EC centrifugal fan

forward-curved, single-intake

with housing (flange)

Nominal data

Type	**G1G140-MW13-06**	
Motor	**M1G055-CF**	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Method of obtaining data		fa
Speed (rpm)	min^{-1}	2500
Power consumption	W	52
Current draw	A	1.2
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

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Technical description

Weight	2.35 kg
Fan size	140 mm
Rotor surface	Painted black
Impeller material	PP-TV40 plastic
Housing material	Die-cast aluminum
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
Cooling hole/opening	On rotor side
Mode	S1
Motor bearing	Ball bearing
Technical features	- Control input 0-10 VDC / PWM - Motor current limitation - Soft start
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC interference emission	According to EN 55022 (Class B)
Electrical hookup	With plug
Motor protection	Reverse polarity and locked-rotor protection
With cable	Lateral
Approval	CCC

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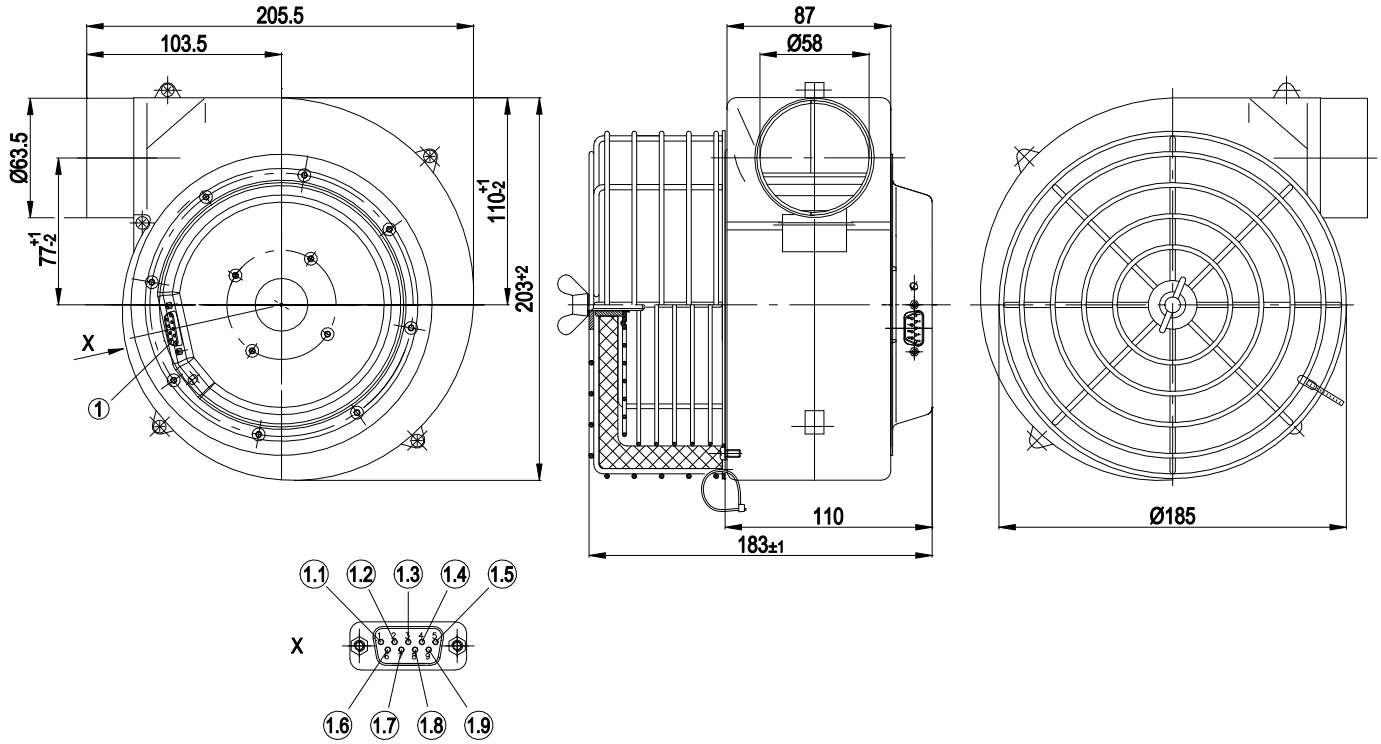
Product drawing



1	Connector housing Spectrum Control no. 56F-701-015LI
1.1	GND
1.2	not used
1.3	not used
1.4	0-10 VDC
1.5	not used
1.6	not used
1.7	not used
1.8	not used
1.9	UN +24 VDC
X	View X

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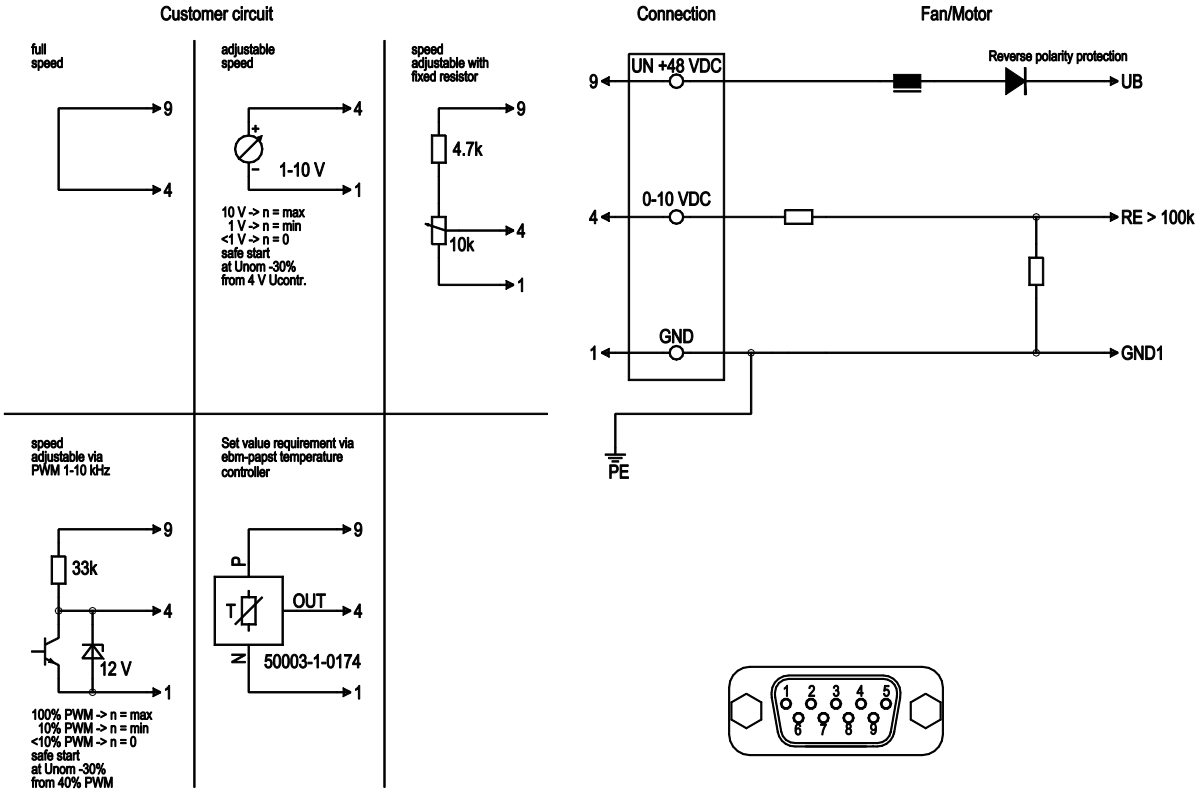
Connection diagram



No.	Conn.	Designation	Color	Function/assignment
1	1	GND	blue	Reference ground
1	4	0-10 VDC	yellow	Control input Re > 100 k
1	9	UN +48 VDC	red	Power supply 48 VDC, maximum ripple 3.5%

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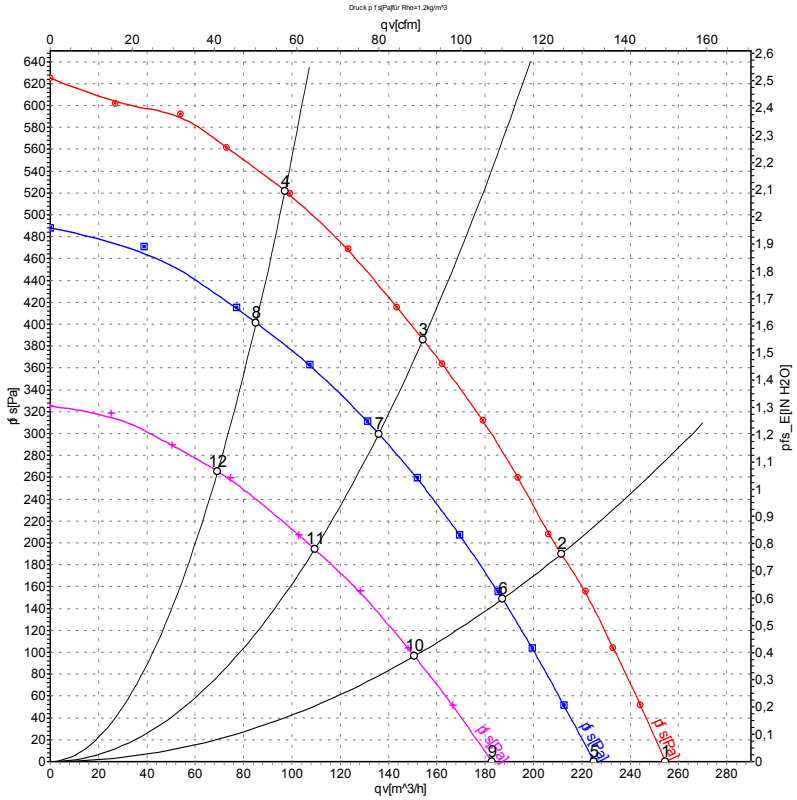
Curves: Air performance



Measurement: LU-58479-1
Measurement: LU-58478-1
Measurement: LU-58480-1

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	inH2O
1	57	2785	71	1.39	255	0	150	0.00
2	57	2935	66	1.28	210	190	125	0.76
3	57	3145	56	1.08	155	386	90	1.55
4	57	3365	46	0.90	95	523	55	2.10
5	48	2500	52	1.20	225	0	130	0.00
6	48	2615	47	1.08	185	149	110	0.60
7	48	2785	40	0.92	135	300	80	1.20
8	48	2960	33	0.78	85	402	50	1.61
9	36	2055	29	0.89	185	0	110	0.00
10	36	2140	26	0.81	150	96	90	0.39
11	36	2270	22	0.72	110	194	65	0.78
12	36	2425	19	0.68	70	266	40	1.07

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