D4E160-HN48-10

AC centrifugal fan

forward curved, dual inlet

with housing (without flange)

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Nominal data

Type	**D4E160-HN48-10**
Motor	**M4E068-CF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		ml
Valid for approval / standard		CE
Speed	min^{-1}	1280
Power input	W	93
Current draw	A	0.42
Motor capacitor	µF	2
Capacitor voltage	VDB	450
Capacitor standard		P2 (CE)
Min. back pressure	Pa	100
Max. ambient temperature	°C	40

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

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Technical features

Mass	2.55 kg
Size	160 mm
Surface of rotor	Uncoated
Material of impeller	PP plastic, fibreglass-reinforced
Housing material	Plastic PA6, fibreglass-reinforced; sheet steel, hot-galvanised
Motor suspension	Motor anti-vibration mounted on both sides
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position
Insulation class	"F"
Humidity class	F0
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Calotte bearing
Speed steps	2
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Electrical leads	With plug
Motor protection	Thermal overload protector (TOP) wired internally
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE

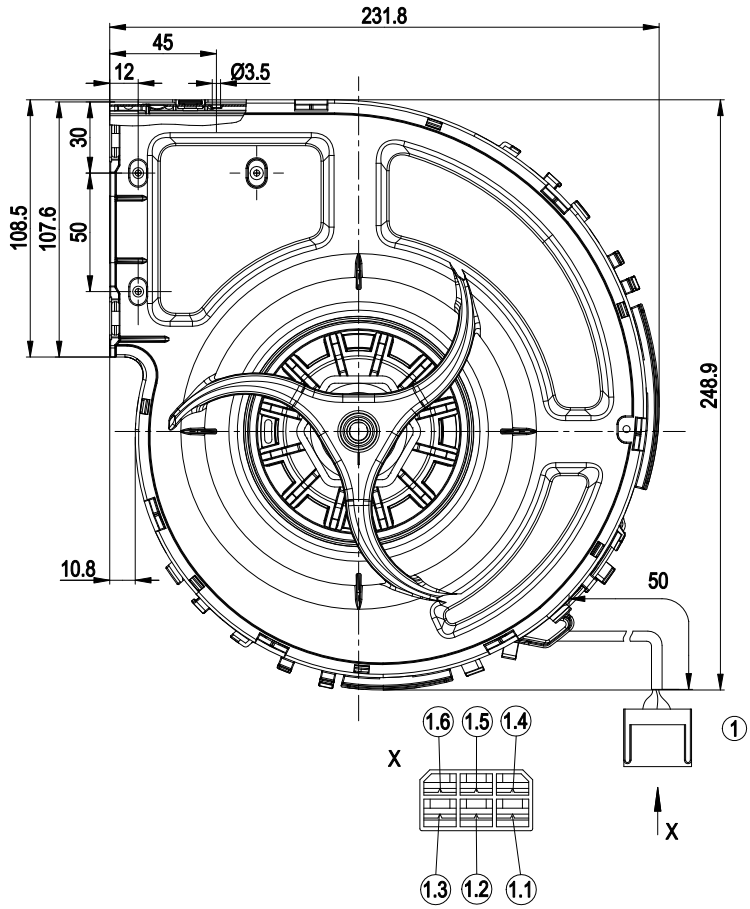
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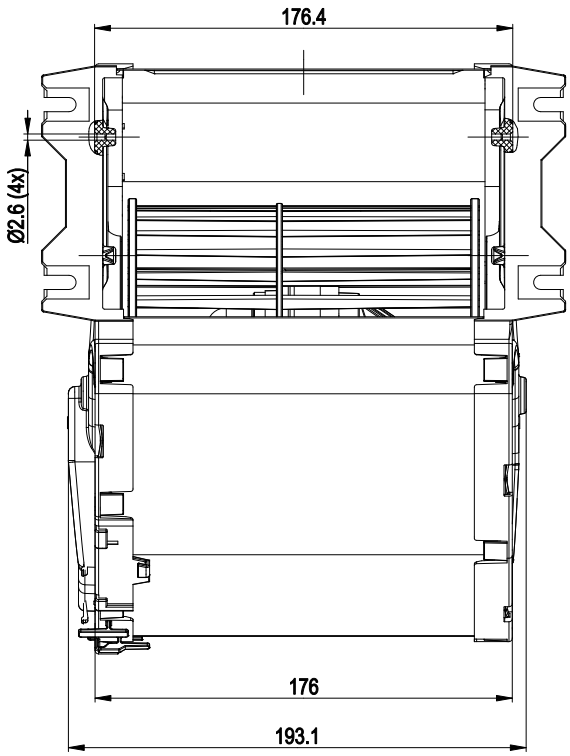
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Product drawing





Line	No.	Signal	Colour	Function / assignment
		1		Connector shell INARCA 0854081700
		1.1	yellow	Capacitor
		1.2	black	Step 2 (max.)
		1.3	blue	N
		1.4	brown	Capacitor
		1.5	white	Step 1 (min.)
		1.6	green/yellow	Protective earth

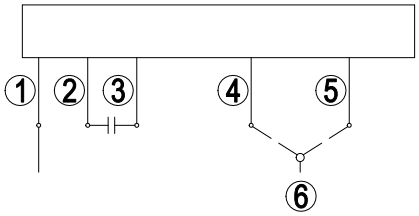
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Connection screen



Note: Fast speed (step II); slow speed (step I)

1	= N = blue	2	brown	3	yellow
4	Step I white	5	Step II black	6	L1

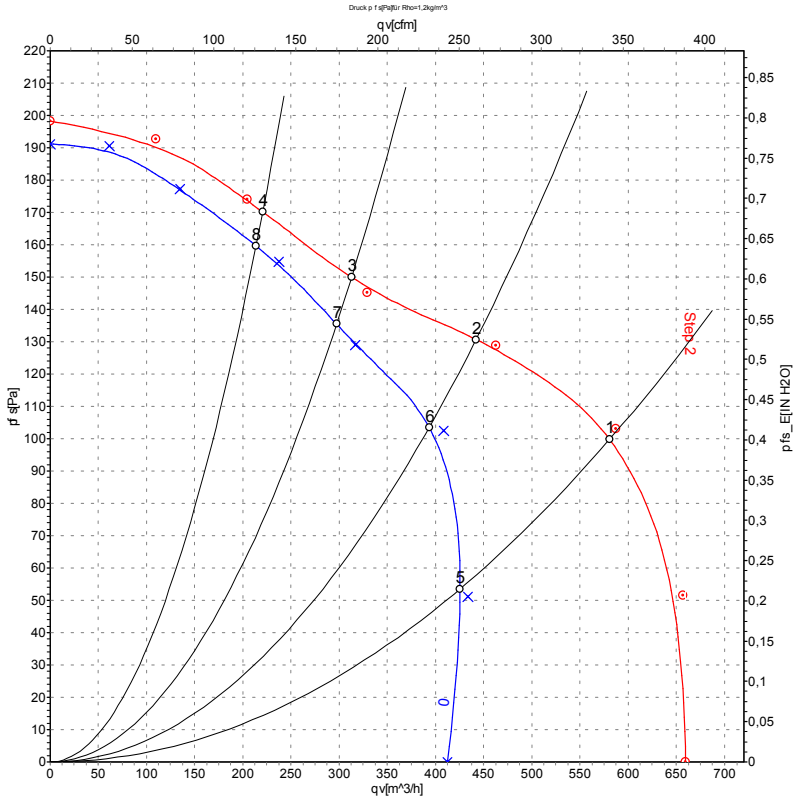
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Charts: Air flow 50 Hz



Measurement: LU-38542
Measurement: LU-38543

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	Stage	U	f	n	P_e	I	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa
1	2	230	50	1280	93	0.42	580	100
2	2	230	50	1365	80	0.35	440	130
3	2	230	50	1405	73	0.33	315	150
4	2	230	50	1425	69	0.31	220	170
5	1	230	50	800	88	0.38	425	32
6	1	230	50	1235	70	0.31	395	107
7	1	230	50	1335	61	0.27	295	135
8	1	230	50	1380	56	0.25	215	160

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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