R3G400-AC38-81

EC centrifugal fan

backward-curved, single-intake

R3G400-AC38-81 ebmpapst Datasheet
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Nominal data

Type	**R3G400-AC38-81**
Motor	**M3G084-FA**

Phase		1~
Nominal voltage	VAC	115
Nominal voltage range	VAC	100 .. 130
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	1320
Power consumption	W	360
Current draw	A	4.2
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	40

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

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Technical description

Weight	6.2 kg
Fan size	400 mm
Rotor surface	Painted black
Electronics housing material	Die-cast aluminum
Impeller material	Sheet aluminum
Number of blades	6
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F3-1
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on top; rotor on bottom on request
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Alarm relay - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Thermal overload protection for electronics/motor - Line undervoltage detection
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC circuit feedback	According to EN 61000-3-2/3
EMC interference emission	According to EN 61000-6-4 (industrial environment)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 61800-5-1
Approval	EAC; UL 1004-3; CSA C22.2 No. 77

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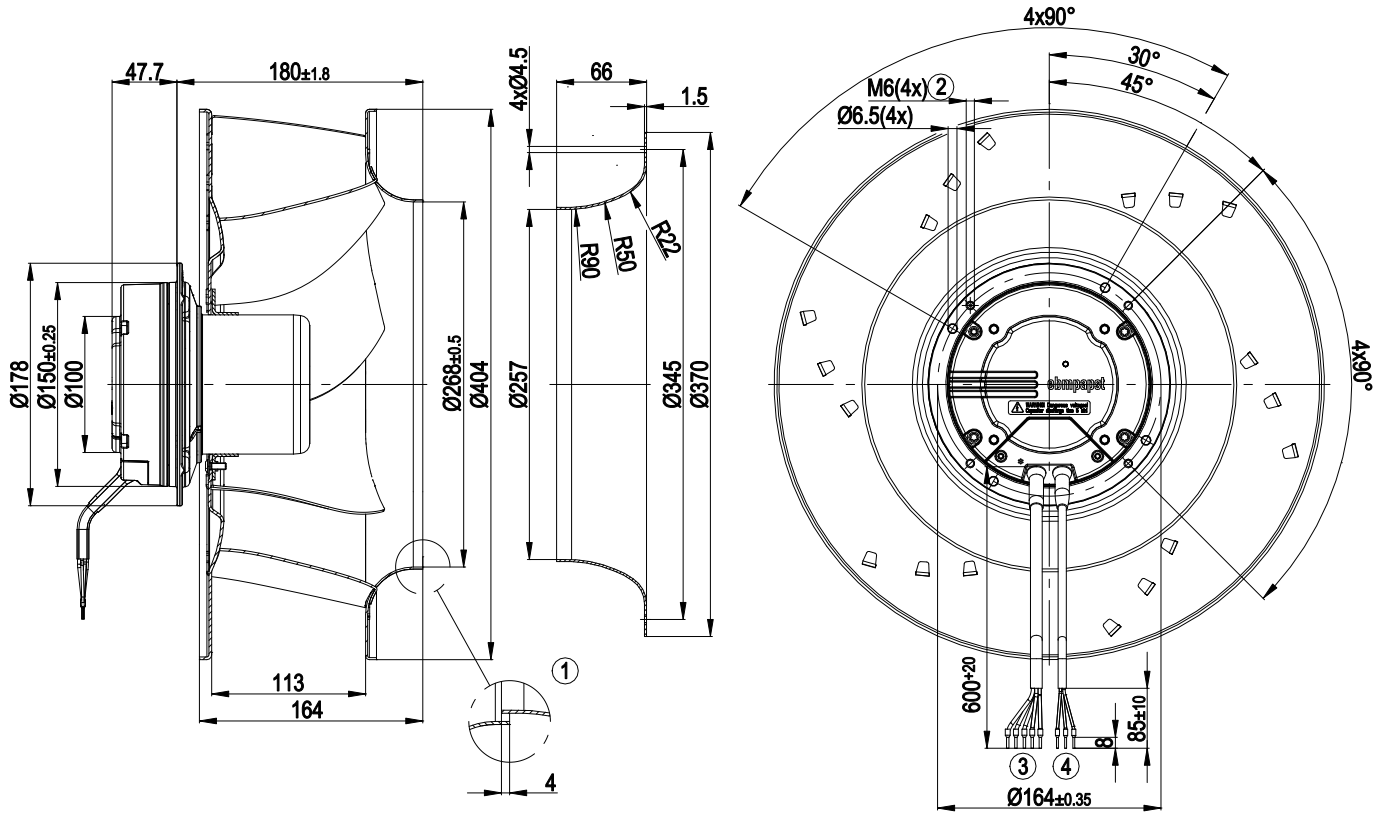
Product drawing



1	Accessory part: inlet ring 54476-2-4013 not included in scope of delivery, other inlet rings on request
2	Max. clearance for screw 10 mm
3	Cable AWG18, 5x crimped ferrules
4	Cable AWG 22, 3x crimped ferrules

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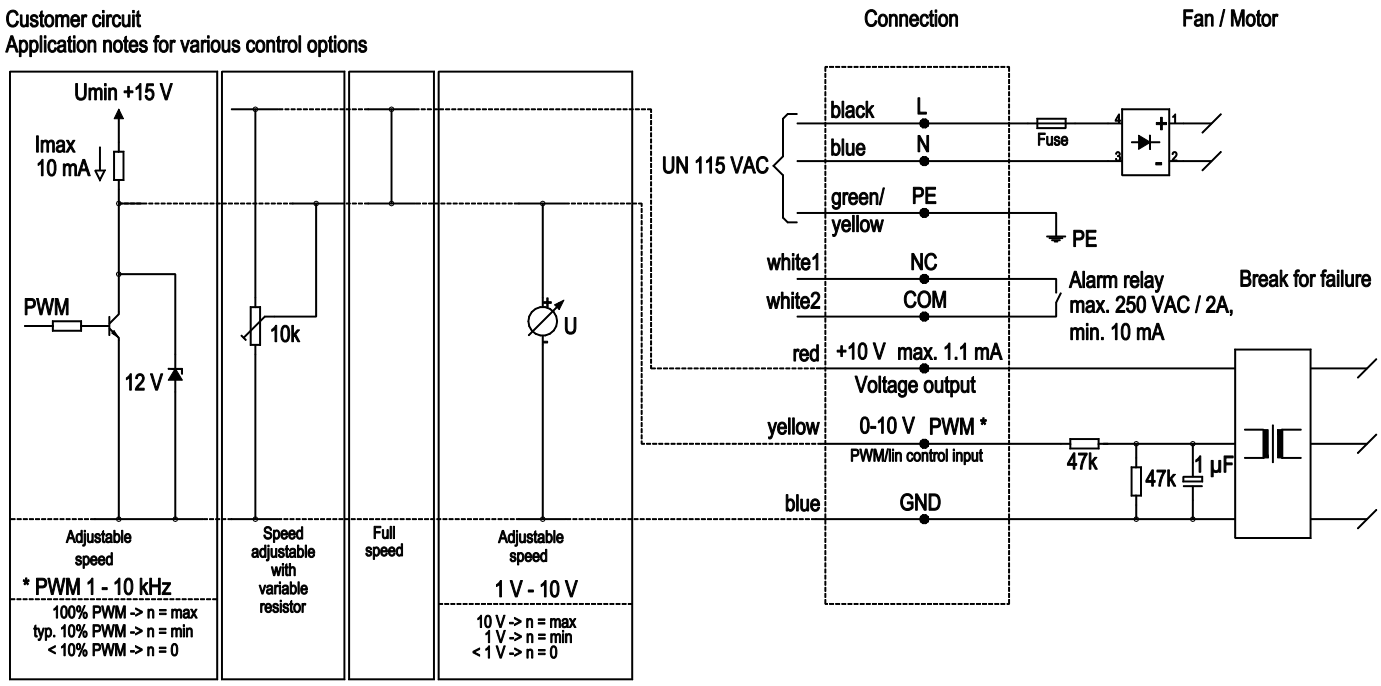
Connection diagram



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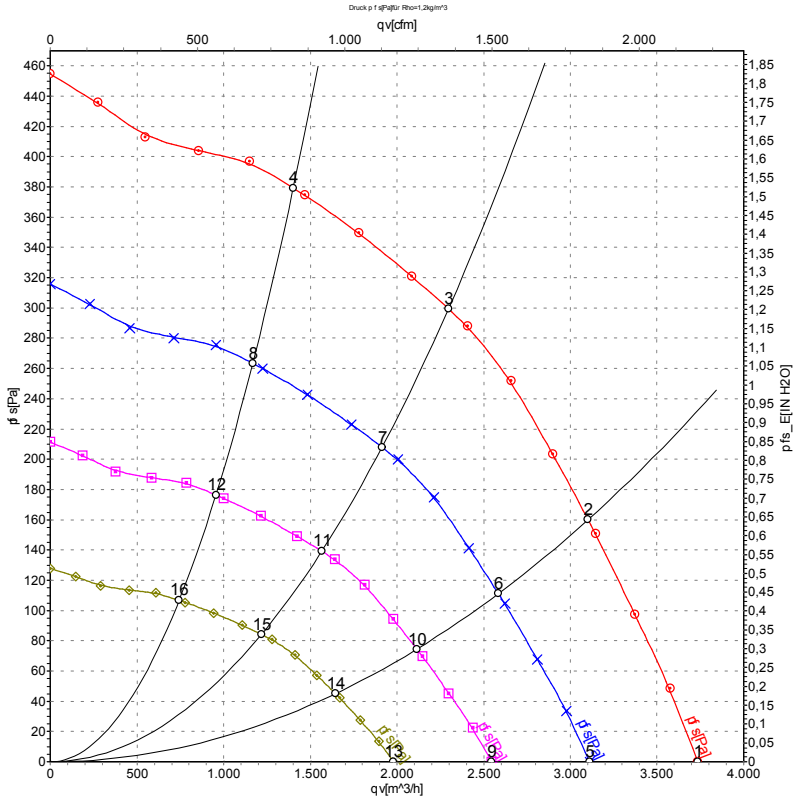
Curves: Air performance 60 Hz



Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	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	115	60	1320	280	3.24	3735	0	2195	0.00
2	115	60	1320	338	3.89	3100	160	1825	0.64
3	115	60	1320	360	4.20	2295	300	1350	1.20
4	115	60	1320	304	3.50	1400	380	825	1.53
5	115	60	1100	162	1.87	3110	0	1830	0.00
6	115	60	1100	196	2.25	2585	111	1520	0.45
7	115	60	1100	206	2.37	1915	208	1125	0.84
8	115	60	1100	176	2.02	1170	264	685	1.06
9	115	60	900	89	1.03	2545	0	1500	0.00
10	115	60	900	107	1.23	2115	74	1245	0.30
11	115	60	900	113	1.30	1565	139	920	0.56
12	115	60	900	96	1.11	955	176	565	0.71
13	115	60	700	42	0.48	1980	0	1165	0.00
14	115	60	700	50	0.58	1645	45	970	0.18
15	115	60	700	53	0.61	1220	84	715	0.34
16	115	60	700	45	0.52	745	107	435	0.43

U = Power supply · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase