R1G225-AF11-43

EC centrifugal fan

backward curved



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	**R1G225-AF11-43**	
Motor	**M1G074-BF**	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Type of data definition		fa
Speed	min-1	2700
Power input	W	95
Current draw	A	2.2
Min. ambient temperature	°C	- 25
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

Technical features

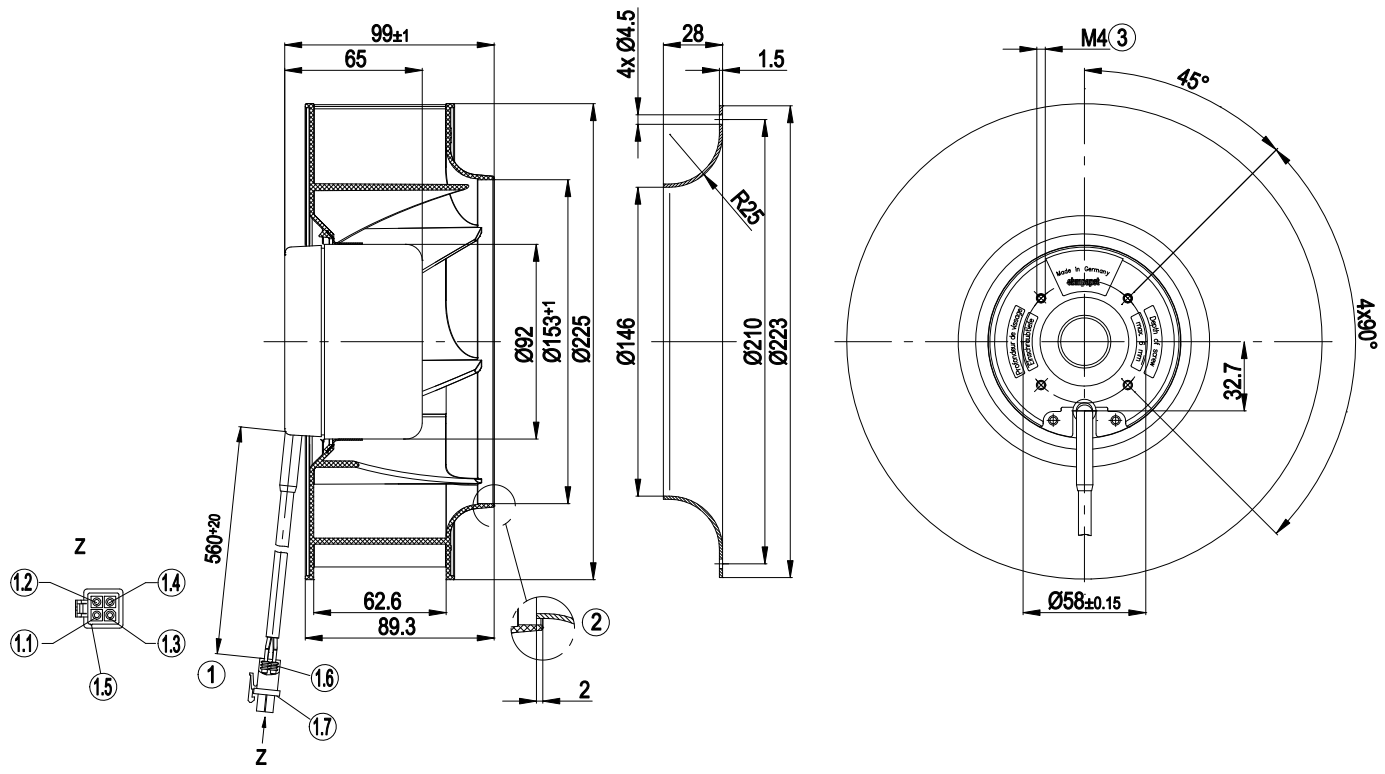
Mass	1.6 kg
Size	225 mm
Surface of rotor	Coated in black
Material of electronics housing	Die-cast aluminium
Material of impeller	Plastic PA66, fibreglass-reinforced
Number of blades	7
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44
Insulation class	"B"
Humidity class	F4-2
Max. 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 - Motor current limit - Soft start
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC interference emission	Acc. to EN 55022 (Class B)
Electrical leads	With plug
Motor protection	Reverse polarity and locked-rotor protection
Cable exit	Variable
Approval	UL 1004-1; CSA C22.2 Nr.77

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

Product drawing



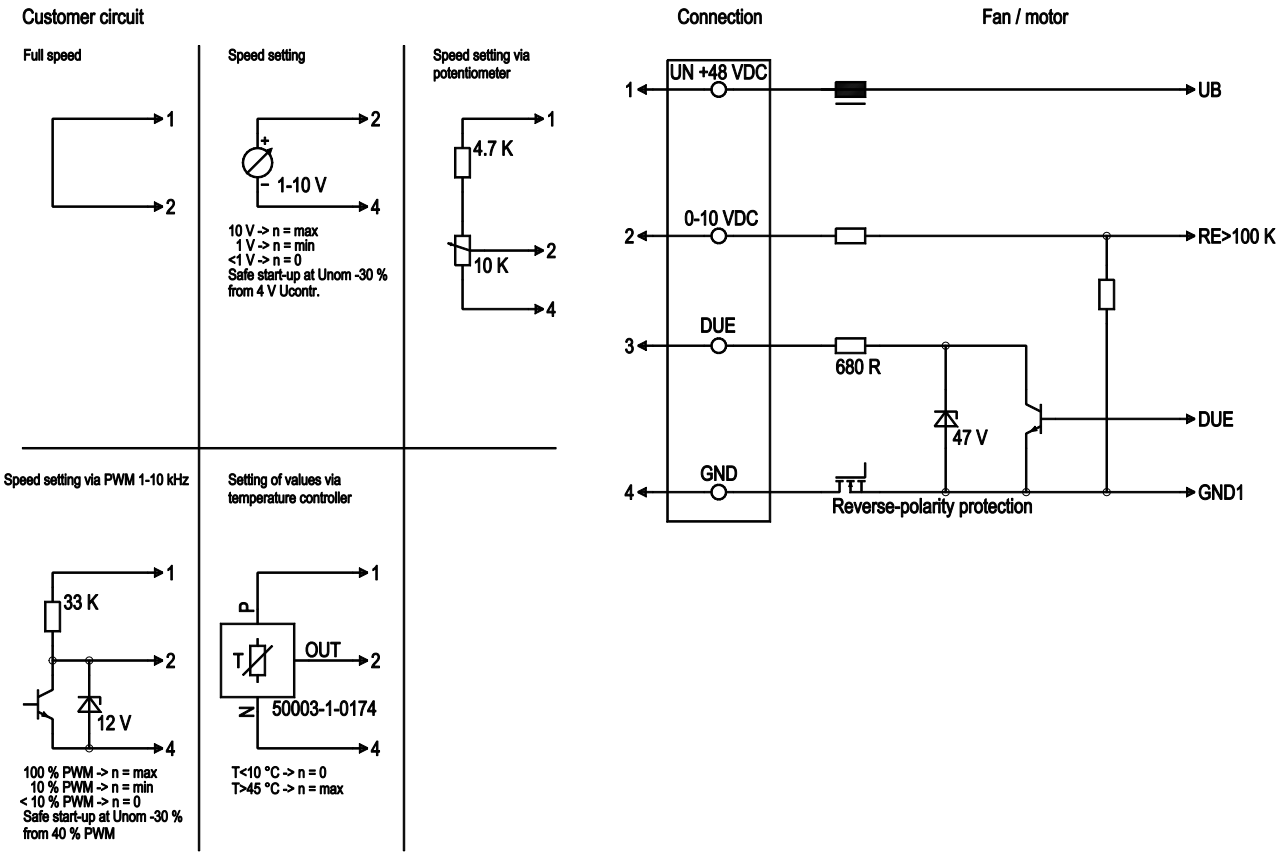
Z	View Z shown magnified
1	Connector housing 4-pole (AMP 794805-1), 4 x female connector (AMP 770904-1), mating connector (not included in delivery)
1.1	(+) red
1.2	(-) blue
1.3	Speed monitoring, white
1.4	Yellow control input
1.5	Polarising rib
1.6	4 x seal (AMP 794758-1)
1.7	1 x seal (AMP 794772-4)
2	Accessory part: Inlet nozzle 96358-2-4013, not included in the standard scope of delivery
3	Depth of screw max. 6 mm

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

Connection screen



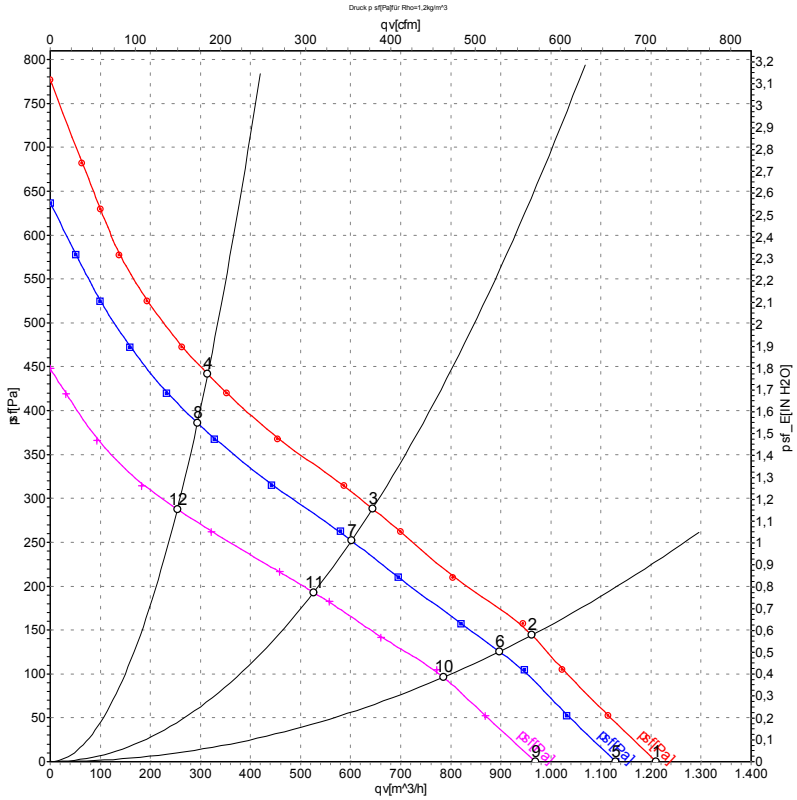
Line	No.	Signal	Colour	Function / assignment
1	1	Un +48 VDC	red	Power supply 48 VDC, residual ripple 3.5 %
1	2	0-10 VDC	yellow	Control input Re > 100 K
1	3	DUE	white	Speed monitoring output, 3 pulses per rotation, Isink max = 10 mA
1	4	GND	blue	Reference mass

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

Charts: Air flow



Measurement: LU-53006
Measurement: LU-53007
Measurement: LU-53005

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	57	2780	112	2.39	1210	0
2	57	2635	116	2.52	960	146
3	57	2580	117	2.58	645	288
4	57	2755	113	2.42	315	442
5	48	2600	91	2.20	1130	0
6	48	2475	93	2.28	895	126
7	48	2410	95	2.34	600	252
8	48	2580	92	2.21	295	386
9	36	2235	59	1.84	970	0
10	36	2150	63	1.96	785	98
11	36	2115	64	2.00	525	193
12	36	2230	59	1.84	255	288

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