

# EC centrifugal fan

backward-curved, single-intake



R3G225-RE09-06 ebmpapst Datasheet

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## Nominal data

Type	R3G225-RE09-06	
Motor	M3G055-DF	
Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min <sup>-1</sup>	2725
Power consumption	W	138
Current draw	A	1.1
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 $\eta_{es}$	%	50.6	42.2	09 Power consumption $P_{ed}$	kW	0.13
02 Measurement category		A		09 Air flow $q_v$	m <sup>3</sup> /h	700
03 Efficiency category		Static		09 Pressure increase $p_{fs}$	Pa	361
04 Efficiency grade N		70.4	62	10 Speed (rpm) n	min <sup>-1</sup>	2725
05 Variable speed drive		No		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-135883



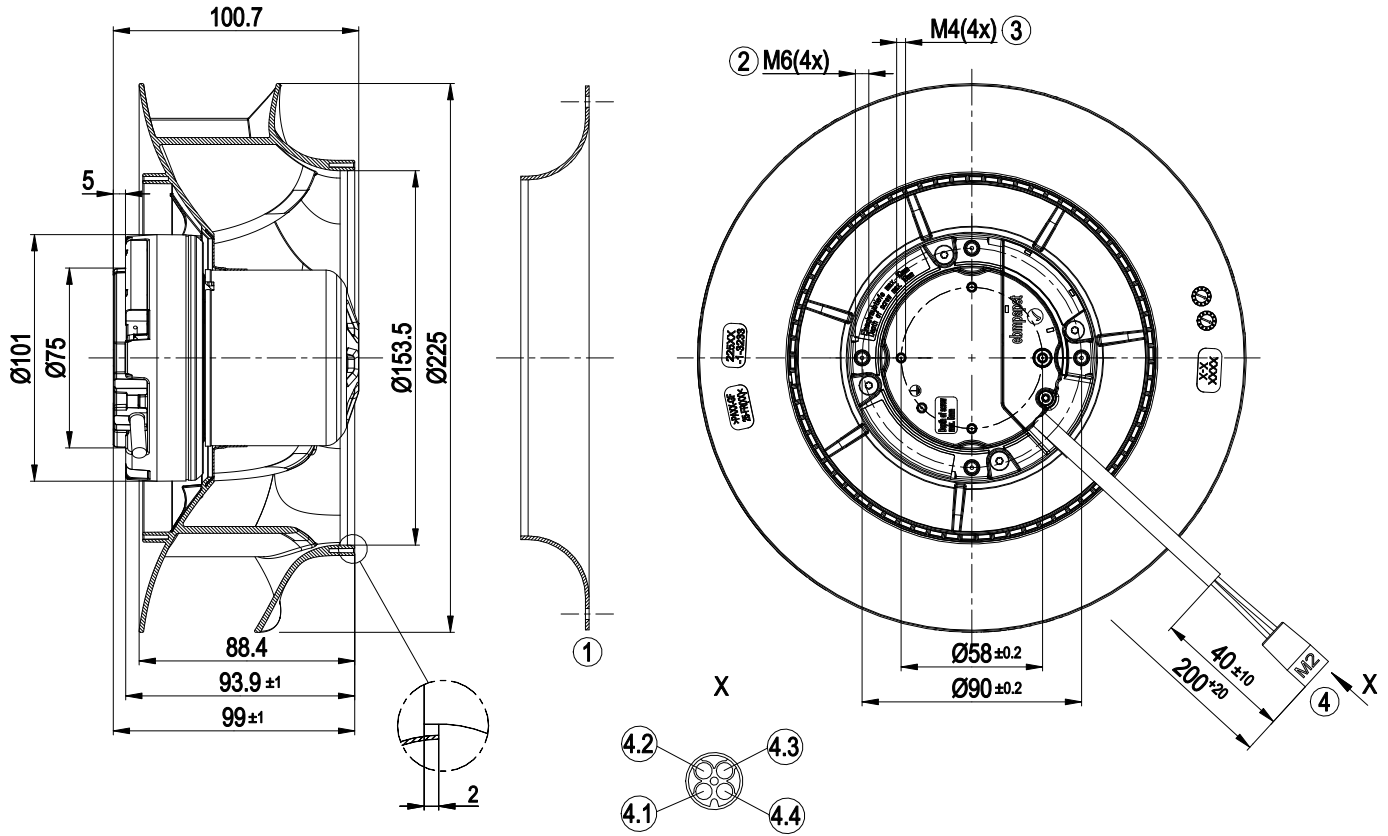
## Technical description

Weight	1.7 kg
Fan size	225 mm
Impeller material	PA plastic
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
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, open rotor
Mode	S1
Motor bearing	Ball bearing
Technical features	<ul style="list-style-type: none"> <li>- Motor current limitation</li> <li>- Soft start</li> <li>- Thermal overload protection for electronics/motor</li> <li>- Line undervoltage detection</li> </ul>
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	STK
Motor protection	Locked-rotor protection
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	CCC; UL 2111; CSA C22.2 No. 77

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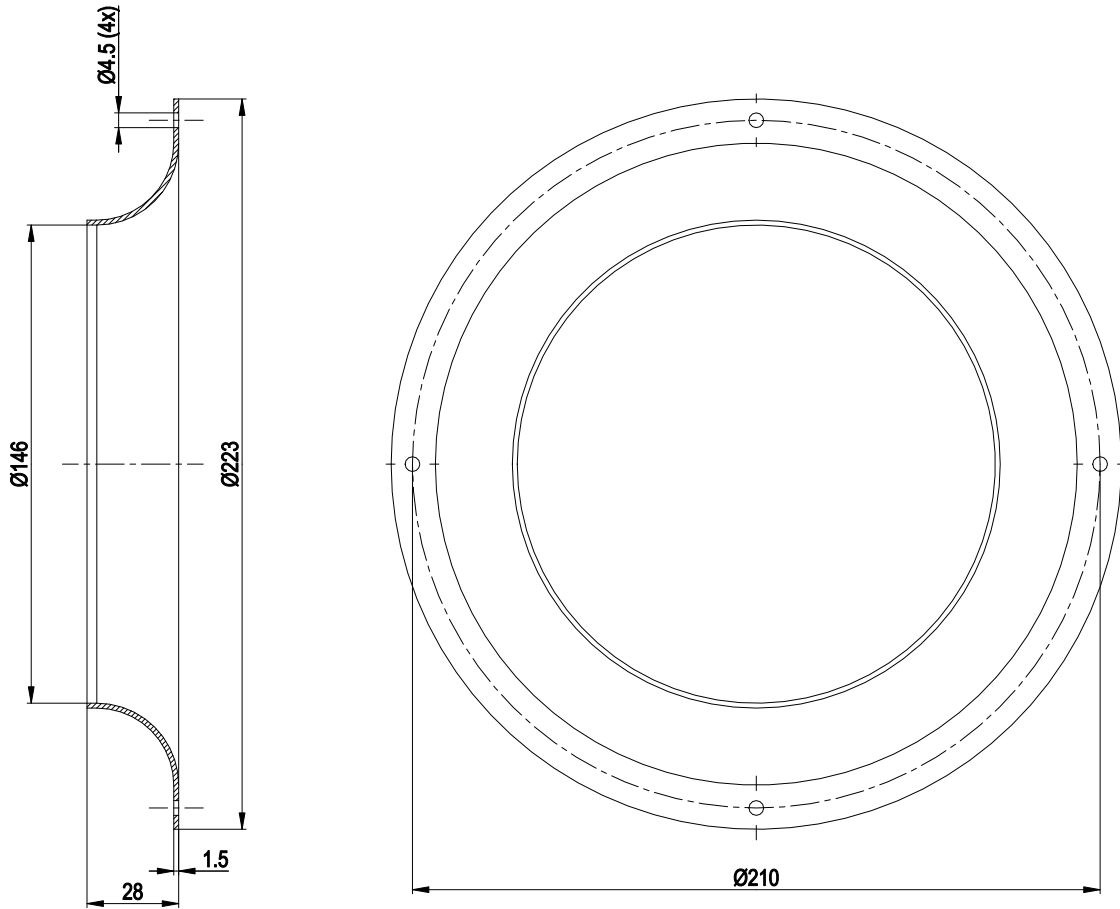
## Product drawing



1	Accessory part: Inlet ring 96358-2-4013, not included in scope of delivery
2	Max. clearance for screw 10 mm
3	Max. clearance for screw 10 mm
4	Cable PVC AWG20, 4-pole connector housing tyco 925075-7, 4x plug pin tyco 163555-6
4.1	black (L)
4.2	blue (N)
4.3	green/yellow (PE)
4.4	not used



## Accessory part



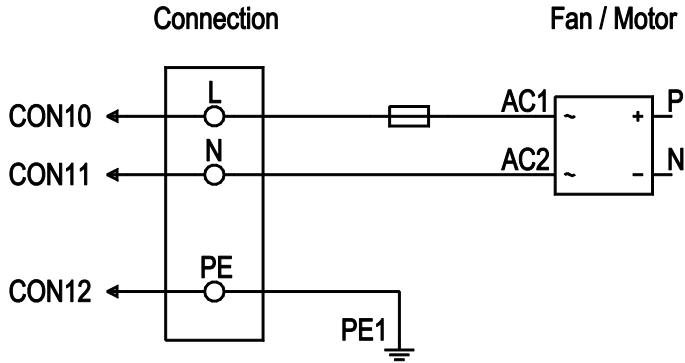
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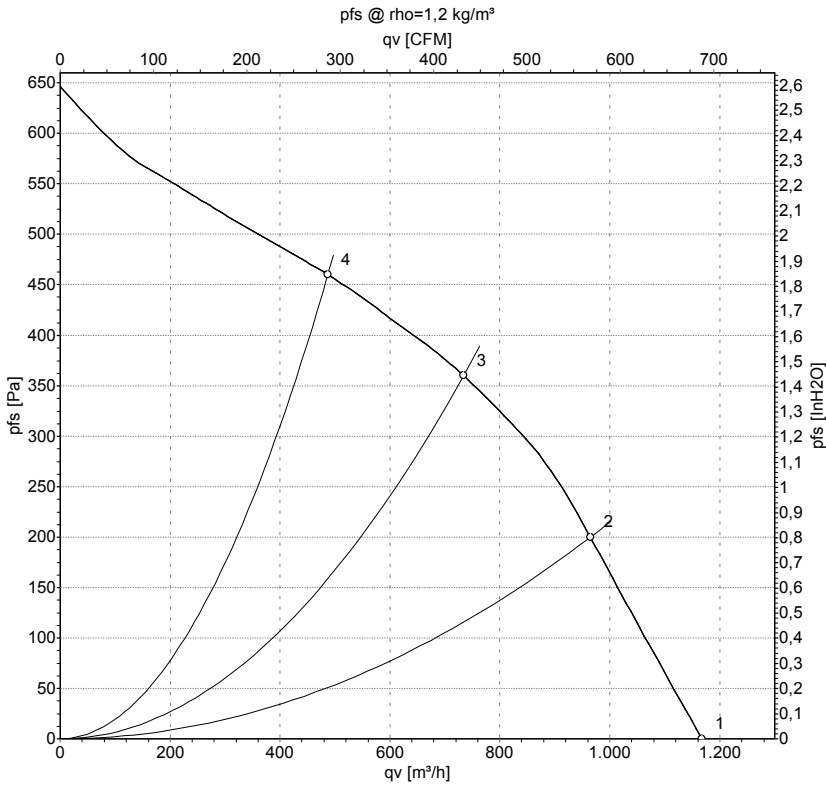
## Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	CON 10	L	black	Power supply 230 VAC, 50-60 Hz, see nameplate for voltage range
	CON 11	N	blue	Neutral conductor
	CON 12	PE	green/yellow	Protective earth



## Curves: Air performance 50 Hz



Measurement: LU-135883-1

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	f	n	P <sub>ed</sub>	I	q <sub>v</sub>	p <sub>fs</sub>	q <sub>v</sub>	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	cfm	inH2O
1	230	50	2785	125	1.05	1165	0	685	0.00
2	230	50	2725	138	1.10	965	200	570	0.80
3	230	50	2725	138	1.10	735	360	430	1.45
4	230	50	2765	131	1.05	485	460	285	1.85

U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>ed</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase

