

R3G220-AD01-07

Zehnder Group Nederland B.V.

EC centrifugal fan

backward-curved



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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	R3G220-AD01-07	
Motor	M3G055-CF	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Method of obtaining data		ml/ce
Speed (rpm)	min ⁻¹	3400
Power consumption	W	117
Current draw	A	0.9
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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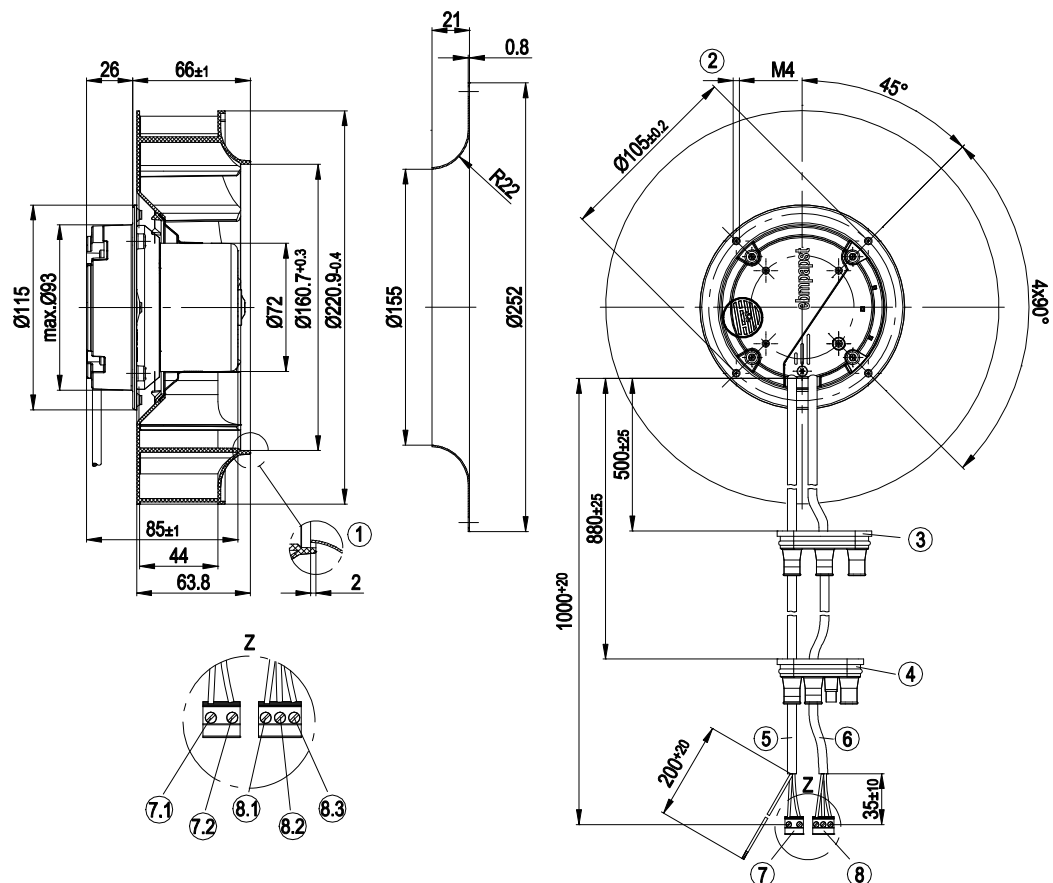
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Technical description

Weight	1.4 kg
Fan size	220 mm
Rotor surface	Thick-film passivated
Electronics housing material	Die-cast aluminum
Impeller material	PA plastic
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
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Technical features	- Control input 0-10 VDC / PWM - Output 10 VDC, max. 1.1 mA - Tach output - Motor current limitation - Soft start
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 61000-6-3 (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
Conformity with standards	CE



Product drawing

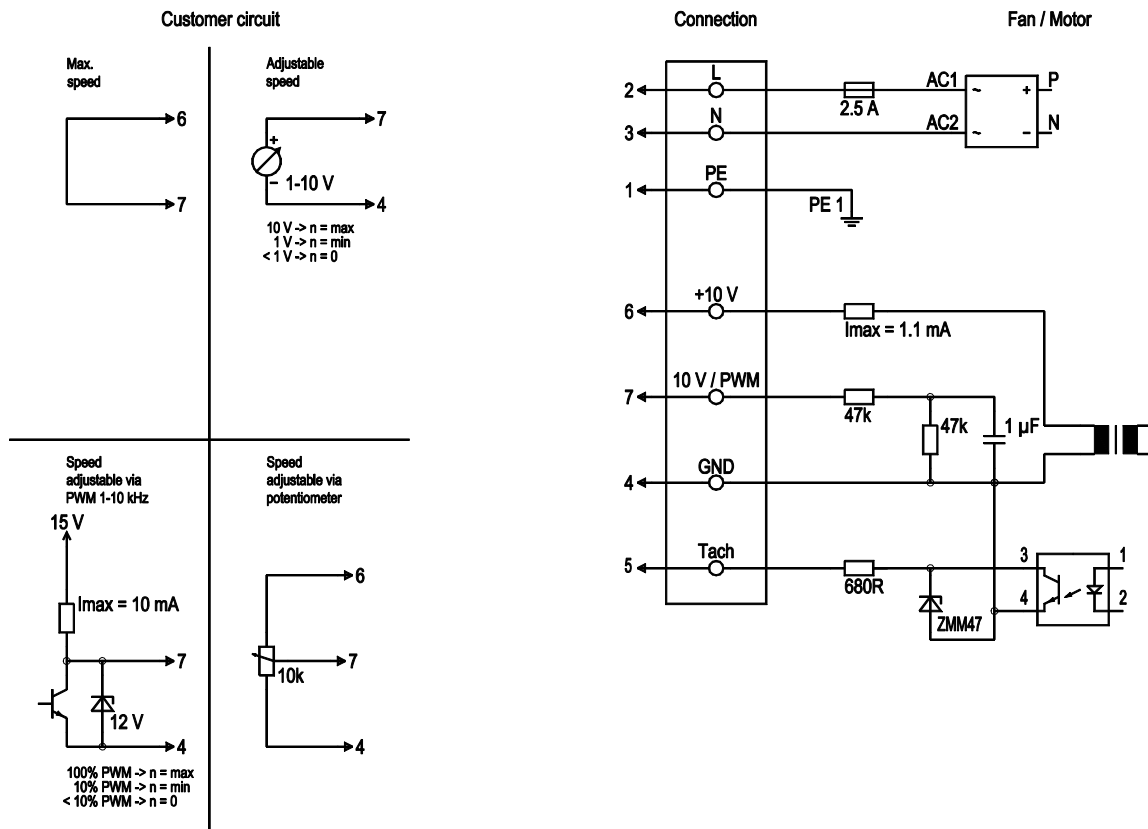


1	Accessory part: inlet ring 09609-2-4013 not included in scope of delivery
2	Max. clearance for screw 6 mm
3	Cable grommet Dutch Ruber Seals part no.: 860010030
4	Cable grommet Dutch Ruber Seals part no.: 86001004007
5	Cable H03VV-F3G 0.5, 1 x splice crimped to yellow/green wire.
6	Cable A03VV-F 4x0.25
7	Plug Phoenix GMVSTBR 2.5/2-ST
7.1	brown
7.2	blue
8	Plug Phoenix MVSTRBR 2.5/3-ST
8.1	blue
8.2	yellow
8.3	white

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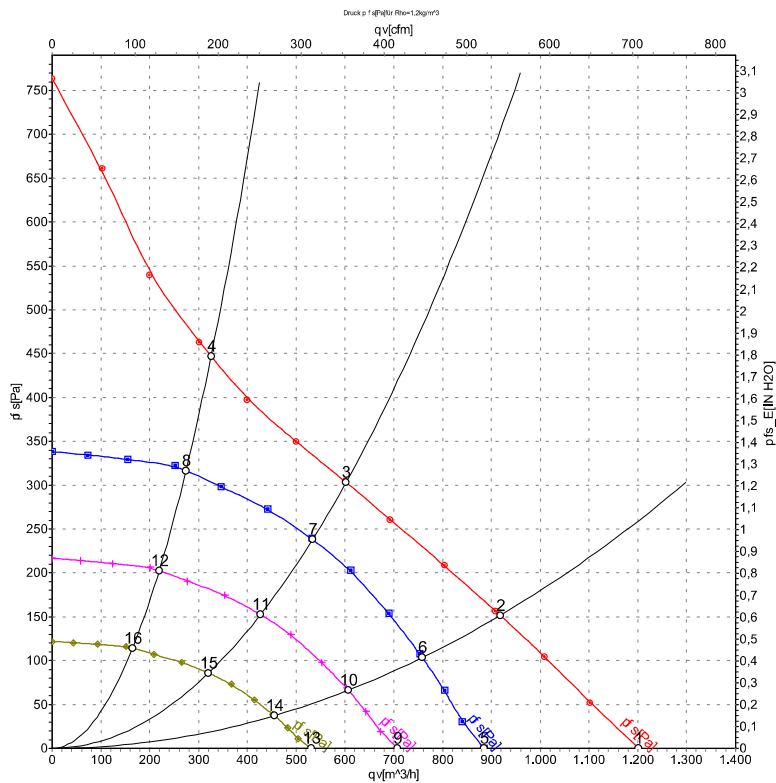
Connection diagram



No.	Conn.	Designation	Color	Function/assignment
2	L		brown	Power supply 230 VAC, 50-60 Hz, see nameplate for voltage range
3	N		blue	Neutral conductor
1	PE		green/yellow	Protective earth
7	0-10 V PWM		yellow	Control input 0-10 V or PWM, electrically isolated
5	Tach		white	Tach output: open collector, 1 pulse per revolution, electrically isolated
6	10V / max. 1.1 mA		red	Voltage output 10 V / 1.1 mA, electrically isolated, not short-circuit-proof
4	GND		blue	GND connection for control interface



Curves: Air performance 50 Hz



Measurement: LU-73182-1

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	m³/h	Pa	CFM	inH ₂ O
1	230	50	3400	117	0.90	1200	0	705	0.00
2	230	50	3025	117	0.90	920	150	540	0.60
3	230	50	2820	117	0.90	600	300	355	1.20
4	230	50	2970	117	0.90	325	450	190	1.81
5	230	50	2500	47	0.34	885	0	520	0.00
6	230	50	2500	65	0.47	760	104	445	0.42
7	230	50	2500	81	0.61	535	239	315	0.96
8	230	50	2500	70	0.53	275	317	160	1.27
9	230	50	2000	24	0.18	710	0	415	0.00
10	230	50	2000	33	0.24	605	66	355	0.26
11	230	50	2000	42	0.31	425	153	250	0.61
12	230	50	2000	36	0.27	220	203	130	0.81
13	230	50	1500	10	0.07	530	0	315	0.00
14	230	50	1500	14	0.10	455	37	270	0.15
15	230	50	1500	18	0.13	320	86	190	0.35
16	230	50	1500	15	0.11	165	114	95	0.46

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

