D3G146-HS05-33

EC centrifugal fan

forward-curved, dual-intake

with housing (large flange)

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Nominal data

Type	**D3G146-HS05-33**
Motor	**M3G055-CF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	1320
Power consumption	W	107
Current draw	A	0.9
Min. back pressure	Pa	0
Min. back pressure	inH2O	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	50

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	2.5 kg
Fan size	146 mm
Rotor surface	Galvanized
Electronics housing material	PP plastic, black
Impeller material	PP plastic, white
Housing material	PP plastic, black
Motor suspension	Motor vibration-damped on both sides
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP20
Insulation class	"F"
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, open rotor
Mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Thermal overload protection for motor
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	> 3.5 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

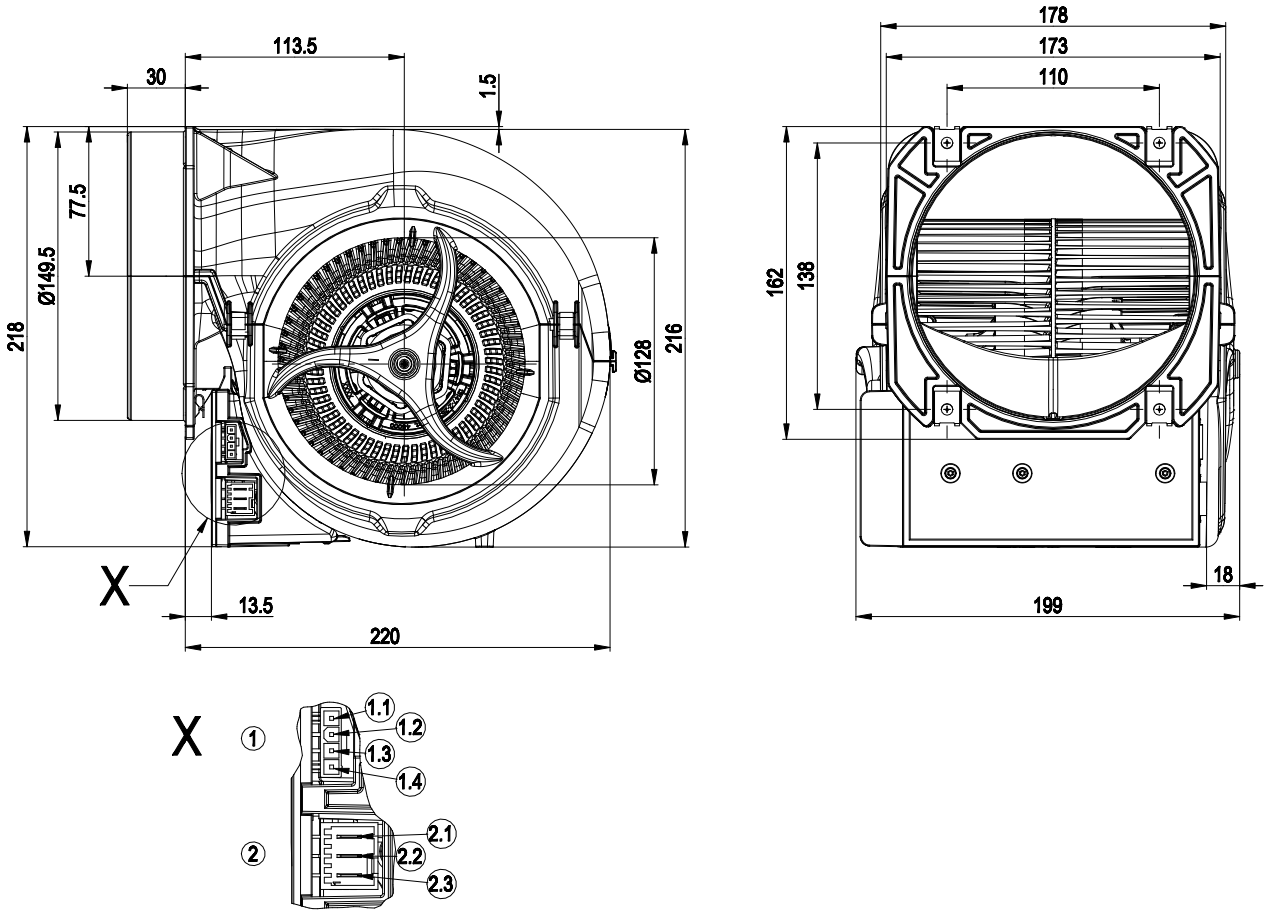
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Product drawing



1	Macromodul connector Stocko MSLO 9404-003-00A-960 pluggable with Stocko MFMP 9761-003-50A-960
1.1	GND
1.2	0-10 V/PWM
1.3	Tach
1.4	10 V
2	Header Stocko MSLO 7708-004-003-960 pluggable with Stocko EH 705-004-003-960 + RBB 8230.120 Ms
2.1	PE
2.2	N
2.3	L

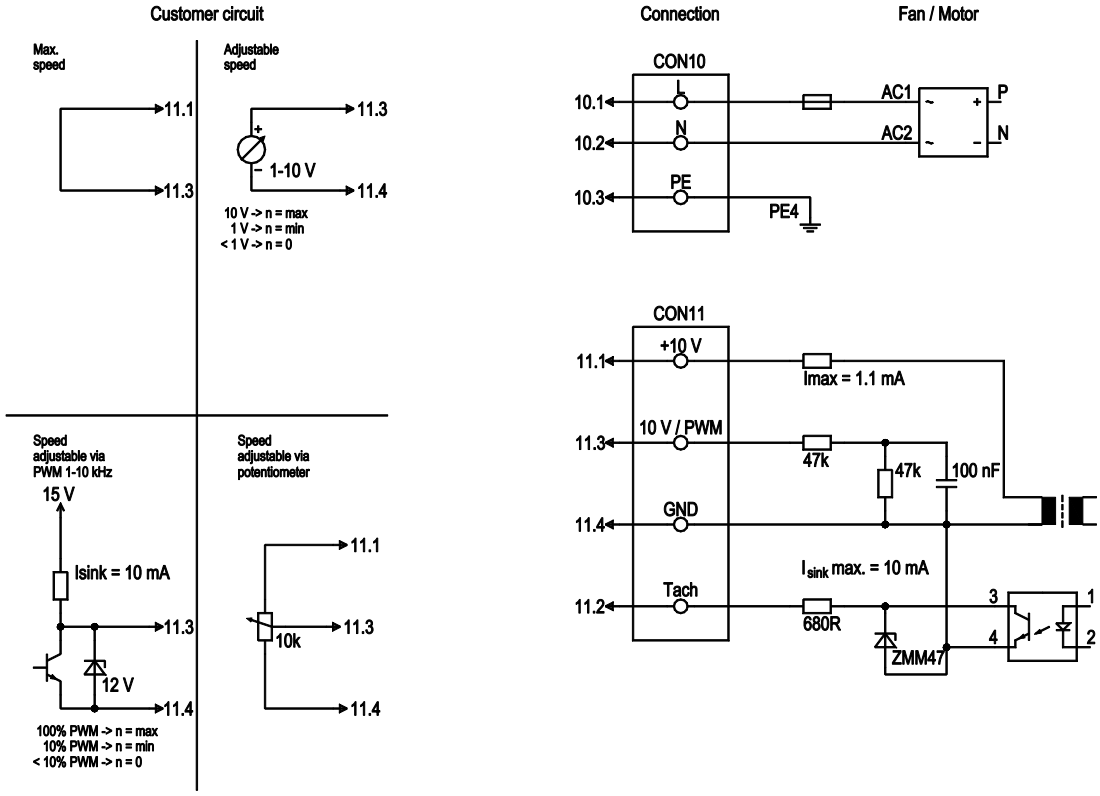
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
CON10	10.1	L	black	Power supply 230 VAC, 50-60 Hz, see nameplate for voltage range
CON10	10.2	N	blue	Neutral conductor
CON10	10.3	PE	green/yellow	Protective earth
CON11	11.1	10 V/max. 1.1mA	red	Voltage output 10 V / 1.1 mA, electrically isolated, not short-circuit-proof
CON11	11.2	Tacho	white	Tach output: Open collector, 1 pulse per revolution, electrically isolated, Isink max = 10 mA
CON11	11.3	0-10 V PWM	yellow	Control input 0-10 V or PWM, electrically isolated
CON11	11.4	GND	blue	GND connection for control interface

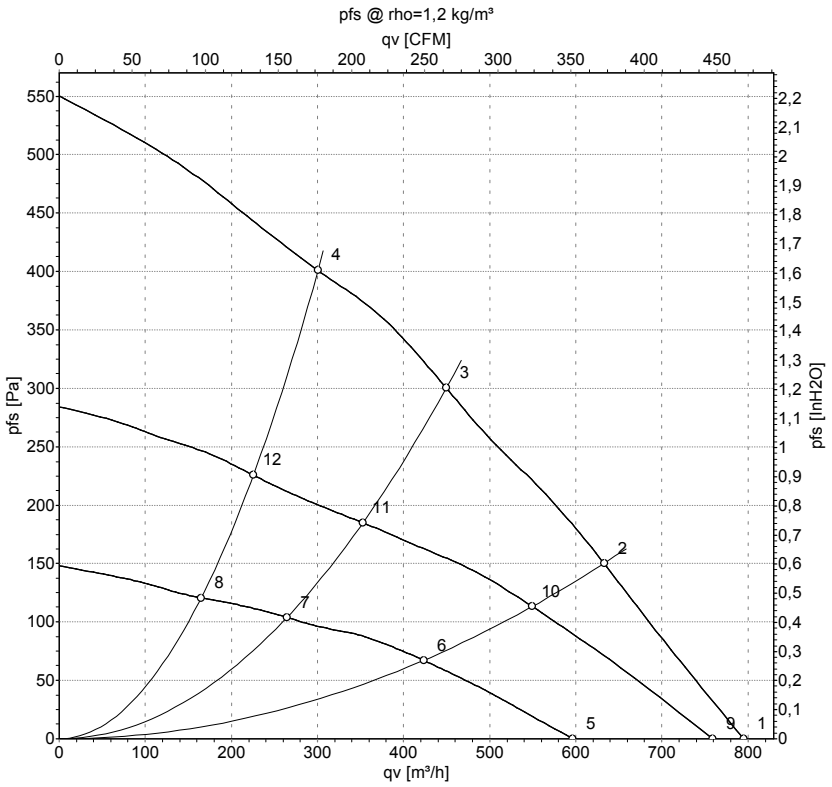
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Curves: Air performance 50 Hz



Measurement: LU-135250-1
Measurement: LU-131828-1
Measurement: LU-131827-1

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	f	n	P_{ed}	I	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	230	50	1320	107	0.90	795	0	470	0.00
2	230	50	1730	107	0.90	635	150	375	0.60
3	230	50	2200	107	0.90	450	300	265	1.20
4	230	50	2525	97	0.80	300	400	175	1.61
5	230	50	1000	41	0.38	595	0	350	0.00
6	230	50	1170	30	0.29	425	67	250	0.27
7	230	50	1320	23	0.23	265	104	155	0.42
8	230	50	1420	18	0.19	165	120	95	0.48
9	230	50	1255	84	0.70	760	0	445	0.00
10	230	50	1505	67	0.58	550	113	325	0.45
11	230	50	1745	50	0.45	355	185	210	0.74
12	230	50	1910	42	0.39	225	226	135	0.91

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

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