R3G225-RN28-03

EC centrifugal fan - RadiCal

backward-curved

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Nominal data

Type	**R3G225-RN28-03**	
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 Commission Regulation (EU) 327/2011

		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

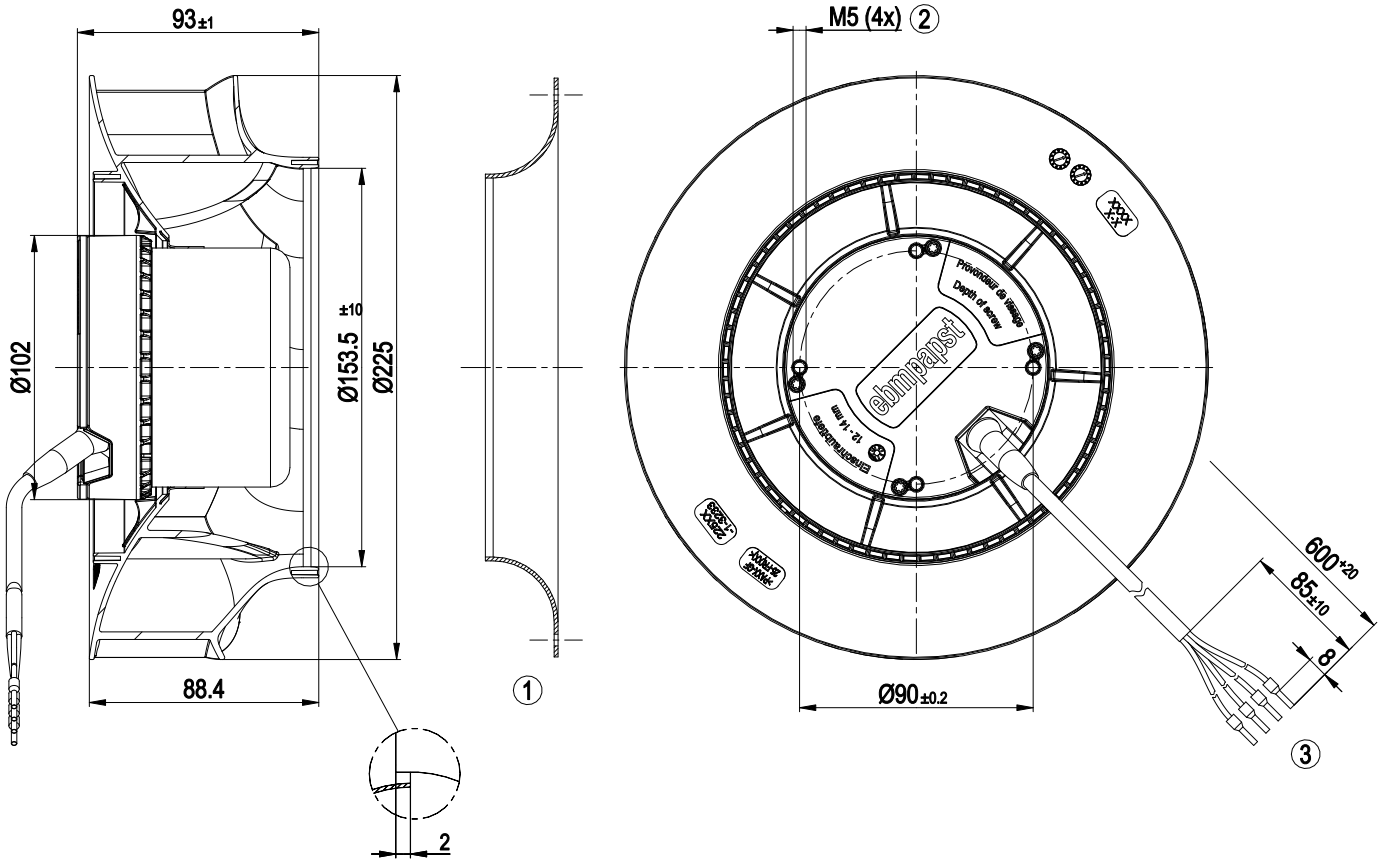
Weight	2.05 kg
Size	225 mm
Motor size	74
Rotor surface	Painted black
Impeller material	PA plastic
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	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	On rotor side
Mode	S1
Motor mounting	Ball bearing
Technical features	- Tach output - Motor current limitation - Soft start - Control input 10-0 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



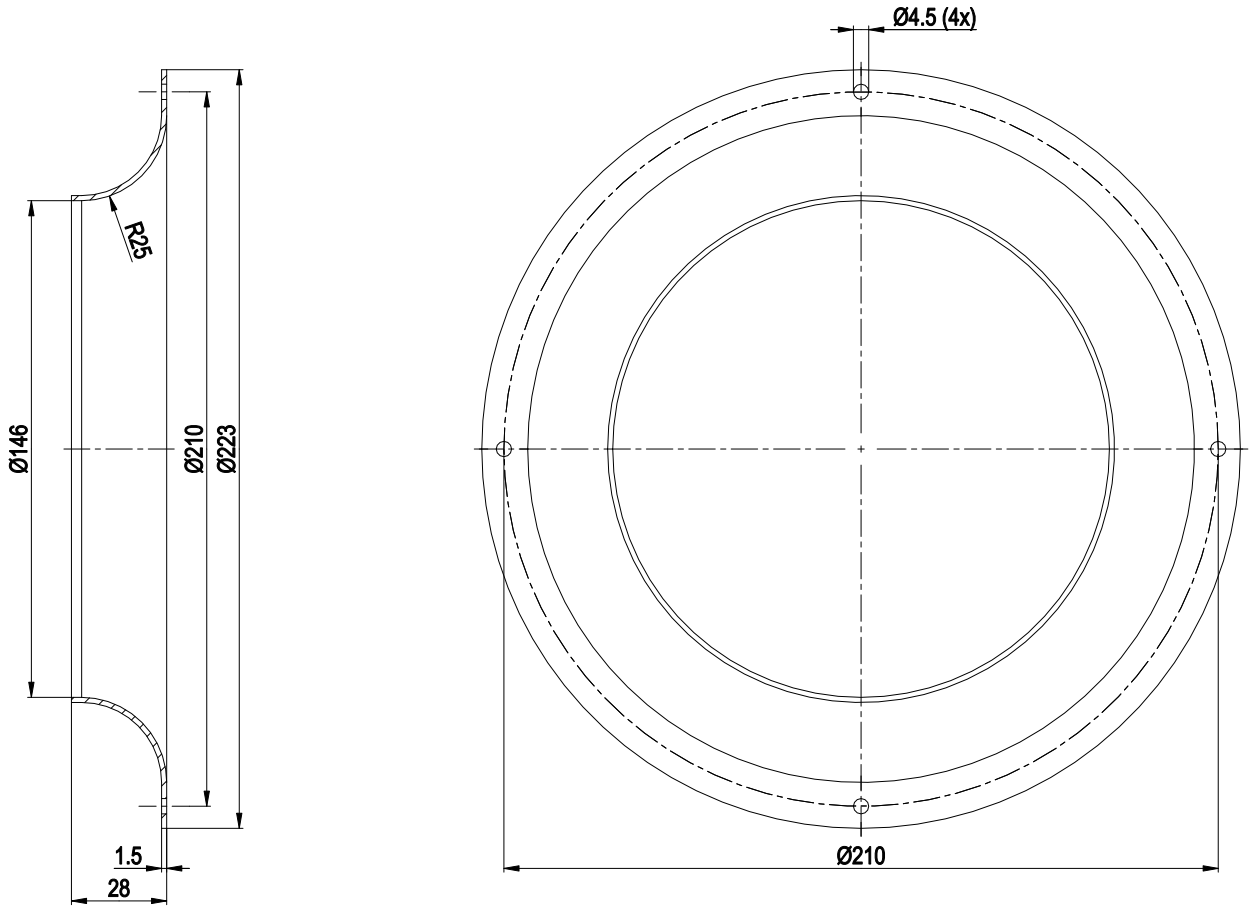
1	Accessory part: inlet ring 96358-2-4013 not included in scope of delivery
2	Clearance for screw 12-14 mm
3	Cable PVC AWG16, 4x crimped ferrules

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Accessory part



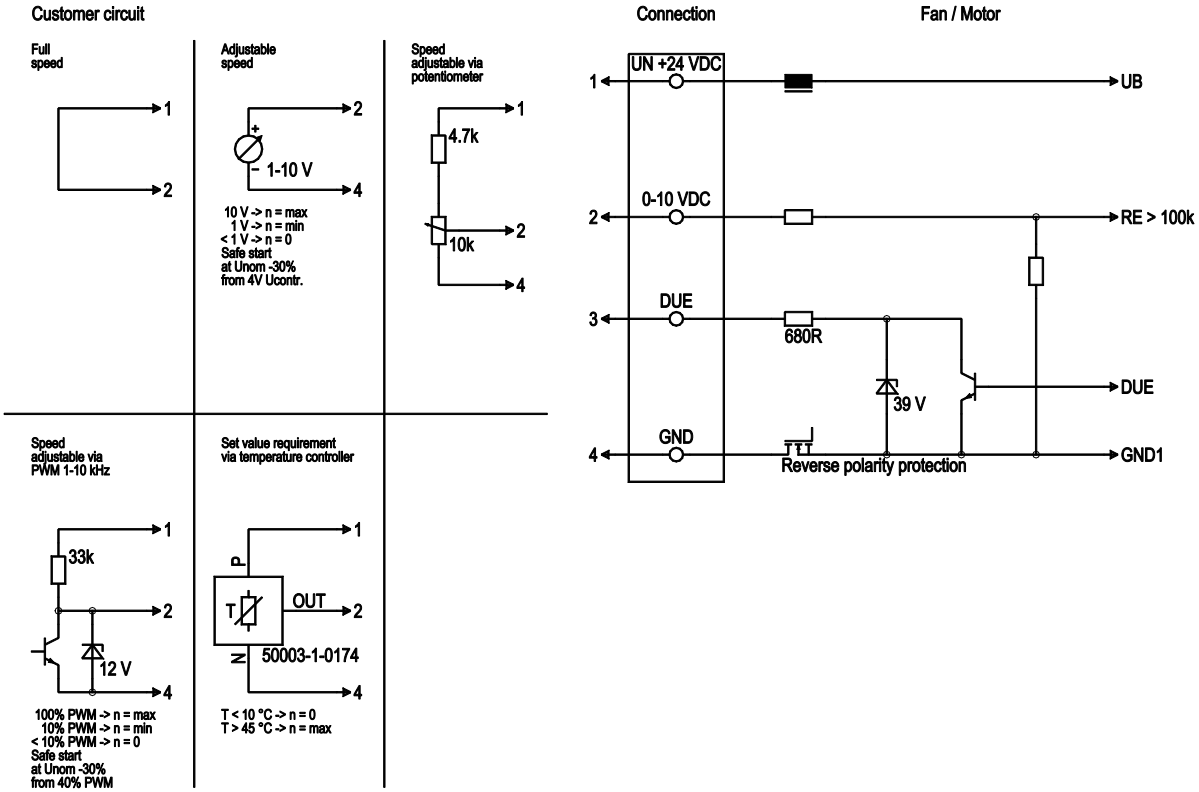
Inlet ring 96358-2-4013 not included in scope of delivery

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Connection diagram



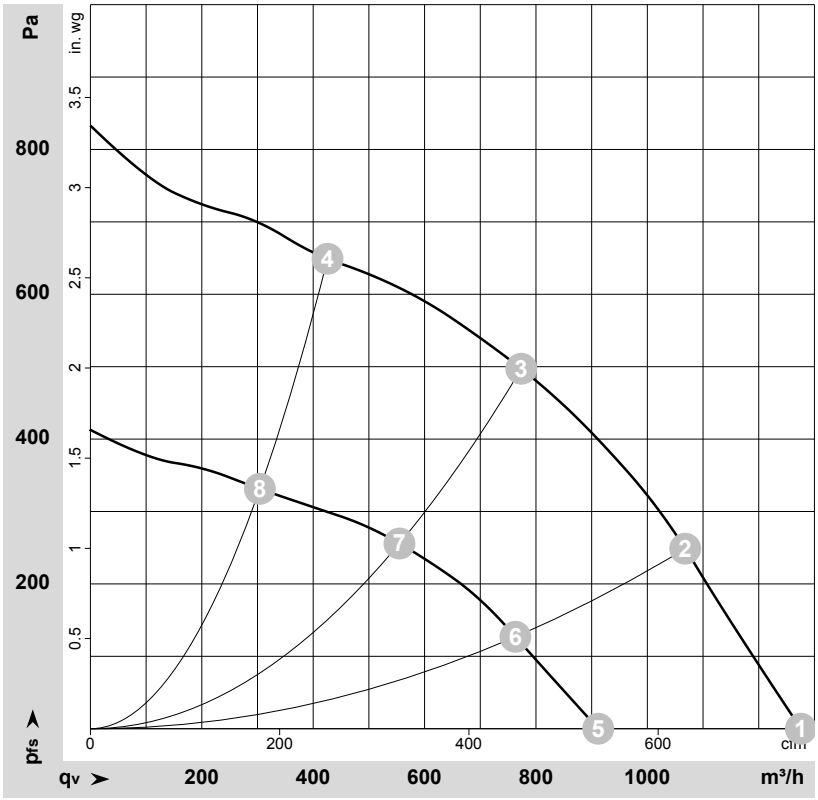
No.	Conn.	Designation	Color	Function/assignment
	1	Un +24 VDC	red	Power supply 24 VDC, maximum ripple 3.5%
	2	0-10 VDC	yellow	Control input Re > 100k
	3	Tach	white	Tach output, 3 pulses per revolution, Isink max = 10 mA
	4	GND	blue	Reference ground

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Curves: Air performance



ρ = 1.15 kg/m³ ± 2 %

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	in. wg
1	24-28	3270	205	8.50*	81	1275	0	750	0.00
2	24-28	3200	208	8.66*	78	1070	250	630	1.00
3	24-28	3185	213	8.88*	74	775	500	455	2.01
4	24-28	3275	182	7.76*	77	425	650	250	2.61
5	16	2335	77	4.79		910	0	535	0.00
6	16	2305	82	5.12		765	127	450	0.51
7	16	2305	82	5.12		555	256	325	1.03
8	16	2355	73	4.52		305	331	180	1.33

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

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