

R3G225-RN28-01 ebmpapst Datasheet

sales@fansco.com

www.fansco.com

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 Commission Regulation (EU) 327/2011 (prEN 17166)

		Actual	Req. 2015			
01 Overall efficiency η_{es}	%	57.2	44.5	09 Power consumption P_e	kW	0.21
02 Measurement category		A		09 Air flow q_v	m ³ /h	800
03 Efficiency category		Static		09 Pressure increase p_{fs}	Pa	483
04 Efficiency grade N		74.7	62	10 Speed (rpm) n	min ⁻¹	3185
05 Variable speed drive		Yes		11 Specific ratio*		1.01

Data obtained at optimum efficiency level.

* Specific ratio = $1 + p_{fs} / 100\,000\text{ Pa}$

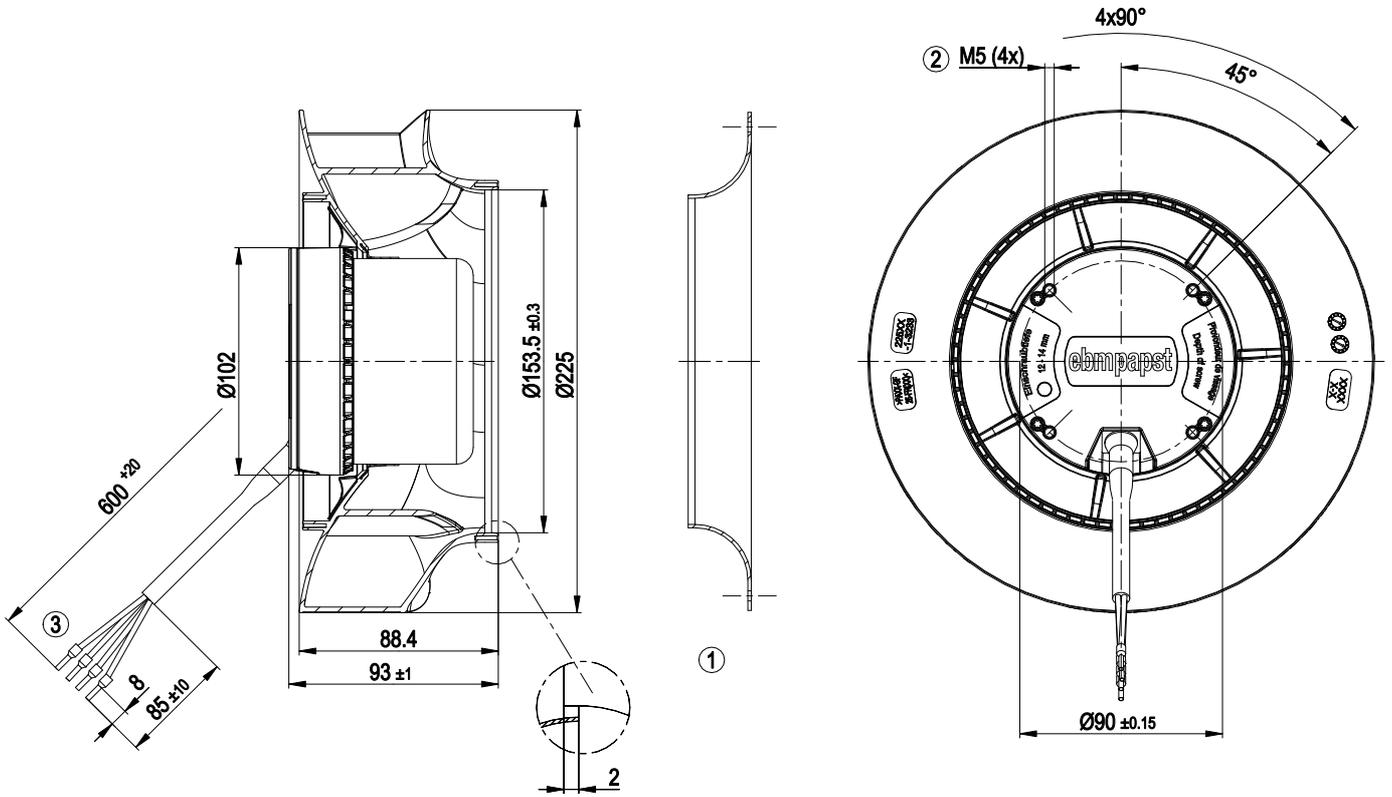
LU-156112

The efficiency values displayed for achieving conformity with the Ecodesign Regulation EU 327/2011 has been reached with defined air duct components (e.g. inlet rings).
The dimensions must be requested from ebm-papst. If other air conduction geometries are used on the installation side, the ebm-papst evaluation loses its validity/the conformity must be confirmed again.
The product does not fall within the scope of Regulation (EU) 2019/1781 due to the exception specified in Article 2 (2a) (motors completely integrated into a product).

Technical description

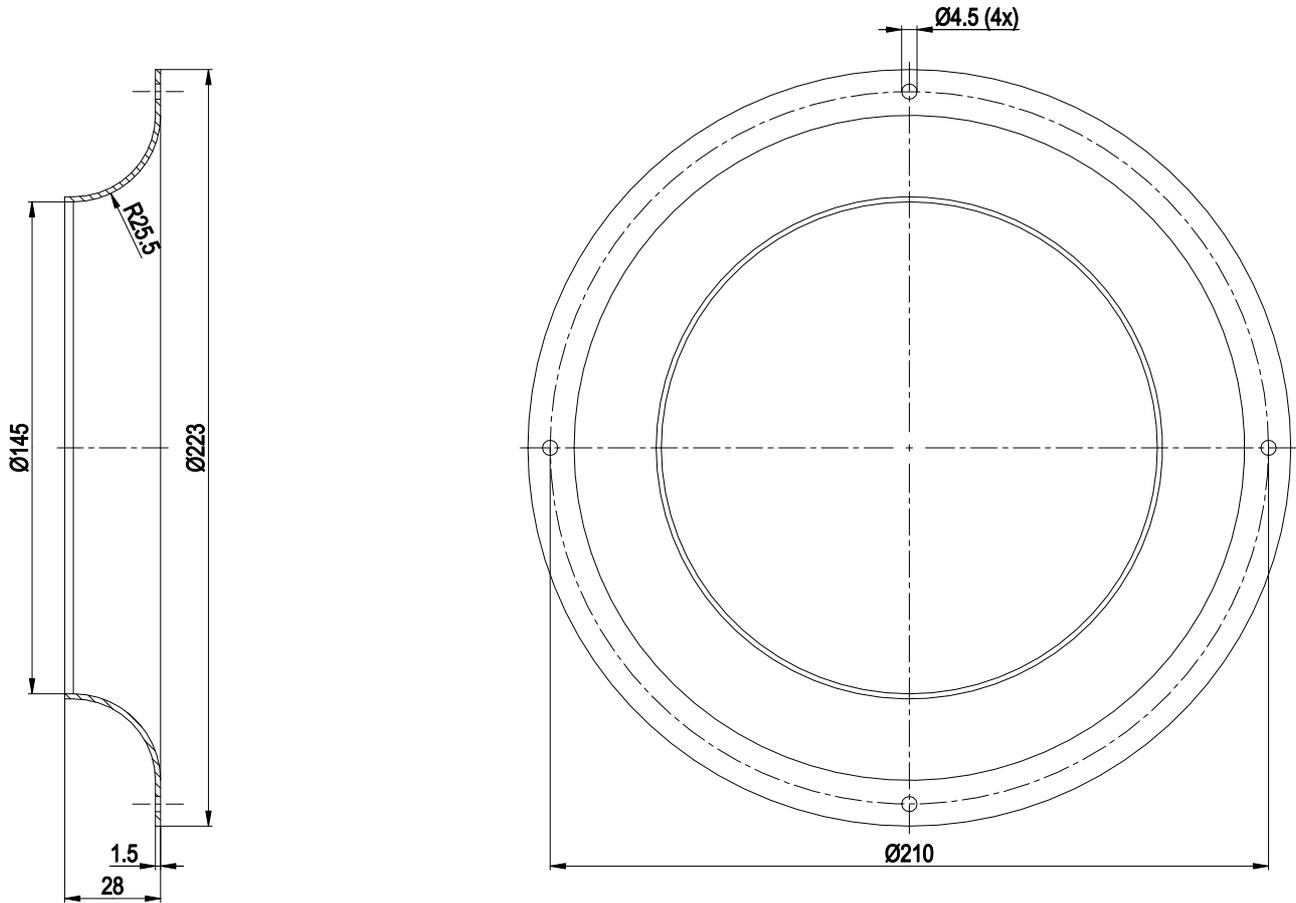
Weight	2.05 kg
Size	225 mm
Motor size	74
Rotor surface	Painted black
Impeller material	PA plastic
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1 = Moist – occasional or constantly high level of humidity
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	<ul style="list-style-type: none"> - Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Overvoltage detection - Reverse polarity protection
With cable	Variable
Protection class assignment	<p>III; Supply with safety extra-low voltage SELV.</p> <p>The built-in component has several local protection class assignments.</p> <p>The final protection class is determined by the intended installation.</p>
Conformity with standards	EN 62368-1; CE
Approval	EAC

Product drawing



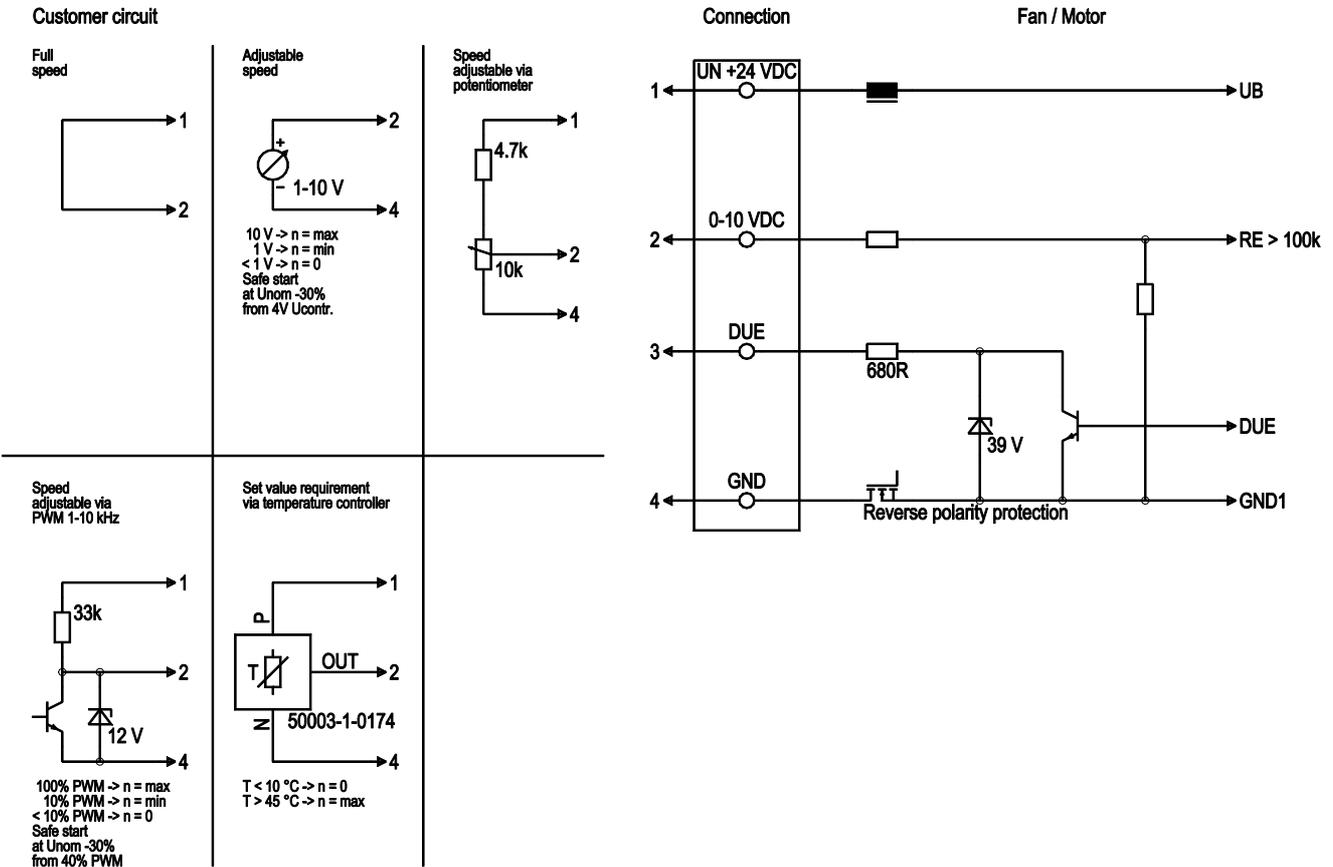
1	Accessory part: inlet ring 96358-2-4013 not included in scope of delivery
2	Max. screw-in depth 12 - 14 mm
3	Cable PVC AWG16
	4x wire-end ferrule

Accessory part



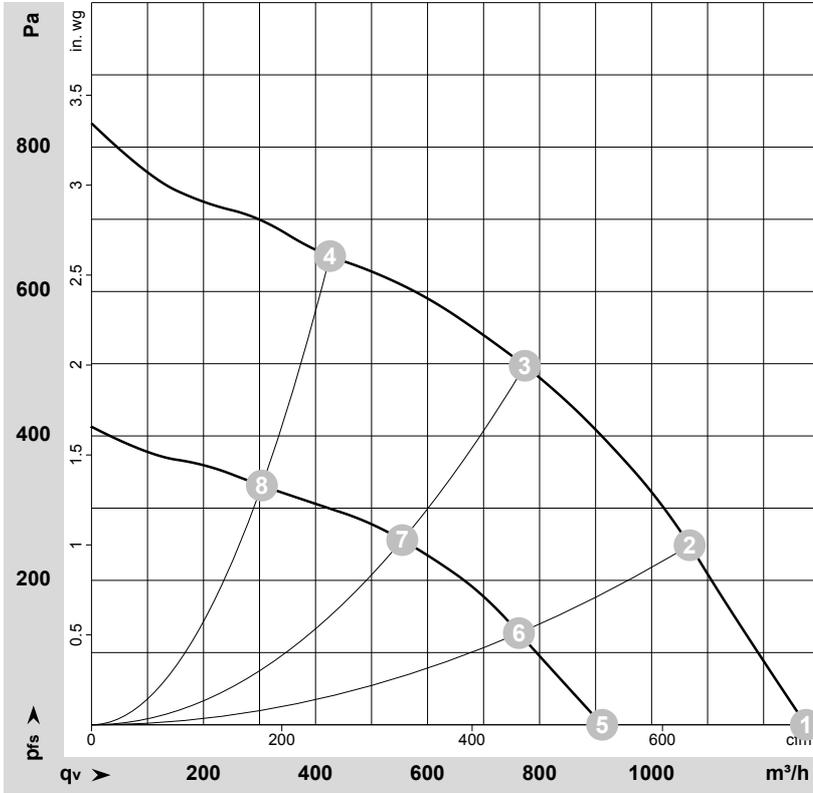
Inlet ring 96358-2-4013

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

Curves: Air performance



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-156112-1
Date: 2013-06-14
Nozzle: 22510-2-2911

Measurement: LU-156119-1
Date: 2013-06-14
Nozzle: 22510-2-2911

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 = Voltage · 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