R1G175-AB63-39

EC centrifugal fan

backward curved, single inlet



ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.com

Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

General partner: Elektrobau Mulfingen GmbH · Headquarters Mulfingen
County court Stuttgart · HRB 590142

Nominal data

Type	**R1G175-AB63-39**	
Motor	**M1G055-BD**	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Type of data definition		fa
Speed	min-1	3100
Power input	W	34
Current draw	A	1.6
Max. ambient temperature	°C	+ 60

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

EC centrifugal fan

backward curved, single inlet

Technical features

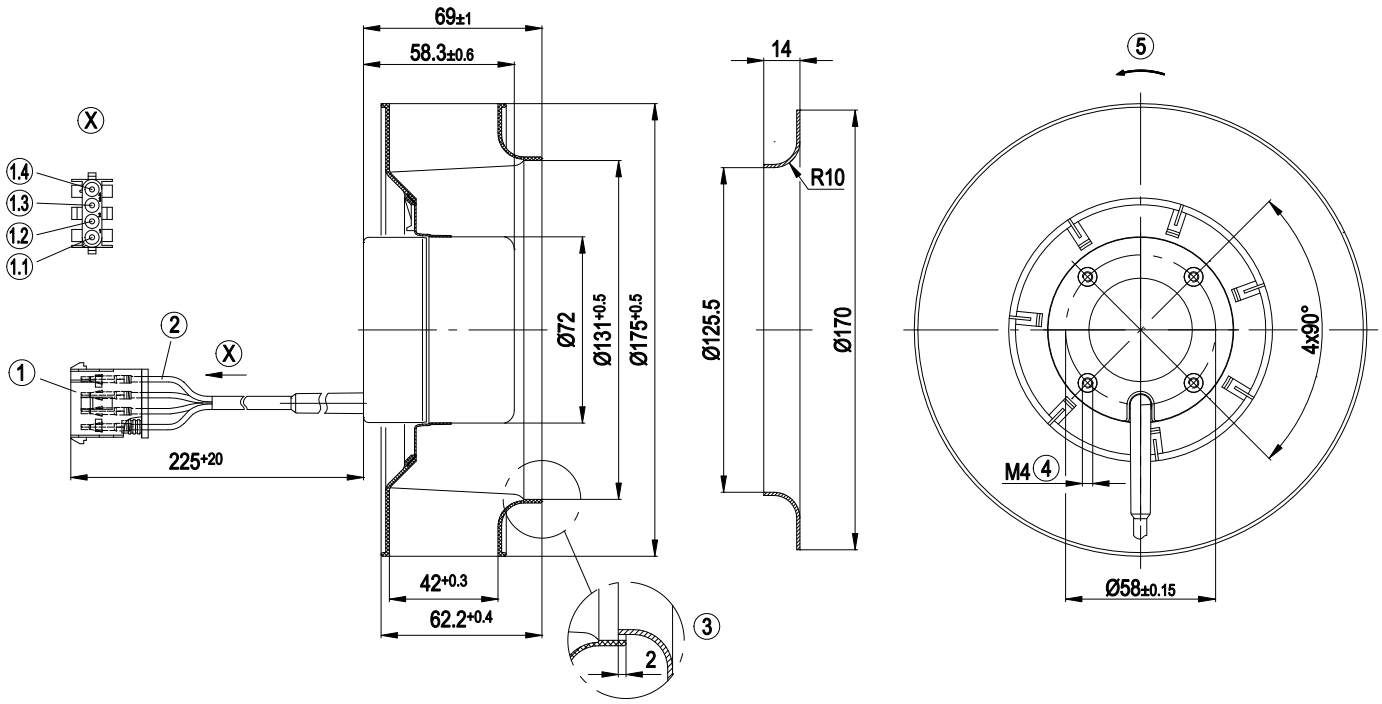
Mass	0.79 kg
Size	175 mm
Surface of rotor	Coated in black
Material of impeller	PA plastic 6.6, fiberglass-reinforced
Number of blades	7
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44
Insulation class	"B"
Humidity class	F4-2
Max. permissible ambient motor temp. (transp./ storage)	+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
Technical features	- Control input 0-10 VDC / PWM - Tach output - Soft start
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC interference emission	Acc. to EN 61000-6-3
Electrical leads	With plug
Motor protection	Reverse polarity and locked-rotor protection
Cable exit	Variable
Approval	CSA C22.2 Nr.77; UL 1004-1

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 7938 81-0 · Fax +49 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC centrifugal fan

backward curved, single inlet

Product drawing



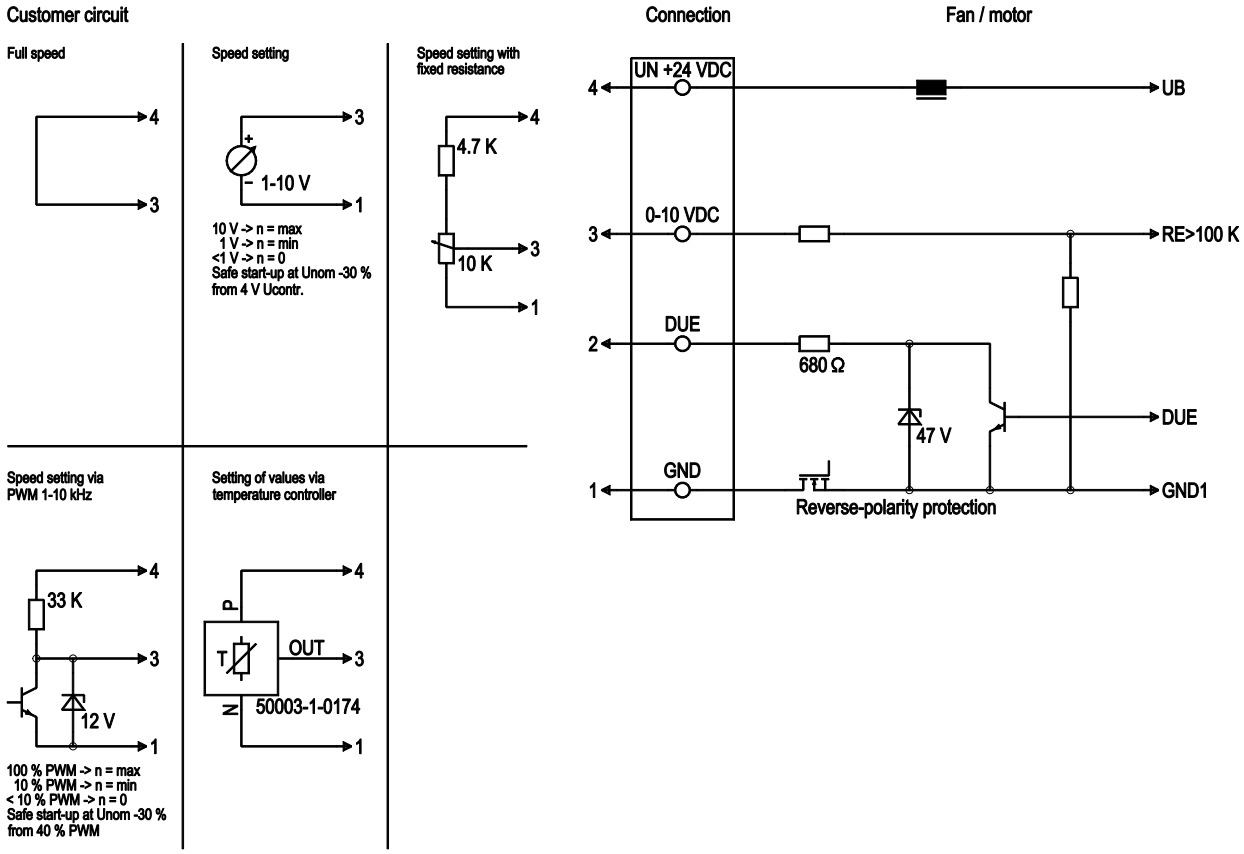
X	View X / plug assignment
1	Connector housing AMP350 780-1, female terminal 926882-1 (4x)
1.1	+ = red
1.2	0-10 VDC = yellow
1.3	Speed monitoring = white
1.4	GND = blue
2	Connection line 4 x AWG20
3	Accessory part: Inlet nozzle 09576-2-4013, not included in the standard scope of delivery
4	Screw depth max. 6 mm
5	Direction of rotation clockwise, seen on rotor

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 7938 81-0 · Fax +49 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC centrifugal fan

backward curved, single inlet

Connection screen



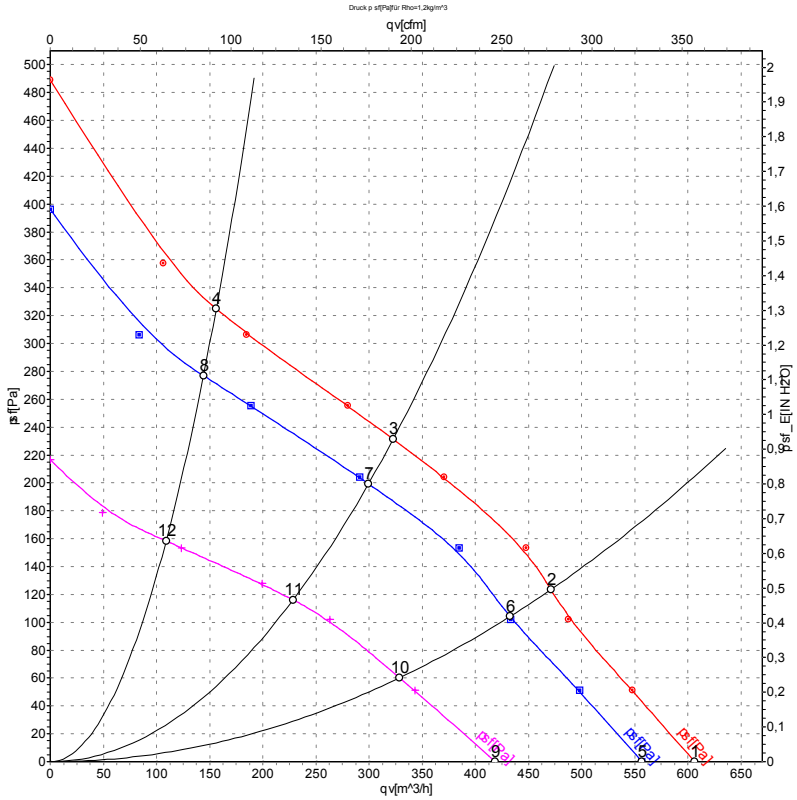
Line	No.	Signal	Colour	Function / assignment
1	1	GND	blue	Reference mass
1	2	DUE	white	Speed monitoring output, 2 pulses per rotation, Isink max = 10 mA
1	3	0-10 VDC	yellow	Control input Re > 100 K
1	4	Un +24 VDC	red	Power supply 24 VDC, residual ripple 3.5 %

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 7938 81-0 · Fax +49 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC centrifugal fan

backward curved, single inlet

Charts: Air flow



Measurement: LU-44776
Measurement: LU-44775
Measurement: LU-44777

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: LwA measured as per ISO 13347 / LpA 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	n	P_e	I	qv	p_{sf}
	V	min^{-1}	W	A	m^3/h	Pa
1	28	3375	46	1.83	605	0
2	28	3170	48	1.97	470	123
3	28	3105	49	2.01	325	231
4	28	3255	47	1.91	155	325
5	24	3100	34	1.60	555	0
6	24	2915	39	1.79	435	100
7	24	2885	39	1.82	300	200
8	24	3010	37	1.69	145	275
9	16	2320	16	1.10	420	0
10	16	2225	17	1.21	330	60
11	16	2205	18	1.24	230	116
12	16	2270	16	1.15	110	158

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 7938 81-0 · Fax +49 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com