

EC centrifugal fan

backward-curved, single-intake

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General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	R1G225-AG15-11	
Motor	M1G074-CF	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 49
Method of obtaining data		fa
Speed (rpm)	min ⁻¹	2850
Power consumption	W	115
Current draw	A	2.7
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

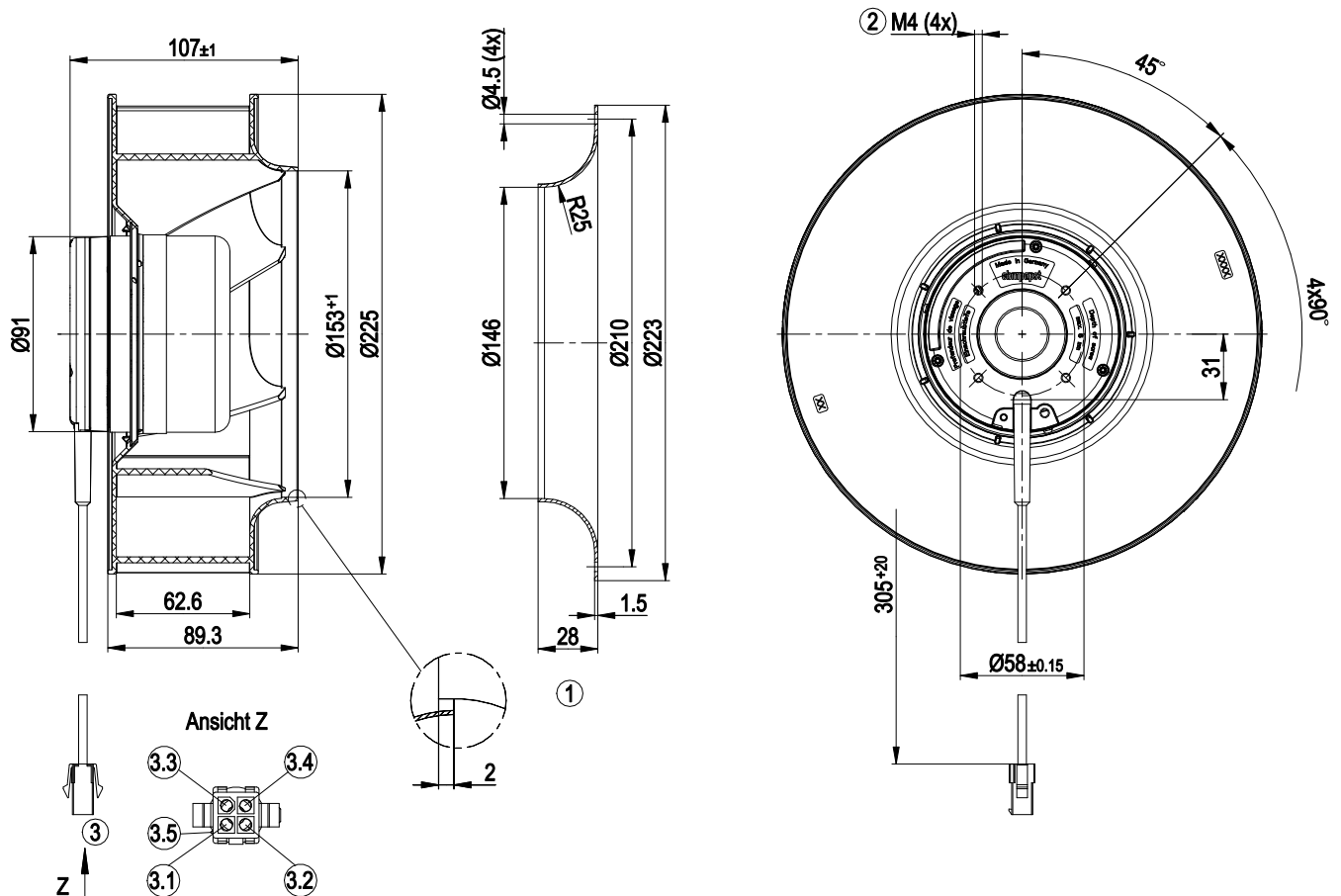
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change



Technical description

Weight	1.8 kg
Size	225 mm
Motor size	74
Rotor surface	Painted black
Impeller material	PA plastic
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F3-1
Max. permitted ambient temp. for motor (transport/storage)	+80 °C
Min. permitted ambient temp. for motor (transport/storage)	-40 °C
Installation position	Any
Mode	S1
Motor mounting	Ball bearing
Technical features	- Control input 0-10 VDC / PWM - Tach output - Motor current limitation - Soft start
Electrical hookup	Plug
Motor protection	Reverse polarity and locked-rotor protection
With cable	Variable
Conformity with standards	EN 60950-1
Approval	UL 1004-1; CSA C22.2 No. 77

Product drawing

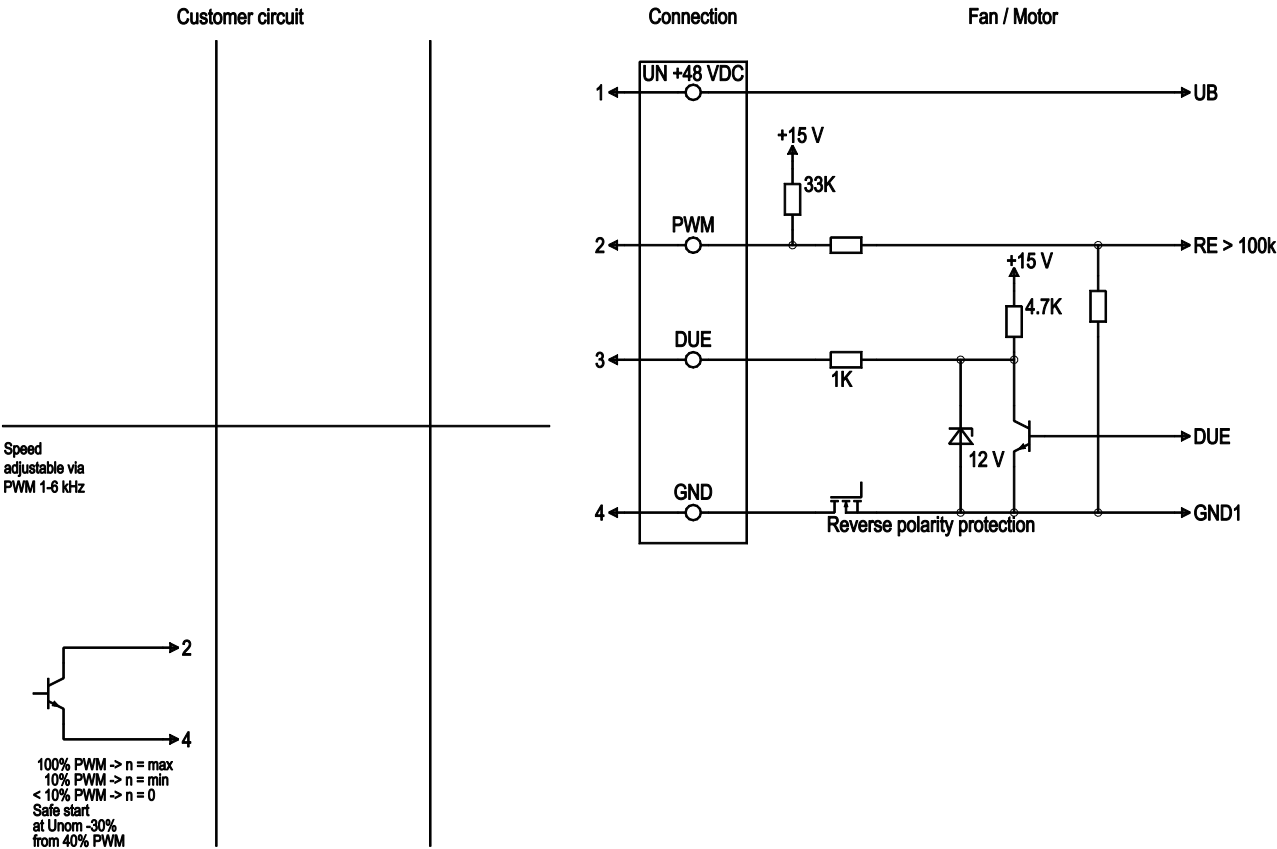


Z	View Z shown magnified
1	Accessory part: inlet ring 96358-2-4013 not included in scope of delivery
2	Max. clearance for screw 6 mm
3	Cable PVC AWG20 with 4-pole connector housing tyco 172159-1, 4x plug pin tyco 170360-3
3.1	+ (red)
3.2	- (blue)
3.3	PWM (black)
3.4	Tach (white)
3.5	Polarizing rib

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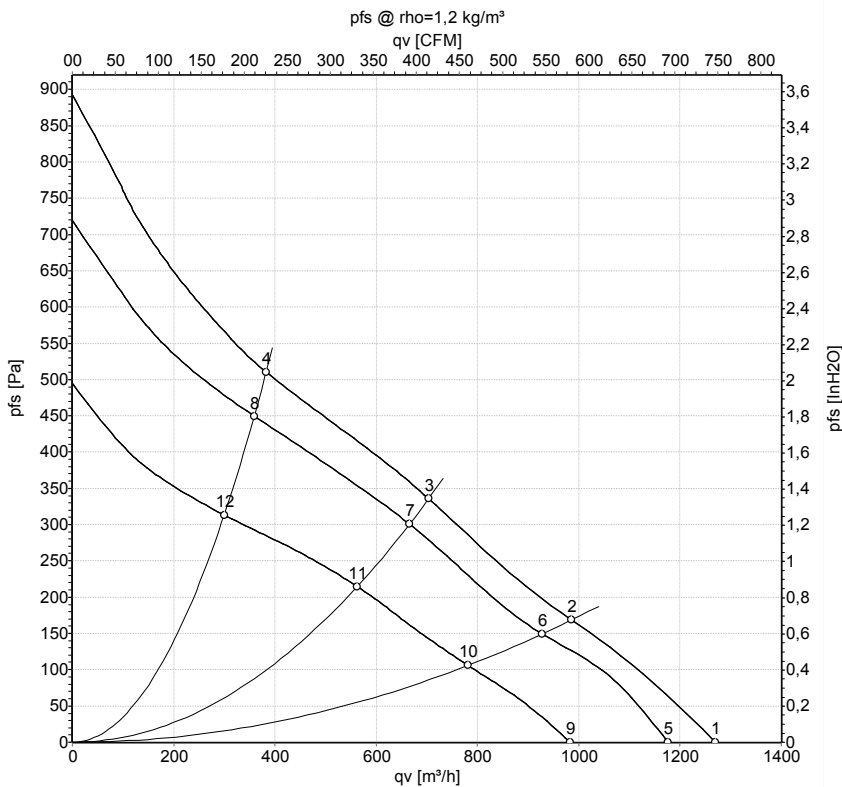
Connection diagram



No.	Conn.	Designation	Color	Function/assignment
1	1	Un +48 VDC	red	Power supply 48 VDC, maximum ripple 3.5 %
1	2	PWM / lin	black	PWM / lin. Control input, 0-10 V
1	3	Tach	white	Tach output, 3 pulses per revolution, Isink max = 10 mA
1	4	GND	blue	Reference ground



Curves: Air performance



Measurement: LU-63636-1
Measurement: LU-63634-1
Measurement: LU-63637-1

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	q _v	p _{fs}	q _v	p _{fs}
	V	min ⁻¹	W	A	m³/h	Pa	cfm	in. wg
1	57	3115	144	2.90	1270	0	745	0.00
2	57	2900	148	3.08	985	168	580	0.67
3	57	2845	150	3.13	705	336	415	1.35
4	57	3005	146	2.99	385	510	225	2.05
5	48	2850	115	2.70	1175	0	690	0.00
6	48	2720	121	2.85	930	150	545	0.60
7	48	2685	122	2.87	665	300	390	1.20
8	48	2825	117	2.74	360	450	210	1.81
9	36	2405	68	2.10	985	0	580	0.00
10	36	2300	74	2.30	780	105	460	0.42
11	36	2275	76	2.36	560	215	330	0.86
12	36	2350	71	2.21	300	312	175	1.25

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