G3G125-AB20-01

EC centrifugal module

backward-curved

with housing

ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.com

Limited partnership · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**G3G125-AB20-01**
Motor	**M3G074-BF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	208 .. 250
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	12300
Power consumption	W	490
Current draw	A	2.1
Min. back pressure	Pa	0
Min. back pressure	in. wg	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

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

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Technical description

Weight	3.9 kg
Size	125 mm
Motor size	74
Rotor surface	Painted black
Impeller material	Sheet aluminum
Number of blades	6
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP20
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1+
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Technical features	- Motor current limitation - PFC, active - Soft start - Control input 0-10 VDC / PWM - Thermal overload protection for electronics/motor
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	Plug
Motor protection	Locked-rotor protection
Pollution degree	3
Protection class	I (with customer connection of protective earth)
Conformity with standards	CE
Approval	CSA C22.2 No. 113; UL 507

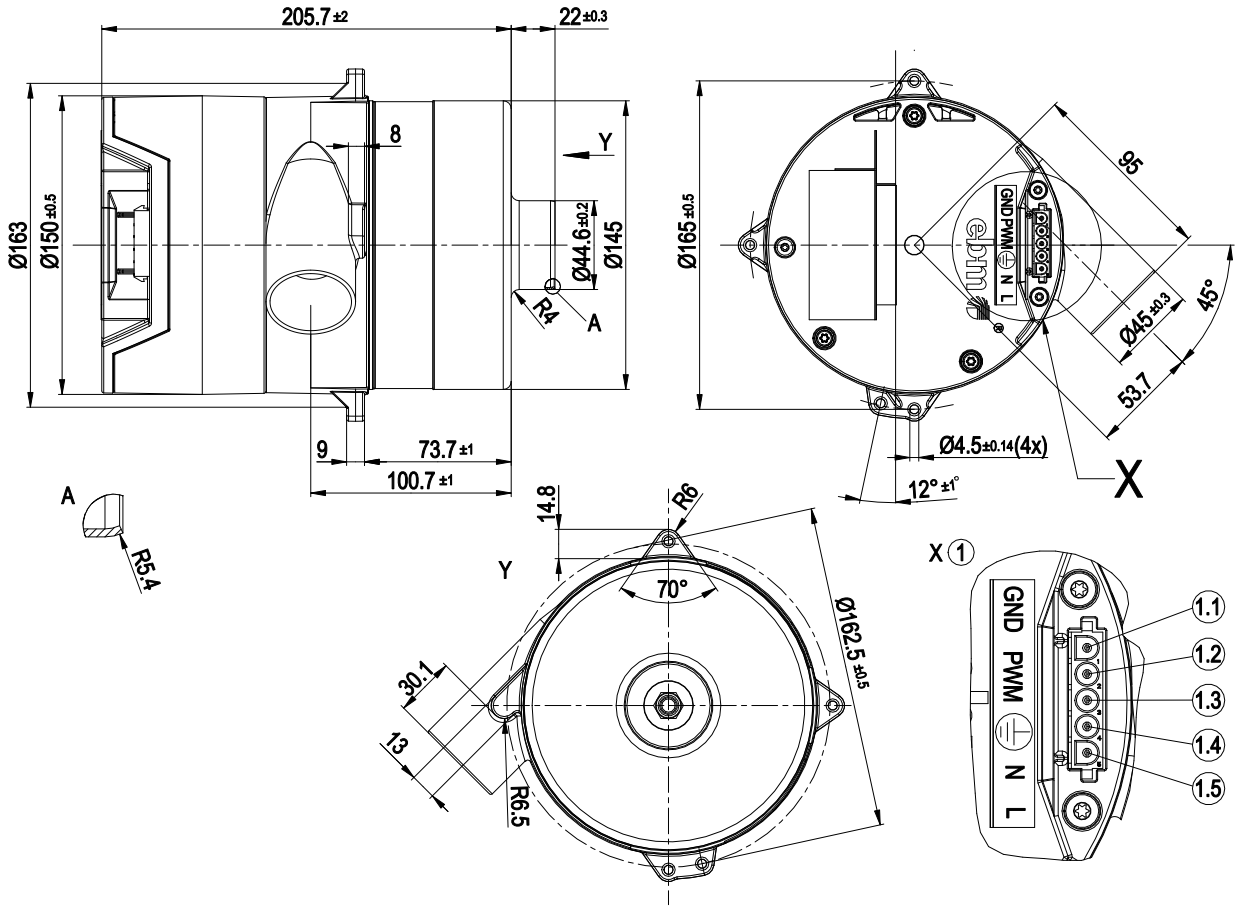
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Product drawing

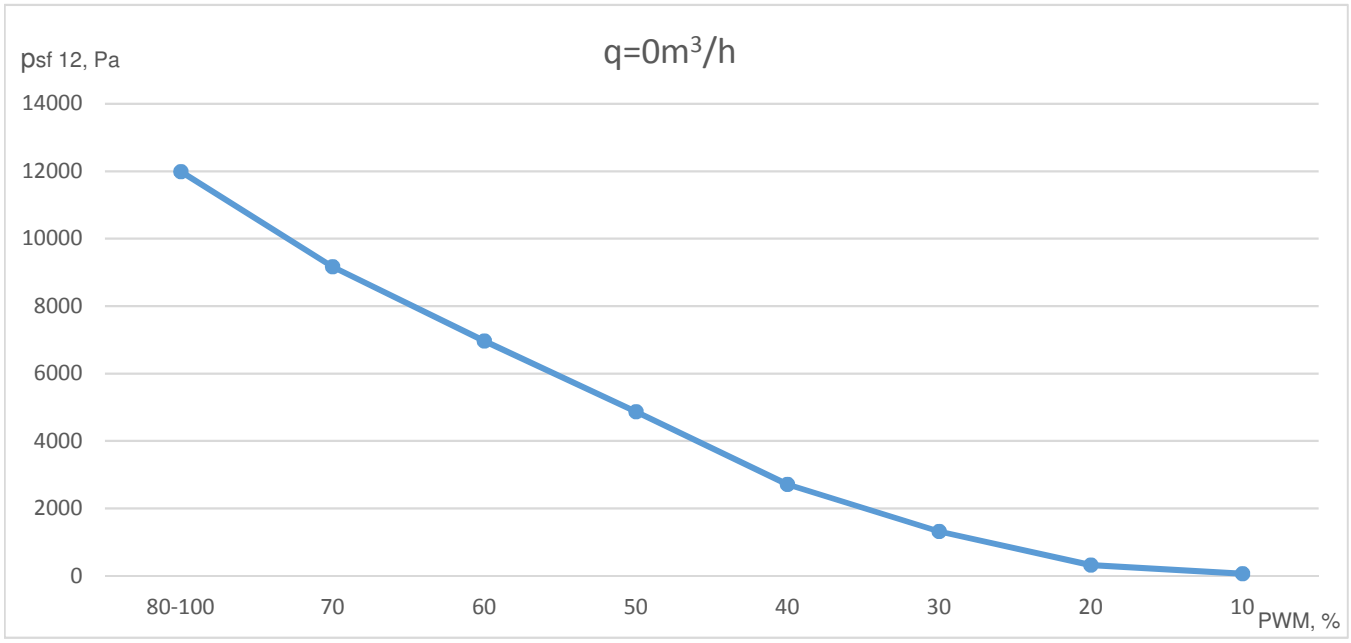


1	5-pole pin socket tyco 643406-1
1.1	GND
1.2	PWM
1.3	PE
1.4	N
1.5	L

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Messwerte im betriebswarmen Zustand

no	PWM [%]	U [V]	f [Hz]	n [min^{-1}]	Ped [W]	I [A]	qv [m³/h]	psf [Pa]	psf12 [Pa]
1	80-100	230	50	14385	265	1,17	0	11276	11990
2	70	230	50	12475	188	0,84	0	8620	9166
3	60	230	50	10762	137	0,67	0	6554	6969
4	50	230	50	8931	91	0,55	0	4578	4868
5	40	230	50	6603	52	0,41	0	2556	2717
6	30	230	50	4569	26	0,30	0	1240	1318
7	20	230	50	2287	10	0,18	0	300	319
8	10	230	50	1029	6	0,09	0	60	64



psf 12 = Druckerhöhung statisch auf Normdichte umgerechnet (Rho=1,2kg/m3)
psf = Druckerhöhung statisch

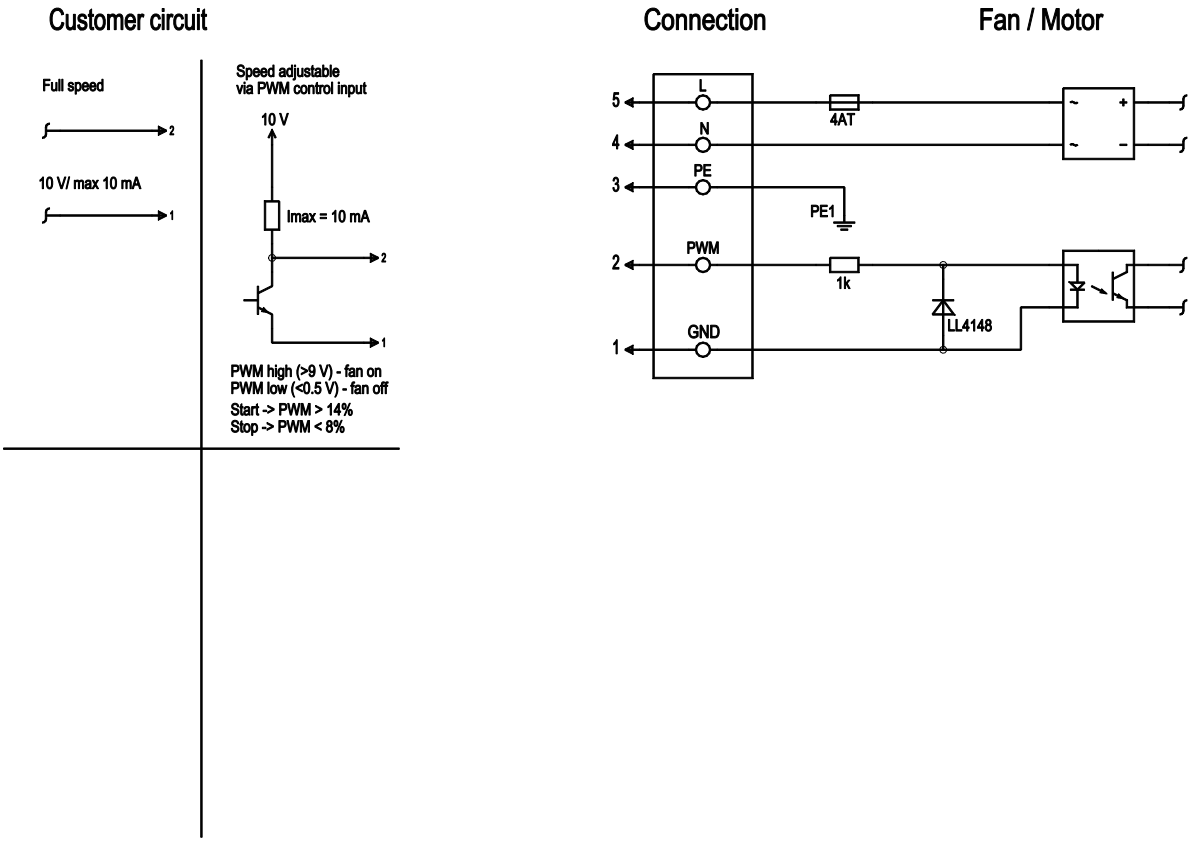
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Connection diagram



No.	Conn.	Designation	Function/assignment
	1	GND	Reference ground for control interface, SELV
	2	PWM	Control input PWM, 250-1250 Hz, Isink max 10 mA, SELV
	3	PE	Protective earth
	4	N	Neutral conductor
	5	L	Power supply 208-250 VAC, 50/60 Hz, phase

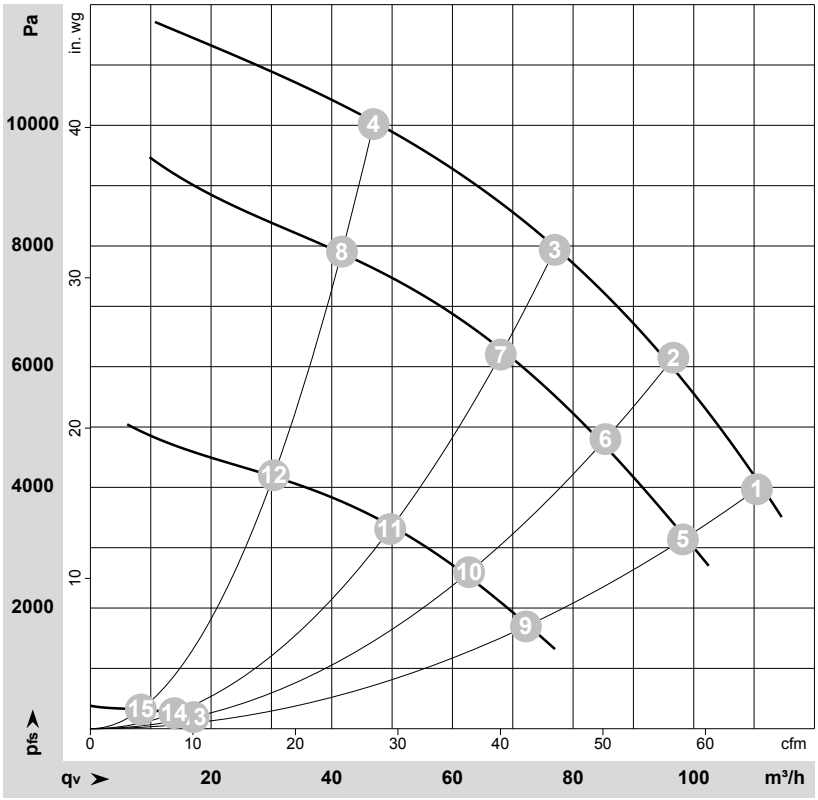
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-197653-1
Measurement: LU-197810-1
Measurement: LU-197811-1
Measurement: LU-197812-1

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

	Stage	Wired	U	f	n	P_{ed}	I	q_V	p_{fs}	q_V	p_{fs}
			V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	100%	1~	230	50	12300	490	2.10	110	4000	65	16.06
2	100%	1~	230	50	12300	490	2.10	95	6000	55	24.09
3	100%	1~	230	50	12500	464	2.02	75	8000	45	32.12
4	100%	1~	230	50	12920	409	1.78	45	10000	30	40.15
5	70%	1~	230	50	10935	347	1.51	100	3080	60	12.37
6	70%	1~	230	50	10925	347	1.51	85	4840	50	19.43
7	70%	1~	230	50	11025	336	1.47	70	6201	40	24.89
8	70%	1~	230	50	11355	292	1.28	40	7906	25	31.74
9	50%	1~	230	50	8040	158	0.72	70	1695	40	6.80
10	50%	1~	230	50	7980	157	0.71	65	2623	35	10.53
11	50%	1~	230	50	8010	152	0.70	50	3309	30	13.28
12	50%	1~	230	50	8140	135	0.66	30	4200	20	16.86
13	20%	1~	230	50	2050	12	0.19	15	192	10	0.77
14	20%	1~	230	50	2045	12	0.19	15	260	10	1.04
15	20%	1~	230	50	2080	13	0.20	10	320	5	1.28

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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