D1G146-LU01-01

EC centrifugal fan

forward curved, dual inlet

with housing (flange)

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Nominal data

Type	**D1G146-LU01-01**
Motor	**M1G055-CF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Type of data definition		ml
State		prelim.
Speed (rpm)	min^{-1}	1300
Power input	W	100
Current draw	A	0.82
Max. ambient temperature	°C	50

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

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Technical features

Mass	2 kg
Size	146 mm
Surface of rotor	Thick layer passivated
Material of electronics housing	PP plastic, black
Material of impeller	PA plastic
Housing material	PP plastic, black
Motor suspension	Motor mounted anti-vibration on both sides
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 20
Insulation class	"B"
Humidity (F)/environmental protection class (H)	F0
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None, open rotor
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limit - Soft start - PWM control input - Control interface with SELV potential safely disconnected from the mains - Over-temperature protected motor
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC harmonics	Acc. to EN 61000-3-2/3
EMC interference emission	Acc. to EN 61000-6-3 (household environment)
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) wired internally
Protection class	Built-in component with basic insulation, protection rating results from installation according to intended use
Product conforming to standard	EN 60335-1; CE

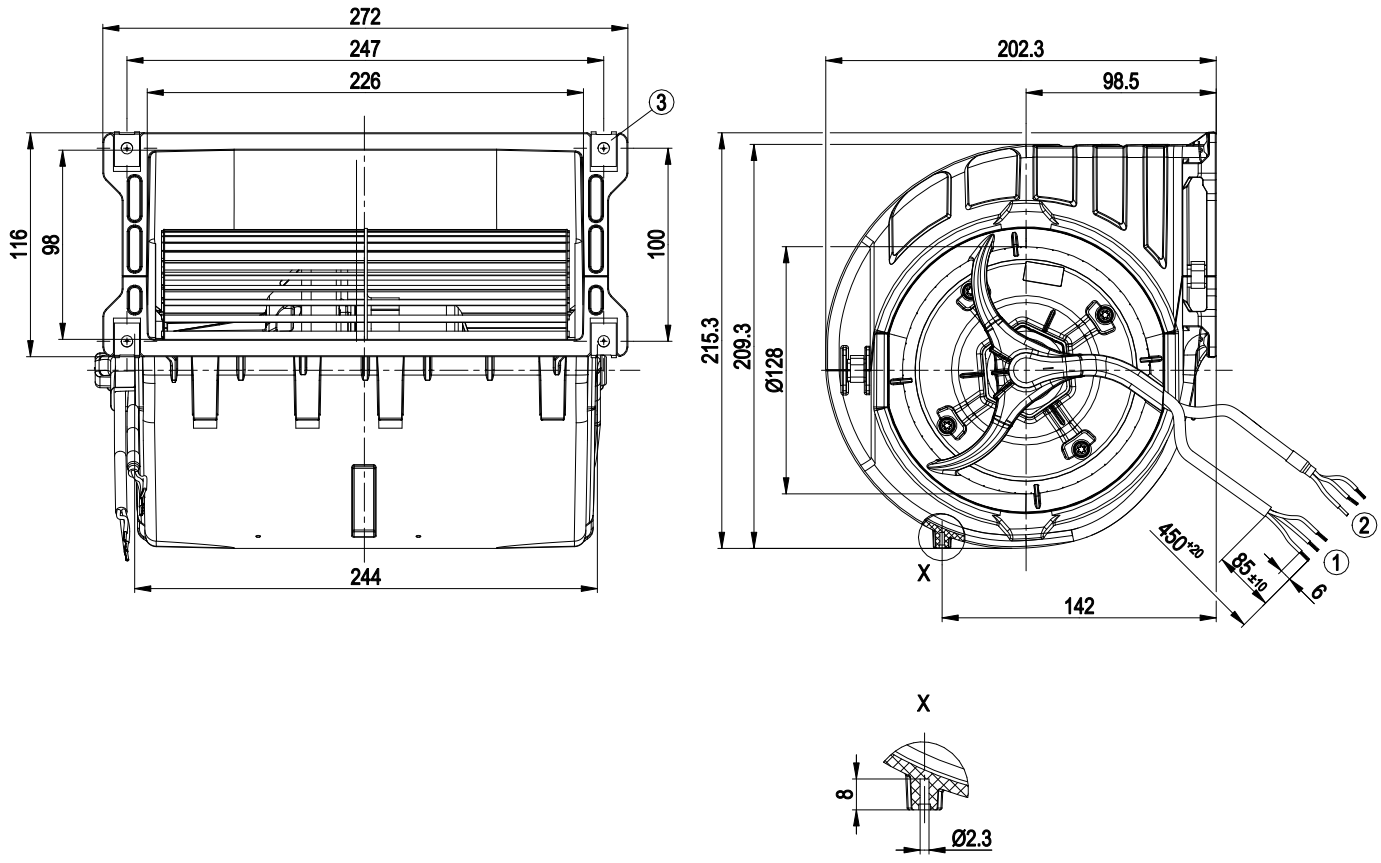
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Product drawing



1	Connection line PVC AWG20, 3x lead tips crimped
2	Connection line PVC AWG20, 3x lead tips crimped
3	4x sheet metal nut for thread EN ISO 1478-ST4.8 (min. screw length 14.5 mm plus thickness of mounting material)

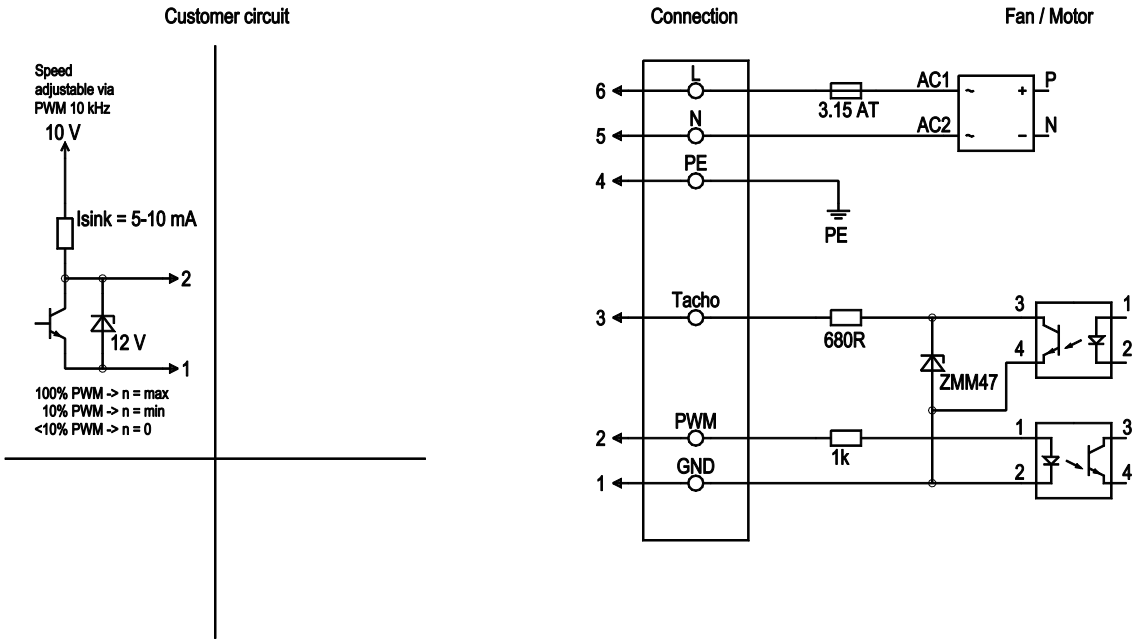
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Connection screen



No.	Conn.	Designation	Colour	Function / assignment
	6	L	black	Power supply 230 VAC, 50-60 Hz, see type plate for voltage range
	5	N	blue	Neutral conductor
	4	PE	green/yellow	Protective earth
	3	Tach	white	Tach output: Open collector, 1 pulse per revolution, electrically isolated, Isink max = 10 mA
	2	PWM	yellow	Control input PWM, electrically isolated, Isink = 5-10 mA
	1	GND	blue	GND connection of control interface

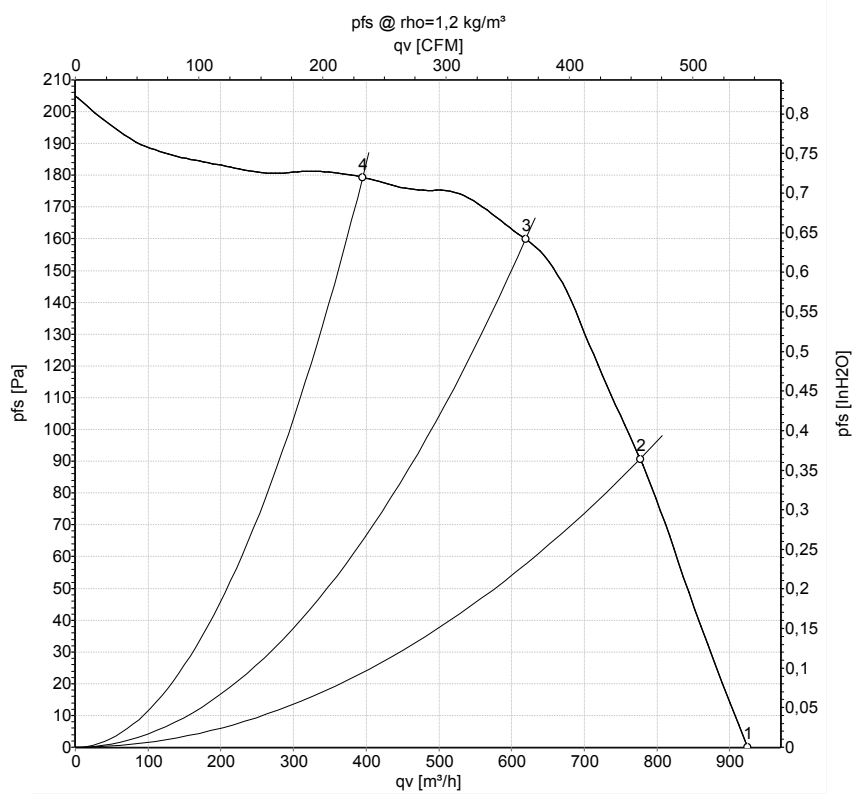
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Charts: Air flow 50 Hz



Measurement: LU-162537-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	U	f	n	P_{ed}	I	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	230	50	1300	100	0.82	56	66	925	0	545	0.00
2	230	50	1545	100	0.82	56	66	775	90	455	0.36
3	230	50	1780	97	0.77	55	66	620	160	365	0.64
4	230	50	1790	59	0.50	54	64	395	180	230	0.72

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · q_V = Air flow
p_{fs} = Pressure increase

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