EC centrifugal fan - RadiCal

backward curved, single inlet

R3G355-RP36-83 ebmpapst Datasheet
sales@fansco.com
www.fansco.com

Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
County court Stuttgart · HRB 590142

Nominal data

Type	**R3G355-RP36-83**
Motor	**M3G084-FA**

Phase		1~
Nominal voltage	VAC	115
Nominal voltage range	VAC	100 .. 130
Frequency	Hz	50/60
Type of data definition		ml
Speed (rpm)	min^{-1}	1630
Power input	W	360
Current draw	A	4.4
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	40

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

EC centrifugal fan - RadiCal

backward curved, single inlet

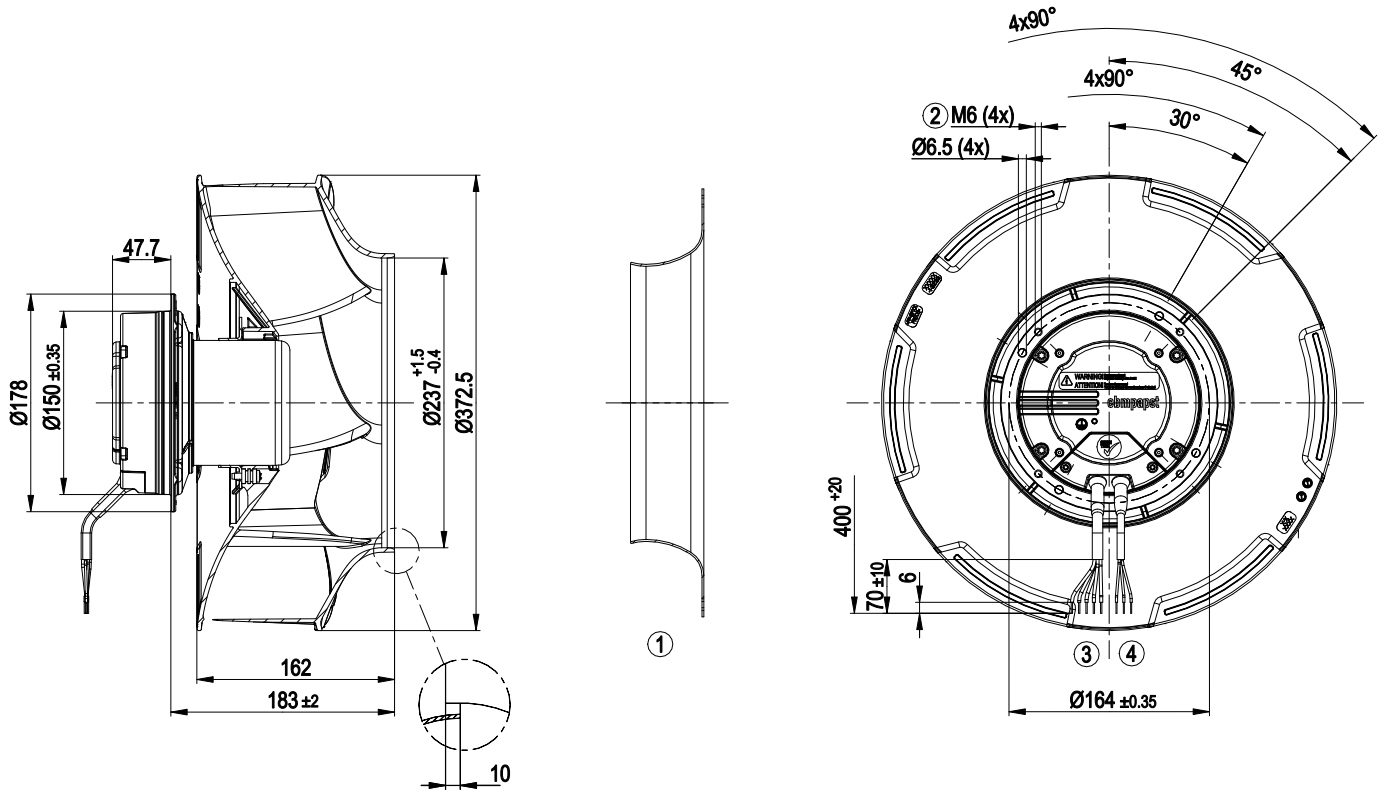
Technical features

Mass	6 kg
Size	355 mm
Surface of rotor	Coated in black
Material of electronics housing	Die-cast aluminium
Material of impeller	PP plastic
Number of blades	6
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Humidity (F)/environmental protection class (H)	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Shaft horizontal or rotor on top; rotor on bottom on request
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Over-temperature protected electronics / motor - Line undervoltage detection
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC interference emission	Acc. to EN 61000-6-4 (industrial environment)
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) wired internally
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 61800-5-1; CE
Approval	CSA C22.2 No.77; UL 1004-3

EC centrifugal fan - RadiCal

backward curved, single inlet

Product drawing

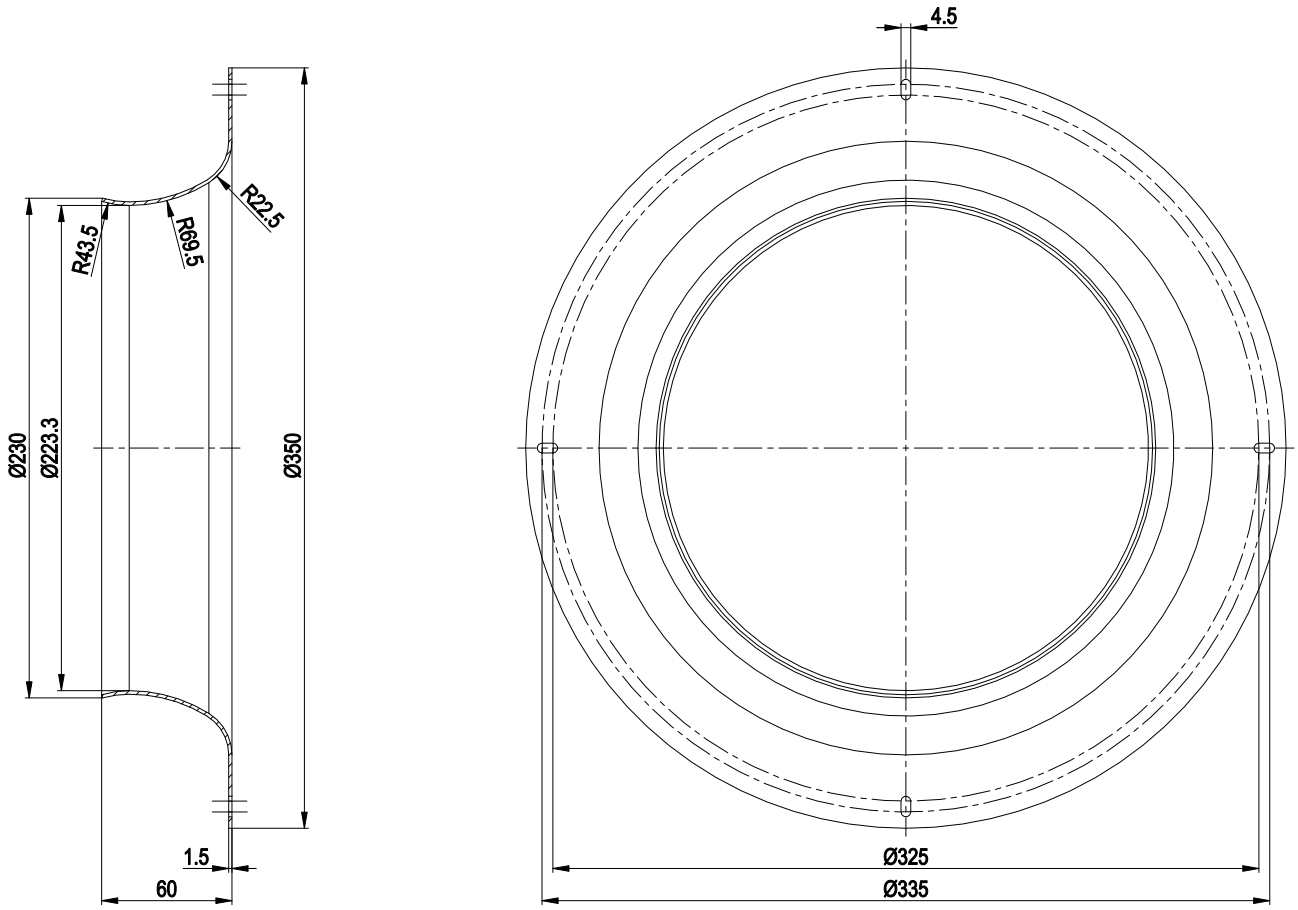


1	Accessory part: Inlet nozzle 35500-2-4013 not included in scope of delivery
2	Thread reach max. 10 mm
3	Connection line PVC AWG18, 3x lead tips crimped
4	Connection line PVC AWG22, 4x lead tips crimped

EC centrifugal fan - RadiCal

backward curved, single inlet

Accessory part

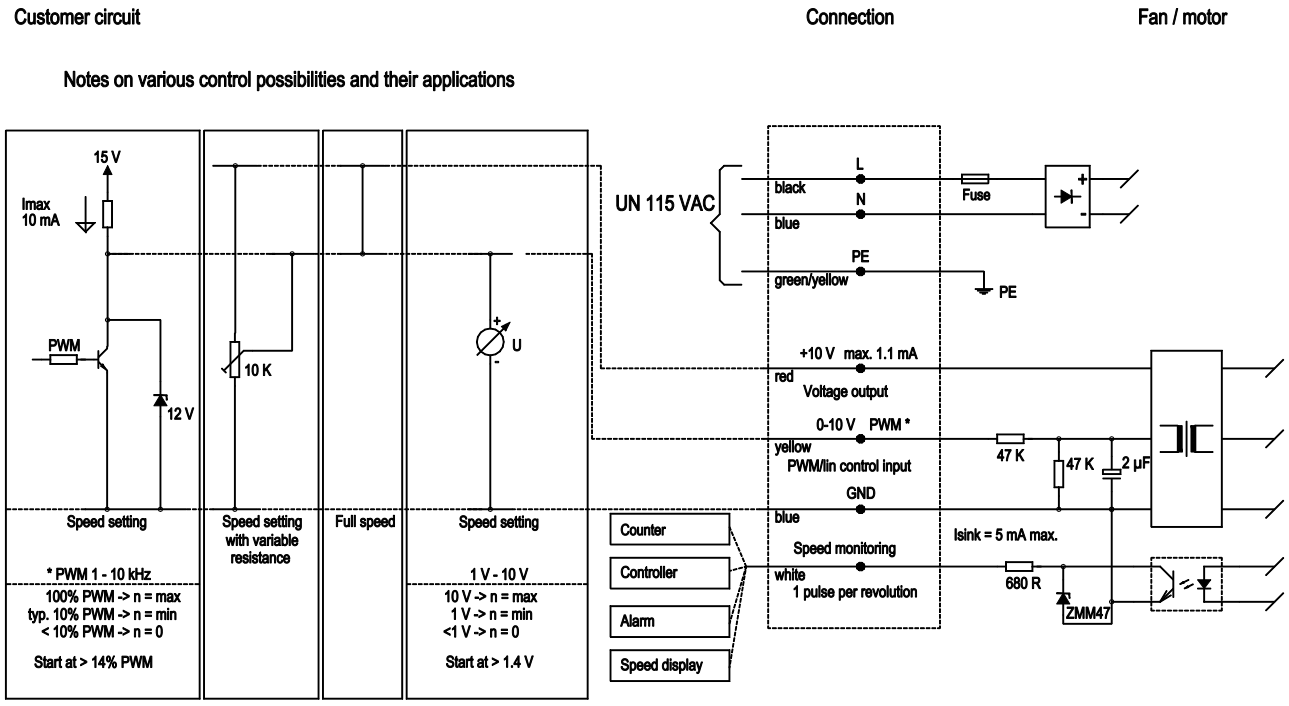


Inlet nozzle 35500-2-4013 not included in scope of delivery

EC centrifugal fan - RadiCal

backward curved, single inlet

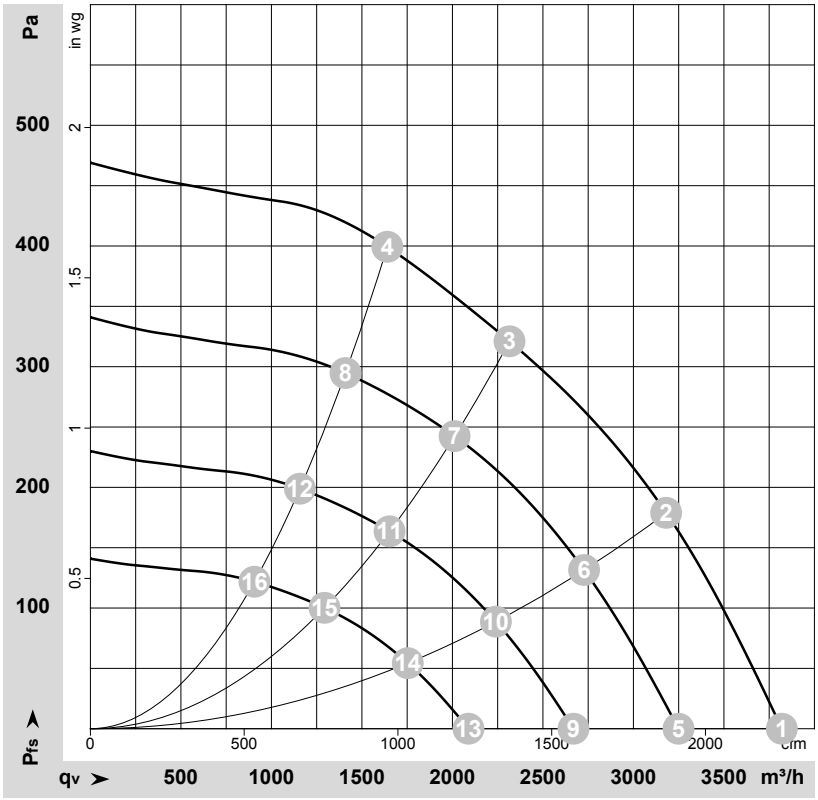
Connection screen



EC centrifugal fan - RadiCal

backward curved, single inlet

Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-162646-1

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	f	n	P_{ed}	I	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	115	50	1630	252	3.21	3820	0	2250	0.00
2	115	50	1630	337	4.17	3180	180	1870	0.72
3	115	50	1630	360	4.40	2315	320	1365	1.28
4	115	50	1630	344	4.25	1640	400	965	1.61
5	115	50	1400	155	1.97	3250	0	1910	0.00
6	115	50	1400	213	2.63	2725	132	1605	0.53
7	115	50	1400	235	2.89	2010	243	1185	0.98
8	115	50	1400	218	2.69	1410	295	830	1.18
9	115	50	1150	86	1.09	2670	0	1570	0.00
10	115	50	1150	118	1.46	2240	89	1320	0.36
11	115	50	1150	130	1.60	1655	164	975	0.66
12	115	50	1150	121	1.49	1160	199	680	0.80
13	115	50	900	41	0.52	2090	0	1230	0.00
14	115	50	900	56	0.70	1755	54	1030	0.22
15	115	50	900	62	0.77	1295	100	760	0.40
16	115	50	900	58	0.72	905	122	535	0.49

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