D3G146-HQ01-09

EC centrifugal fan

forward-curved, dual-intake

with housing (large flange)



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Nominal data

Type	**D3G146-HQ01-09**
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
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	Motor IP54, electronics 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
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; CE

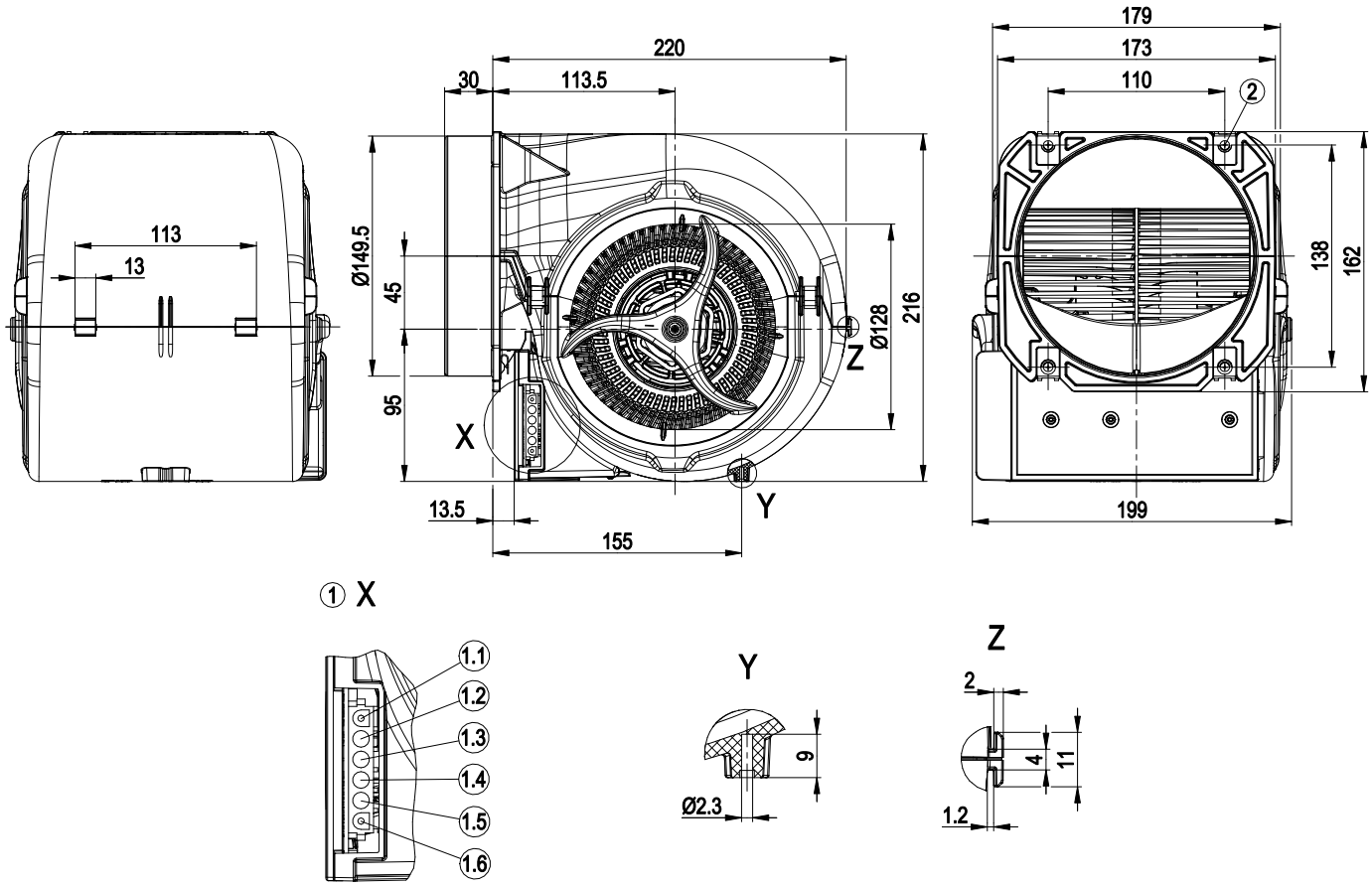
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Product drawing



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	4x sheet metal nut for thread EN ISO 1478-ST4.8

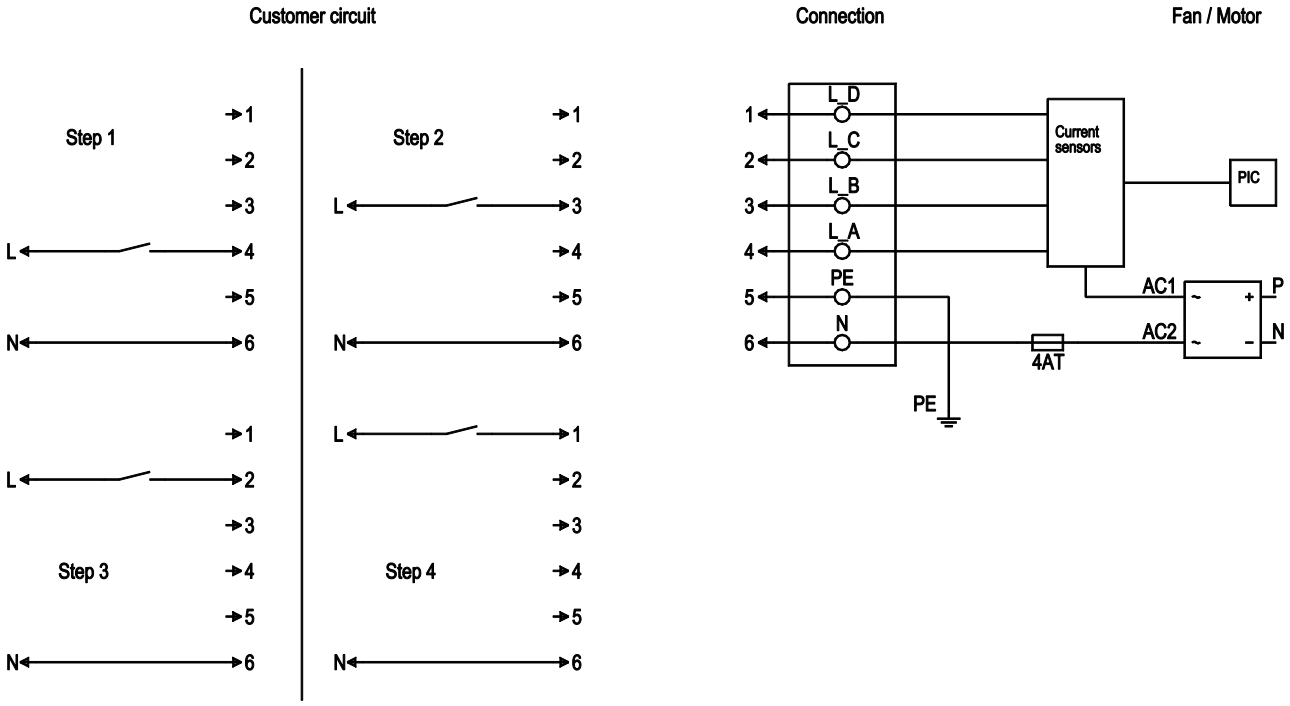
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Connection diagram



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

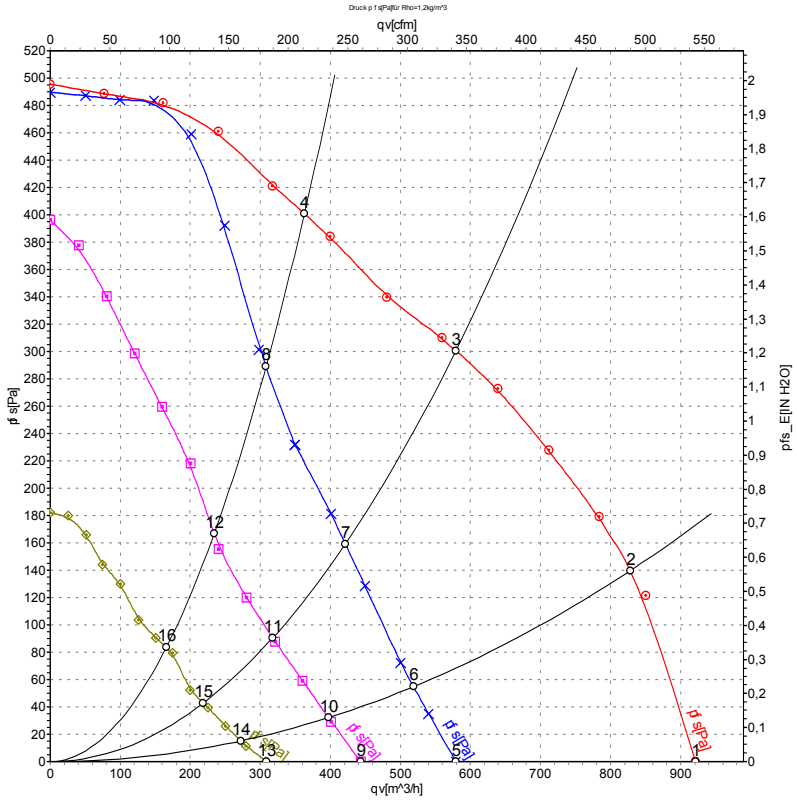
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Curves: Air performance 50 Hz



Measurement: LU-135423-1
Measurement: LU-134018-1
Measurement: LU-134019-1
Measurement: LU-134021-1

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	1530	135	1.08	920	0	545	0.00
2	230	50	1850	160	1.30	830	140	485	0.56
3	230	50	2210	128	1.05	580	300	340	1.20
4	230	50	2510	101	0.84	365	400	215	1.61
5	230	50	985	33	0.32	580	0	340	0.00
6	230	50	1205	38	0.36	520	55	305	0.22
7	230	50	1640	52	0.48	420	159	250	0.64
8	230	50	2135	62	0.55	310	288	180	1.16
9	230	50	780	17	0.18	445	0	260	0.00
10	230	50	940	20	0.20	395	32	235	0.13
11	230	50	1250	24	0.24	320	90	185	0.36
12	230	50	1640	31	0.29	235	166	140	0.67
13	230	50	555	7.3	0.10	310	0	180	0.00
14	230	50	655	7.7	0.10	270	15	160	0.06
15	230	50	875	9.9	0.11	220	43	130	0.17
16	230	50	1175	12	0.14	165	84	100	0.34

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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