R6D310-CG03-01

AC centrifugal fan

forward-curved, single-intake

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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**R6D310-CG03-01**
Motor	**M6D110-GF**

Phase		3~	3~
Nominal voltage	VAC	230	400
Wiring		Δ	Y
Frequency	Hz	50	50
Method of obtaining data		ml	ml
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	840	840
Power consumption	W	760	760
Current draw	A	2.5	1.45
Min. back pressure	Pa	50	50
Min. back pressure	inH2O	0.2	0.2
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	50	50
Starting current	A	5.7	3.3

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

Data according to ErP Directive

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	34.7	34.7
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		44	44
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.34
09 Air flow q_v	m^3/h	1605
09 Pressure increase p_{fs}	Pa	264
10 Speed (rpm) n	min^{-1}	940
11 Specific ratio*		1.00

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

* Specific ratio = 1 + p_{fs} / 100 000 Pa

LU-73088

ebmpapst

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Technical description

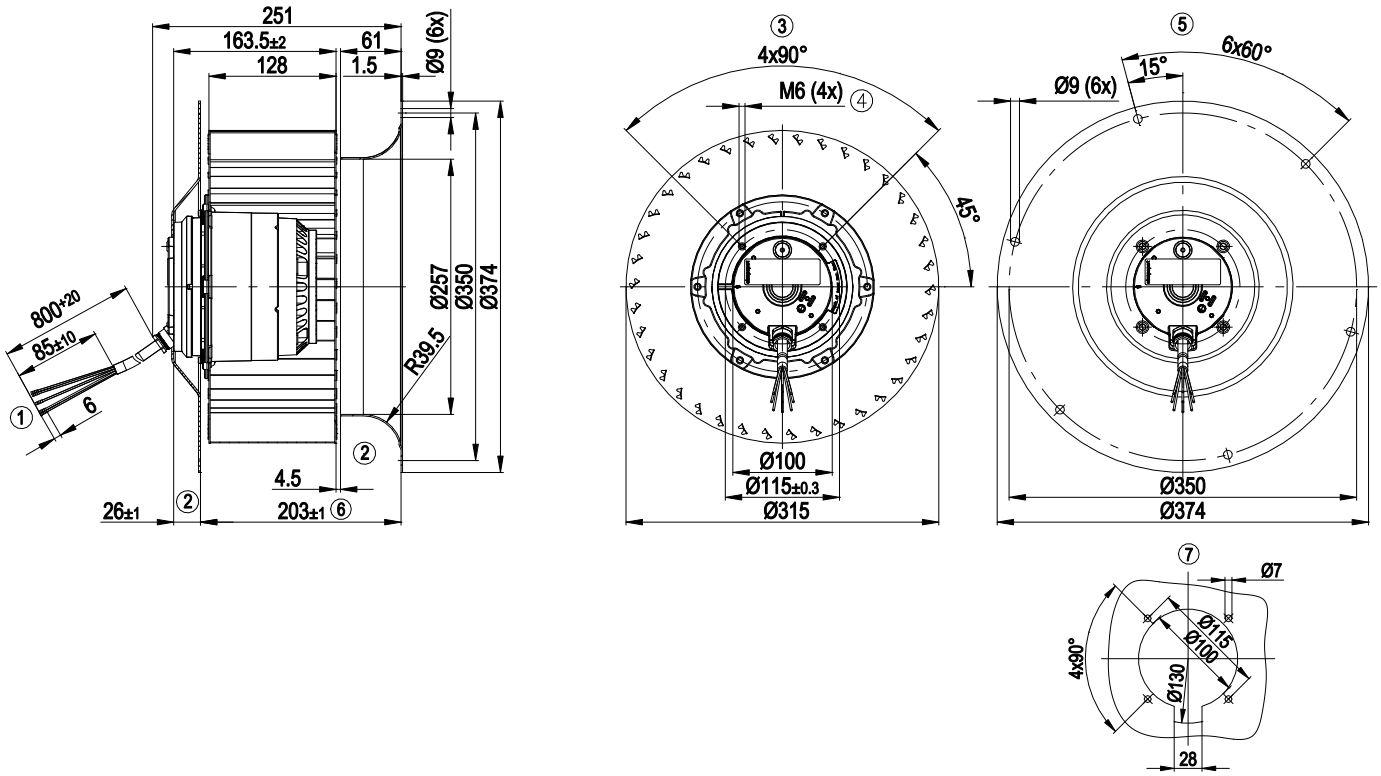
Weight	11 kg
Fan size	310 mm
Rotor surface	Cast in aluminum
Impeller material	Sheet steel, galvanized
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F3-1
Max. permitted ambient temp. for motor (transport/storage)	+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)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) with basic insulation
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 61800-5-1; CE
Approval	EAC; VDE; UL 1004-1; CSA C22.2 No. 100

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Product drawing



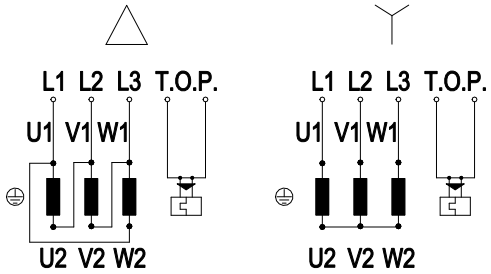
1	Cable silicone, 9x crimped splices
2	Accessory part: Inlet ring 31010-2-4013 and flange 10310-2-4017 not included in scope of delivery
3	View without flange
4	Max. clearance for screw 12 mm
5	View with flange
6	Housing width
7	Drill pattern for mounting without flange

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Connection diagram



Note: Change of rotation direction by reversing two phases

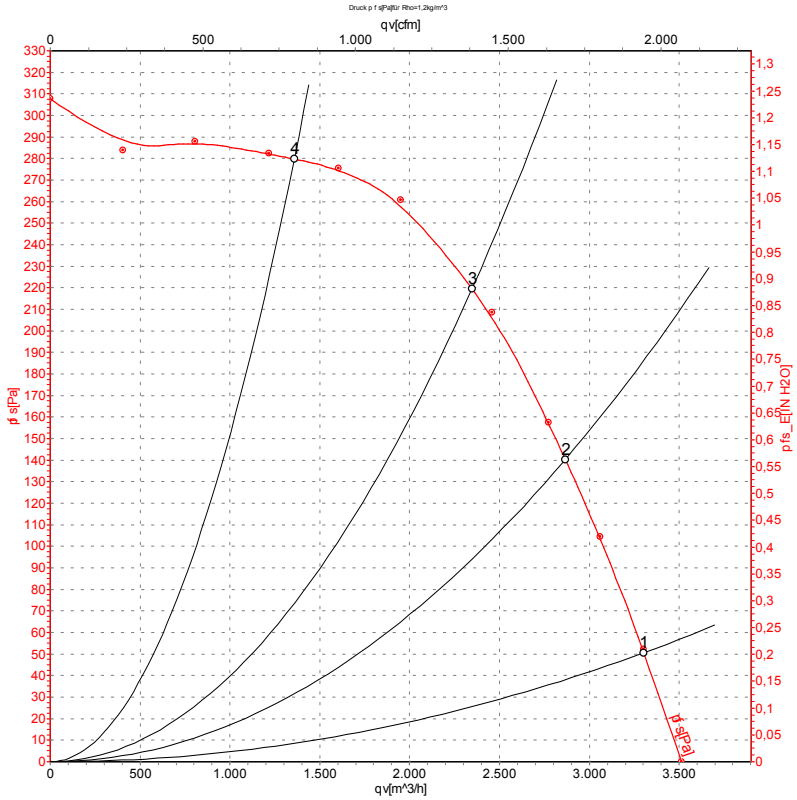
Δ	Delta connection	Y	Star connection	L1	black
L2	blue	L3	brown	U1	black
V1	blue	W1	brown	U2	green
V2	white	W2	yellow	TOP	gray

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Curves: Air performance 50 Hz Y



Measurement: LU-73088-1

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	Y	400	50	840	760	1.45	3300	50	1945	0.20
2	Y	400	50	875	625	1.27	2865	140	1685	0.56
3	Y	400	50	905	499	1.12	2345	220	1380	0.88
4	Y	400	50	950	308	0.94	1360	280	800	1.12

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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