EC centrifugal fan

forward-curved, single-intake

Nominal data

Type	G3G160-8317080273
Motor	M3G055-DF

Phase		1~
Nominal voltage	VAC	220
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	2100
Power consumption	W	170
Current draw	A	1.4
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	45

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	3.6 kg
Fan size	160 mm
Rotor surface	Thick-film passivated
Electronics housing material	Die-cast aluminum
Impeller material	PA plastic, galvanized sheet-metal plate
scroll housing material	Sheet steel, painted black
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44 (Air inlet upward or horizontal)
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	On rotor side
Mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limit - Soft start - PWM control input
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Locked-rotor protection
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	GB12350
Approval	CCC;

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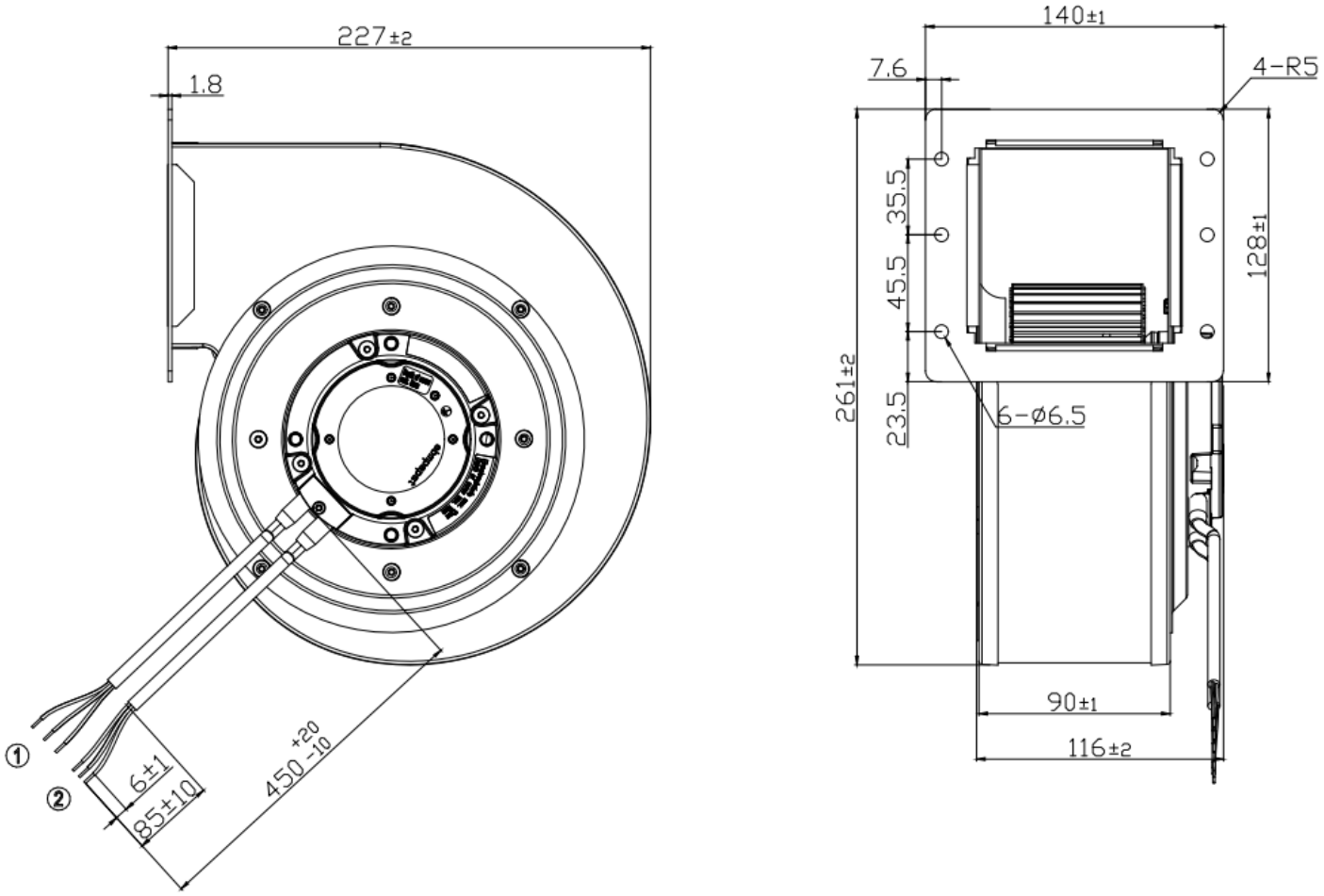
Product drawing



1	Cable PVC 3x 0.25 mm² , 3x tinning thread
2	Cable PVC 3x 0.5 mm² , 3x tinning thread
3	Scroling housing 8317080269

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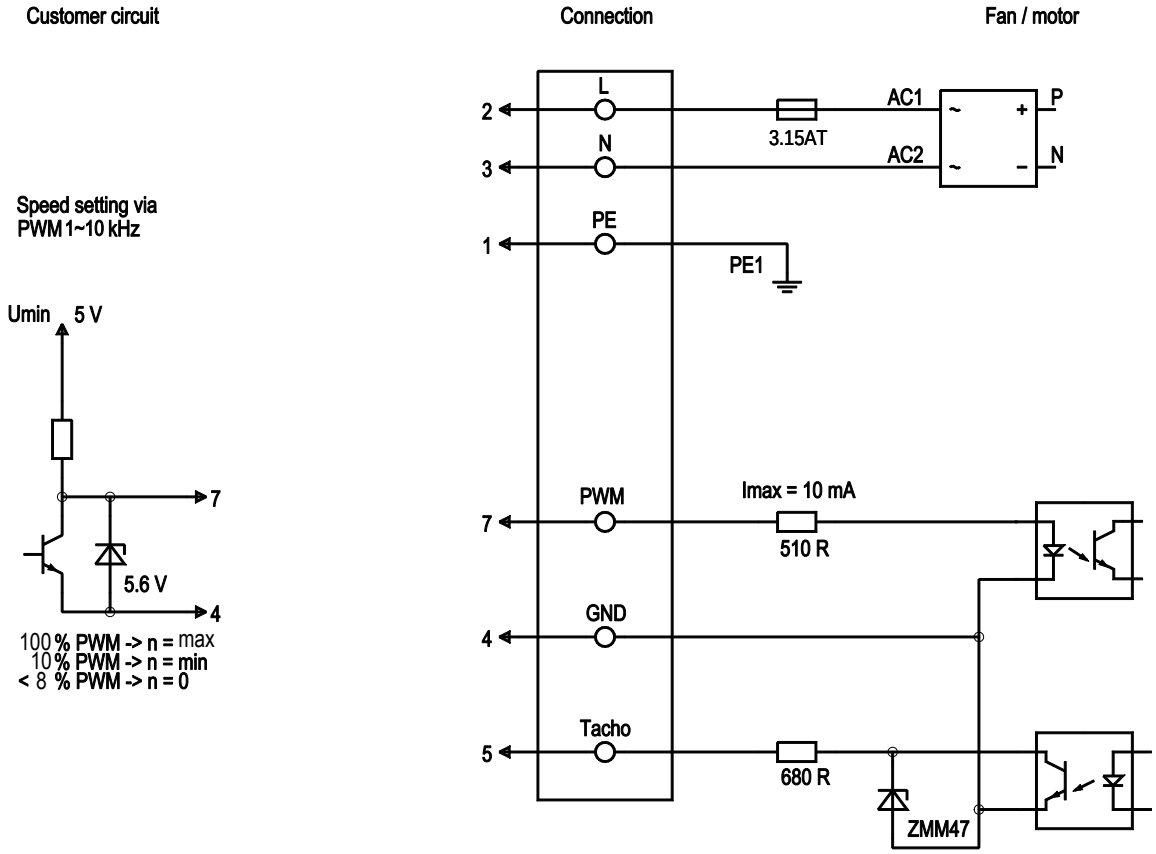
Connection diagram



Line	No.	Signal	Colour	Function / assignment
	1	PE	green/yellow	Protective earth
	2	L	brown	Power supply 220 VAC, 50 - 60 Hz
	3	N	blue	Neutral conductor
	4	GND	blue	GND - Connection for control interface
	5	Tacho	white	Tach output: Open Collector, 1 pulse per revolution, electrically isolated
	7	PWM	yellow	PWM control input, electrically isolated

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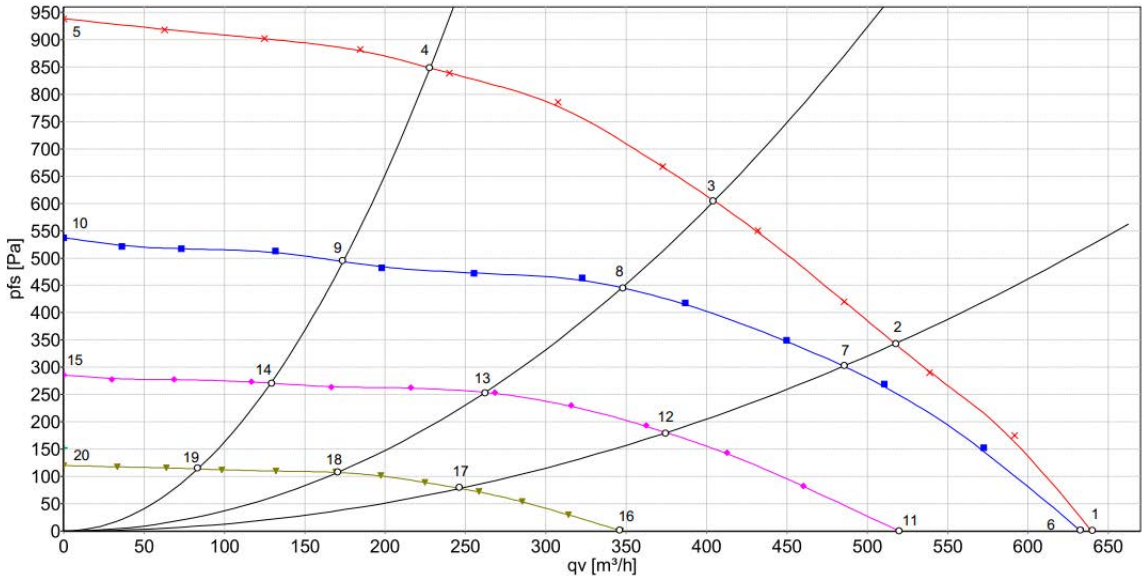
Curves: Air performance 50 Hz



ρ = 1.2 kg/m3 ± 2 %

Test ID:12330

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.

Fan performance

Index	U	f	n	P_{ed}	I	LpA_{in}	LwA_{in}	q_v	p_{fs}	q_v
	v	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm
01	220	50	2092	164	1.31	70	78	640	0	376
02	220	50	2440	163	1.32	70	77	517	343	304
03	220	50	2821	163	1.32	69	76	405	605	238
04	220	50	3366	141	1.14	69	76	227	849	133
05	220	50	3490	100	0.82			0	939	0
06	220	50	2073	160	1.30	70	77	633	0	372
07	220	50	2291	136	1.10	69	76	486	301	286
08	220	50	2437	106	0.86	68	75	348	446	205
09	220	50	2574	69	0.57	66	74	172	494	101
10	220	50	2653	48	0.42			0	537	0
11	220	50	1691	85	0.69	65	73	519	0	305
12	220	50	1785	64	0.53	63	71	374	181	220
13	220	50	1850	48	0.40	62	70	262	254	154
14	220	50	1915	31	0.27	60	68	129	271	76
15	220	50	1957	23	0.21			0	286	0
16	220	50	1140	28	0.24	56	63	346	1	204
17	220	50	1184	21	0.19	53	61	249	77	146
18	220	50	1219	16	0.15	52	60	171	107	100
19	220	50	1255	12	0.11	51	60	84	114	49
20	220	50	1288	9	0.10			0	120	0

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