

EC axial fan - AxiCool

sickled blades (S series)
Wall ring with air-guiding system

W3G350-SN01-32 ebmpapst Datasheet
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Nominal data

Type	W3G350-SN01-32	
Motor	M3G074-CF	
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	1475
Power input	W	165
Current draw	A	1.35
Max. back pressure	Pa	85
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

Data according to ErP directive

		Actual	Request 2015
01 Overall efficiency η_{es}	%	40.7	28.6
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		52.1	40
05 Variable speed drive		Yes	

Data definition with optimum efficiency.
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

09 Power input P_{ed}	kW	0.16
09 Air flow q_v	m³/h	2405
09 Pressure increase p_{fs}	Pa	90
10 Speed (rpm) n	min ⁻¹	1500
11 Specific ratio*		1.00

* Specific ratio = $1 + p_{fs} / 100\,000\text{ Pa}$

LU-152182



Technical features

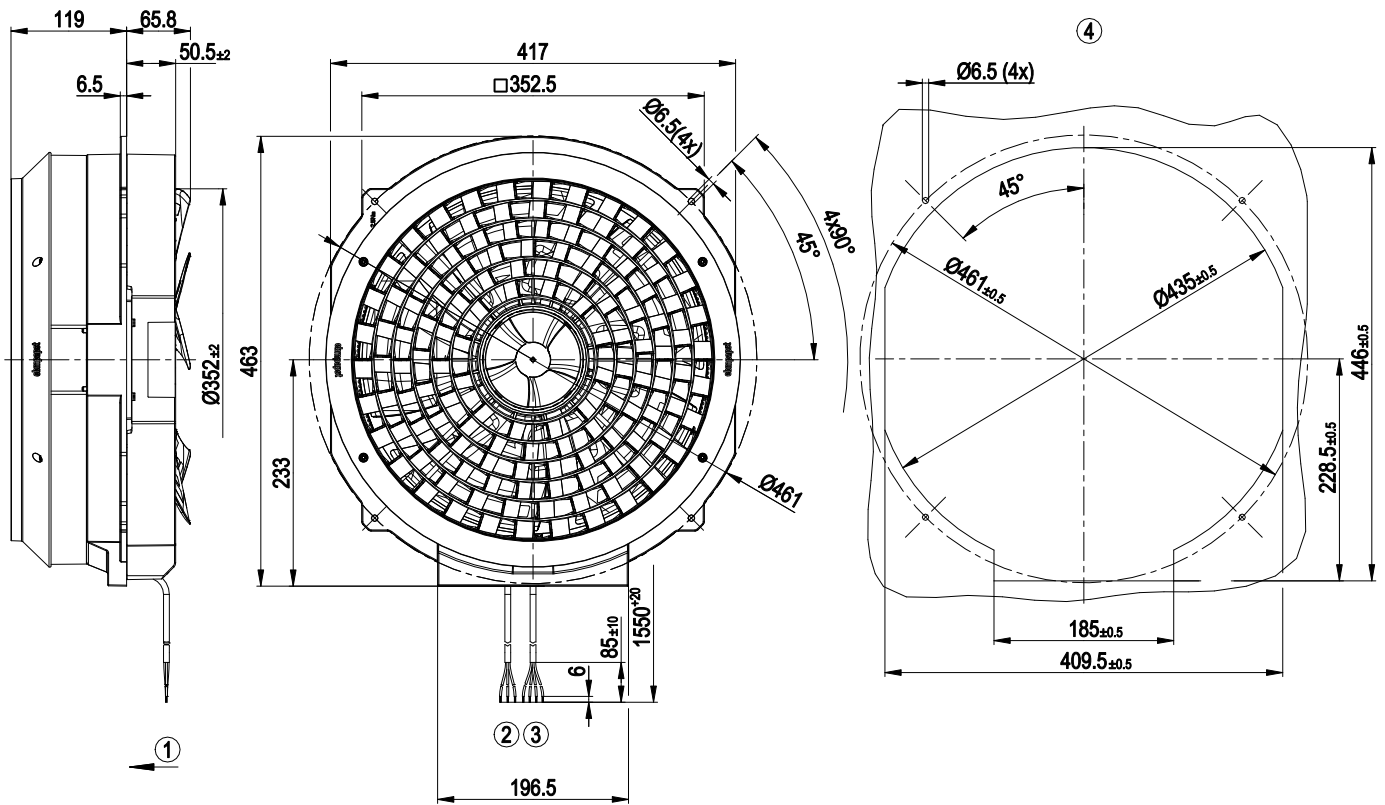
Mass	5.2 kg
Size	350 mm
Surface of rotor	Thick layer passivated
Material of blades	Press-fitted sheet steel blank, sprayed with PP plastic
Material of wall ring	PP plastic
Number of blades	5
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Humidity (F)/environmental protection class (H)	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
Cooling bore / aperture	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 10 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	PTC resistor
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



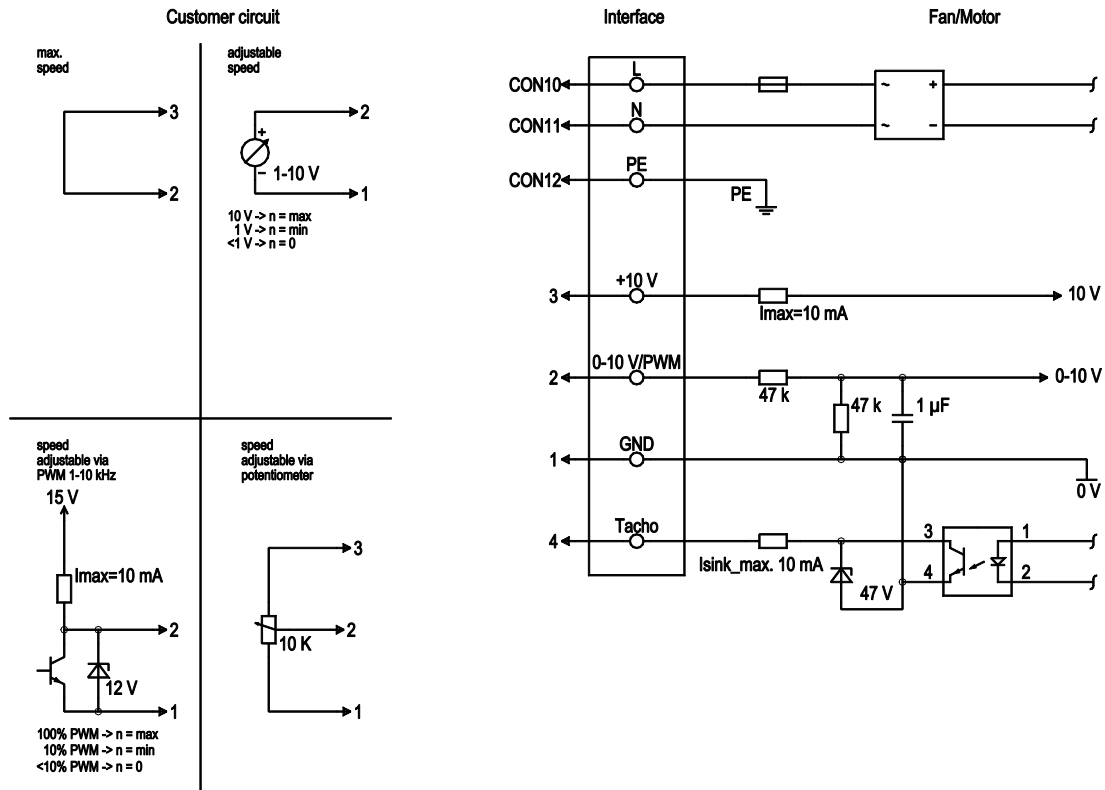
1	Direction of air flow "V"
2	Connection line PVC AWG20, 3x lead tips crimped
3	Connection line PVC AWG22, 4x lead tips crimped
4	Mounting dimensions

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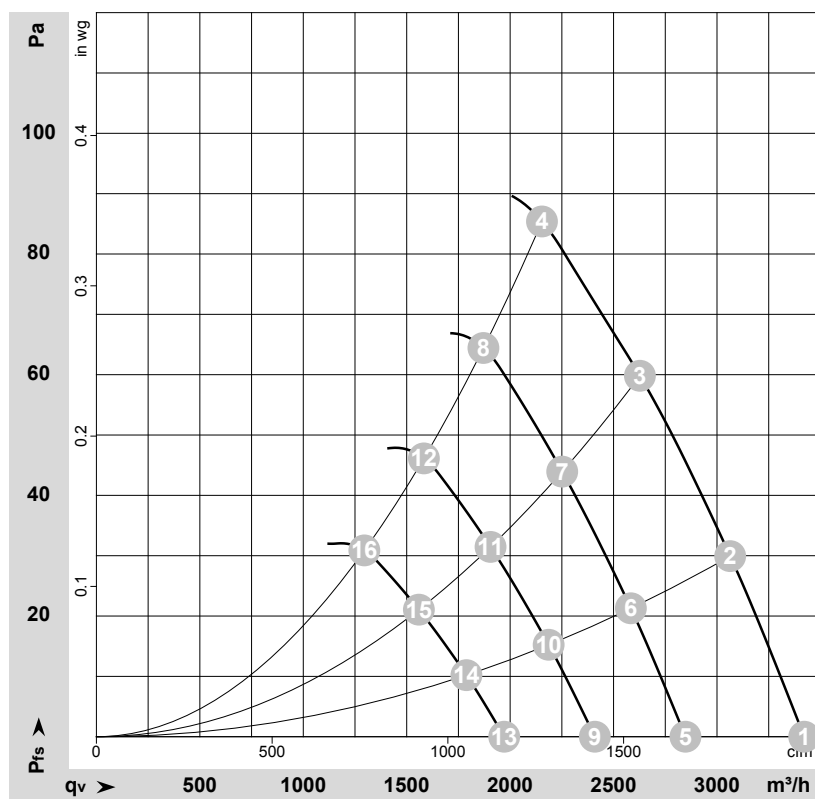
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Connection screen



No.	Conn.	Designation	Colour	Function / assignment
	CON10	L	black	Mains connection, power supply, phase, see type plate for voltage range
	CON11	N	blue	Mains connection, power supply, neutral conductor, see type plate for voltage range
	CON12	PE	green/yellow	Earth connection
	2	0- 10V PWM	yellow	0-10 V/PWM control input, $R_i=100\text{ k}\Omega$, SELV
	4	Tach	white	Speed monitoring output, open collector, 1 pulse per revolution, $I_{sink\ max} = 10\text{ mA}$, SELV
	3	+10 V	red	Fixed voltage output 10 VDC $\pm 3\%$, $I_{max.}\ 10\text{ mA}$, short-circuit-proof, power supply for ext. devices (e.g. potentiometer), SELV
	1	GND	blue	Signal ground for control interface, SELV

Charts: Air flow 50 Hz



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

Measurement: LU-155833-1

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	1560	151	1.25	64	72	3420	0	2015	0.00
2	230	50	1540	159	1.32	63	71	3065	30	1805	0.12
3	230	50	1515	165	1.35	63	71	2625	60	1545	0.24
4	230	50	1475	165	1.35	64	72	2155	85	1270	0.34
5	230	50	1300	87	0.72	60	68	2850	0	1675	0.00
6	230	50	1300	95	0.79	59	67	2585	21	1520	0.08
7	230	50	1300	103	0.86	59	67	2250	44	1325	0.18
8	230	50	1300	108	0.90	60	68	1870	65	1100	0.26
9	230	50	1100	53	0.44	55	63	2410	0	1420	0.00
10	230	50	1100	58	0.48	55	63	2185	15	1285	0.06
11	230	50	1100	63	0.52	55	63	1905	32	1120	0.13
12	230	50	1100	65	0.54	56	64	1585	47	930	0.19
13	230	50	900	29	0.24	50	58	1970	0	1160	0.00
14	230	50	900	32	0.26	50	58	1790	10	1055	0.04
15	230	50	900	34	0.28	50	58	1560	21	920	0.08
16	230	50	900	36	0.30	51	59	1295	31	760	0.12

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

