AC centrifugal module - RadiCal®

backward curved, single inlet

with housing

Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

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

Nominal data

Type	**K2E190-RA50-11**
Motor	**M2E068-BF**

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	min^{-1}	2300	2450	2450
Power input	W	53	66	70
Current draw	A	0.47	0.59	0.61
Motor capacitor	µF	6	6	6
Capacitor voltage	VDB	250	250	250
Capacitor standard		P0 (CE)	P0 (CE)	UL
Min. back pressure	Pa	0	0	0
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	80	80	80
Starting current	A	0.71	0.72	

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	1.65 kg
Size	190 mm
Surface of rotor	Coated in black
Material of impeller	PA plastic
Housing material	PA plastic
Material of guard grille	PA plastic
Number of blades	7
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"F"
Humidity class	F1-2
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
Electrical leads	With plug
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	CSA C22.2 Nr.77; UL 2111

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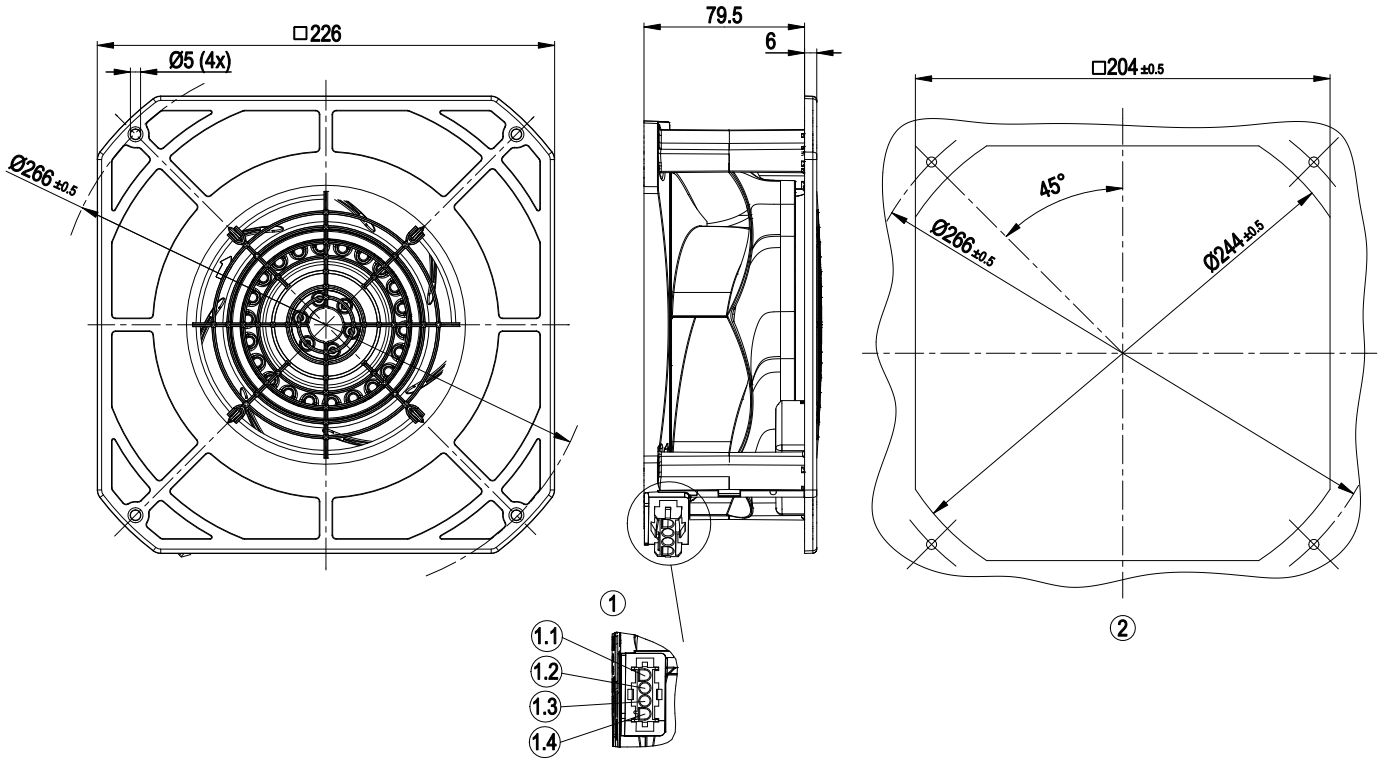
Product drawing



1	Coded plug system Tyco
	Connector housing 4-pole Tyco 1586845-1
	4x plug pin Tyco 926 885-1
	Mating connector (not included in scope of delivery):
	Connector housing 4-pole Tyco 926298-6
	4x female connector Tyco 926 884-1
1.1	PE
1.2	L
1.3	N + capacitor
1.4	Capacitor
	(Capacitor not included in scope of delivery)
2	Mounting dimensions

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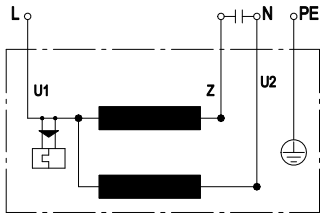
Connection screen



U1	blue	Z	brown	U2	black
PE	green/yellow				

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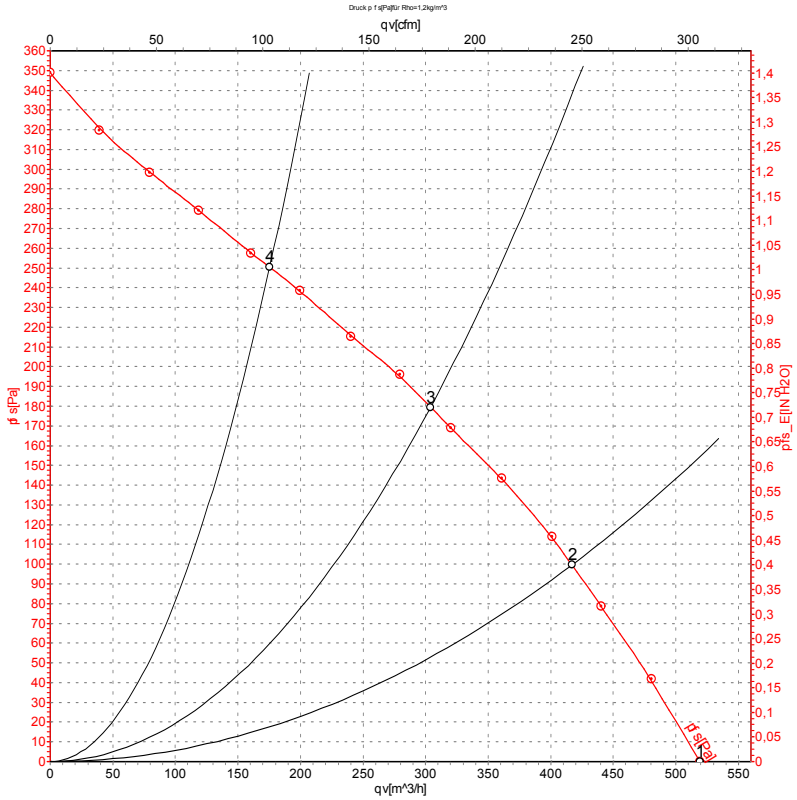
Charts: Air flow 50 Hz



Measurement: LU-128366

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	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	115	50	2480	48	0.42	520	0
2	115	50	2380	52	0.45	415	100
3	115	50	2300	53	0.47	305	180
4	115	50	2425	50	0.44	175	250

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

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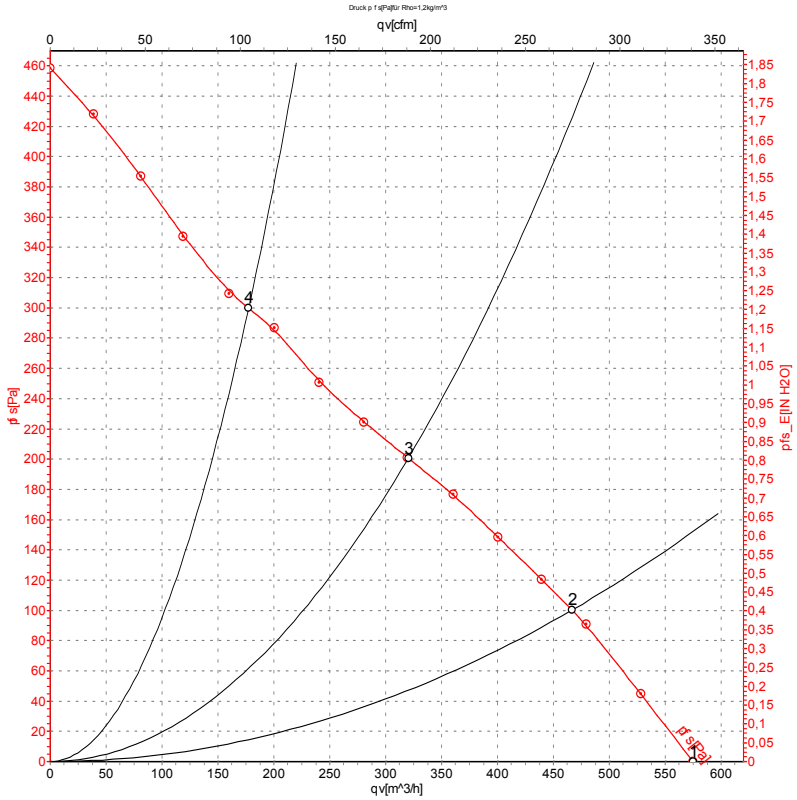
Charts: Air flow 60 Hz



Measurement: LU-128367

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	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	115	60	2750	60	0.53	580	0
2	115	60	2575	63	0.55	465	100
3	115	60	2450	66	0.59	320	200
4	115	60	2630	62	0.54	175	300

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