

R2E140-AI28-37 ebmpapst Datasheet

sales@fansco.com

www.fansco.com

Limited partnership · Headquarters Muldingen
County court Stuttgart · HRA 590344

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

Nominal data

Type	R2E140-AI28-37		
Motor	M2E068-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 (rpm)	min ⁻¹	2400	2350
Power input	W	160	205
Current draw	A	0.7	0.9
Motor capacitor	µF	4	4
Capacitor voltage	VDB	400	400
Capacitor standard		S0 (CE)	S0 (CE)
Min. back pressure	Pa	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	70	45

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations



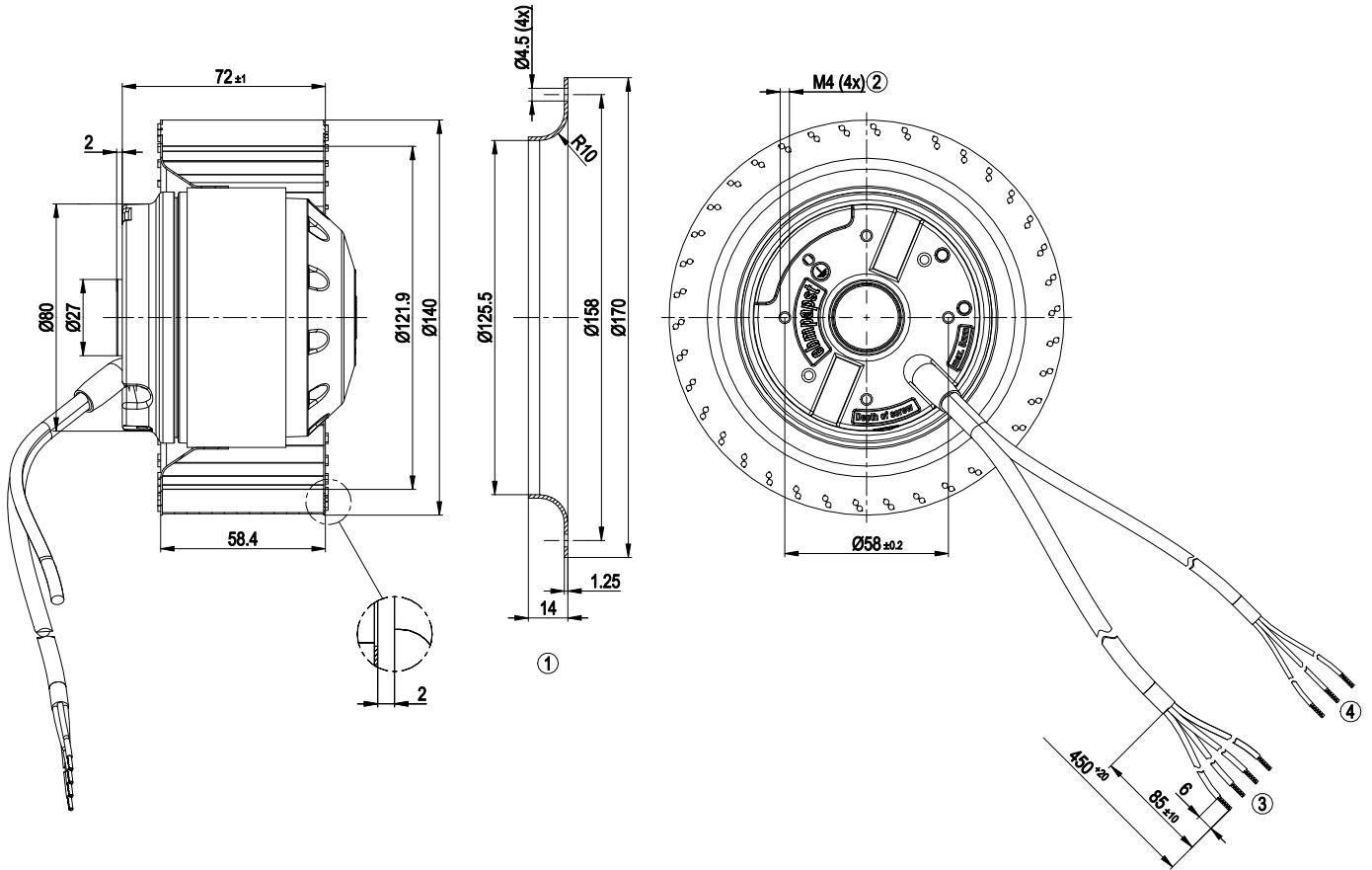
Technical features

Mass	2.1 kg
Size	140 mm
Surface of rotor	Uncoated
Material of impeller	Sheet steel, galvanised
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position
Insulation class	"B"
Humidity (F)/environmental protection class (H)	H0 - dry environment
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
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

AC centrifugal fan

forward curved, single inlet

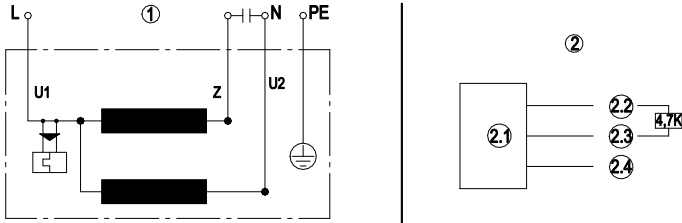
Product drawing



1	Accessory part: Inlet nozzle 09576-2-4013, not included in scope of delivery
2	Thread reach max. 5 mm
3	Connection line PVC 4G AWG20, 4x lead tips crimped
4	Connection line Raychem Spec. 44, AWG24, 3x lead tips crimped

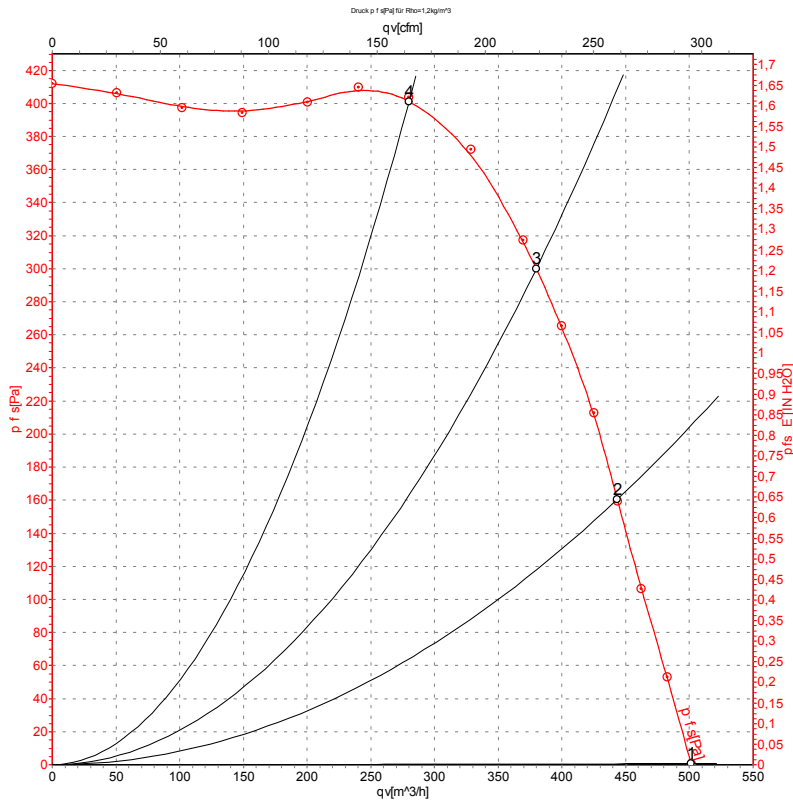


Connection screen



1	Fan connection diagram
U1	Blue
Z	brown
U2	black
PE	green/yellow
2	Hall IC circuit
2.1	Hall IC
2.2	Red (+5V)
2.3	White (out)
2.4	Black (0V)

Charts: Air flow 50 Hz



Measurement: LU-104964-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebmpapst. Suction-side noise levels: L_{wA} measured as per ISO 13347 / L_{pA} 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.

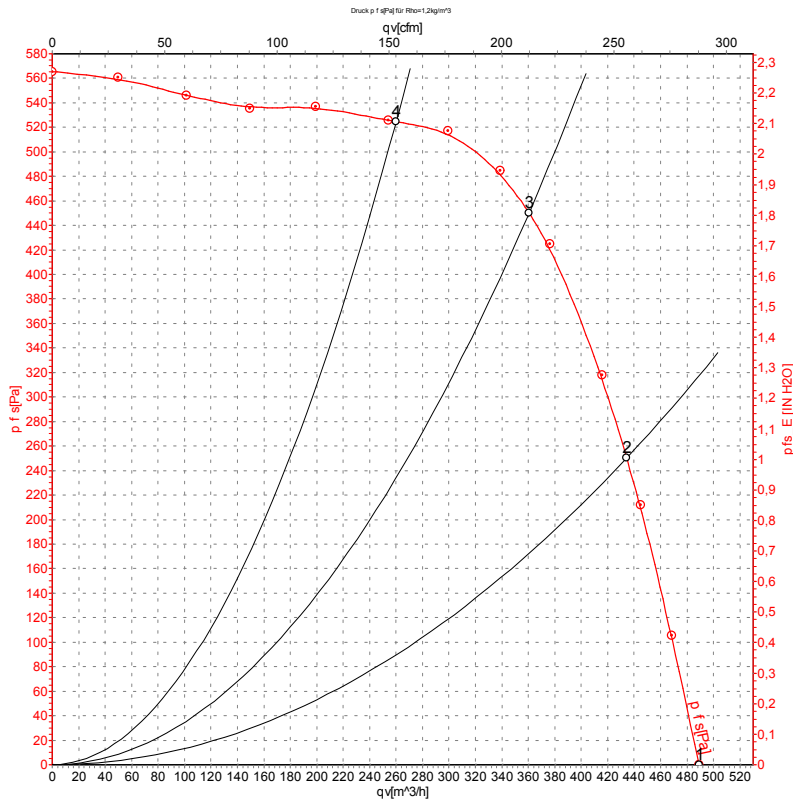
Measured values

	U	f	n	P _e	I	q _v	P _{is}	q _v	P _{is}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa	cfm	in. wg
1	230	50	2400	160	0.70	500	0	295	0.00
2	230	50	2495	143	0.62	445	160	260	0.64
3	230	50	2595	127	0.55	380	300	225	1.20
4	230	50	2710	107	0.47	280	400	165	1.61

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · q_v = Air flow · P_{is} = Pressure increase



Charts: Air flow 60 Hz



Measurement: LU-104967-1

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_{wA} measured as per ISO 13347 / L_{pA} 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	q _v	P _{fs}	q _v	P _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa	cfm	in. wg
1	230	60	2350	205	0.90	490	0	290	0.00
2	230	60	2660	186	0.82	435	250	255	1.00
3	230	60	2930	167	0.75	360	450	210	1.81
4	230	60	3135	146	0.67	260	525	155	2.11

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · q_v = Air flow · P_{fs} = Pressure increase

