

R3G355-AN18-29 ebmpapst Datasheet

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Nominal data

Type	R3G355-AN18-29	
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
Min. ambient temperature	°C	-25
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	09 Power consumption P_e	kW	0.21
02 Measurement category		A		09 Air flow q_v	m ³ /h	1935
03 Efficiency category		Static		09 Pressure increase p_{fs}	Pa	225
04 Efficiency grade N		81.1	62	10 Speed (rpm) n	min ⁻¹	1360
05 Variable speed drive		Yes		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 = $1 + p_{fs} / 100\,000\text{ Pa}$

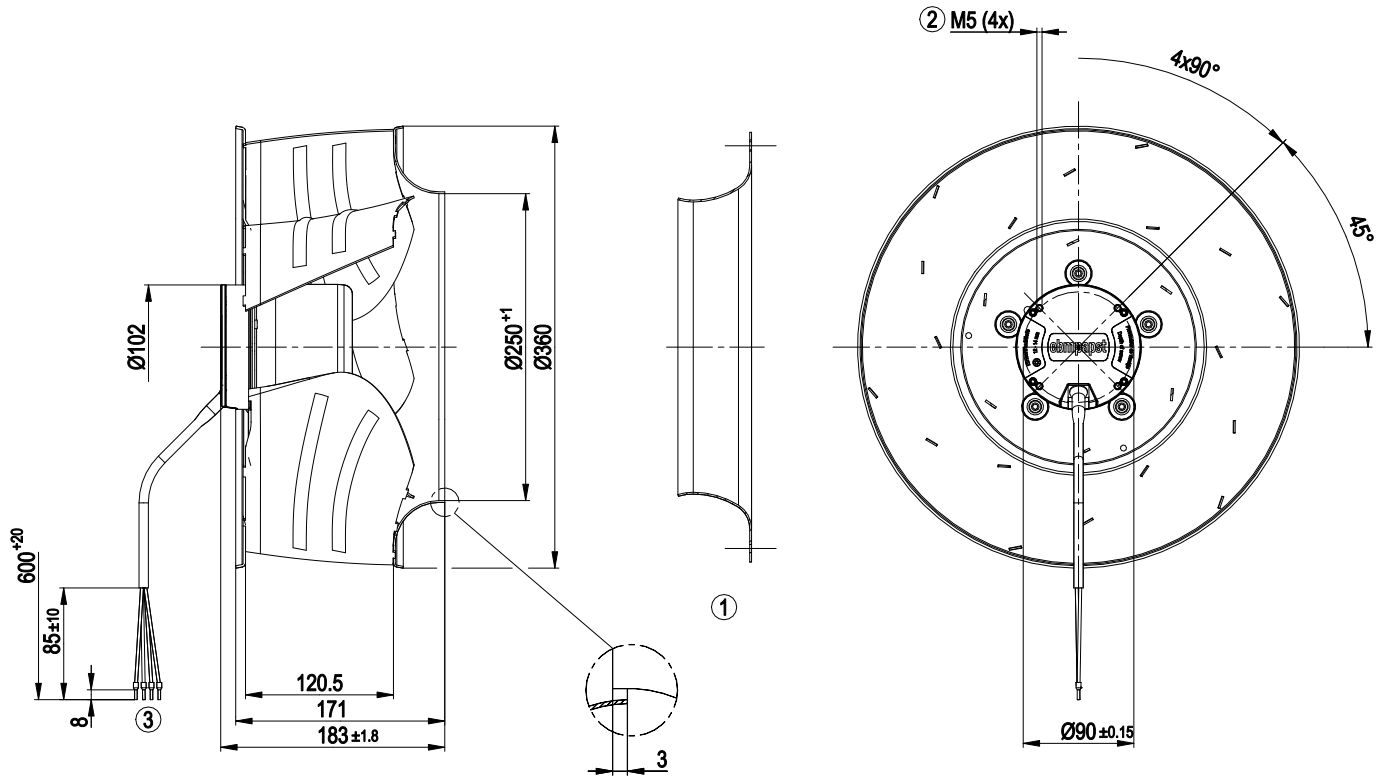
LU-56045



Technical description

Weight	4.7 kg
Fan size	355 mm
Rotor surface	Painted black
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	<ul style="list-style-type: none"> - 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	UL 1004-1; CSA C22.2 No. 100

Product drawing



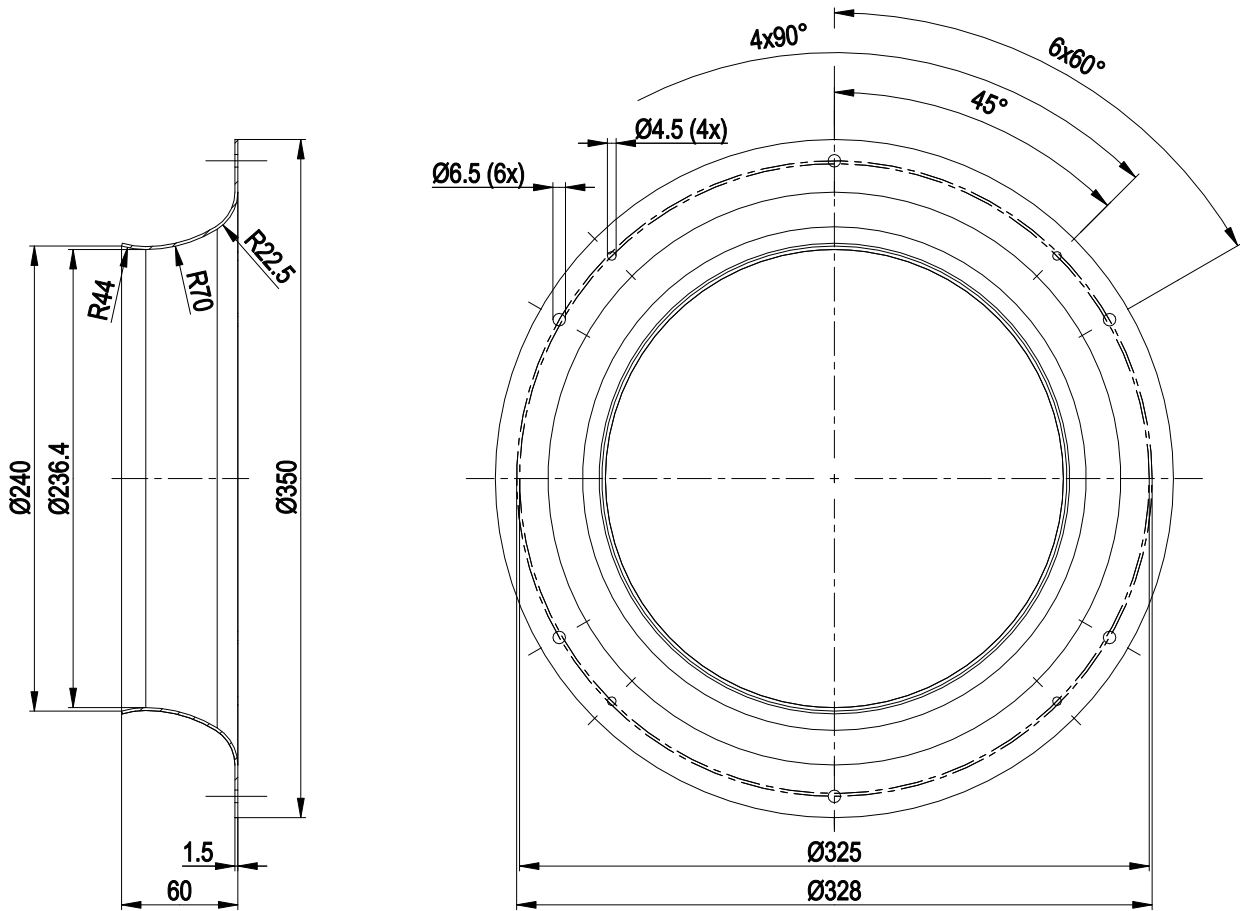
1	Accessory part: inlet ring 35560-2-4013 not included in scope of delivery
2	Max. clearance for screw 14 mm
3	Cable PVC AWG16, 4x crimped ferrules



EC centrifugal fan

backward-curved, single-intake

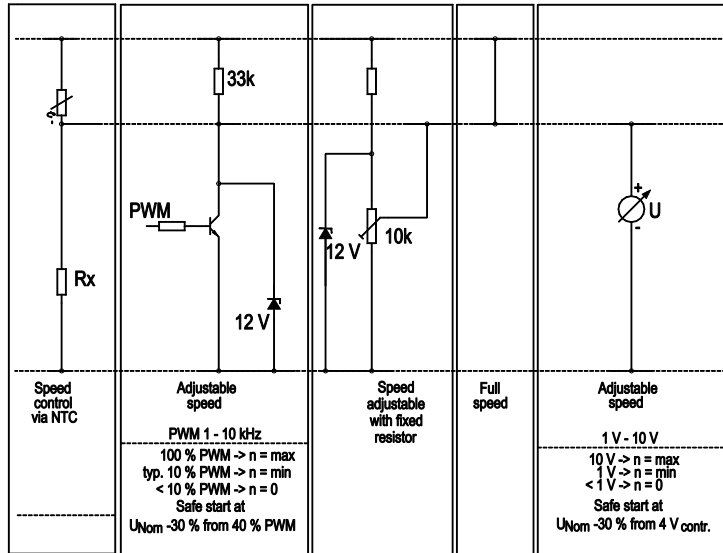
Accessory part



Connection diagram

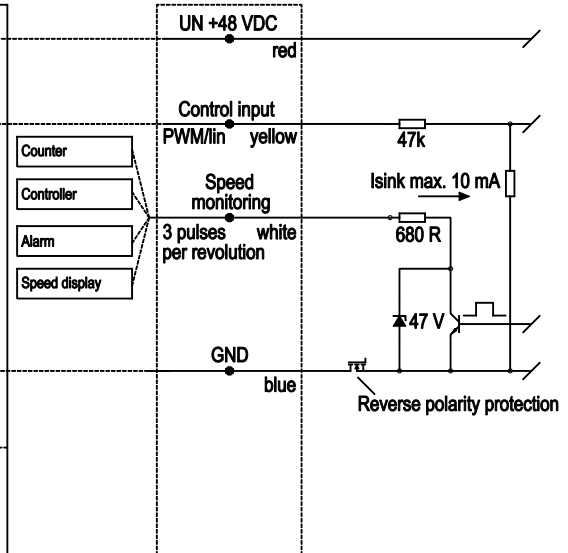
Customer circuit

Application notes for various control options

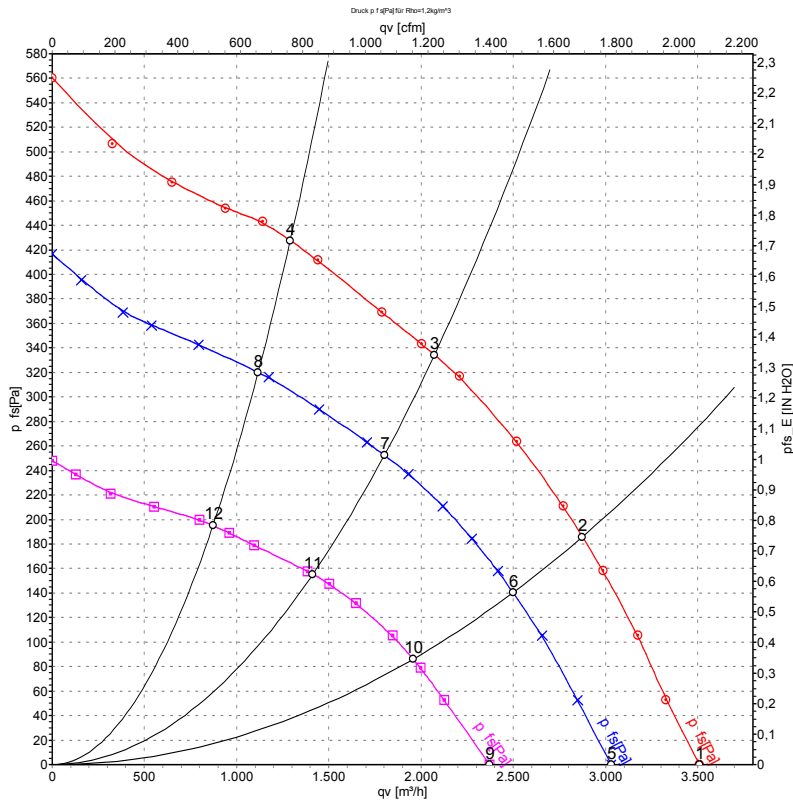


Connection
Supply voltage ripple $\pm 3.5\%$

Fan / Motor



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 ebmpapst. 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	inH ₂ O
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 = Power supply · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · q_v = Air flow · P_{fs} = Pressure increase

