R3G225-RN28-01

EC centrifugal fan - RadiCal

backward-curved, single-intake

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Nominal data

Type	**R3G225-RN28-01**	
Motor	**M3G074-CF**	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Method of obtaining data		fa
Speed (rpm)	min^{-1}	3270
Power consumption	W	205
Current draw	A	8.5
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 ErP Directive

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	57.1	44.4
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		74.7	62
05 Variable speed drive		Yes	

09 Power consumption P_e	kW	0.21
09 Air flow q_v	m^3/h	800
09 Pressure increase p_{fs}	Pa	483
10 Speed (rpm) n	min^{-1}	3185
11 Specific ratio*		1.01

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-156112

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Technical description

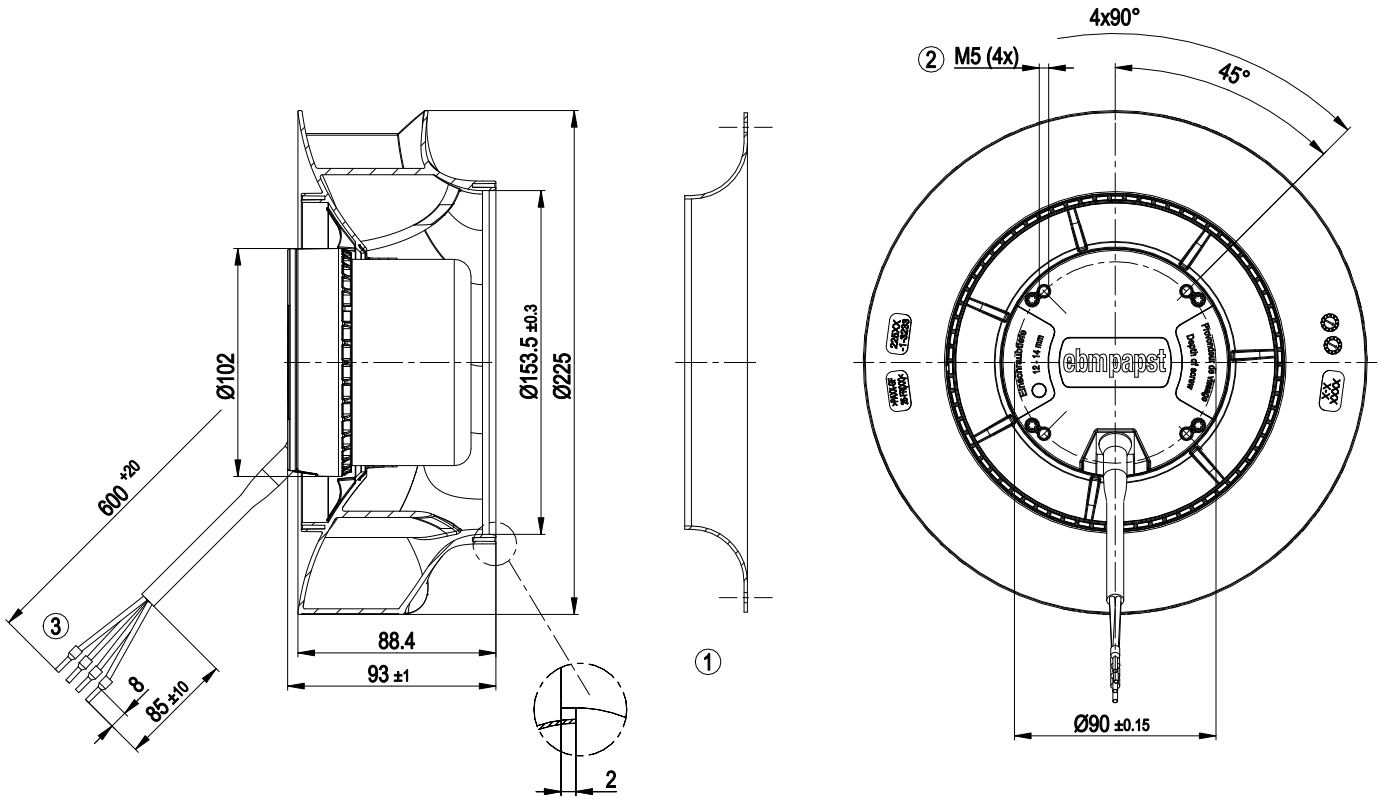
Weight	2.06 kg
Fan size	225 mm
Rotor surface	Painted black
Impeller material	PA plastic
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F3-1
Max. 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 - Overvoltage detection
Motor protection	Reverse polarity and locked-rotor protection
With cable	Variable
Conformity with standards	EN 60950-1
Approval	EAC

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Product drawing



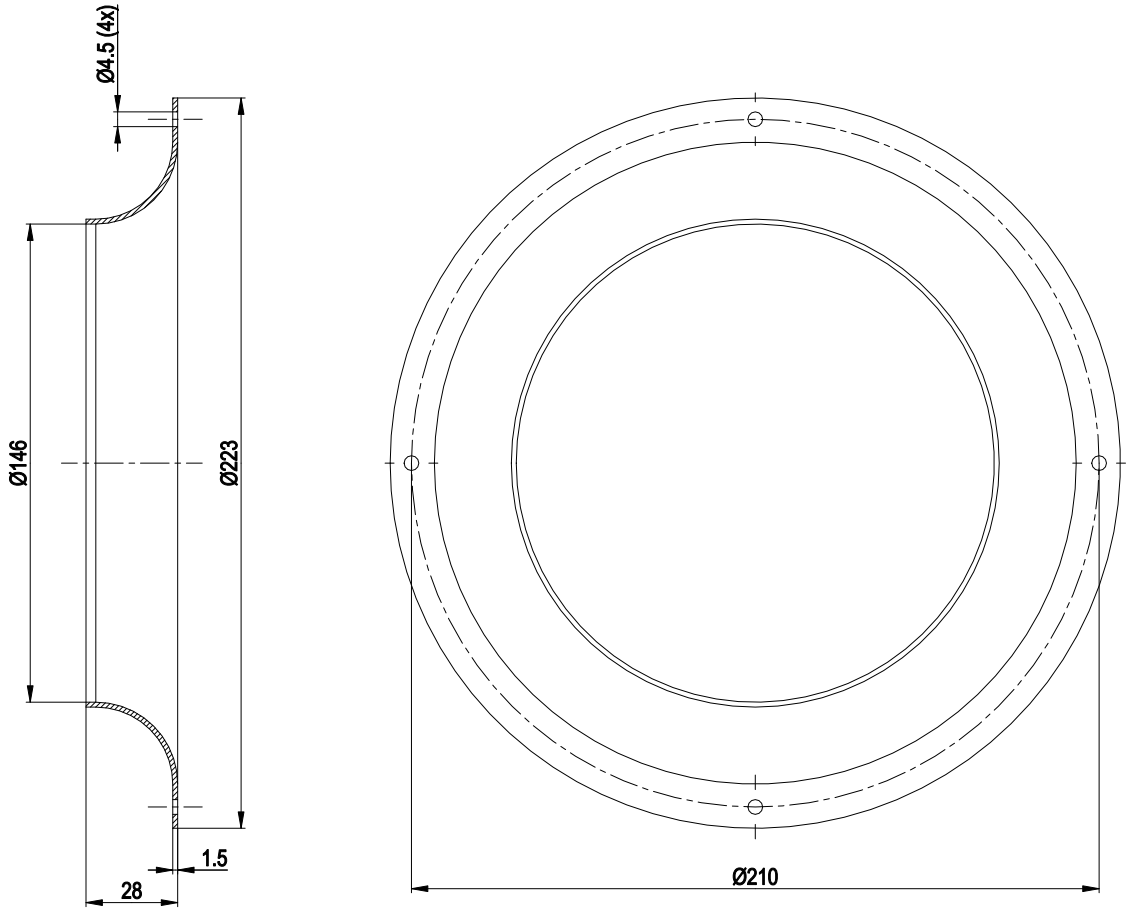
1	Accessory part: inlet ring 96358-2-4013 not included in scope of delivery
2	Cable PVC AWG 16, 4x crimped ferrules
3	Max. clearance for screw 12-14 mm

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Accessory part



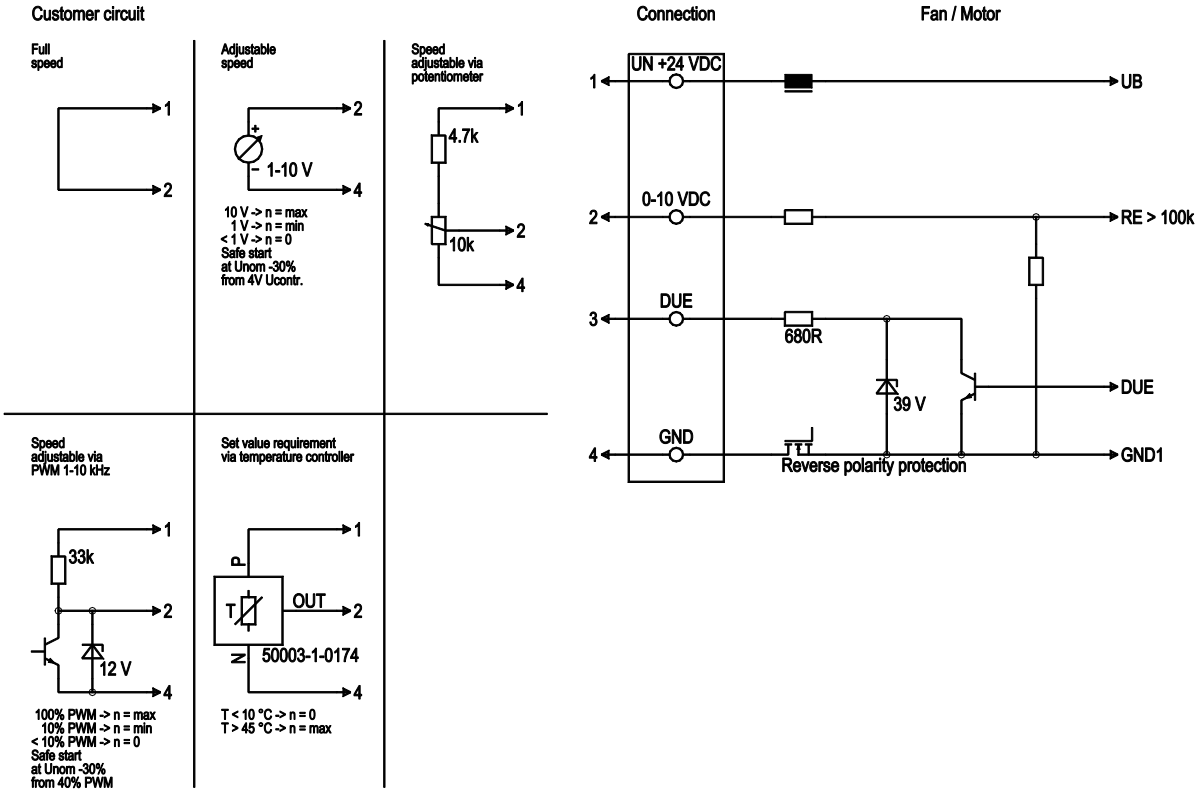
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Connection diagram



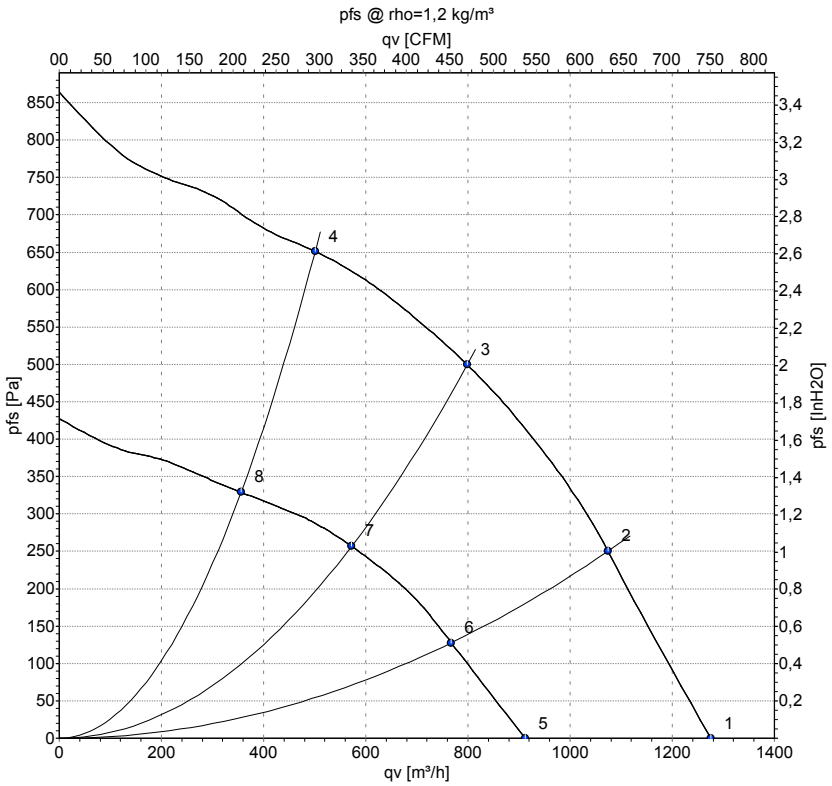
No.	Conn.	Designation	Color	Function/assignment
	1	Un +24 VDC	red	Power supply 24 VDC, maximum ripple 3.5%
	2	0-10 VDC	yellow	Control input Re > 100k
	3	Tach	white	Tach output, 3 pulses per revolution, Isink max = 10 mA
	4	GND	blue	Reference ground

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Curves: Air performance



Measurement: LU-156112-1
Measurement: LU-156119-1

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	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
	V	min^{-1}	W	A	dB(A)	m^3/h	Pa	cfm	inH2O
1	24-28	3270	205		81	1275	0	750	0.00
2	24-28	3200	208		78	1075	250	630	1.00
3	24-28	3185	213		74	800	500	470	2.01
4	24-28	3260	194		77	500	650	295	2.61
5	16	2335	77	4.79		910	0	535	0.00
6	16	2305	82	5.12		770	128	450	0.51
7	16	2305	82	5.14		575	257	335	1.03
8	16	2335	76	4.75		355	329	210	1.32

U = Power supply · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · LwA_{in} = Sound power level intake side · q_V = Air flow · p_{fs} = Pressure increase

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