R4D450-AK11-08

AC centrifugal fan

backward curved, single inlet

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Nominal data

Type	**R4D450-AK11-08**
Motor	**M4D110-GF**

Phase		3~	3~	3~	3~
Nominal voltage	VAC	200	200	346	346
Connection		Δ	Δ	Y	Y
Frequency	Hz	50	60	50	60
Type of data definition		ml	ml	ml	ml
Valid for approval / standard		CE	CE	CE	CE
Speed	min^{-1}	1325	1440	1325	1440
Power input	W	740	1070	740	1070
Current draw	A	2.84	3.74	1.63	2.15
Min. back pressure	Pa	0	0	0	0
Max. ambient temperature	°C	85	50	85	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

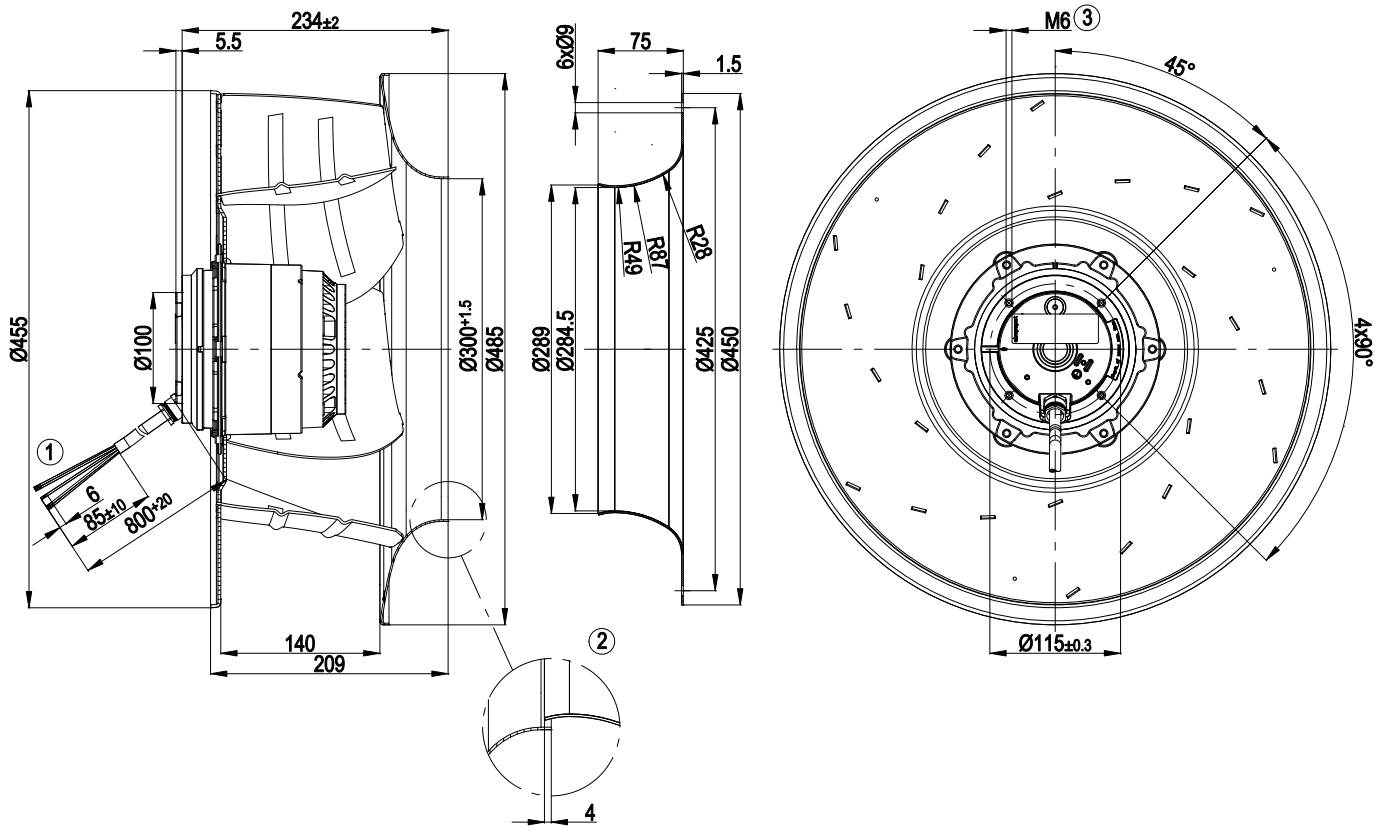
Mass	12.5 kg
Size	450 mm
Surface of rotor	Cast in aluminium
Material of impeller	Aluminium sheet
Number of blades	6
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"F"
Humidity class	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible 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
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 61800-5-1; CE
Approval	EAC; VDE

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Product drawing



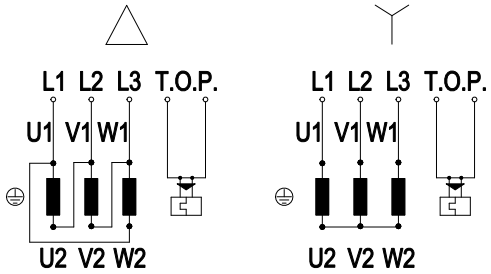
1	Connection line silicone, 9 x brass lead tips crimped
2	Accessory part: inlet nozzle 63045-2-4013 not included in the standard scope of delivery; other inlet nozzles on request
3	Depth of screw max. 12 mm

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Connection screen



Note: Direction of rotation changes when two phases are reversed

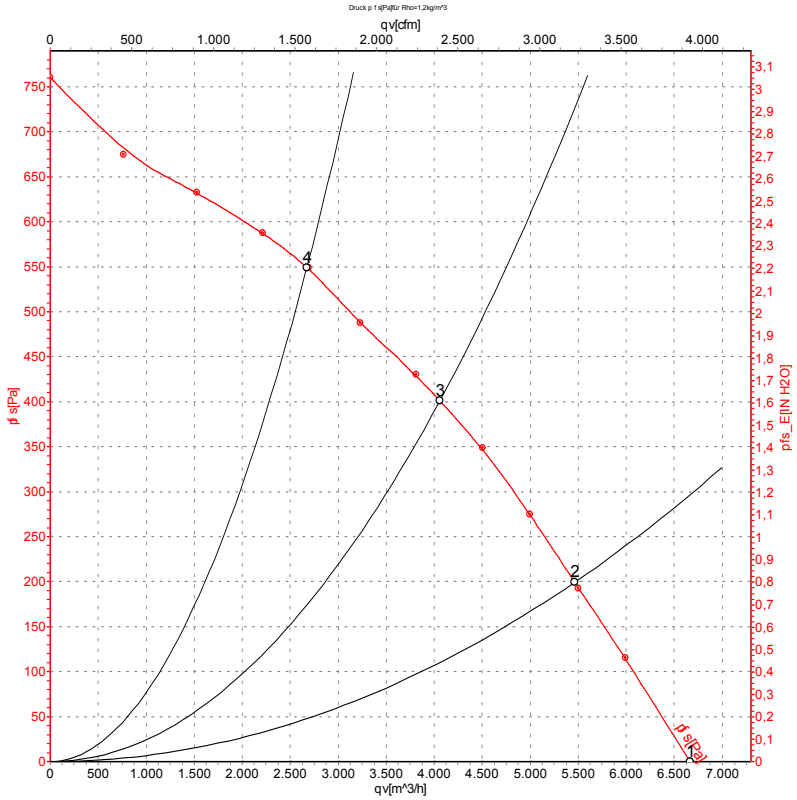
Δ	Delta-connection	Y	Star connection	L1	black
L2	blue	L3	brown	U1	black
V1	blue	W1	brown	U2	green
V2	white	W2	yellow	TOP	grey

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Charts: Air flow 60 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: 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	Δ	200	60	1545	834	2.90	84	89	92	6665	0
2	Δ	200	60	1480	978	3.34	74	80	85	5465	200
3	Δ	200	60	1440	1070	3.74	66	74	80	4060	400
4	Δ	200	60	1470	1006	3.38	69	76	83	2675	550

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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