D3G146-HQ01-07

EC centrifugal fan

forward-curved, dual-intake

with housing (flange)



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Nominal data

Type	**D3G146-HQ01-07**
Motor	**M3G055-DF**

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}	1850
Power consumption	W	160
Current draw	A	1.3
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	2.4 kg
Fan size	146 mm
Rotor surface	Galvanized
Impeller material	PP plastic
Housing material	PP plastic
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	- Speed setting input (230 V) - Motor current limitation - Soft start - Thermal overload protection for motor
Speed levels	4
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	STK; Via terminal box
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; EN 60335-2-31; CE

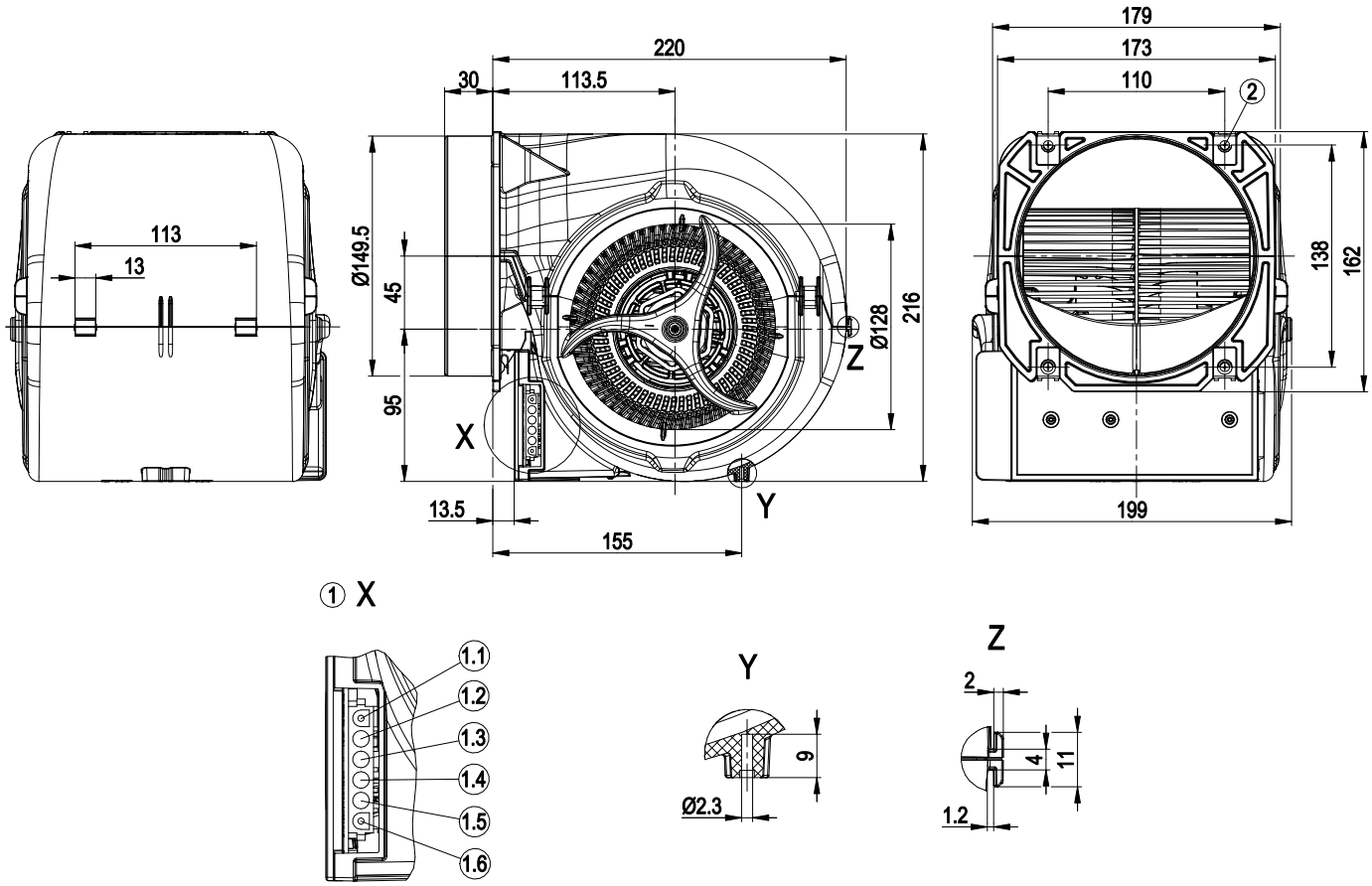
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Product drawing



1	Pin socket AMP Universal Mate-N-Lok 1586936-1
1.1	L = step 4 (max.)
1.2	L = step 3
1.3	L = step 2
1.4	L = step 1 (min.)
1.5	PE
1.6	N
2	4 x sheet metal nut for thread EN ISO 1478-ST4.8 (screw length at least 14.5 mm plus thickness of mounting material)

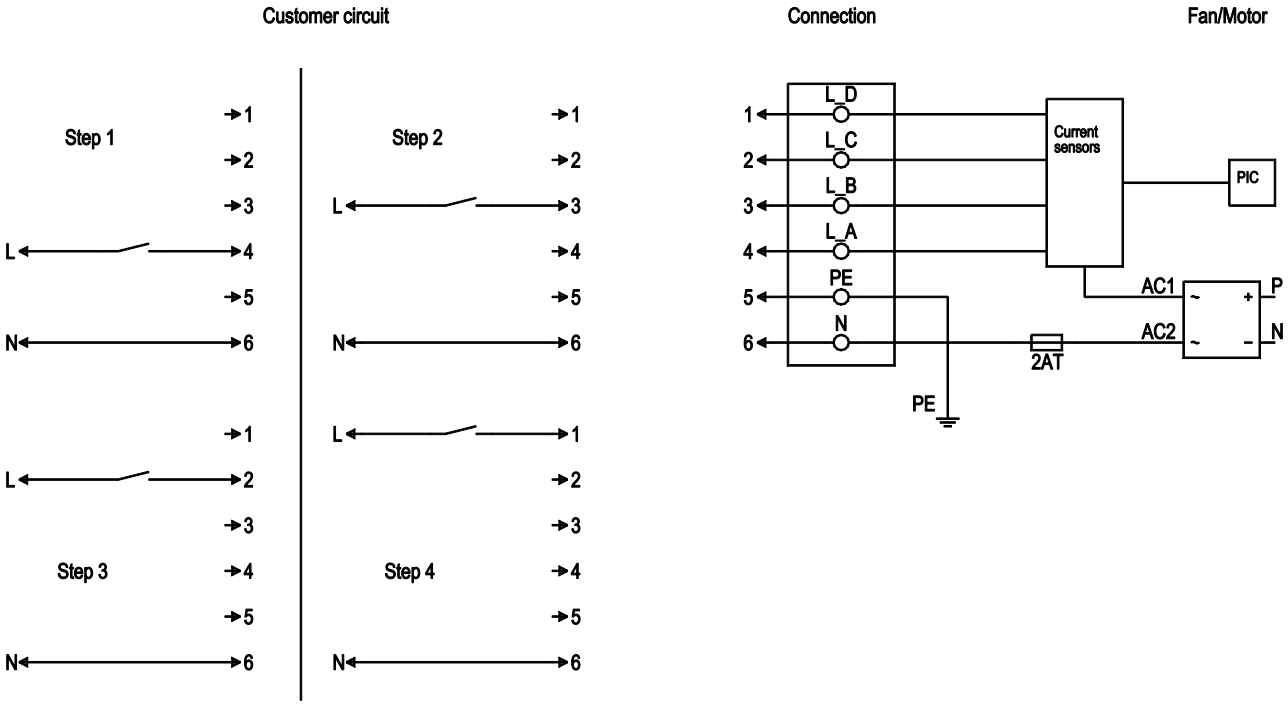
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	1	L_D	black	Step 4 - highest step (230 VAC, 50-60 Hz, see nameplate for voltage range)
	2	L_C	gray	Step 3 (230 VAC, 50-60 Hz, see nameplate for voltage range)
	3	L_B	red	Step 2 (230 VAC, 50-60 Hz, see nameplate for voltage range)
	4	L_A	white	Step 1 - lowest step (230 VAC, 50-60 Hz, see nameplate for voltage range)
	5	PE	green/yellow	Protective earth
	6	N	blue	Neutral conductor

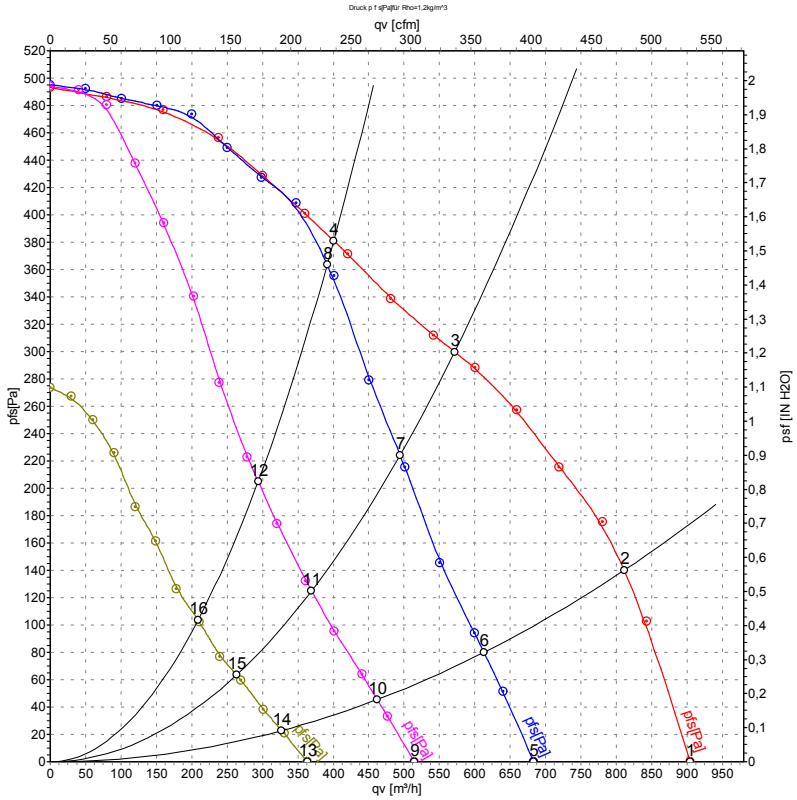
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Curves: Air performance 50 Hz



Measurement: LU-137679-1
Measurement: LU-137680-1
Measurement: LU-137685-1
Measurement: LU-137686-1

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	LpA_{in}	LwA_{in}	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	CFM	inH2O
1	230	50	1500	131	1.06	57	69	905	0	535	0.00
2	230	50	1850	160	1.30	56	68	810	140	475	0.56
3	230	50	2210	129	1.05	56	68	570	300	335	1.20
4	230	50	2425	109	0.92	58	70	400	380	235	1.53
5	230	50	1145	55	0.50	49	62	685	0	400	0.00
6	230	50	1425	65	0.57	49	61	615	80	360	0.32
7	230	50	1930	84	0.71	52	64	495	225	290	0.90
8	230	50	2410	101	0.85	58	69	390	365	230	1.47
9	230	50	875	24	0.25	43	55	515	0	305	0.00
10	230	50	1090	29	0.27	42	54	460	46	270	0.18
11	230	50	1465	37	0.34	46	57	370	125	215	0.50
12	230	50	1815	44	0.40	51	62	295	205	175	0.82
13	230	50	640	10	0.12	34	47	365	0	215	0.00
14	230	50	785	12	0.13	34	46	325	23	190	0.09
15	230	50	1050	15	0.15	37	49	265	64	155	0.26
16	230	50	1310	18	0.18	43	54	210	104	125	0.42

U = Power supply · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
qv = Air flow · p_{fs} = Pressure increase

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