R4D630-RB15-01

AC centrifugal fan - RadiCal®

backward curved, single inlet

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ErP2013 EXCEEDS THE NORM

Nominal data

Type	**R4D630-RB15-01**
Motor	**M4D138-LA**

Phase		3~	3~
Nominal voltage	VAC	230	400
Connection		Δ	Y
Frequency	Hz	50	50
Type of data definition		ml	ml
Valid for approval / standard		CE	CE
Speed	min^{-1}	1345	1345
Power input	W	3570	3570
Current draw	A	11.5	6.63
Min. back pressure	Pa	0	0
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	40	40
Starting current	A	39	22.5

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*	1.01

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

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}		53.2	53.2	57.2
Efficiency grade N		58	58	62
Power input P_e	kW	3.49		
Air flow q_v	m^3/h	12405		
Pressure increase p_{fs}	Pa	528		
Speed n	min^{-1}	1345		

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

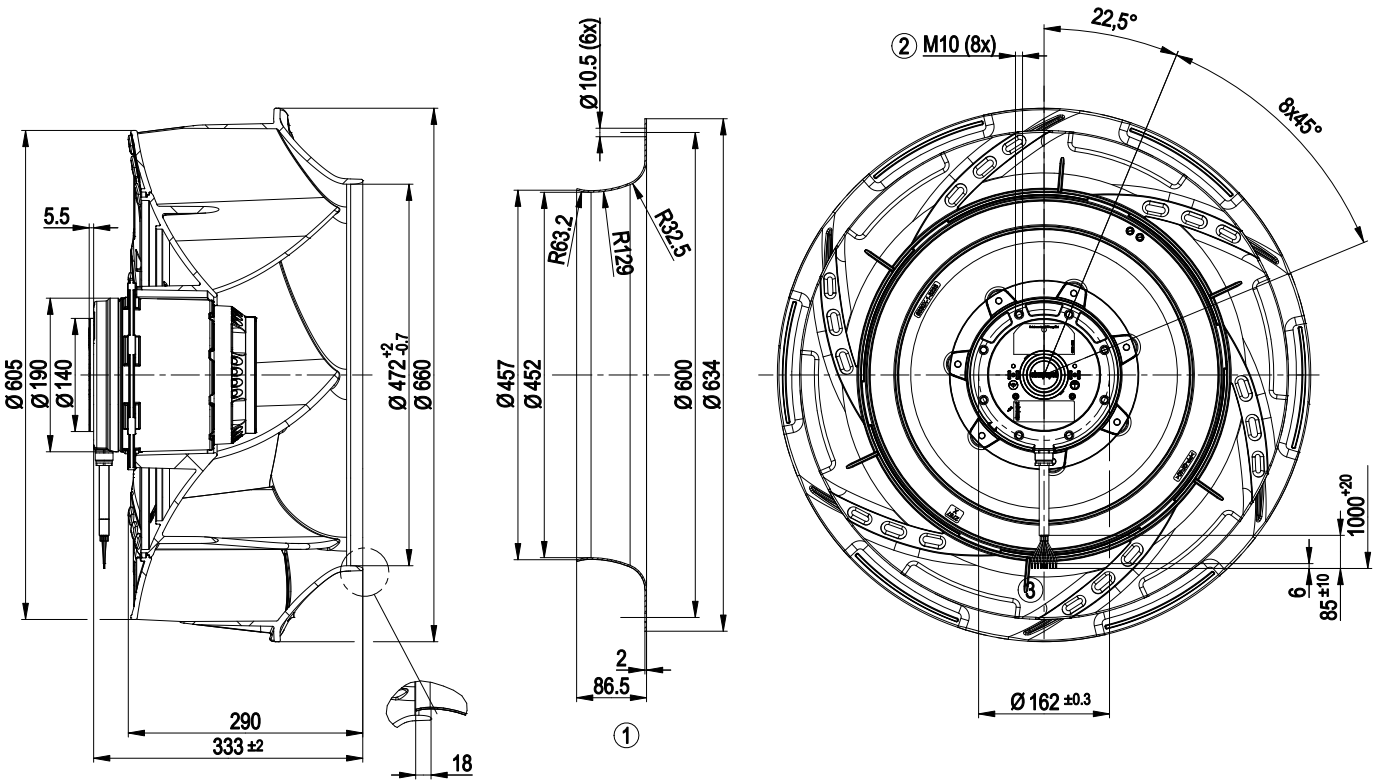
Mass	28.7 kg
Size	630 mm
Surface of rotor	Cast in aluminium
Material of impeller	PP plastic
Number of blades	6
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 20
Insulation class	"F"
Humidity class	F0
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Cooling bore / aperture	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 60034; EN 61800-5-1; CE
Approval	VDE; GOST

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Product drawing



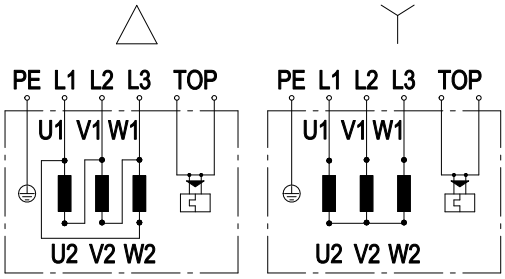
1	Accessory part: Inlet nozzle 63300-2-4013, not included in the standard scope of delivery.
2	Depth of screw max. 18 mm
3	Connection line halogen-free, 9x 0.75mm², 9x brass lead tips crimped

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Connection screen



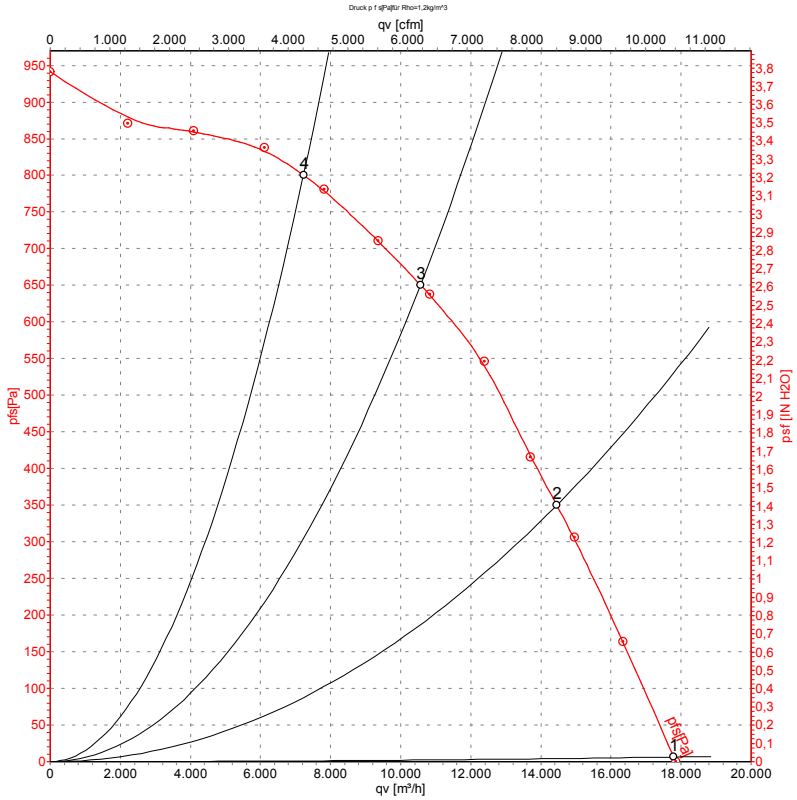
Δ	Delta connection	Y	Star connection	L1	black
L2	blue	L3	brown	U1	black
V1	blue	W1	brown	U2	green
V2	white	W2	yellow	TOP	2xgrey
PE	green/yellow				

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Charts: Air flow 50 Hz



Measurement: LU-138494

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	Y	400	50	1400	2571	5.17	84	90	17790	0
2	Y	400	50	1360	3314	6.25	77	84	14450	350
3	Y	400	50	1345	3570	6.63	74	81	10560	650
4	Y	400	50	1350	3397	6.37	76	83	7225	800

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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