

R3G560-AH02-03

EC centrifugal fan

backward curved, single inlet



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Nominal data

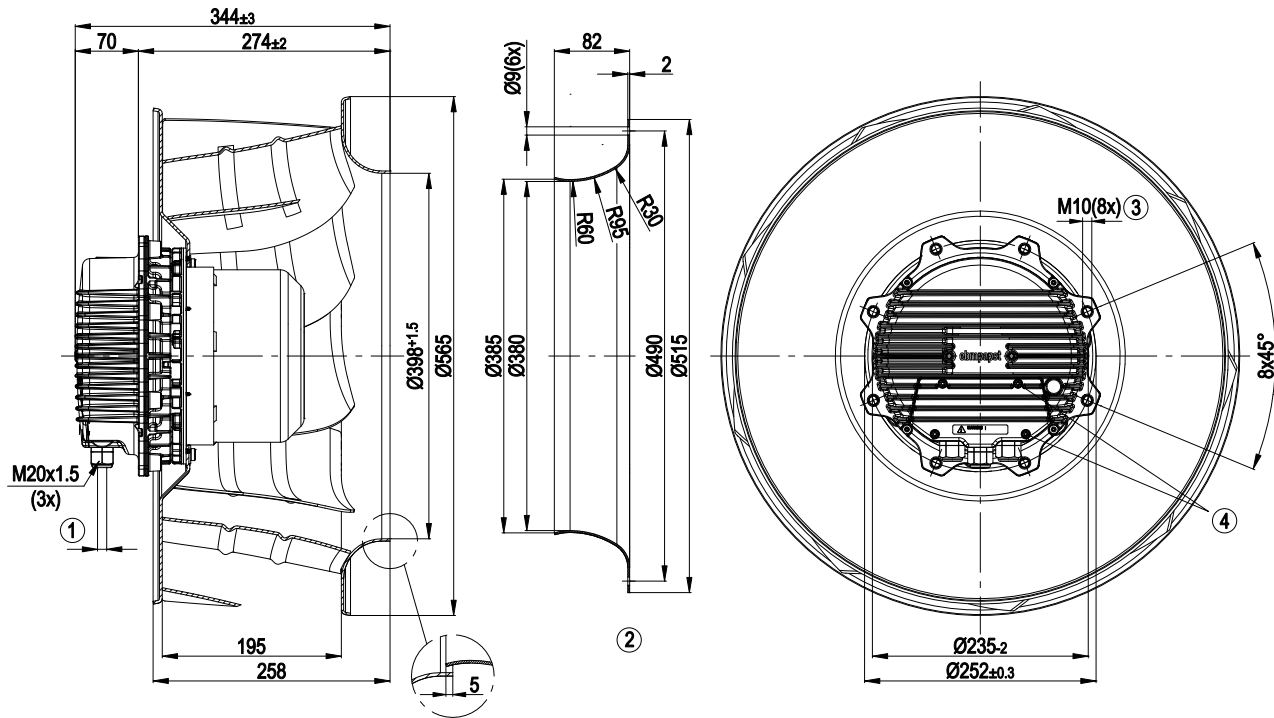
Type	R3G560-AH02-03	
Motor	M3G150-IF	
Phase		3~
Nominal voltage	[VAC]	400
Nominal voltage range	[VAC]	380 .. 480
Frequency	[Hz]	50/60
Type of data definition		ml
Speed	[min ⁻¹]	1510
Power input	[W]	3100
Current draw	[A]	4.9
Max. ambient temperature	[°C]	60

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

Technical features

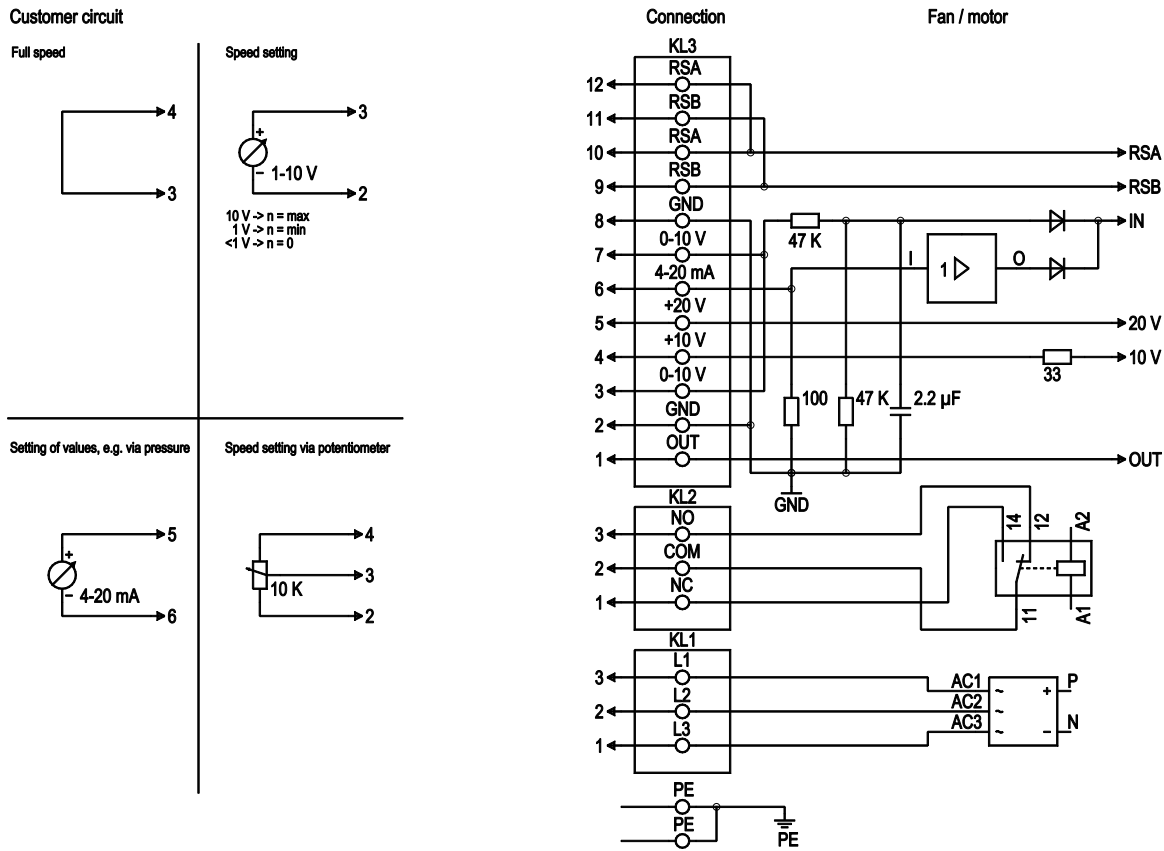
Leakage current	<= 3.5 mA
Size	560 mm
Operation mode	S1
Direction of rotation	Clockwise, seen on rotor
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Electrical leads	Via terminal box
EMC interference emission	Acc. to EN 61000-6-3 (household environment)
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
Humidity class	F4-1
Insulation class	"F"
Condensate discharge holes	Rotor-side
Bearing motor	Ball bearing
Mass	28 kg
Material of electronics housing	Die-cast aluminum
Material of impeller	Aluminium sheet
Motor protection	Reverse polarity and locked-rotor protection
Product conforming to standard	CE; EN 61800-5-1
Surface of rotor	Coated in black
Number of blades	9
Type of protection	IP 54
Protection class	I
Technical features	<ul style="list-style-type: none"> - PFC, passive - Control input 0-10 VDC / PWM - Over-temperature protected electronics / motor - Alarm relay - Integrated PID controller - Input for sensor 0-10 V or 4-20 mA - Output for slave 0-10 V - Output 20 VDC, max. 50 mA - Output 10 VDC, max. 10 mA - RS485 ebmBUS - Motor current limit - Soft start - Line undervoltage / phase failure detection
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Approval	CSA C22.2 Nr.100; GOST; UL 2111; VDE

Product drawing



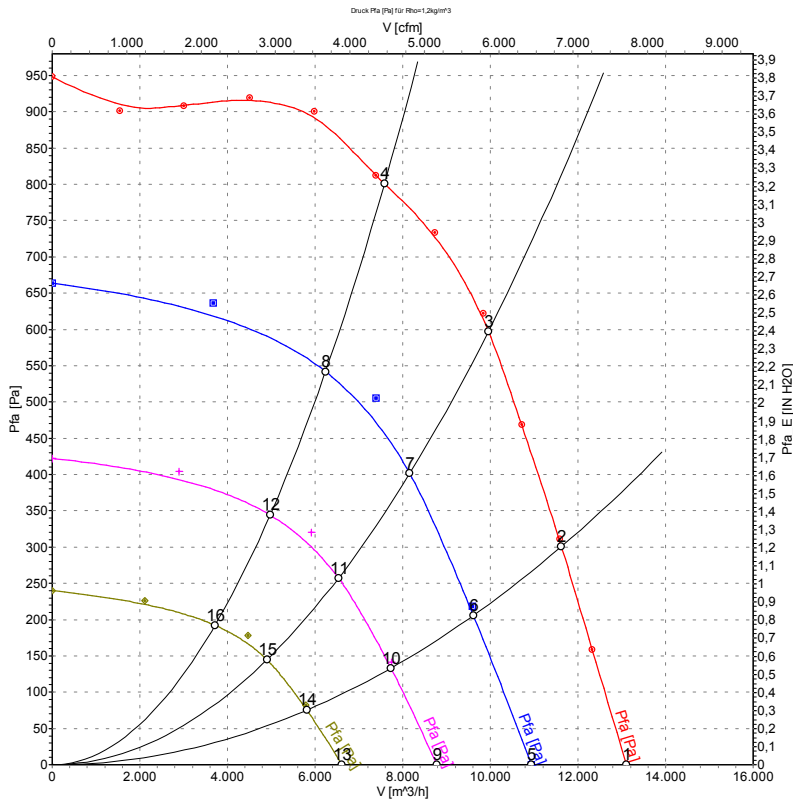
1	Cable diameter: min. 4 mm, max. 10 mm, tightening torque: 4 ± 0.6 Nm
2	Accessory part: Inlet nozzle 63071-2-4013 not included in delivery, other inlet nozzles on request
3	Depth of screw max. 25 mm
4	Tightening torque, terminal box cover 3.5 ± 0.5 Nm

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 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



Measurement: LU-109157
 Measurement: LU-111949
 Measurement: LU-111950
 Measurement: LU-111948

Measured values

	Conn.	U	f	n	P ₁	I	LpA _{ss}	LpA _{ds}	LwA _{ss}	LwA _{ds}	Ŵ	P _{fa}
		[V]	[Hz]	[min ⁻¹]	[W]	[A]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[m ³ /h]	[Pa]
1	Y	400	50	1510	1965	2.99	80	80	86	94	13110	0
2	Y	400	50	1510	2553	3.88	78	77	84	92	11620	300
3	Y	400	50	1510	3100	4.90	76	75	83	90	9955	600
4	Y	400	50	1510	2981	4.53	75	75	82	89	7585	800
5	Y	400	50	1250	1082	1.65	74	73	81	88	10930	0
6	Y	400	50	1250	1392	2.12	72	71	79	86	9615	216
7	Y	400	50	1250	1579	2.40	71	70	78	84	8160	405
8	Y	400	50	1250	1557	2.37	71	70	78	84	6240	546
9	Y	400	50	1000	583	0.95	67	66	74	81	8775	0
10	Y	400	50	1000	734	1.16	66	65	73	79	7735	142
11	Y	400	50	1000	826	1.30	65	64	72	78	6535	260
12	Y	400	50	1000	811	1.27	65	64	72	78	4970	346
13	Y	400	50	750	272	0.54	60	59	67	73	6615	0
14	Y	400	50	750	330	0.63	60	58	67	73	5810	80
15	Y	400	50	750	368	0.69	59	58	66	72	4900	146
16	Y	400	50	750	357	0.67	58	58	66	72	3715	193