R6D560-AH05-01

AC centrifugal fan

backward curved, single inlet

ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.com

Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
County court Stuttgart · HRB 590142

ErP2013 EXCEEDS THE NORM

Nominal data

Type	**R6D560-AH05-01**
Motor	**M6D110-IA**

Phase		3~	3~	3~
Nominal voltage	VAC	230	400	415
Connection		Δ	Y	Y
Frequency	Hz	50	50	50
Type of data definition		ml	ml	ml
Valid for approval / standard		CE	CE	CE
Speed	min^{-1}	890	890	900
Power input	W	780	780	800
Current draw	A	2.9	1.68	1.72
Min. back pressure	Pa	0	0	0
Min. ambient temperature	°C	-40	-40	-40
Max. ambient temperature	°C	60	60	55
Starting current	A	9.4	5.4	5.1

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

Data according to ErP directive

Installation category	A
Efficiency category	Static
Variable speed drive	No
Specific ratio*	1.00

* Specific ratio = 1 + p_{fs} / 100 000 Pa

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}	%	46.4	46.4	50.4
Efficiency grade N		58	58	62
Power input P_e	kW	0.78		
Air flow q_v	m^3/h	5255		
Pressure increase p_{fs}	Pa	240		
Speed n	min^{-1}	890		

Data definition with optimum efficiency.
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

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Technical features

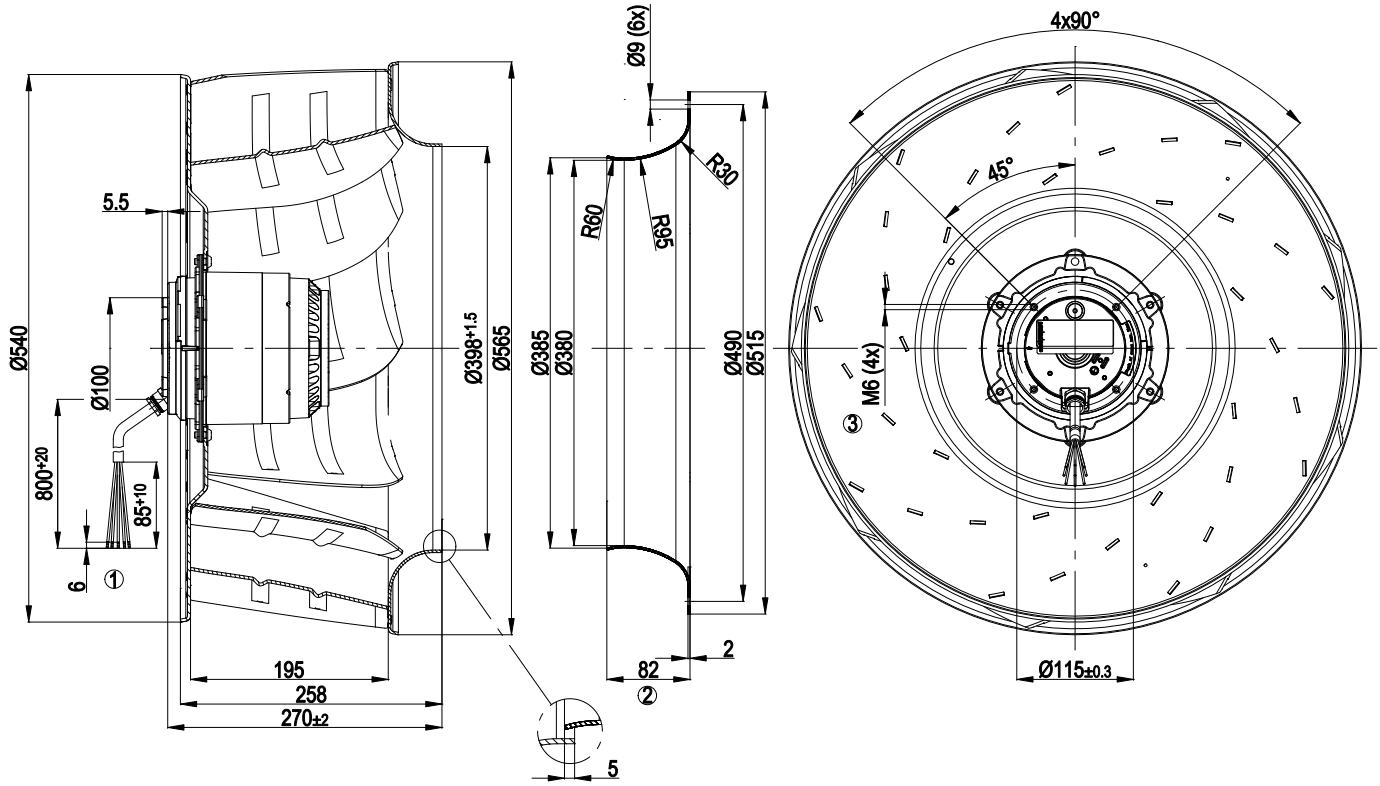
Mass	16.5 kg
Size	560 mm
Surface of rotor	Cast in aluminium
Material of impeller	Aluminium sheet
Number of blades	9
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"F"
Humidity class	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensate discharge holes	Rotor-side
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
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 61800-5-1; CE
Approval	CCC; GOST; VDE; UL 1004-1; CSA C22.2 Nr.100

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Product drawing



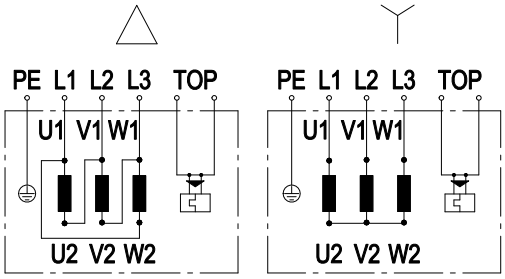
1	Connection line silicone 9 x 0.75 mm², 9 x brass lead tips crimped
2	Accessory part: Inlet nozzle 63071-2-4013, 64001-2-4013, 64030-2-4013 not included in the standard scope of delivery
3	Depth of screw max. 12 mm

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Connection screen



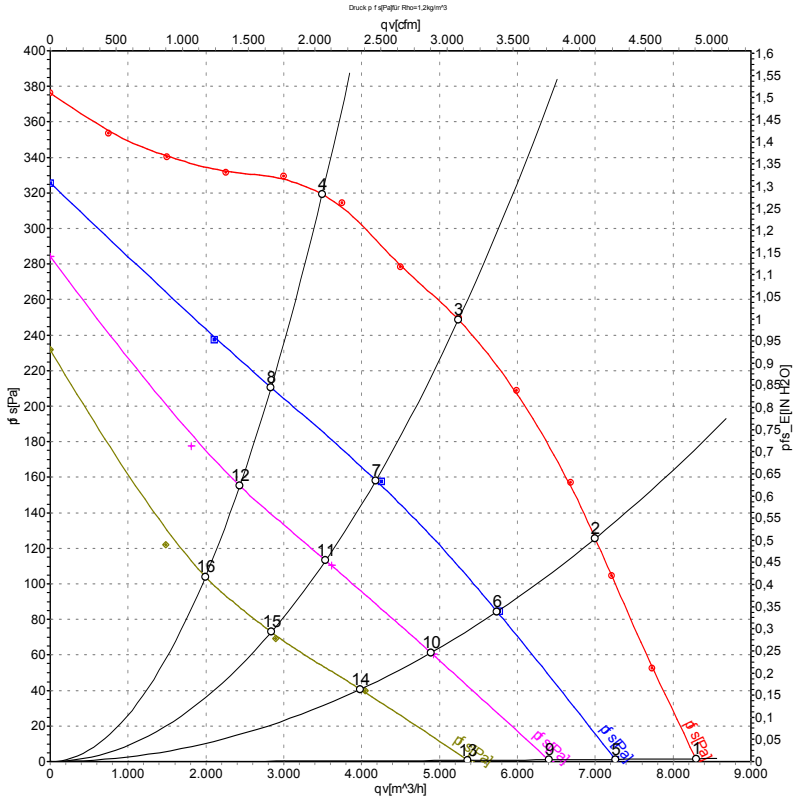
Δ	Delta connection	Y	Star connection	L1	black
L2	blue	L3	brown	U1	black
V1	blue	W1	brown	U2	green
V2	white	W2	yellow	TOP	2xgrey
PE	green/yellow				

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Charts: Air flow 50 Hz



Measurement: LU-104086
Measurement: LU-105563
Measurement: LU-105564
Measurement: LU-105550

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}	LwA_{out}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	dB(A)	m^3/h	Pa
1	Y	400	50	930	557	1.46	68	75	80	8310	0
2	Y	400	50	905	699	1.59	63	71	76	7000	125
3	Y	400	50	890	780	1.68	61	69	74	5240	250
4	Y	400	50	900	718	1.59	62	69	75	3495	320
5	Y	230	50	805	404	1.29	63	71	75	7255	0
6	Y	230	50	735	475	1.48	57	65	71	5740	86
7	Y	230	50	705	507	1.58	54	63	68	4180	160
8	Y	230	50	745	462	1.45	57	66	71	2835	210
9	Y	180	50	705	319	1.29	60	67	72	6405	0
10	Y	180	50	620	352	1.42	52	60	66	4890	62
11	Y	180	50	590	365	1.47	50	58	64	3535	113
12	Y	180	50	635	345	1.39	53	61	67	2435	154
13	Y	140	50	585	227	1.19	53	61	67	5365	0
14	Y	140	50	500	238	1.25	46	55	61	3985	41
15	Y	140	50	470	243	1.29	44	53	58	2840	71
16	Y	140	50	515	237	1.24	47	55	61	1995	103

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
LwA_{out} = Sound power level outlet side · qv = Air flow · p_{fs} = Pressure increase

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