R3G280-AA75-01

EC centrifugal fan

backward-curved, single-intake

Limited partnership · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**R3G280-AA75-01**
Motor	**M3G074-CF**

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}	1670
Power consumption	W	140
Current draw	A	1.8
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

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	3.4 kg
Fan size	280 mm
Rotor surface	Thick-film passivated
Electronics housing material	Die-cast aluminum
Impeller material	Sheet steel, galvanized
Number of blades	11
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F3-1
Installation position	Shaft horizontal or rotor on top; rotor on bottom on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from supply - Thermal overload protection for electronics/motor
EMC immunity to interference	According to EN 61000-6-2
EMC interference emission	According to EN 55022 (Class B, household 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)
Approval	CSA C22.2 No. 77; UL 2111

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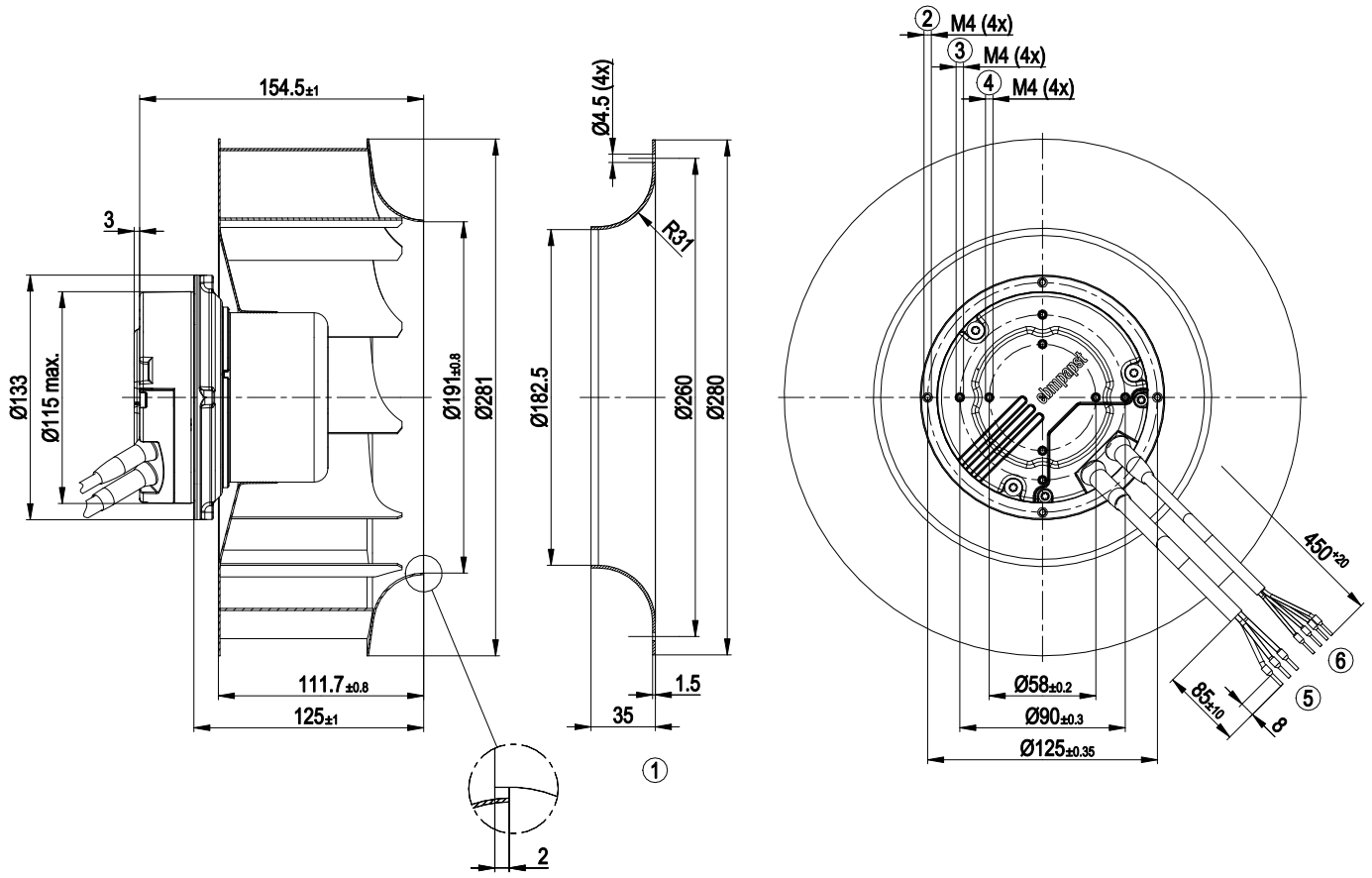
Product drawing



1	Accessory part: inlet ring 96360-2-4013 not included in scope of delivery
2	Clearance for screw 8-10 mm
3	Tapping hole ready for self-tapping M4 screw, max. clearance for screw 6 mm
4	Tapping hole ready for self-tapping M4 screw, max. clearance for screw 6 mm
5	Cable PVC AWG18, 3x crimped ferrules
6	Cable PVC AWG22, 4x crimped ferrules

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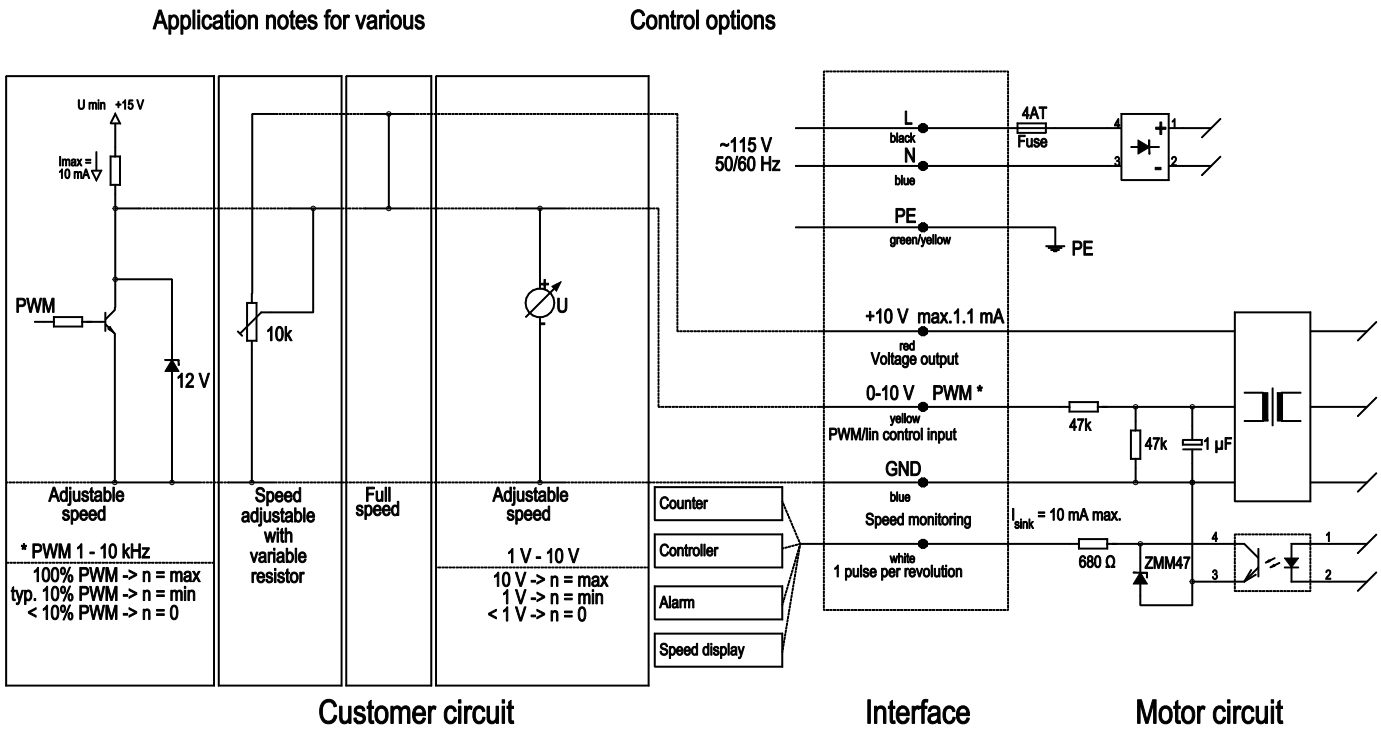
Connection diagram



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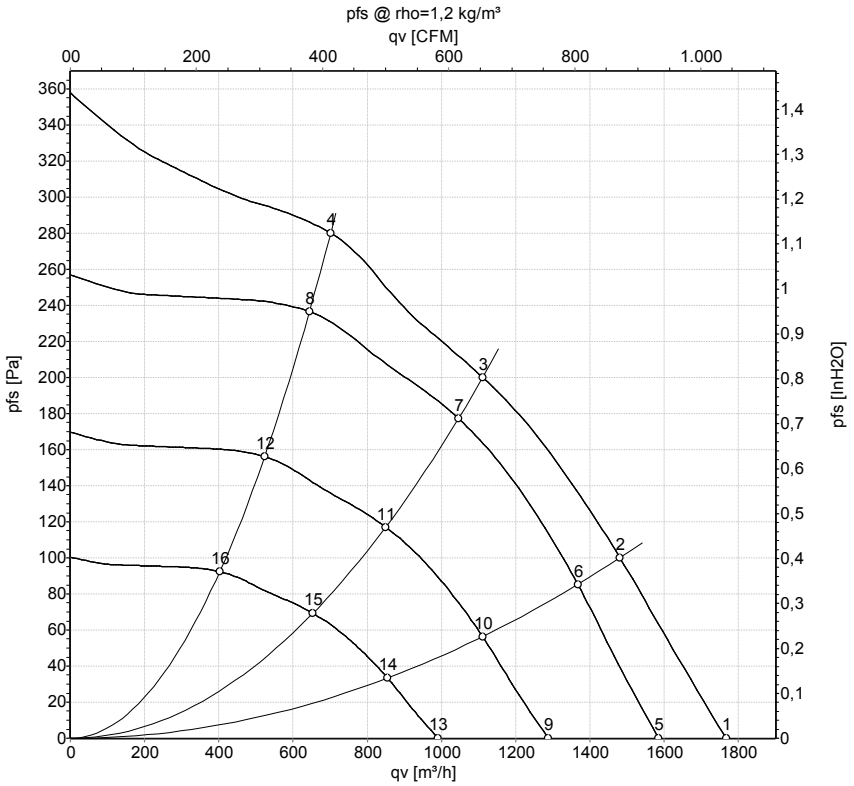
Curves: Air performance 50 Hz



Measurement: LU-135512-1

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	50	1785	103	1.41	1765	0	1040	0.00
2	115	50	1735	125	1.68	1480	100	870	0.40
3	115	50	1670	140	1.80	1110	200	655	0.80
4	115	50	1740	123	1.66	700	280	415	1.12
5	115	50	1600	75	1.02	1585	0	935	0.00
6	115	50	1600	98	1.32	1365	86	805	0.35
7	115	50	1600	115	1.53	1045	177	615	0.71
8	115	50	1600	96	1.29	645	237	380	0.95
9	115	50	1300	40	0.55	1290	0	760	0.00
10	115	50	1300	53	0.71	1110	57	655	0.23
11	115	50	1300	62	0.82	850	117	500	0.47
12	115	50	1300	51	0.69	525	156	310	0.63
13	115	50	1000	18	0.25	990	0	585	0.00
14	115	50	1000	24	0.32	855	34	505	0.14
15	115	50	1000	28	0.37	655	69	385	0.28
16	115	50	1000	23	0.32	405	92	235	0.37

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