	72	84	86	89	83	77	74	92	81
emitted	70	81	82	77	71	68	61	86	74

The performance characteristics of the fans are determined for a medium with a temperature of 20°C. Sound pressure level dB(A), determined at a distance of 1,5 m



PERFORMANCE CHARACTERISTICS OF THE FANS



Hz / dB(A)	125	250	500	1000	2000	4000	8000	L_{WA}	L_{PA}
inlet	74	76	81	83	80	79	71	88	76
outlet	76	79	83	87	85	82	74	91	80
emitted	67	72	78	80	77	73	67	84	73

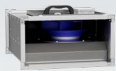
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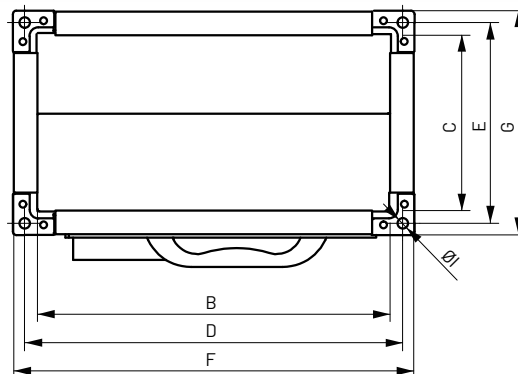
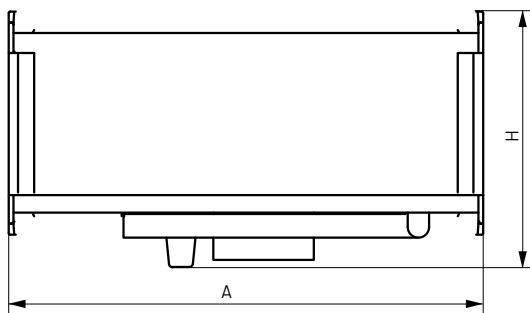
ECO PROJECT

Type	IBF/EC-30/15S	IBF/EC-40/20S	IBF/EC-50/25S	IBF/EC-60/35T
a Supplier name	VENTURE INDUSTRIES	VENTURE INDUSTRIES	VENTURE INDUSTRIES	VENTURE INDUSTRIES
b Article number	41010808	41010818	41010828	41010838
c Device category	NRVU	NRVU	NRVU	NRVU
c Device type	UVU	UVU	UVU	UVU
d Type of drive	variable speed drive v	variable speed drive v	variable speed drive v	variable speed drive v
e Type of heat recovery system	not applicable	not applicable	not applicable	not applicable
f Thermal efficiency of heat recovery [%]	not applicable	not applicable	not applicable	not applicable
g Reference flow rate in NRVU [m ³ /s]	0,21	0,22	0,5	0,86
h Electric power input [kW]	0,17	0,17	0,74	1,35
i SFPint [W/(m ² /s)]	816	760	1480	1567
j Face velocity [m/s]	1,21	1,13	2,2	2,62
k Δps, ext [Pa]	315	307	703	701
l Δps, int [Pa]	not applicable	not applicable	not applicable	not applicable
m Δps, add [Pa]	not applicable	not applicable	not applicable	not applicable
n Static efficiency of fans [%]	38,6	40,4	47,5	44,7
o Maximum external leakage rate [%]	0	0	0	0
p Energy performance	not applicable	not applicable	not applicable	not applicable
q Visual filter warning	not applicable	not applicable	not applicable	not applicable
r L _{WA} [dB(A)]	67	68	76	75
s Internet address	www.ventur.eu	www.ventur.eu	www.ventur.eu	www.ventur.eu

Type	IBF/EC-70/40T	IBF/EC-80/50T	IBF/EC-100/50T
a Supplier name	VENTURE INDUSTRIES	VENTURE INDUSTRIES	VENTURE INDUSTRIES
b Article number	41010848	41010858	41010868
c Device category	NRVU	NRVU	NRVU
c Device type	UVU	UVU	UVU
d Type of drive	variable speed drive v	variable speed drive v	variable speed drive v
e Type of heat recovery system	not applicable	not applicable	not applicable
f Thermal efficiency of heat recovery [%]	not applicable	not applicable	not applicable
g Reference flow rate in NRVU [m ³ /s]	1,11	2,37	2,78
h Electric power input [kW]	1,41	4,62	4,42
i SFPint [W/(m ² /s)]	1270	1952	1590
j Face velocity [m/s]	3,01	5,2	5,49
k Δps, ext [Pa]	567	1007	817
l Δps, int [Pa]	not applicable	not applicable	not applicable
m Δps, add [Pa]	not applicable	not applicable	not applicable
n Static efficiency of fans [%]	44,6	51,6	51,4
o Maximum external leakage rate [%]	0	0	0
p Energy performance	not applicable	not applicable	not applicable
q Visual filter warning	not applicable	not applicable	not applicable
r L _{WA} [dB(A)]	84	84	84
s Internet address	www.ventur.eu	www.ventur.eu	www.ventur.eu



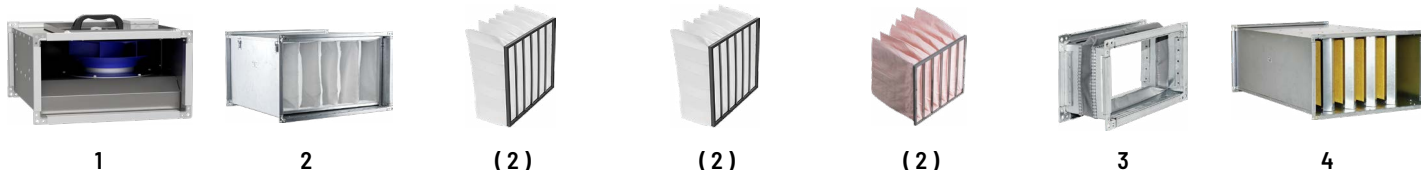
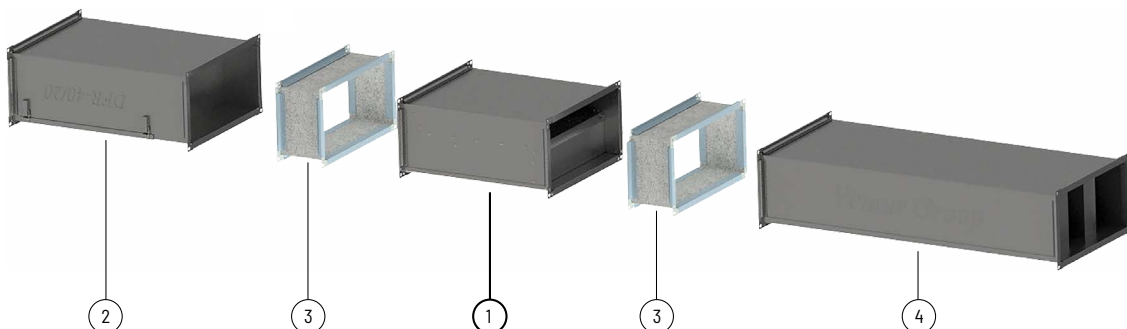
DIMENSIONS



type	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	ØI mm
IBF/EC-30/15S	402	300	150	320	170	340	190	250	9
IBF/EC-40/20S	502	400	200	420	220	440	240	320	9
IBF/EC-50/25S	532	500	250	520	270	540	290	350	9
IBF/EC-60/35T	724	600	350	620	370	640	390	450	9

type	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	ØI mm
IBF/EC-70/40T	724	700	400	722	420	742	440	500	9
IBF/EC-80/50T	880	800	500	822	522	842	542	630	9
IBF/EC-100/50T	1000	1000	500	1029	529	1059	559	630	13

MOUNTING ACCESSORIES



type	duct filter DFR	cartridge filter EU3	cartridge filter EU5	cartridge filter EU7	antivibration connector IAE-PL	silencer RCS
IBF/2-30/15	DFR-30/15	EU3 30/15cm	EU5 30/15cm	EU7 30/15cm	IAE-PL-190	RCS-30/15
IBF/2-40/20	DFR-40/20	EU3 40/20cm	EU5 40/20cm	EU7 40/20cm	IAE-PL-200	RCS-40/20
IBF/4-50/25	DFR-50/25	EU3 50/25cm	EU5 50/25cm	EU7 50/25cm	IAE-PL-225	RCS-50/25
IBF/4-60/35	DFR-60/35	EU3 60/35cm	EU5 60/35cm	EU7 60/35cm	IAE-PL-315	RCS-60/35
IBF/4-70/40	DFR-70/40	EU3 70/40cm	EU5 70/40cm	EU7 70/40cm	IAE-PL-355	RCS-70/40
IBF/4-80/50	DFR-80/50	EU3 80/50cm	EU5 80/50cm	EU7 80/50cm	IAE-PL-400	RCS-80/50
IBF/4-100/50	DFR-100/50	EU3 100/50cm	EU5 100/50cm	EU7 100/50cm	IAE-PL-450	RCS-100/50

Article numbers

40520910 DFR-30/15	40520913 EU3 30/15cm	40520915 EU5 30/15cm	40520917 EU7 30/15cm	40532800 IAE-PL-190	40521900 RCS-30/15
40520920 DFR-40/20	40520923 EU3 40/20cm	40520925 EU5 40/20cm	40520927 EU7 40/20cm	40532810 IAE-PL-200	40521910 RCS-40/20
40520930 DFR-50/25	40520933 EU3 50/25cm	40520935 EU5 50/25cm	40520937 EU7 50/25cm	40532820 IAE-PL-225	40521920 RCS-50/25
40520960 DFR-60/35	40520963 EU3 60/35cm	40520965 EU5 60/35cm	40520967 EU7 60/35cm	40532850 IAE-PL-315	40521950 RCS-60/35
40520970 DFR-70/40	40520973 EU3 70/40cm	40520975 EU5 70/40cm	40520977 EU7 70/40cm	40532860 IAE-PL-355	40521960 RCS-70/40
40520980 DFR-80/50	40520983 EU3 80/50cm	40520985 EU5 80/50cm	40520987 EU7 80/50cm	40532870 IAE-PL-400	40521970 RCS-80/50
40520990 DFR-100/50	40520993 EU3 100/50cm	40520995 EU5 100/50cm	40520997 EU7 100/50cm	40532880 IAE-PL-450	40521980 RCS-100/50



ELECTRICAL ACCESSORIES



type	wall thermostat	duct thermostat	air quality sensor	humidistat	thyristor regulator	signal converter
	TS	TK-21	SQA	HIG-2	REB-ECOWATT	MODBUS
IBF/EC-30/15S	TS	TK-21	SQA	HIG-2	REB-ECOWATT	MDACM1
IBF/EC-40/20S	TS	TK-21	SQA	HIG-2	REB-ECOWATT	MDACM1
IBF/EC-50/25S	TS	TK-21	SQA	HIG-2	REB-ECOWATT	built in
IBF/EC-60/35T	TS + DILM7-10	TK-21+ DILM7-10	SQA + DILM7-10	HIG-2 + DILM7-10	REB-ECOWATT	MDACM1
IBF/EC-70/40T	TS + DILM7-10	TK-21+ DILM7-10	SQA + DILM7-10	HIG-2 + DILM7-10	REB-ECOWATT	MDACM1
IBF/EC-80/50T	TS + DILM12-10	TK-21+ DILM12-10	SQA + DILM12-10	HIG-2 + DILM12-10	REB-ECOWATT	built in
IBF/EC-100/50T	TS + DILM12-10	TK-21+ DILM12-10	SQA + DILM12-10	HIG-2 + DILM12-10	REB-ECOWATT	built in

Article numbers

40025345 TS
40025320 TK-21

40025140 SQA
40025150 HIG-2

40025005 REB-ECOWATT

40025287 MDACM1

91040997 DILM7-10
91040666-41 DILM12-10