D2E140-HR01-14

AC centrifugal fan

forward-curved, dual-intake

with housing (flange)



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Nominal data

Type	**D2E140-HR01-14**
Motor	**M2E068-CF**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		ml	ml
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	1600	2250
Power consumption	W	150	160
Current draw	A	0.65	0.70
Capacitor	µF	4	4
Capacitor voltage	VDB	400	400
Capacitor standard		S2 (CE)	S2 (CE)
Min. back pressure	Pa	50	300
Min. back pressure	inH2O	0.2	1.2
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	60	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	140 mm
Rotor surface	Unpainted
Impeller material	PP plastic
Housing material	PP plastic
Motor suspension	Motor mounted with brackets on one side
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
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
Mode	S1
Motor bearing	Ball bearing
Speed levels	3
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	Via terminal box, capacitor integrated and connected; With plug
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S2
Conformity with standards	EN 60335-1; CE
Approval	VDE

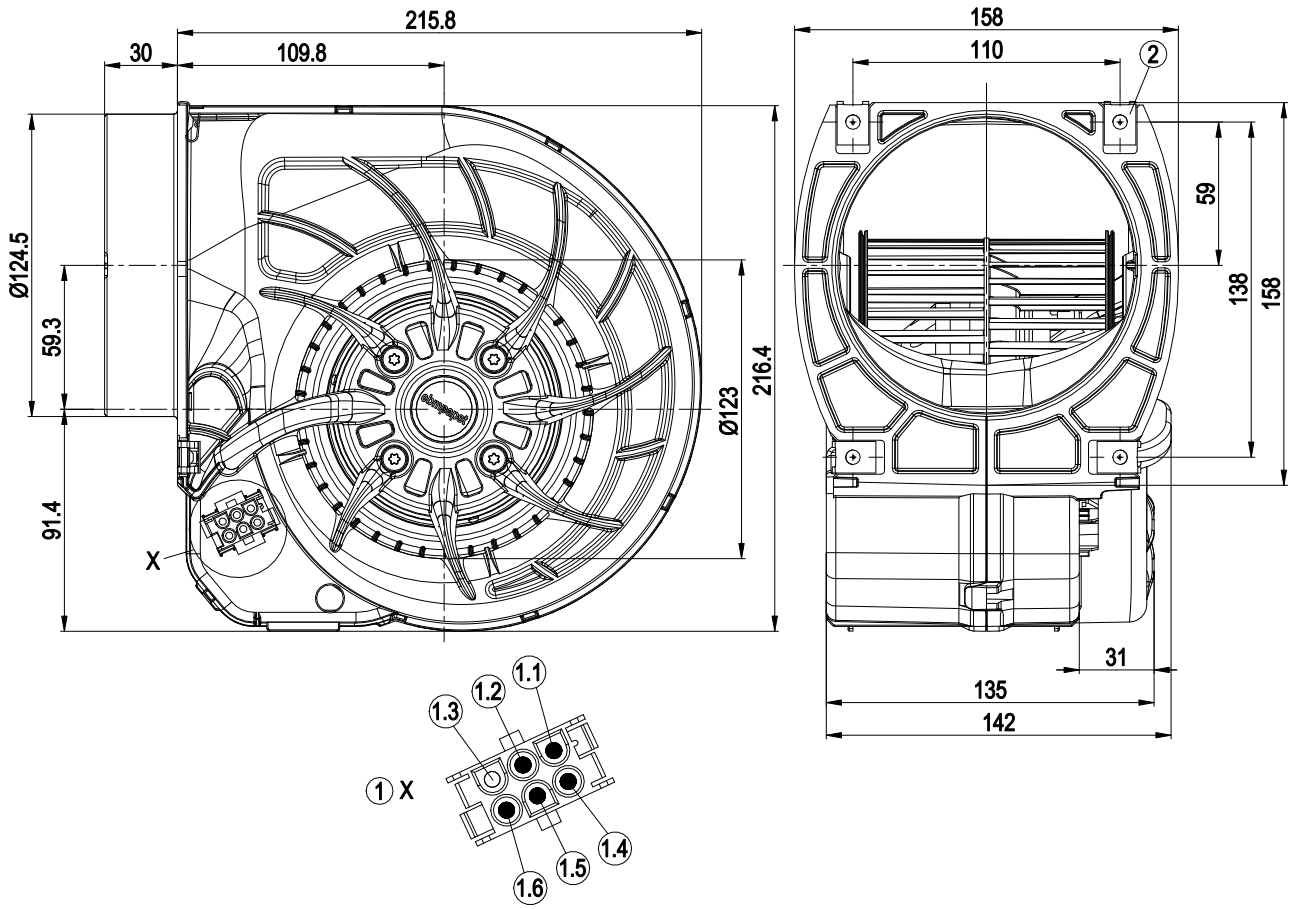
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Product drawing



1	Coded plug system tyco Universal-Mate-N-Lok, connector housing: tyco 926682-3, 5x plug pin tyco 926886-1
1.1	L = step 1 (min.)
1.2	L = step 2
1.3	not used
1.4	L = step 3 (max.)
1.5	N
1.6	PE
2	4x sheet metal nut for thread EN ISO 1478-ST4.8 (screw length at least 14.5 mm plus thickness of mounting material)

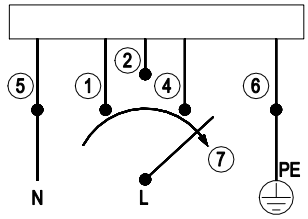
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Connection diagram



The switch must interrupt the circuit on switching.

1	Step 1 (min.)	2	Step 2	3	not used
4	Step 3 (max.)	5	N	6	PE protective earth
7	Speed increasing				

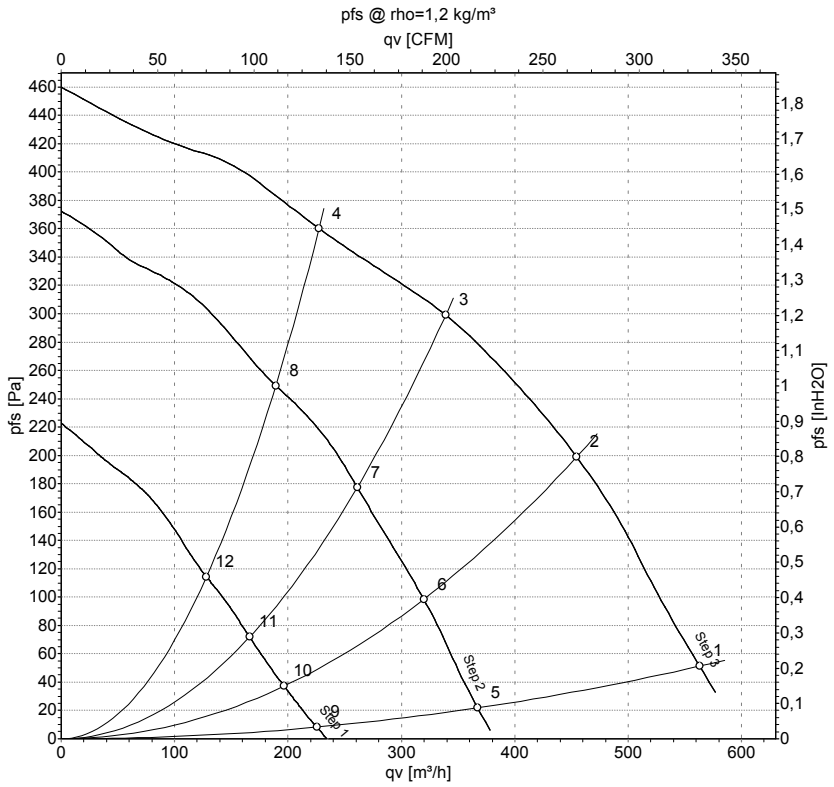
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Curves: Air performance 50 Hz



Measurement: LU-104819-1
Measurement: LU-104823-1
Measurement: LU-104827-1

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

	Stage	U	f	n	P_e	I	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	3	230	50	1600	150	0.65	565	50	330	0.20
2	3	230	50	1970	140	0.61	455	200	270	0.80
3	3	230	50	2250	128	0.56	340	300	200	1.20
4	3	230	50	2415	120	0.53	225	360	135	1.45
5	2	230	50	1065	91	0.46	365	21	215	0.08
6	2	230	50	1400	87	0.45	320	99	190	0.40
7	2	230	50	1780	80	0.43	260	177	155	0.71
8	2	230	50	2020	74	0.41	190	249	110	1.00
9	1	230	50	675	68	0.37	225	8	130	0.03
10	1	230	50	875	67	0.36	195	37	115	0.15
11	1	230	50	1150	65	0.36	165	72	100	0.29
12	1	230	50	1390	63	0.35	130	114	75	0.46

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

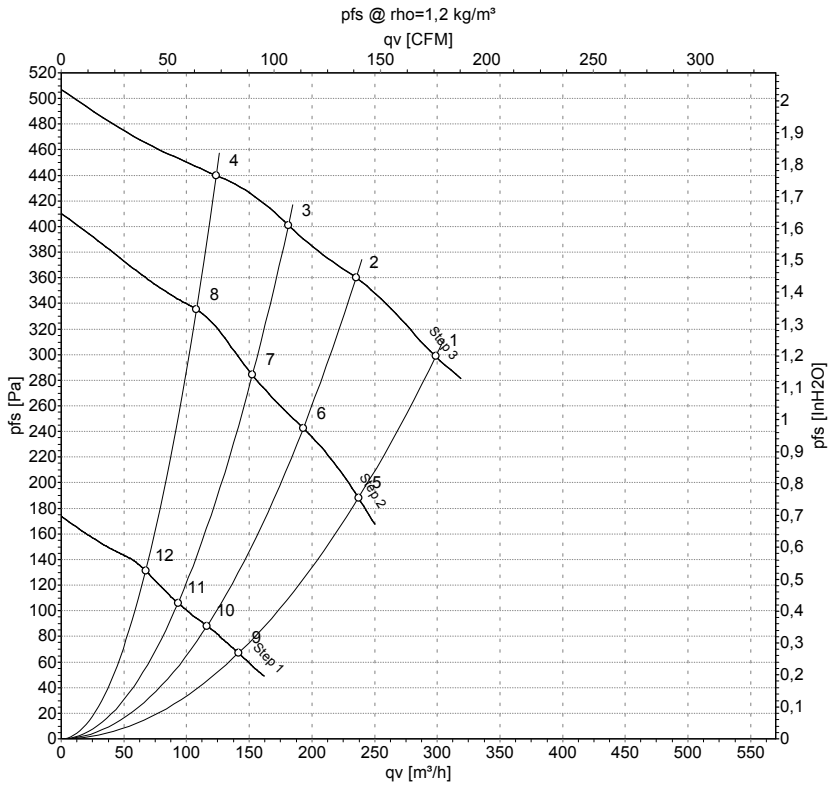
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Curves: Air performance 60 Hz



Measurement: LU-104821-1
Measurement: LU-104826-1
Measurement: LU-104829-1

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

	Stage	U	f	n	P_e	I	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	3	230	60	2250	160	0.70	300	300	175	1.20
2	3	230	60	2395	159	0.69	235	360	140	1.45
3	3	230	60	2495	157	0.69	180	400	105	1.61
4	3	230	60	2590	156	0.68	125	440	75	1.77
5	2	230	60	1795	91	0.52	235	188	140	0.75
6	2	230	60	1980	88	0.51	195	242	115	0.97
7	2	230	60	2105	86	0.51	155	283	90	1.14
8	2	230	60	2255	84	0.50	110	336	65	1.35
9	1	230	60	1100	65	0.40	140	67	85	0.27
10	1	230	60	1240	65	0.40	115	88	70	0.35
11	1	230	60	1320	64	0.40	95	106	55	0.43
12	1	230	60	1430	64	0.40	65	131	40	0.53

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

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