W3G350-WN01-32

EC axial fan

sickle-shaped blades (S series)

Fan housing with guide vanes

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Nominal data

Type	**W3G350-WN01-32**
Motor	**M3G074-CF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	1475
Power consumption	W	165
Current draw	A	1.35
Max. back pressure	Pa	85
Max. back pressure	in. wg	0.34
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

Data according to Commission Regulation (EU) 327/2011 (EN 17166)

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	36.2	28.8
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		47.4	40
05 Variable speed drive		Yes	

09 Power consumption P_{ed}	kW	0.16
09 Air flow q_v	m^3/h	2105
09 Pressure increase p_{fs}	Pa	91
10 Speed (rpm) n	min^{-1}	1510
11 Specific ratio*		1.00

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

* Specific ratio = 1 + p_{fs} / 100 000 Pa

LU-175055

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Technical description

Weight	5.5 kg
Size	350 mm
Motor size	74
Rotor surface	Thick-film passivated
Blade material	Press-fitted sheet steel blank, sprayed with PP plastic
Fan housing material	PP plastic
Number of blades	5
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP54
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	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	None, open rotor
Cooling hole/opening	On rotor side
Mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 10 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 - Overvoltage detection - Thermal overload protection for electronics/motor - Line undervoltage detection
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	Electronic motor protection
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60034-1; EN 60204-1; EN 60335-1; CE

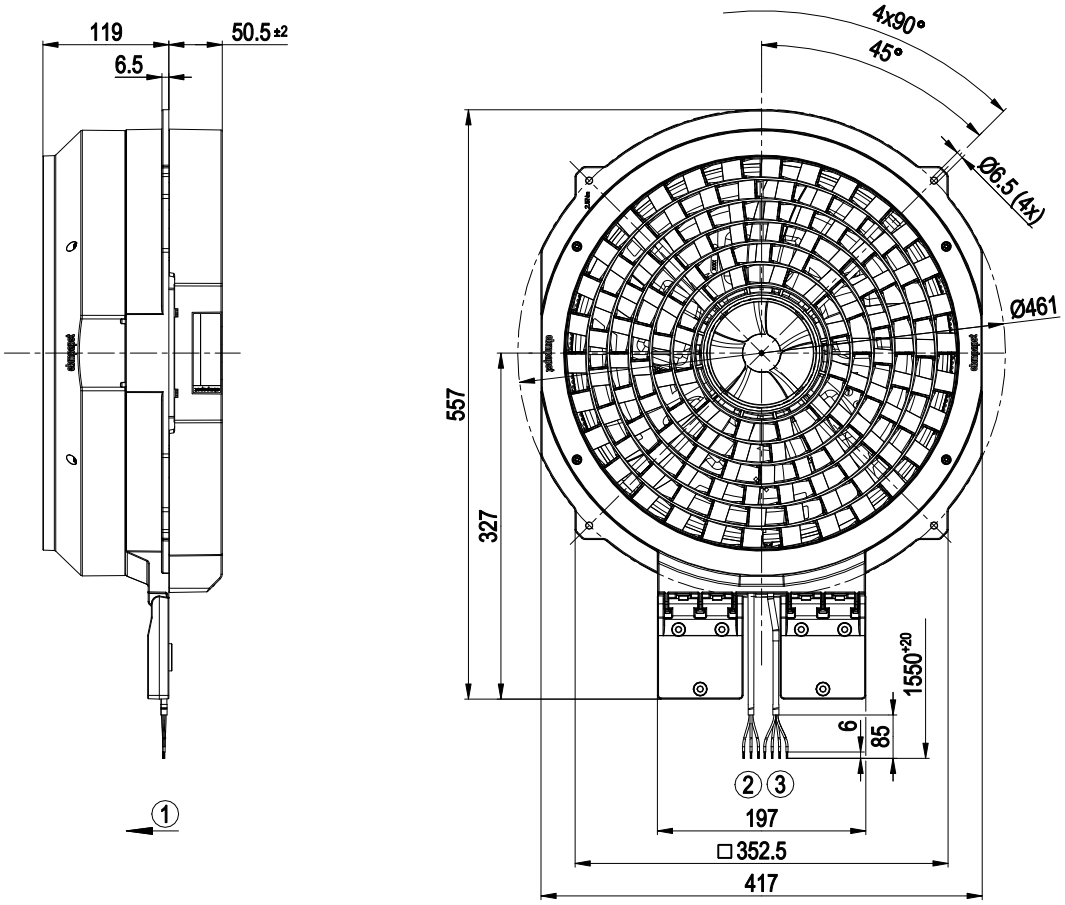
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Product drawing



1	Airflow direction "V"
2	Cable PVC AWG20
	3x splice
3	Cable PVC AWG22
	4x splice

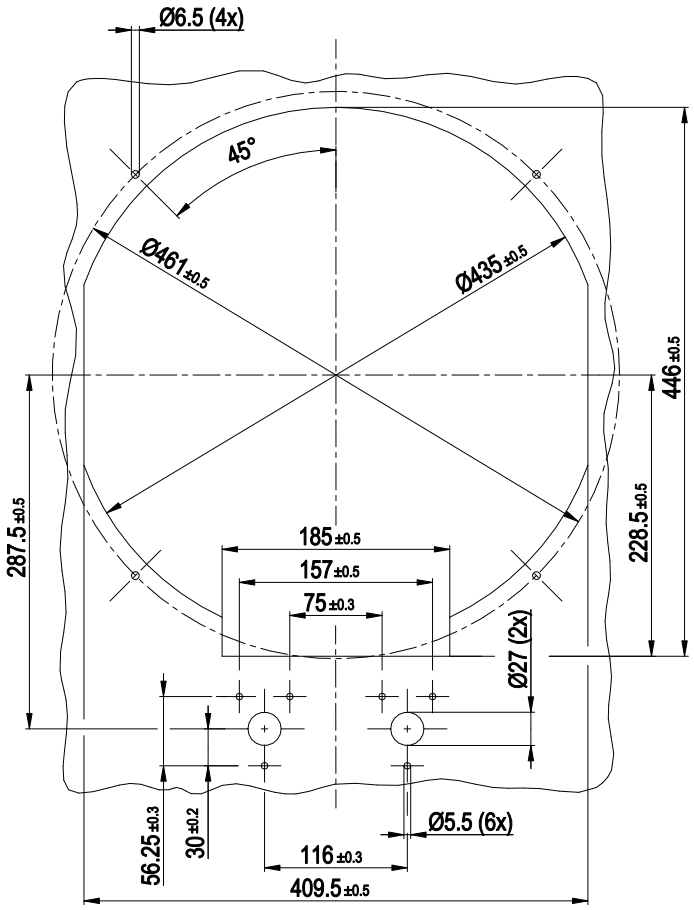
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Mounting dimensions



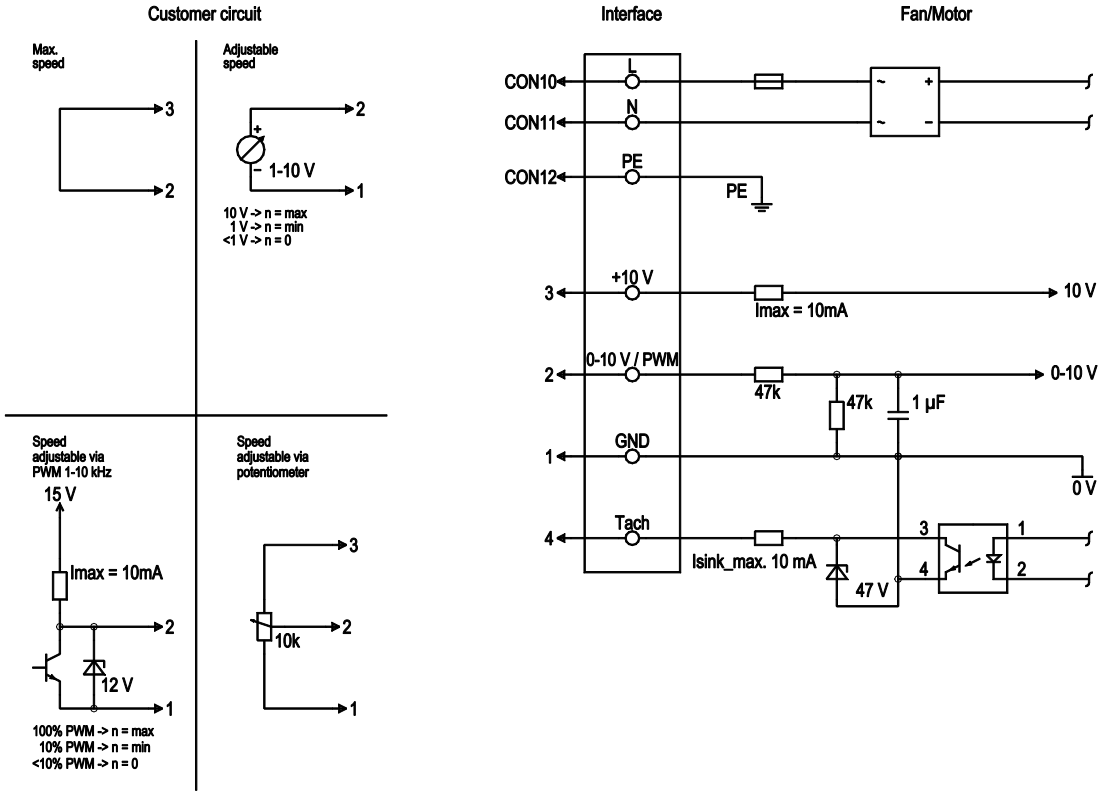
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	CON10	L	black	Supply connection, power supply, phase, see nameplate for voltage range
	CON11	N	blue	Supply connection, power supply, neutral conductor, see nameplate for voltage range
	CON12	PE	green/yellow	Ground connection
	2	0- 10V PWM	yellow	0-10 V / PWM control input, Ri=100 kΩ, SELV
	4	Tach	white	Tach output, open collector, 1 pulse per revolution, Isink max = 10 mA, SELV
	3	+10 V	red	Fixed voltage output 10 VDC +/-3 %, Imax. 10 mA, short-circuit-proof, power supply for ext. devices (e.g. pot), SELV
	1	GND	blue	Reference ground for control interface, SELV

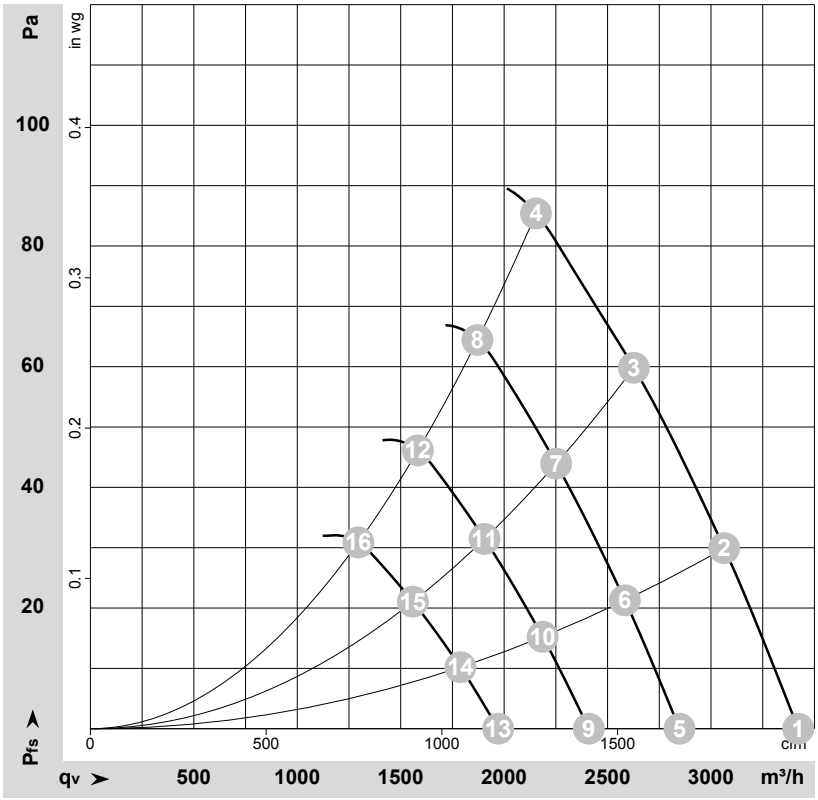
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-155833-1

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	in. wg
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 = Voltage · 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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