G3G180-EU60-01

EC centrifugal fan

forward-curved, single-intake

with housing (without flange)



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Nominal data

Type	**G3G180-EU60-01**	
Motor	**M3G074-CF**	
Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 277
Frequency	Hz	50/60
Method of obtaining data		fa
Speed (rpm)	min^{-1}	1300
Power consumption	W	165
Current draw	A	1.25
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	4.9 kg
Fan size	180 mm
Rotor surface	Painted black
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F3-1
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	- Output 10 VDC, max. 1.1 mA - Tach output - Power limiter - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Thermal overload protection for motor
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC interference emission	According to EN 61000-6-4 (industrial environment)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	CSA C22.2 No. 77; UL 2111

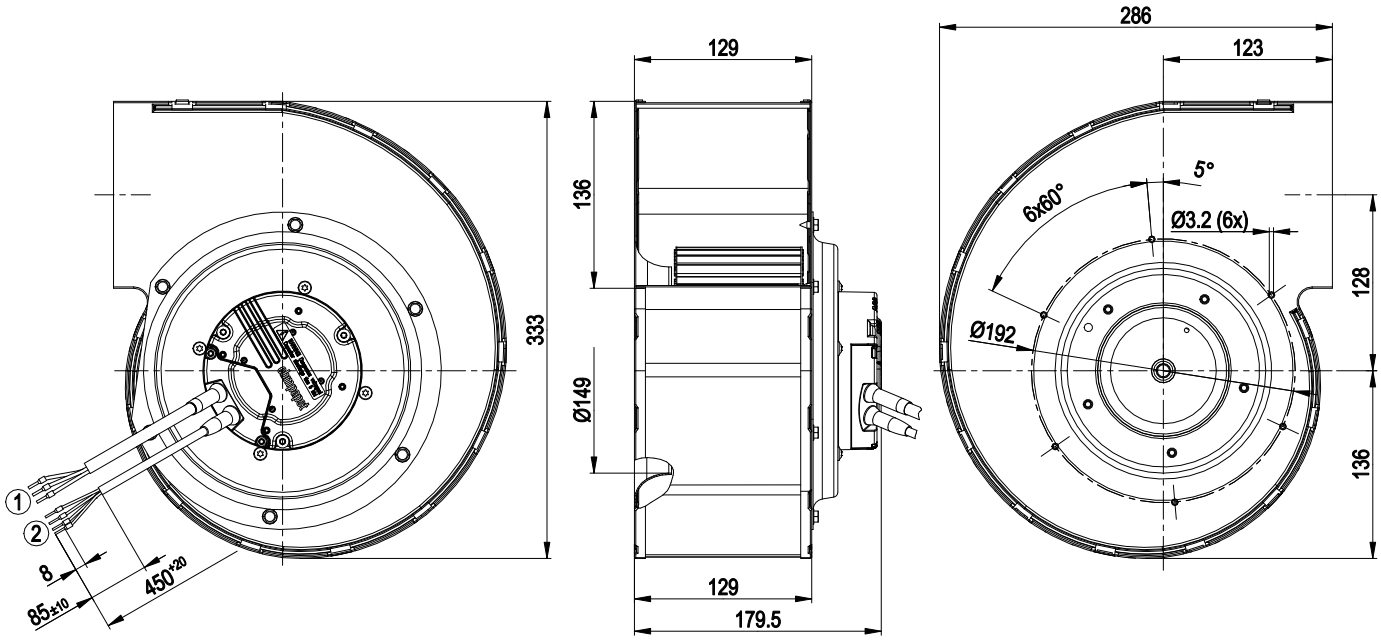
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Product drawing



1	Cable PVC AWG18, 3x crimped ferrules
2	Cable PVC AWG22, 4x crimped ferrules

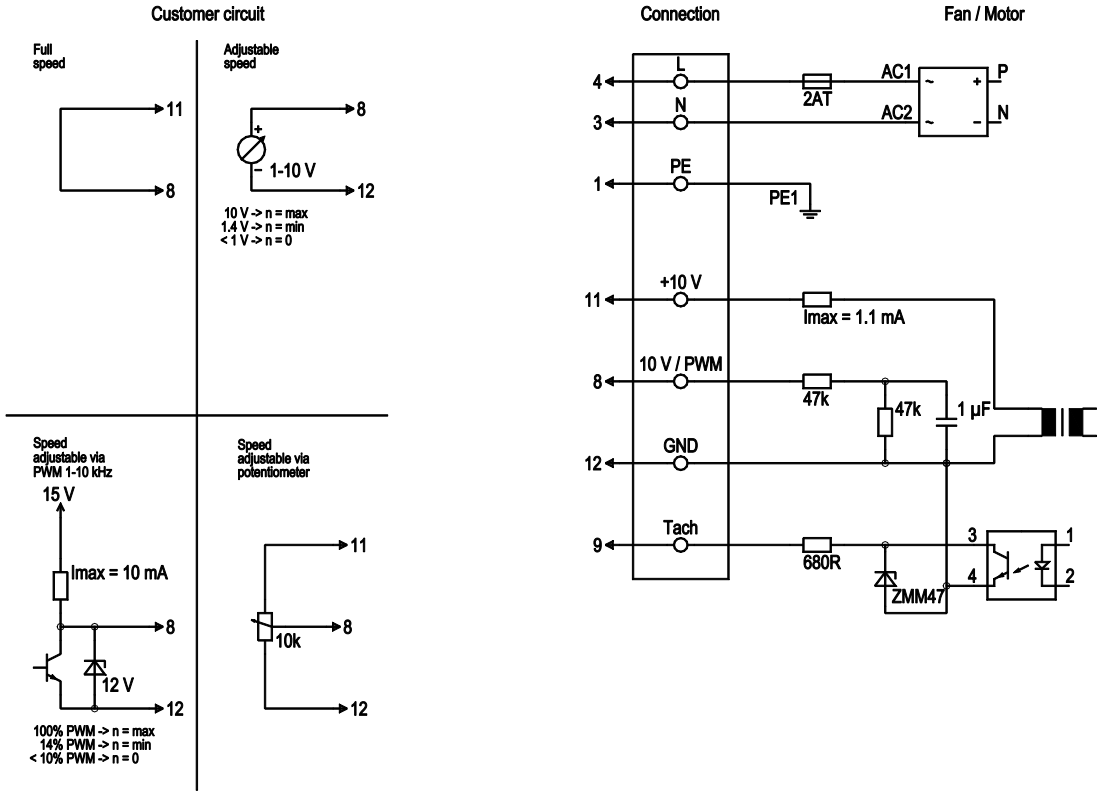
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	4	L	black	Power supply 230 VAC, 50-60 Hz, see nameplate for voltage range
	3	N	blue	Neutral conductor
	1	PE	green/yellow	Protective earth
	8	0-10 V PWM	yellow	Control input 0-10 V or PWM, electrically isolated
	9	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated
	11	10V / max 1.1 mA	red	Voltage output 10 V/max. 1.1 mA, electrically isolated
	12	GND	blue	GND connection for control interface

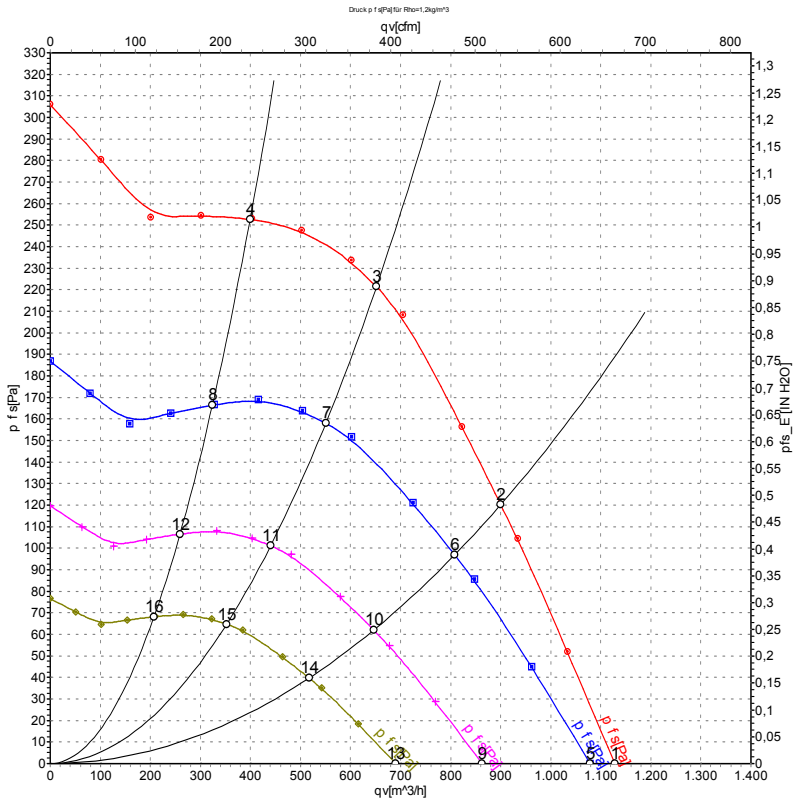
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Curves: Air performance 50 Hz



Measurement: LU-117663-1

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

	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	1300	165	1.25	68	73	1130	0	665	0.00
2	230	50	1390	133	0.99	65	71	900	120	530	0.48
3	230	50	1480	98	0.73	62	69	650	220	385	0.88
4	230	50	1540	68	0.51	61	68	400	250	235	1.00
5	230	50	1250	146	1.07	67	72	1080	0	635	0.00
6	230	50	1250	97	0.72	62	69	810	97	475	0.39
7	230	50	1250	59	0.44	59	66	550	158	325	0.63
8	230	50	1250	36	0.27	56	64	325	167	190	0.67
9	230	50	1000	75	0.55	62	67	865	0	510	0.00
10	230	50	1000	50	0.37	57	64	645	62	380	0.25
11	230	50	1000	30	0.23	54	61	440	101	260	0.41
12	230	50	1000	18	0.14	52	59	260	107	150	0.43
13	230	50	800	38	0.28	57	63	690	0	405	0.00
14	230	50	800	25	0.19	53	59	515	40	305	0.16
15	230	50	800	16	0.12	49	56	350	65	205	0.26
16	230	50	800	9.5	0.07	47	54	205	68	120	0.27

U = Power supply · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
q_V = Air flow · p_{fs} = Pressure increase

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