R4E450-RI01-05

AC centrifugal fan - RadiCal

backward curved, single inlet

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Nominal data

Type	**R4E450-RI01-05**	
Motor	**M4E110-IA**	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	60
Type of data definition		ml
Valid for approval / standard		CE
Speed (rpm)	min^{-1}	1490
Power input	W	1150
Current draw	A	5.0
Motor capacitor	µF	16
Capacitor voltage	VDB	500
Capacitor standard		S0 (CE)
Min. back pressure	Pa	0
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	40
Starting current	A	7.5

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

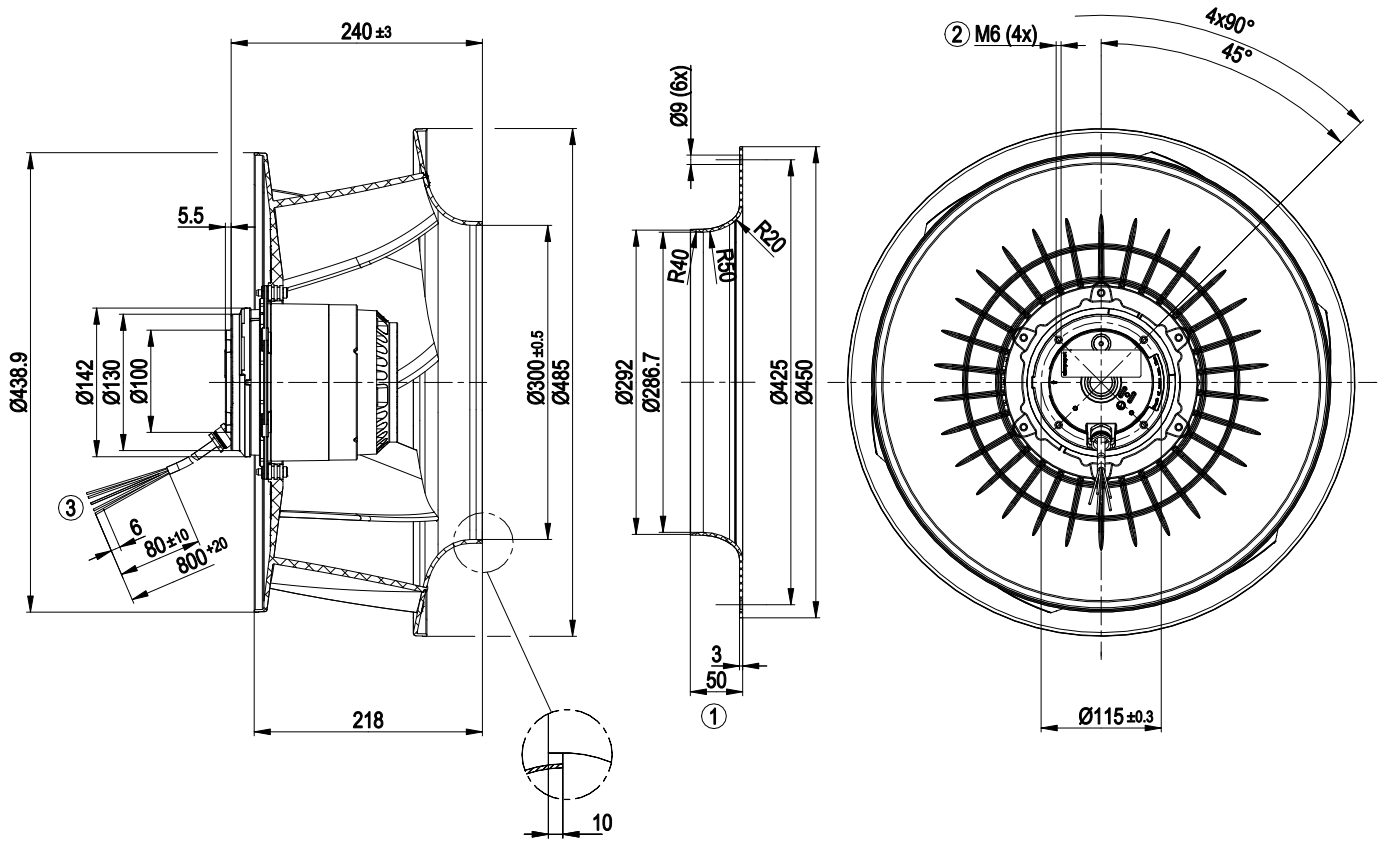
Mass	12 kg
Size	450 mm
Surface of rotor	Cast in aluminium
Material of impeller	PP plastic
Number of blades	6
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"F"
Humidity (F)/environmental protection class (H)	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal or rotor on 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)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) brought out, basic insulation
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 61800-5-1; CE
Approval	CSA C22.2 No.100; UL 1004-1; VDE; EAC

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Product drawing



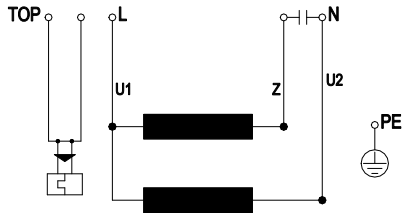
1	Accessory part: inlet nozzle 45901-2-2943 not included in scope of delivery.
2	Thread reach max. 12 mm
3	Connection line silicone 6G 0.75 mm², 6x lead tips crimped

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Connection screen



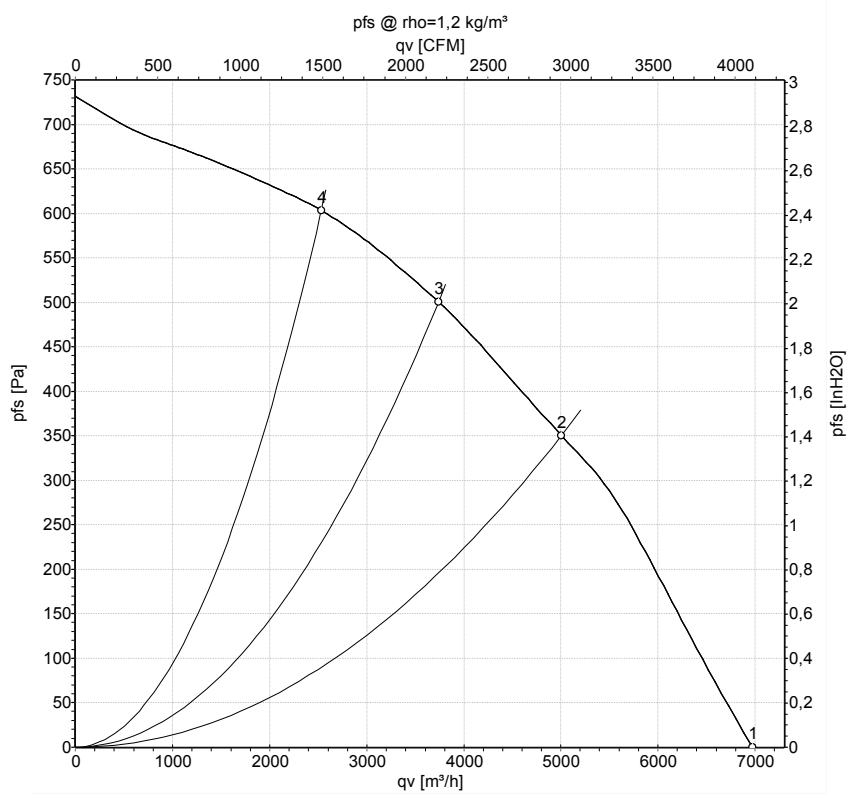
TOP	2 x grey	U1	blue	Z	brown
U2	black	PE	green / yellow		

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Charts: Air flow 60 Hz



Measurement: LU-163992-1

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	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	230	60	1620	959	4.19	6970	0	4100	0.00
2	230	60	1490	1150	5.00	5005	350	2945	1.41
3	230	60	1510	1121	4.88	3740	500	2200	2.01
4	230	60	1545	1076	4.67	2530	600	1490	2.41

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

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