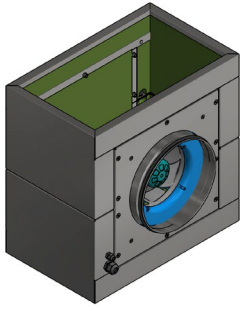


BF500S-250RE0707

BoxFan

Built-in Radical EC fan
With square air inlet and outlet



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Denmark
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Nominal data

Type	BF500S-250RE0707	
EC Ventilator	K3G250-RE07-07	

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200...240
Frequency	Hz	50/60

Type of data definition		ml
Speed	min ⁻¹	2510
Power input	W	170
Current draw	A	1,4
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

ml = Max. load · me = Max. efficiency · rfa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

Data in accordance with the EU environment design regulation 327/2011 for built-in fan units.

	Actual	Request 2015			
Overall efficiency η_{es}	57,8%	43,1%	Power input P_{ed}	kW	0,16
Installation category	A		Airflow q_v	m ³ /h	800
Efficiency category	Static		Pressure increase p_{fs}	Pa	380
Efficiency grade N	76,7%	62%	Speed n	min ⁻¹	2535
Variable speed drive	Yes		Specific ratio*		1,00

*Specific ratio = $1 + p_{fs} / 100\,000\text{ Pa}$

Data definition with optimum efficiency.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup

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Technical features

Rotor surface	Thick-film passivated
Electronic housing material	Die-cast aluminium
Impeller material	Plastic PA
Housing material	Plastic PA
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP 54
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1
Max. permitted ambient temp. for motor (transport/storage)	+80 °C
Min. permitted ambient motor temp. (transp./storage)	-40 °C
Mounting position	Any
Condensate discharge holes	None, open rotor
Mode	S1
Motor bearing	Ball bearing
Technical features	<ul style="list-style-type: none"> -Output 10 VDC, max. 10 mA -Tacho-output -Power limiter -Motor current limitation -Soft start -Control input 0-10 VDC / PWM -Control interface with SELV potential safely disconnected from the mains -Overvoltage detection -Thermal overload protection for electronics/motor -Line undervoltage detection
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC interference emission	According to EN 61000-6-4 (industrial environment)
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	≤ 3.5 mA
Motor protection	Electronic motor protection
Protection class	I (with customer connection of protective earth)

Physical description

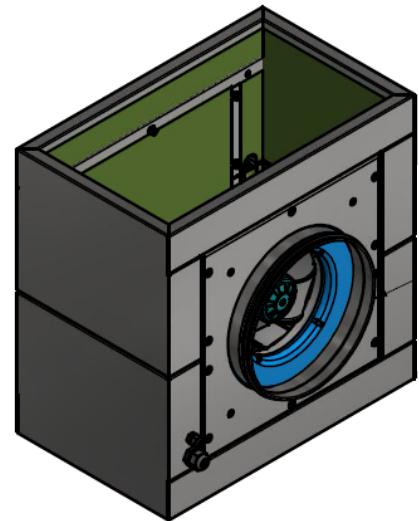
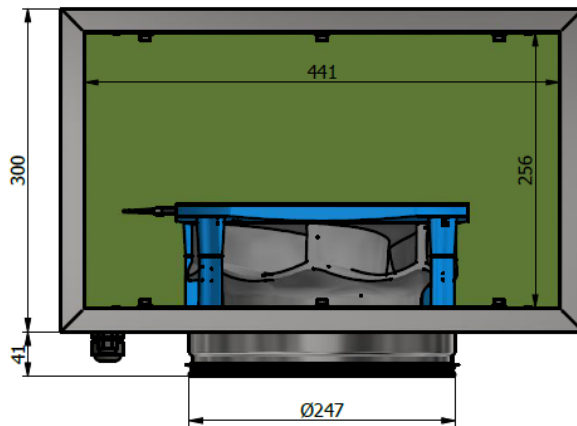
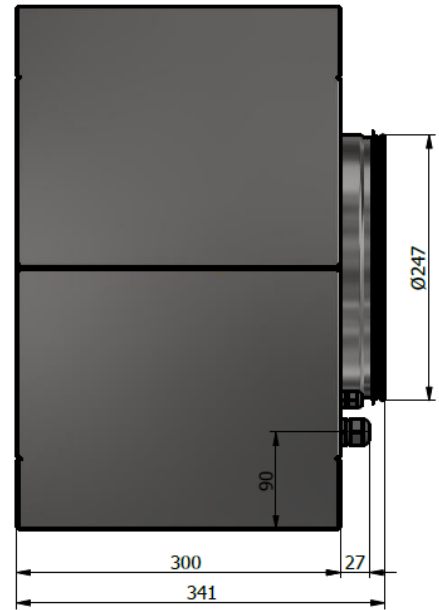
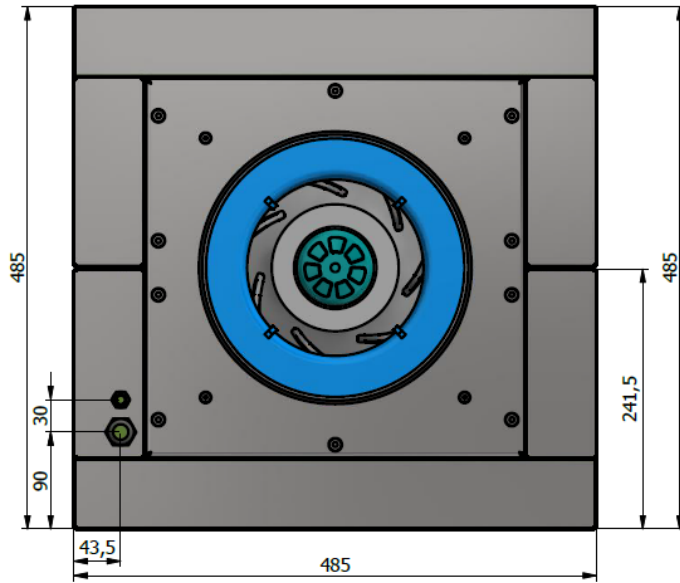
Weight	15,7 kg
Plate thickness, chassis	1 mm
Plate thickness, fan plate and inspection hatch	3 mm
Insulation	Polyethylen Cross Linked PE-Foam - LD-30, Black
Cable glands, PG	M12
Duct connection, ILU	Ø250
Dimensions	See product drawing

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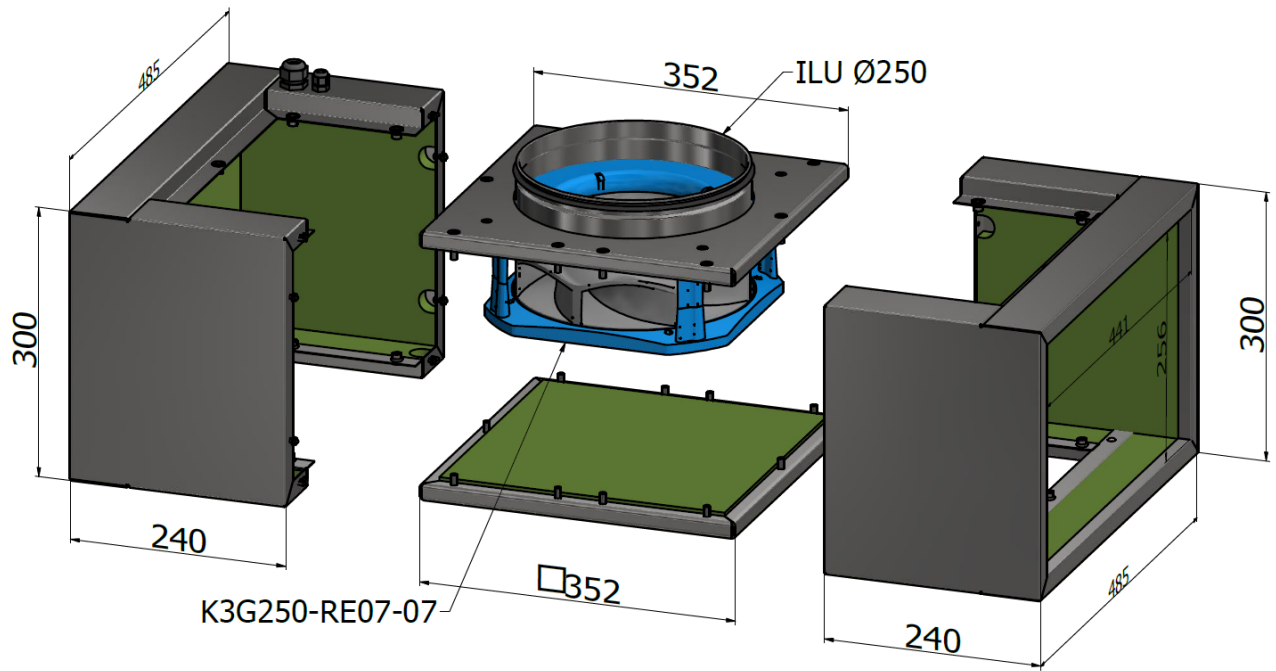
Product drawing



BF500S-250RE0707

BoxFan

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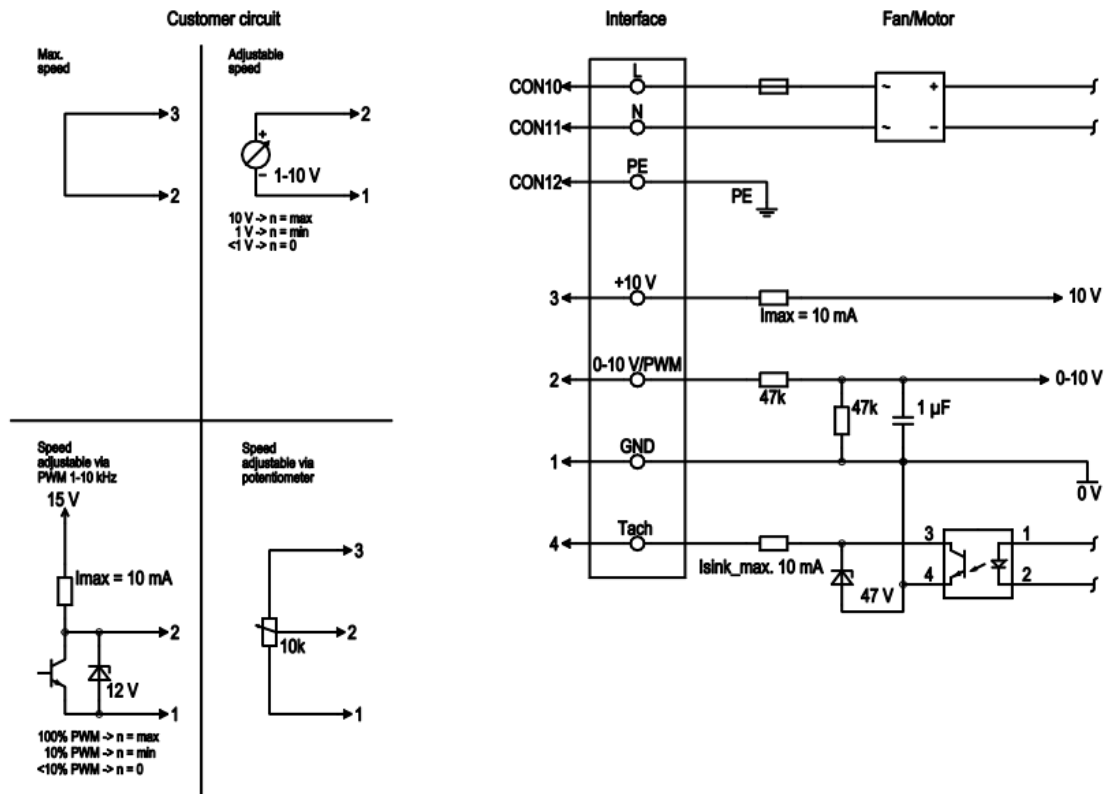


Cable PVC AWG22, 4x crimped splices

Cable PVC AWG20, 3x crimped splices

Mounting dimensions

Connection diagram

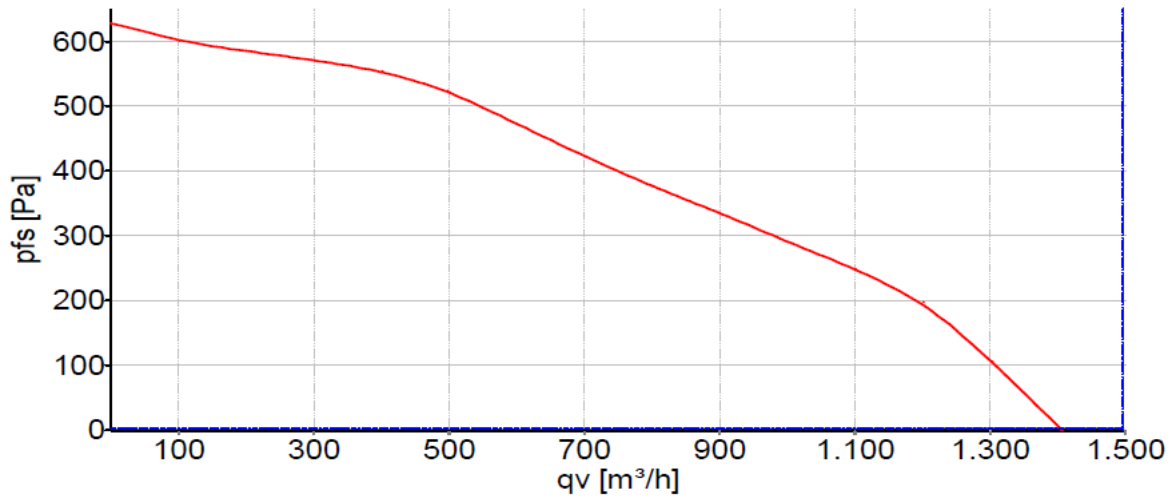


No.	Comm	Designation	Color	Function/assignment
	CON10	L	Black	Supply connection, power supply, phase, see nameplate for voltage range
	CON11	N	Blue	Supply connection, power supply, neutral conductor, see nameplate for voltage range
	CON12	PE	Green/yellow	Ground connection
	2	0- 10V PWM	Yellow	0-10 V / PWM control input, R _i =100 kΩ, SELV
	4	Tach	White	Tach output, open collector, 1 pulse per revolution, I _{sink maks.} = 10 mA, SELV
	3	+10 V	Red	Fixed voltage output 10 VDC +/-3 %, I _{max.} 10 mA, short-circuit-proof, power supply for ext devices (e.g pot), SELV
	1	GND	Blue	Reference ground for control interface, SELV

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Curves: Air performance 50 Hz



Measurement: LU-154717-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.