

# AC circulation blower for hot air

## single-intake

R2E160-BL82-09 ebmpapst Datasheet  
 sales@fansco.com  
 www.fansco.com

Limited partnership · Headquarters Muldingen  
 Amtsgericht (court of registration) Stuttgart · HRA 590344  
 General partner Elektrobau Muldingen GmbH · Headquarters Muldingen  
 Amtsgericht (court of registration) Stuttgart · HRB 590142

### Nominal data

Type	R2E160-BL82-09	
Motor	M2E068-CF	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		fa
Valid for approval/standard		CE
Speed	min <sup>-1</sup>	2700
Power consumption	W	55
Current draw	A	0.25
Capacitor	µF	2
Capacitor voltage	VDB	400
Capacitor standard		P0 (CE)
Min. back pressure	Pa	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	30
Starting current	A	0.64

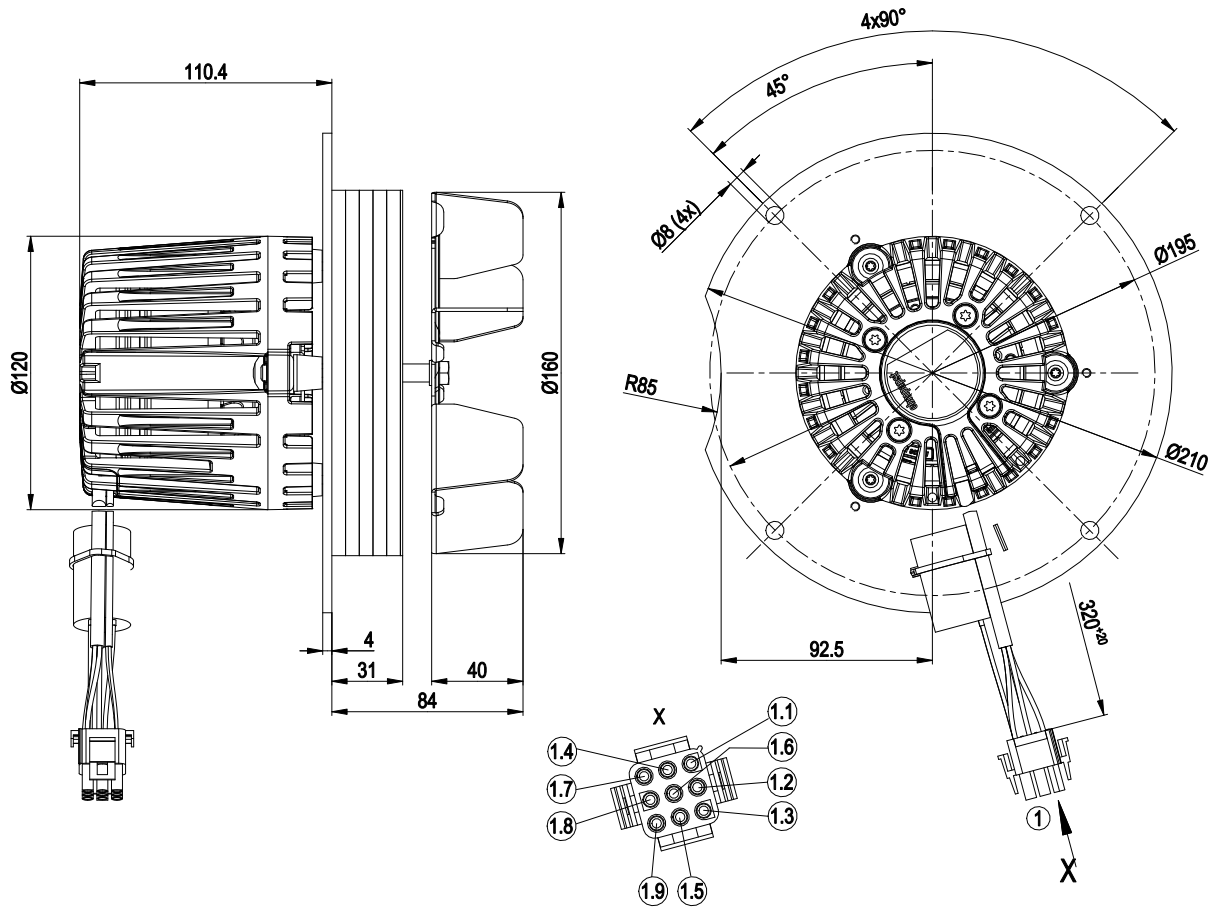
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment  
 Subject to change



## Technical description

<b>Weight</b>	3.8 kg
<b>Fan size</b>	160 mm
<b>Rotor surface</b>	Unpainted
<b>Impeller material</b>	Sheet steel, rust-resistant
<b>Number of blades</b>	6
<b>Direction of rotation</b>	Clockwise, viewed toward rotor
<b>Degree of protection</b>	IP44; installation- and position-dependent
<b>Insulation class</b>	"F"
<b>Moisture (F) / Environmental (H) protection class</b>	F0
<b>Max. permitted ambient temp. for motor (transport/storage)</b>	+ 80 °C
<b>Min. permitted ambient temp. for motor (transport/storage)</b>	- 40 °C
<b>Installation position</b>	Any
<b>Condensation drainage holes</b>	None
<b>Mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)</b>	< 0.75 mA
<b>Motor protection</b>	Thermal overload protector (TOP) internally connected
<b>With cable</b>	Variable
<b>Protection class</b>	I (with customer connection of protective earth)
<b>Motor capacitor according to EN 60252-1 in safety protection class</b>	P0/S0
<b>Conformity with standards</b>	EN 60335-1; CE

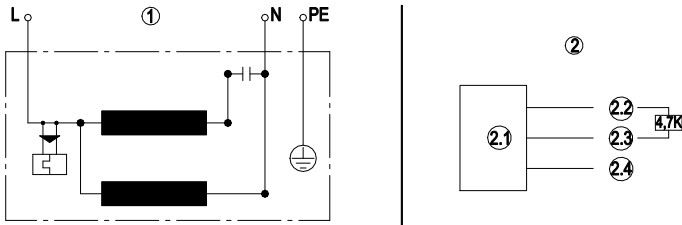
Product drawing



1	Cable silicone 4G 0.5 mm <sup>2</sup> , cable Raychem Spec. 44 AWG24, 1x 9-pole connector housing tyco 1863003-1, 4x socket tyco 926882-1, 3x socket tyco 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)



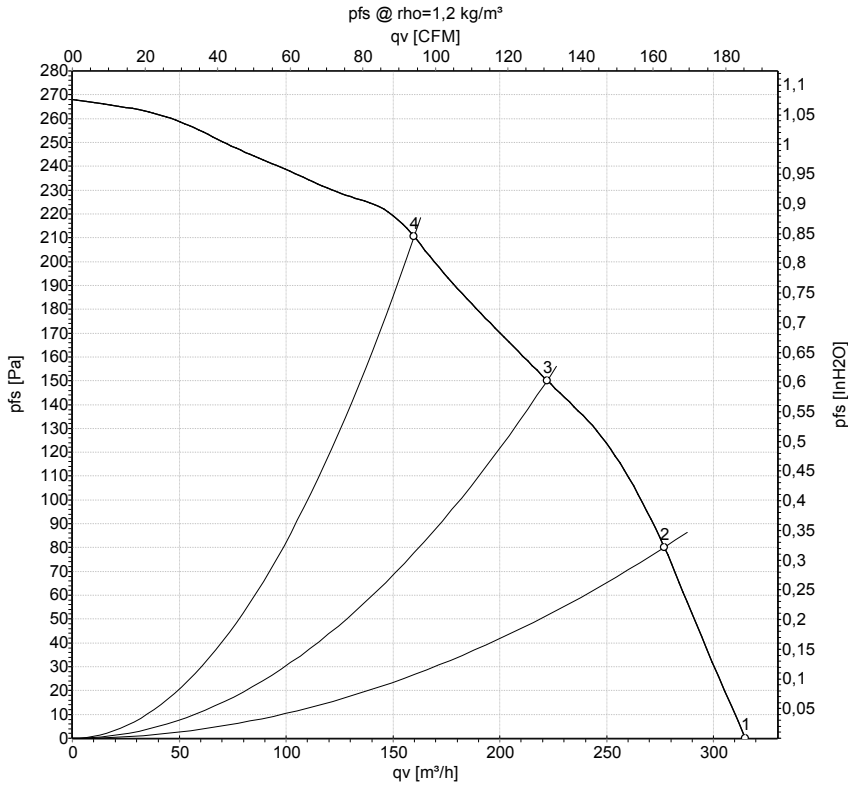
## Connection diagram



1	Fan connection diagram
L	blue
N	black
PE	green/yellow
2	Hall IC circuit
2.1	Hall IC
2.2	red (+5 V)
2.3	white (out)
2.4	black (0 V)



## Curves: Air performance 50 Hz



Measurement: LU-153446-1

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 <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	2700	55	0.25	315	0
2	230	50	2705	55	0.25	275	80
3	230	50	2720	54	0.24	220	150
4	230	50	2750	51	0.24	160	210

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

