R2E180-AU01-09

AC centrifugal fan

single-intake

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Nominal data

Type	**R2E180-AU01-09**
Motor	**M2E068-CF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		fa
Valid for approval/standard		CE
Speed (rpm)	min^{-1}	2400
Power consumption	W	85
Current draw	A	0.38
Capacitor	µF	2
Capacitor voltage	VDB	400
Capacitor standard		S0 (CE)
Min. back pressure	Pa	0
Min. back pressure	inH2O	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	100

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

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Technical description

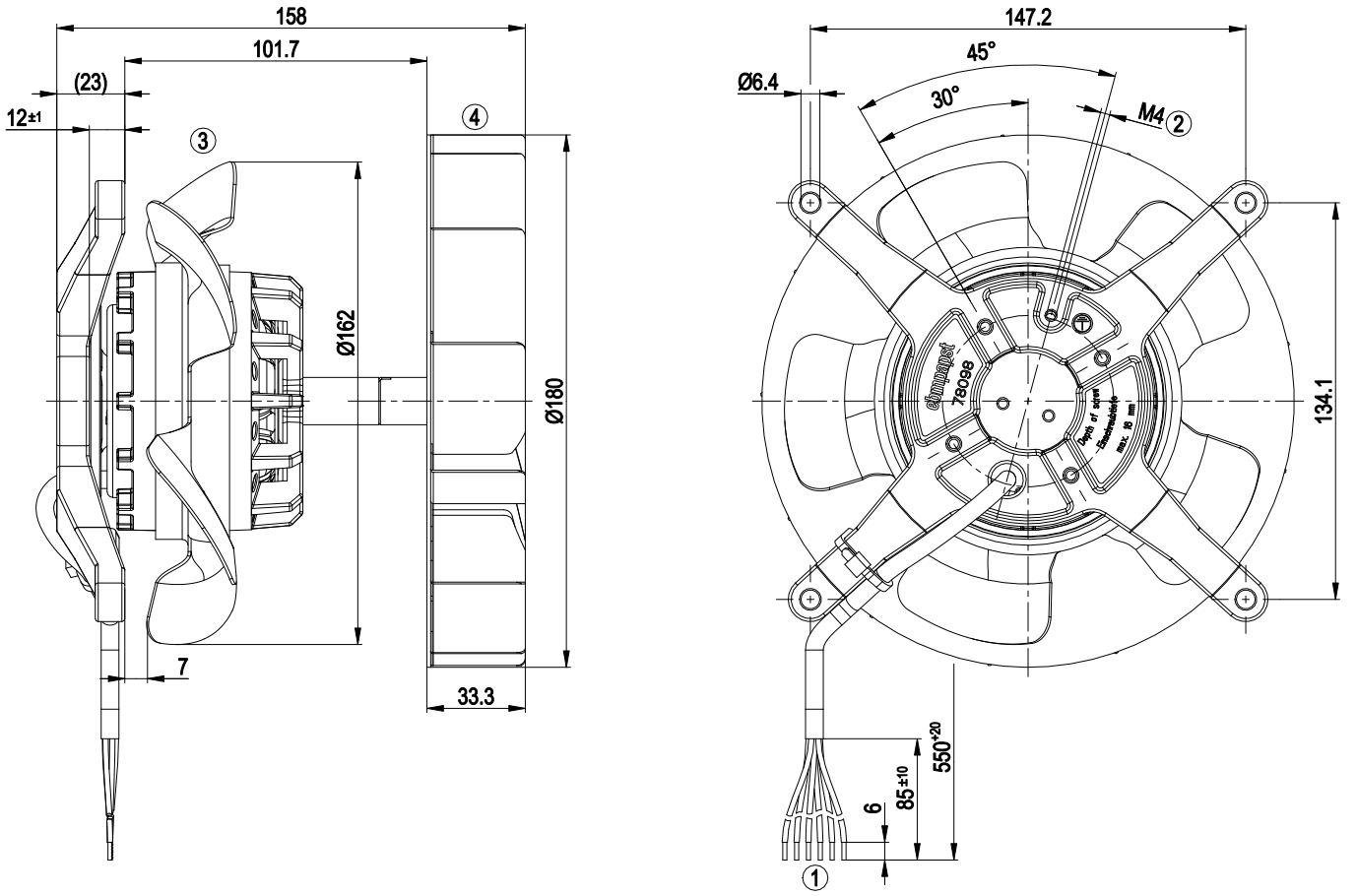
Weight	2.3 kg
Fan size	180 mm
Impeller material	Sheet steel, rust- and acid-resistant
Motor suspension	Motor mounted with brackets on one side
Direction of rotation	Right and left
Degree of protection	IP00
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None, open rotor
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) with basic insulation
With cable	Variable
Protection class	I (if protective earth is connected by customer to the housing's connection point)
Conformity with standards	EN 60335-1; CE
Approval	CCC

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Product drawing



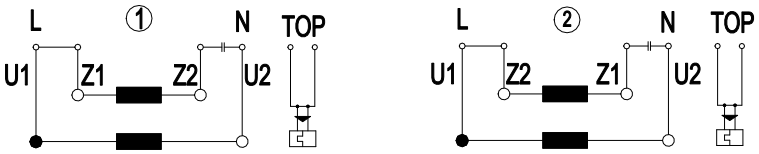
1	Cable halogen-silicone-free 6x 0.5 mm², 6x crimped splices
2	Max. clearance for screw 16 mm
3	Centrifugal fan impeller (sheet steel, galvanized)
4	Centrifugal fan impeller (sheet steel, rust and acid-resistant)

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Connection diagram



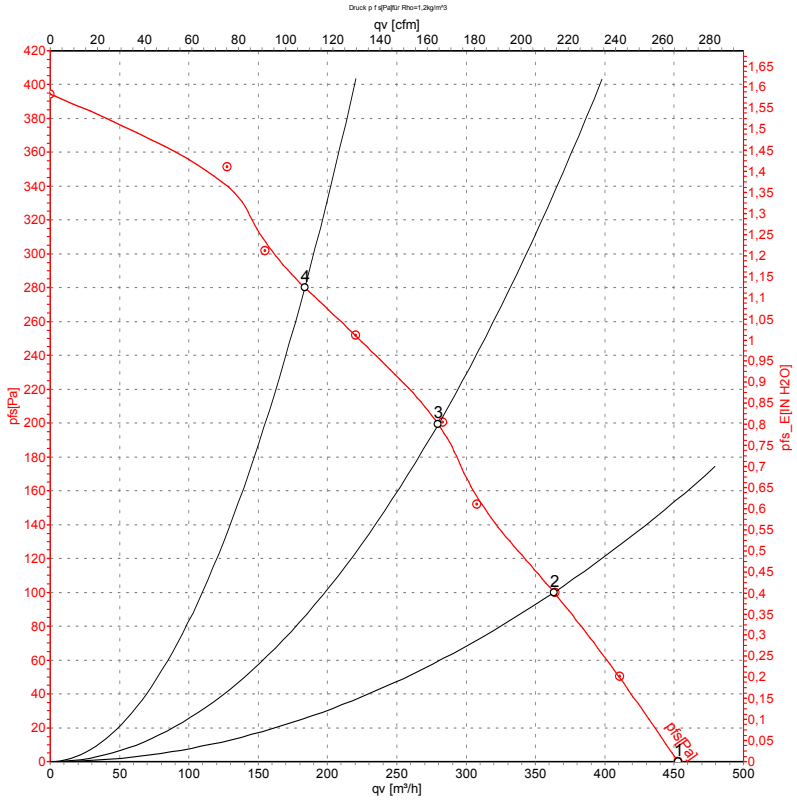
1	Clockwise operation
2	Counterclockwise operation
U1	black
U2	gray
Z1	blue
Z2	brown
TOP	2x white

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Curves: Air performance 50 Hz



Measurement: LU-5453-1

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

	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	50	2400	85	0.38	455	0	265	0.00
2	230	50	2455	82	0.36	365	100	215	0.40
3	230	50	2550	74	0.33	280	200	165	0.80
4	230	50	2570	72	0.32	185	280	110	1.12

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

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