

EC centrifugal fan

backward-curved, single-intake

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Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	R1G175-AB75-24	
Motor	M1G055-BD	
Nominal voltage	VDC	12
Nominal voltage range	VDC	8 .. 14
Frequency	Hz	-
Method of obtaining data		fa
Speed (rpm)	min ⁻¹	2800
Power consumption	W	27
Current draw	A	2.5
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

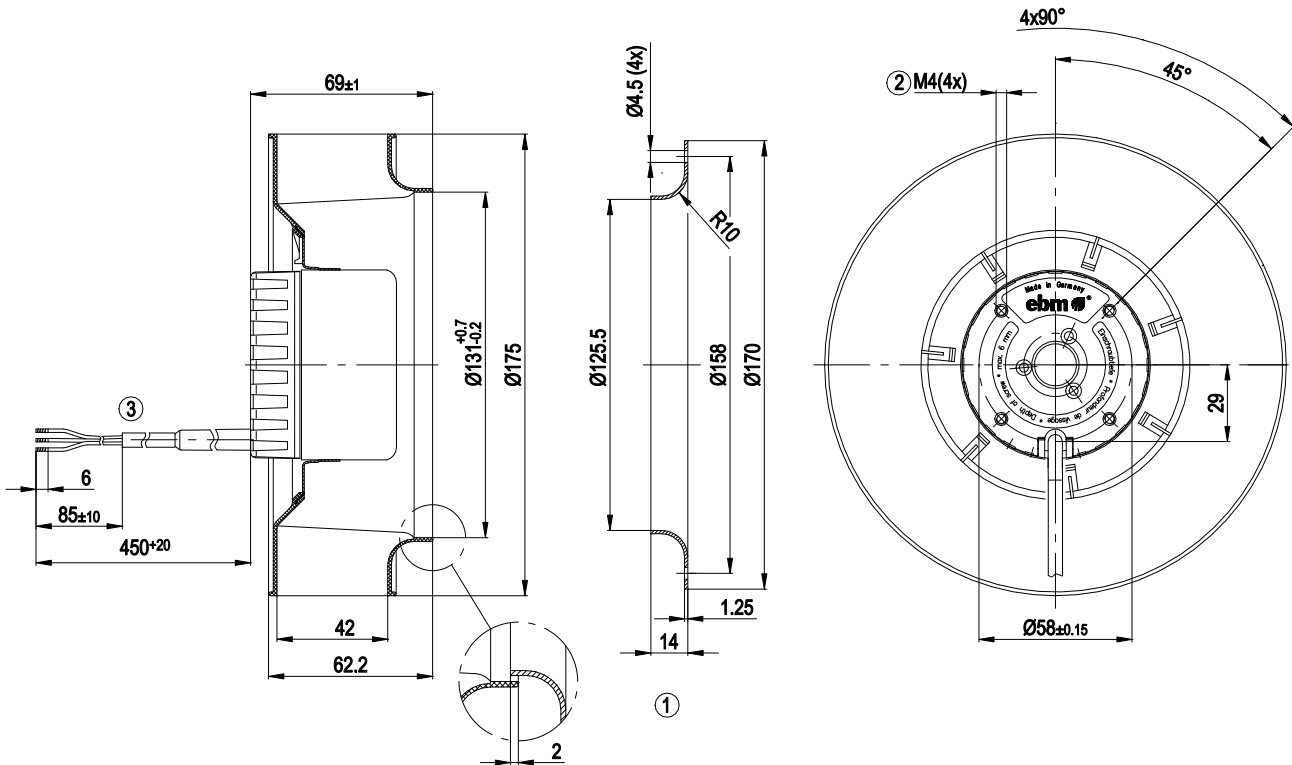
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change



Technical description

Weight	0.7 kg
Fan size	175 mm
Rotor surface	Thick-film passivated
Impeller material	PA plastic
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP20
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F0
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
Mode	S1
Motor bearing	Ball bearing
Technical features	<ul style="list-style-type: none"> - Tach output - Motor current limitation - Soft start - PWM control input
Motor protection	Reverse polarity and locked-rotor protection
With cable	Variable
Conformity with standards	EN 60950-1

Product drawing



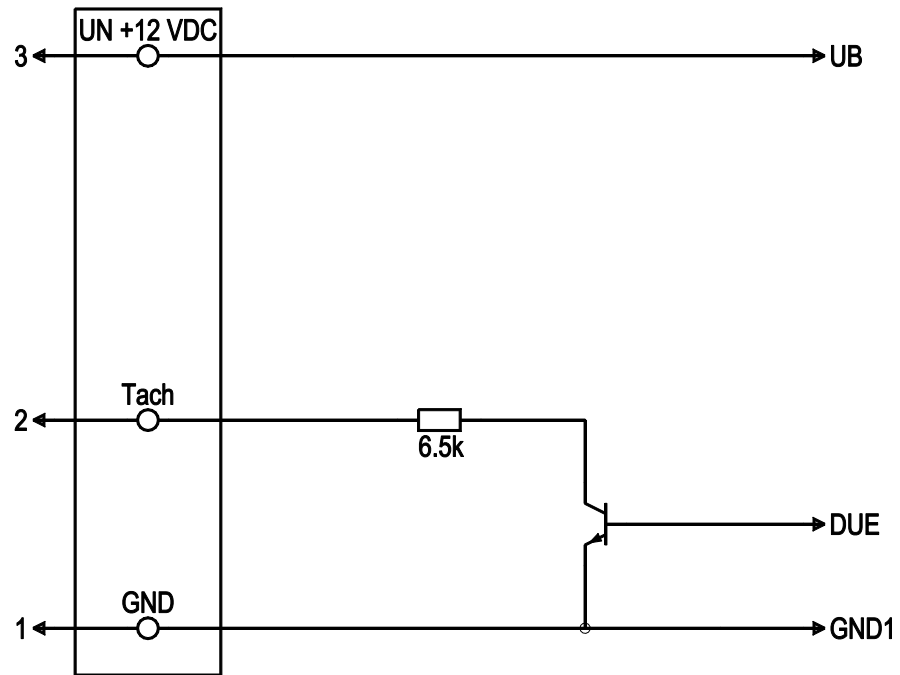
- | | |
|---|---|
| 1 | Accessory part: inlet ring 09576-2-4013 not included in scope of delivery |
| 2 | Max. clearance for screw 6 mm |
| 3 | Cable PVC AWG20, 3x crimped splices |

Connection diagram

Customer circuit

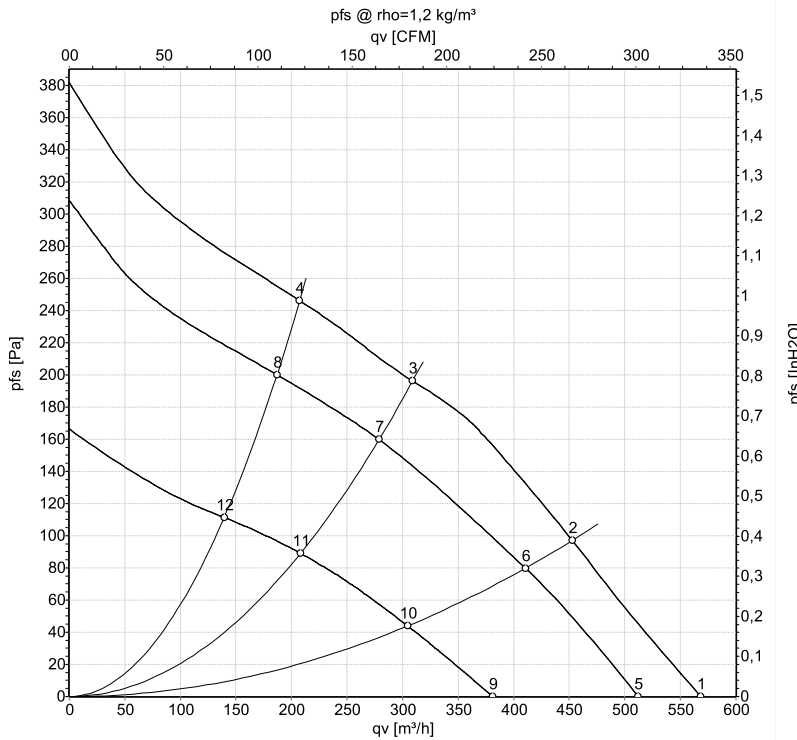
Connection

Fan / Motor



No.	Conn.	Designation	Color	Function/assignment
	1	GND	blue	Reference ground
	2	Tach	white	Tach output, 2 pulses per revolution, Isink max = 10 mA
	3	UN +12 VDC	red	Power supply 12 VDC, maximum ripple 3.5%

Curves: Air performance



Measurement: LU-53571-1
 Measurement: LU-53536-1
 Measurement: LU-53538-1

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	n	P _{ed}	I	qv	P _{fs}	qv	P _{fs}
	V	min ⁻¹	W	A	m ³ /h	Pa	CFM	inH ₂ O
1	14	3100	37	2.90	570	0	335	0.00
2	14	2980	40	3.15	455	98	265	0.39
3	14	2890	42	3.34	310	196	180	0.79
4	14	2925	41	3.26	205	246	120	0.99
5	12	2800	27	2.50	510	0	300	0.00
6	12	2680	30	2.73	410	80	240	0.32
7	12	2610	31	2.87	280	160	165	0.64
8	12	2645	30	2.80	185	200	110	0.80
9	8	2075	11	1.64	380	0	225	0.00
10	8	2000	13	1.79	305	44	180	0.18
11	8	1960	13	1.87	210	89	120	0.36
12	8	1990	13	1.81	140	111	80	0.45

U = Power supply · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · qv = Air flow · P_{fs} = Pressure increase

