R3G560-AH07-20

Emerson

EC centrifugal fan

backward curved, single inlet

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Nominal data

Type	**R3G560-AH07-20**
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

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Technical features

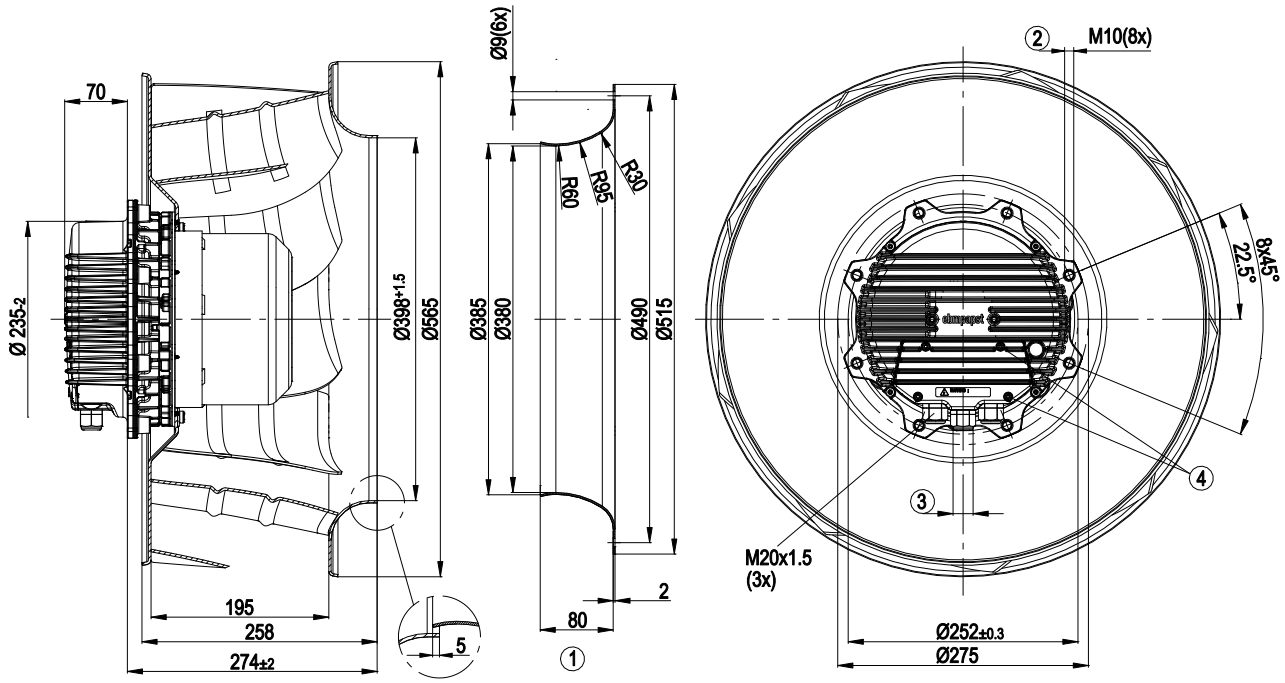
Mass	28 kg
Size	560 mm
Surface of rotor	Coated in black
Material of electronics housing	Die-cast aluminium
Material of impeller	Aluminium sheet
Number of blades	9
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 55
Insulation class	"F"
Humidity (F)/environmental protection class (H)	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

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Product drawing



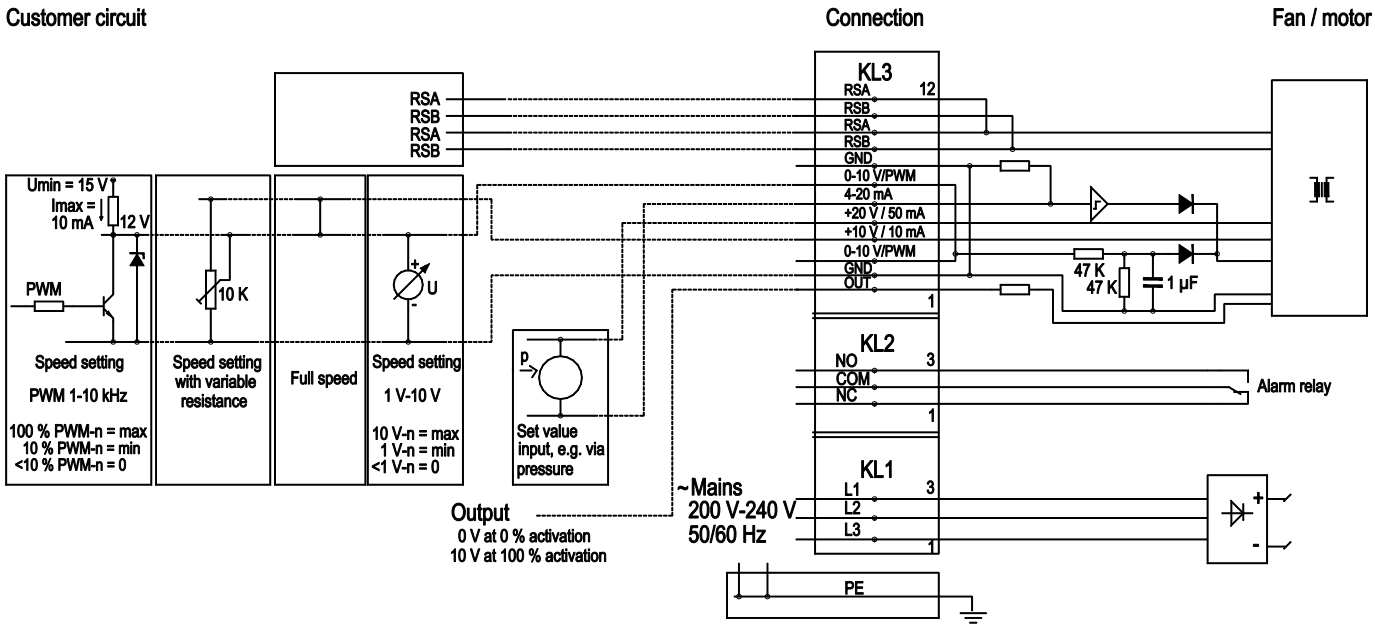
1	Accessory part: Inlet nozzle 63071-2-4013 not included in the standard scope of delivery, other inlet nozzles on request
2	Depth of screw max. 25 mm
3	Cable diameter: min. 4 mm, max. 10 mm, tightening torque: 4±0.6 Nm
4	Tightening torque of terminal box cover 3.5±0.5 Nm

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Connection screen



No.	Conn.	Designation	Function / assignment
PE		PE	Protective ground connection
KL1	1, 2, 3	L1, L2, L3	Power line, L1, L2, L3
KL2	1	NC	Alarm relay, normally closed connection
KL2	2	COM	Alarm relay, common
KL2	3	NO	Alarm relay, normally open connection
KL3	1	OUT	Master output for controlling fans
KL3	2, 8	GND	GND
KL3	3, 7	0-10 V/PWM	Reference / Actual value
KL3	4	+10 V	Supply to external potentiometers
KL3	5	+20 V	Supply to external sensor
KL3	6	4-20 mA	Reference / Actual value input
KL3	9, 11	RSB	RS485 interface for ebmBus, RSB
KL3	10, 12	RSA	RS485 interface for ebmBus, RSA

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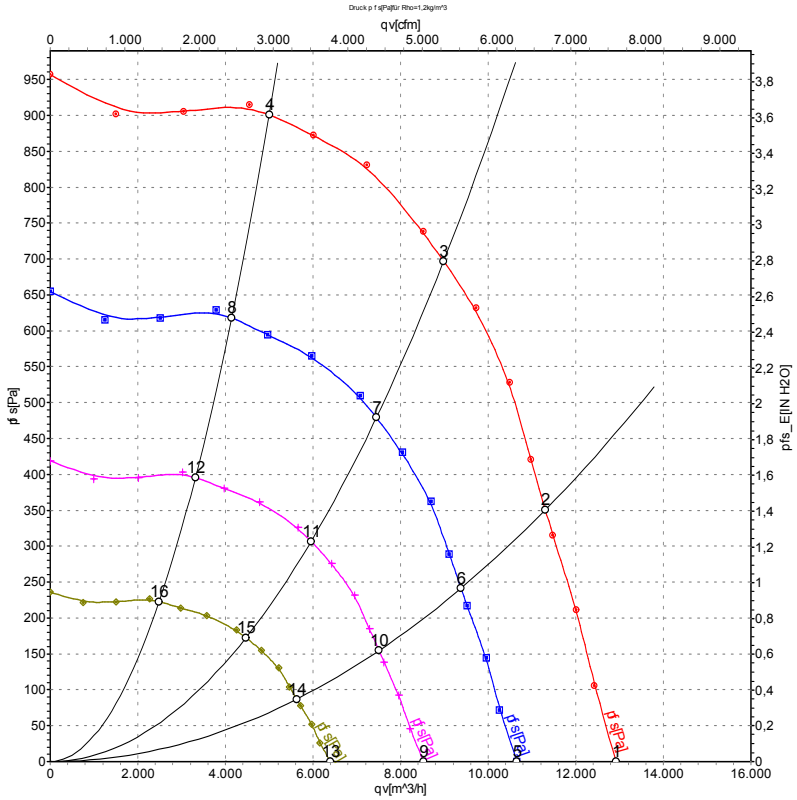
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Charts: Air flow 50 Hz Y



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: 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

	Conn.	U	f	n	P_{ed}	I	qv	p_{fs}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
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

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