

EC centrifugal fan

single inlet

G3G180-FJ11-01 ebmpapst Datasheet

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Nominal data

Type	G3G180-FJ11-01	
Motor	M3G055-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	2690
Power input	W	55
Current draw	A	0.5

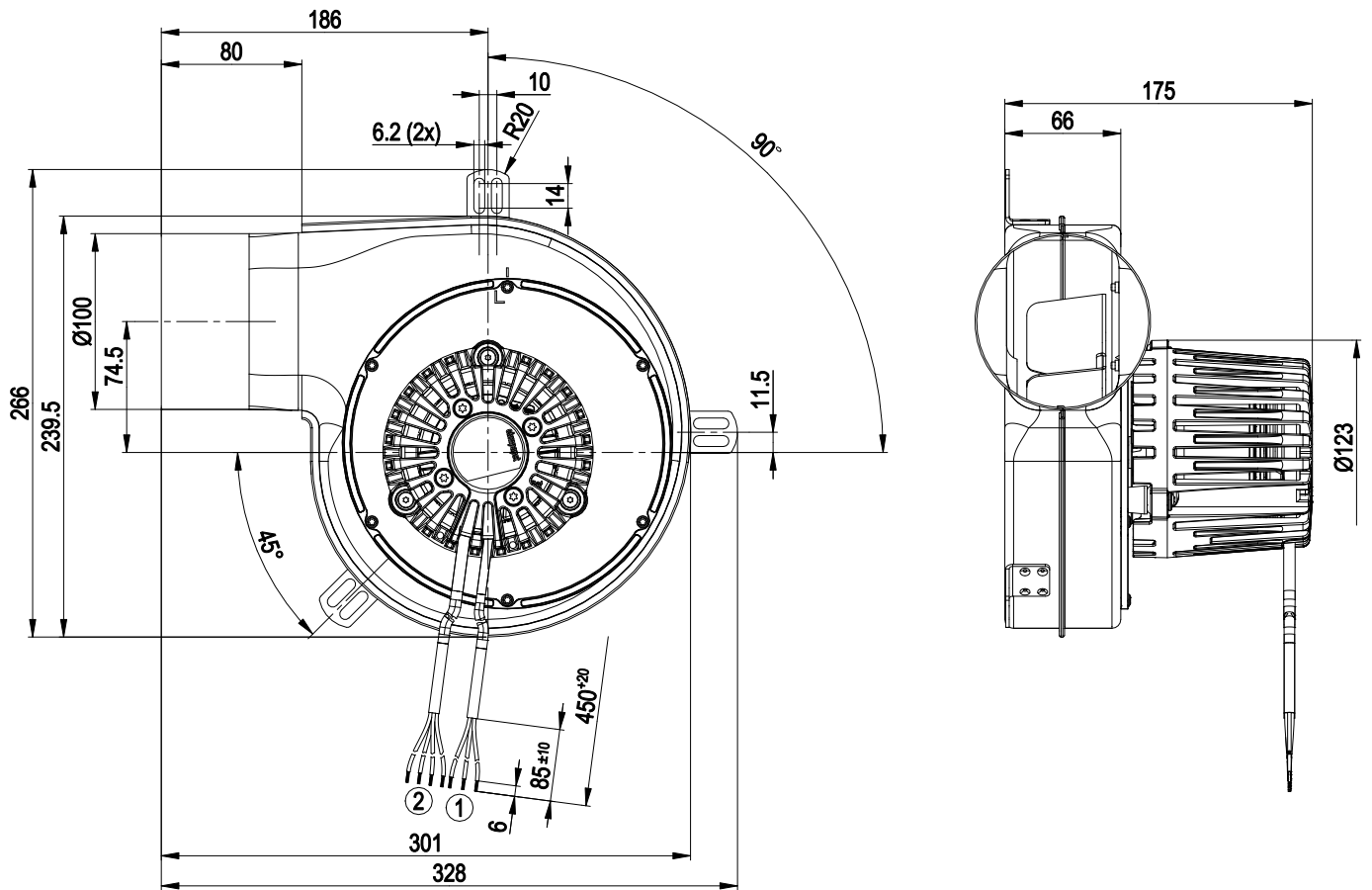
ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations



Technical features

Mass	2.8 kg
Size	180 mm
Surface of rotor	Thick layer passivated
Material of impeller	Sheet steel, rust and acid-resistant
Housing material	Aluminised sheet steel
Number of blades	6
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
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	<ul style="list-style-type: none"> - Output 10 VDC, max. 1.1 mA - Tach output - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Over-temperature protected motor
Motor protection	Locked-rotor protection
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE

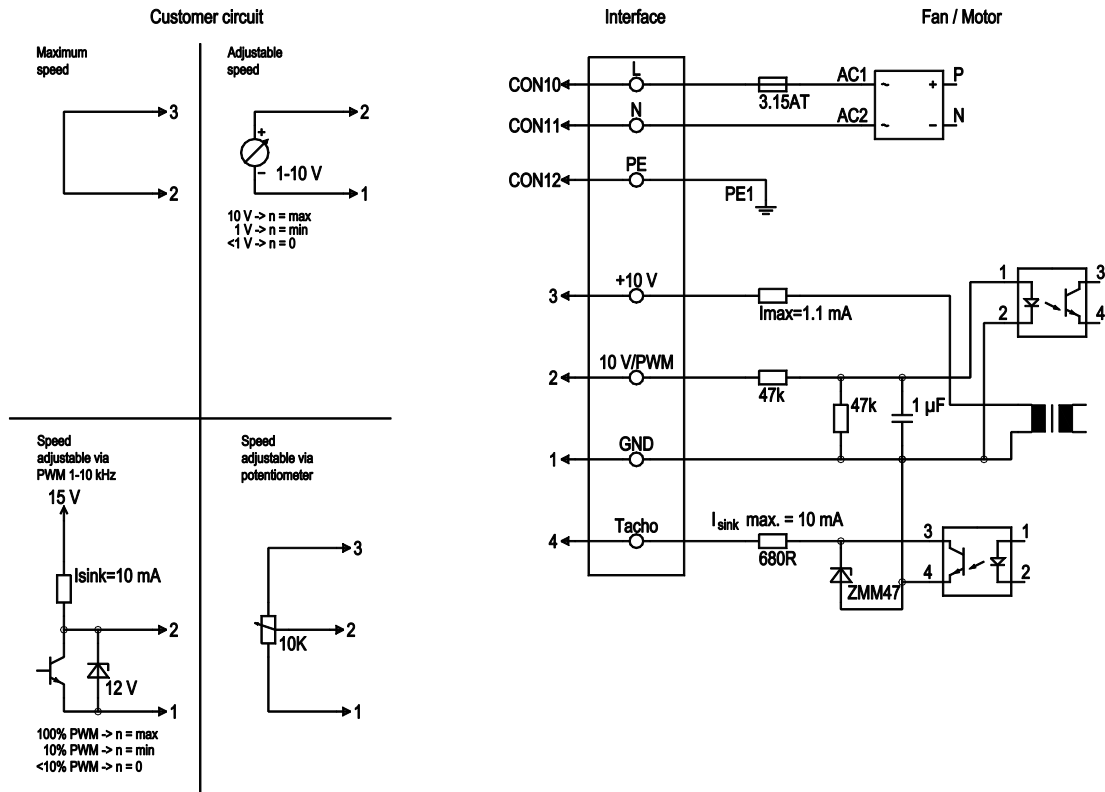
Product drawing



- | | |
|---|---|
| 1 | Connection line PVC AWG20, 3x lead tips crimped |
| 2 | Connection line PVC AWG22, 4x lead tips crimped |



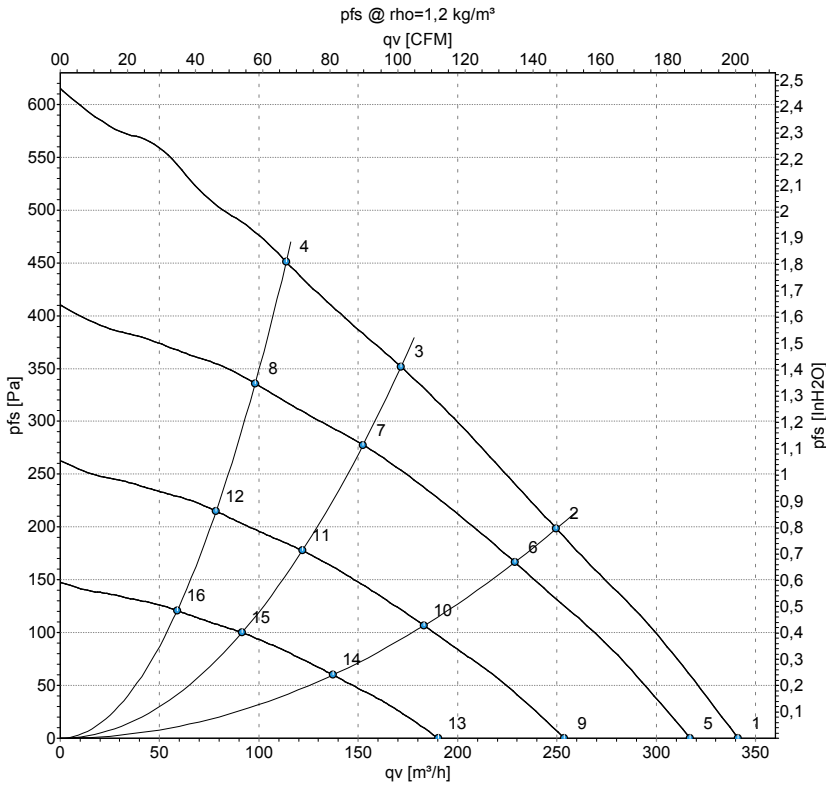
Connection screen



No.	Conn.	Designation	Colour	Function / assignment
	CON10	L	black	Power supply 230 VAC, 50-60 Hz, for voltage range refer to rating plate
	CON11	N	blue	Neutral conductor
	CON12	PE	green/yellow	Protective earth
	1	GND	blue	GND - Connection for control interface
	2	0- 10V PWM	yellow	Control input 0 - 10 V or PWM, electrically isolated
	3	10V/ max 1.1mA	red	Voltage output 10 V / 1.1 mA, electrically isolated, not short-circuit-proof
	4	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated, Isink max = 10 mA



Charts: Air flow 50 Hz



Measurement: LU-159626-1

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)	m³/h	Pa	cfm	inH2O
1	230	50	2690	55	0.50	74	79	340	0	200	0.00
2	230	50	2725	52	0.48	70	75	250	200	145	0.80
3	230	50	2810	46	0.44	66	72	170	350	100	1.41
4	230	50	2895	39	0.38	64	72	115	450	65	1.81
5	230	50	2500	44	0.40	72	77	315	0	185	0.00
6	230	50	2500	40	0.37	67	73	230	167	135	0.67
7	230	50	2500	32	0.31	63	69	150	279	90	1.12
8	230	50	2500	25	0.25	61	68	100	336	60	1.35
9	230	50	2000	22	0.21	66	72	255	0	150	0.00
10	230	50	2000	20	0.19	62	68	185	107	110	0.43
11	230	50	2000	16	0.16	57	64	120	178	70	0.71
12	230	50	2000	13	0.13	55	62	80	215	45	0.86
13	230	50	1500	9.0	0.09	59	64	190	0	110	0.00
14	230	50	1500	9.0	0.08	55	60	135	60	80	0.24
15	230	50	1500	7.0	0.07	50	57	90	100	55	0.40
16	230	50	1500	5.0	0.05	48	55	60	121	35	0.49

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

