R3G355-AN18-30

EC centrifugal fan

backward-curved, single-intake



ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.com

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	**R3G355-AN18-30**
Motor	**M3G084-FA**

Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Method of obtaining data		fa
Speed (rpm)	min^{-1}	1410
Power consumption	W	168
Current draw	A	3.5
Max. ambient temperature	°C	60

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

Data according to Commission Regulation (EU) 327/2011

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	63.5	44.4
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		81.1	62
05 Variable speed drive		Yes	

09 Power consumption P_e	kW	0.21
09 Air flow q_v	m^3/h	1935
09 Pressure increase p_{fs}	Pa	225
10 Speed (rpm) n	min^{-1}	1360
11 Specific ratio*		1.00

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

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

LU-56045

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Technical description

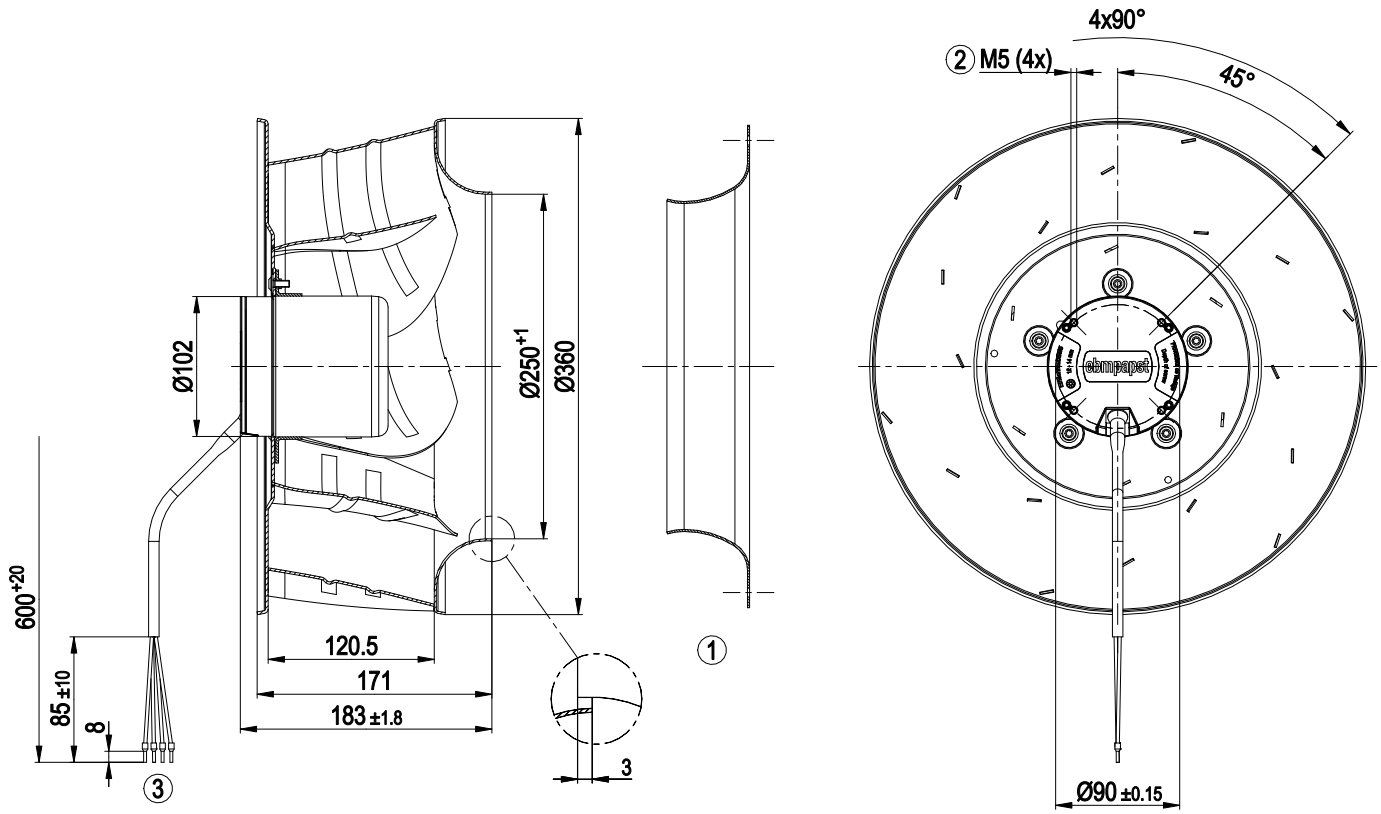
Weight	4.9 kg
Size	355 mm
Motor size	84
Electronics housing material	Die-cast aluminum
Impeller material	Sheet aluminum
Number of blades	6
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP42
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1
Max. permitted ambient temp. for motor (transport/storage)	+80 °C
Min. permitted ambient temp. for motor (transport/storage)	-40 °C
Installation position	Any
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Thermal overload protection for motor
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60950-1; CE
Approval	CSA C22.2 No. 100; EAC; UL 1004-1

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Product drawing



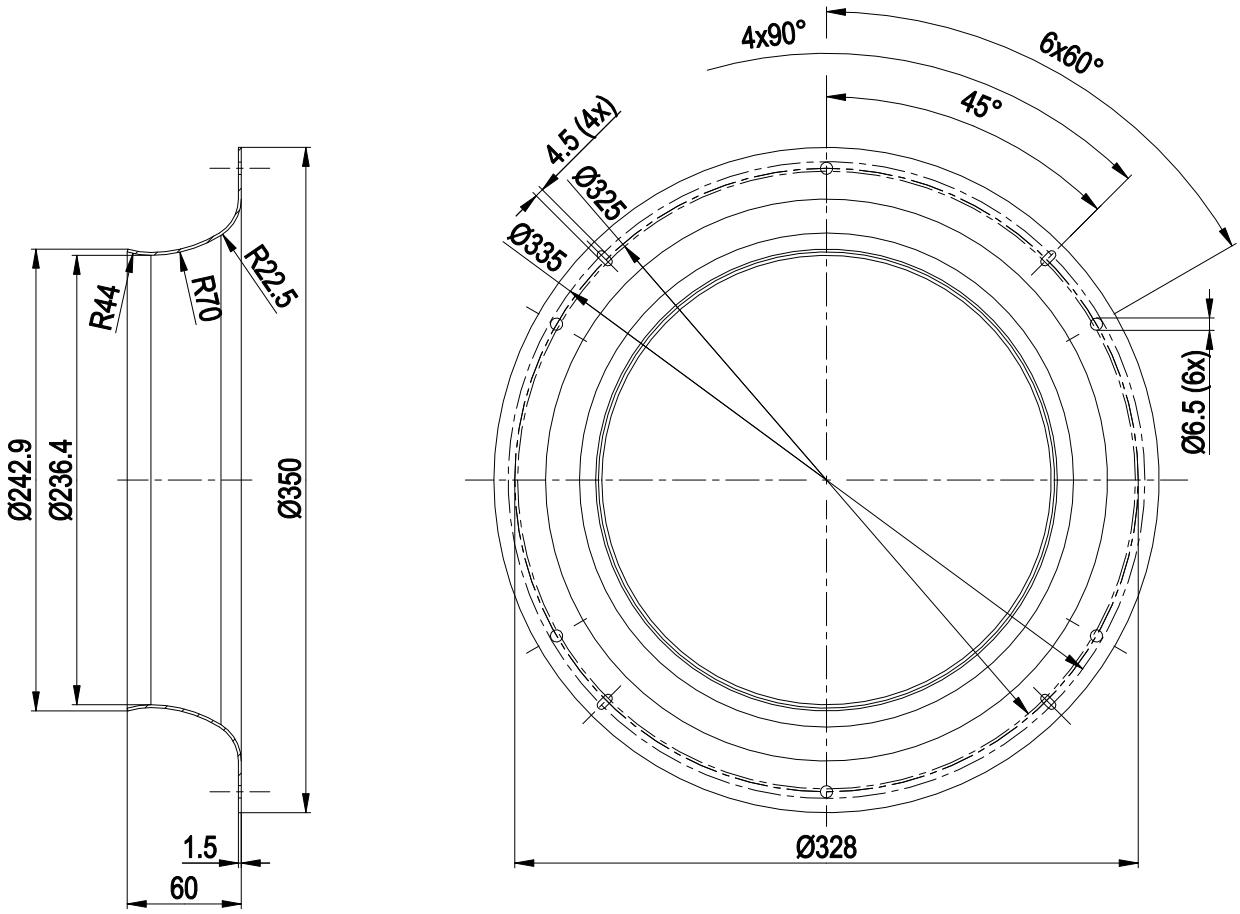
1	Accessory part: inlet ring 35560-2-4013 not included in scope of delivery
2	Max. clearance for screw 14 mm
3	Cable PVC AWG16
	4x wire-end ferrule

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Accessory part



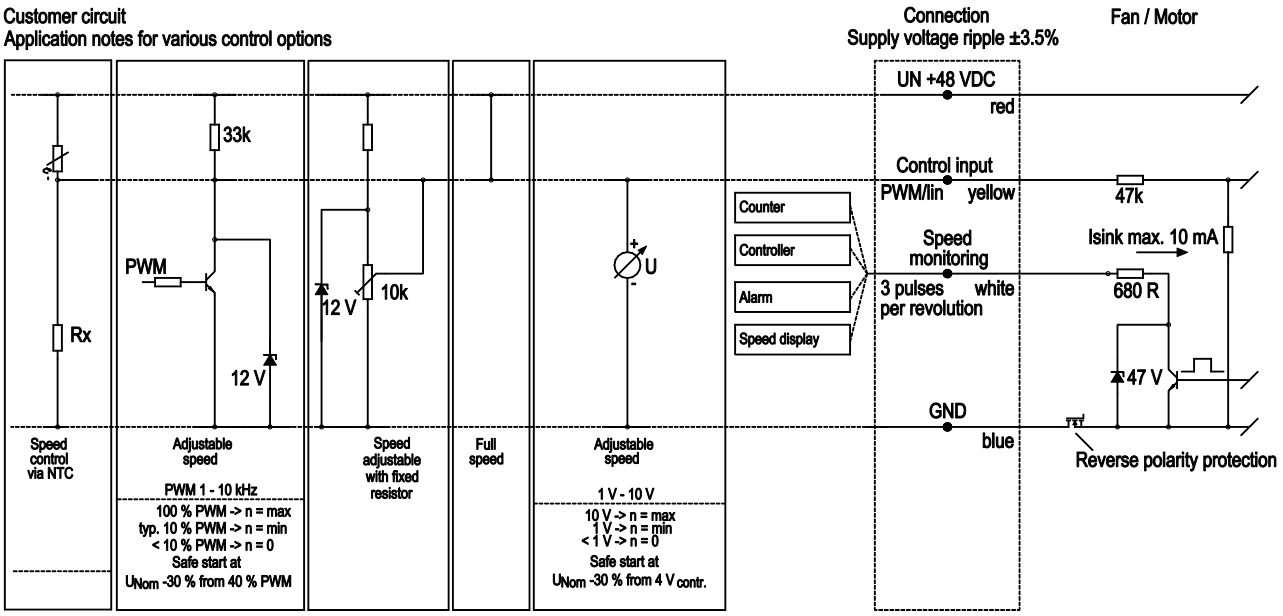
Inlet ring 35560-2-4013

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Connection diagram

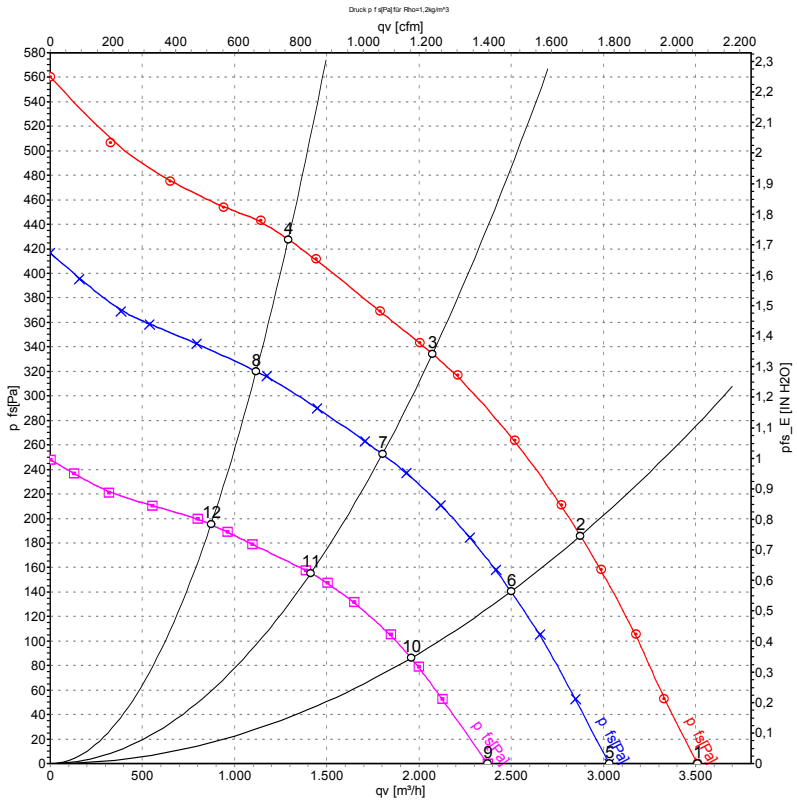


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Curves: Air performance



Measurement: LU-56046-1
Measurement: LU-56045-1
Measurement: LU-56044-1

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	q_V	p_{fs}	q_V	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	57	1630	257	4.54	3510	0	2065	0.00
2	57	1580	311	5.51	2875	186	1690	0.75
3	57	1565	324	5.75	2075	334	1220	1.34
4	57	1595	296	5.24	1290	428	760	1.72
5	48	1410	168	3.50	3030	0	1785	0.00
6	48	1375	203	4.25	2500	140	1470	0.56
7	48	1365	214	4.49	1800	250	1060	1.00
8	48	1385	193	4.05	1115	320	655	1.28
9	36	1095	81	2.27	2370	0	1395	0.00
10	36	1075	99	2.77	1955	86	1150	0.35
11	36	1070	104	2.92	1415	155	830	0.62
12	36	1080	94	2.64	870	195	515	0.78

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

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