D2E140-HR97-07

AC centrifugal fan

forward curved, dual inlet

with housing (flange)



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Nominal data

Type	**D2E140-HR97-07**
Motor	**M2E068-CF**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		fa	fa
Valid for approval / standard		CE	CE
Speed (rpm)	min^{-1}	1150	1050
Power input	W	130	130
Current draw	A	0.58	0.58
Motor capacitor	µF	2	2
Capacitor voltage	VDB	400	400
Capacitor standard		S2 (CE)	S2 (CE)
Min. back pressure	Pa	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	50	40
Starting current	A	0.57	0.59

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	2.3 kg
Size	140 mm
Surface of rotor	Uncoated
Material of impeller	PP plastic
Housing material	PP plastic
Motor suspension	Motor mounted via brackets on one side
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44
Insulation class	"F"
Humidity (F)/environmental protection class (H)	H0 - dry environment
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Speed steps	4
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Electrical leads	Via terminal box, integrated capacitor connected via terminal box; With plug
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Motor capacitor according to EN 60252-1 in safety protection class	S2
Product conforming to standard	EN 60335-1; CE
Approval	VDE; EAC; CCC

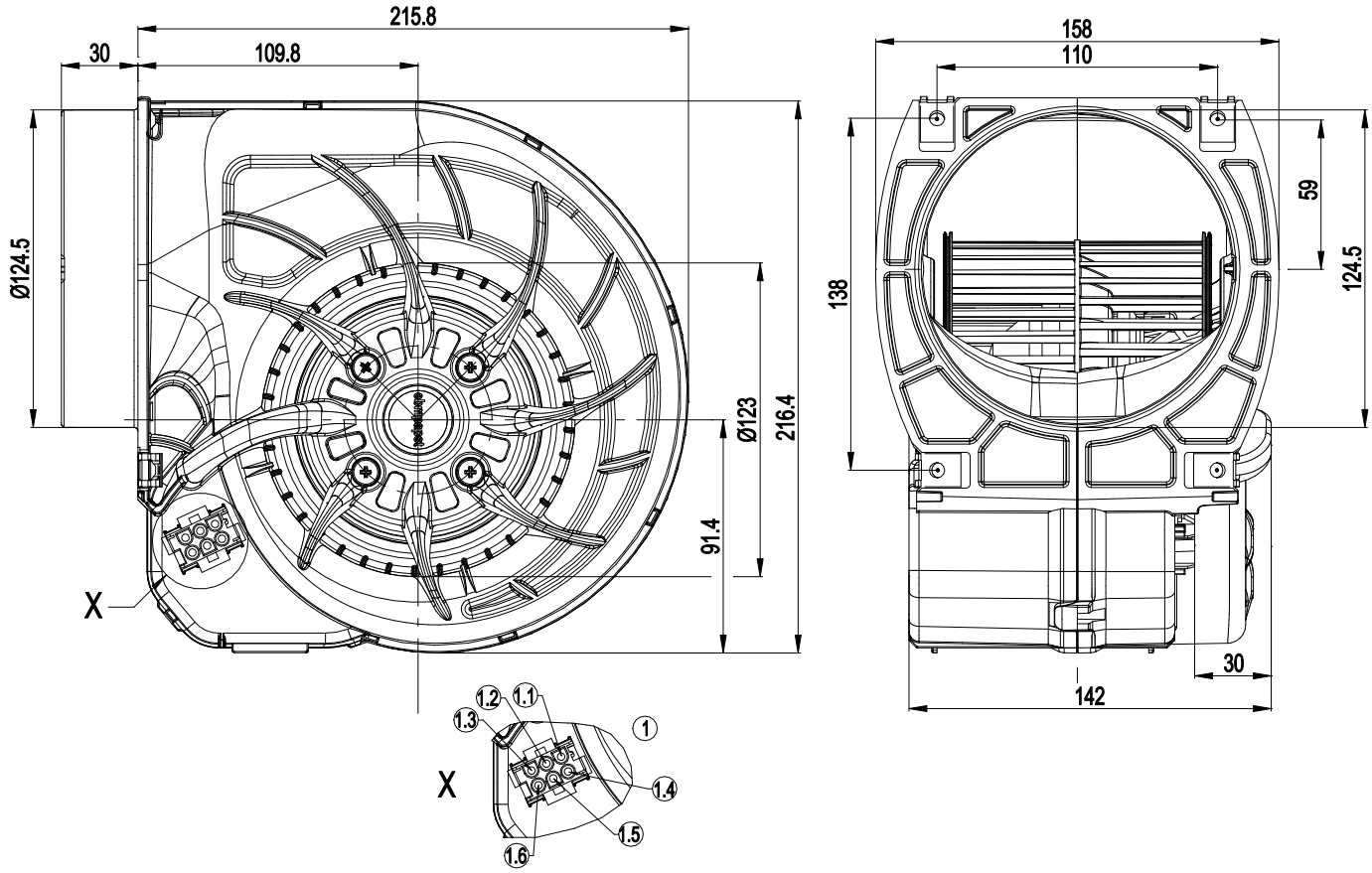
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Product drawing



1	Connector housing AMP Mate-N-Lok 350 715-4
1.1	L= Stage 1
1.2	L = step 2
1.3	L= Stage 3
1.4	L= Stage 4 (max.)
1.5	N
1.6	Protective earth

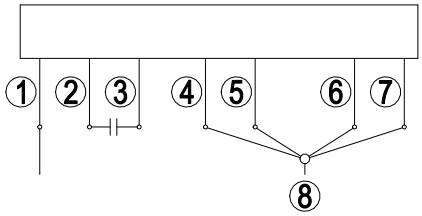
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Connection screen



Note: fast speed (step IV); slow speed (step I); the switch must interrupt the circuit during the changeover.

1	= N = blue
2	brown
3	yellow
4	Step I black 1 / white
5	Step II black 2 / red
6	Step III black 3 / grey
7	Step IV black 4 / black
8	L1

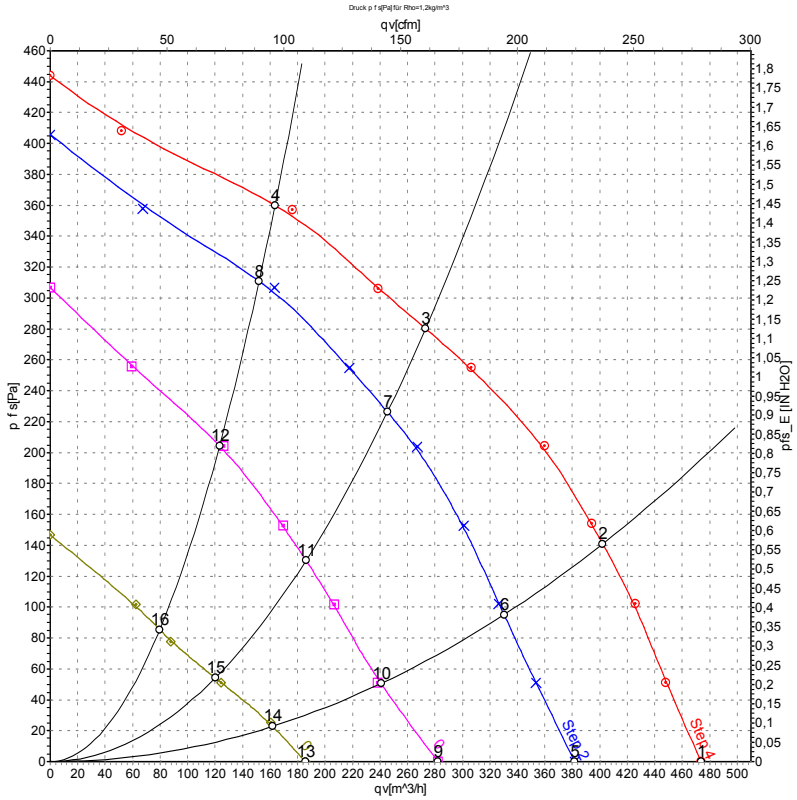
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Charts: Air flow 50 Hz



Measurement: LU-43529-1
Measurement: LU-43530-1
Measurement: LU-43531-1
Measurement: LU-43532-1

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	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	4	230	50	1150	130	0.58	58	70	475	0	280	0.00
2	4	230	50	1705	117	0.51	57	69	400	140	235	0.56
3	4	230	50	2220	100	0.43	59	71	275	280	160	1.12
4	4	230	50	2390	92	0.40	60	72	165	360	95	1.45
5	3	230	50	955	97	0.43	52	64	380	0	225	0.00
6	3	230	50	1415	92	0.41	53	65	330	95	195	0.38
7	3	230	50	1995	81	0.36	56	69	245	226	145	0.91
8	3	230	50	2230	73	0.34	59	71	150	313	90	1.26
9	2	230	50	710	75	0.34	44	56	280	0	165	0.00
10	2	230	50	1020	73	0.33	45	57	240	48	140	0.19
11	2	230	50	1510	68	0.31	49	61	185	130	110	0.52
12	2	230	50	1815	63	0.30	54	66	125	206	70	0.83
13	1	230	50	490	57	0.26	35	47	185	0	110	0.00
14	1	230	50	705	56	0.26	36	48	160	24	95	0.10
15	1	230	50	1000	55	0.25	38	50	120	54	70	0.22
16	1	230	50	1185	54	0.25	43	55	80	85	45	0.34

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · q_V = Air flow
p_{fs} = Pressure increase

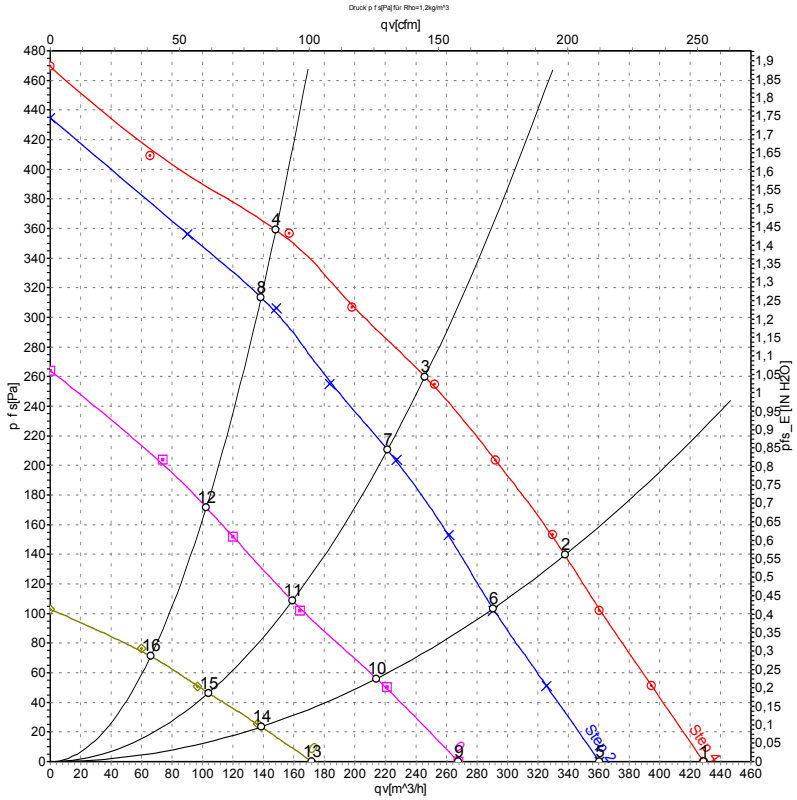
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Charts: Air flow 60 Hz



Measurement: LU-43534-1
Measurement: LU-43535-1
Measurement: LU-43536-1
Measurement: LU-43533-1

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	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	4	230	60	1050	130	0.58	430	0	255	0.00
2	4	230	60	1635	127	0.56	340	140	200	0.56
3	4	230	60	2120	122	0.53	245	260	145	1.04
4	4	230	60	2380	118	0.51	150	360	85	1.45
5	3	230	60	905	100	0.44	360	0	210	0.00
6	3	230	60	1415	97	0.44	290	102	170	0.41
7	3	230	60	1920	93	0.43	220	211	130	0.85
8	3	230	60	2220	90	0.42	140	315	80	1.26
9	2	230	60	665	75	0.35	270	0	160	0.00
10	2	230	60	1045	73	0.34	215	57	125	0.23
11	2	230	60	1400	71	0.34	160	108	95	0.43
12	2	230	60	1675	70	0.34	100	172	60	0.69
13	1	230	60	455	56	0.27	170	0	100	0.00
14	1	230	60	700	55	0.27	140	24	80	0.10
15	1	230	60	925	54	0.27	105	46	60	0.18
16	1	230	60	1085	53	0.26	65	72	40	0.29

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

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