R1G225-AT85-11

EC centrifugal fan

backward curved, single inlet

for railway applications

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-AT85-11**	
Motor	**M1G074-BF**	
Nominal voltage	VDC	110
Nominal voltage range	VDC	67 .. 121
Type of data definition		fa
External electronics		CHG012AA0601
Speed (rpm)	min^{-1}	2600
Power input	W	80
Current draw	A	0.8
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, single inlet

for railway applications

Technical features

Mass	1.6 kg
Size	225 mm
Surface of rotor	Coated in black
Material of impeller	PA plastic, galvanised round sheet-metal plate
Number of blades	11
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 42
Insulation class	"B"
Humidity (F)/environmental protection class (H)	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Shaft horizontal or rotor on bottom
Condensate discharge holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limit - Control input 2-bit
Electrical leads	With plug
Motor protection	Reverse polarity and locked-rotor protection
Cable exit	Variable
Product conforming to standard	EN 60950-1

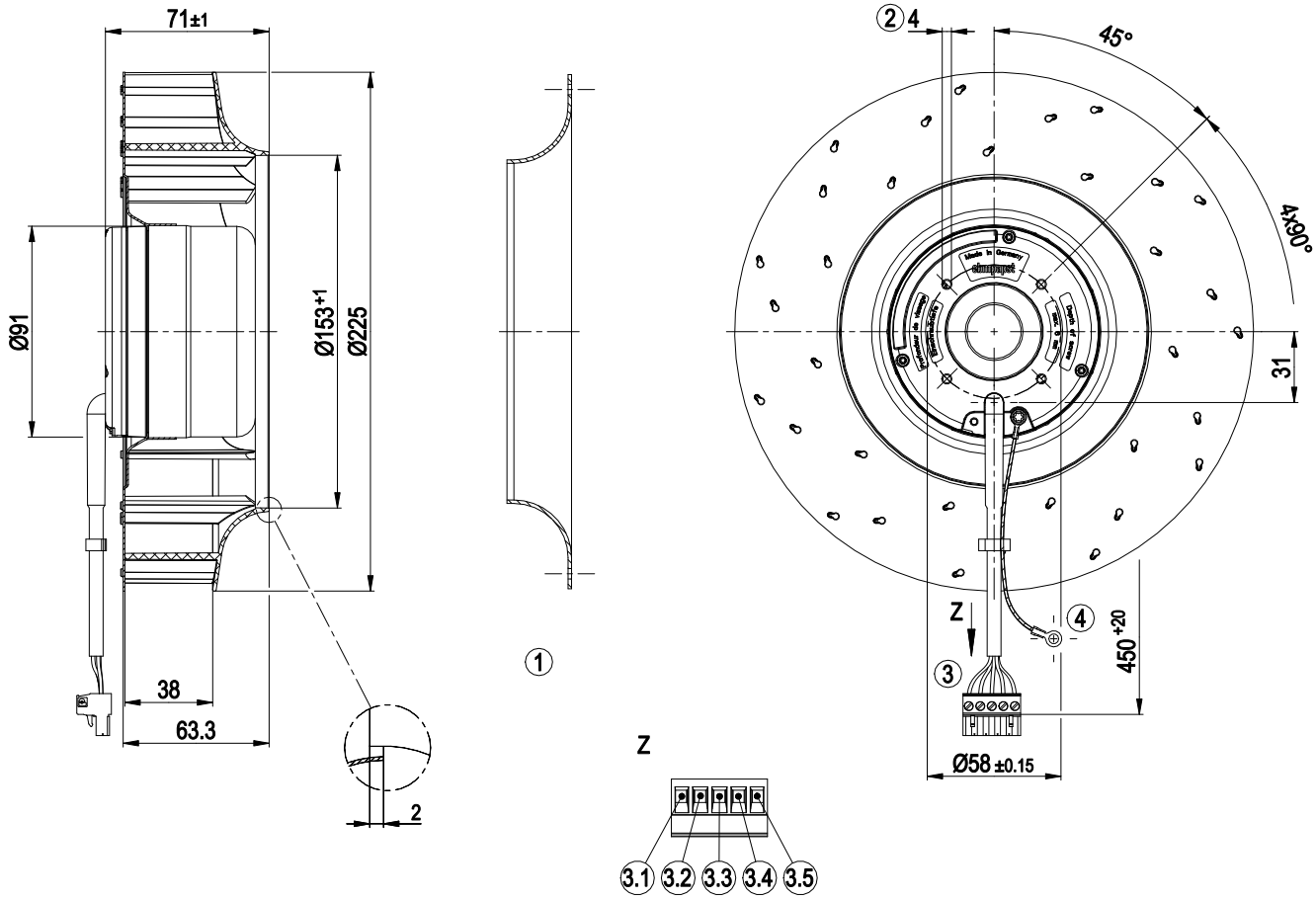
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC centrifugal fan

backward curved, single inlet

for railway applications

Product drawing



1	Accessory part: Inlet nozzle 96358-2-4013 not included in scope of delivery
2	Thread reach max. 6 mm
3	Connection line silicone 5G 0.5 mm², connector housing Phoenix MSTB 2.5/5-ST
3.1	brown
3.2	black
3.3	grey (Hall IC signal)
3.4	blue (Hall IC -)
3.5	yellow (Hall IC +)
4	PE (green/yellow) lead wire halogen-silicone-free with contact stud HS 24360240 4.3x7x9.5
5	Accessory part: External electronics CHG012-AA06-01, not included in scope of delivery (not illustrated)

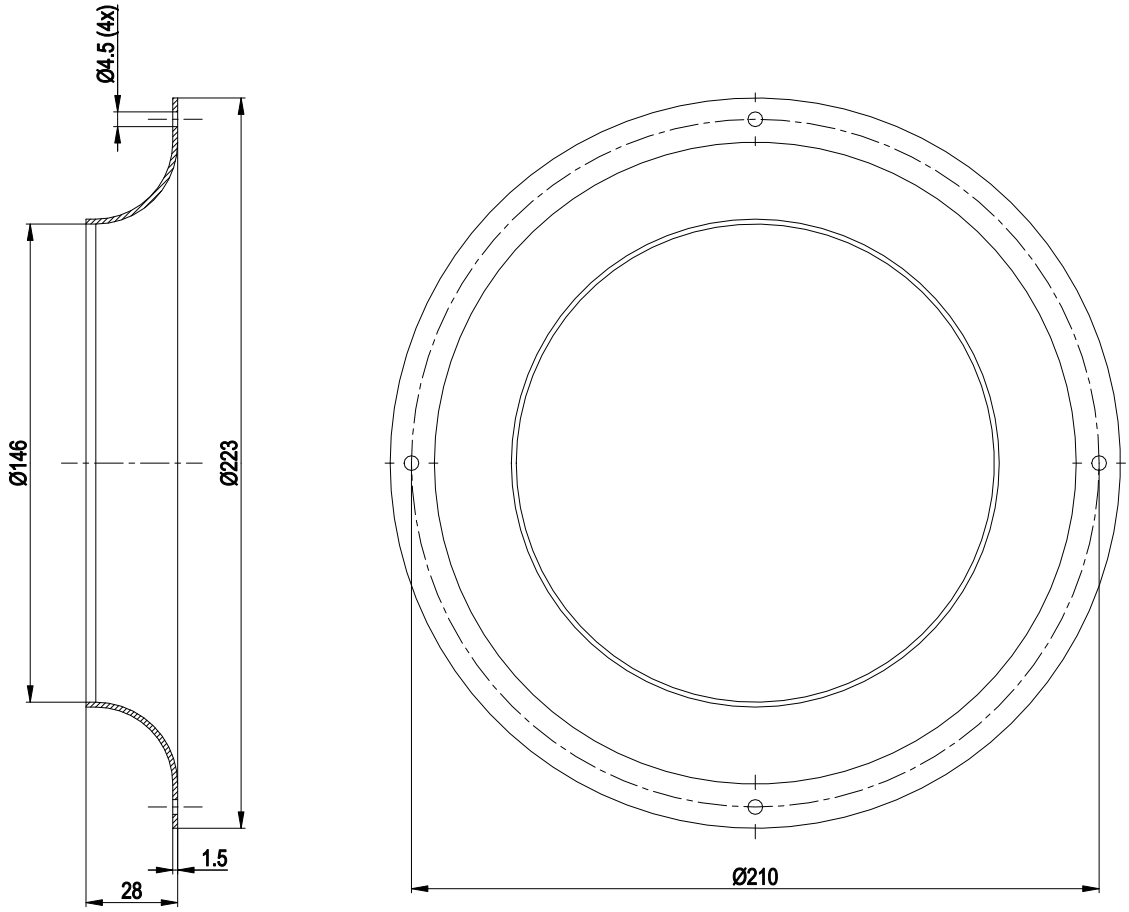
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC centrifugal fan

backward curved, single inlet

for railway applications

Accessory part



1	Accessory part: Inlet nozzle 96358-2-4013 not included in scope of delivery

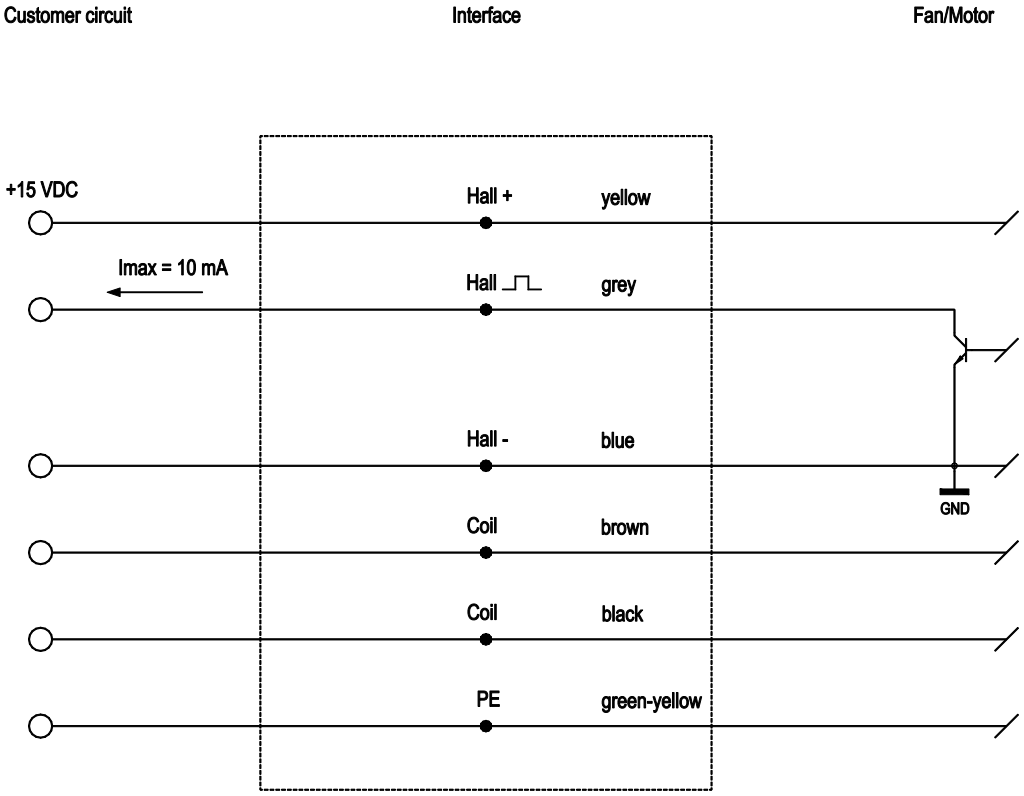
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC centrifugal fan

backward curved, single inlet

for railway applications

Connection screen



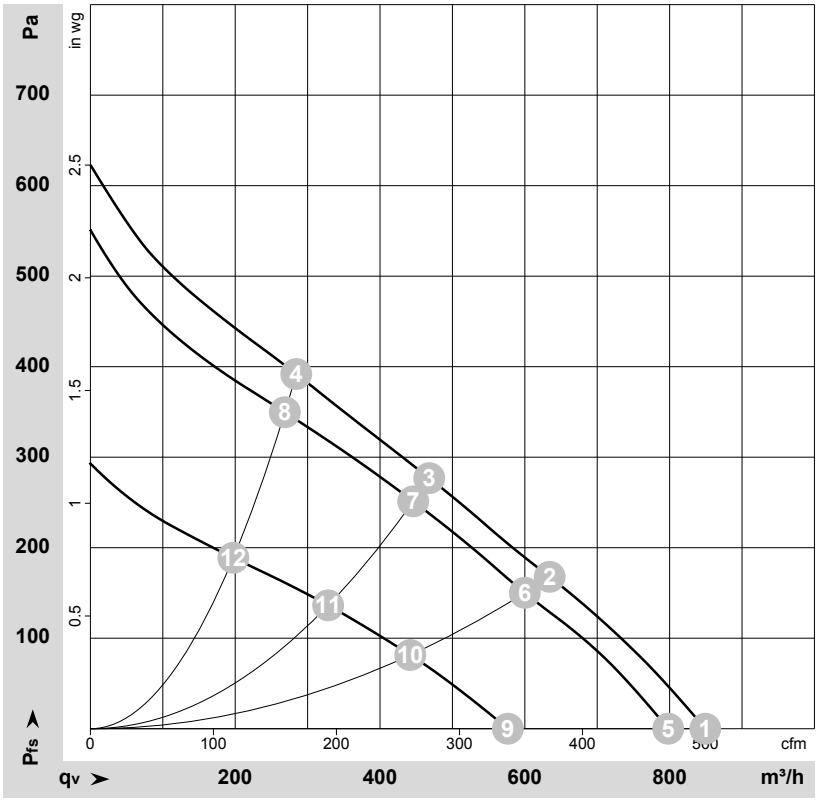
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC centrifugal fan

backward curved, single inlet

for railway applications

Charts: Air flow



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-35459-1
Measurement: LU-35458-1
Measurement: LU-35460-1

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: 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_{ed}	I	q_V	p_{fs}	q_V	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	121	2815	92	0.86	850	0	500	0.00
2	121	2660	97	0.92	635	168	375	0.67
3	121	2640	98	0.93	470	277	275	1.11
4	121	2760	94	0.88	285	392	165	1.57
5	110	2600	80	0.80	800	0	470	0.00
6	110	2530	85	0.88	600	150	355	0.60
7	110	2515	86	0.89	445	250	265	1.00
8	110	2610	81	0.83	270	350	160	1.41
9	67	1950	33	0.55	575	0	340	0.00
10	67	1880	36	0.60	440	81	260	0.33
11	67	1875	36	0.60	330	137	195	0.55
12	67	1930	33	0.56	195	189	115	0.76

U = Supply voltage · n = Speed (rpm) · P_{ed} = Power input · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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