

R3G630-AA08-03

EC centrifugal fan

backward curved, single inlet



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Nominal data

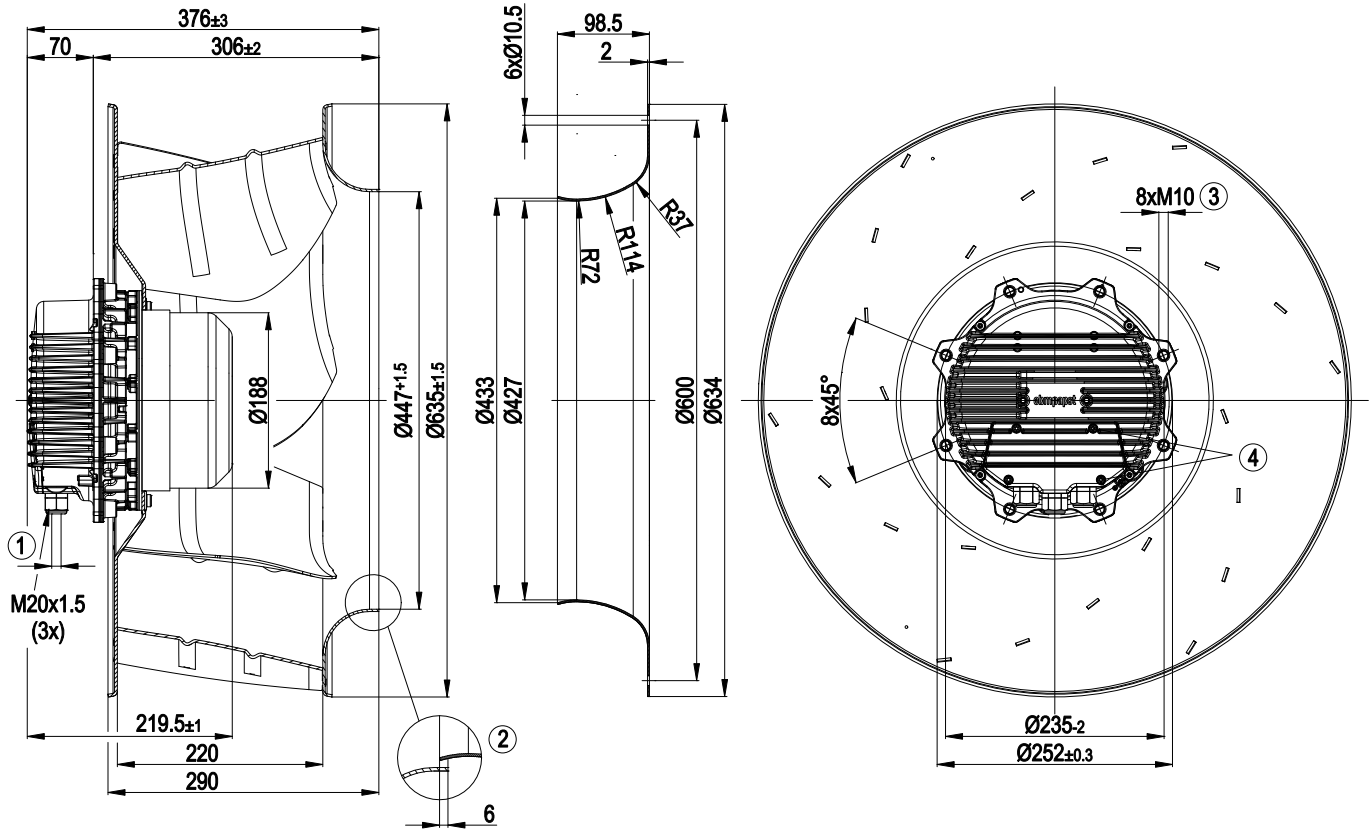
Type	R3G630-AA08-03	
Motor	M3G150-FF	
Phase		3~
Nominal voltage	[VAC]	400
Nominal voltage range	[VAC]	380 .. 480
Frequency	[Hz]	50/60
Type of data definition		ml
Speed	[min ⁻¹]	1000
Power input	[W]	1700
Current draw	[A]	2.6
Min. ambient temperature	[°C]	-25
Max. ambient temperature	[°C]	60

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

Technical features

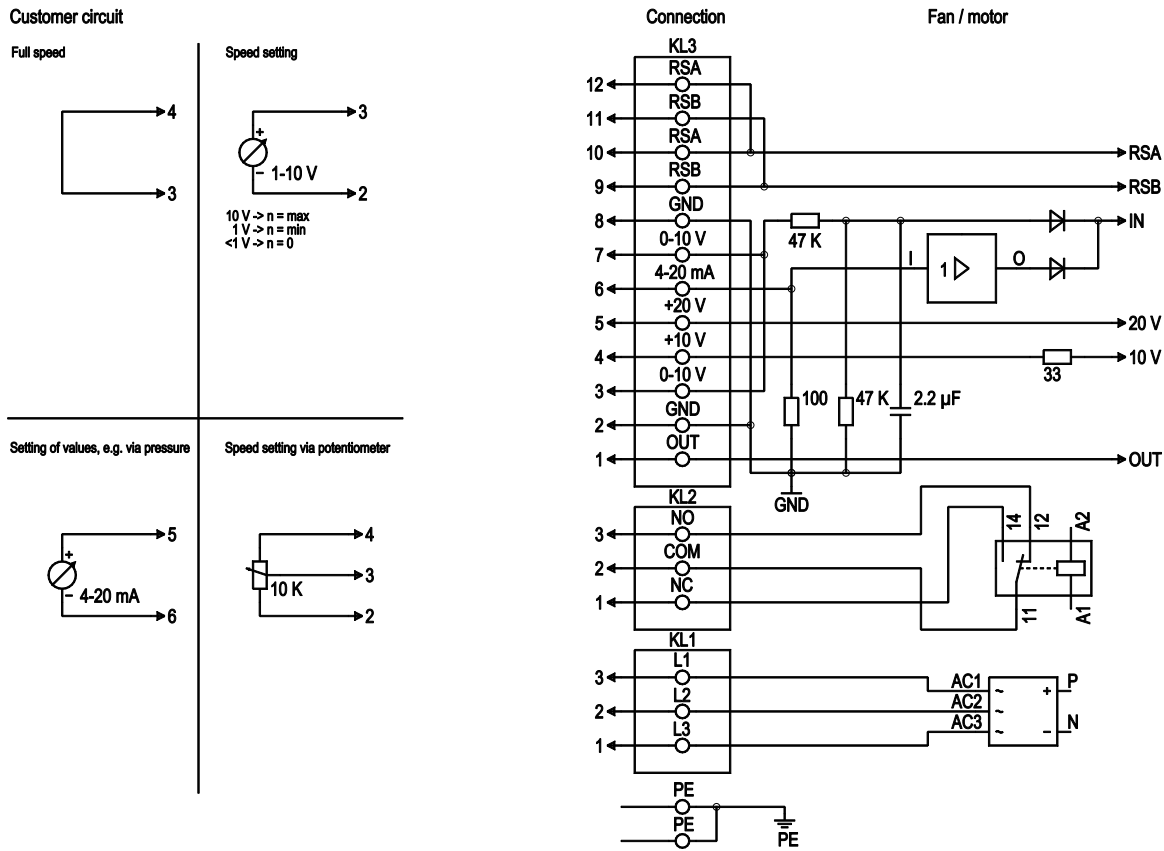
Leakage current	<= 3.5 mA
General description	Integrated electronics
Size	630 mm
Operation mode	Continuous operation (S1)
Direction of rotation	Clockwise, seen on rotor
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Electrical leads	Via terminal box
EMC interference emission	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	24 kg
Material of electronics housing	Die-cast aluminium
Material of impeller	Sheet aluminium, laser-welded
Motor protection	Reverse polarity and locked-rotor protection
Product conforming to standard	CE
Surface of rotor	Coated in black
Number of blades	6
Type of protection	IP 54
Protection class	I (acc. to EN 61800-5-1)
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 - RS485 ebmBUS - Line undervoltage / phase failure detection - Motor current limit - Soft start - Output 10 VDC, max. 10 mA - Output 20 VDC, max. 50 mA
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Approval	CSA C22.2 Nr.77; GOST; UL 2111; VDE

Product drawing



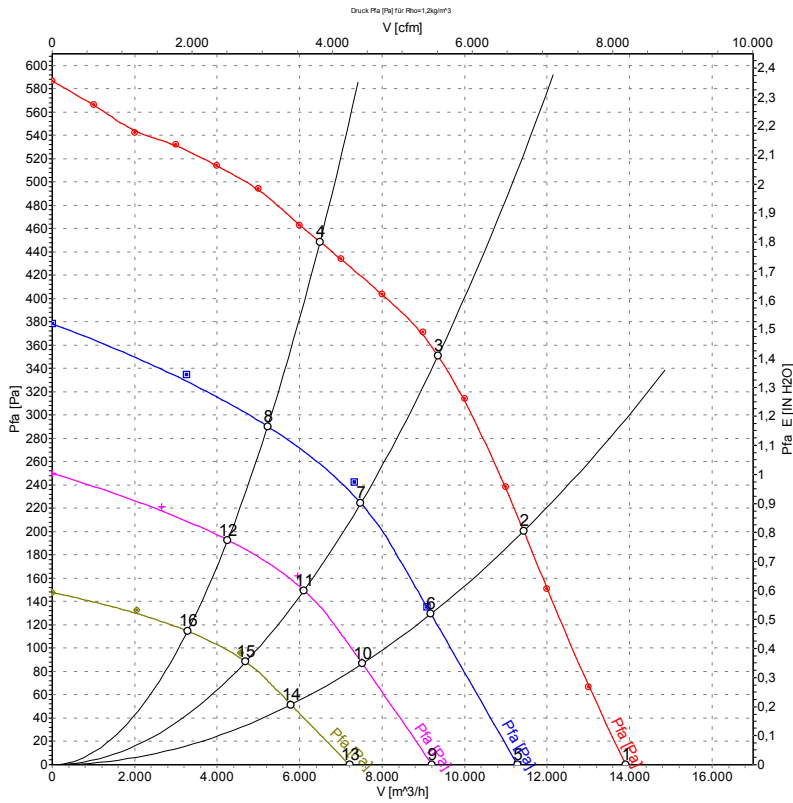
1	Cable diameter: min. 4 mm, max. 10 mm, tightening torque: 4 ± 0.4 Nm
2	Accessory part: inlet nozzle 63070-2-4013 not included in the standard scope of delivery; other inlet nozzles on request
3	Depth of screw max. 25 mm
4	Tightening torque 3.5 ± 0.5 Nm

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-109100
 Measurement: LU-119157
 Measurement: LU-119158
 Measurement: LU-119159

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	1000	1141	1.74	73	71	80	85	13910	0
2	Y	400	50	1000	1475	2.23	69	68	76	82	11430	200
3	Y	400	50	1000	1700	2.60	68	67	75	81	9355	350
4	Y	400	50	1000	1543	2.33	68	68	76	82	6495	450
5	Y	400	50	800	529	0.84	67	64	74	79	11280	0
6	Y	400	50	800	706	1.10	63	61	70	76	9185	130
7	Y	400	50	800	793	1.24	62	61	69	75	7480	233
8	Y	400	50	800	706	1.11	62	62	70	76	5225	290
9	Y	400	50	650	302	0.56	61	59	68	73	9215	0
10	Y	400	50	650	378	0.66	57	56	64	70	7520	88
11	Y	400	50	650	421	0.70	56	56	64	70	6110	155
12	Y	400	50	650	376	0.64	57	56	64	70	4255	193
13	Y	400	50	500	139	0.29	53	52	61	66	7210	0
14	Y	400	50	500	178	0.36	50	49	57	63	5795	51
15	Y	400	50	500	196	0.39	50	49	57	63	4695	91
16	Y	400	50	500	176	0.36	50	50	57	63	3280	115