

AC centrifugal fan - RadiCal

backward-curved, single-intake

Nominal data

Type	R6D630-RA07-01				
Motor	M6D138-HF				
Phase		3~	3~	3~	3~
Nominal voltage	VAC	230	230	400	400
Wiring		Δ	Δ	Y	Y
Frequency	Hz	50	60	50	60
Method of obtaining data		ml	ml	ml	ml
Valid for approval/standard		CE	CE	CE	CE
Speed (rpm)	min ⁻¹	880	940	880	940
Power consumption	W	1030	1440	1030	1440
Current draw	A	3.8	4.87	2.2	2.81
Min. back pressure	Pa	0	0	0	0
Min. back pressure	in. wg	0	0	0	0
Min. ambient temperature	°C	-40	-40	-40	-40
Max. ambient temperature	°C	60	60	60	60
Starting current	A	12	10.5	6.92	6.05

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

Data according to Commission Regulation (EU) 327/2011

		Actual	Req. 2015			
01 Overall efficiency η_{es}	%	51.5	51.5	09 Power consumption P_e	kW	1
02 Measurement category		A		09 Air flow q_v	m ³ /h	8005
03 Efficiency category		Static		09 Pressure increase p_{fs}	Pa	225
04 Efficiency grade N		62	62	10 Speed (rpm) n	min ⁻¹	885
05 Variable speed drive		No		11 Specific ratio*		1.00

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

* Specific ratio = $1 + p_{fs} / 100\,000\text{ Pa}$ LU-138022



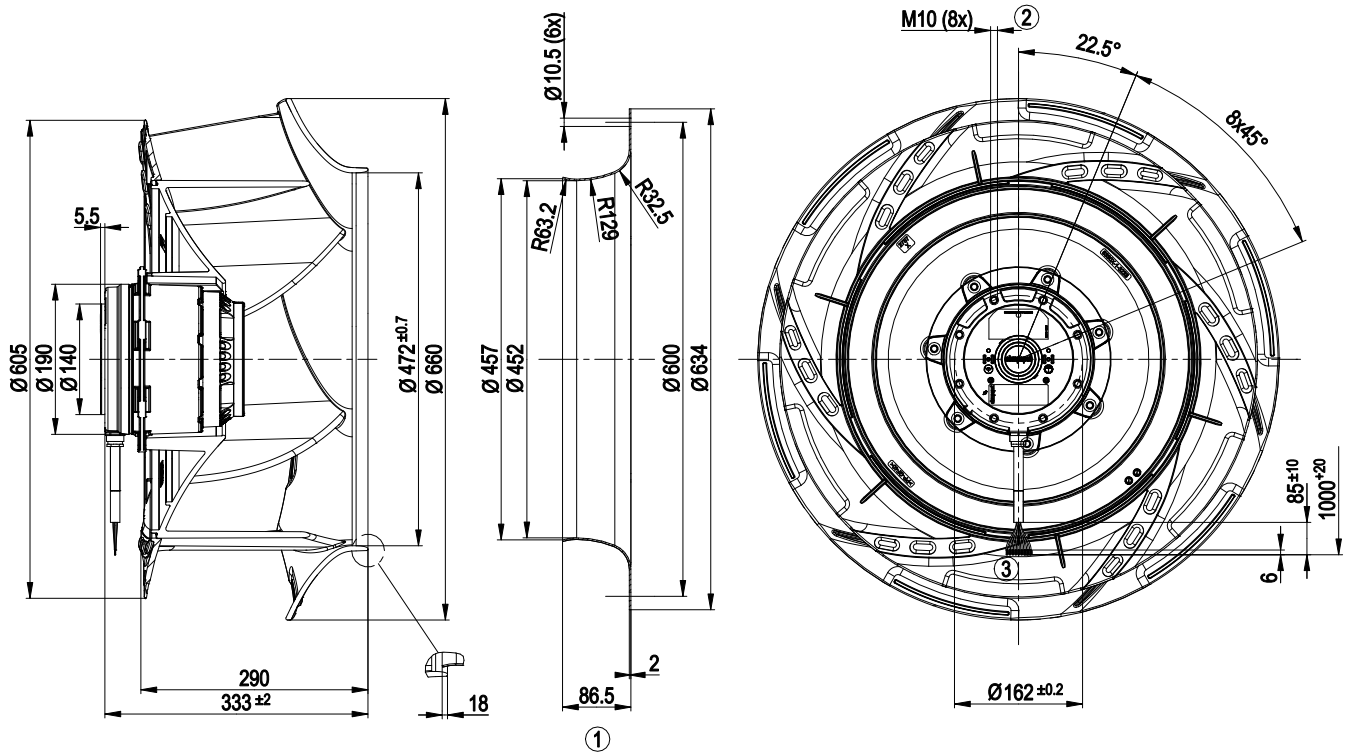
Technical description

Weight	24 kg
Fan size	630 mm
Rotor surface	Cast in aluminum
Impeller material	PP plastic
Number of blades	6
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F3-1
Ambient temperature note	Occasional start-up between -40°C and -25°C is permissible. For continuous operation at temperatures below -25°C (e.g. refrigeration applications) we recommend our fan design with special low-temperature bearings.
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	On rotor and stator sides
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Lateral
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60034-1 (2010); EN 61800-5-1; CE
Approval	VDE; EAC

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Product drawing

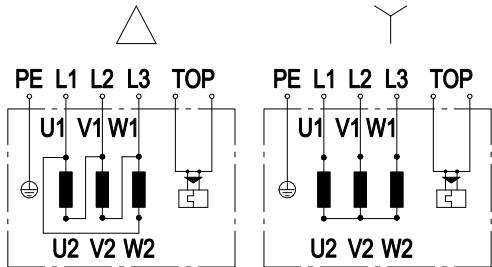


- | | |
|---|--|
| 1 | Accessory part: Inlet ring 63300-2-4013 not included in scope of delivery. |
| 2 | Max. clearance for screw 18 mm |
| 3 | Cable halogen-free, 9x 0.75 mm ² , 9x crimped splices |

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Connection diagram

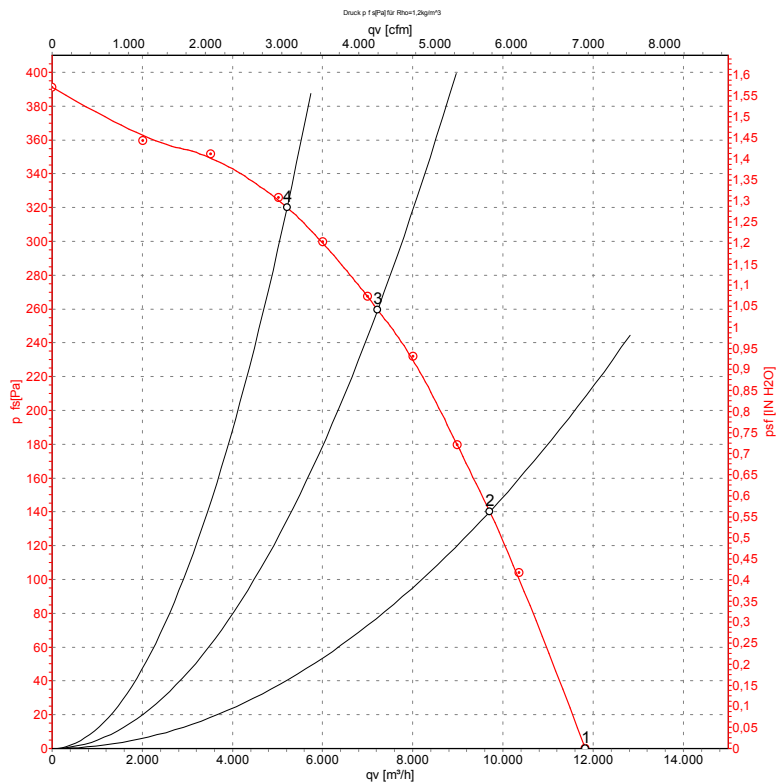


Note: Change of rotation direction by reversing two phases

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	2x gray
PE	green/yellow				



Curves: Air performance 50 Hz



Measurement: LU-138022-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

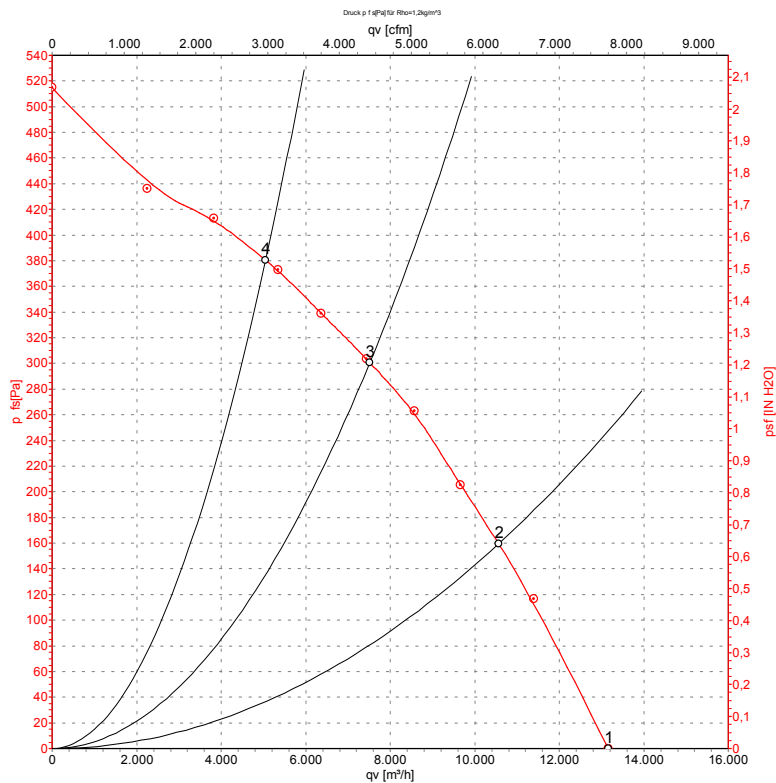
Measured values

	Wired	U	f	n	P _e	I	LpA _{in}	LwA _{in}	LwA _{out}	q _v	p _{ts}	q _v	p _{ts}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	dB(A)	m³/h	Pa	cfm	in. wg
1	Y	400	50	925	732	1.84	73	79	84	11830	0	6965	0.00
2	Y	400	50	895	936	2.09	66	73	78	9705	140	5715	0.56
3	Y	400	50	880	1030	2.20	64	71	75	7225	260	4250	1.04
4	Y	400	50	885	997	2.16	65	72	76	5210	320	3070	1.28

Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
LwA_{out} = Sound power level outlet side · q_v = Air flow · p_{ts} = Pressure increase



Curves: Air performance 60 Hz



Measurement: LU-138030-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	Wired	U	f	n	P _e	I	LpA _{in}	LwA _{in}	LwA _{out}	q _v	p _{ts}	q _v	p _{ts}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	dB(A)	m³/h	Pa	cfm	in. wg
1	Y	400	60	1030	1088	2.18	76	83	87	13160	0	7745	0.00
2	Y	400	60	970	1342	2.63	68	75	80	10560	160	6215	0.64
3	Y	400	60	940	1440	2.81	66	72	76	7520	300	4425	1.20
4	Y	400	60	950	1389	2.70	67	74	78	5055	380	2975	1.53

Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
LwA_{out} = Sound power level outlet side · q_v = Air flow · p_{ts} = Pressure increase