G3G180-EF01-03

EC centrifugal fan

forward curved, single inlet

with housing (flange)

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Nominal data

Type	**G3G180-EF01-03**	
Motor	**M3G074-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	min^{-1}	1370
Power input	W	165
Current draw	A	1.33
Min. back pressure	Pa	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

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

Size	180 mm
Material of impeller	Sheet steel, galvanised
Housing material	Sheet steel, galvanised
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Humidity class	F3-1
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	- 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 electronics / motor
Motor protection	PTC resistor
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)

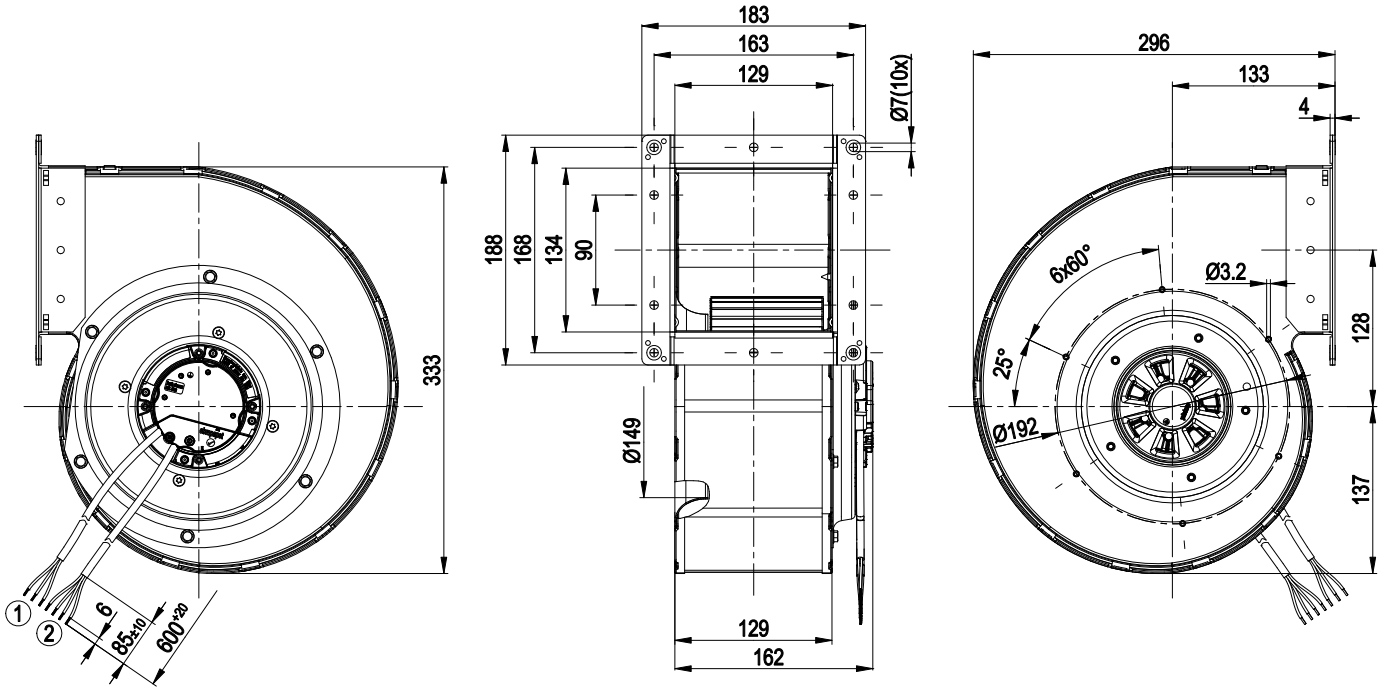
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Product drawing



1	Connection line PVC 3X AWG20, 3x brass lead tips crimped
2	Connection line PVC 4X AWG22, 4x brass lead tips crimped

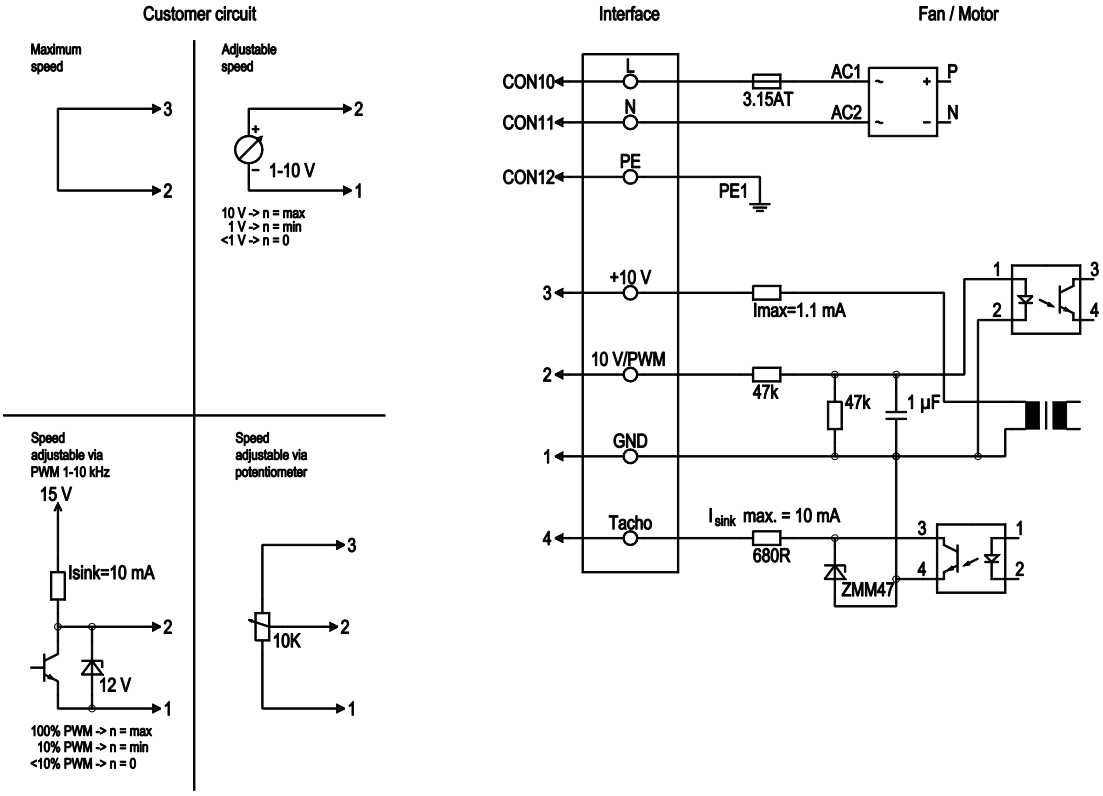
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Connection screen



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, Isink = 10 mA
	4	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated, Isink max = 10 mA

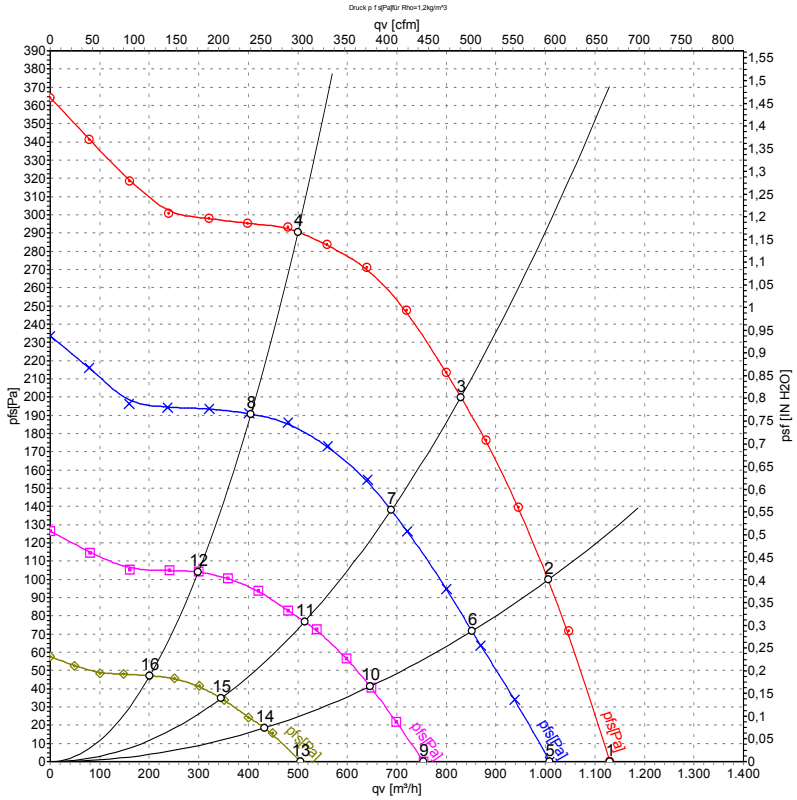
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Charts: Air flow 50 Hz



Measurement: LU-139387

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	1370	165	1.33	67	72	1130	0
2	230	50	1495	162	1.31	66	71	1005	100
3	230	50	1570	136	1.14	64	70	830	200
4	230	50	1665	87	0.75	61	67	500	290
5	230	50	1230	120	0.97			1010	0
6	230	50	1265	99	0.83			850	72
7	230	50	1305	79	0.68			690	138
8	230	50	1360	50	0.44			405	191
9	230	50	940	54	0.46			755	0
10	230	50	960	45	0.40			645	41
11	230	50	985	36	0.33			515	77
12	230	50	1020	24	0.23			300	104
13	230	50	650	20	0.19			505	0
14	230	50	660	17	0.16			435	19
15	230	50	675	14	0.14			345	35
16	230	50	700	10	0.11			200	47

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

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