D2E146-ET65-08

AC centrifugal fan

forward-curved, dual-intake

with housing (without flange)

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Nominal data

Type	**D2E146-ET65-08**		
Motor	**M2E068-EC**		
Phase		1~	1~
Nominal voltage	VAC	115	115
Frequency	Hz	60	60
Method of obtaining data		ml	ml
Valid for approval/standard		UL 2111	CE
Speed (rpm)	min^{-1}	2000	2000
Power consumption	W	450	430
Current draw	A		3.8
Capacitor	µF	25	25
Capacitor voltage	VDB	250	250
Capacitor standard		S2 (CE)	S2 (CE)
Min. back pressure	Pa	100	100
Min. back pressure	inH2O	0.4	0.4
Min. ambient temperature	°C	-20	-20
Max. ambient temperature	°C	50	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	4.2 kg
Fan size	146 mm
Rotor surface	Unpainted
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Guard grille material	Steel, galvanized and coated with white-aluminum plastic (RAL 9006)
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP20
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
Max. permitted ambient temp. for motor (transport/storage)	+ 70 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None, open rotor
Mode	S1
Motor bearing	Calotte bearing
Speed levels	4
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
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	CSA C22.2 No. 100; UL 1004-1

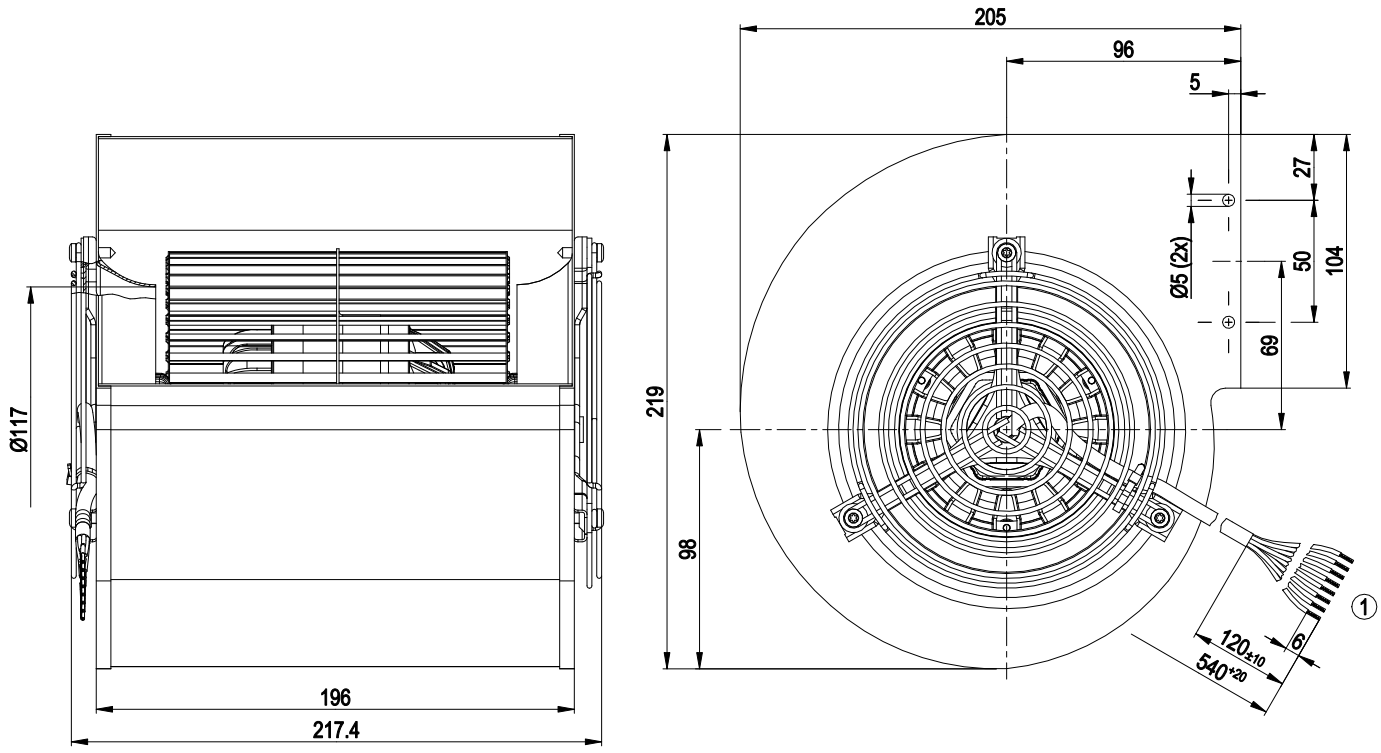
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Product drawing



1	Cable Raychem Spec.44, AWG22 (gn/yl and gray AWG20), 8x crimped splices

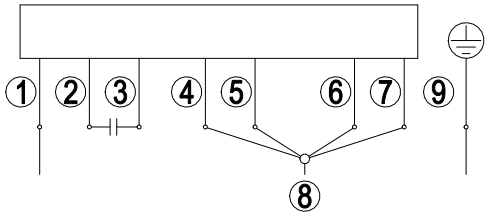
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Connection diagram



Note: High speed (step IV); low speed (step I); the switch must interrupt the circuit when switching.

1	N (blue)
2	brown
3	yellow
4	Step I black 1 / white
5	Step II black 2 / red
6	Step III black 3 / gray
7	Step IV black 4 / black
8	L1
9	= PE = green/yellow

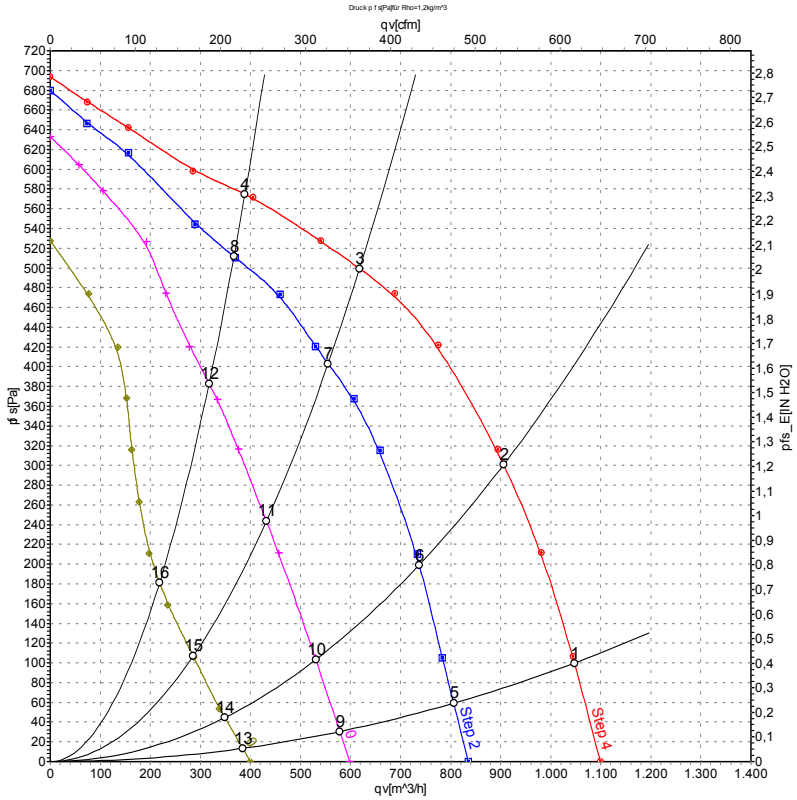
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Curves: Air performance 60 Hz



Measurement: LU-52785-1
Measurement: LU-52787-1
Measurement: LU-52788-1
Measurement: LU-52789-1

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	4	115	60	2000	430	3.80	1045	100	615	0.40
2	4	115	60	2410	414	3.60	905	300	535	1.20
3	4	115	60	2870	355	3.09	620	500	365	2.01
4	4	115	60	3060	319	2.78	390	575	230	2.31
5	3	115	60	1555	323	2.86	805	59	475	0.24
6	3	115	60	1985	309	2.76	735	203	435	0.81
7	3	115	60	2615	266	2.49	555	403	325	1.62
8	3	115	60	2910	235	2.28	365	512	215	2.06
9	2	115	60	1130	246	2.23	580	30	340	0.12
10	2	115	60	1450	242	2.20	530	104	315	0.42
11	2	115	60	2045	222	2.09	430	244	255	0.98
12	2	115	60	2495	199	1.96	320	383	185	1.54
13	1	115	60	780	193	1.77	385	13	225	0.05
14	1	115	60	975	191	1.75	350	44	205	0.18
15	1	115	60	1360	185	1.71	285	107	170	0.43
16	1	115	60	1740	176	1.66	220	181	130	0.73

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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