

R4E180-AB01-05

# AC centrifugal fan

forward curved, single inlet



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## Nominal data

Type	R4E180-AB01-05		
Motor	M4E068-DF		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		fa	fa
Valid for approval / standard		CE	CE
Speed	min <sup>-1</sup>	1250	1300
Power input	W	110	145
Current draw	A	0.49	0.64
Motor capacitor	µF	3	3
Capacitor voltage	VDB	450	450
Capacitor standard		P0 (CE)	P0 (CE)
Min. back pressure	Pa	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	50	40

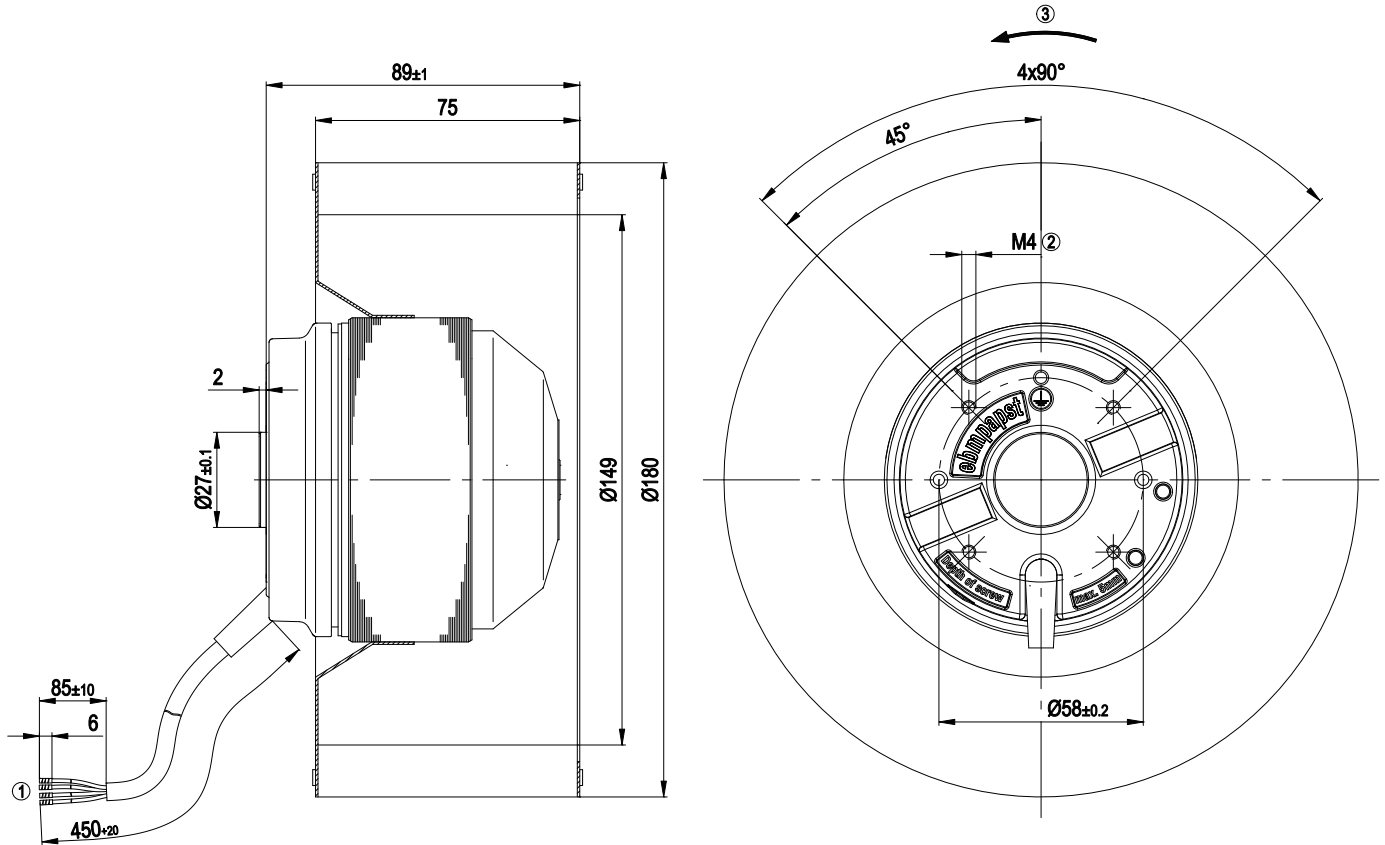
ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit  
Subject to alterations



### Technical features

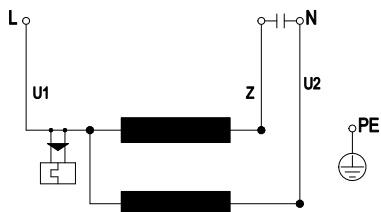
<b>Mass</b>	2.1 kg
<b>Size</b>	180 mm
<b>Material of impeller</b>	Sheet steel, galvanized
<b>Direction of rotation</b>	Clockwise, seen on rotor
<b>Type of protection</b>	IP 44; Depending on installation and position
<b>Insulation class</b>	"B"
<b>Humidity class</b>	F0
<b>Max. permissible ambient motor temp. (transp./ storage)</b>	+ 80 °C
<b>Min. permissible ambient motor temp. (transp./storage)</b>	- 40 °C
<b>Mounting position</b>	Any
<b>Condensate discharge holes</b>	None
<b>Operation mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)</b>	< 0.75 mA
<b>Motor protection</b>	Thermal overload protector (TOP) wired internally
<b>Cable exit</b>	Variable
<b>Protection class</b>	I (if protective earth is connected by customer)
<b>Product conforming to standard</b>	EN 60335-1; CE
<b>Approval</b>	CCC

## Product drawing



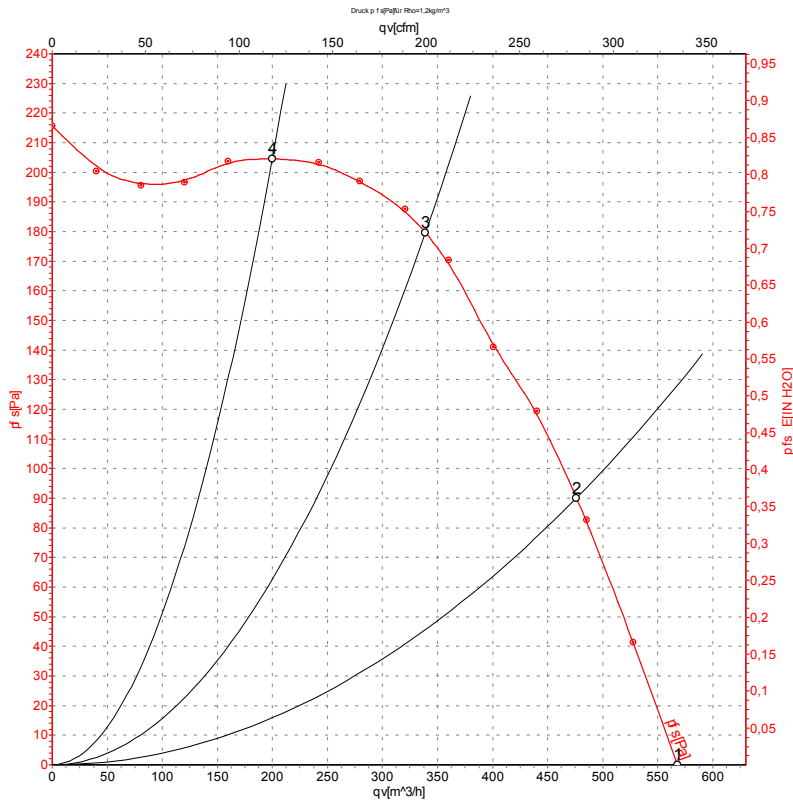
1	Connection line PVC, 4x brass lead tips crimped
2	Screw depth max. 5 mm
3	Direction of rotation clockwise, seen on rotor

## Connection screen



U1	blue	Z	brown	U2	black
PE	green/yellow				

## Charts: Air flow 50 Hz



Measurement: LU-105029

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: L<sub>wA</sub> measured as per ISO 13347 / L<sub>pA</sub> 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.

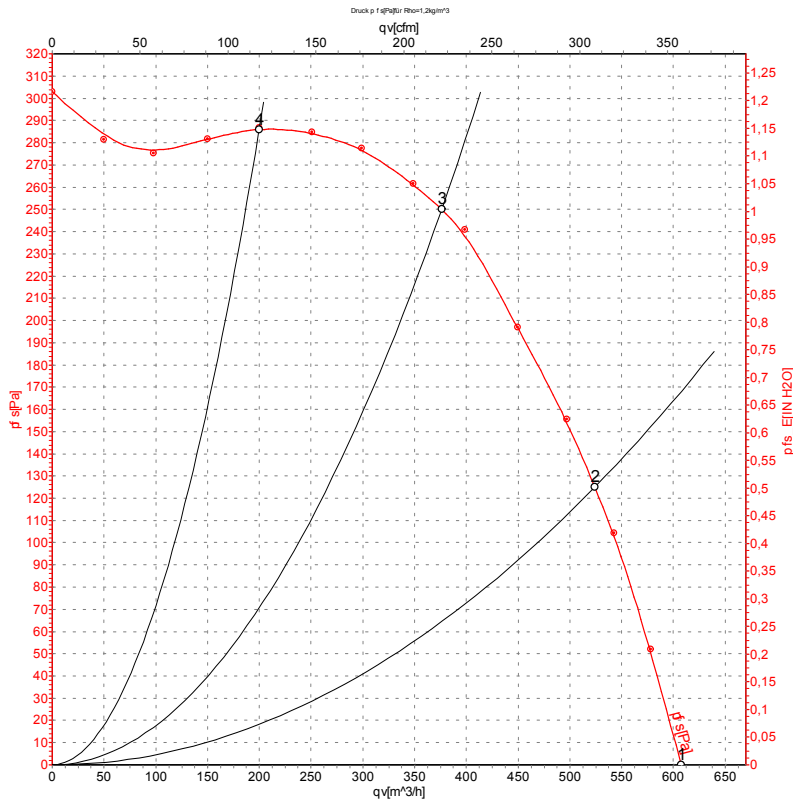
## Measured values

	U	f	n	P <sub>e</sub>	I	qv	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	230	50	1250	110	0.49	570	0
2	230	50	1310	96	0.42	475	90
3	230	50	1380	83	0.37	340	180
4	230	50	1425	74	0.34	200	205

U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase



## Charts: Air flow 60 Hz



Measurement: LU-105031

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	Pe	I	qv	Pfs
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	230	60	1300	145	0.64	610	0
2	230	60	1460	127	0.55	525	125
3	230	60	1595	110	0.49	375	250
4	230	60	1690	95	0.42	200	287

U = Supply voltage · f = Frequency · n = Speed · Pe = Power input · I = Current draw · qv = Air flow · Pfs = Pressure increase

