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Nominal data

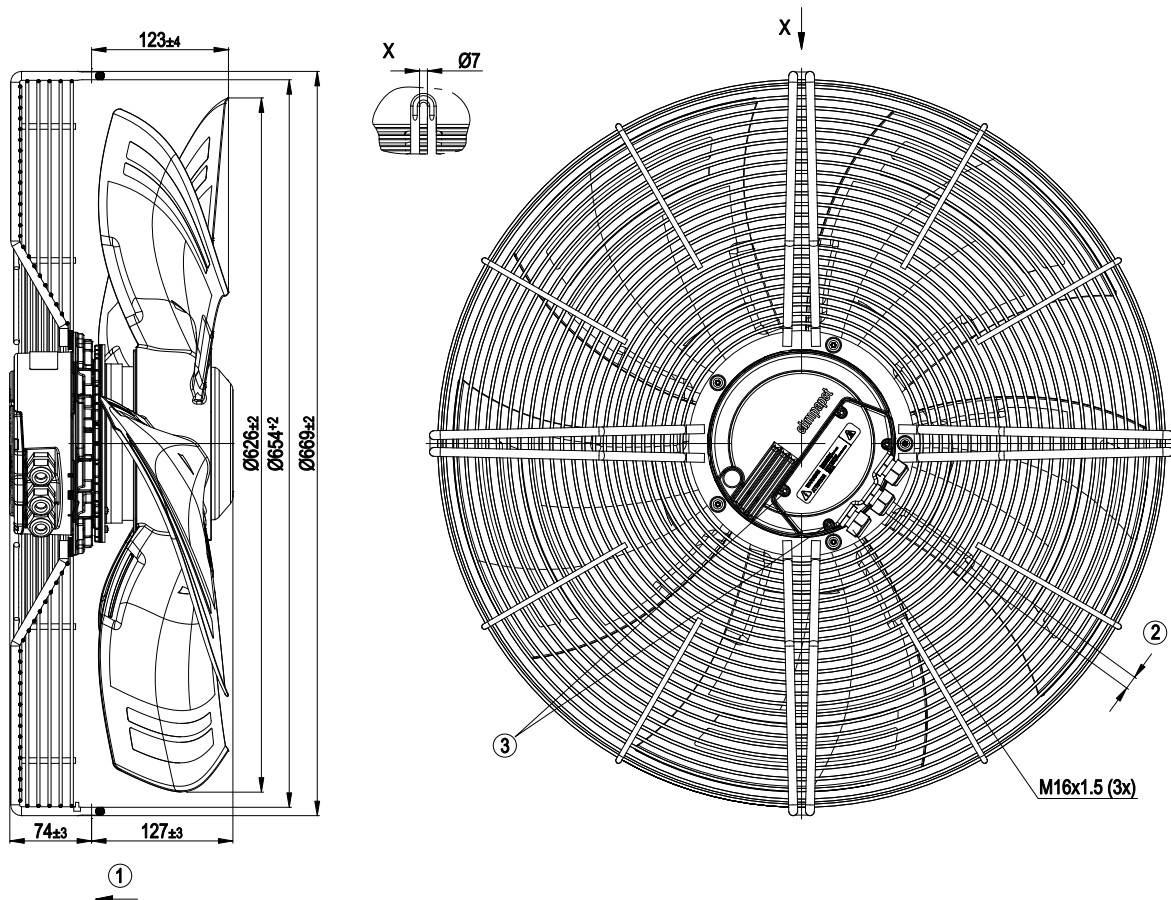
Type	S3G630-BR85-03	
Motor	M3G112-IA	
Phase		3~
Nominal voltage	VAC	400
Nominal voltage range	VAC	380 .. 480
Frequency	Hz	50/60
Type of data definition		ml
Speed	min ⁻¹	1140
Power input	W	970
Current draw	A	1.6
Max. back pressure	Pa	170
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	+60

ml = max. load · me = max. efficiency · rfa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

Technical features

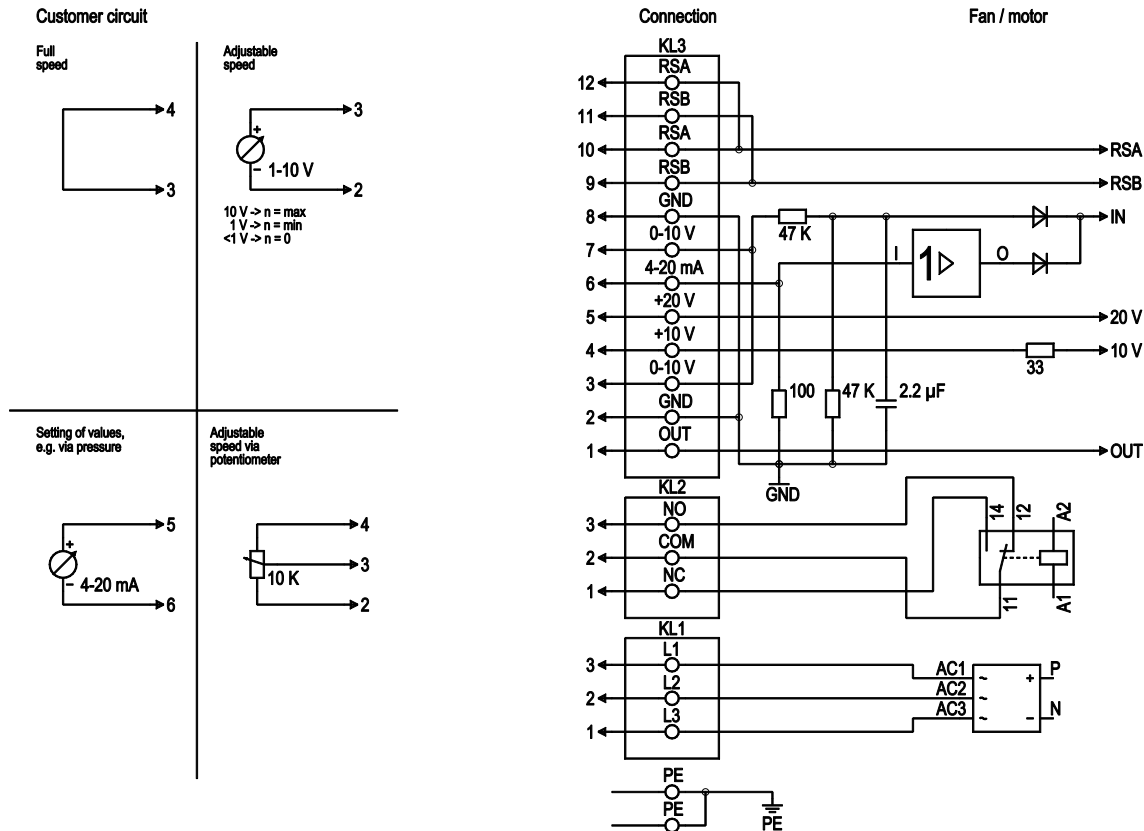
Leakage current	<= 3.5 mA
Size	630 mm
Operation mode	S1
Direction of rotation	Counter-clockwise, seen on rotor
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Electrical leads	Via terminal box
EMC harmonics	Acc. to EN 61000-3-2/3
EMC interference emission	Acc. to EN 61000-6-3
EMC interference immunity	Acc. to EN 61000-6-2
Humidity class	F4-1
Direction of air flow	"V"
Insulation class	"B"
Cable exit	Variable
Condensate discharge holes	Rotor-side
Motor bearing	Ball bearing
Mass	15.5 kg
Material of electronics housing	Die-cast aluminium, coated in black
Material of blades	Press-fitted sheet steel blank, sprayed with PP plastic
Material of guard grille	Steel, phosphated and coated in black plastic
Motor protection	Thermal overload protector (TOP) wired internally
Surface of rotor	Coated in black
Number of blades	5
Type of protection	IP 54
Protection class	I
Technical features	- Output 10 VDC, max. 10 mA - Output 20 VDC, max. 50 mA - Output for slave 0-10 V - Input for sensor 0-10 V or 4-20 mA - Alarm relay - Integrated PID controller - Motor current limit - PFC, passive - RS485 ebmBUS - Soft start - Control input 0-10 VDC / PWM - Over-temperature protected electronics / motor - Line undervoltage / phase failure detection
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C

Product drawing



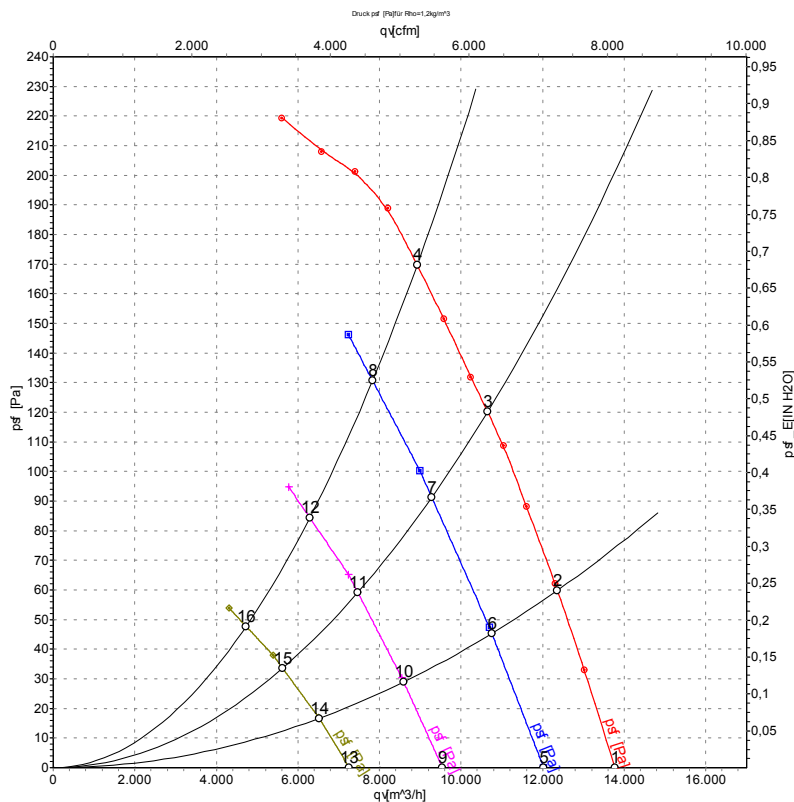
1	Direction of air flow "V"
2	Cable diameter: min. 4 mm; max. 10 mm; tightening torque: 2±0.3 Nm
3	Tightening torque 3.5±0.5 Nm

Connection screen



No.	Pin	Signal	Function / assignment
PE		PE	Protective earth connection
KL1	1, 2, 3	L1, L2, L3	Supply voltage, 50/60 Hz
KL2	1	NC	Floating status message contact, normally closed connection
KL2	2	COM	Floating status message contact, changeover contact, common connection (2 A, max. 250 VAC, min. 10 mA, AC1)
KL2	3	NO	Floating status message contact, normally open connection
KL3	1	OUT	Analog output, 0-10 VDC, max. 3 mA, SELV, output of the current level control coefficient: 1 V equates to 10% level control coefficient. 10 V equate to 100% level control coefficient.
KL3	2, 8	GND	Reference mass for control interface, SELV
KL3	3, 7	0-10 V	Use control / actual value input 0-10 VDC, impedance 100 kΩ only as alternative to 4-20 mA input, SELV
KL3	4	+10 V	Voltage output 10 VDC (+/-3%), max. 10 mA, supply voltage for external devices (e.g. potentiometers), SELV
KL3	5	+20 V	Voltage output 20 VDC (+25%/-10%), max. 50 mA, supply voltage for external devices (e.g. sensors), SELV
KL3	6	4-20 mA	Use control / actual value input 4-20 mA, impedance 100 Ω, only as alternative to 0-10 V input, SELV
KL3	9, 11	RSB	RS485 interface for ebmBus, RSB, SELV
KL3	10, 12	RSA	RS485 interface for ebmBus, RSA, SELV

Charts: Air flow 50 Hz



Measurement: LU-115687
Measurement: LU-118125
Measurement: LU-118126
Measurement: LU-118127

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: L_{wA} measured as per ISO 13347 / L_{pA} 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 ₁	I	LpA _{in}	LpA _{out}	LwA _{in}	LwA _{out}	q _v	p _{sf}
	V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	dB(A)	dB(A)	m³/h	Pa
1	400	50	1140	642	1.02	67	62	74	74	13770	0
2	400	50	1140	775	1.25	64	56	71	71	12360	60
3	400	50	1140	892	1.42	66	56	72	71	10650	120
4	400	50	1140	970	1.60	68	58	74	73	8920	170
5	400	50	1000	406	0.75	64	58	71	70	12020	0
6	400	50	1000	490	0.86	61	54	68	67	10750	45
7	400	50	1000	564	0.95	62	52	69	68	9280	91
8	400	50	1000	626	1.05	63	54	70	69	7830	131
9	400	50	800	224	0.45	59	51	65	65	9540	0
10	400	50	800	270	0.53	56	47	62	62	8595	29
11	400	50	800	300	0.58	56	46	63	62	7470	59
12	400	50	800	331	0.64	57	48	64	64	6290	84
13	400	50	600	109	0.25	52	43	59	58	7255	0
14	400	50	600	124	0.28	50	40	56	56	6520	17
15	400	50	600	139	0.31	50	40	56	56	5625	34
16	400	50	600	152	0.33	50	42	57	57	4730	48