R3G150-AA03-05

EC centrifugal fan

single inlet

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Nominal data

Type	**R3G150-AA03-05**
Motor	**M3G055-AI**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Type of data definition		ml
Speed (rpm)	min^{-1}	3450
Power input	W	50
Current draw	A	0.44
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	50

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

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Technical features

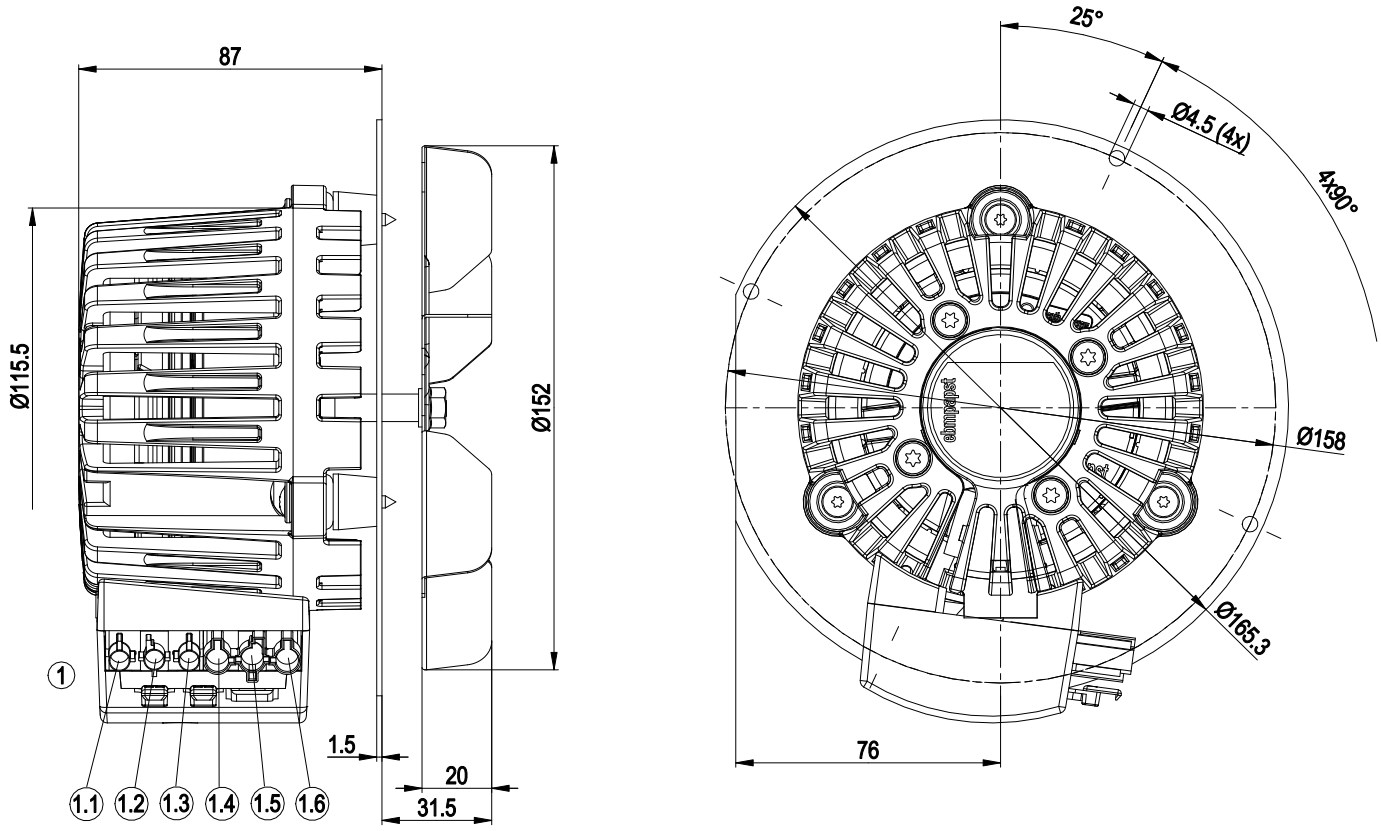
Mass	1.2 kg
Size	150 mm
Surface of rotor	Thick layer passivated
Material of terminal box	PA plastic
Material of impeller	Sheet steel, stainless
Material of mounting plate	Sheet steel, galvanised
Number of blades	6
Motor suspension	Motor anti-vibration mounted on one side via mounting plate
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None, open rotor
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Over-temperature protected motor
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Electrical leads	Via terminal box
Motor protection	Locked-rotor protection
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE

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Product drawing



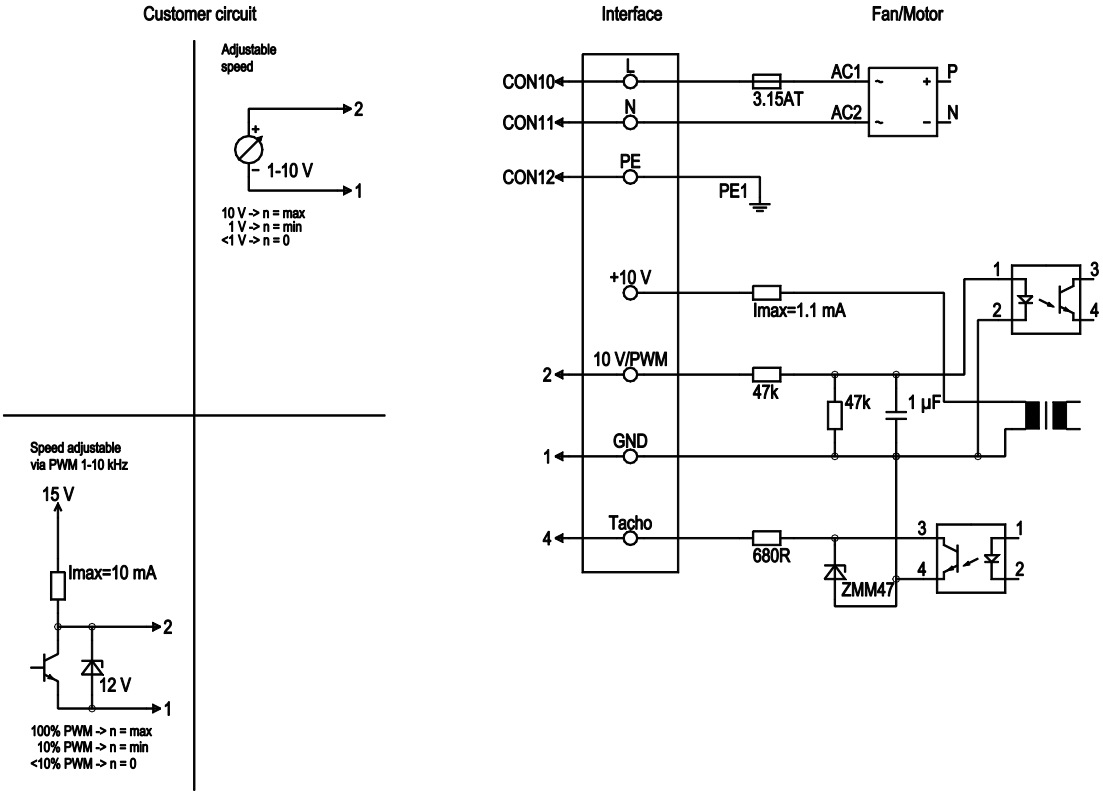
1	Connector housing 3-pole Wieland 93.031.3257.0
1	Connector housing 3-pole Wieland 93.031.3757.0
1.1	N (blue)
1.2	PE (green/yellow)
1.3	L (black)
1.4	0-10 V PWM (yellow)
1.5	GND (blue)
1.6	Tach (white)

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Connection screen



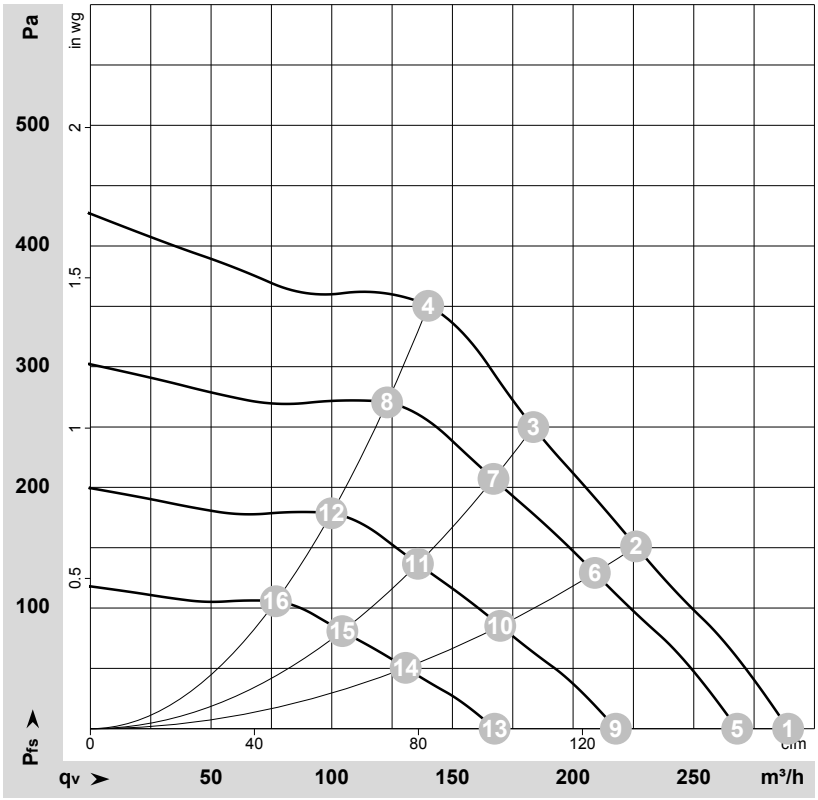
No.	Conn.	Designation	Colour	Function / assignment
	CON10	L	black	Power supply 230 VAC, 50-60 Hz, see type plate for voltage range
	CON11	N	blue	Neutral conductor
	CON12	PE	green/yellow	Protective earth
	1	GND	blue	GND connection for control interface
	2	0- 10V PWM	yellow	Control input 0-10 V or PWM, electrically isolated
	4	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated

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Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-170669-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	U	f	n	P_{ed}	I	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	230	50	3450	50	0.44	290	0	170	0.00
2	230	50	3460	50	0.44	225	150	135	0.60
3	230	50	3510	47	0.41	185	250	110	1.00
4	230	50	3610	42	0.35	140	350	80	1.41
5	230	50	3200	40	0.35	270	0	160	0.00
6	230	50	3200	39	0.35	210	129	125	0.52
7	230	50	3200	36	0.31	165	207	100	0.83
8	230	50	3200	29	0.25	125	271	70	1.09
9	230	50	2600	21	0.19	220	0	130	0.00
10	230	50	2600	21	0.19	170	85	100	0.34
11	230	50	2600	19	0.17	135	136	80	0.55
12	230	50	2600	15	0.13	100	179	60	0.72
13	230	50	2000	10.0	0.09	165	0	100	0.00
14	230	50	2000	10.0	0.08	130	50	75	0.20
15	230	50	2000	9.0	0.08	105	81	60	0.33
16	230	50	2000	7.0	0.06	75	106	45	0.43

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power input · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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