D3G146-HQ01-06

EC centrifugal fan

forward-curved, dual-intake

with housing (flange)

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Nominal data

Type	**D3G146-HQ01-06**
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}	2385
Power consumption	W	130
Current draw	A	1.1
Min. back pressure	Pa	0
Min. back pressure	inH2O	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	40

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
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	Motor IP54, electronics IP20; Motor IP54
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	- Thermal overload protection for motor - Soft start - Speed setting input (230 V) - Motor current limitation
Speed levels	4
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	With plug; 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; CE
Approval	VDE

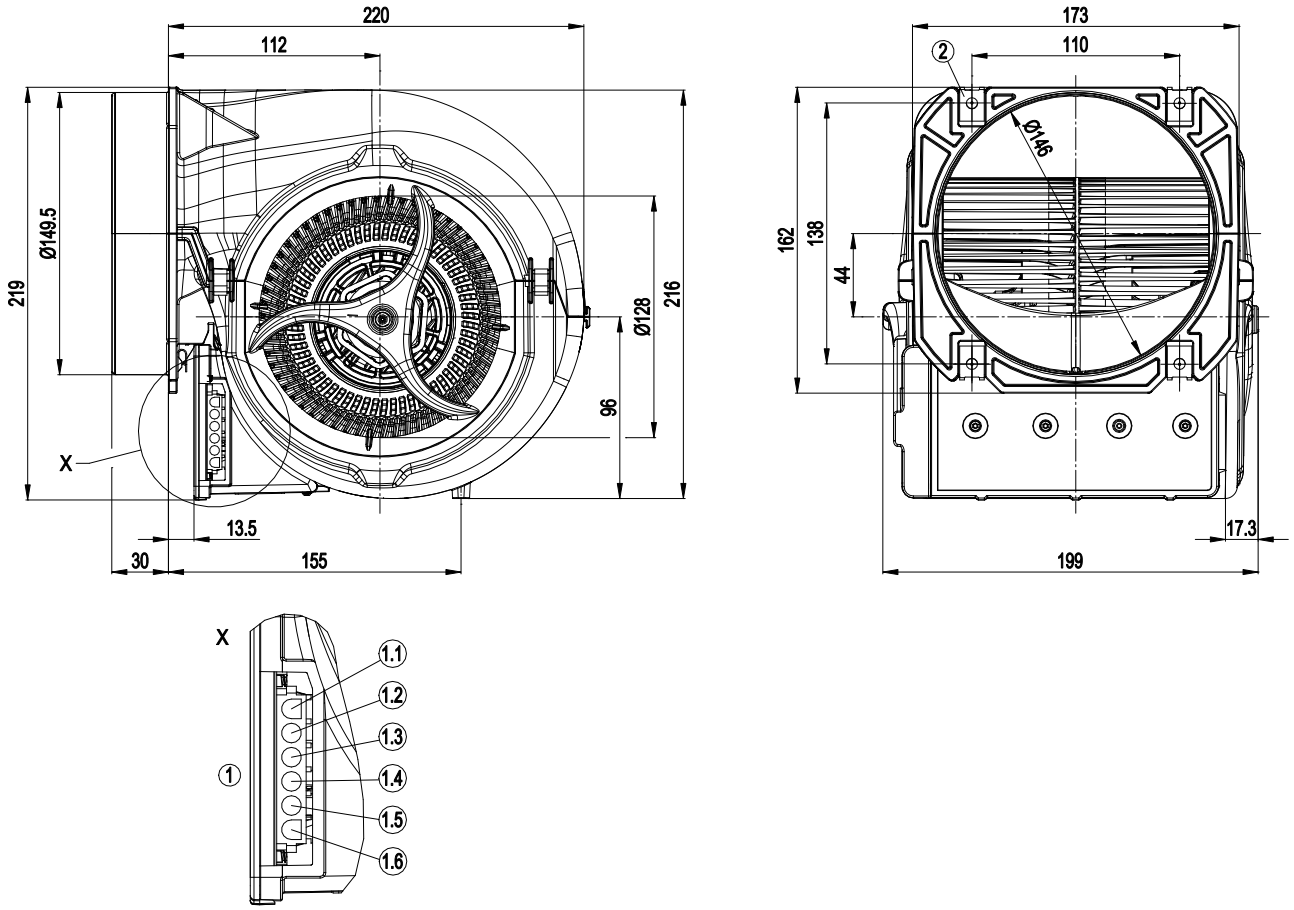
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Product drawing



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)

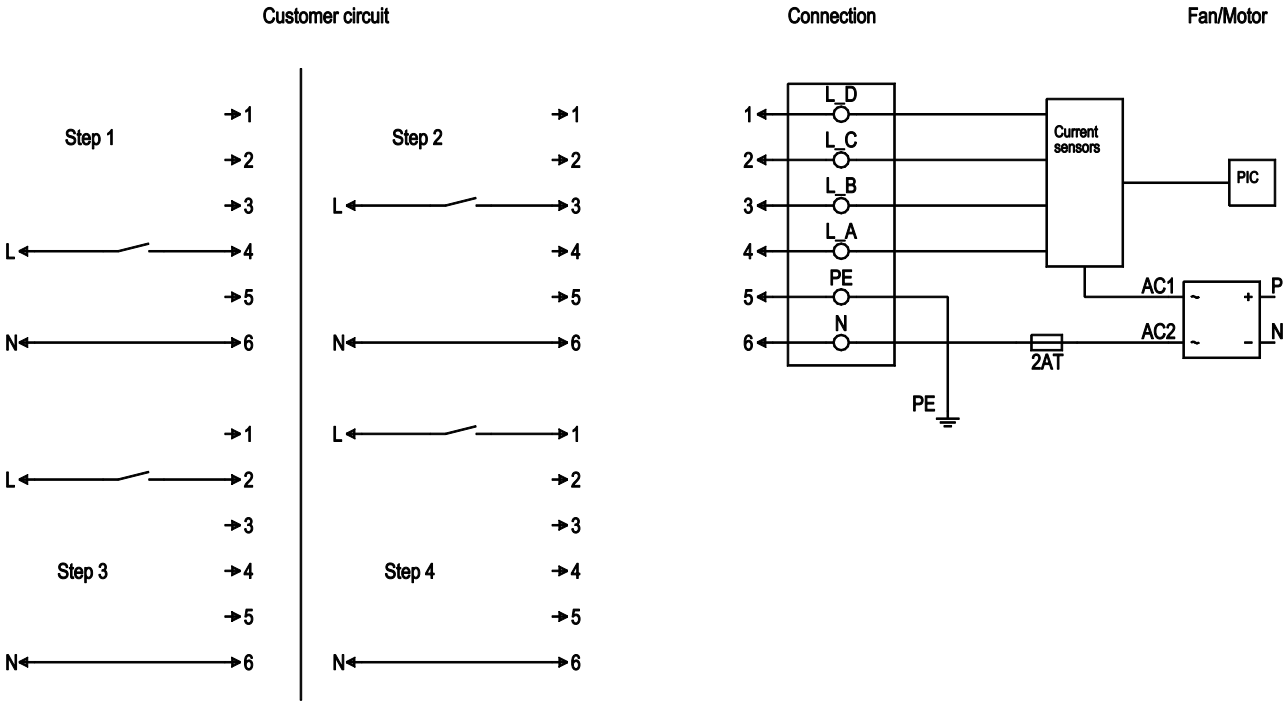
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Connection diagram



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

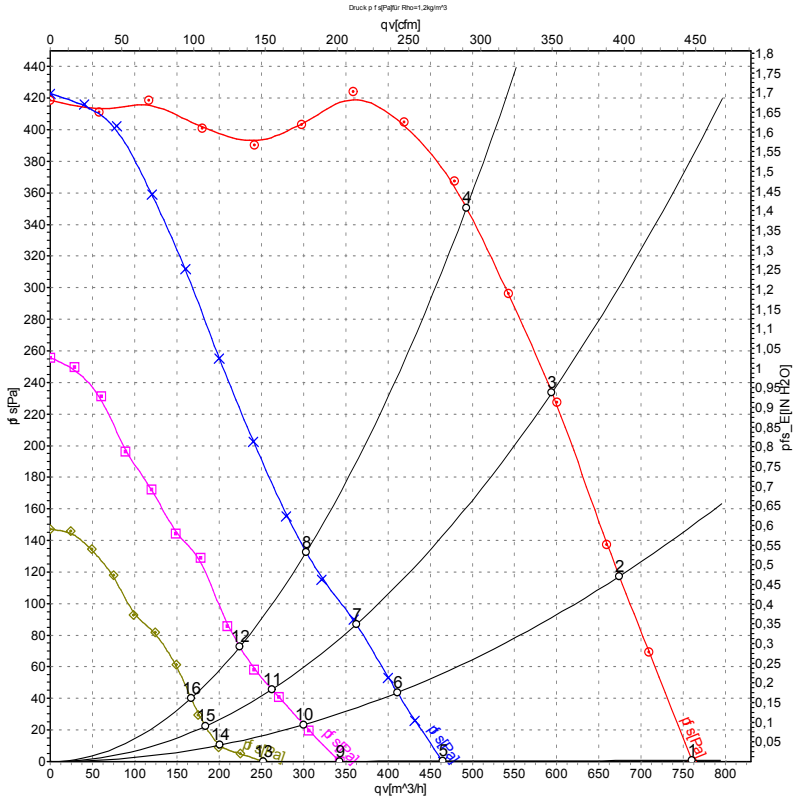
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Curves: Air performance 50 Hz



Measurement: LU-127229-1
Measurement: LU-127231-1
Measurement: LU-127232-1
Measurement: LU-127234-1

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	1290	80	0.66	760	0	445	0.00
2	230	50	1660	99	0.82	675	120	395	0.48
3	230	50	2020	118	0.95	595	235	350	0.94
4	230	50	2385	130	1.10	500	350	295	1.41
5	230	50	800	19	0.18	465	0	275	0.00
6	230	50	1025	22	0.20	410	44	240	0.18
7	230	50	1240	27	0.24	360	88	215	0.35
8	230	50	1475	30	0.27	305	133	180	0.53
9	230	50	610	9.0	0.10	340	0	200	0.00
10	230	50	770	10	0.11	300	23	175	0.09
11	230	50	935	13	0.14	265	46	155	0.18
12	230	50	1110	15	0.14	225	73	130	0.29
13	230	50	465	4.0	0.07	250	0	150	0.00
14	230	50	500	5.0	0.07	200	9	120	0.04
15	230	50	650	6.0	0.07	185	22	110	0.09
16	230	50	820	7.0	0.08	165	40	100	0.16

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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