

AC centrifugal fan

backward curved, single inlet

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Nominal data

Type	R4D560-AW03-05				
Motor	M4D138-NA				
Phase		3~	3~	3~	3~
Nominal voltage	VAC	230	277	400	480
Connection		Δ	Δ	Y	Y
Frequency	Hz	50	60	50	60
Type of data definition		ml	ml	ml	ml
Valid for approval / standard		-	-	-	-
Speed	min ⁻¹	1370	1610	1370	1610
Power input	W	2350	3800	2350	3800
Current draw	A	8.17	10.12	4.72	5.85
Min. back pressure	Pa	0	0	0	0
Min. ambient temperature	°C	-40	-40	-40	-40
Max. ambient temperature	°C	85	60	85	60
Starting current	A	38	42	22	24

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit

Subject to alterations



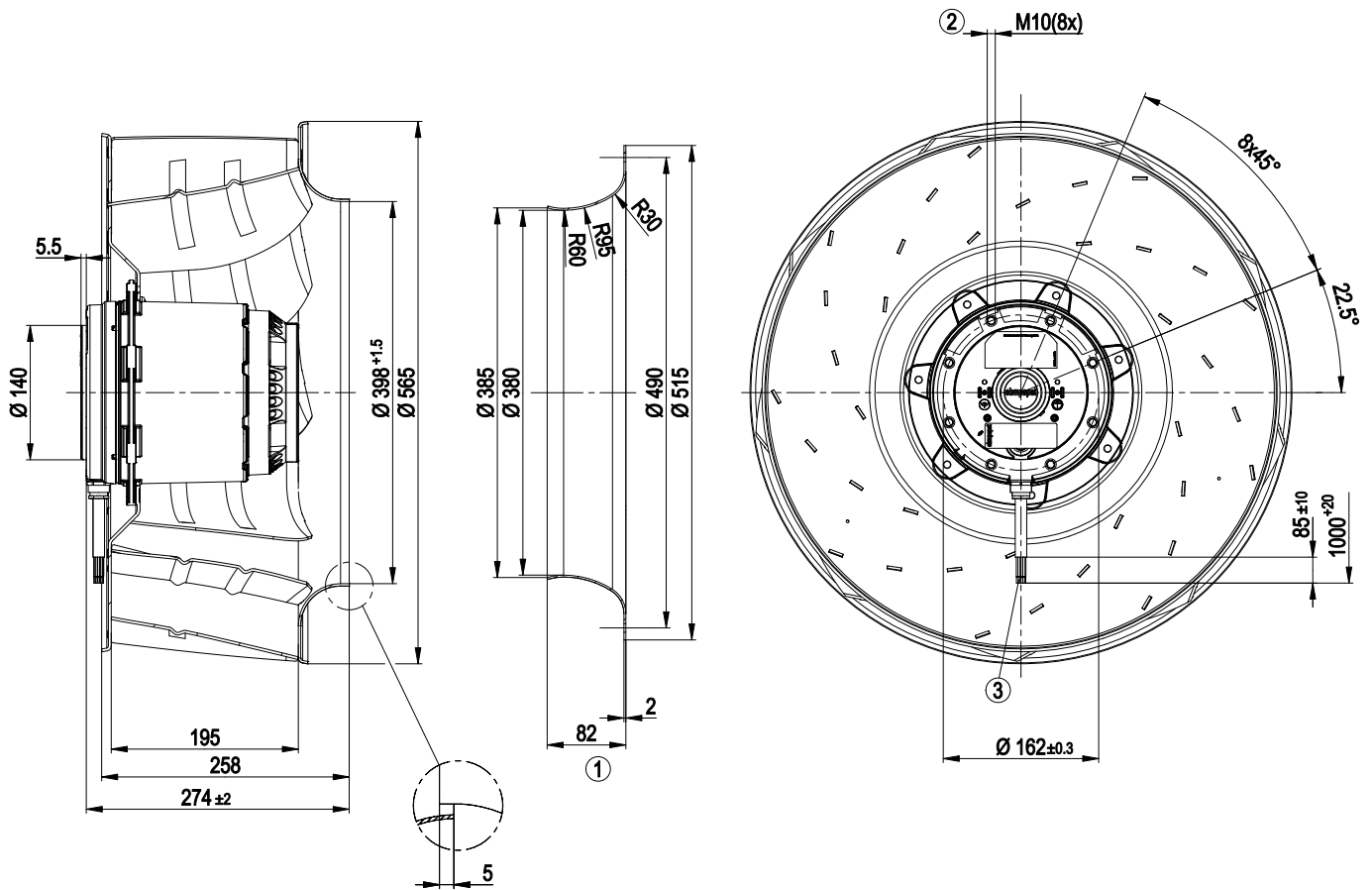
Technical features

Mass	30.8 kg
Size	560 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
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Electrical leads	Via terminal box
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; CE

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Product drawing



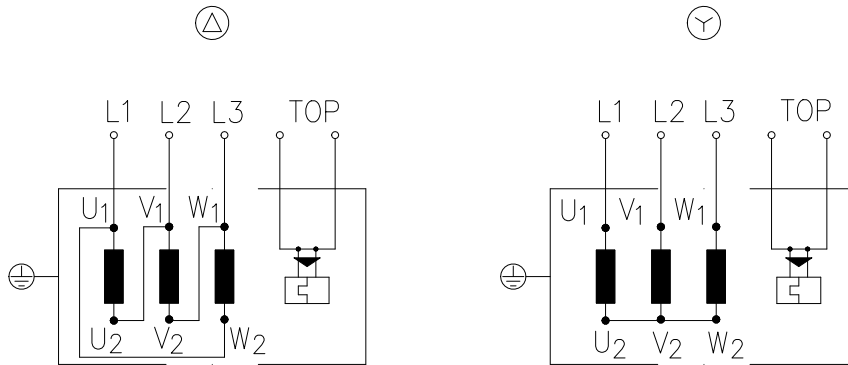
- | | |
|---|--|
| 1 | Accessory part: inlet nozzle 63071-2-4013 not included in scope of delivery. |
| 2 | Depth of screw max. 18 mm |
| 3 | Connection line halogen-free 9G 0.75 mm ² , 9 x lead tips crimped |



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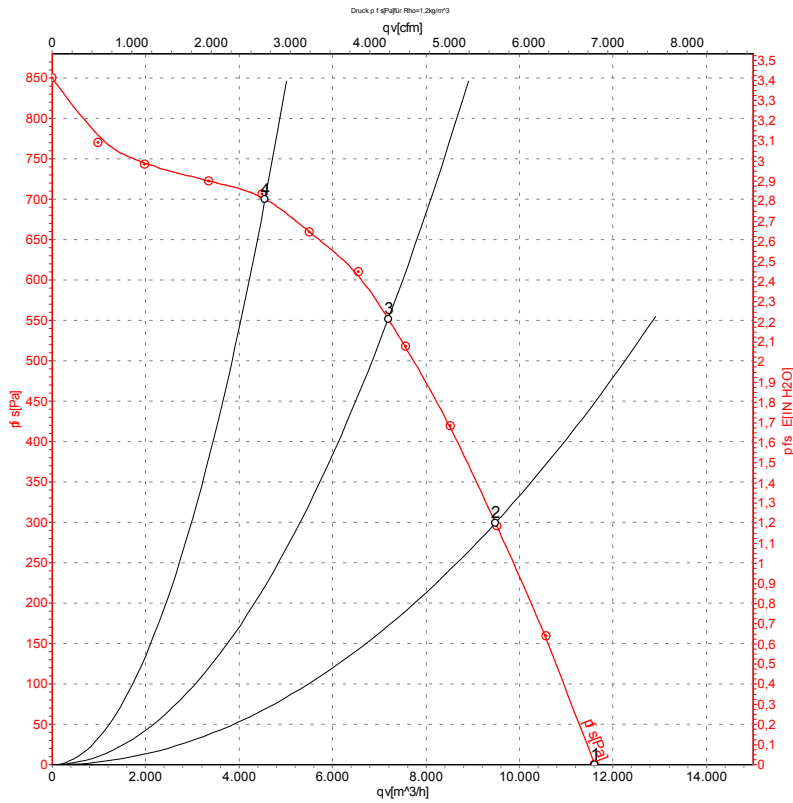
Connection screen



Changing the direction of rotation by reversing the two phases

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

Charts: Air flow 50 Hz



Measurement: LU-101336

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: L_{wA} measured as per ISO 13347 / L_{pA} 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.

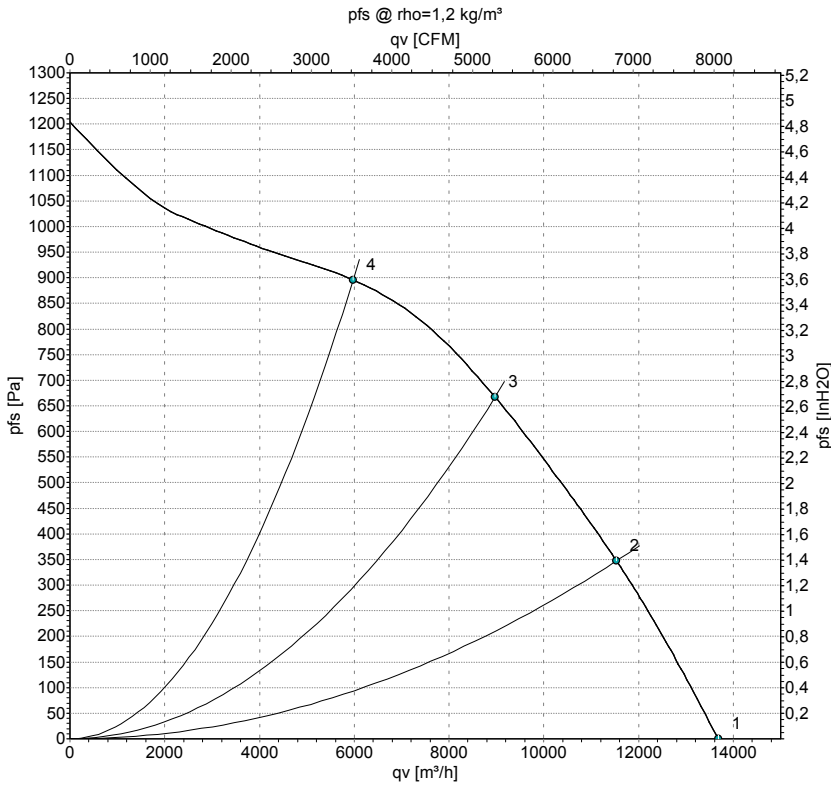
Measured values

	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	Y	400	50	1405	1785	4.01	78	86	11610	0
2	Y	400	50	1380	2197	4.52	76	83	9485	300
3	Y	400	50	1370	2350	4.72	74	81	7190	550
4	Y	400	50	1390	2046	4.30	74	82	4555	700

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



Charts: Air flow 60 Hz



Measurement: LU-101338

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebmpapst. 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	Y	480	60	1660	2931	4.80	83	90	13680	0
2	Y	480	60	1625	3513	5.50	80	87	11540	350
3	Y	480	60	1610	3800	5.85	78	85	8970	675
4	Y	480	60	1630	3388	5.33	78	86	5975	900

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

