R4D500-AT01-05

AC centrifugal fan

backward curved, single inlet

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Nominal data

Type	**R4D500-AT01-05**
Motor	**M4D138-HF**

Phase		3~	3~
Nominal voltage	VAC	400	400
Connection		Δ	Y
Frequency	Hz	50	50
Type of data definition		ml	ml
Valid for approval / standard		-	-
Speed	min^{-1}	1380	1160
Power input	W	1450	1080
Current draw	A	2.8	1.8
Min. back pressure	Pa	0	0
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	80	80
Starting current	A	14	4.5

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

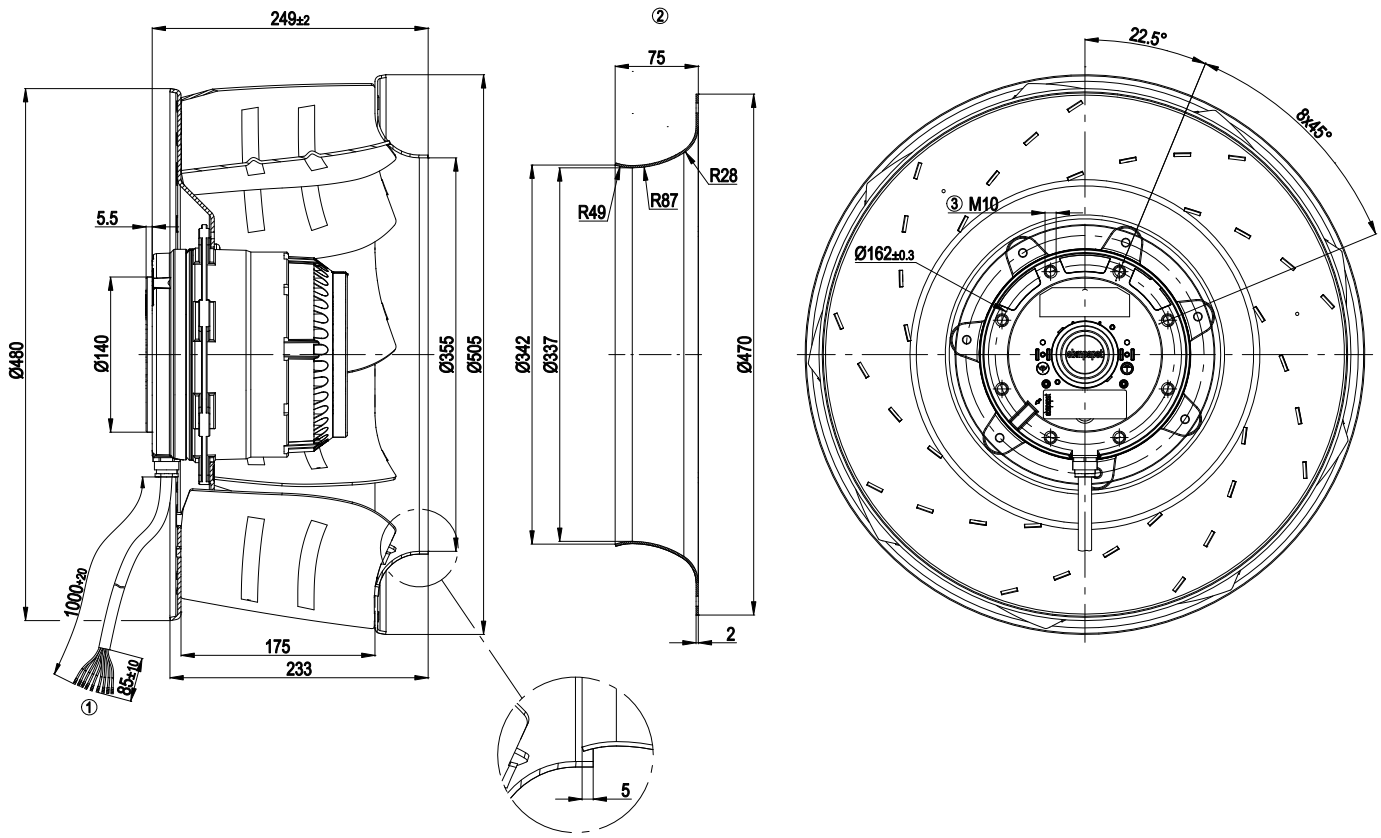
Mass	22 kg
Size	500 mm
Surface of rotor	Cast in aluminium
Material of impeller	Aluminium sheet
Number of blades	9
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"F"
Humidity class	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	On rotor and stator sides
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) brought out
Cable exit	Lateral
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 61800-5-1; EN 60034
Approval	VDE

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Product drawing



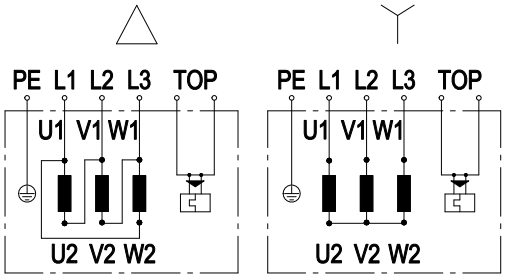
1	Connection line halogen-free, 9 x 0.75 mm², 9 x brass lead tips crimped
2	Accessory part: Inlet nozzle 63072-2-4013, not included in the standard scope of delivery.
3	Depth of screw max. 18 mm

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Connection screen



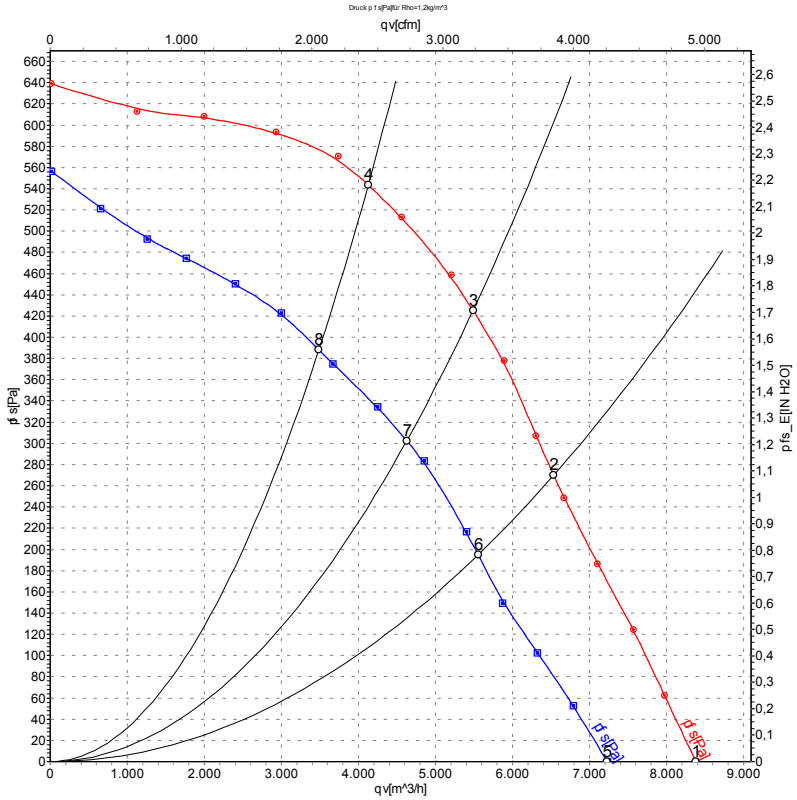
Δ	Delta connection	Y	Star connection	L1	black
L2	blue	L3	brown	U1	black
V1	blue	W1	brown	U2	green
V2	white	W2	yellow	TOP	2xgrey
PE	green/yellow				

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Charts: Air flow 50 Hz Δ



Measurement: LU-100733
Measurement: LU-100734

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

	Conn.	U	f	n	P_e	I	LpA_{in}	LwA_{in}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa
1	Δ	400	50	1410	1148	2.33	78	85	8370	0
2	Δ	400	50	1385	1347	2.54	73	80	6540	270
3	Δ	400	50	1380	1450	2.80	71	78	5490	425
4	Δ	400	50	1385	1336	2.54	70	77	4130	544
5	Y	400	50	1230	900	1.48			7280	0
6	Y	400	50	1175	1025	1.69			5555	195
7	Y	400	50	1160	1080	1.80			4630	303
8	Y	400	50	1175	1015	1.67			3490	388

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

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