W1G200-EF41-01

EC axial fan - ESM

sickled blades (S series)

ESM wall ring



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Nominal data

Type	**W1G200-EF41-01**	
Motor	**M1G055-BD**	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Type of data definition		fa
Speed (rpm)	min^{-1}	1550
Power input	W	11
Current draw	A	0.5
Max. back pressure	Pa	30
Min. ambient temperature	°C	-30
Max. ambient temperature	°C	50

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

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Technical features

Mass	1 kg
Size	200 mm
Material of electronics housing	PP plastic
Material of blades	PA plastic
Material of wall ring	Plastic, epylene GT50
Number of blades	5
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Humidity (F)/environmental protection class (H)	H1
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	- Tach output - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Over-temperature protected electronics / motor
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Lateral
Protection class	II
Approval	VDE; CSA C22.2 No.77; EAC; UL 1004-3

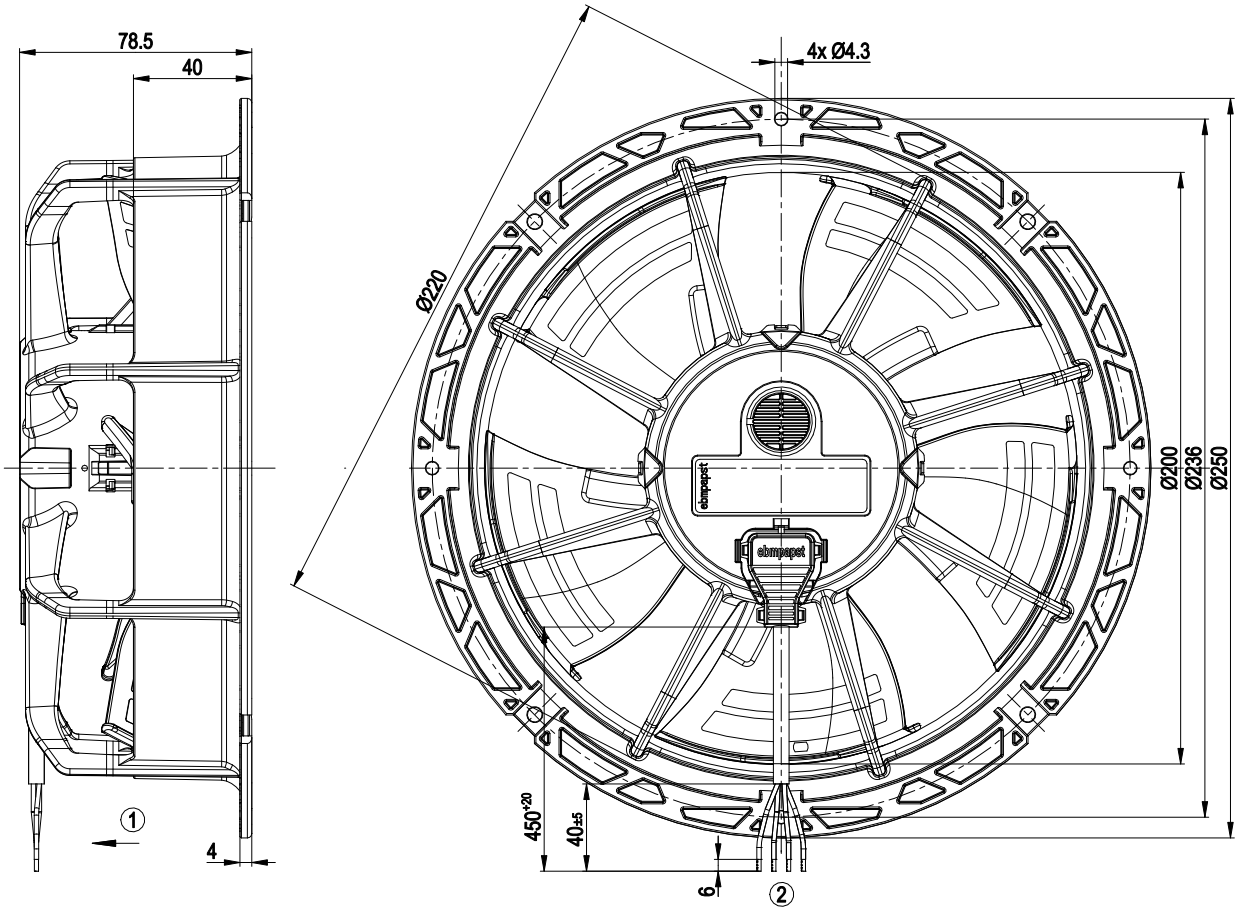
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Product drawing



1	Direction of air flow "V"
2	Connection line AWG20, 4 x brass lead tips crimped

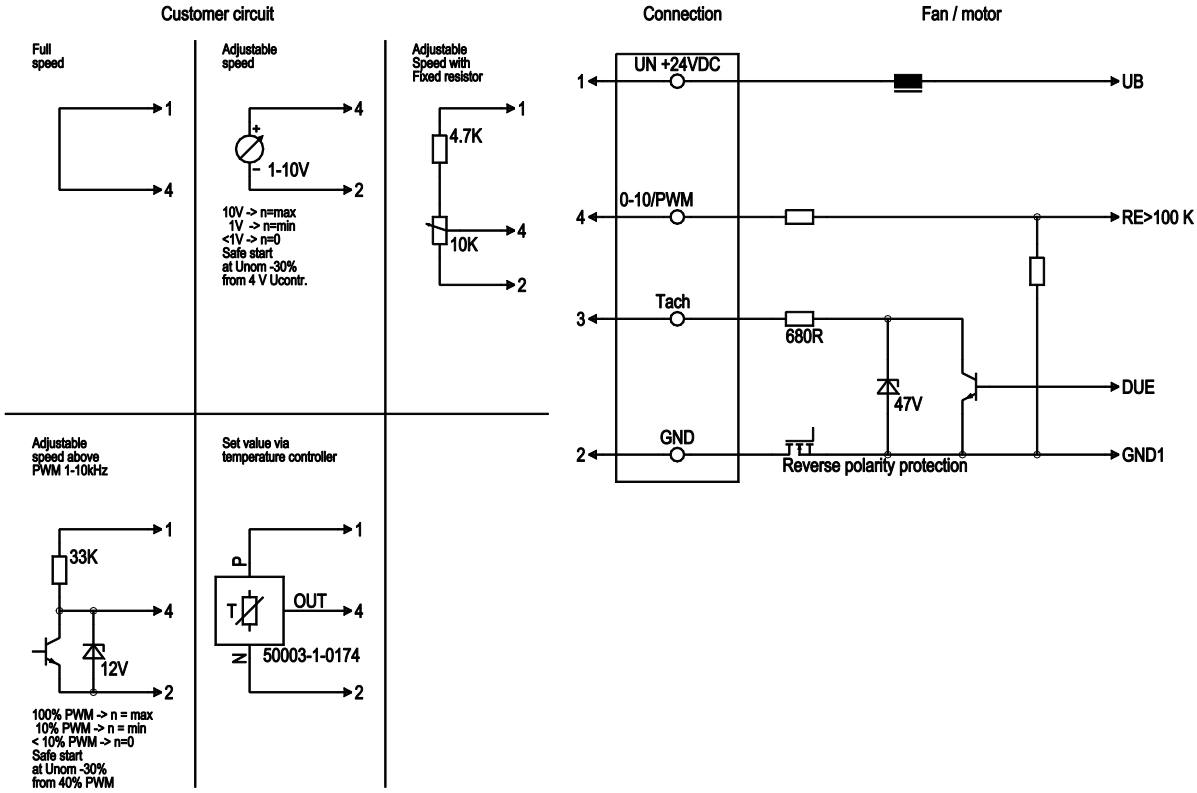
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Connection screen



No.	Conn.	Designation	Colour	Function / assignment
	1	UN +24 VDC	red	Power supply 24 VDC, residual ripple 3.5 %
	2	GND	blue	Reference ground
	3	Tach	white	Tacho output, 1 pulse per revolution, Isink max = 10 mA, open collector
	4	PWM / 0-10 VDC	yellow	Control input PWM or 0-10 V, RE >100K

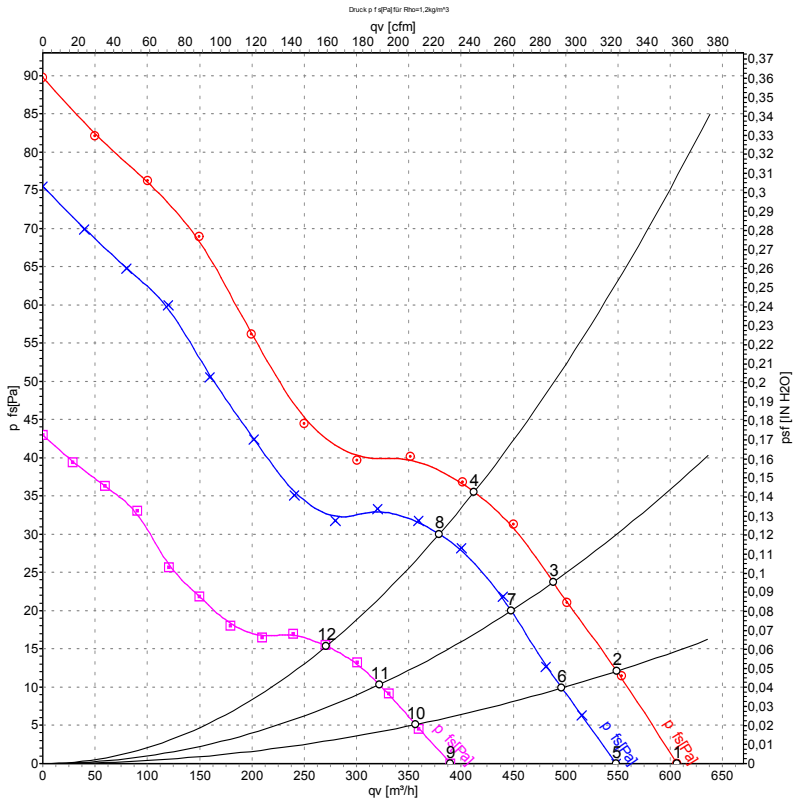
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Charts: Air flow



Measurement: LU-139780-1
Measurement: LU-139779-1
Measurement: LU-139781-1

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	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
	V	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	28	1715	14	0.56	49	57	605	0	355	0.00
2	28	1685	15	0.58	48	56	550	12	325	0.05
3	28	1665	15	0.60	47	55	490	24	285	0.10
4	28	1680	15	0.59	51	59	410	36	240	0.14
5	24	1550	11	0.50	46	54	550	0	325	0.00
6	24	1530	11	0.50	45	53	495	10	290	0.04
7	24	1510	11	0.51	44	52	450	20	265	0.08
8	24	1515	11	0.51	46	55	380	30	225	0.12
9	16	1120	4.2	0.28	37	46	390	0	230	0.00
10	16	1105	4.3	0.29	37	45	355	5	210	0.02
11	16	1100	4.5	0.30	35	44	320	10	190	0.04
12	16	1100	4.5	0.30	37	46	270	16	160	0.06

U = Supply voltage · n = Speed (rpm) · P_{ed} = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · q_V = Air flow · p_{fs} = Pressure increase

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