S3G400-LA37-81

EC axial fan

sickle-shaped blades (S series)

with guard grille for short nozzle

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Nominal data

Type	**S3G400-LA37-81**
Motor	**M3G084-FA**

Phase		1~
Nominal voltage	VAC	115
Nominal voltage range	VAC	100 .. 130
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	1550
Power consumption	W	350
Current draw	A	4.0
Max. back pressure	Pa	140
Max. back pressure	in. wg	0.56
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

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Technical description

Weight	7 kg
Size	400 mm
Motor size	84
Rotor surface	Painted black
Electronics housing material	Die-cast aluminum
Impeller material	Sheet steel, painted black
Guard grille material	Steel, coated with black plastic (RAL 9005)
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	On rotor side
Mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Alarm relay - Motor current limitation - PFC, passive - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Thermal overload protection for electronics/motor - Line undervoltage detection
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 61800-5-1
Approval	UL 1004-3 + 60730-1; EAC; CSA C22.2 No. 77 + CAN/CSA-E60730-1

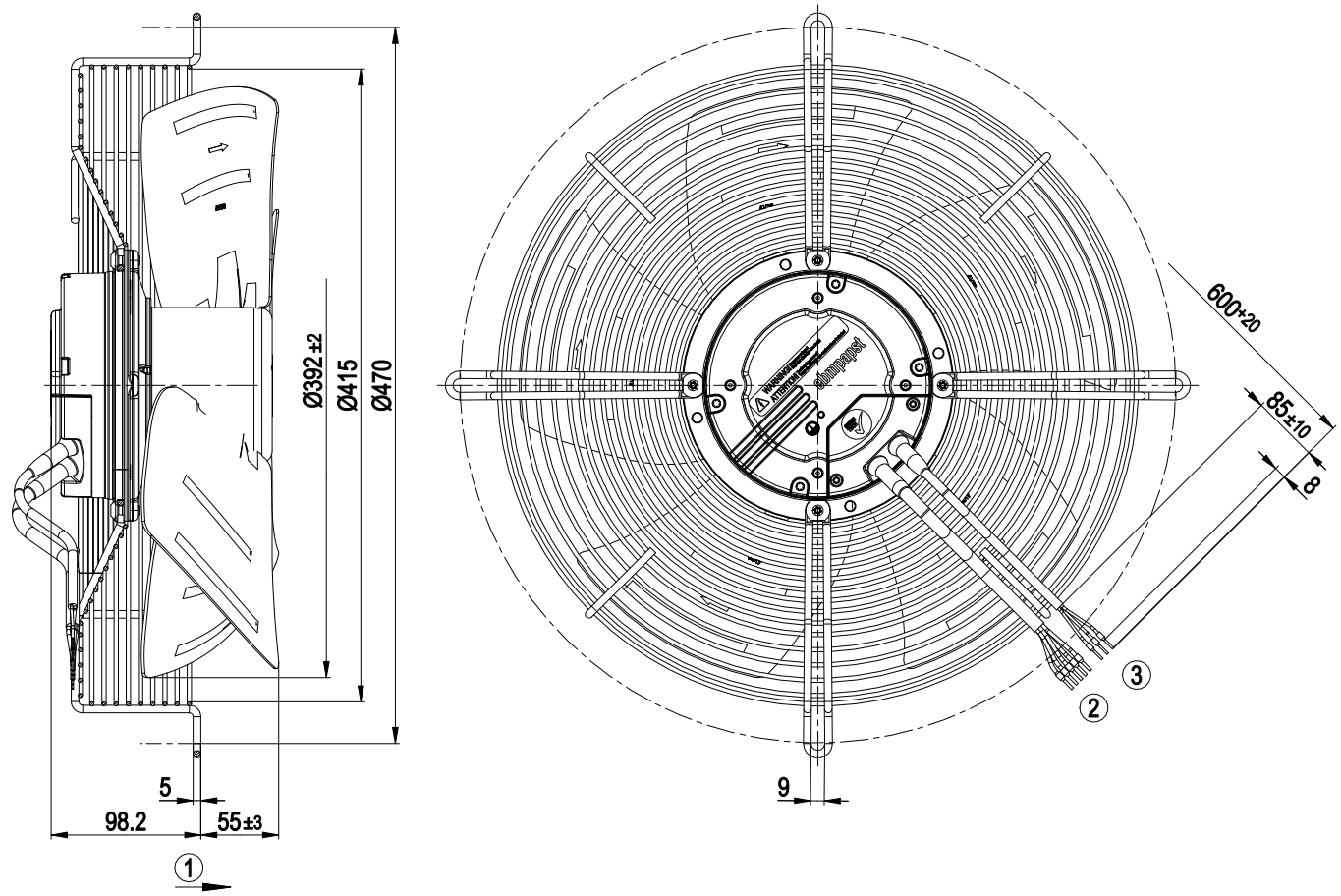
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Product drawing



1	Direction of air flow "A"
2	Cable PVC AWG18
	5x wire-end ferrule
3	Cable PVC AWG22
	3x wire-end ferrule

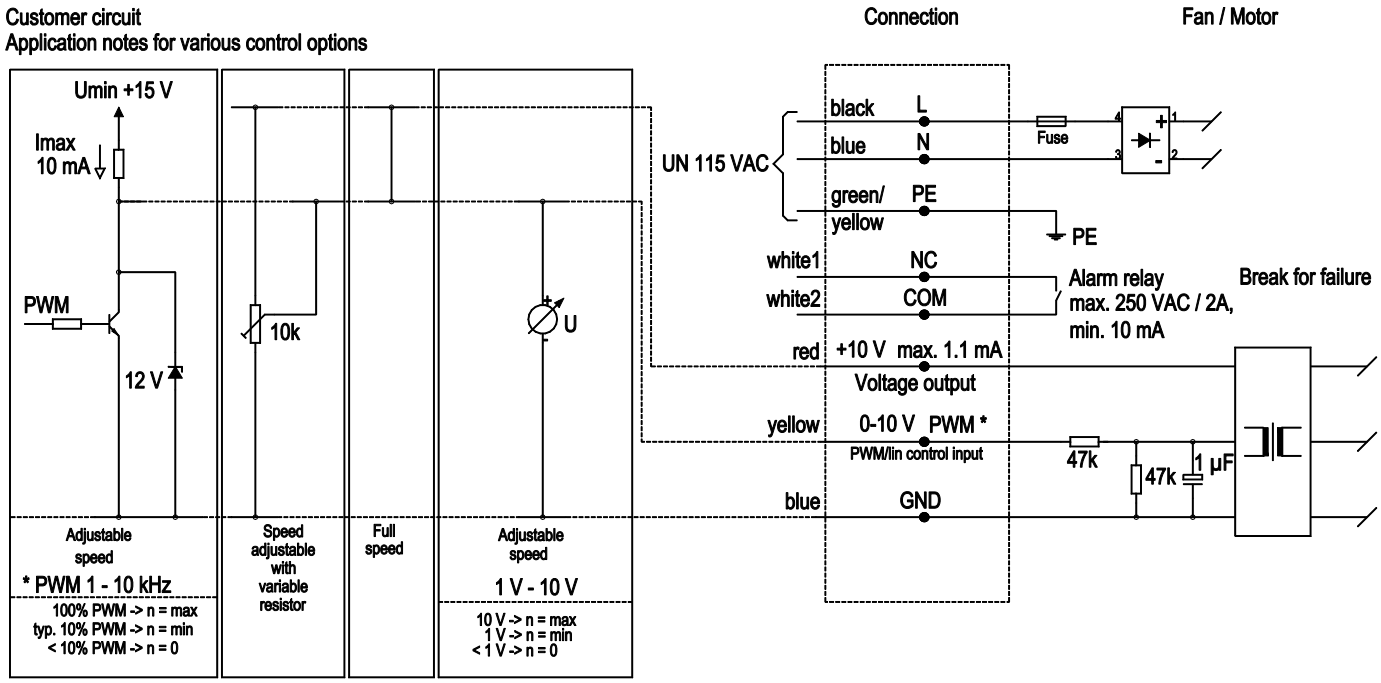
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Connection diagram



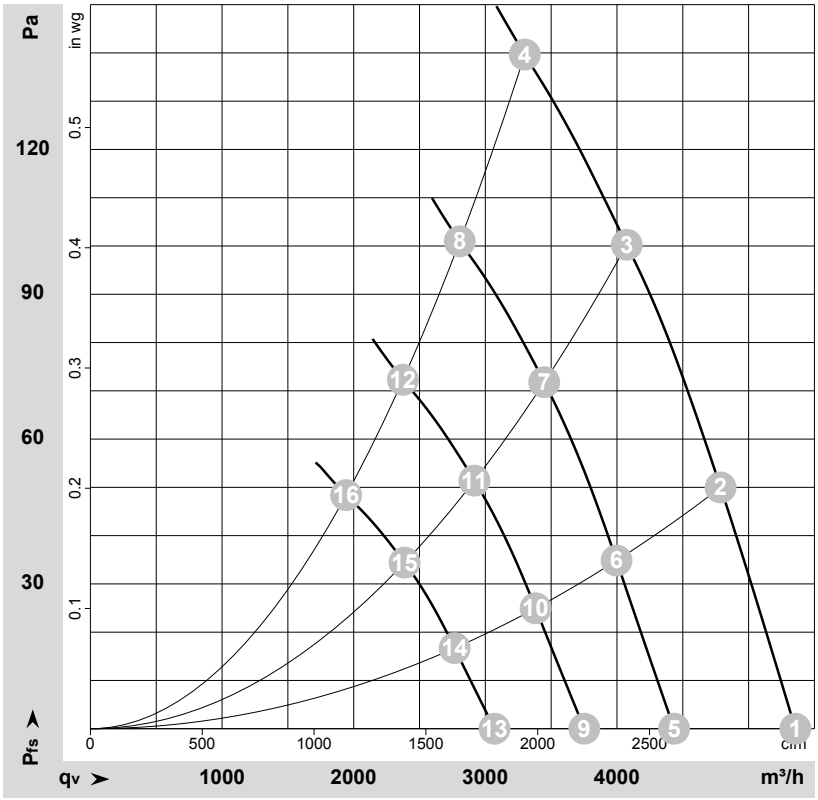
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-74679-1

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	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	115	50	1570	275	3.24	5355	0	3150	0.00
2	115	50	1555	299	3.48	4785	50	2820	0.20
3	115	50	1535	317	3.68	4075	100	2400	0.40
4	115	50	1550	350	4.00	3300	140	1940	0.56
5	115	50	1300	156	1.84	4435	0	2610	0.00
6	115	50	1300	174	2.02	3995	35	2355	0.14
7	115	50	1300	192	2.23	3450	72	2030	0.29
8	115	50	1300	200	2.32	2805	101	1650	0.41
9	115	50	1100	94	1.11	3750	0	2210	0.00
10	115	50	1100	105	1.23	3380	25	1990	0.10
11	115	50	1100	116	1.35	2915	51	1715	0.20
12	115	50	1100	121	1.40	2375	72	1395	0.29
13	115	50	900	52	0.61	3070	0	1805	0.00
14	115	50	900	58	0.67	2765	17	1630	0.07
15	115	50	900	64	0.74	2385	34	1405	0.14
16	115	50	900	66	0.77	1940	48	1145	0.19

U = Voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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