G3G160-AA05-10

61611-1-1360

EC centrifugal fan

with housing (without flange)

G3G160-AA05-10 ebmpapst Datasheet
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Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

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

Nominal data

Type	**G3G160-AA05-10**
Motor	**M3G045-AI**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Type of data definition		fa
Speed (rpm)	min^{-1}	2200
Power input	W	15
Current draw	A	0.15
Min. ambient temperature	°C	15
Max. ambient temperature	°C	40

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	0.8 kg
Size	160 mm
Surface of rotor	Cast in PP plastic
Material of impeller	PP plastic
Housing material	PP plastic
Direction of rotation	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	Shaft horizontal or rotor on bottom
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
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)
Motor protection	Locked-rotor protection
Cable exit	Lateral
Protection class	II
Product conforming to standard	EN 60335-1; EN 60335-2-80; CE

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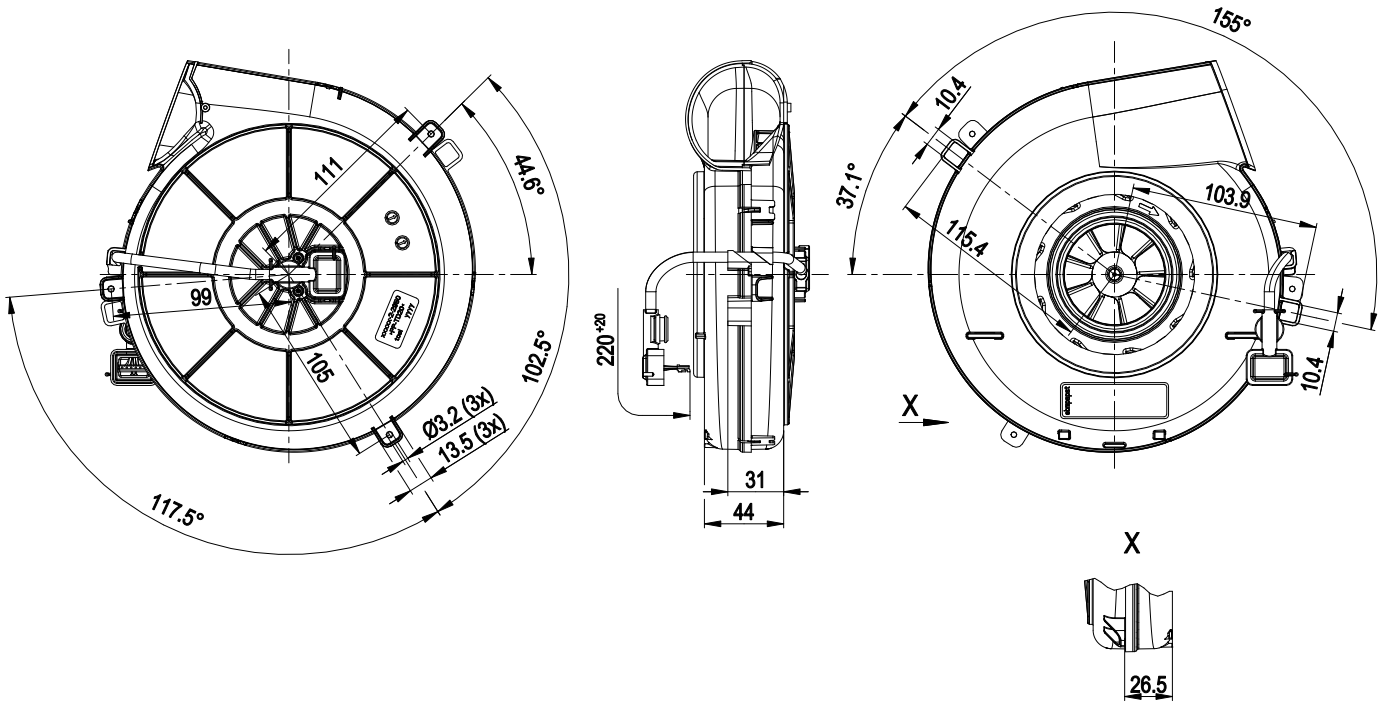
Product drawing



	Attention! Device may only be operated with circuit board 61611-1-1360. Circuit board must be ordered separately.
	Technical features:
	Motor current limit
	Soft start
	Motor excess temperature protection
	Output limit

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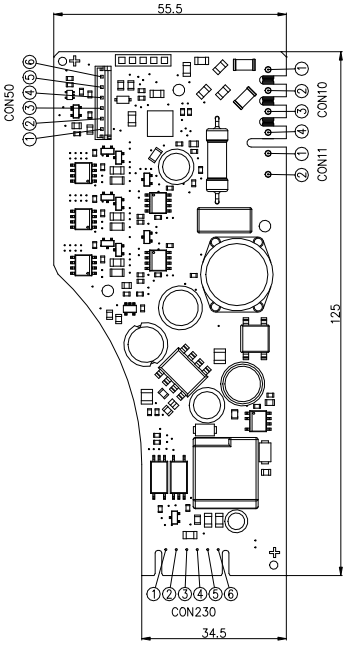
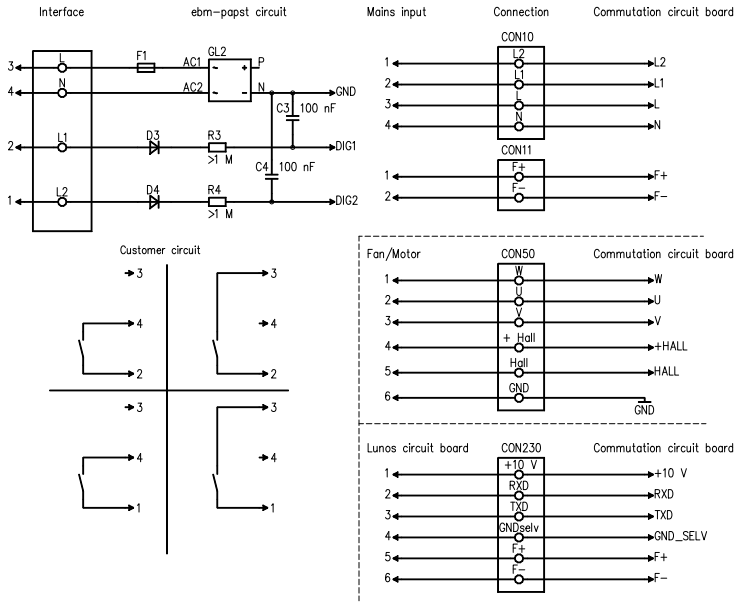
Connection screen



L_1	L_2	Ausgabe output
L/N	–	L_1
L/N	L/N	L_1+L_2
–	L/N	L_2
–	–	–



No.	Conn.	Designation	Function / assignment
CON10	1	L2	Digital input 2
CON10	2	L1	Digital input 1
CON10	3	L	Power supply 200-240 VAC, 50-60 Hz, see type plate for voltage range
CON10	4	N	Neutral conductor
CON11	1	F+	F+ 0-10 V
CON11	2	F-	F- 0 V / GND
CON50	1	W	Coil connection W
CON50	2	U	Coil connection U
CON50	3	V	Coil connection V
CON50	4	+Hall	Power supply Hall IC (20 V)
CON50	5	Hall	Hall signal
CON50	6	GND	GND
CON230	1	+10 V	+10 VDC ±10%, electrically isolated, SELV
CON230	2	RXD	Receive data, electrically isolated, SELV
CON230	3	TXD	Transmit data, electrically isolated, SELV
CON230	4	GND_SELV	Interface GND, electrically isolated, SELV
CON230	5	F+	F+ 0-10 V
CON230	6	F-	F- 0 V / GND

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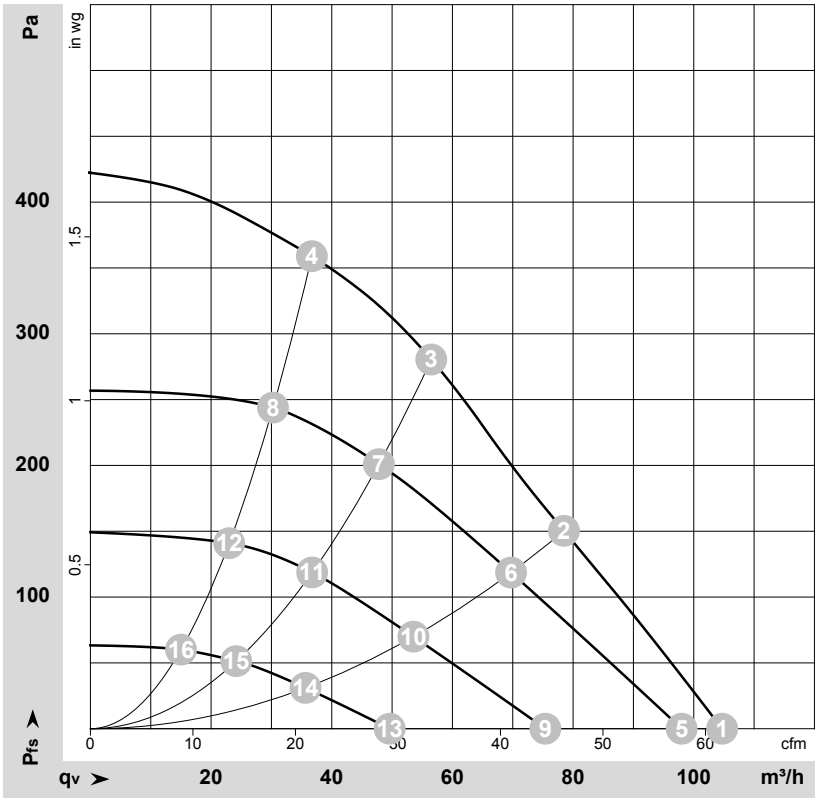
Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-175604-1
Measurement: LU-176261-1
Measurement: LU-176263-1
Measurement: LU-176265-1

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	2200	15	0.15	55	63	105	0	60	0.00
2	230	50	2395	15	0.15	52	60	80	150	45	0.60
3	230	50	2675	15	0.15	51	59	55	280	35	1.12
4	230	50	2835	13	0.12	51	60	35	360	20	1.45
5	230	50	2045	12	0.11	53	61	100	0	60	0.00
6	230	50	2145	11	0.10	48	56	70	121	40	0.49
7	230	50	2235	9.0	0.08	46	54	50	201	30	0.81
8	230	50	2315	8.0	0.07	45	53	30	245	20	0.98
9	230	50	1575	7.0	0.07	46	54	75	0	45	0.00
10	230	50	1625	6.0	0.06	41	49	55	71	30	0.29
11	230	50	1690	5.0	0.05	38	46	35	119	20	0.48
12	230	50	1740	4.0	0.04	38	46	25	141	15	0.57
13	230	50	1035	3.00	0.03	34	42	50	0	30	0.00
14	230	50	1075	3.00	0.03	29	38	35	32	20	0.13
15	230	50	1105	3.00	0.03	27	35	25	51	15	0.20
16	230	50	1130	2.00	0.03	26	35	15	60	10	0.24

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