R4E280-RA34-09

AC centrifugal fan - RadiCal

backward curved, single inlet

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Nominal data

Type	**R4E280-RA34-09**
Motor	**M4E068-DF**

Phase		1~	1~	1~
Nominal voltage	VAC	115	115	115
Frequency	Hz	50	60	60
Type of data definition		ml	ml	ml
Valid for approval / standard		CE	CE	UL 2111
Speed (rpm)	min^{-1}	1300	1380	1380
Power input	W	87	120	125
Current draw	A	0.77	1.06	1.06
Motor capacitor	µF	10	10	10
Capacitor voltage	VDB	250	250	250
Capacitor standard		S0 (CE)	S0 (CE)	UL
Min. back pressure	Pa	0	0	0
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	70	60	60
Starting current	A	1.56	1.52	

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

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Technical features

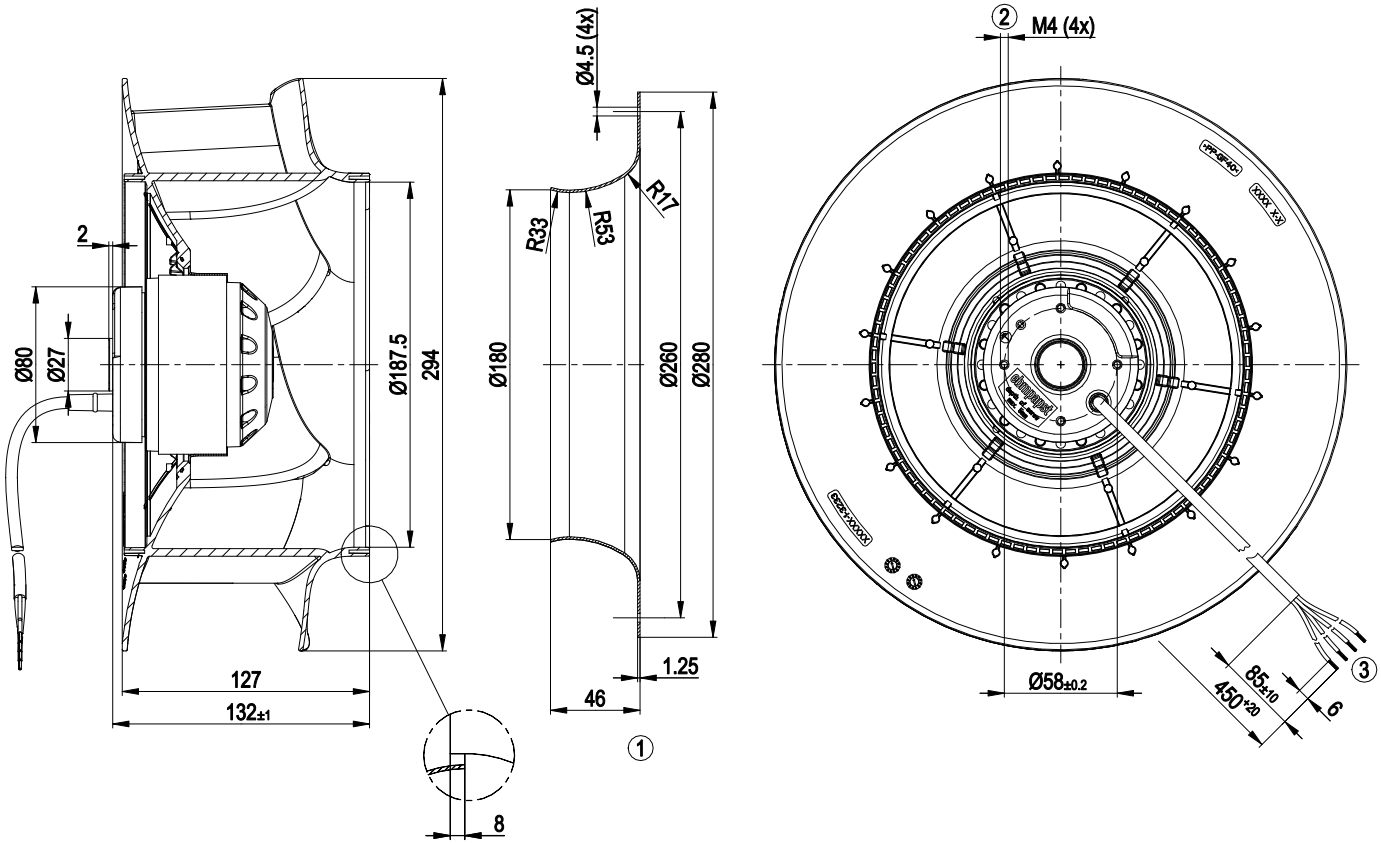
Mass	2.4 kg
Size	280 mm
Surface of rotor	Coated in black
Material of impeller	PP plastic
Number of blades	6
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"B"
Humidity (F)/environmental protection class (H)	H0+
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 bottom; rotor on top on request
Condensate discharge holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	CSA C22.2 No.77; UL 2111

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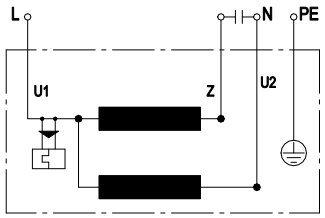
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Product drawing



1	Accessory part: Inlet nozzle 28000-2-4013 not included in scope of delivery
2	Thread reach max. 5mm
3	Connection line PVC AWG20, 4x lead tips crimped

Connection screen



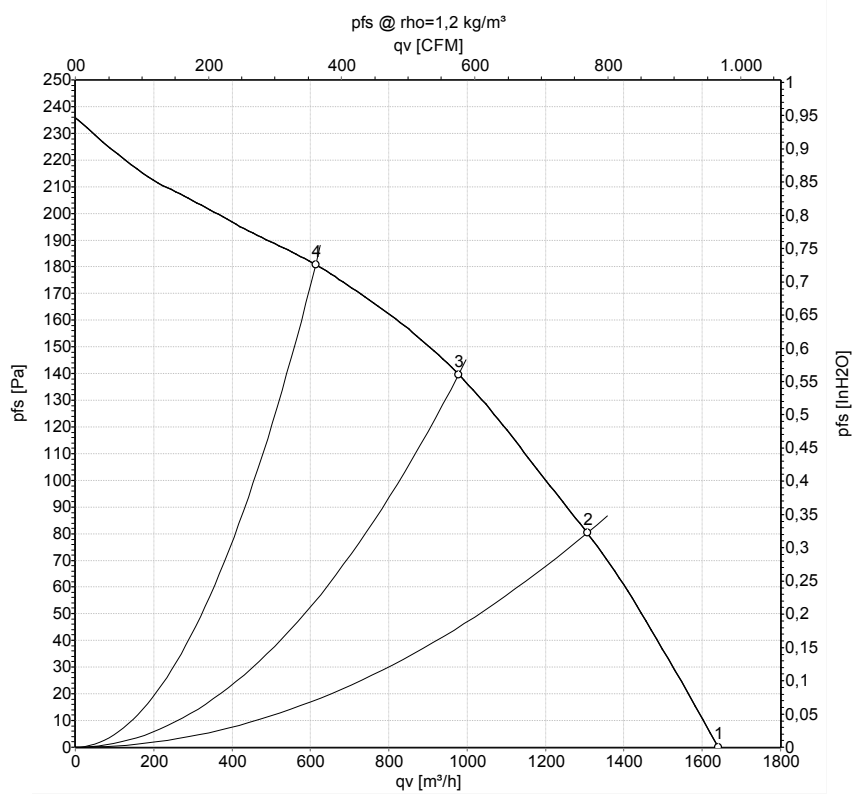
U1	blue	Z	brown	U2	black
PE	green/yellow				

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Charts: Air flow 50 Hz



Measurement: LU-149675-1

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_e	I	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	115	50	1370	69	0.61	57	65	1640	0	965	0.00
2	115	50	1325	82	0.71	52	59	1305	80	770	0.32
3	115	50	1300	87	0.77	48	55	980	140	575	0.56
4	115	50	1330	80	0.70	49	57	615	180	360	0.72

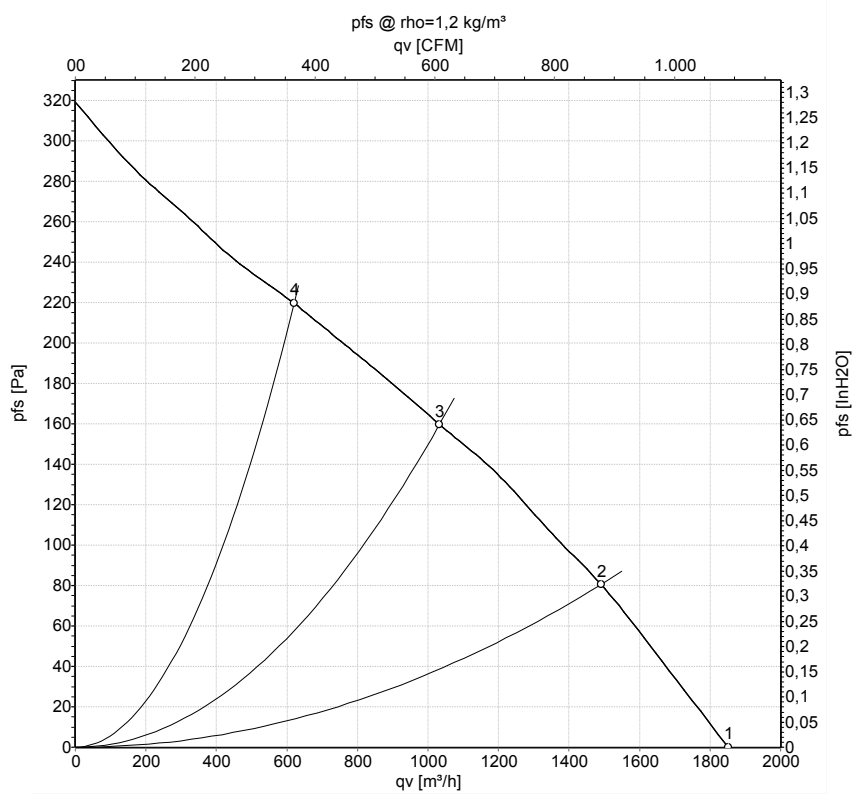
U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · q_V = Air flow
p_{fs} = Pressure increase

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Charts: Air flow 60 Hz



Measurement: LU-149677-1

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_e	I	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	115	60	1545	98	0.86	60	67	1850	0	1090	0.00
2	115	60	1435	114	0.99	54	62	1490	80	880	0.32
3	115	60	1380	120	1.06	48	56	1035	160	610	0.64
4	115	60	1450	111	0.96	52	59	620	220	365	0.88

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · q_V = Air flow
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