S3G350-AN01-32

EC axial fan - HyBlade®

sickled blades (S series)

with guard grille for short nozzle

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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**S3G350-AN01-32**	
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_{fs} / 100 000 Pa

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}	%	39.8	24.6	28.6
Efficiency grade N		51.2	36	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	3.64 kg
Size	350 mm
Material of impeller	PP plastic
Material of guard grille	Steel, phosphated and coated in black 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 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 - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Over-temperature protected electronics / motor
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)

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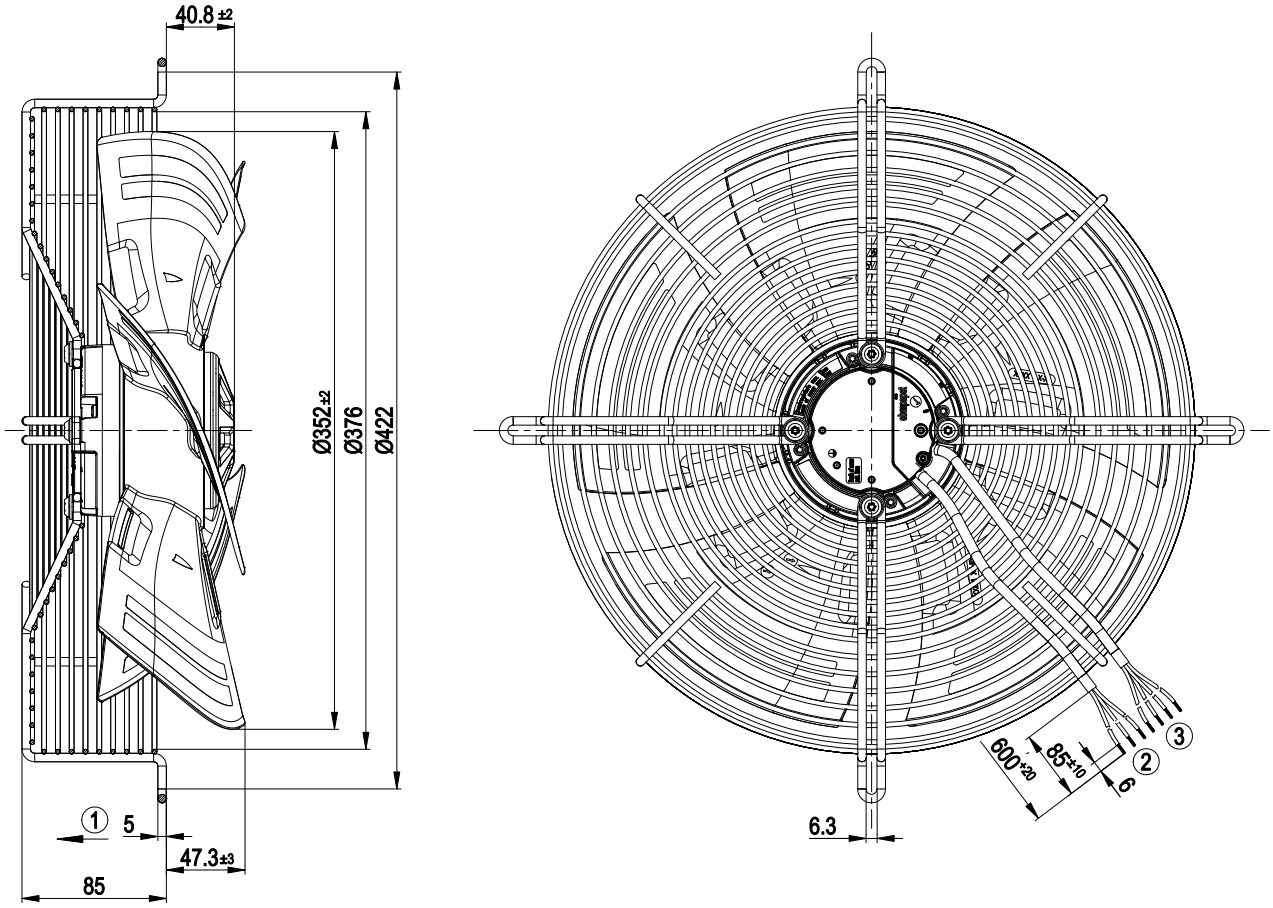
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Product drawing



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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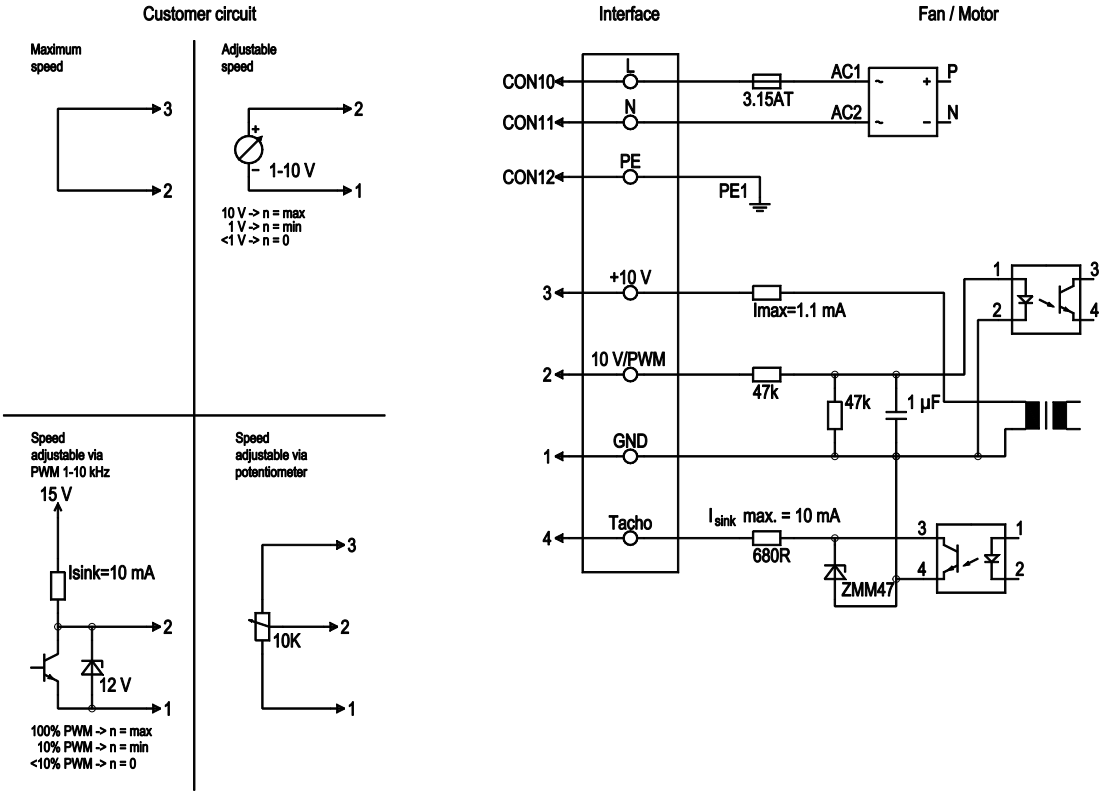
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Connection screen



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, Isink = 10 mA
	4	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated, Isink max = 10 mA

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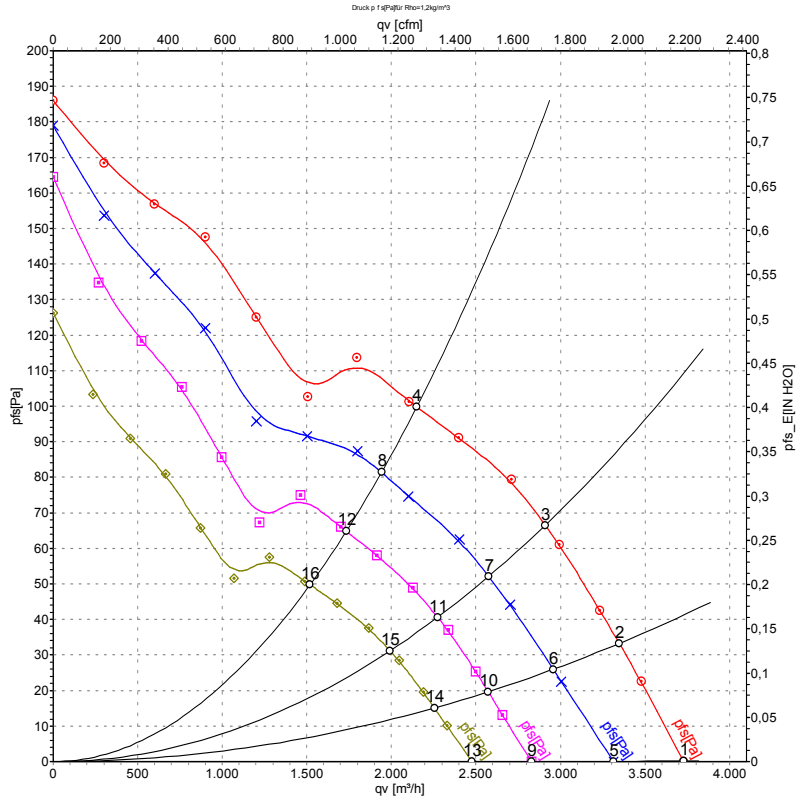
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Charts: Air flow 50 Hz



Measurement: LU-134592
Measurement: LU-134596

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	3725	0
2	230	50	1555	152	1.23	62	69	3350	33
3	230	50	1530	161	1.31	59	66	2910	67
4	230	50	1475	165	1.35	59	67	2150	100
5	230	50	1395	98	0.82	61	68	3315	0
6	230	50	1375	106	0.88	59	66	2960	26
7	230	50	1355	113	0.96	57	64	2575	52
8	230	50	1340	122	1.03	56	64	1940	81
9	230	50	1195	62	0.50	58	65	2825	0
10	230	50	1195	69	0.56	56	63	2575	20
11	230	50	1195	77	0.63	54	61	2275	41
12	230	50	1195	87	0.70	54	62	1735	65
13	230	50	1045	41	0.34	55	62	2475	0
14	230	50	1045	47	0.38	53	60	2255	15
15	230	50	1045	52	0.42	51	58	1990	31
16	230	50	1045	58	0.47	51	59	1520	50

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

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