

R4D200-AL12-05

AC centrifugal fan

forward curved, single inlet

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Nominal data

Type	R4D200-AL12-05				
Motor	M4D074-EI				
Phase		1~	1~	1~	1~
Nominal voltage	VAC	230	230	400	400
Connection		Δ	Δ	Y	Y
Frequency	Hz	50	60	50	60
Type of data definition		fa	ml	fa	ml
Valid for approval / standard		CE	CE	CE	CE
Speed	min ⁻¹	1350	1530	1350	1530
Power input	W	285	360	285	360
Current draw	A	1.0	1.13	0.58	0.65
Min. back pressure	Pa	0	200	0	200
Min. ambient temperature	°C	-25	-25	-25	-25
Max. ambient temperature	°C	45	45	45	45

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 = $1 + p_b / 100\,000\text{ Pa}$

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}	%	29.5	25.8	32.8
Efficiency grade N		40.7	37	44
Power input P_e	kW	0.17		
Air flow q_v	m ³ /h	805		
Pressure increase p_{fs}	Pa	234		
Speed n	min ⁻¹	1425		

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

LU-105240



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Technical features

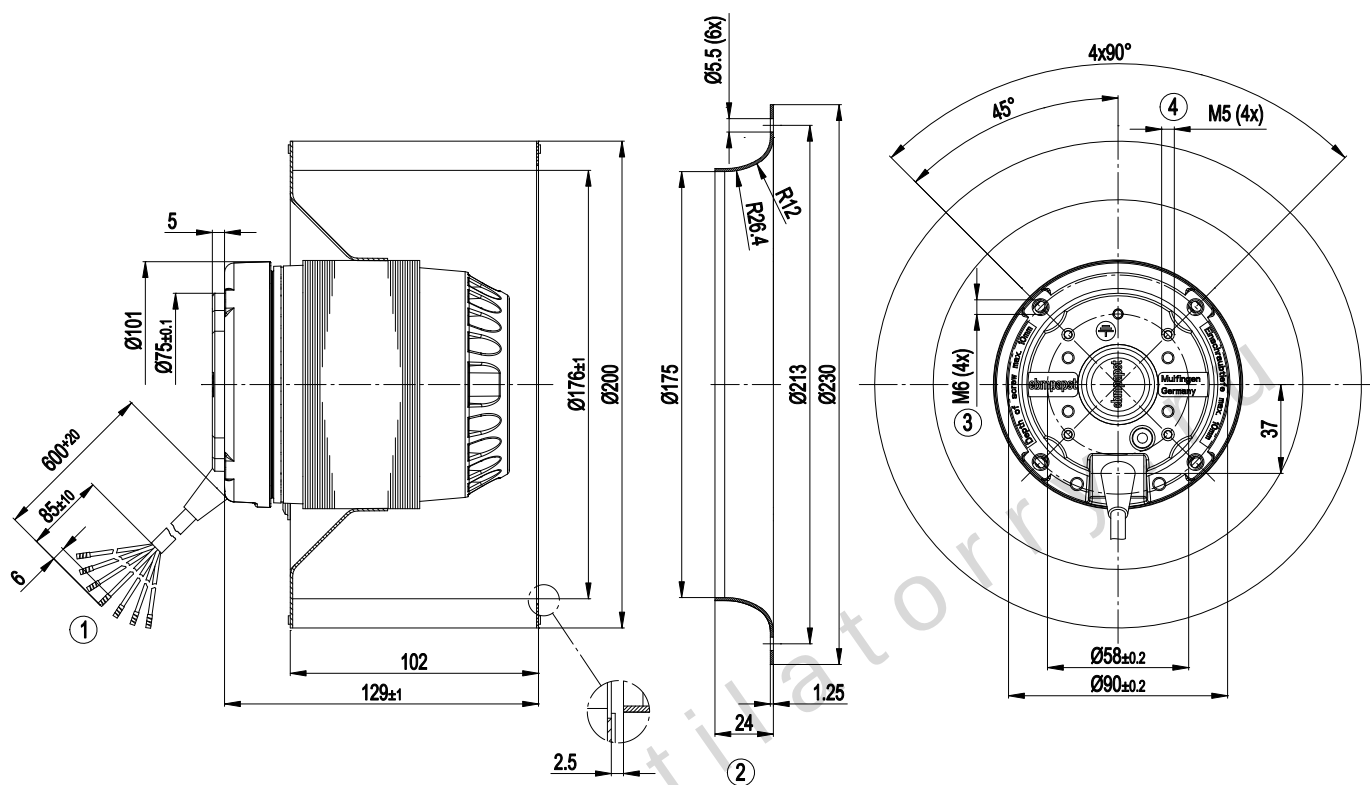
Mass	4 kg
Size	200 mm
Surface of rotor	Coated in black
Material of impeller	Sheet steel, hot-dip galvanised
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44
Insulation class	"B"
Humidity class	F1-2
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1, motor does not have factory-installed overheating protection

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Product drawing



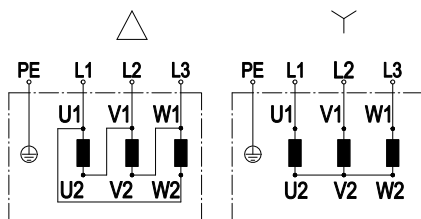
1	Connection line A03VV-F7G0.5, 7x brass lead tips crimped
2	Accessory part: Inlet nozzle 09605-2-4013, not included in the standard scope of delivery
3	Depth of screw max. 10 mm
4	Depth of screw max. 6 mm

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Connection screen



Change direction of rotation by reversing two phases

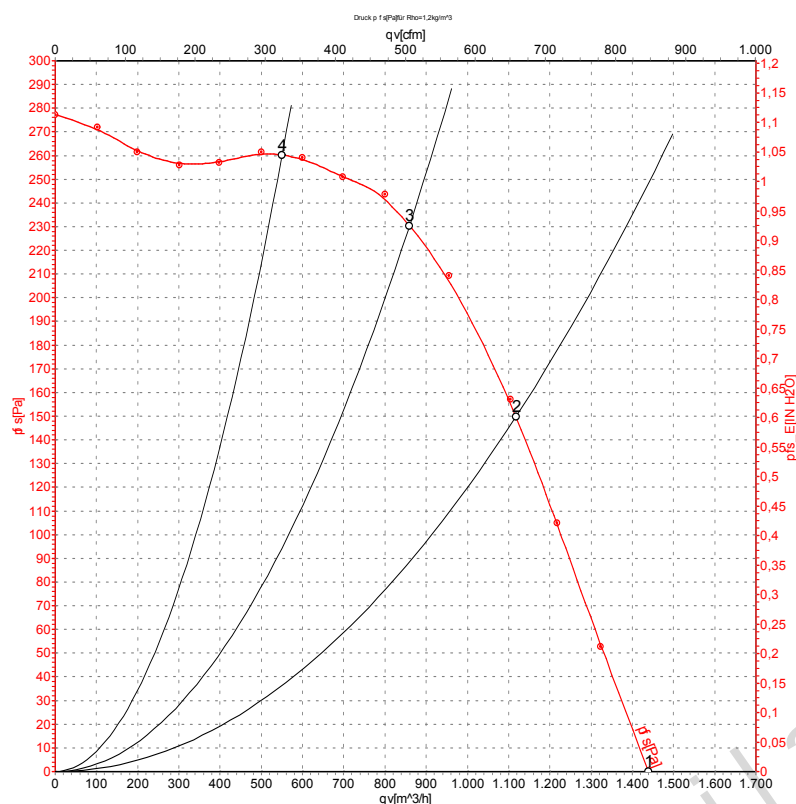
	Three-phase motor	Δ	Delta connection	Y	Star connection
L1	= U1 = black	L2	= V1 = blue	L3	= W1 = brown
U2	green	V2	white	W2	yellow
PE	green/yellow				

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Charts: Air flow 50 Hz



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	qv	p _{fs}
		V	Hz	min ⁻¹	W	A	m³/h	Pa
1	Y	400	50	1350	285	0.58	1440	0
2	Y	400	50	1385	232	0.51	1120	150
3	Y	400	50	1420	186	0.48	860	230
4	Y	400	50	1445	140	0.46	550	260

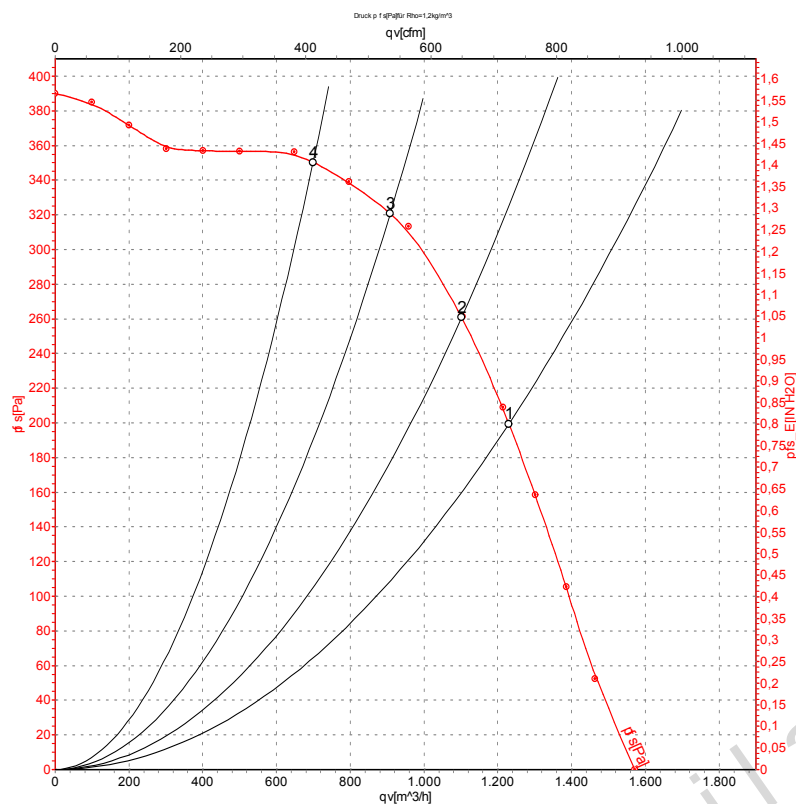
Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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Charts: Air flow 60 Hz



Air performance measured as per ISO 5801
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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	qv	p _{fs}
		V	Hz	min ⁻¹	W	A	m³/h	Pa
1	Y	400	60	1530	360	0.65	1230	200
2	Y	400	60	1585	293	0.52	1100	260
3	Y	400	60	1635	242	0.45	910	320
4	Y	400	60	1675	194	0.40	700	350

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase