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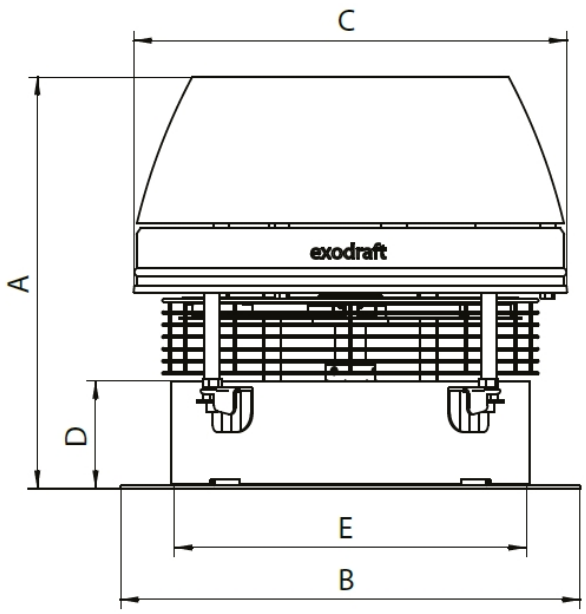
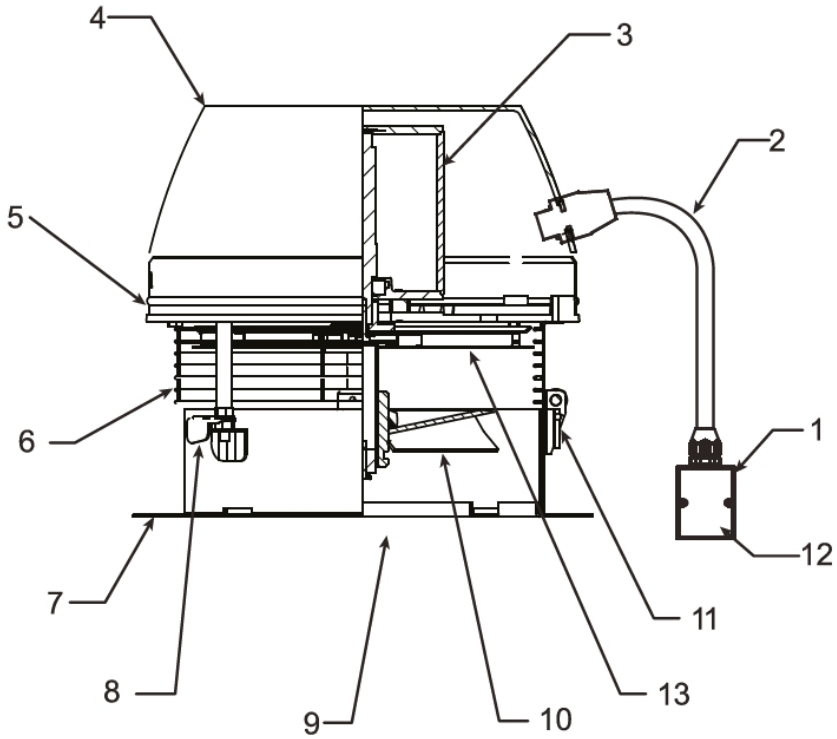




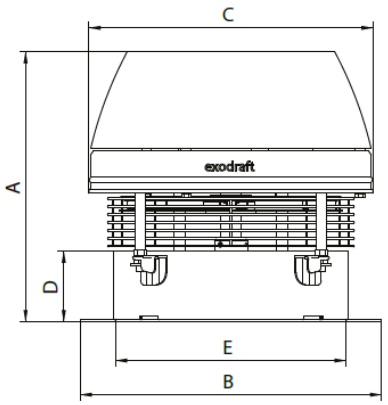
1	Capacitor and repair switch box	7	Base plate
2	Conduit/cord	8	Locking handle
3	Motor	9	Inlet
4	Motor housing	10	Axial vane
5	Motor plate	11	Hinge
6	Bird screen	12	Capacitor (inside box)
		13	Cooling wheel

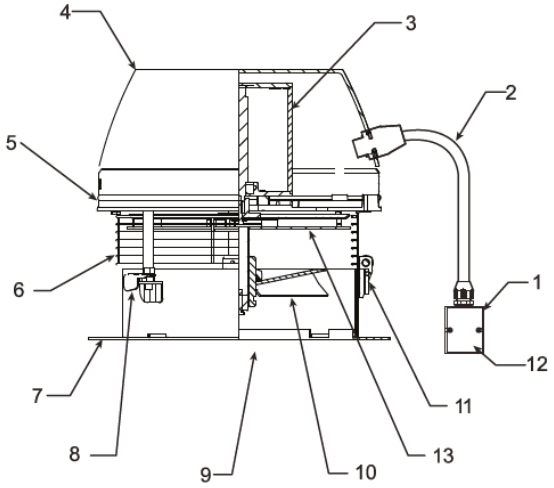
A	B	Ø C	D	Ø E
298	296	275	75	220

Unit of measure: mm

Hekon art. : EXH-RSHT009

Technical data





1 Capacitor and repair switch box
2 Conduit/cord
3 Motor
4 Motor housing
5 Motor plate
6 Bird screen
7 Base plate
8 Locking handle
9 Inlet
10 Axial vane
11 Hinge
12 Capacitor (inside box)
13 Cooling wheel

Type	Motor data				Weight	Dimensions (mm)				
	RPM	V	Amps	kW*	kg	A	B	C ø	D	E ø
RSHT009-4-1	1400	1 x 230	0,4	0,09	12	298	296	275	75	220
RSHT012-4-1	1400	1 x 230	0,6	0,13	15	325	364	344	85	280
RSHT014-4-1	1400	1 x 230	1,2	0,29	19	372	422	395	100	330
RSHT016-4-1	1400	1 x 230	1,8	0,37	22	400	478	441	100	380

Type \ Lw(dB)	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	LP dB(A)
RSHT009-4-1	66	61	63	57	58	57	51	37
RSHT012-4-1	72	74	71	65	66	62	54	33
RSHT014-4-1	80	76	72	70	71	68	61	49
RSHT016-4-1	84	81	75	74	73	70	65	52

* Power absorbed with an ambient temperature of 20 °C
The rotational speed of the flue gas fan is steplessly variable on all single phase 230 V versions.
Protection rating IP 54, Insulation class F

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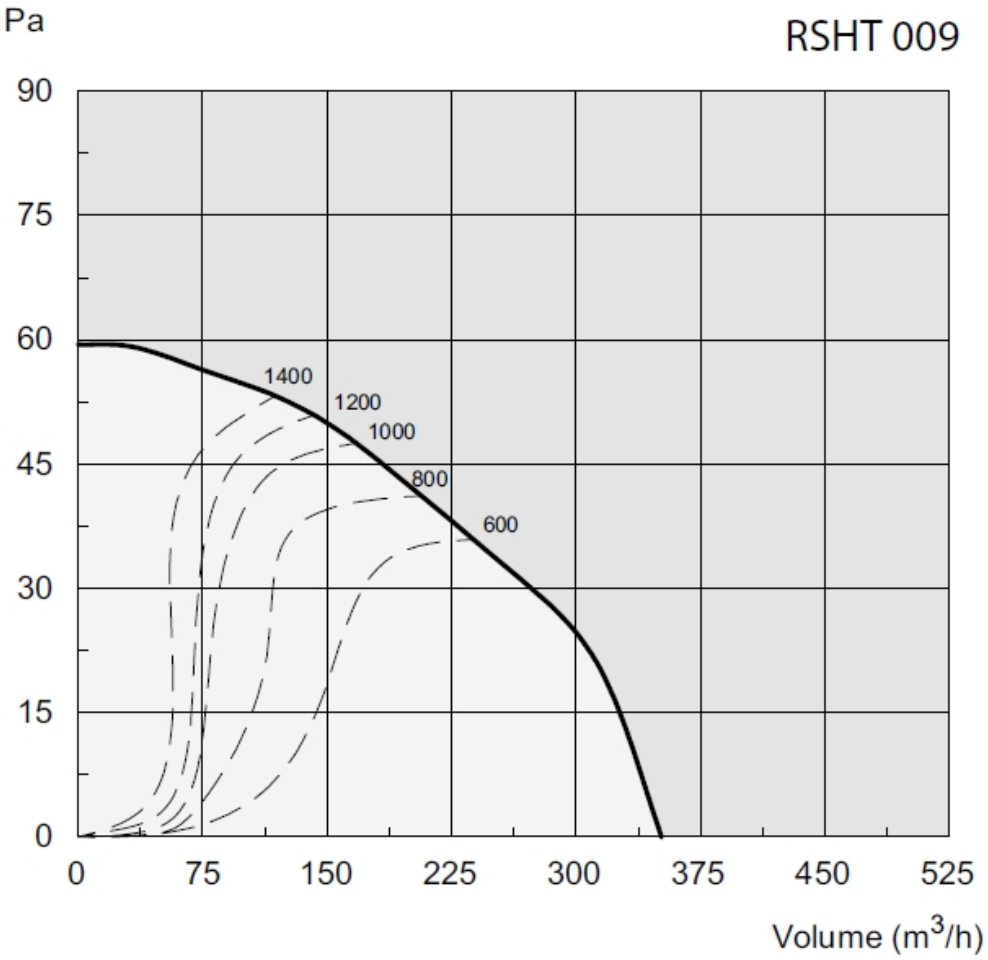
Capacity diagram



— — — Specific Fan Power (SFP) curve
_____ Capacity curve

SFP

SFP = (joule/m3)
P1 = consumption (watt)
qv = flow (m^3/h)

$$P1 = \frac{SFP \times qv}{3600}$$

Capacity curve

The capacity diagrams are measured with a flue gas temperature of 20 °C. The fan's capacity changes with the temperature of the flue gases. The correction of the capacity can be calculated using the following equation:

$$P_{s_{20}} = P_{s_t} \times \frac{(273 + t)}{293}$$

P_s = static pressure
t = temperature measured in °C

Example: (RSHT012)
System demand: 600 m^3/h and 32 Pa at 180 °C
Fan selection: 600 m^3/h and 50 Pa at 20 °C

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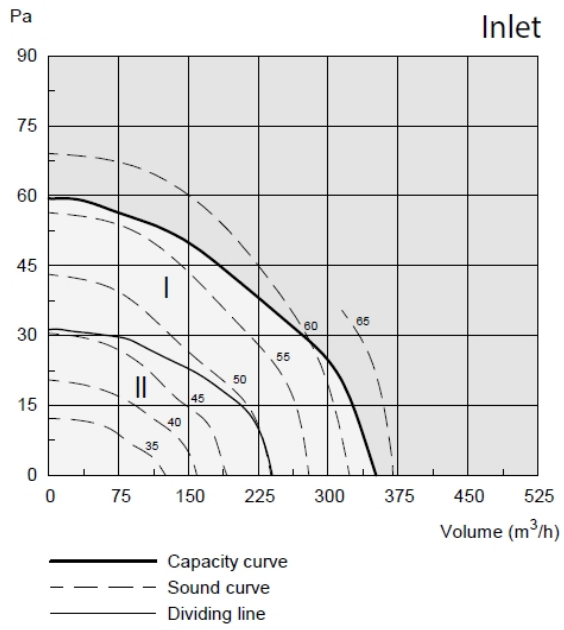
Sound data RSHT 009



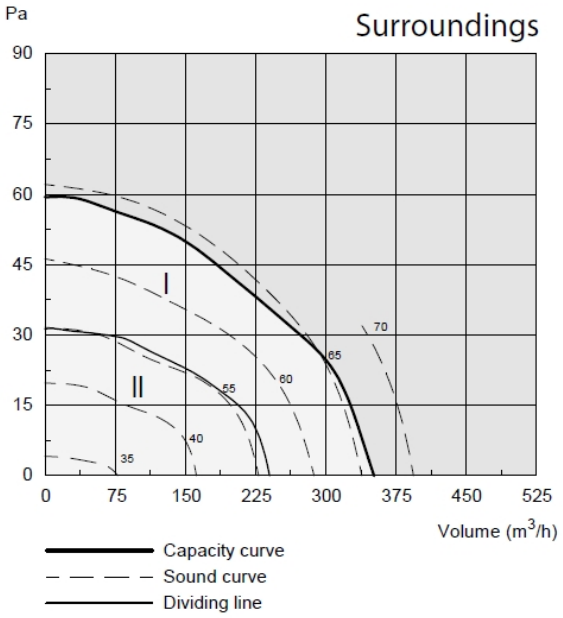


Table 1

Correction factors for calculating sound output in the **first octave band** to extractor channel and surroundings. [dB]

	Area	63Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
Inlet channel (K_W)	I	16	13	3	-6	-12	-13	-18	-26
	II	18	12	1	-5	-8	-13	-18	-23
Surroundings (K_W)	I	2	1	-4	-2	-8	-7	-8	-14
	II	12	8	-1	-2	-7	-10	-10	-13

Table 2

Correction factors for calculating **A-weighed** sound pressure to surroundings [dB(A)]

	Area	10m							
Pressure (K_{pA})	I	-28							
	II	-28							

Table 3

Example: Sound power output level for inlet channel [dB] = (Readings in Diagram A) + (Correction factor in Table 1)

Sound power output to inlet channel in the **first octave band** (L_{W1})	Area	63Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
	I	73	70	60	51	45	44	39	31
	II	-	-	-	-	-	-	-	-

Table 4

Example: Sound power output level for surroundings [dB] = (Readings in Diagram B) + (Correction factor in Table 1)

Sound power output to surroundings in the **first octave band** (L_{W3})	Area	63Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
	I	65	64	59	61	55	56	55	49
	II	-	-	-	-	-	-	-	-

Table 5

Example: Sound pressure to surroundings [dB(A)] = (Readings in Diagram B) + (Correction factor in Table 2)
Every time that distance doubles another 6 dB is withdrawn. Example: 20m = 63 - 28 - 6=29

A-weighed sound pressure in ( ) meters distance (L_{pA3})	Area	10m	20m	40m	80m				
	I	35	29	23	17				
	II	-	-	-	-				

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Example: For the values in ***Table 3*** is read the factor (L_{WA1}) in ***Diagram A*** at 2/3 of max. flow.
2/3 of 250 M^3/h = 167 M^3/h
Reading = 57

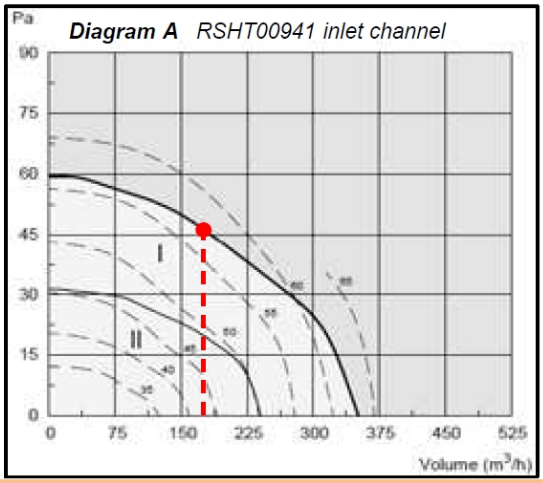

Diagram A *RSHT00941 inlet channel*

Example: For the values in ***Table 4*** and ***Table 5*** is read the factor (L_{WA3}) in ***Diagram B*** at 2/3 of max. flow.
2/3 of 250 M^3/h = 167 M^3/h
Reading = 63

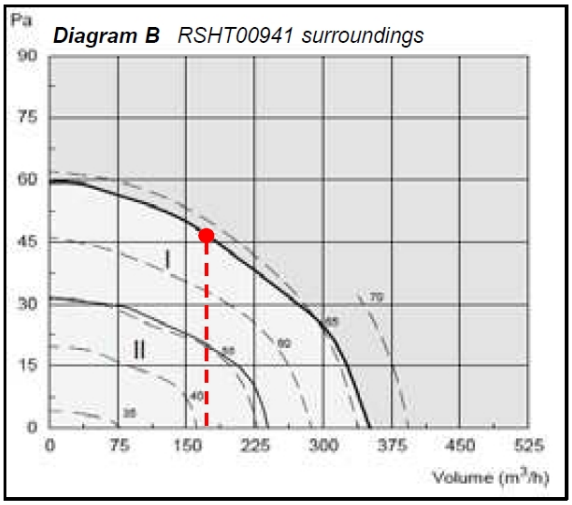

Diagram B *RSHT00941 surroundings*

K_W: Correction factor for calculating sound output in the first octave band.

K_{pA}: Correction factor for calculating A-weighed sound pressure.

L_{W1}: Sound output level for inlet channel

L_{W3}: Sound output level to surroundings

L_{pA3}: Sound pressure level dB(A) at a distance of 10 metres from hemi-spherical sound dissipation in free field and with insulated connection ducts..

I: Upper operating area.

II: Lower operating area.

L_{WA1} can be read from the curve diagram.

L_{WA3} can be read from the curve diagram.

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