EC centrifugal fan

forward curved, dual inlet

with housing (flange)

D1G146-HQ03-06 ebmpapst Datasheet
sales@fansco.com
www.fansco.com

Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
County court Stuttgart · HRB 590142

Nominal data

Type	**D1G146-HQ03-06**
Motor	**M1G055-DF**

Phase		1~
Nominal voltage	VAC	240
Frequency	Hz	50/60
Type of data definition		fa
State		prelim.
Speed (rpm)	min^{-1}	1675
Power input	W	170
Current draw	A	1.3
Min. back pressure	Pa	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	45

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	1.9 kg
Size	146 mm
Material of impeller	PP plastic
Housing material	PP plastic
Motor suspension	Motor mounted vibration-free 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)	H0 - dry environment
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
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, safety classification after installation in accordance with intended use
Product conforming to standard	EN 60335-1; EN 60335-2-31; CE
Remark	Measured values correspond to measurements with customer electronics MOD-01 rev.10

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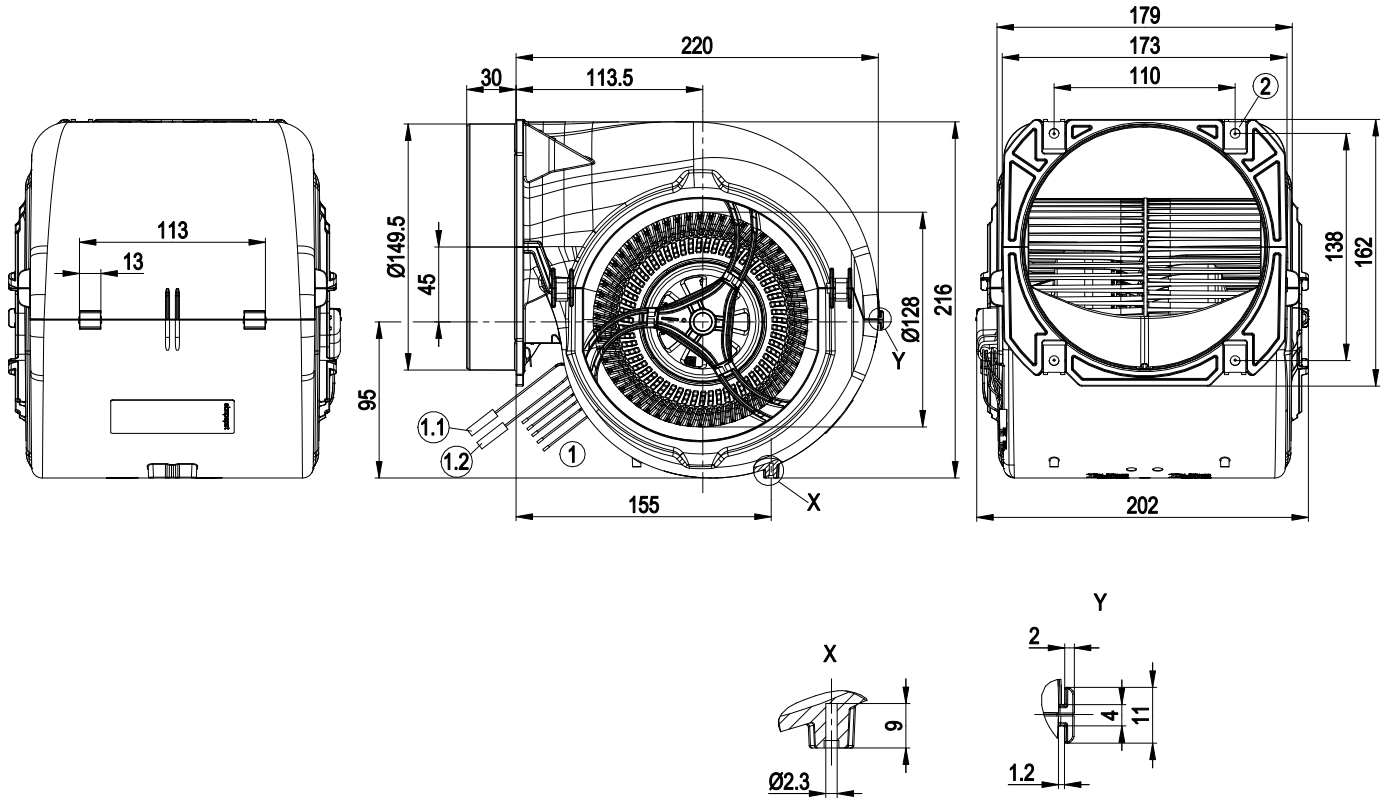
Product drawing



1	Connection line ETFE AWG22, 5x lead tips crimped
1.1	brown, threaded pin 2.8x0.8 with insulating sleeve
1.2	black, threaded pin 2.8x0.8 with insulating sleeve
2	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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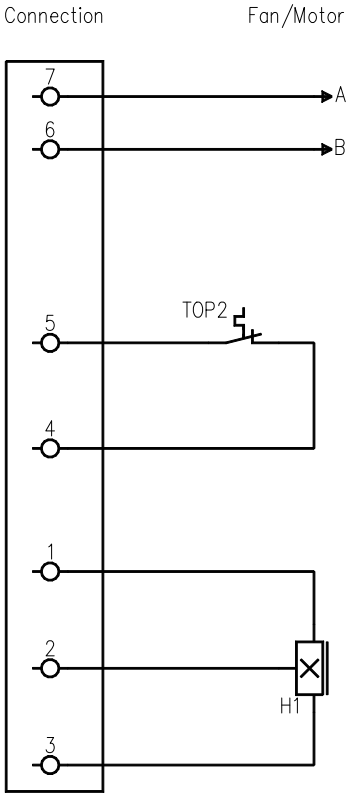
Connection screen



No.	Conn.	Designation	Colour	Function / assignment
	7		brown	Coil connection A
	6		black	Coil connection B
	5		grey	Thermal overload protector
	4		grey	Thermal overload protector
	1		red	+ power supply 5-25 VDC
	2		orange	Hall signal H1
	3		blue	-GND

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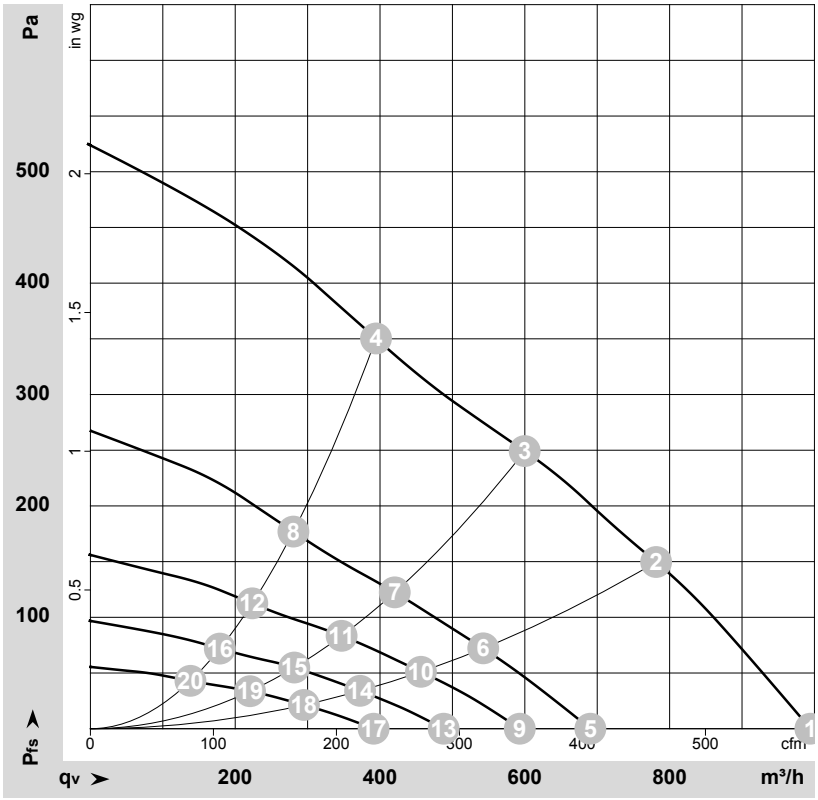
Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-174448-1
Measurement: LU-174509-1
Measurement: LU-174511-1
Measurement: LU-174514-1
Measurement: LU-174517-1

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

	Stage	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	5	240	50	1675	170	1.30	61	72	995	0	585	0.00
2	5	240	50	1935	144	1.14	58	69	780	150	460	0.60
3	5	240	50	2180	124	0.97	58	69	600	250	355	1.00
4	5	240	50	2490	104	0.83	61	71	395	350	230	1.41
5	4	240	50	1195	57	0.47			690	0	405	0.00
6	4	240	50	1370	51	0.42			545	72	320	0.29
7	4	240	50	1540	45	0.38			420	123	245	0.49
8	4	240	50	1790	40	0.34			280	177	165	0.71
9	3	240	50	1025	36	0.29			595	0	350	0.00
10	3	240	50	1155	31	0.26			455	51	270	0.20
11	3	240	50	1275	27	0.23			345	83	205	0.33
12	3	240	50	1435	22	0.20			225	113	130	0.45
13	2	240	50	855	22	0.20			490	0	285	0.00
14	2	240	50	950	18	0.17			370	34	220	0.14
15	2	240	50	1040	16	0.15			280	55	165	0.22
16	2	240	50	1145	13	0.13			180	72	105	0.29
17	1	240	50	700	13	0.12	40	51	390	0	230	0.00
18	1	240	50	760	11	0.11	37	47	295	21	175	0.08
19	1	240	50	820	9.0	0.10	35	45	220	34	130	0.14
20	1	240	50	895	8.0	0.09	35	45	140	43	80	0.17

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