W1G230-FB34-10

EC axial fan - ESM

sickle-shaped blades (S series)

ESM fan housing

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Nominal data

Type	**W1G230-FB34-10**	
Motor	**M1G055-BD**	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Method of obtaining data		fa
Speed (rpm)	min-1	1545
Power consumption	W	25
Current draw	A	1.3
Max. back pressure	Pa	28
Max. back pressure	inH2O	0.11
Min. ambient temperature	°C	-30
Max. ambient temperature	°C	55
Starting current	A	2.5

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	1.1 kg
Fan size	230 mm
Electronics housing material	PP plastic
Blade material	PA plastic
Fan housing material	Plastic, PP
Number of blades	5
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1
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
Mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limitation - Soft start - Set value input Lin 0-10 VDC / PWM (1.7 V corresponds to V=min, 10 V corresponds to V=max) - Control input 0-10 VDC / PWM
Electrical hookup	With plug
With cable	Lateral
Protection class	II
Conformity with standards	EN 60335-1; EN 60335-2-24; EN 60335-2-80; EN 60335-2-89

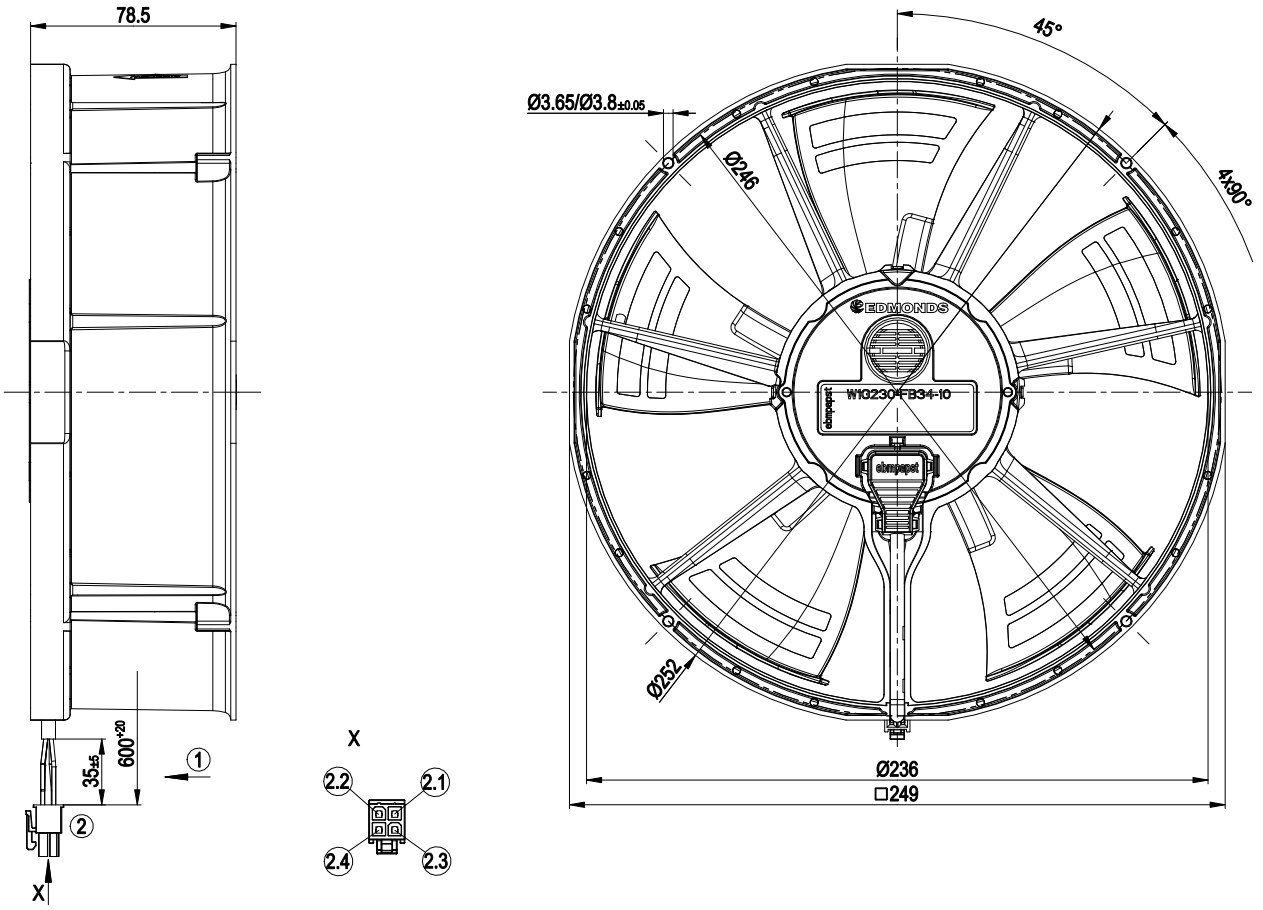
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Product drawing



1	Direction of air flow "V"
2	Cable AWG20, with connector housing Molex 39-01-2045 and 4 x socket Molex 39-00-0038 crimped
2.1	red (+)
2.2	blue (-)
2.3	white (tach output)
2.4	yellow (control input)

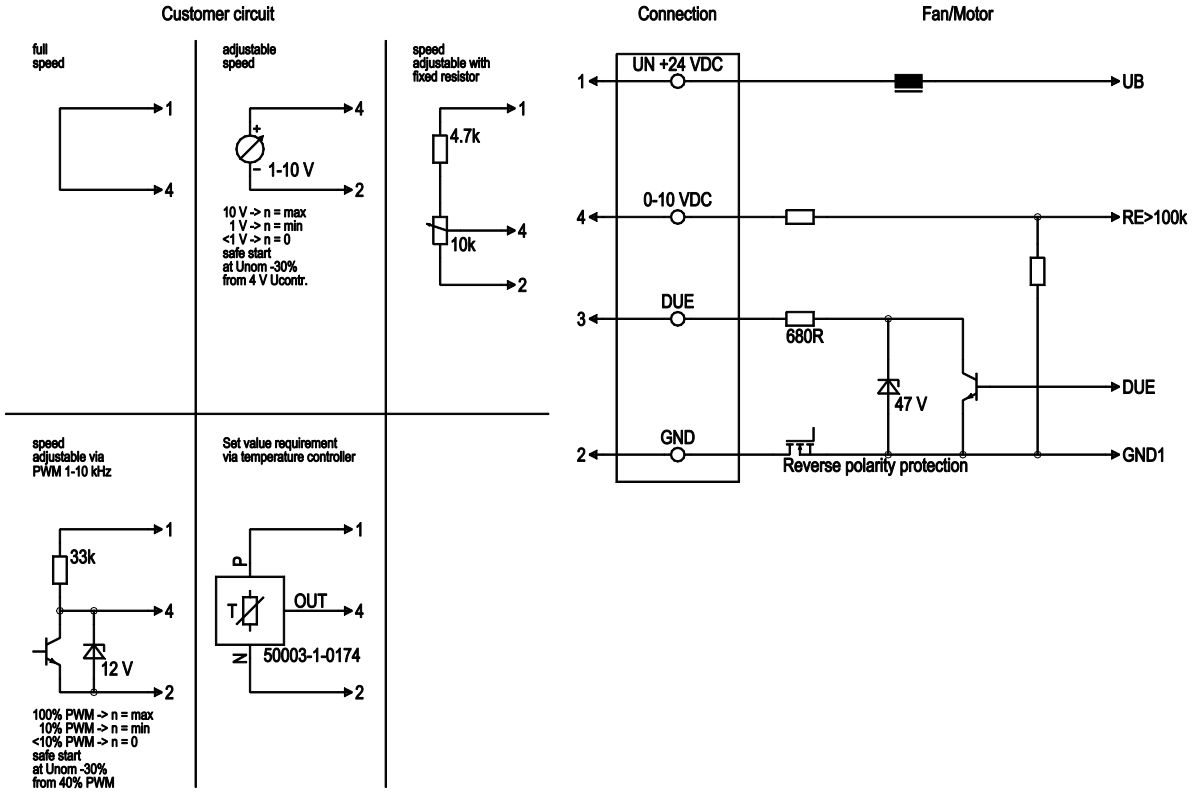
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Connection diagram



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

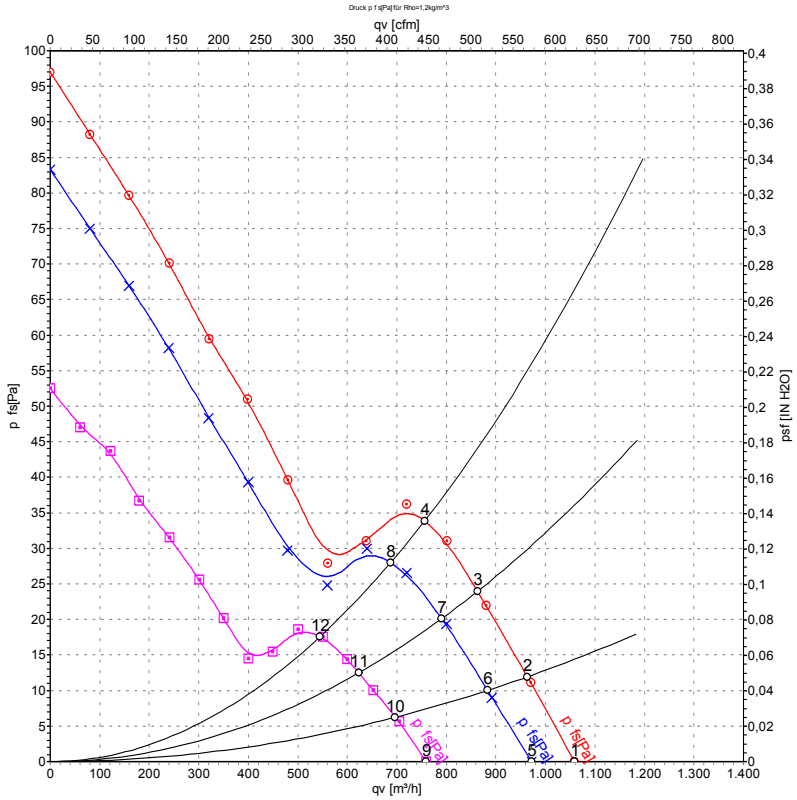
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Curves: Air performance



Measurement: LU-141062-1
Measurement: LU-141061-1
Measurement: LU-141063-1

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	m^3/h	Pa	cfm	inH2O
1	28	1675	34	1.52	1060	0	625	0.00
2	28	1655	35	1.55	965	12	565	0.05
3	28	1650	35	1.55	865	24	510	0.10
4	28	1665	35	1.54	755	34	445	0.14
5	24	1545	25	1.30	970	0	570	0.00
6	24	1530	26	1.30	885	10	520	0.04
7	24	1530	26	1.30	790	20	465	0.08
8	24	1545	25	1.25	685	28	405	0.11
9	16	1225	12	0.78	760	0	445	0.00
10	16	1215	12	0.80	695	6	410	0.02
11	16	1210	12	0.81	625	12	365	0.05
12	16	1220	12	0.80	545	18	320	0.07

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

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