

S3G630-CS21-06 ebmpapst Datasheet

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Nominal data

Type	S3G630-CS21-06	
Motor	M3G150-FF	
Phase		3~
Nominal voltage	VAC	400
Nominal voltage range	VAC	380 .. 480
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min ⁻¹	1230
Power consumption	W	1850
Current draw	A	2.85
Max. back pressure	Pa	190
Max. back pressure	inH ₂ O	0.76
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	70

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

Data according to ErP Directive

		Actual	Req. 2015		
01 Overall efficiency η_{es}	%	36.5	35.3	09 Power consumption P_{ed}	kW
02 Measurement category		A		09 Air flow q_v	m ³ /h
03 Efficiency category		Static		09 Pressure increase p_{fs}	Pa
04 Efficiency grade N		41.2	40	10 Speed (rpm) n	min ⁻¹
05 Variable speed drive		Yes		11 Specific ratio*	

Data obtained at optimum efficiency level.

The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

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

LU-130208



EC axial fan - HyBlade

sickle-shaped blades (S series)

with guard grille for full nozzle

Technical description

Weight	25.5 kg
Fan size	630 mm
Rotor surface	Painted black
Electronics housing material	Die-cast aluminum, painted black
Blade material	Sheet aluminum insert, sprayed with PP plastic
Guard grille material	Steel, phosphated and coated with black plastic
Number of blades	5
Blade pitch	0°
Airflow direction	"V"
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP55
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F4-1
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	<ul style="list-style-type: none"> - External 24 V input (parameter setting) - RS-485 MODBUS-RTU - Control input 0-10 VDC / PWM - Thermal overload protection for electronics/motor - Alarm relay - Integrated PID controller - Input for sensor 0-10 V or 4-20 mA - Output for slave 0-10 V - Motor current limitation - Soft start - Line undervoltage / phase failure detection - Output 10 VDC, max. 10 mA - Output 20 VDC, max. 50 mA - Selection of direction of rotation left/right
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC interference emission	According to EN 61000-6-3 (household environment)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	Via terminal box
Motor protection	Reverse polarity and locked-rotor protection
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 61800-5-1; CE
Approval	EAC; UL 1004-7 + 60730; C22.2 No.77 + CAN/CSA-E60730-1

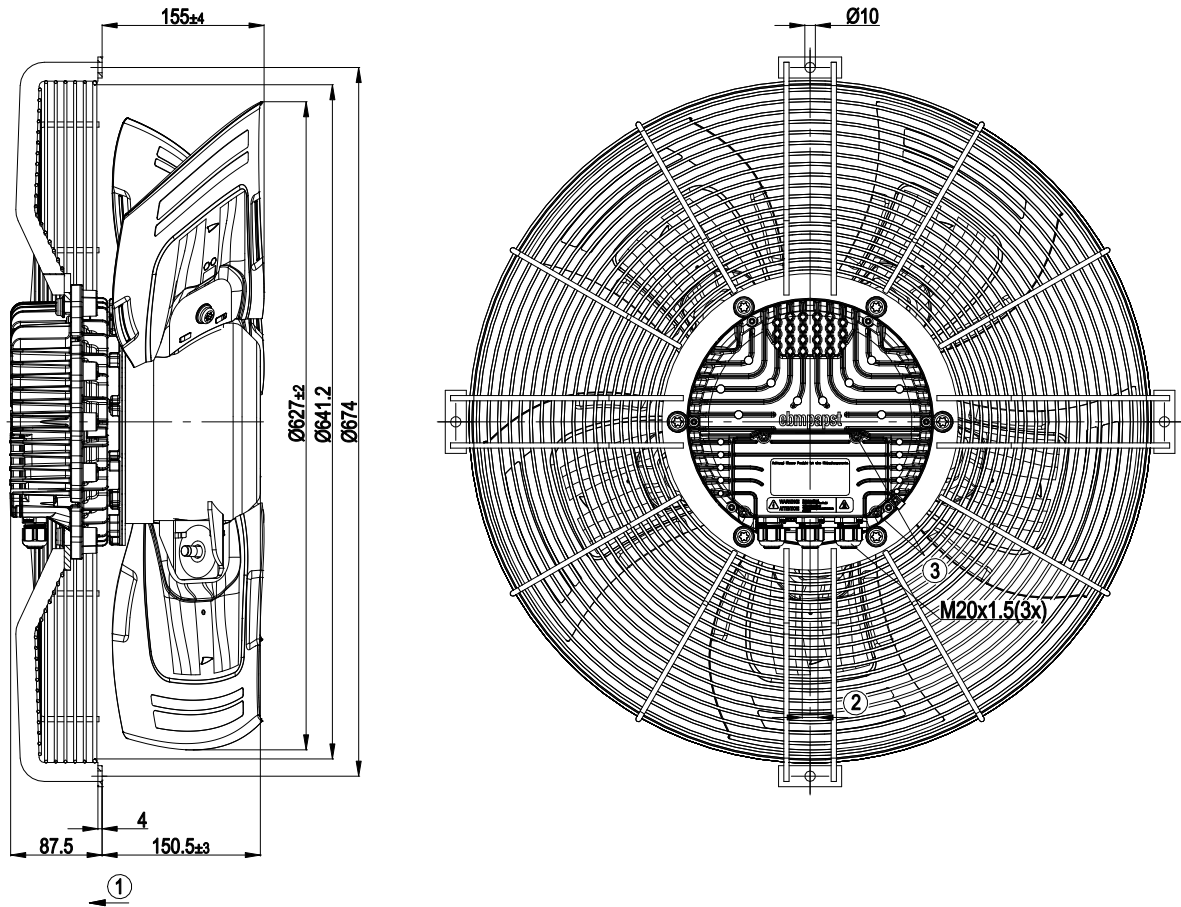


EC axial fan - HyBlade

sickle-shaped blades (S series)

with guard grille for full nozzle

Product drawing



- | | |
|---|--|
| 1 | Direction of air flow "V" |
| 2 | Cable diameter min. 4 mm; max. 10 mm; tightening torque 4±0.6 Nm |
| 3 | Tightening torque 3.5±0.5 Nm |



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No.	Conn.	Designation	Function/assignment
KL 3	13	Ain2 I	Analog input 2, measured value: 4-20 mA, $R_i = 100 \Omega$, adjustable curve, only usable as alternative to input Ain2U; SELV
KL 3	14	Aout	Analog output 0-10 VDC, max. 5 mA, output of current motor modulation level / motor speed adjustable curve; SELV

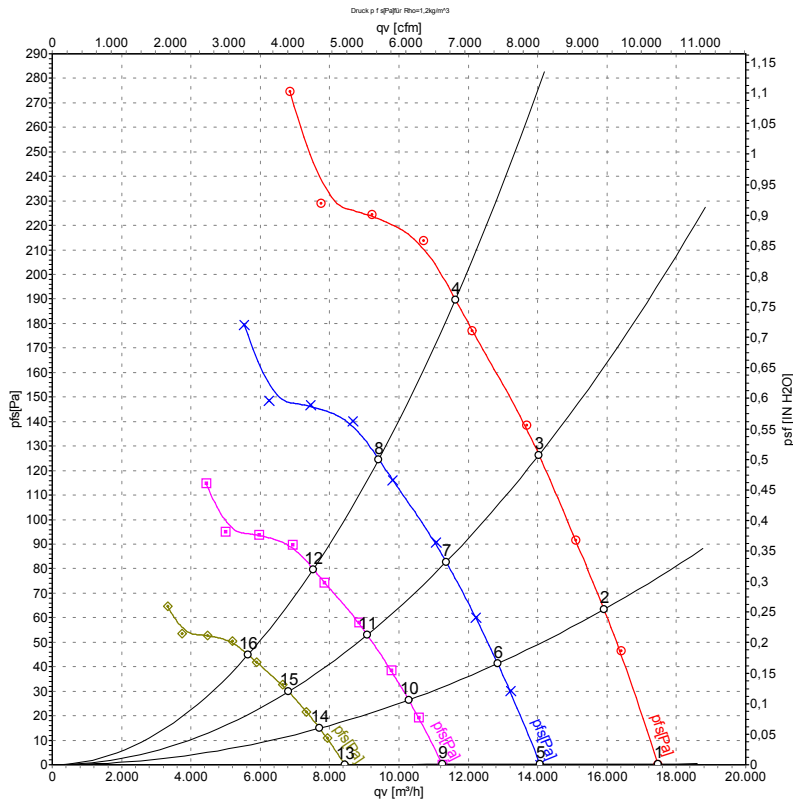


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Curves: Air performance 50 Hz



Measurement: LU-130208-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebmpapst. 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	LpA _{in}	LwA _{in}	LwA _{out}	qv	P _{fs}	qv	P _{fs}
	V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	dB(A)	m ³ /h	Pa	CFM	inH2O
1	400	50	1230	1390	2.14	68	76	77	17470	0	10280	0.00
2	400	50	1230	1528	2.32	68	76	77	15920	65	9370	0.26
3	400	50	1230	1651	2.52	68	76	76	14040	125	8265	0.50
4	400	50	1230	1850	2.85	72	79	79	11620	190	6840	0.76
5	400	50	1000	726	1.12	64	71	73	14070	0	8280	0.00
6	400	50	1000	804	1.22	63	71	72	12850	41	7565	0.16
7	400	50	1000	875	1.34	64	71	72	11360	83	6685	0.33
8	400	50	1000	948	1.44	67	75	74	9415	124	5545	0.50
9	400	50	800	372	0.57	59	67	68	11260	0	6625	0.00
10	400	50	800	412	0.63	59	66	67	10280	26	6050	0.10
11	400	50	800	448	0.68	59	66	67	9090	53	5350	0.21
12	400	50	800	485	0.74	63	70	69	7535	80	4435	0.32
13	400	50	600	157	0.24	53	60	61	8440	0	4970	0.00
14	400	50	600	174	0.26	52	60	61	7710	15	4540	0.06
15	400	50	600	189	0.29	53	60	61	6815	30	4010	0.12
16	400	50	600	205	0.31	56	64	63	5650	45	3325	0.18

U = Power supply · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
LwA_{out} = Sound power level outlet side · qv = Air flow · P_{fs} = Pressure increase

