

R2E140-AT77-21 ebmpapst Datasheet

sales@fansco.com

www.fansco.com

Nominal data

Type	R2E140-AT77-21		
Motor	M2E068-BF		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		CE	CE
Speed (rpm)	min ⁻¹	1400	1500
Power consumption	W	105	115
Current draw	A	0.46	0.51
Capacitor	μF	2	2
Capacitor voltage	VDB	450	450
Capacitor standard		S0 (CE)	S0 (CE)
Min. back pressure	Pa	0	0
Min. back pressure	in. wg	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	40	35
Starting current	A	0.47	0.48

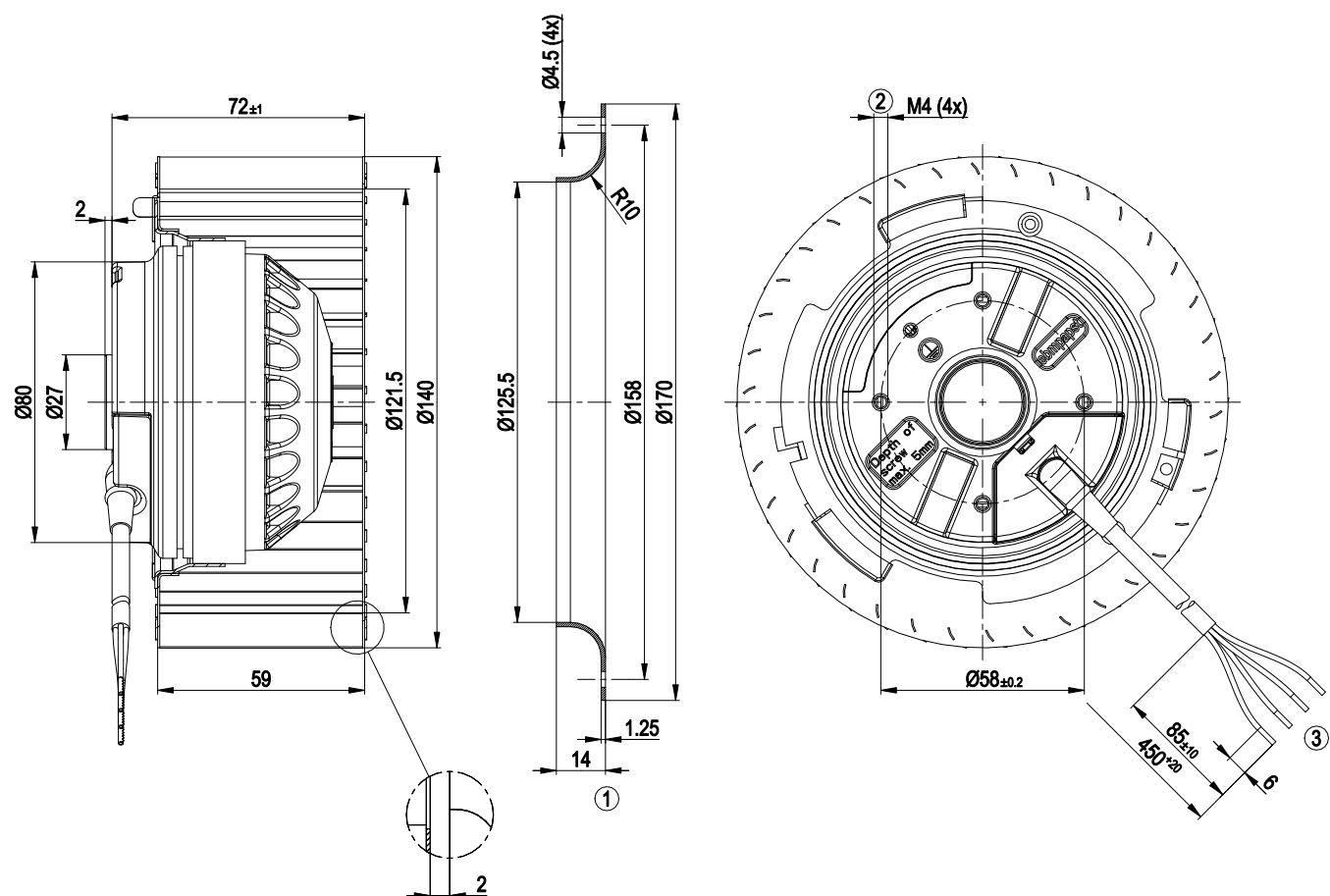
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change



Technical description

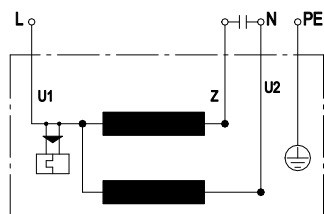
Weight	1.16 kg
Size	140 mm
Motor size	68
Rotor surface	Painted black
Impeller material	Sheet aluminum, sheet steel blank galvanized
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1
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	Temperature limiter manual reset
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

Product drawing



- | | |
|---|--|
| 1 | Accessory part: inlet ring 09576-2-4013, not included in scope of delivery |
| 2 | Max. clearance for screw 5 mm |
| 3 | Cable PVC 4G 0.5 mm ² , 4x crimped splices |

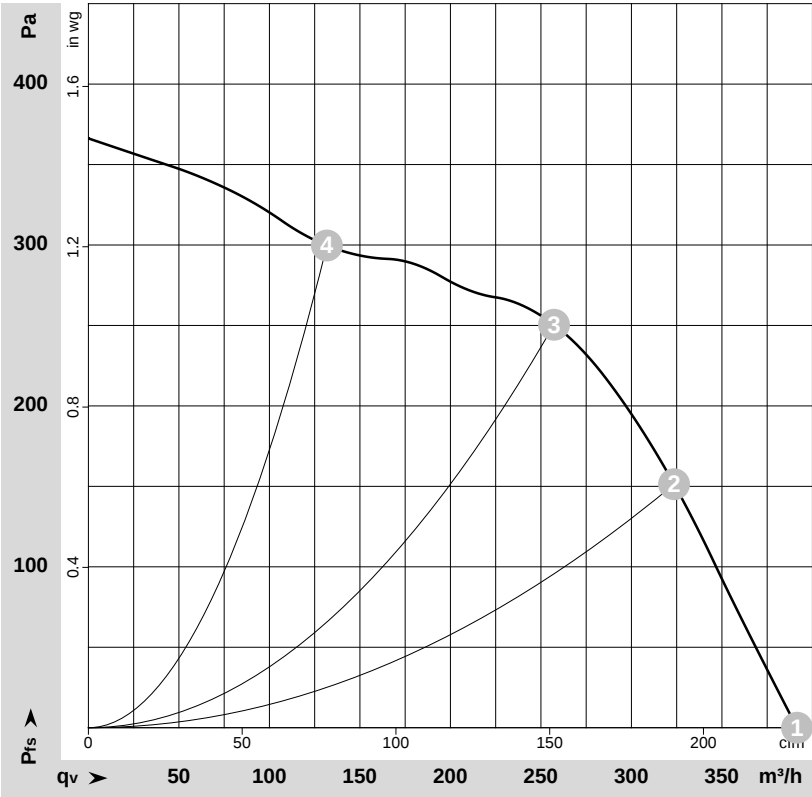
Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				



Curves: Air performance 50 Hz



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

Measurement: LU-173576-1

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.

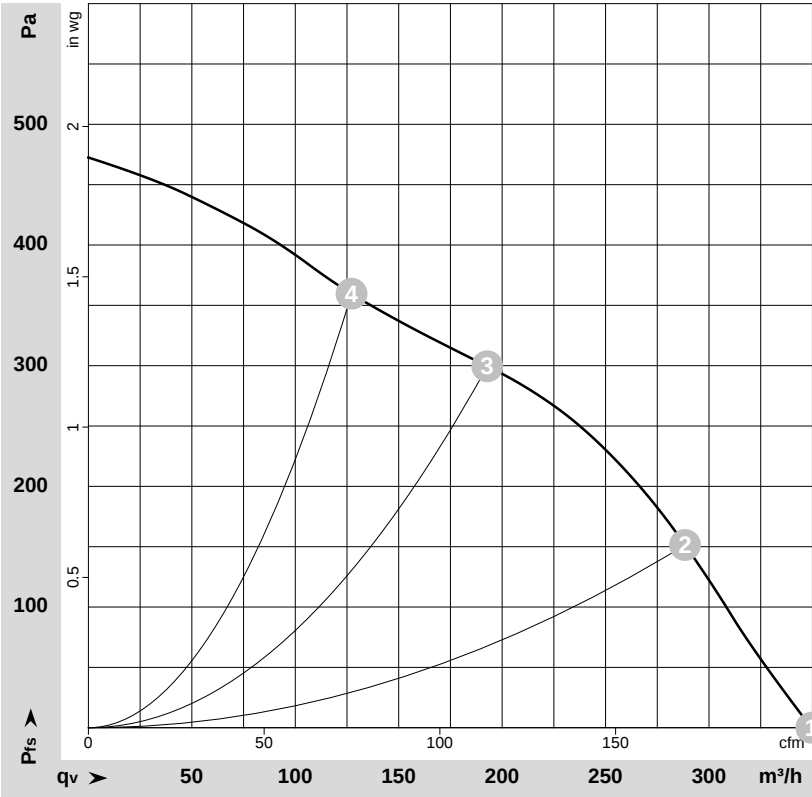
Measured values

	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	in. wg
1	230	50	1400	105	0.46	390	0	230	0.00
2	230	50	1825	91	0.40	325	150	190	0.60
3	230	50	2095	85	0.37	255	250	150	1.00
4	230	50	2450	74	0.33	130	300	80	1.20

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



Curves: Air performance 60 Hz



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

Measurement: LU-173630-1

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 _{ts}	q _v	P _{ts}
	V	Hz	min ⁻¹	W	A	m³/h	Pa	cfm	in. wg
1	230	60	1500	115	0.51	350	0	205	0.00
2	230	60	1755	103	0.45	290	150	170	0.60
3	230	60	2355	98	0.42	195	300	115	1.20
4	230	60	2670	92	0.40	125	360	75	1.45

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

