S3G450-CK65-02

EC axial fan - HyBlade

sickled blades (S series)

with guard grille for short nozzle

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Nominal data

Type	**S3G450-CK65-02**	
Motor	**M3G074-CF**	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Type of data definition		me
Speed (rpm)	min^{-1}	835
Power input	W	105
Current draw	A	0.8
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	4.8 kg
Size	450 mm
Surface of rotor	Coated in black
Material of electronics housing	Die-cast aluminium
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 rotation	"A"
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
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	Shaft horizontal or rotor on bottom; rotor on top on request
Condensate discharge holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Control input 0-10 VDC / PWM - Output 10 VDC, max. 1.1 mA - Tach output - Over-temperature protected electronics / motor - Motor current limit - Soft start
EMC interference immunity	Acc. to EN 61000-6-2
EMC harmonics	Acc. to EN 61000-3-2/3
EMC interference emission	Acc. to EN 61000-6-3 (household environment)
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1

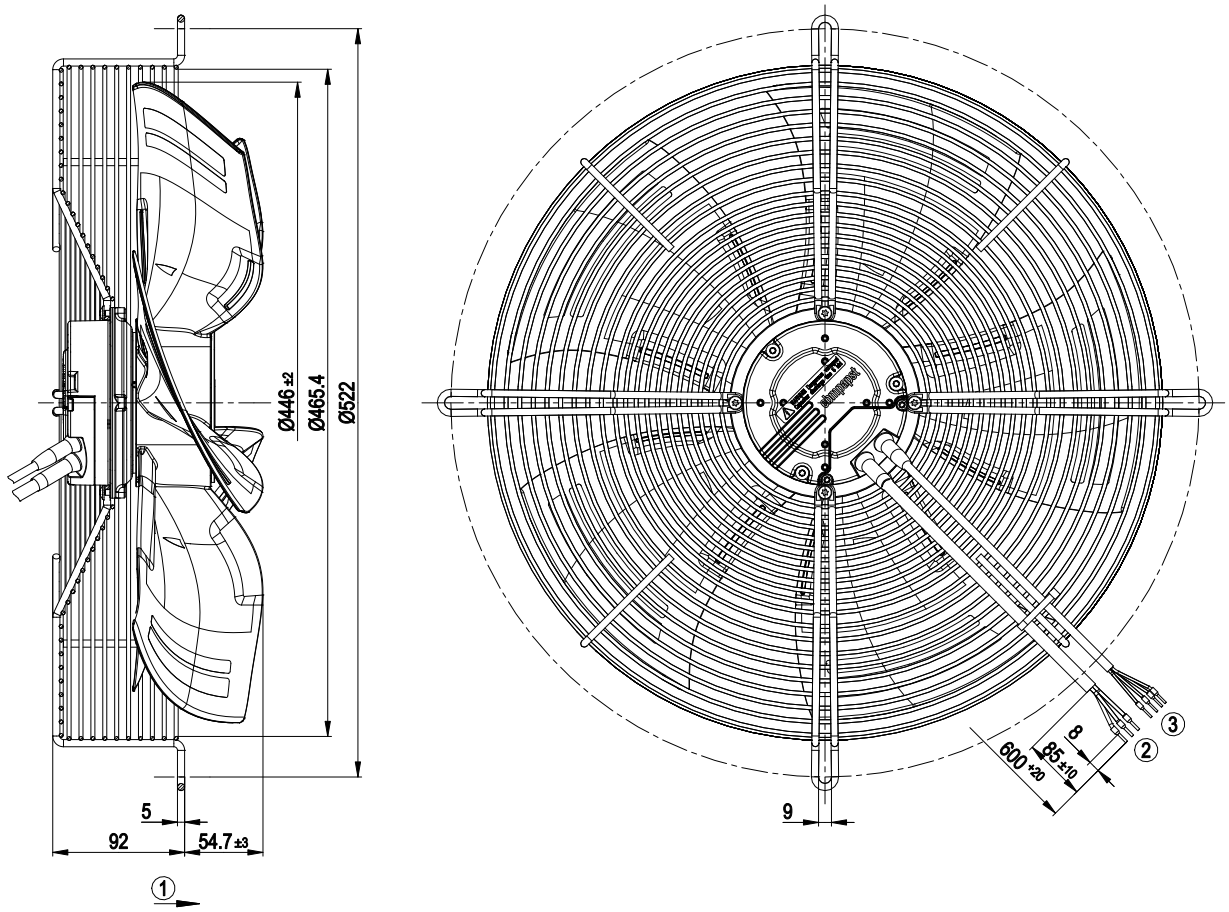
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Product drawing



1	Direction of air flow "A"
2	Connection line PVC AWG18, 3x crimped core-end sleeves
3	Connection line PVC AWG22, 4x crimped core-end sleeves

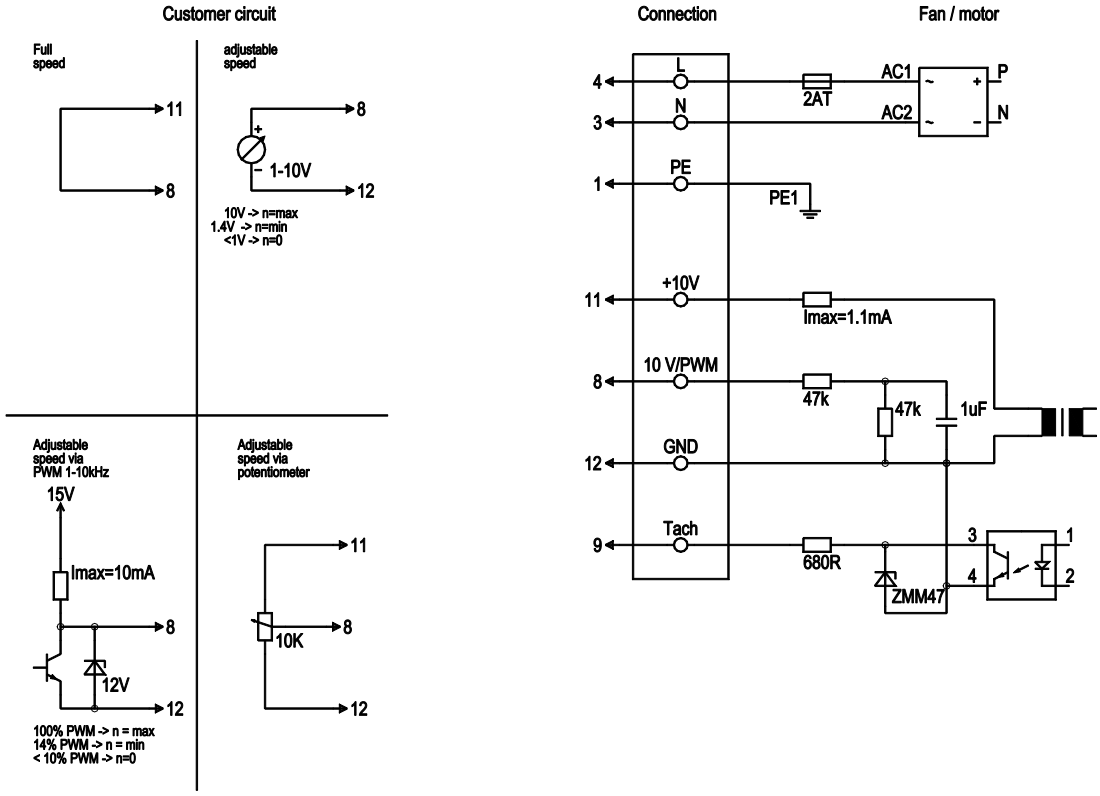
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Connection screen



No.	Conn.	Designation	Colour	Function / assignment
	4	L	black	Power supply 230 VAC, 50-60 Hz, see type plate for voltage range
	3	N	blue	Neutral conductor
	1	PE	green/yellow	Protective earth
	8	0-10 V PWM	yellow	Control input 0 - 10 V or PWM, electrically isolated
	9	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated
	11	10V / max 1.1 mA	red	Voltage output 10 V / max. 1.1 mA, electrically isolated
	12	GND	blue	GND - Connection for control interface

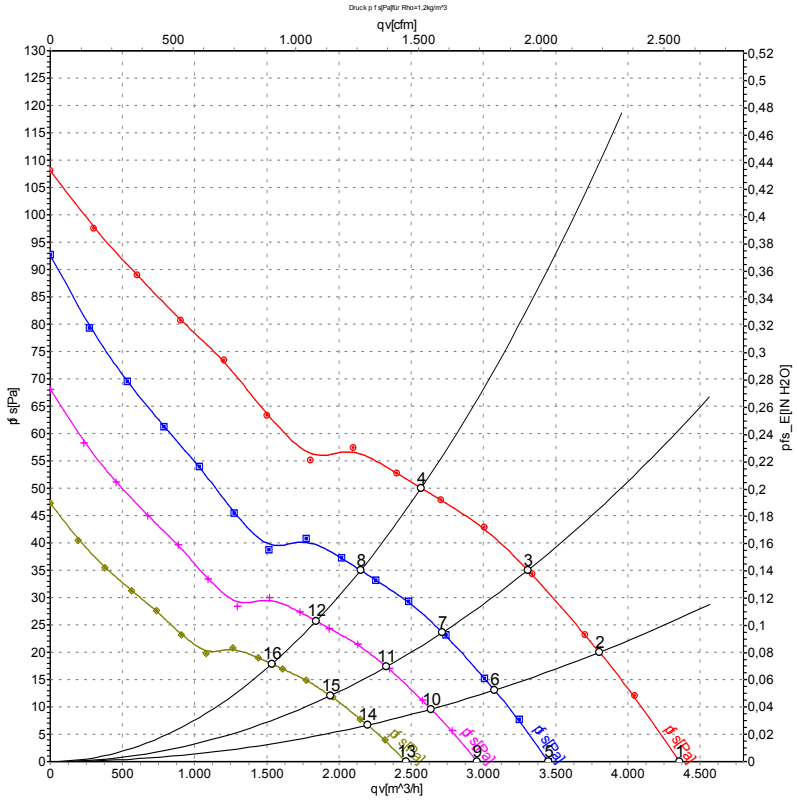
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Charts: Air flow 50 Hz



Measurement: LU-122753-1

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)	m^3/h	Pa	cfm	inH2O
1	230	50	885	90	0.68	56	62	4355	0	2565	0.00
2	230	50	865	96	0.73	54	60	3800	20	2240	0.08
3	230	50	850	100	0.76	51	58	3305	35	1945	0.14
4	230	50	835	105	0.80	50	57	2570	50	1510	0.20
5	230	50	700	45	0.34	51	57	3450	0	2030	0.00
6	230	50	700	51	0.39	49	55	3075	13	1810	0.05
7	230	50	700	56	0.42	47	53	2715	24	1600	0.10
8	230	50	700	62	0.47	46	53	2150	35	1265	0.14
9	230	50	600	28	0.21	48	54	2955	0	1740	0.00
10	230	50	600	32	0.24	46	52	2635	10	1550	0.04
11	230	50	600	35	0.27	44	50	2325	17	1370	0.07
12	230	50	600	39	0.29	43	50	1840	26	1085	0.10
13	230	50	500	16	0.12	44	50	2465	0	1450	0.00
14	230	50	500	19	0.14	42	48	2195	7	1295	0.03
15	230	50	500	20	0.15	40	46	1940	12	1140	0.05
16	230	50	500	22	0.17	39	46	1535	18	905	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

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