D3G146-LU03-01

EC centrifugal fan

forward curved, dual inlet

with housing (flange)

D3G146-LU03-01 ebmpapst Datasheet FansCo

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Nominal data

Type	**D3G146-LU03-01**
Motor	**M3G055-CF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Type of data definition		ml
Speed	min^{-1}	1330
Power input	W	100
Current draw	A	0.8
Min. back pressure	Pa	0
Min. ambient temperature	°C	-25
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	2.4 kg
Size	146 mm
Surface of rotor	Galvanised
Material of electronics housing	PP plastic, black
Material of impeller	Plastic PA6, fibreglass-reinforced
Housing material	PP plastic, black
Motor suspension	Motor anti-vibration mounted on both sides
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	Motor IP 54, electronic IP 20; Depending on installation and position
Insulation class	"F"
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	- Control input 0-10 VDC / PWM - Output 10 VDC, max. 1.1 mA - Tach output - Motor current limit - Soft start
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Electrical leads	With plug
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1

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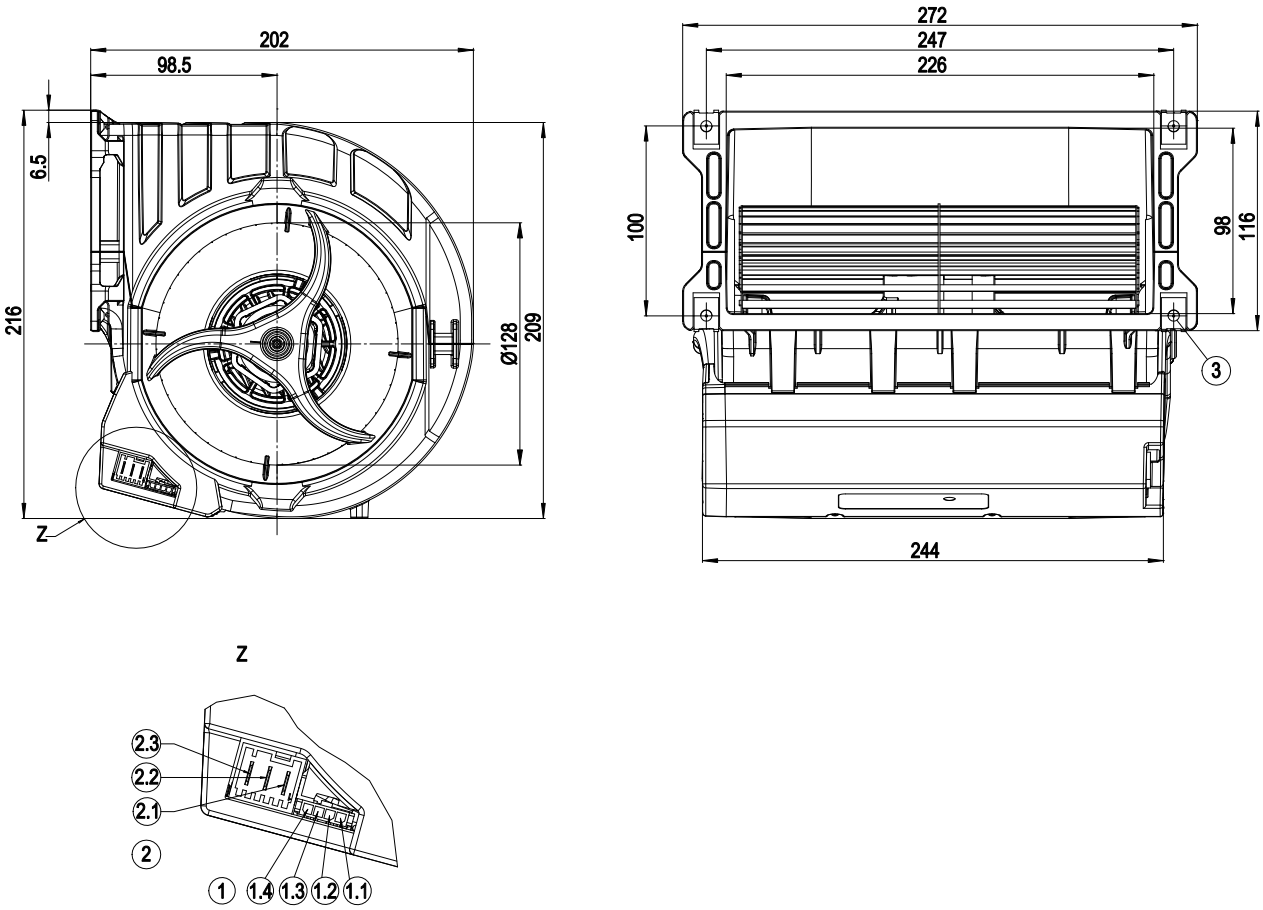
Product drawing



1	Strip Molex Micro Fit 3.0 04365 00400 (pluggable with 04364 50400)
1.1	10V
1.2	Tach
1.3	0-10V lin. / PWM
1.4	GND
2	Plug connector Lumberg 3642 03 K01 (pluggable with 3626 03 K01)
2.1	PE
2.2	L
2.3	N
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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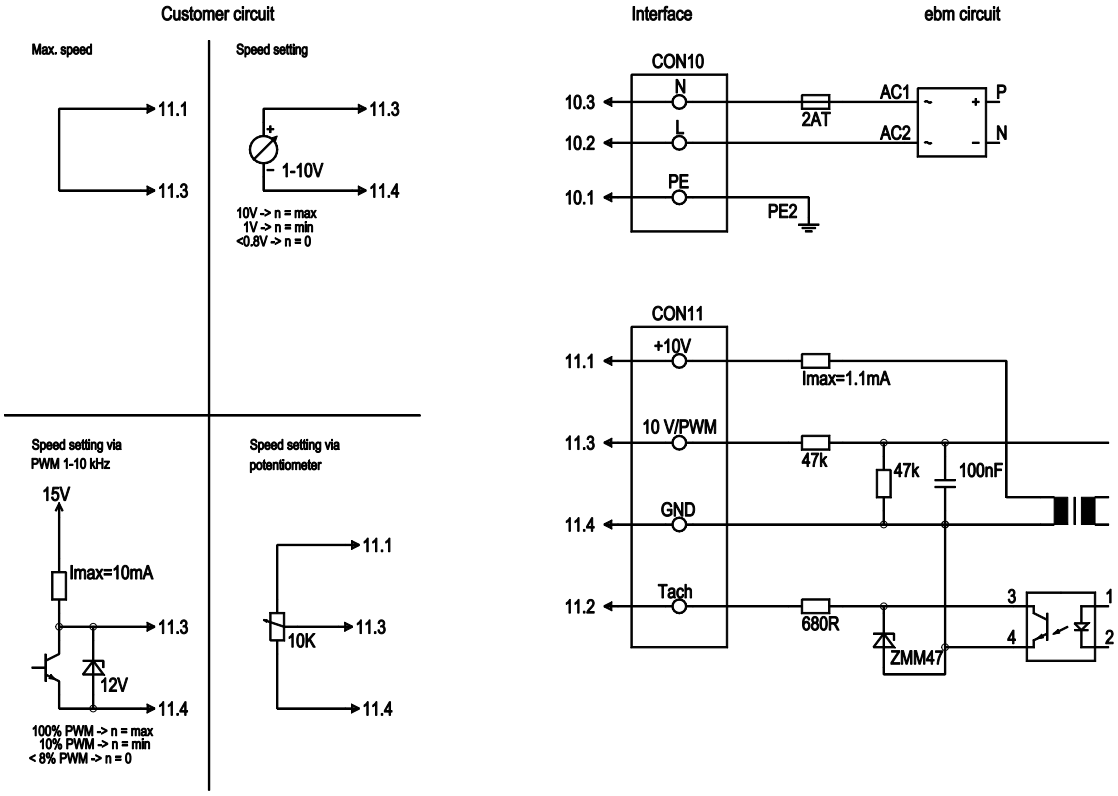
Connection screen



Line	No.	Signal	Colour	Function / assignment
CON10	10.1	PE	green/yellow	Protective earth
CON10	10.2	L	blue	Neutral conductor
CON10	10.3	N	black	Power supply 230 VAC, 50-60 Hz, for voltage range refer to rating plate
CON11	11.1	10 V/max. 1.1 mA	red	Voltage output 10 V/ 1 mA, electrically isolated
CON11	11.2	Tach	white	Tach output: open collector, 1 pulses per revolution, electrically isolated
CON11	11.3	0-10 V PWM	yellow	Control input 0 - 10 V or PWM, electrically isolated
CON11	11.4	GND	blue	GND - Connection for control interface

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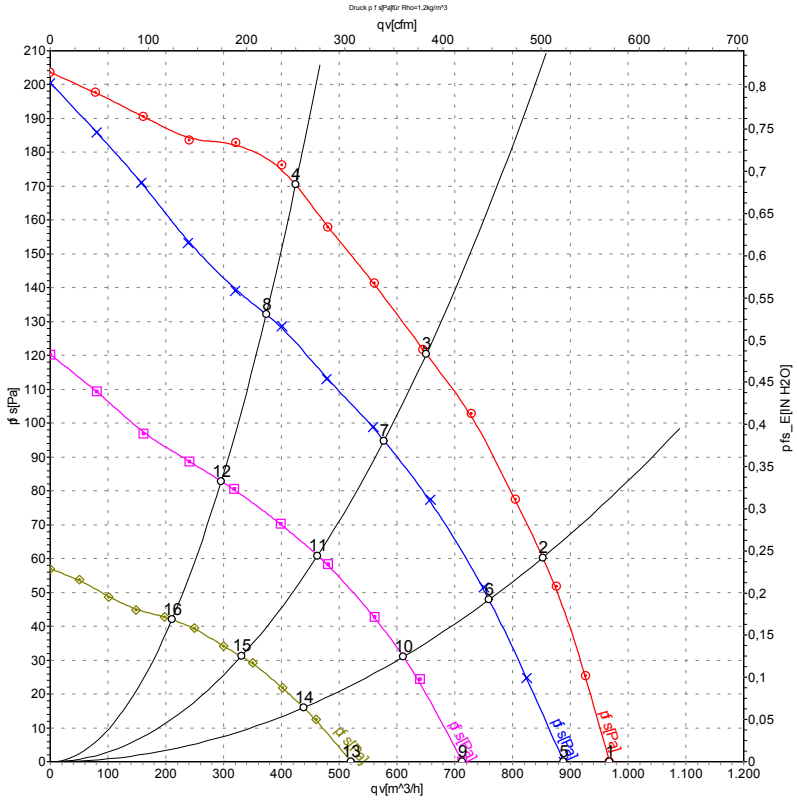
Charts: Air flow 50 Hz



Measurement: LU-131834
Measurement: LU-131837
Measurement: LU-131838
Measurement: LU-131839

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}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa
1	230	50	1330	100	0.80	56	68	970	0
2	230	50	1490	99	0.81	54	67	850	60
3	230	50	1625	79	0.67	52	65	650	120
4	230	50	1780	60	0.53	52	64	425	170
5	230	50	1245	82	0.69			890	0
6	230	50	1330	69	0.59			760	48
7	230	50	1455	56	0.46			580	95
8	230	50	1575	43	0.37			375	132
9	230	50	1030	45	0.39			715	0
10	230	50	1090	39	0.34			610	31
11	230	50	1175	31	0.28			465	61
12	230	50	1255	23	0.22			295	83
13	230	50	765	19	0.17			520	0
14	230	50	800	16	0.15			440	16
15	230	50	850	13	0.13			330	31
16	230	50	900	9.8	0.10			210	42

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