G4D146-BF16-07

AC centrifugal fan

Airfoil blade, single-intake

with housing (flange)

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Nominal data

Type	**G4D146-BF16-07**
Motor	**M4D068-EC**

Phase		3~
Nominal voltage	VAC	380
Wiring		Δ
Frequency	Hz	100
Method of obtaining data		fa
Valid for approval/standard		-
Speed (rpm)	min^{-1}	2400
Power consumption	W	265
Current draw	A	0.48
Min. back pressure	Pa	0
Min. back pressure	inH2O	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	70

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

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Technical description

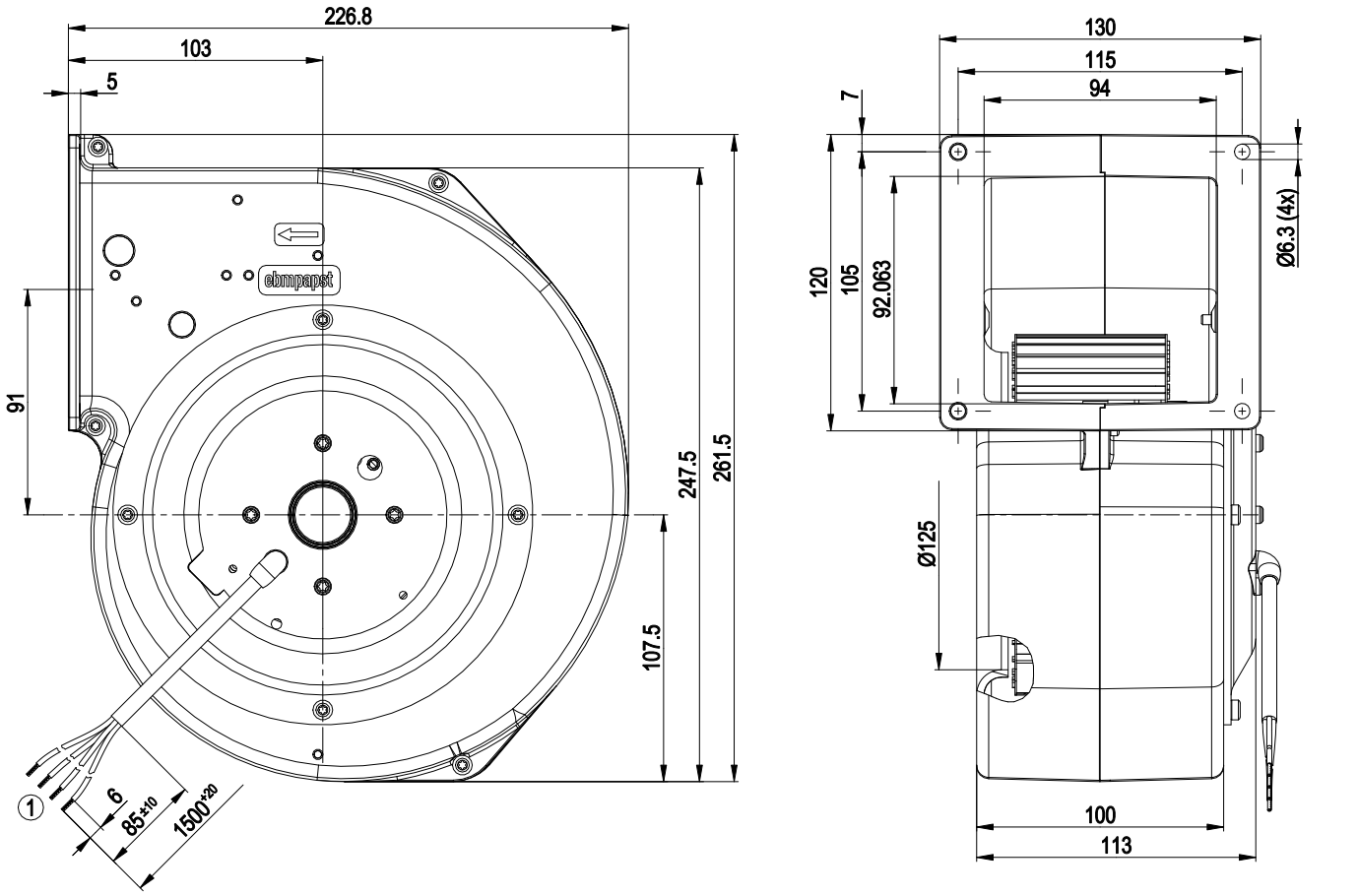
Weight	4.3 kg
Fan size	146 mm
Rotor surface	Painted black
Impeller material	Sheet steel, painted black
Housing material	Die-cast aluminum
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54; installation- and position-dependent as per EN 60034-5
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F2-2
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1, motor does not have factory-installed overheating protection

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Product drawing



1	Cable silicone 4G 0.5 mm², 4x crimped splices

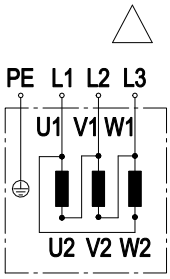
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Connection diagram



Note: Change of rotation direction by reversing two phases

Δ	Delta connection	L1	= U1 = black	L2	= V1 = blue
L3	= W1 = brown	PE	green/yellow		

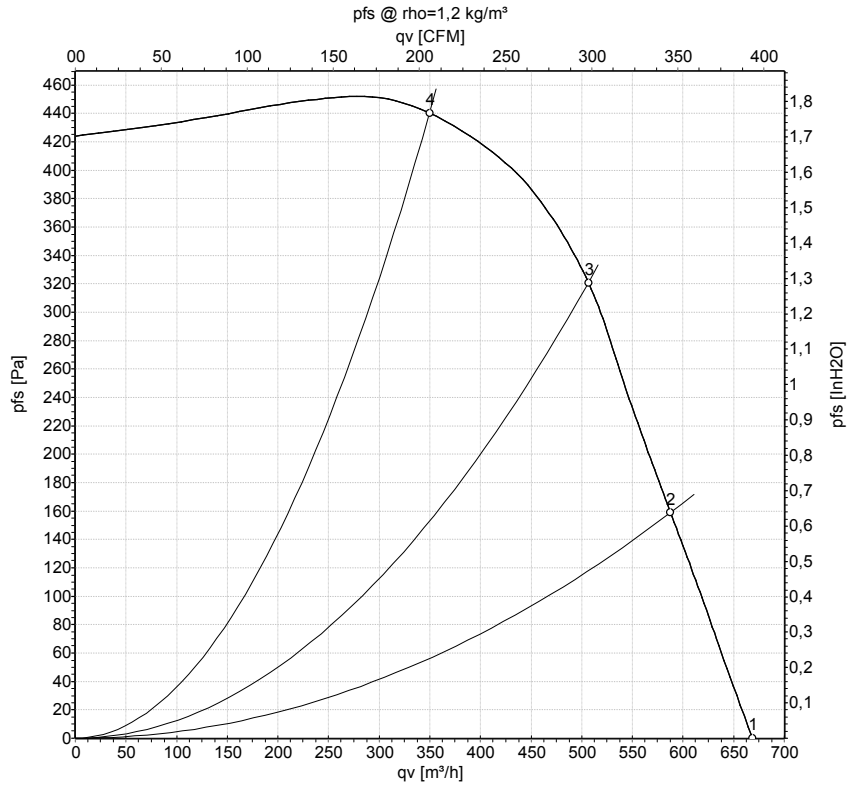
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Curves: Air performance



Measurement: LU-8808-1

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.

Measured values

	Wired	U	f	n	P_e	I	qv	p_{fs}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	Δ	380	100	2400	265	0.48	670	0	395	0.00
2	Δ	380	100	2565	205	0.40	590	160	345	0.64
3	Δ	380	100	2665	168	0.33	505	320	300	1.28
4	Δ	380	100	2800	109	0.24	350	440	205	1.77

Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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