R3G220-AC08-45

EC centrifugal fan

backward-curved, single-intake

Automotive

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Nominal data

Type	**R3G220-AC08-45**	
Motor	**M3G074-CF**	
Nominal voltage	VDC	24
Nominal voltage range	VDC	15 .. 32
Method of obtaining data		fa
Speed (rpm)	min^{-1}	4100
Power consumption	W	230
Current draw	A	9.5
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	70

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	2 kg
Fan size	220 mm
Rotor surface	Painted black
Electronics housing material	Die-cast aluminum
Impeller material	PA66 plastic, sheet-metal plate painted black
Number of blades	11
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F3-2
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 bottom; rotor on top on request
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Technical features	- Control input 0-10 VDC / PWM - Tach output - Thermal overload protection for electronics/motor - Undervoltage detection - Motor current limitation - Soft start
EMC regulations	VDE 0879-2, interference suppression grade 5
Motor protection	Reverse polarity and locked-rotor protection
With cable	Lateral
Protection class	III
Approval	CSA C22.2 No. 113; UL 507
Comment	Only high-voltage test according to EN 60335-1 with 900 VDC.

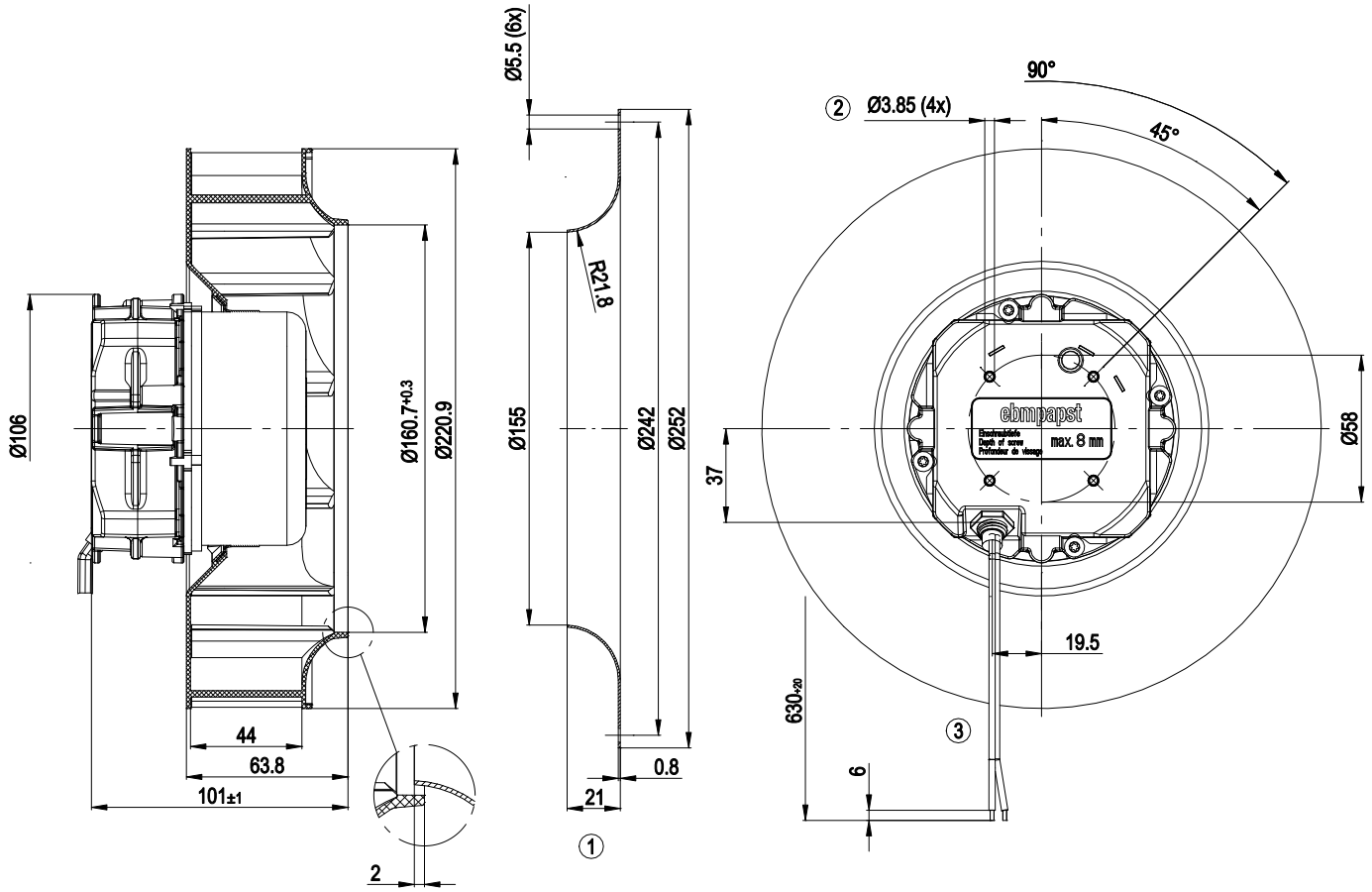
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Product drawing



1	Accessory part: Inlet ring 09609-2-4013, not included in scope of delivery
2	Max. clearance for screw 8 mm
3	Cable PVC 2x AWG14, 2x AWG22, tin-plated ends of cable

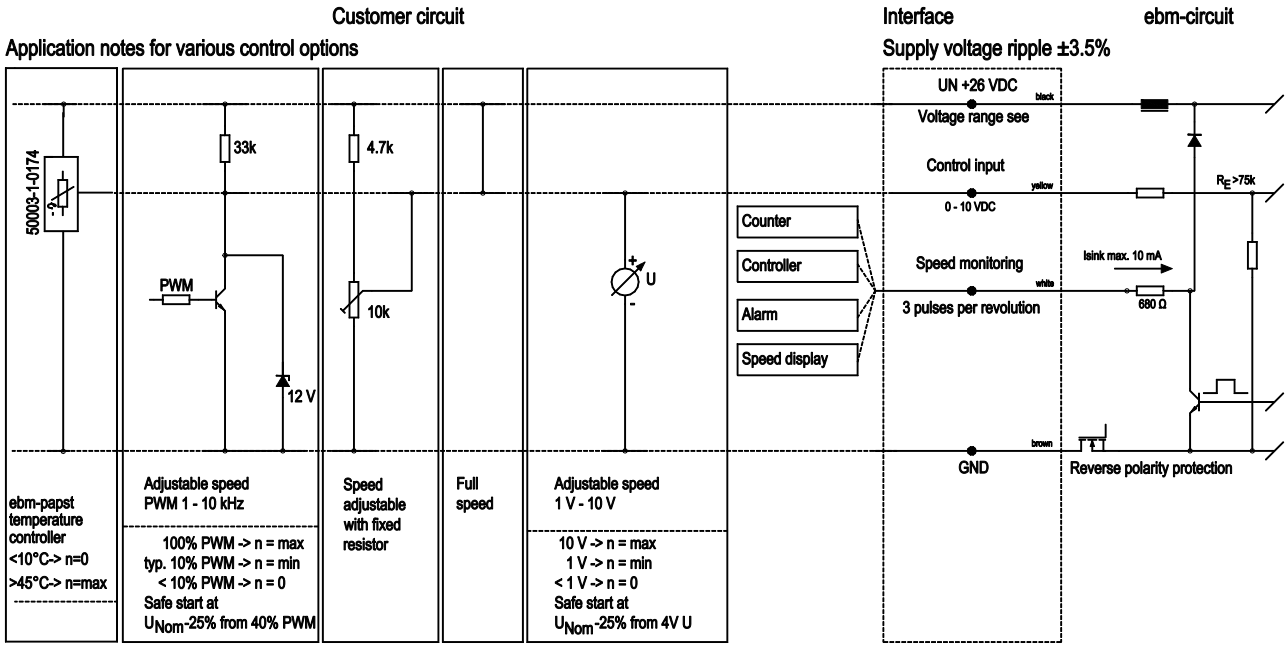
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Connection diagram



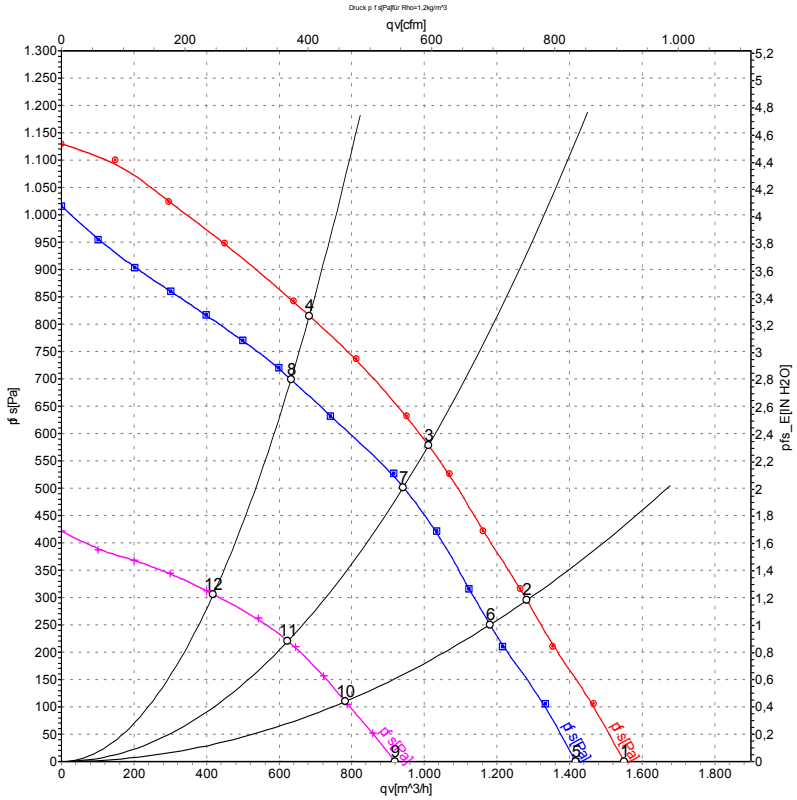
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Curves: Air performance



Measurement: LU-68024-1
Measurement: LU-67963-1
Measurement: LU-67964-1

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	n	P_{ed}	I	qv	p_{fs}	qv	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	32	4485	296	9.24	1550	0	910	0.00
2	32	4370	345	10.78	1280	296	755	1.19
3	32	4245	373	11.65	1010	578	595	2.32
4	32	4235	367	11.48	685	816	400	3.28
5	24	4100	230	9.50	1420	0	835	0.00
6	24	4015	269	11.22	1180	250	695	1.00
7	24	3900	300	12.51	940	500	555	2.01
8	24	3930	290	12.07	635	700	375	2.81
9	15	2700	74	4.94	920	0	540	0.00
10	15	2645	86	5.72	780	110	460	0.44
11	15	2615	95	6.31	625	221	365	0.89
12	15	2595	92	6.15	420	306	245	1.23

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

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