R2E146-AI01-20

AC centrifugal fan

forward curved, single inlet

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Nominal data

Type	**R2E146-AI01-20**
Motor	**M2E068-BF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		ml
Valid for approval / standard		CE
Speed (rpm)	min^{-1}	1600
Power input	W	100
Current draw	A	0.44
Motor capacitor	µF	2
Capacitor voltage	VDB	400
Capacitor standard		S2 (CE)
Min. back pressure	Pa	100
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	50

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

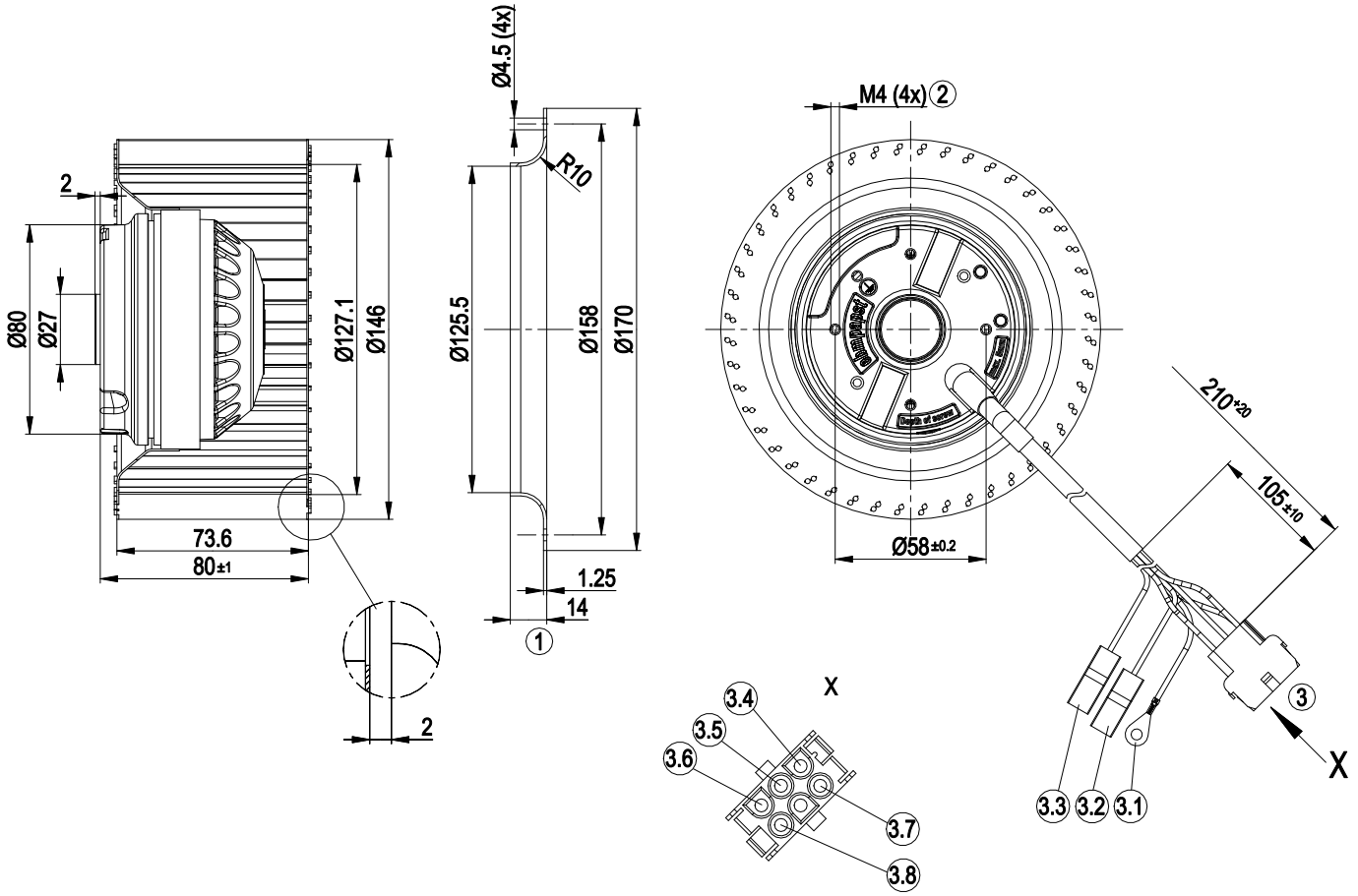
Mass	1.25 kg
Size	146 mm
Surface of rotor	Uncoated
Material of impeller	Sheet steel, galvanised
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position
Insulation class	"F"
Humidity (F)/environmental protection class (H)	H0 - dry environment
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
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE

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Product drawing



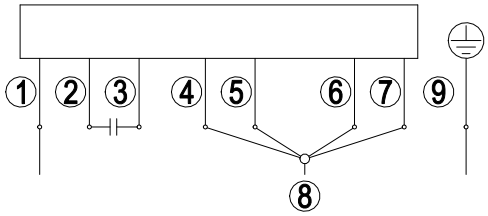
1	Accessory part: Inlet nozzle 09576-2-4013 not included in scope of delivery
2	Thread reach max. 5 mm
3	Connection line halogen-silicone-free 8G 0.5 mm², 6-pole connector housing tyco 2178773-1, 5x plug pin tyco 926886-1
3.1	PE (green/yellow), contact stud Ø 4.3
3.2	Yellow, threaded pin 6.3x0.8 with insulating sleeve
3.3	Grey, threaded pin 6.3x0.8 with insulating sleeve
3.4	red
3.5	blue
3.6	black
3.7	white
3.8	brown

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Connection screen



Note: Fast speed (level IV); slow speed (level I); the switch must interrupt the circuit on switching.

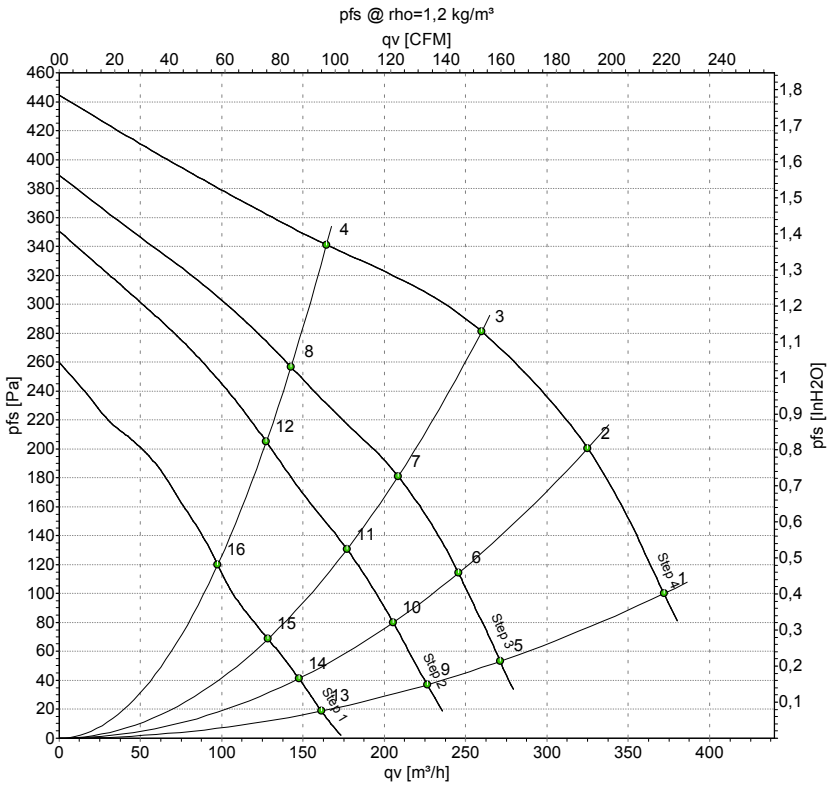
1	N (blue)
2	grey
3	yellow
4	Level 1 (red)
5	Level 2 (white)
6	Level 3 (brown)
7	Level 4 (black)
8	L1
9	= PE = green / yellow

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Charts: Air flow 50 Hz



Measurement: LU-78709-1
Measurement: LU-78711-1
Measurement: LU-78713-1
Measurement: LU-78715-1

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	in. wg
1	4	230	50	1600	100	0.44	370	100	220	0.40
2	4	230	50	1840	93	0.41	325	200	190	0.80
3	4	230	50	2105	86	0.38	260	280	155	1.12
4	4	230	50	2375	77	0.34	165	340	95	1.36
5	3	230	50	1170	71	0.32	270	53	160	0.21
6	3	230	50	1395	69	0.31	245	114	145	0.46
7	3	230	50	1695	65	0.30	210	181	125	0.73
8	3	230	50	2080	58	0.27	145	257	85	1.03
9	2	230	50	975	62	0.29	225	36	135	0.14
10	2	230	50	1180	61	0.28	205	80	120	0.32
11	2	230	50	1445	58	0.27	175	131	105	0.53
12	2	230	50	1860	53	0.25	125	205	75	0.82
13	1	230	50	710	52	0.25	160	18	95	0.07
14	1	230	50	860	51	0.24	145	41	85	0.16
15	1	230	50	1065	50	0.24	130	69	75	0.28
16	1	230	50	1430	47	0.23	95	120	55	0.48

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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