

EC centrifugal fan

backward curved, single inlet



R3G560-AH07-13 ebmpapst Datasheet
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Nominal data

Type	R3G560-AH07-13	
Motor	M3G150-IF	
Phase		3~
Nominal voltage	VAC	200
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Type of data definition		ml
Speed (rpm)	min ⁻¹	1510
Power input	W	2900
Current draw	A	9.2
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	45

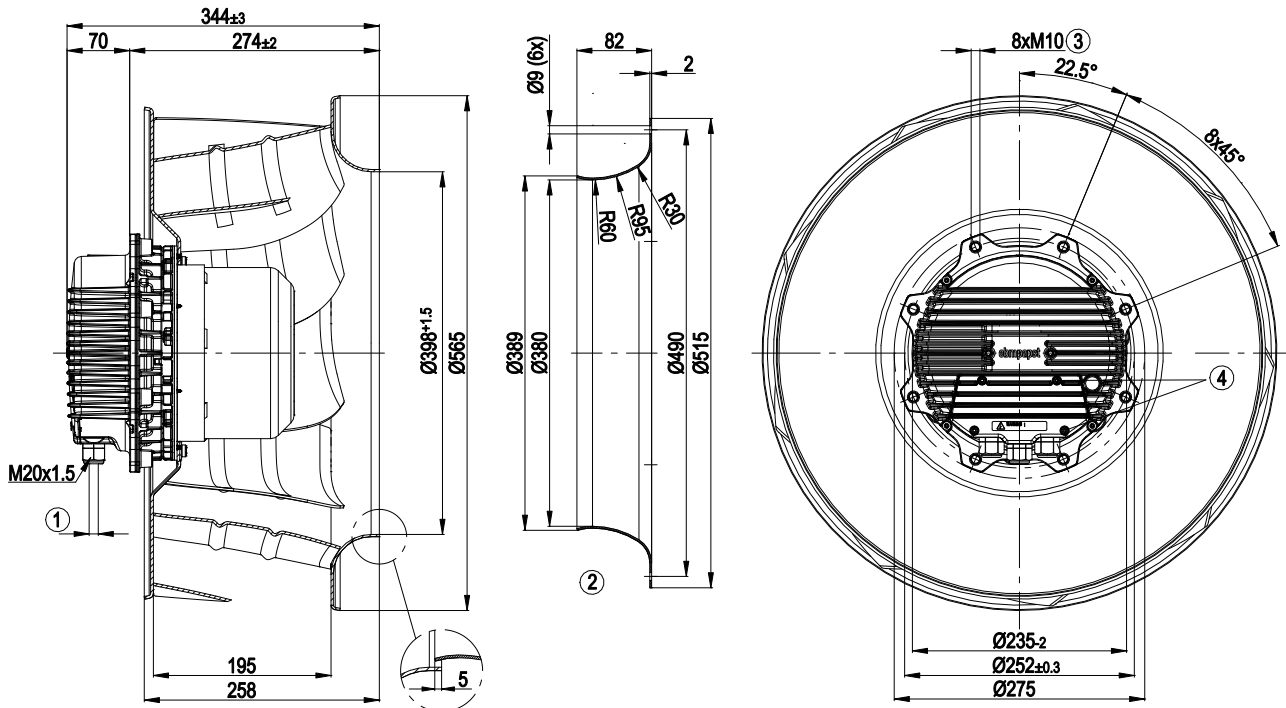
ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations



Technical features

Mass	28 kg
Size	560 mm
Surface of rotor	Coated in black
Material of electronics housing	Die-cast aluminium
Material of impeller	Aluminium sheet
Number of blades	9
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 55
Insulation class	"F"
Humidity (F)/environmental protection class (H)	F4-1
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	- 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 - Control interface with SELV potential safely disconnected from the mains - Over-temperature protected electronics / motor - Line undervoltage / phase failure detection
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Electrical leads	Via terminal box
Motor protection	Reverse polarity and locked-rotor protection
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 61800-5-1; CE
Approval	CSA C22.2 No.77; EAC; UL 2111

Product drawing

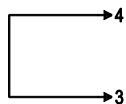


1	Cable diameter: min. 4 mm; max. 10 mm; tightening torque: 4±0.6 Nm
2	Accessory part: Inlet nozzle 63071-2-4013 not included in the standard scope of delivery, other inlet nozzles on request
3	Depth of screw max. 25 mm
4	Tightening torque, terminal box cover 3.5±0.5 Nm

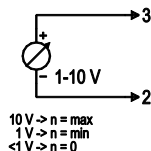
Connection screen

Customer circuit

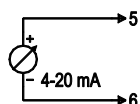
Full speed



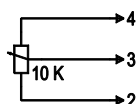
Speed setting



Setting of values, e.g. via pressure

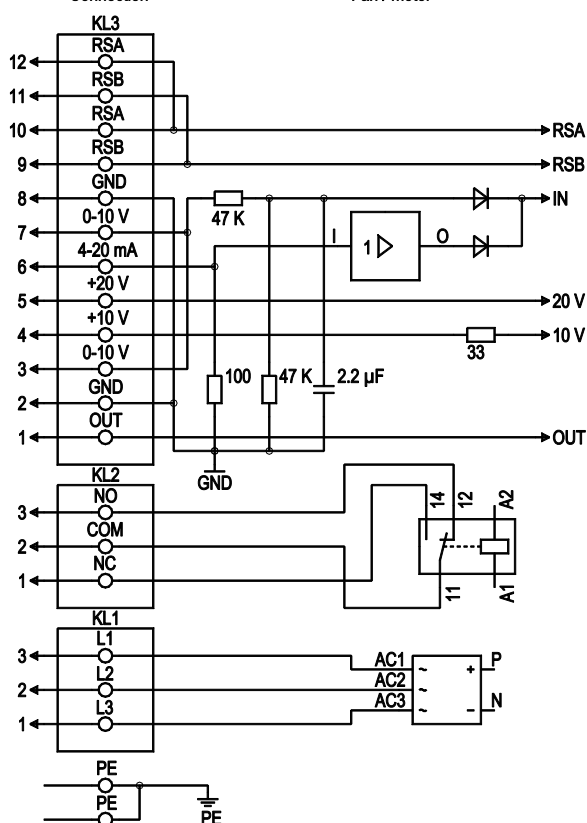


Speed setting via potentiometer



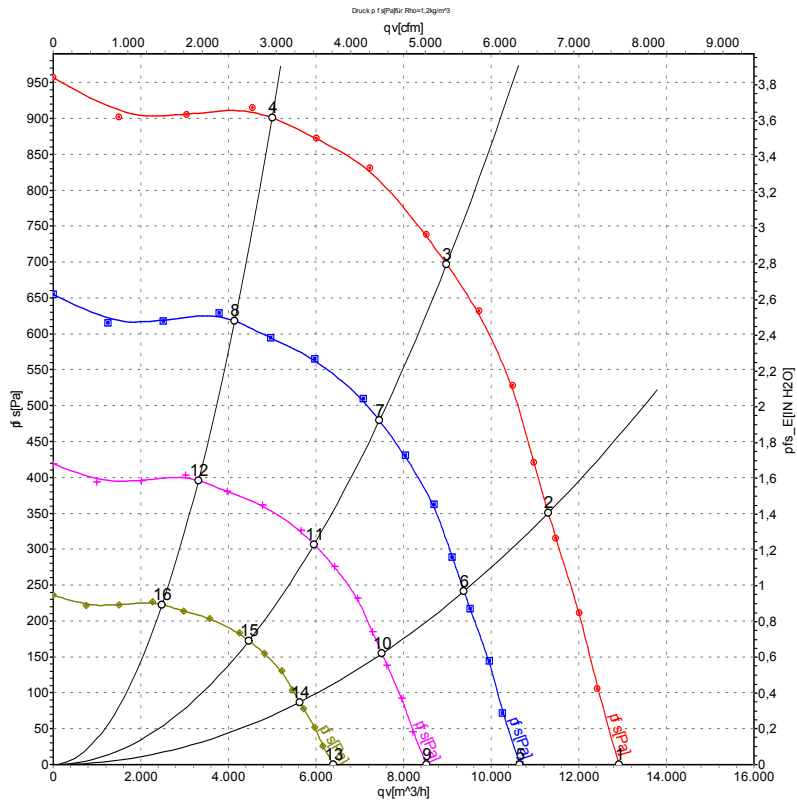
Connection

Fan / motor



No.	Conn.	Designation	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 ext. devices (e.g. potentiometers), SELV
KL3	5	+20 V	Voltage output 20 VDC (+25 %/-10 %), max. 50 mA, supply voltage for ext. 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 Y



Measurement: LU-67300-1

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: 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

	Conn.	U	f	n	P _{ed}	I	qv	P _{fs}	qv	P _{fs}
		V	Hz	min ⁻¹	W	A	m³/h	Pa	CFM	inH ₂ O
1	Y	200	50	1510	1840	5.95	12920	0	7605	0.00
2	Y	200	50	1510	2445	7.87	11310	350	6655	1.41
3	Y	200	50	1510	2900	9.20	8985	700	5285	2.81
4	Y	200	50	1510	2444	7.77	5005	900	2945	3.61
5	Y	200	50	1250	1034	3.34	10660	0	6275	0.00
6	Y	200	50	1250	1396	4.49	9380	241	5520	0.97
7	Y	200	50	1250	1658	5.28	7450	480	4385	1.93
8	Y	200	50	1250	1388	4.41	4145	619	2440	2.49
9	Y	200	50	1000	529	1.71	8525	0	5020	0.00
10	Y	200	50	1000	715	2.30	7505	154	4415	0.62
11	Y	200	50	1000	849	2.70	5960	307	3505	1.23
12	Y	200	50	1000	711	2.26	3315	396	1950	1.59
13	Y	200	50	750	223	0.72	6395	0	3765	0.00
14	Y	200	50	750	302	0.97	5630	87	3315	0.35
15	Y	200	50	750	358	1.14	4470	173	2630	0.69
16	Y	200	50	750	300	0.95	2485	223	1465	0.90

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power input · I = Current draw · qv = Air flow · P_{fs} = Pressure increase