

R2E160-BL82-10 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	R2E160-BL82-10	
Motor	M2E068-CF	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		fa
Valid for approval / standard		CE
Speed (rpm)	min <sup>-1</sup>	2700
Power input	W	55
Current draw	A	0.25
Motor capacitor	µF	2
Capacitor voltage	VDB	400
Capacitor standard		S0 (CE)
Min. back pressure	Pa	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	30
Starting current	A	0.64

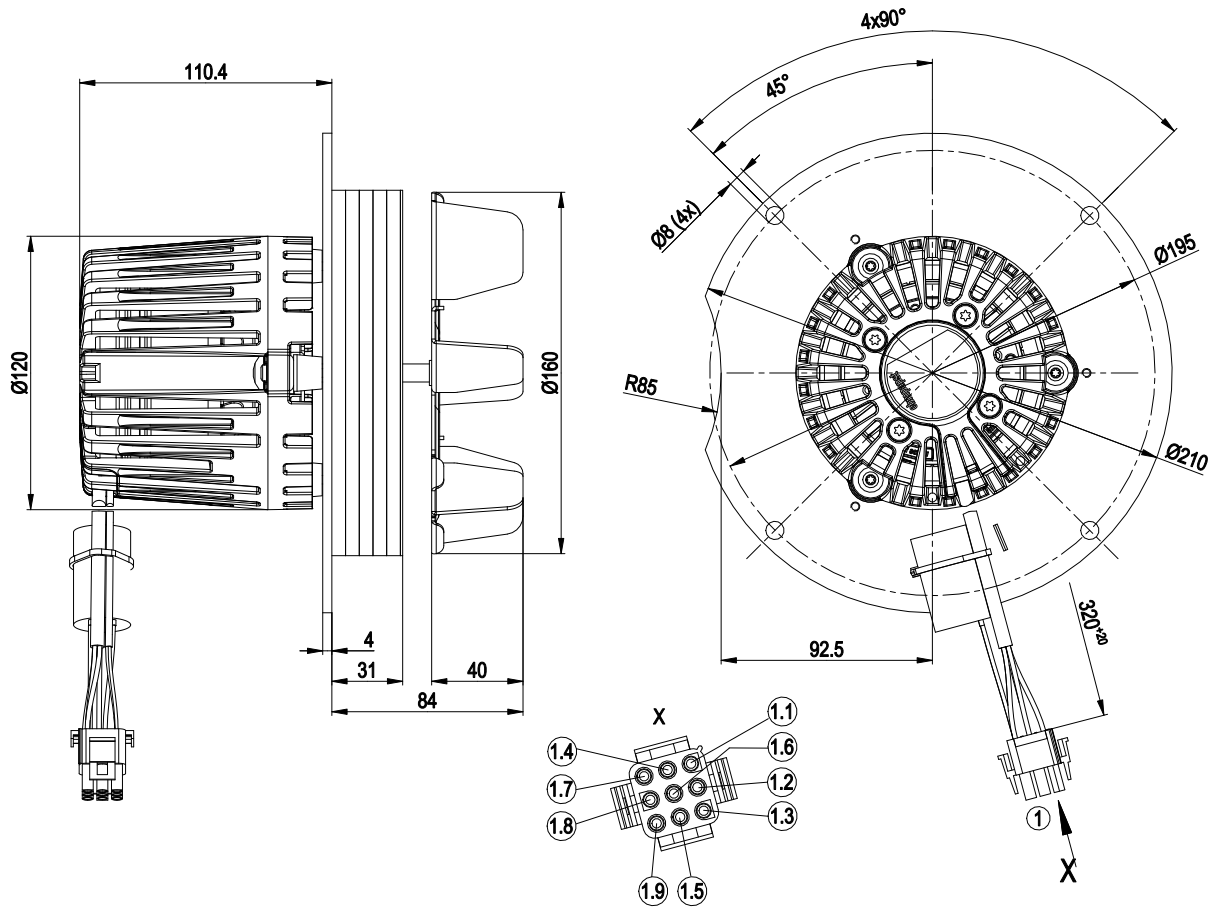
ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit  
 Subject to alterations



## Technical features

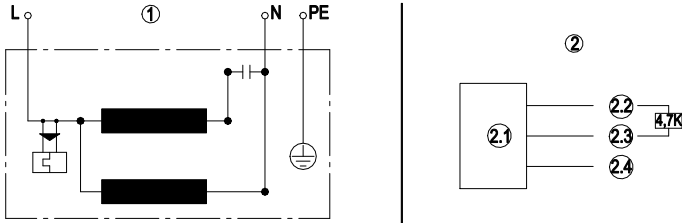
Mass	3.8 kg
Size	160 mm
Surface of rotor	Uncoated
Material of impeller	Sheet steel, rust-resistant
Number of blades	6
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position
Insulation class	"F"
Humidity (F)/environmental protection class (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)
Motor capacitor according to EN 60252-1 in safety protection class	S0
Product conforming to standard	EN 60335-1; CE

Product drawing



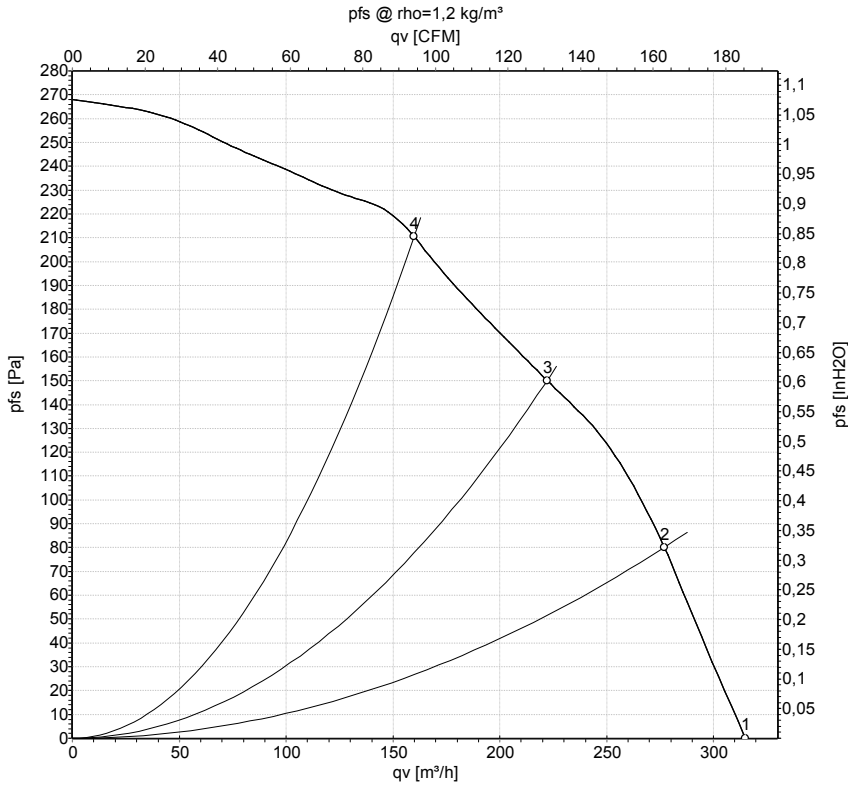
1	Connection line silicone 4G 0.5 mm <sup>2</sup> , connection line Raychem Spec. 44 AWG24, 1x tyco 9-pin connector housing 1863003-1, 4x tyco female connector 926882-1, 3x tyco female connector 350925-1
1.1	black + capacitor
1.2	blue
1.3	green/yellow
1.4	brown + capacitor
1.5	not used
1.6	not used
1.7	+5 V (red)
1.8	out (white)
1.9	0 V (black)

## Connection screen



1	Fan connection diagram
L	blue
N	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-153446-1

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<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	q <sub>v</sub>	p <sub>fs</sub>	q <sub>v</sub>	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	cfm	inH <sub>2</sub> O
1	230	50	2700	55	0.25	315	0	185	0.00
2	230	50	2705	55	0.25	275	80	165	0.32
3	230	50	2720	54	0.24	220	150	130	0.60
4	230	50	2750	51	0.24	160	210	95	0.84

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

