R3G355-AM08-32

EC centrifugal fan

backward curved, single inlet

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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**R3G355-AM08-32**	
Motor	**M3G084-FA**	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Type of data definition		fa
Speed	min^{-1}	1560
Power input	W	178
Current draw	A	3.7
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	+60

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

Data according to ErP directive

Installation category	A
Efficiency category	Static
Variable speed drive	Yes
Specific ratio*	1.00

* Specific ratio = 1 + p_{fs} / 100 000 Pa

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}		64.7	41	45
Efficiency grade N		81.7	58	62
Power input P_e	kW	0.24		
Air flow q_v	m³/h	1805		
Pressure increase p_{fs}	Pa	284		
Speed n	min^{-1}	1525		

Data established at point of optimum efficiency

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Technical features

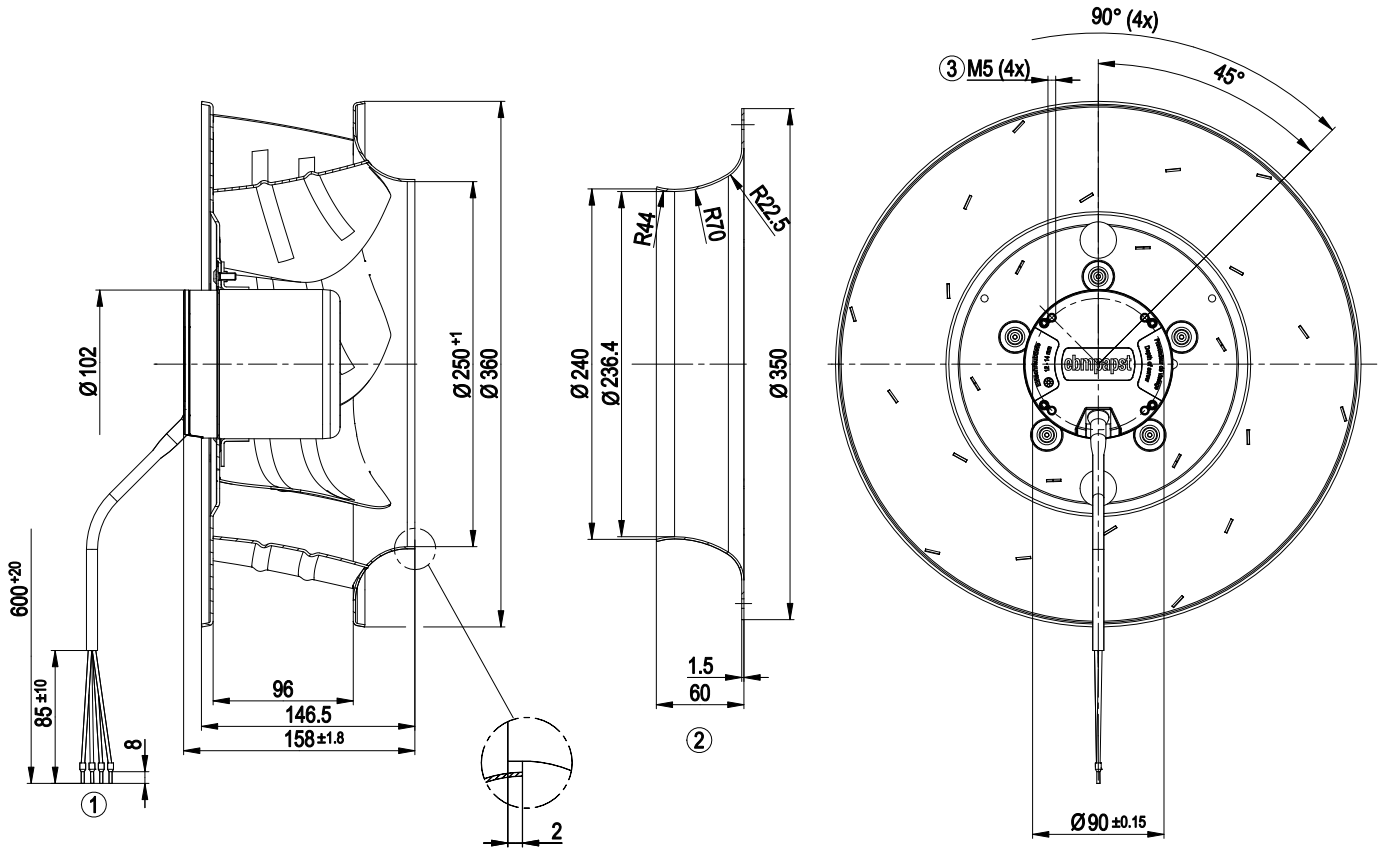
Mass	4.9 kg
Size	355 mm
Surface of rotor	Coated in black
Material of electronics housing	Die-cast aluminium
Material of impeller	Aluminium sheet
Number of blades	6
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 42
Insulation class	"B"
Humidity class	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Shaft horizontal or rotor on top; rotor on bottom on request
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limit - Soft start - PWM control input
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Product conforming to standard	EN 60950-1
Approval	UL 1004-1; CSA C22.2 Nr.100; VDE

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Product drawing



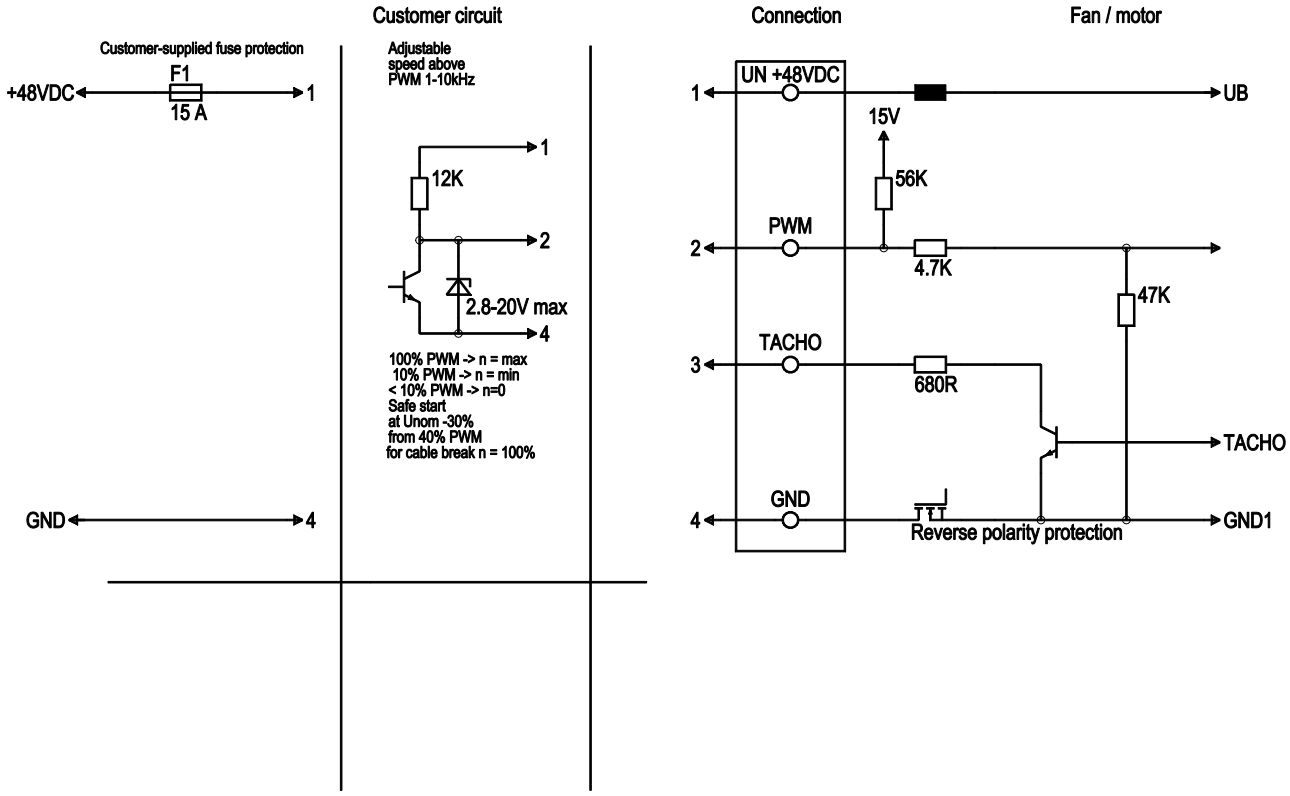
1	Connection line PVC AWG16, 4x crimped core-end sleeves
2	Accessory part: Inlet nozzle 35560-2-4013, not included in the standard scope of delivery
3	Depth of screw 12 - 14 mm

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Connection screen



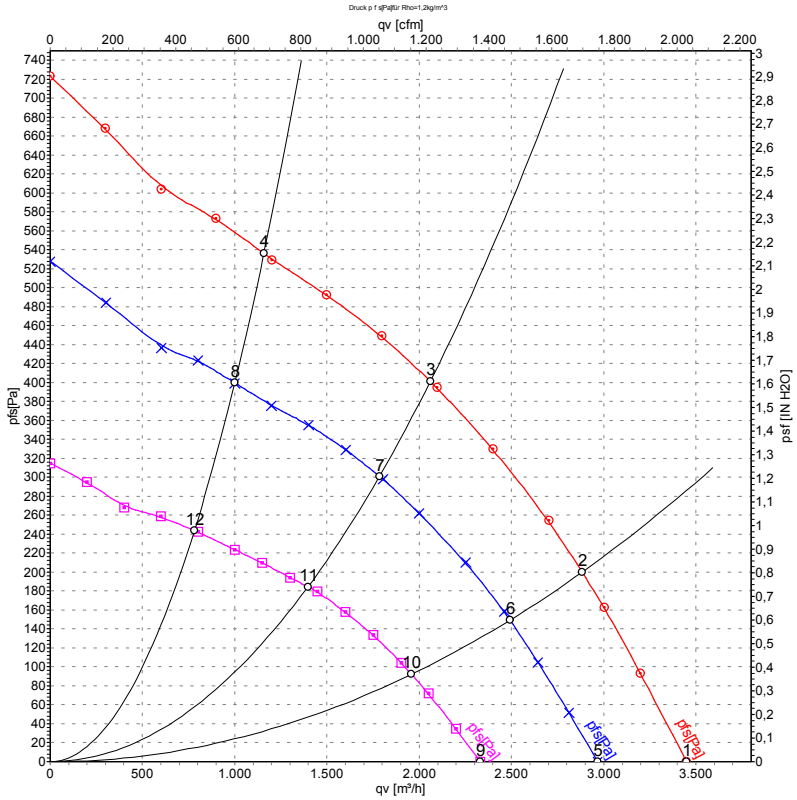
Line	No.	Signal	Colour	Function / assignment
1	1	Un +48 VDC	red	Power supply 48 VDC, residual ripple 3.5 %
1	2	PWM	yellow	PWM level 2.8V-20V / cable break detection
1	3	Tach	white	Tacho output, open Col. 3 pulses per revolution, Isink max = 10 mA
1	4	GND	Blue	Reference ground

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Charts: Air flow



Measurement: LU-119983
Measurement: LU-119970
Measurement: LU-119980

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	n	P_{ed}	I	qv	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa
1	57	1825	292	5.20	3450	0
2	57	1775	350	6.24	2885	200
3	57	1755	376	6.72	2060	402
4	57	1790	340	6.06	1160	536
5	48	1560	178	3.70	2970	0
6	48	1540	231	4.88	2490	150
7	48	1525	248	5.24	1785	300
8	48	1550	223	4.71	1000	400
9	36	1230	93	2.60	2330	0
10	36	1210	113	3.16	1960	92
11	36	1200	121	3.40	1395	185
12	36	1215	109	3.05	780	244

U = Supply voltage · n = Speed · P_{ed} = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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