

EC axial fan

sickled blades (S series), single inlet
with guard grille for full nozzle

S3G350-BG03-42 ebmpapst Datasheet
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Nominal data

Type	S3G350-BG03-42	
Motor	M3G055-DF	
Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Type of data definition		ml
Speed (rpm)	min ⁻¹	1040
Power input	W	73
Current draw	A	0.65
Max. back pressure	Pa	55
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

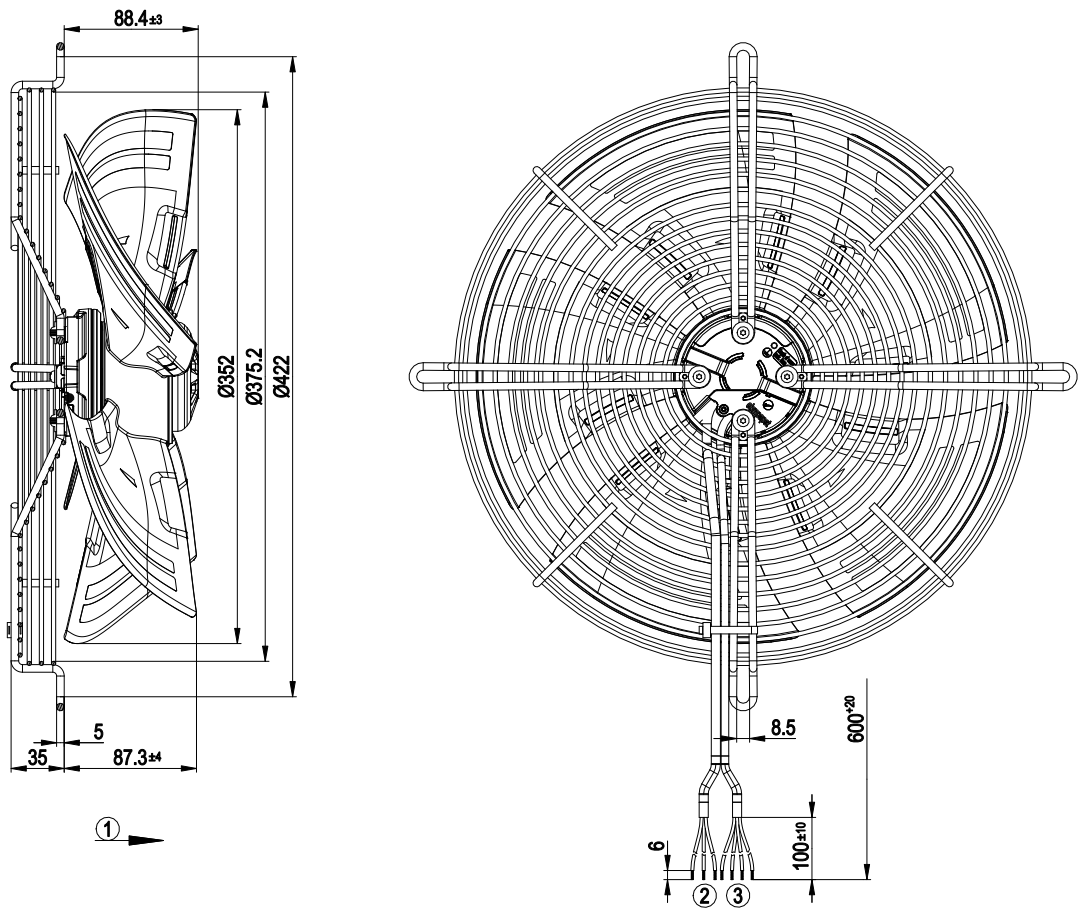
Mass	2.8 kg
Size	350 mm
Surface of rotor	Thick layer passivated
Material of blades	Press-fitted sheet steel blank, sprayed with PP plastic
Material of guard grille	Steel, coated in black plastic (RAL9005)
Number of blades	5
Direction of air flow	"A"
Direction of rotation	Clockwise, seen on rotor
Type 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	- Output 10 VDC, max. 1.1 mA - Tach output - Output limit - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Overvoltage detection - Over-temperature protected electronics / motor - Line undervoltage detection
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	EN 60335-1; CE



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Product drawing



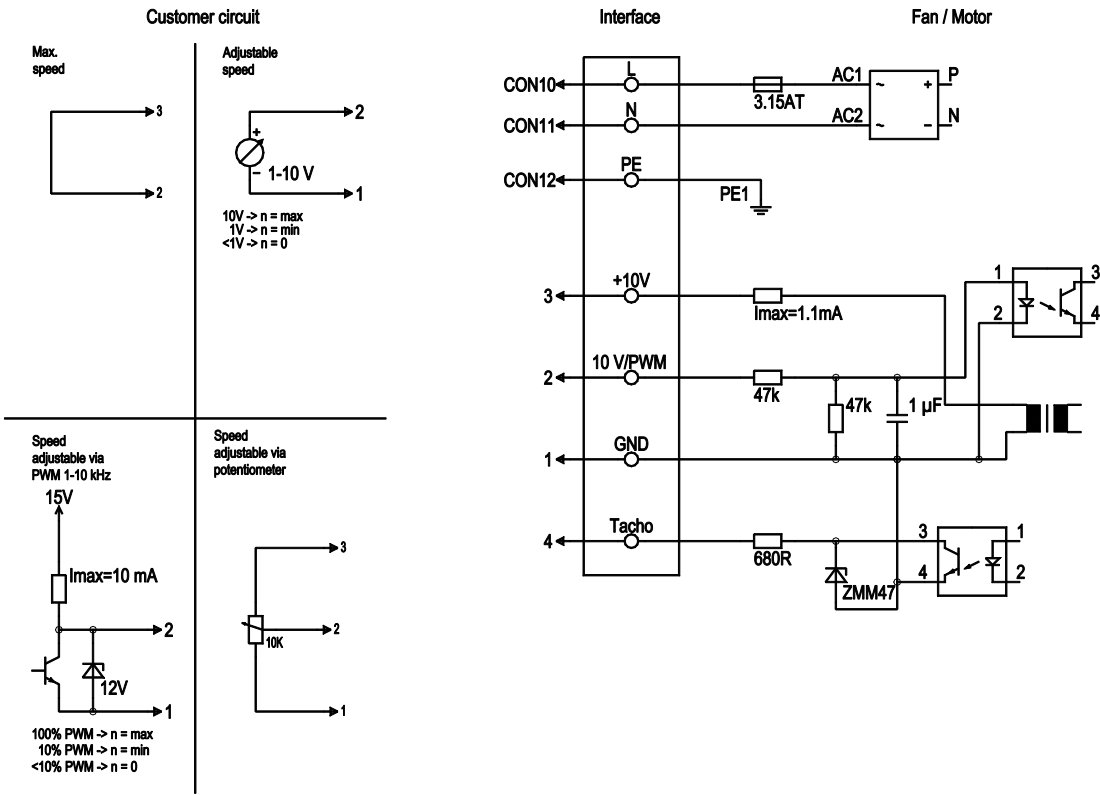
1	Direction of air flow "A"
2	Connection line PVC AWG22, 4x lead tips crimped
3	Connection line PVC AWG20, 3x lead tips crimped



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Connection screen



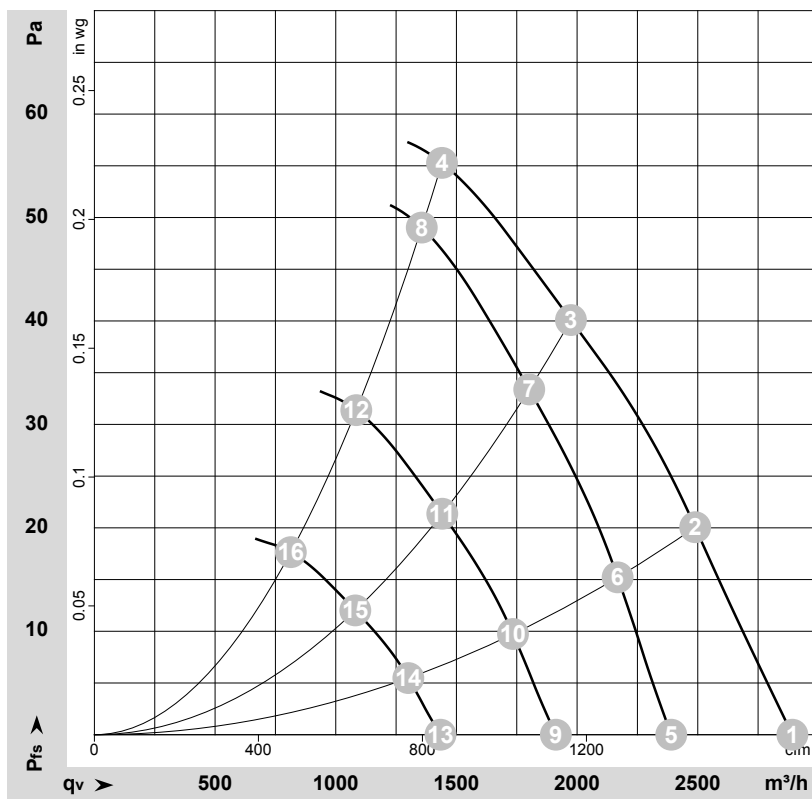
No.	Conn.	Designation	Colour	Function / assignment
	CON10	L	black	Power supply 230 VAC, 50-60 Hz, see type plate for voltage range
	CON11	N	blue	Neutral conductor
	CON12	PE	green/yellow	Protective earth
	1	GND	blue	GND connection for control interface
	2	0-10V PWM	yellow	Control input 0-10 V or PWM, electrically isolated
	3	10 V / max. 1,1 mA	red	Voltage output 10 VDC 1.1 mA, electrically isolated, short-circuit-proof
	4	Tacho	white	Tach output: Open collector, 1 pulse per revolution, electrically isolated



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Charts: Air flow 50 Hz



$$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$$

Measurement: LU-165180-1

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	inH ₂ O
1	230	50	1210	73	0.65	59	65	2890	0	1700	0.00
2	230	50	1150	73	0.65	55	62	2490	20	1465	0.08
3	230	50	1095	73	0.65	52	59	1975	40	1160	0.16
4	230	50	1040	73	0.65	49	56	1440	55	850	0.22
5	230	50	1000	41	0.37			2390	0	1405	0.00
6	230	50	1000	49	0.43			2170	15	1275	0.06
7	230	50	1000	56	0.50			1800	33	1060	0.13
8	230	50	1000	61	0.55			1355	49	800	0.20
9	230	50	800	21	0.19			1910	0	1125	0.00
10	230	50	800	25	0.22			1735	10	1020	0.04
11	230	50	800	28	0.25			1440	21	850	0.08
12	230	50	800	31	0.28			1085	31	640	0.12
13	230	50	600	9.0	0.08			1435	0	845	0.00
14	230	50	600	10.0	0.09			1300	5	765	0.02
15	230	50	600	12	0.11			1080	12	635	0.05
16	230	50	600	13	0.12			815	18	480	0.07

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

