R3G560-AG07-07

Emerson Network Power S.R. L.

EC centrifugal fan

backward curved, single inlet

R3G560-AG07-07 ebmpapst Datasheet
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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**R3G560-AG07-07**	
Motor	**M3G150-FF**	
Phase		3~
Nominal voltage	VAC	400
Nominal voltage range	VAC	380 .. 480
Frequency	Hz	50/60
Type of data definition		ml
Speed	min^{-1}	1350
Power input	W	2300
Current draw	A	3.6
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

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

Data according to ErP directive

Installation category	A
Efficiency category	Static
Variable speed drive	Yes
Specific ratio*	1.01

* Specific ratio = 1 + p_{fs} / 100 000 Pa

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}	%	59.8	51.4	55.4
Efficiency grade N		66.4	58	62
Power input P_{ed}	kW	2.36		
Air flow q_v	m^3/h	8010		
Pressure increase p_{fs}	Pa	599		
Speed n	min^{-1}	1360		

Data definition with optimum efficiency. LU-108580
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

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Technical features

Mass	24 kg
Size	560 mm
Surface of rotor	Coated in black
Material of electronics housing	Die-cast aluminum
Material of impeller	Aluminium sheet
Number of blades	9
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"F"
Humidity class	F4-1
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Any (humidity class I)
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
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC interference emission	Acc. to EN 61000-6-3 (household environment)
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Reverse polarity and locked-rotor protection
Cable exit	Lateral
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 61800-5-1; CE
Approval	UL 2111; VDE; EAC; CSA C22.2 Nr.77

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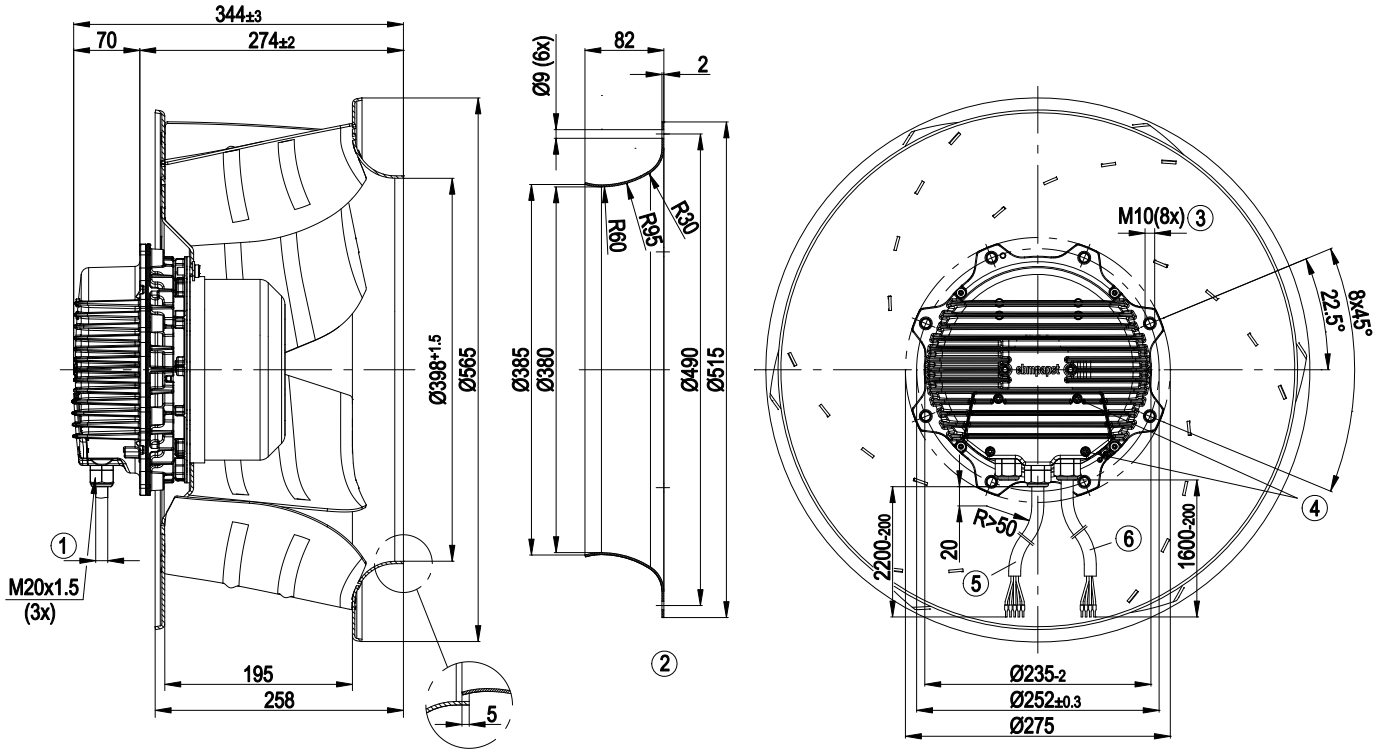
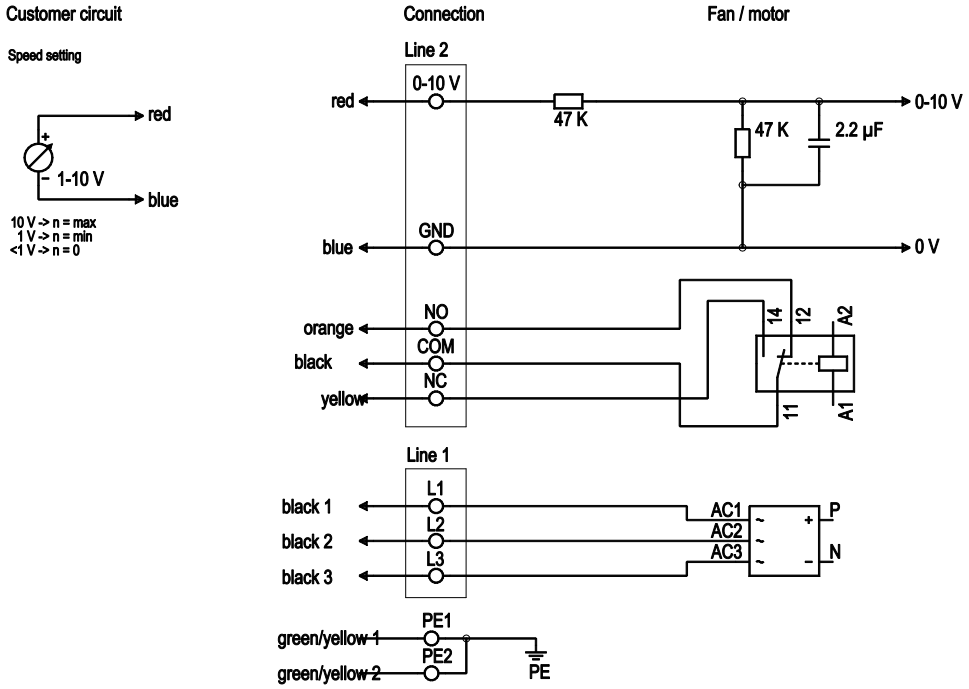
Product drawing



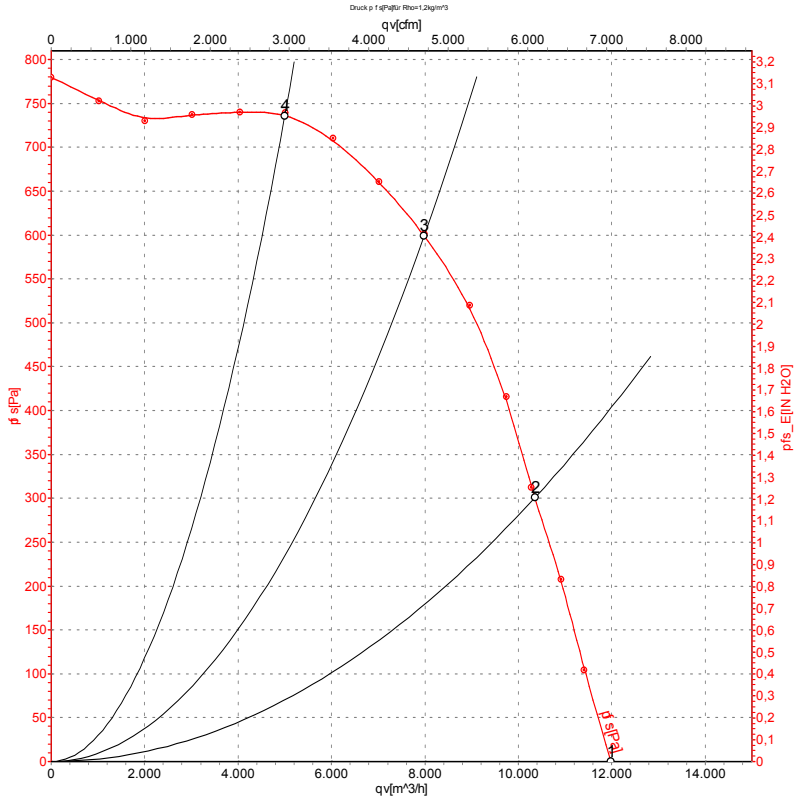
1	Cable diameter: min. 4 mm, max. 10 mm; tightening torque: 4±0.6 Nm
2	Accessory part: Inlet nozzle 63071-2-4013 not included in delivery, other inlet nozzles on request
3	Depth of screw max. 25 mm
4	Tightening torque, terminal box cover 3.5±0.5 Nm
5	Connection line AWG20; 5x end splices, crimped core-end sleeves
6	Connection line AWG18; 4 x crimped core-end sleeves

Connection screen



No.	Conn.	Designation	Colour	Function / assignment
1		PE1	green/yell 1	Protective ground connection
1		PE2	green/yell 2	Protective ground connection
1		L1, L2, L3	black	Supply voltage, 50/60 Hz
2		NC	yellow	Floating status message contact, normally closed connection
2		COM	black	Floating status message contact, changeover contact, common connection (2 A, max. 250 VAC, min. 10 mA, AC1)
2		NO	orange	Floating status message contact, normally open connection
2		GND	blue	Reference mass for control interface, SELV
2		0-10 V	red	Use control / actual value input 0-10 VDC, impedance 100 kΩ only as alternative to 4-20 mA input, SELV

Charts: Air flow 50 Hz Y



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}
		V	Hz	min^{-1}	W	A	m^3/h	Pa
1	Y	400	50	1350	1332	2.18	11980	0
2	Y	400	50	1350	1787	3.19	10350	300
3	Y	400	50	1350	2300	3.90	7980	602
4	Y	400	50	1350	1882	3.50	5000	739

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