

W3G350-CN01-32

EC axial fan - HyBlade

sickled blades (S series)

Wall ring with guard grille

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Nominal data

Type	W3G350-CN01-32	
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	min ⁻¹	1475
Power input	W	165
Current draw	A	1.35
Max. back pressure	Pa	100
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

Installation category	A
Efficiency category	Static
Variable speed drive	Yes
Specific ratio*	1.00

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

		Actual	Request 2015
Overall efficiency η_{es}	%	39.8	28.6
Efficiency grade N		51.2	40
Power input P_{ed}	kW	0.16	
Air flow q_v	m ³ /h	2400	
Pressure increase p_{fs}	Pa	87	
Speed n	min ⁻¹	1495	

Data definition with optimum efficiency. LU-134592
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.



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Technical features

Mass	5.2 kg
Size	350 mm
Material of blades	Press-fitted sheet steel blank, sprayed with PP plastic
Material of wall ring	Sheet steel, galvanised and coated in black plastic (RAL 9005)
Material of guard grille	Steel, coated in black plastic (RAL9005)
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 class	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. 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 - Over-temperature protected electronics / motor
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC interference emission	Acc. to EN 61000-6-4 (industrial environment)
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
Approval	CCC; C22.2 Nr.77 + CAN/CSA-E60730-1; UL 1004-7 + 60730

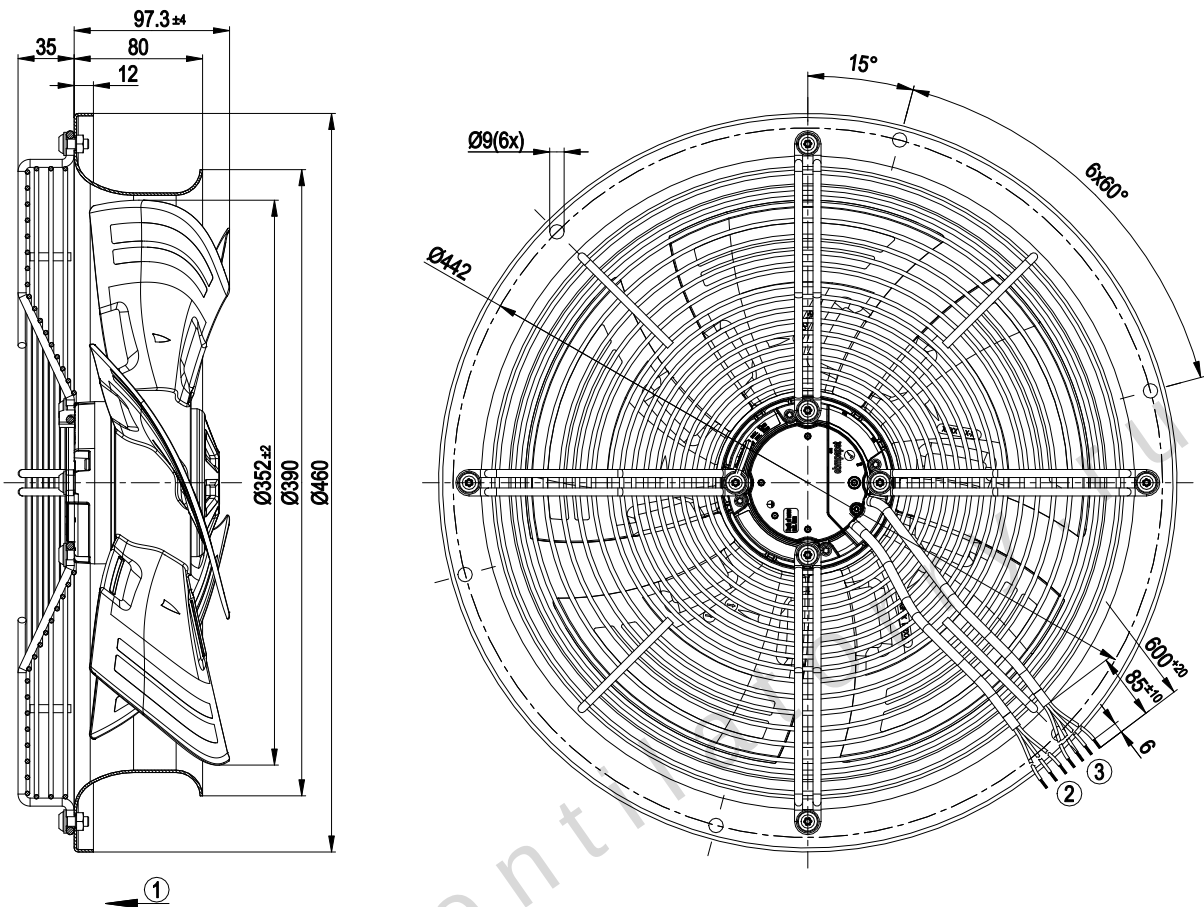
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Product drawing



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

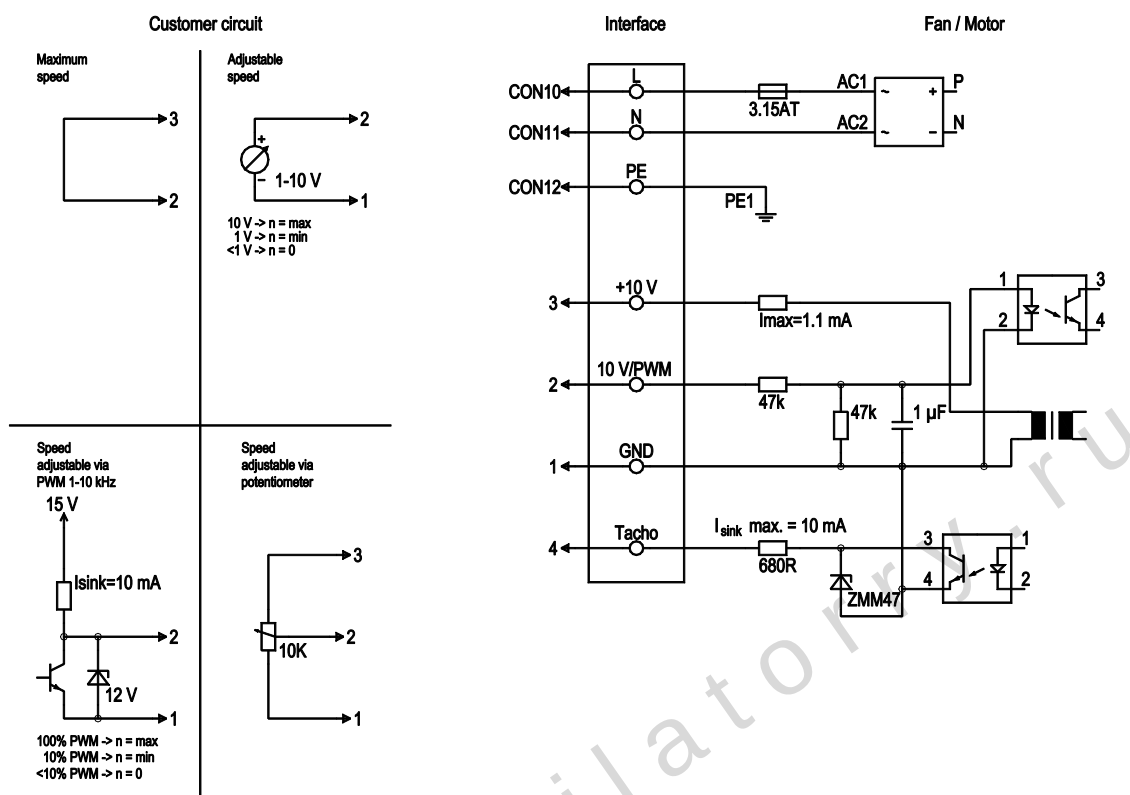
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Connection screen



No.	Conn.	Designation	Colour	Function / assignment
	CON10	L	black	Power supply 230 VAC, 50-60 Hz, for voltage range refer to rating plate
	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	10V/ max 1.1mA	red	Voltage output 10 V / 1.1 mA, electrically isolated, not short-circuit-proof, I _{sink} = 10 mA
	4	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated, I _{sink} max = 10 mA

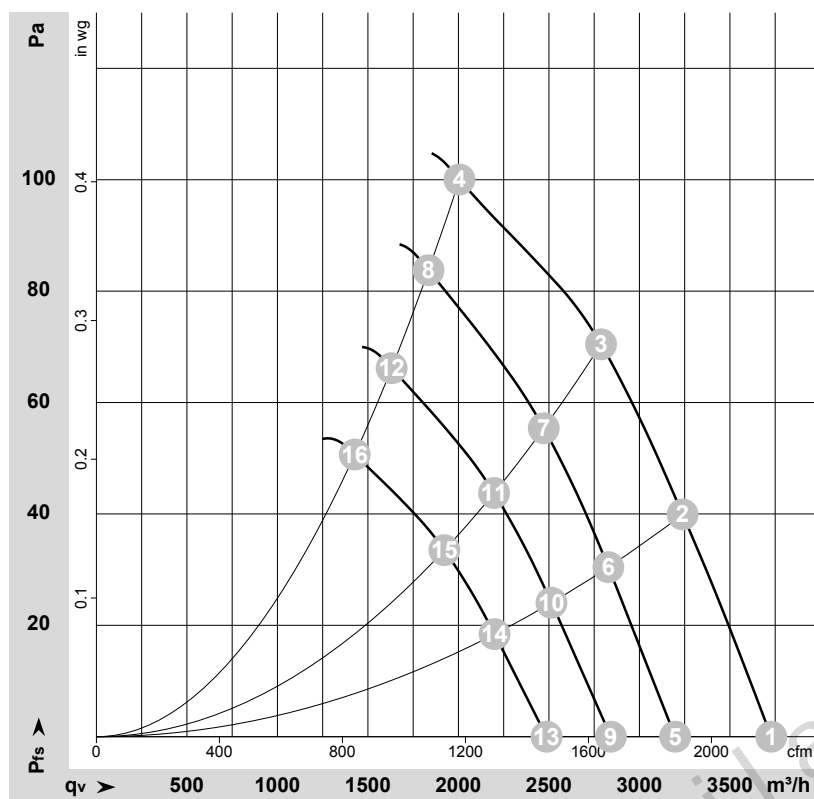
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Charts: Air flow 50 Hz



$\rho = 1,15 \text{ kg/m}^3 \pm 2\%$

Measurement: LU-134592

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}	qv	p _{fs}
	V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m ³ /h	Pa
1	230	50	1575	141	1.15	64	71	3730	0
2	230	50	1545	155	1.24	61	68	3240	40
3	230	50	1525	164	1.32	58	66	2790	70
4	230	50	1475	165	1.35	59	67	2005	100
5	230	50	1350	89	0.72	60	67	3200	0
6	230	50	1350	103	0.83	58	65	2830	31
7	230	50	1350	114	0.92	55	62	2470	55
8	230	50	1350	127	1.02	56	64	1835	84
9	230	50	1200	63	0.51	57	64	2840	0
10	230	50	1200	72	0.58	55	62	2515	24
11	230	50	1200	80	0.65	52	60	2195	44
12	230	50	1200	89	0.72	53	61	1630	66
13	230	50	1050	42	0.34	53	60	2485	0
14	230	50	1050	49	0.39	51	59	2200	19
15	230	50	1050	54	0.43	49	56	1920	34
16	230	50	1050	60	0.48	50	58	1425	51

U = Supply voltage · f = Frequency · n = Speed · P_{ed} = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · qv = Air flow
p_{fs} = Pressure increase