

KARTA KATALOGOWA

R2E180-CH03-01

Wentylator promieniowy AC, łopatki zakrzywione do przodu, jednostronnie ssący

Producent: ebm-papst

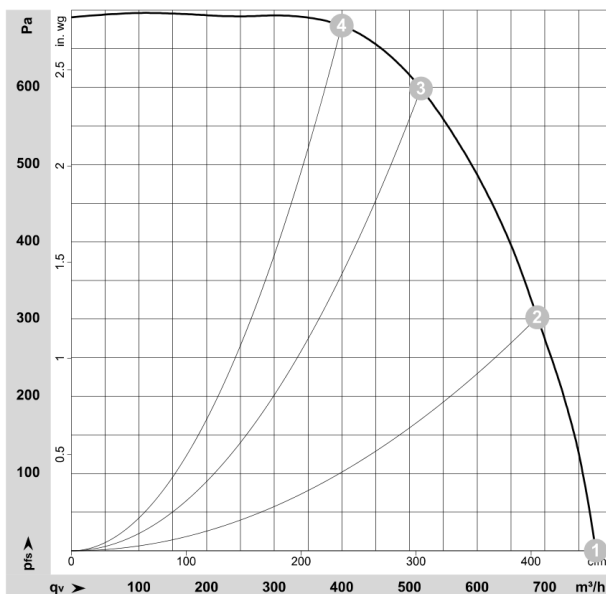


Zdjęcie poglądowe

Dane znamionowe		Budowa	
Napięcie znamionowe	1~ 230 V	Średnica wirnika	180 mm
Częstotliwość	50/60 Hz	Materiał wirnika	stal ocynkowana
Prędkość obrotowa	1950 / 2150 obr/min	Stopień ochrony	IP44
Pobór mocy	400 / 415 W	Klasa izolacji	B
Pobór prądu	1,75 / 1,82 A	Zabezpieczenie silnika	termik (TOP)
Maks. wydajność	715 m³/h	Masa	3,7 kg
Maks. ciśnienie statyczne	680 Pa		
Temperatura otoczenia	-25...+40 °C (60 Hz: +30 °C)		
Dane ErP (UE 327/2011)			
Sprawność całkowita	35,3 %		
Przepływ w pkt. optymalnym	460 m³/h		
Przyrost ciśnienia	653 Pa		
Regulacja obrotów	nie		

Charakterystyka przepływowa

Curves: Air performance 50 Hz



$$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$$

Measurement: LU-140079-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Dane na podstawie karty producenta ebm-papst (oryginał na kolejnych stronach).
Wartości dla 50 Hz / 60 Hz; producent zastrzega możliwość zmian.

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R2E180-CH03-01

AC centrifugal fan

forward-curved

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General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	R2E180-CH03-01		
Motor	M2E074-EI		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		fa	ml
Valid for approval/standard		CE	CE
Speed (rpm)	min ⁻¹	1950	2150
Power consumption	W	400	415
Current draw	A	1.75	1.82
Capacitor	μF	8	8
Capacitor voltage	VDB	400	400
Capacitor standard		S0 (CE)	S0 (CE)
Min. back pressure	Pa	0	250
Min. back pressure	in. wg	0	1
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	40	30
Starting current	A	2.2	2

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

Data according to Commission Regulation (EU) 327/2011 (EN 17166)

		Actual	Req. 2015			
01 Overall efficiency η_{es}	%	35.3	33.7	09 Power consumption P_e	kW	0.23
02 Measurement category		A		09 Air flow q_v	m³/h	460
03 Efficiency category		Static		09 Pressure increase p_{fs}	Pa	653
04 Efficiency grade N		45.6	44	10 Speed (rpm) n	min ⁻¹	2680
05 Variable speed drive		No		11 Specific ratio*		1.01

Data obtained at optimum efficiency level.

 * Specific ratio = $1 + p_b / 100\,000\text{ Pa}$

LU-140079

The efficiency values displayed for achieving conformity with the Ecodesign Regulation EU 327/2011 has been reached with defined air duct components (e.g. inlet rings).
The dimensions must be requested from ebm-papst. If other air conduction geometries are used on the installation side, the ebm-papst evaluation loses its validity/the conformity must be confirmed again.
The product does not fall within the scope of Regulation (EU) 2019/1781 due to the exception specified in Article 2 (2a) (motors completely integrated into a product).


ebmpapst

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Technical description

Weight	3.7 kg
Size	180 mm
Motor size	74
Rotor surface	Painted black
Impeller material	Sheet steel, galvanized
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; UKCA; CE
Approval	EAC

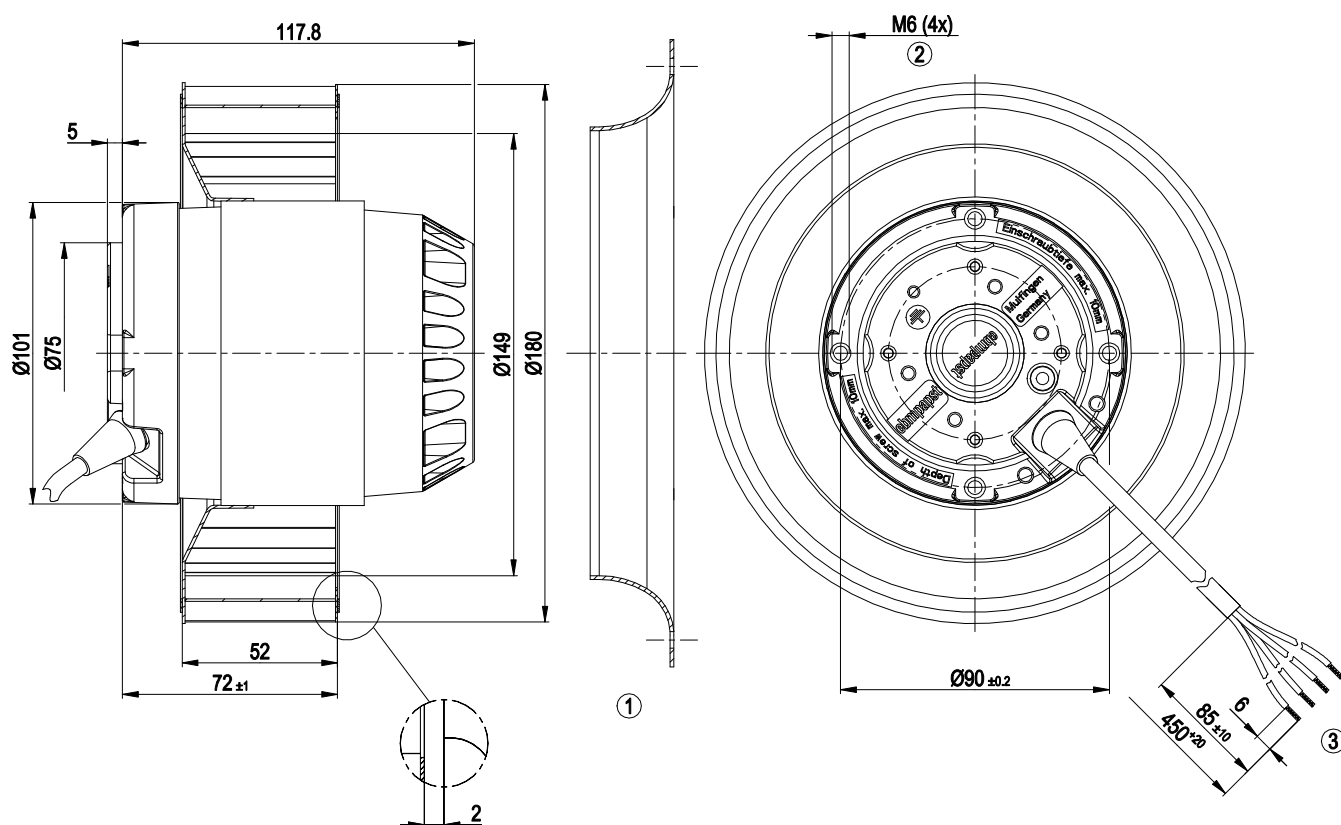


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AC centrifugal fan

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Product drawing

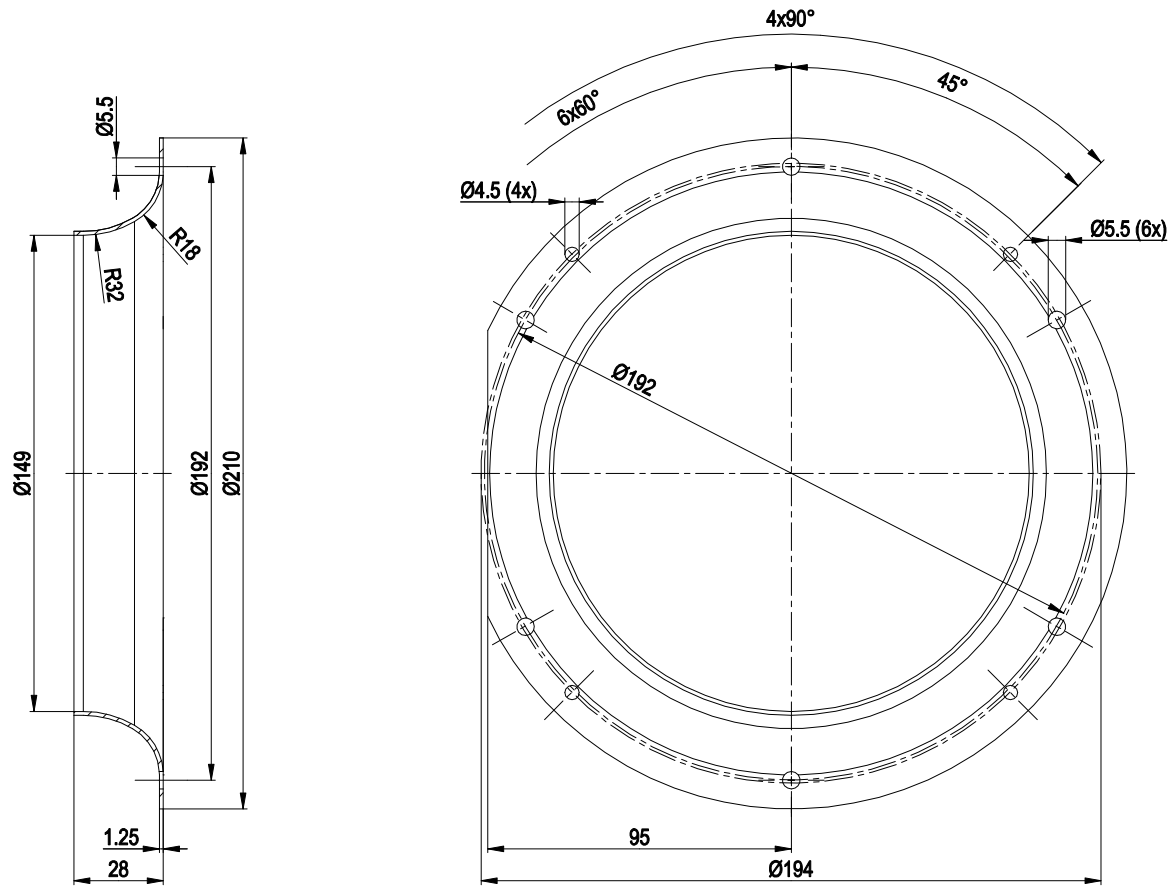


- | | |
|---|---|
| 1 | Accessory part: inlet ring 09597-2-4013 not included in scope of delivery |
| 2 | Max. clearance for screw 10 mm |
| 3 | Cable PVC 4G 0.50, 4x crimped splices |

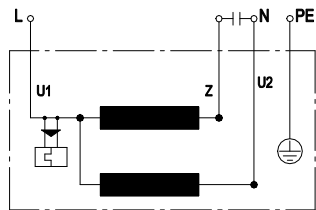
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Accessory part



Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

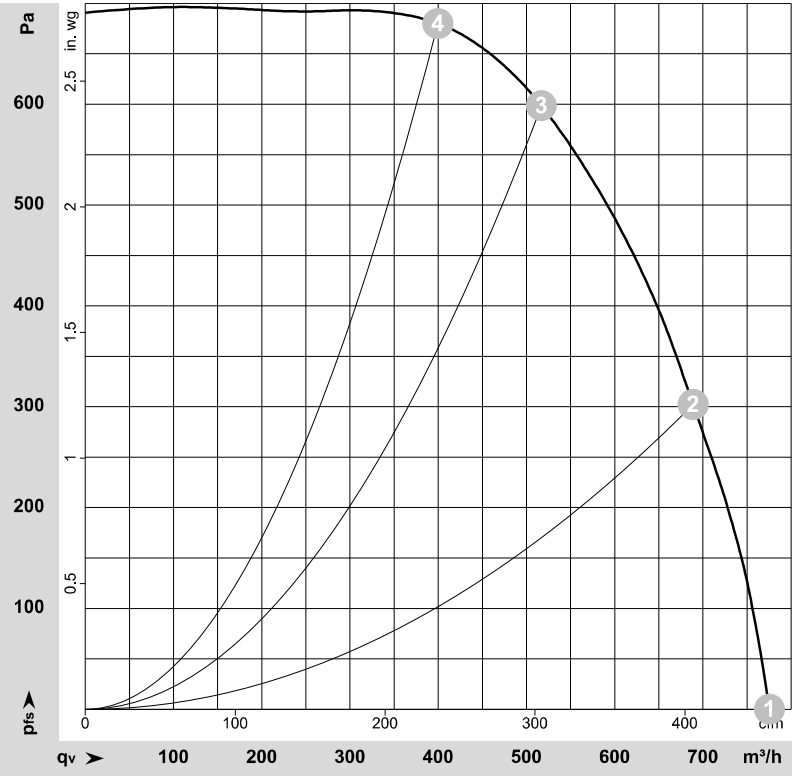


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AC centrifugal fan

forward-curved

Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-140079-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	Wired	U	f	n	P _e	I	q _v	p _{fs}	q _v	p _{fs}
		V	Hz	min ⁻¹	W	A	m³/h	Pa	cfm	in. wg
1	1~	230	50	1950	400	1.75	775	0	455	0.00
2	1~	230	50	2320	347	1.50	690	300	405	1.20
3	1~	230	50	2615	260	1.15	515	600	305	2.41
4	1~	230	50	2715	219	0.98	400	680	235	2.73

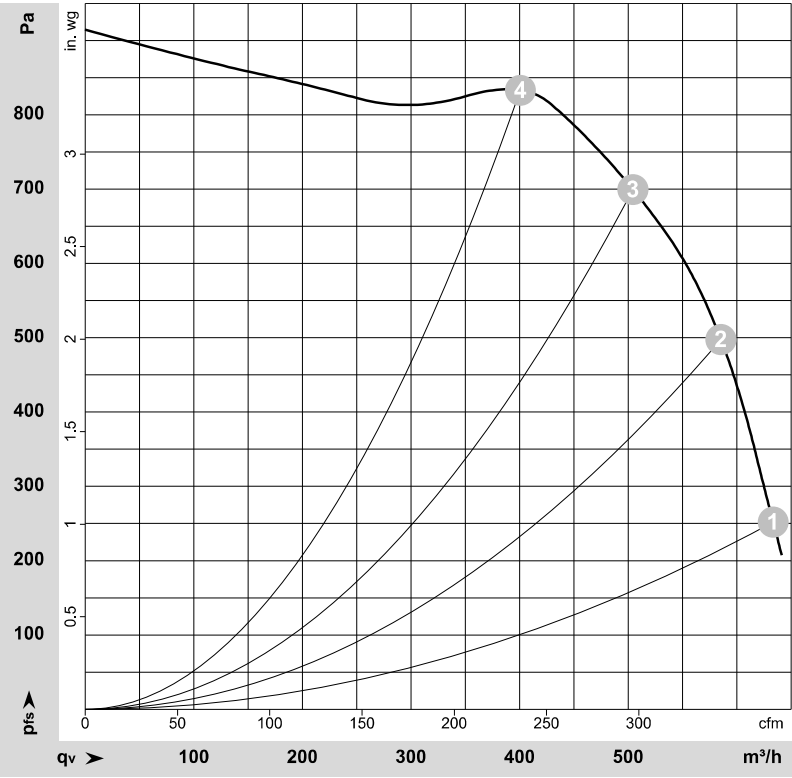
Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase



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Curves: Air performance 60 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-105273-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	Wired	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	in. wg
1	1~	230	60	2150	415	1.82	635	250	375	1.00
2	1~	230	60	2525	393	1.71	585	500	345	2.01
3	1~	230	60	2810	364	1.60	505	700	295	2.81
4	1~	230	60	3040	324	1.48	400	850	235	3.41

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase

