D1G146-AA37-53

EC centrifugal fan

forward-curved, dual-intake

with housing (large flange)

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Nominal data

Type	**D1G146-AA37-53**	
Motor	**M1G074-CF**	
Nominal voltage	VDC	36
Nominal voltage range	VDC	25 .. 45
Method of obtaining data		ml
Speed (rpm)	min^{-1}	1430
Power consumption	W	89
Current draw	A	2.9
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	70

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	3.6 kg
Fan size	146 mm
Rotor surface	Painted black
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP42
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	See product drawing
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM
Electrical hookup	With plug
Motor protection	Reverse polarity and locked-rotor protection
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60950-1

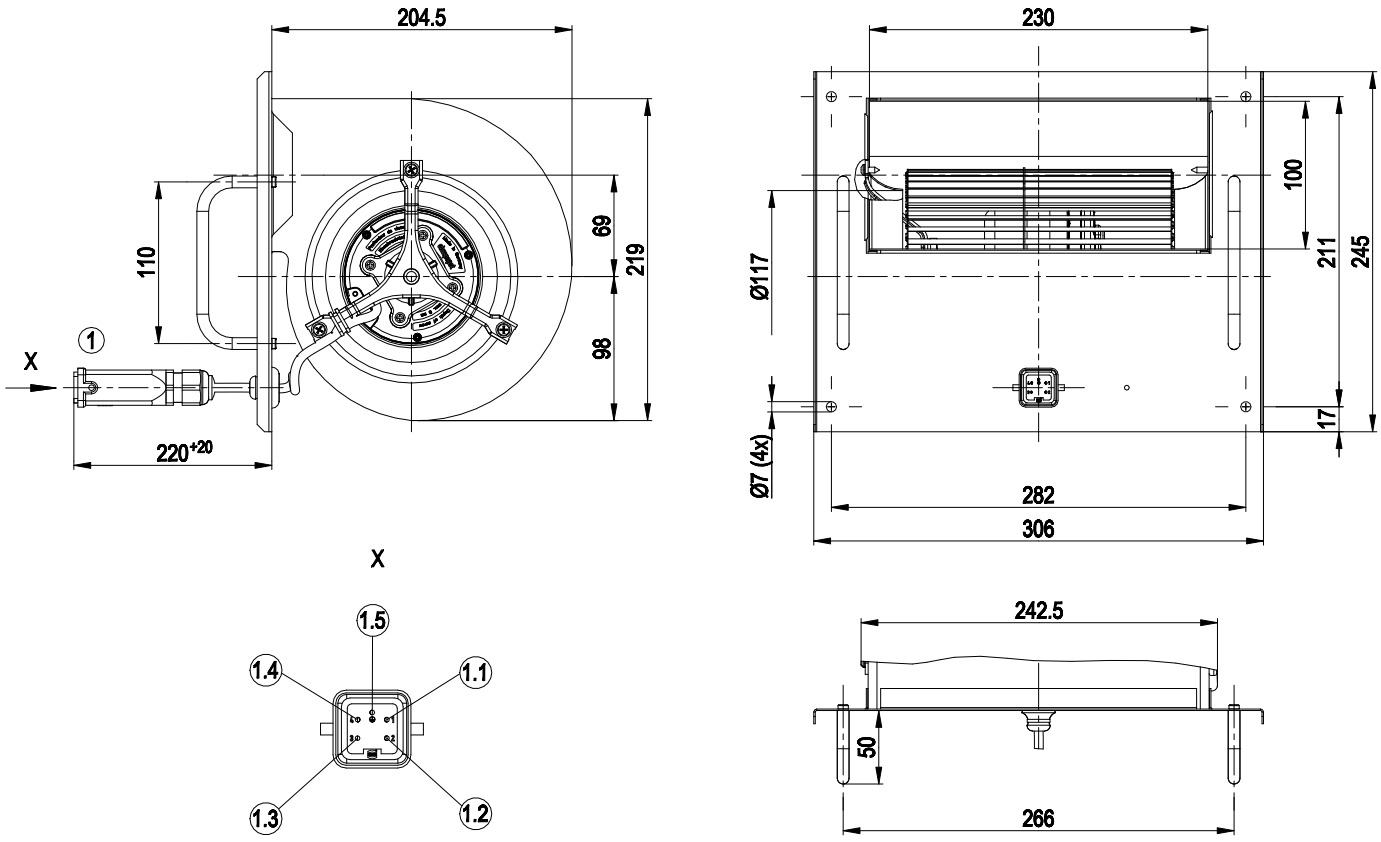
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Product drawing



1	Cable XLPE/XLPO 4X 0.5 mm² with connector housing Harting 09200042611 and 4x crimped splice
1.1	0-10 V (yellow)
1.2	Speed monitoring (white)
1.3	UN +36 VDC (red)
1.4	GND (blue)
1.5	PE (green/yellow)

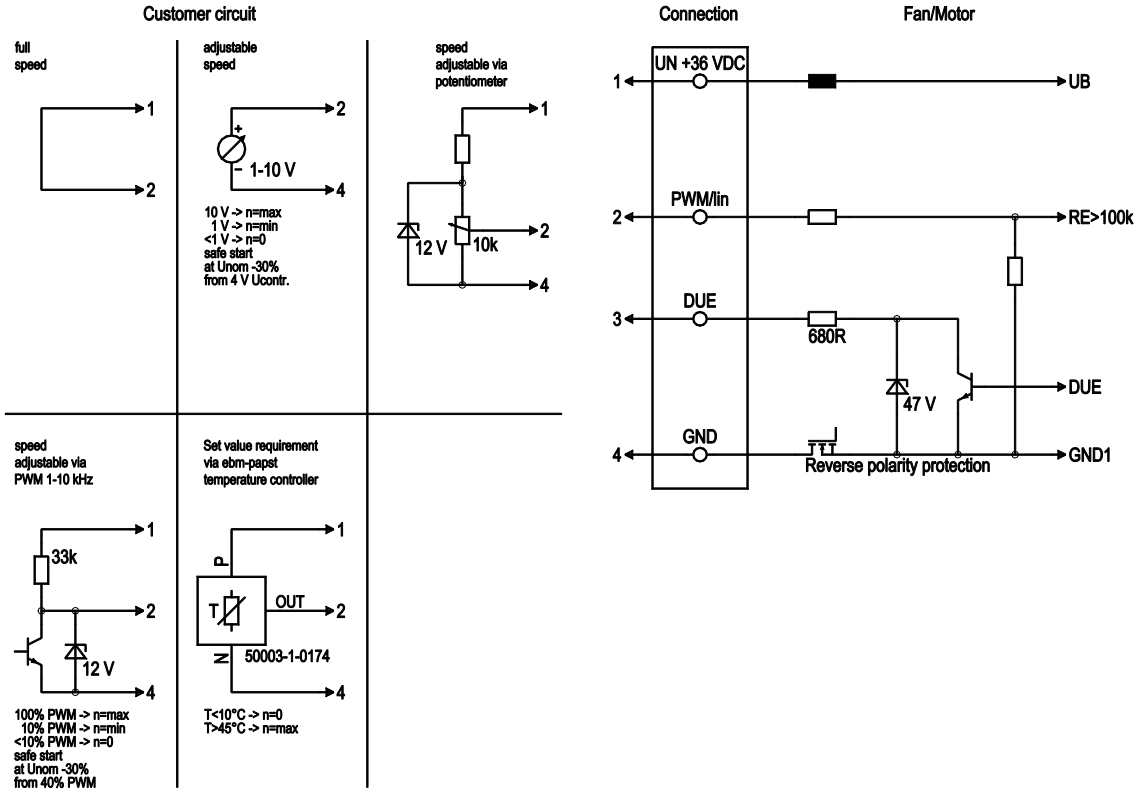
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
1	1	Un +36VDC	red	Power supply 36 VDC, see nameplate for voltage ranges, maximum ripple 3.5%
1	2	PWM/lin	yellow	PWM/lin. Control input, 0-10 V
1	3	DUE	white	Tach output, 3 pulses per revolution, Isink max = 10 mA
1	4	GND	blue	Reference ground

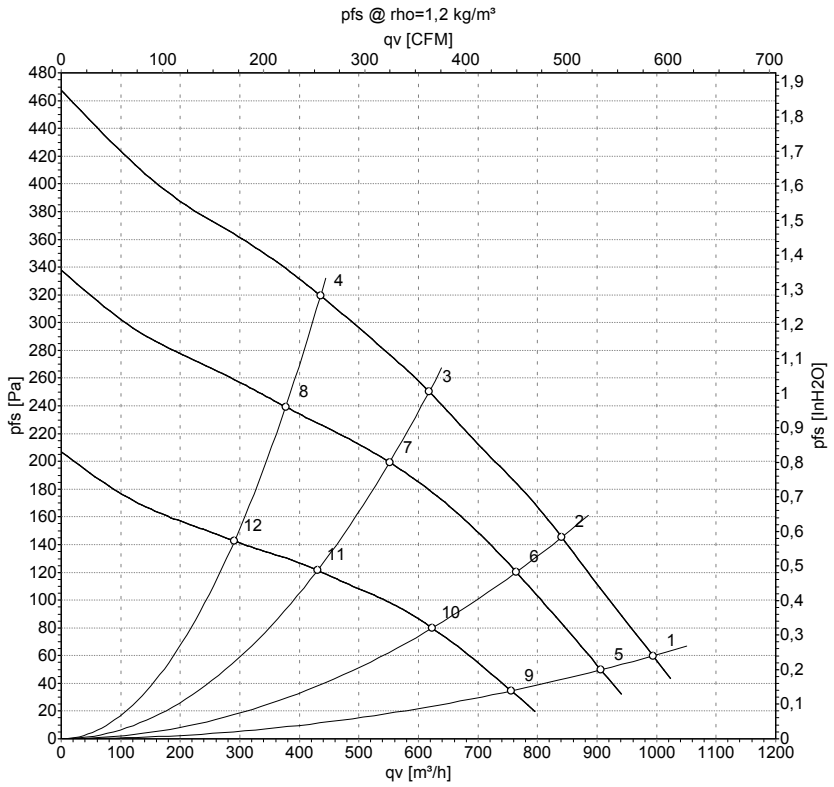
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Curves: Air performance



Measurement: LU-128397-1
Measurement: LU-128396-1
Measurement: LU-128399-1

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	45	1550	120	3.40	995	60	585	0.24
2	45	1710	112	3.03	840	145	495	0.58
3	45	2000	102	2.58	620	251	365	1.01
4	45	2245	94	2.31	435	320	255	1.28
5	36	1430	89	2.90	905	50	535	0.20
6	36	1570	84	2.65	765	120	450	0.48
7	36	1795	75	2.29	550	200	325	0.80
8	36	1950	62	1.91	375	240	220	0.96
9	25	1200	52	2.30	755	35	445	0.14
10	25	1290	45	2.00	625	80	365	0.32
11	25	1420	37	1.63	430	121	255	0.49
12	25	1520	30	1.38	290	143	170	0.57

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

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