R3G355-RP23-33

EC centrifugal fan - RadiCal

backward curved, single inlet



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Nominal data

Type	**R3G355-RP23-33**	
Motor	**M3G084-FA**	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Type of data definition		fa
Speed (rpm)	min^{-1}	1760
Power input	W	290
Current draw	A	6.1
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	50

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

Data in accordance with ecodesign regulation EU 327/2011

		Actual	Request 2015
01 Overall efficiency η_{es}	%	68.8	47.1
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		83.7	62
05 Variable speed drive		Yes	

09 Power input P_e	kW	0.38
09 Air flow q_v	m^3/h	2405
09 Pressure increase p_{fs}	Pa	355
10 Speed (rpm) n	min^{-1}	1690
11 Specific ratio*		1.00

Data definition with optimum efficiency.
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

* Specific ratio = 1 + p_{fs} / 100 000 Pa

LU-155134

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Technical features

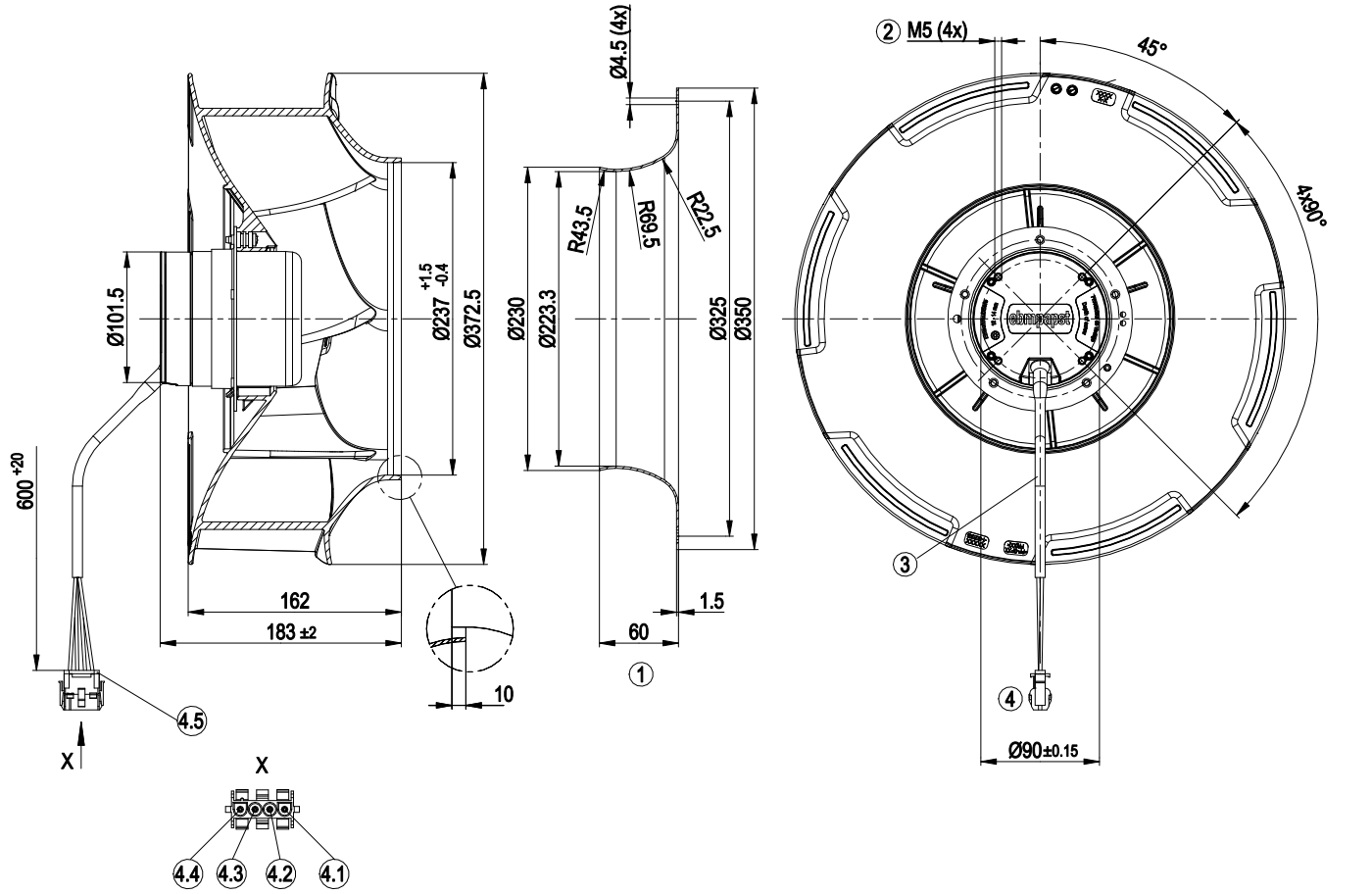
Mass	4.3 kg
Size	355 mm
Surface of rotor	Coated in black
Material of electronics housing	Die-cast aluminium, coated in black
Material of impeller	PP plastic
Number of blades	6
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 42
Insulation class	"B"
Humidity (F)/environmental protection class (H)	H1
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Any
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Output limit - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Over-temperature protected motor
Electrical leads	With plug
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Product conforming to standard	EN 61800-5-1; CE
Approval	CSA C22.2 No.100; EAC; UL 1004-1

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Product drawing



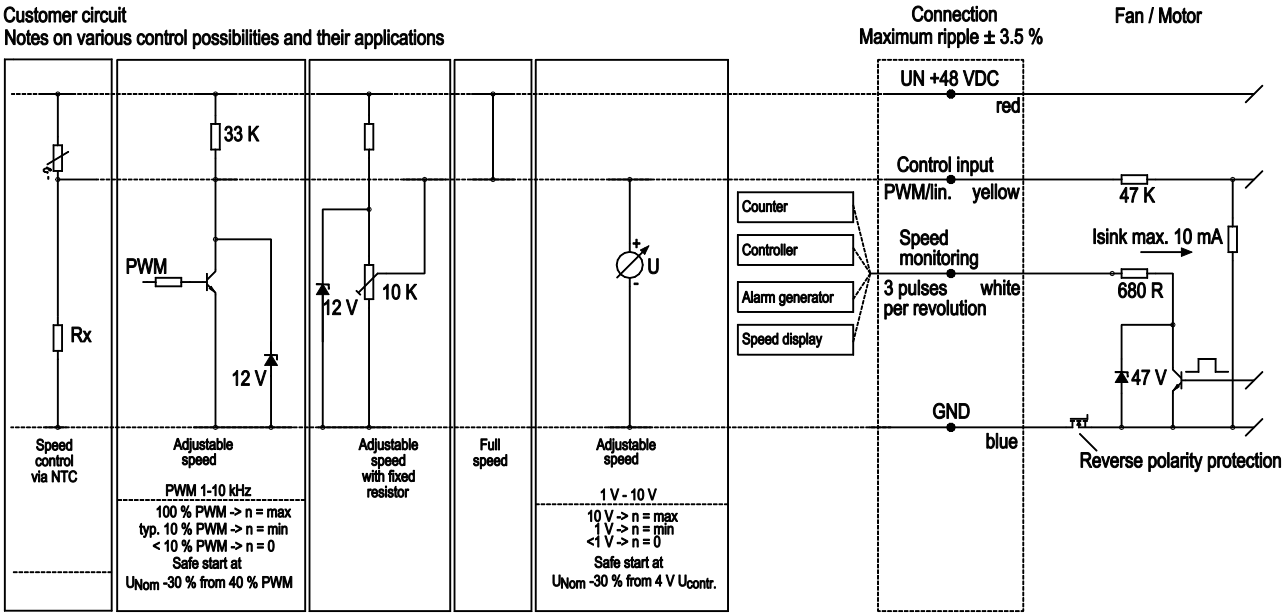
1	Accessory part: Inlet nozzle 35500-2-4013 not included in scope of delivery
2	Thread reach max. 14 mm
3	Connection line PVC AWG16, 4x female connector 926882-1 crimped
4	Connector housing 4-pole tyco 350780-1
4.1	UN +48 VDC (red)
4.2	GND (blue)
4.3	PWM/LIN (yellow)
4.4	Tach (white)
4.5	Seal AMP 794 274-1

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Connection screen

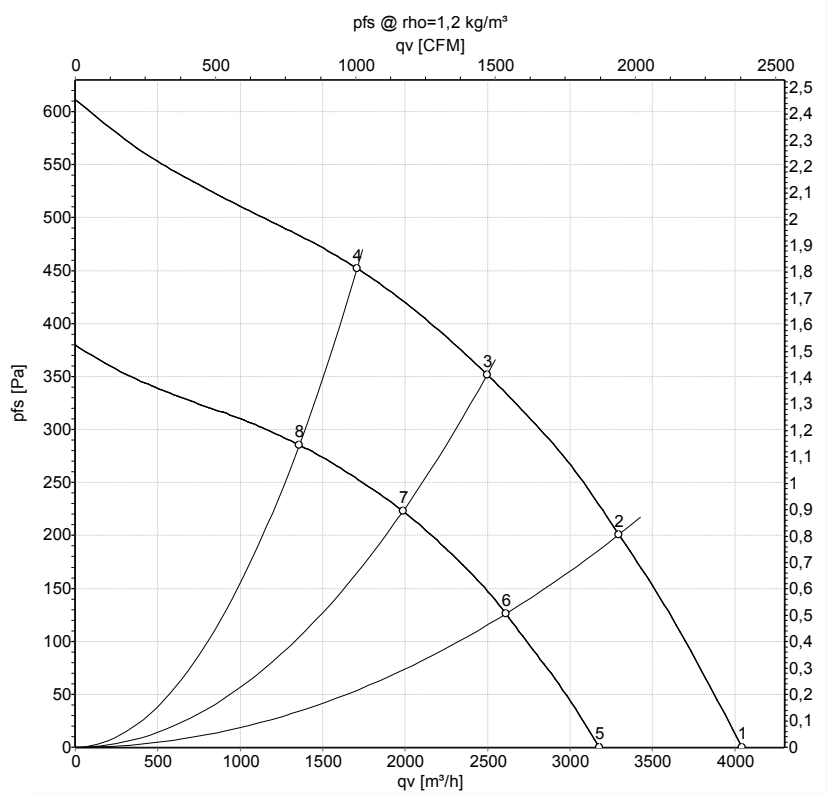


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Charts: Air flow



Measurement: LU-155134-1
Measurement: LU-145471-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

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	inH2O
1	48-57	1760	290		4045	0	2380	0.00
2	48-57	1710	358		3295	200	1940	0.80
3	48-57	1690	383		2495	350	1470	1.41
4	48-57	1705	368		1710	450	1005	1.81
5	36	1390	147	4.11	3180	0	1870	0.00
6	36	1360	175	4.88	2610	126	1535	0.51
7	36	1345	192	5.35	1985	224	1170	0.90
8	36	1355	183	5.12	1360	285	800	1.14

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

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