R3G250-AD71-33

EC centrifugal fan

backward-curved, single-intake

for rail applications

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Nominal data

Type	**R3G250-AD71-33**	
Motor	**M3G084-CA**	
Nominal voltage	VDC	24
Nominal voltage range	VDC	18 .. 30
Method of obtaining data		fa
Speed (rpm)	min^{-1}	2400
Power consumption	W	112
Current draw	A	4.7
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

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Technical description

Weight	3 kg
Size	250 mm
Motor size	84
Rotor surface	Painted black
Impeller material	Sheet steel, galvanized
Number of blades	11
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	Shaft horizontal or rotor on top; rotor on bottom on request
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)
Approval	CSA C22.2 No. 100; UL 1004-1

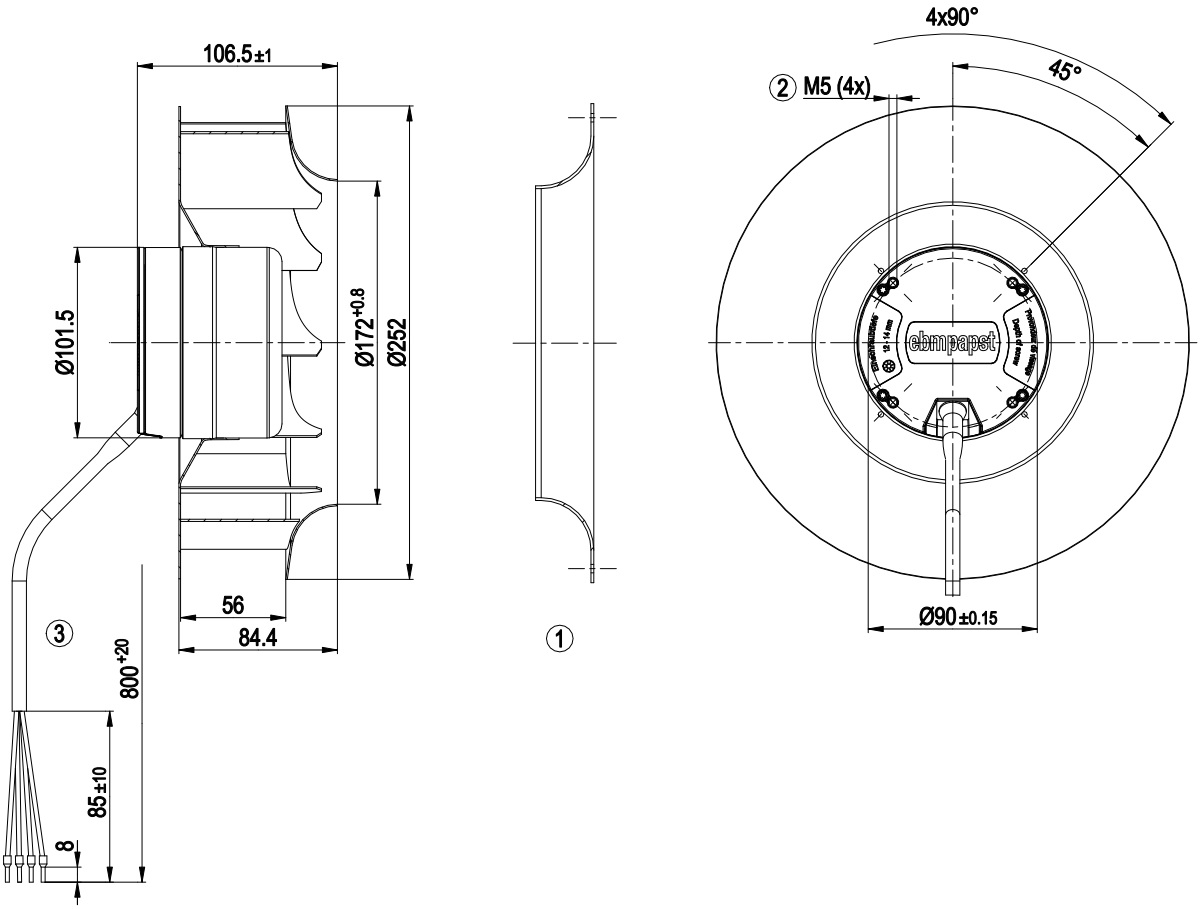
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Product drawing



1	Accessory part: inlet ring 96359-2-4013 not included in scope of delivery
2	Max. clearance for screw 14 mm
3	Cable silicone 4G 1.5 mm², 4x crimped ferrules

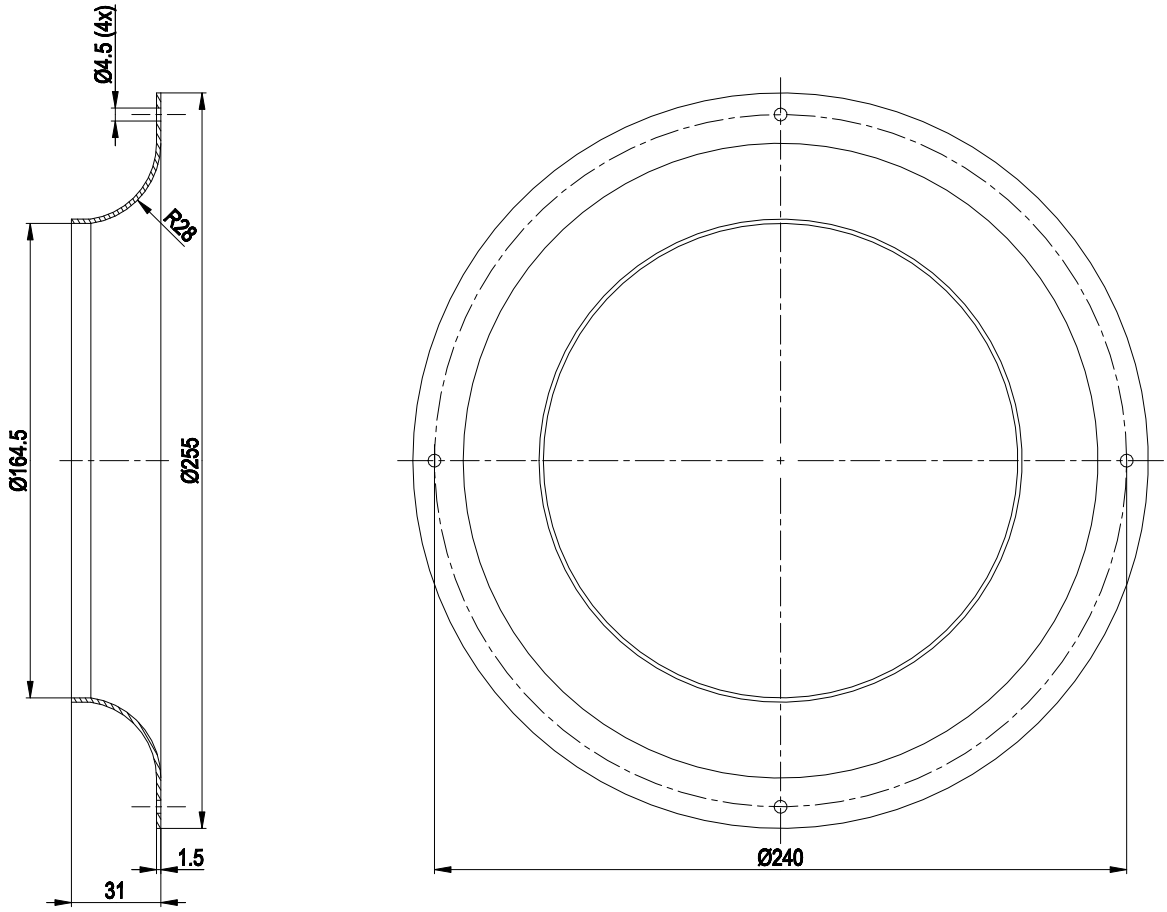
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Accessory part



Accessory part: inlet ring 96359-2-4013 not included in scope of delivery

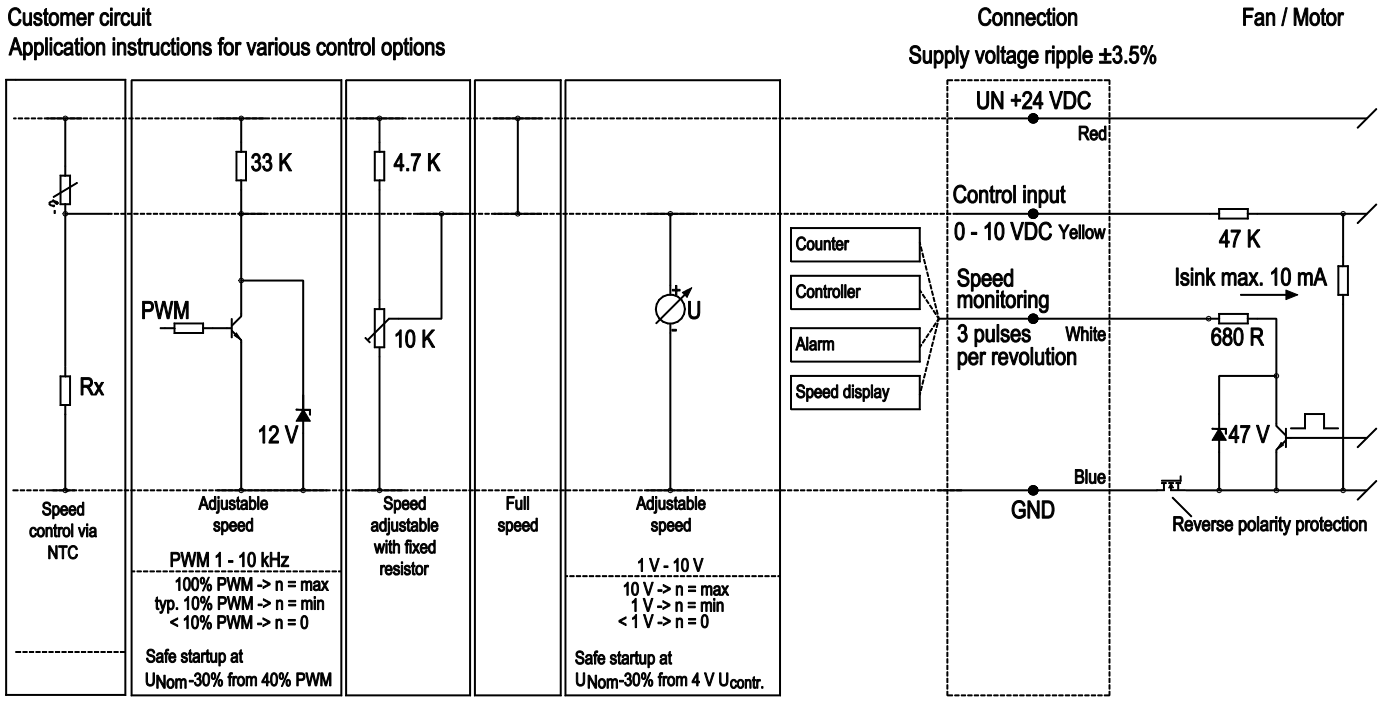
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Connection diagram



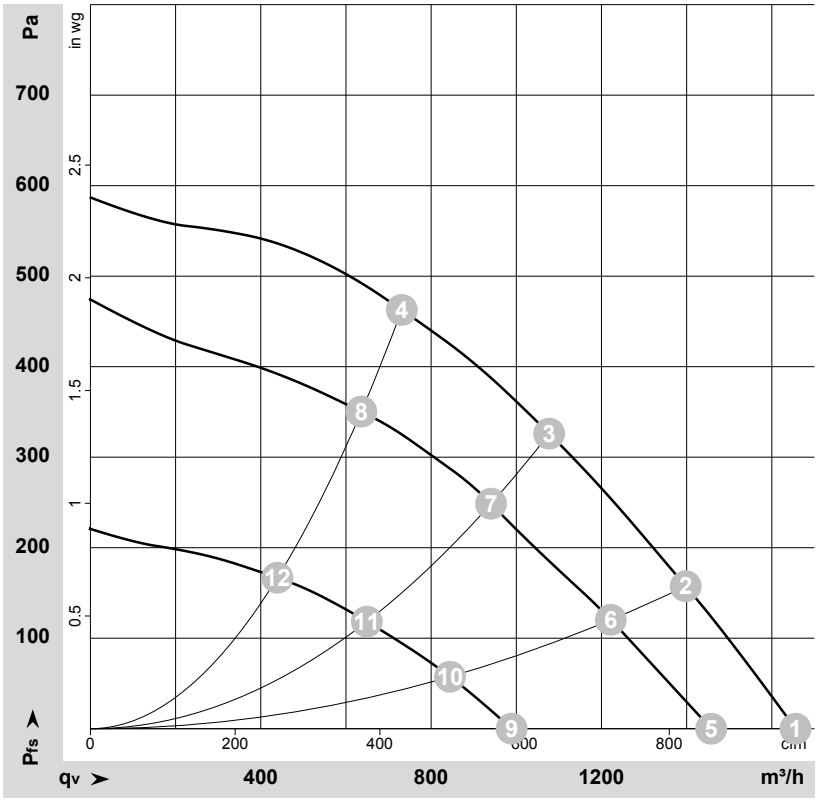
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Curves: Air performance



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-124491-1
Measurement: LU-124490-1
Measurement: LU-124492-1

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	28	2765	167	5.96	1655	0	975	0.00
2	28	2715	196	7.02	1400	157	825	0.63
3	28	2680	217	7.81	1075	326	635	1.31
4	28	2705	207	7.41	730	463	430	1.86
5	24	2400	112	4.70	1460	0	860	0.00
6	24	2350	131	5.50	1220	120	720	0.48
7	24	2335	146	6.12	940	250	555	1.00
8	24	2355	140	5.84	635	350	375	1.41
9	16	1660	40	2.55	990	0	580	0.00
10	16	1645	47	2.97	845	57	495	0.23
11	16	1635	51	3.25	650	118	380	0.47
12	16	1640	49	3.12	440	167	260	0.67

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

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