

MAXIMIZOR 3000 - 4500 & 9000 TECHNICAL DATA & INSTALLATION INSTRUCTIONS

The Reznor MAXIMIZOR de-stratification fans are intended for use in commercial and industrial premises to provide additional air circulation thus improving environmental comfort and providing energy savings.

They are suitable for installing at heights of between (minimum) 4 and 30 meters measured to the underside of the appliance. **This minimum distance of 4m must always be respected. Ensure that the appliance should never be installed within reach of persons!** A distance of at least 300 mm to the top of the appliance should be maintained between the roof or ceiling.

Air velocities of 1.0 m/s under isothermic conditions, at a height of 2,0 meters above floor level are recommended as design criteria. Adjustment is achieved by adjustment of the air outlet louver blades to change the throw pattern. When louvers are adjusted as shown in fig. 1a/b & fig. 3. they must be bent at both setting points to ensure a uniform air flow from the outlet.

MAXIMIZORS must be installed in a suspended manner using all of the suspension points provided. Materials used for the suspension and the structural elements to which they are to be fastened must be capable of withstanding ten (10) times the weight of the appliances.

Suspension chains etc. must be angled at 20° (see figure 6)

to the vertical to ensure that rotational movement does not occur during start-up and operation. Rigid suspension is not recommended, as this will cause noise transmission through the structural elements of the building.

MAXIMIZORS should not be installed close to a wall as to do so destroys the air flow pattern as described as well as causing peripheral turbulence and resulting excess noise generation.

These appliances must be earthed.

Each MAXIMIZOR should be electrically connected to a separate fused double pole isolator with a minimum contact separation of 3,0 mm between all poles.

It is strongly recommended such isolators are of the key lockable type to prevent unauthorised operation. They should be installed so that they are clearly visible to any person working on the appliance.

A control thermostat is fitted to the appliance. As a guide it should be adjusted to operate at a temperature 5 °C higher than the design comfort temperature of the installed space. This will ensure that chill factors are not experienced by occupants.

Table 1

PERFORMANCE DATA

Louver setting angle (°)	Primary air volume V_{PRIM} (m ³ /h)			Mounting height to floor Z_{eff} (m) (h-1)			Effective area covered A_{eff} (m ²) (h-2)		
	3000	4500	9000	3000	4500	9000	3000	4500	9000
0°	3000	4440	8840	12.0	19.5	27.0	3.0	4.0	6.0
15°	2900	4300	8620	6.5	10.5	13.5	5.0	6.0	9.0
30°	2830	4150	8400	5.5	9.0	11.0	8.0	13.0	19.0
45°	2780	4000	8180	4.5	7.0	8.5	10.0	17.0	25.0
60°	2730	3800	7960	3.5	5.5	6.0	11.0	19.0	29.0
75°	2670	3600	7740	3.0	4.0	4.0	11.0	19.8	29.0

The number of MAXIMIZORS required can be determined from the following formula: $n = \frac{V \times 2}{V_{PRIM} \times 1,5}$

Where: n = Number of MAXIMIZORS required (round up)
V = Volume of building m³
V^{prim} = Primary air volume from table 1

INFLUENCE OF THE TEMPERATURE GRADIENT ON THE RECOMMENDED MOUNTING HEIGHT

Table 2a :
MAXIMIZOR 3000

Position of the louvers	0°C	5°C	10°C	15°C	20°C
0°	12.1	10.8	10.3	9.9	9.7
15°	6.3	5.9	5.7	5.6	5.5
30°	5.4	5.1	4.9	4.9	4.8
45°	4.5	4.3	4.2	4.1	4.1
60°	3.6	3.4	3.4	3.3	3.3
75°	2.7	2.7	2.6	2.6	2.6

Table 2b :
MAXIMIZOR 4500

Position of the louvers	0°C	5°C	10°C	15°C	20°C
0°	19.5	16.9	16.1	15.5	15.1
15°	10.5	9.5	9.1	9.0	8.8
30°	9.0	7.9	7.6	7.5	7.3
45°	7.0	6.2	6.0	5.9	5.8
60°	5.5	4.6	4.5	4.4	4.4
75°	4.0	3.2	3.1	3.1	3.0

Table 2c :
MAXIMIZOR 9000

Position of the louvers	0°C	5°C	10°C	15°C	20°C
0°	27	23.2	21.9	21.1	20.5
15°	13.5	11.5	11.1	10.8	10.6
30°	11.0	9.5	9.2	9.0	8.8
45°	8.5	7.4	7.2	7.1	6.9
60°	6.0	5.4	5.3	5.2	5.1
75°	4.0	3.6	3.5	3.5	3.4

Table 3 : TECHNICAL DATA

DESCRIPTION		3000	4500	9000
Electrical	#	230V 1 ~ N 50Hz		
Fan speed	rpm	1000		
Op. current	A	0.92	1.2	2.1
Absorbed power	kW	0.160	0.250	0.405
Sound Lp (1)	dB(A)	51	52	62
Net weight	kg	16.5	16	27
(1) : r=5m; Q=1; A=160m ²				

Table 4 : DIMENSIONS (Fig. 2 & 4)

DIMENSIONS (mm)	3000	4500	9000	
A suspension height	220	580	645	
B height overall	420	580	709	
C suspension points	pos.	□465	Ø495	Ø645
	qty	4	3	3
D body dia OD	□500	Ø475	Ø639	
E overall diameter	--	515	665	

MAXIMIZOR 4500 - 9000

Louvre settings

Fig. 1a : Maximizor 4500

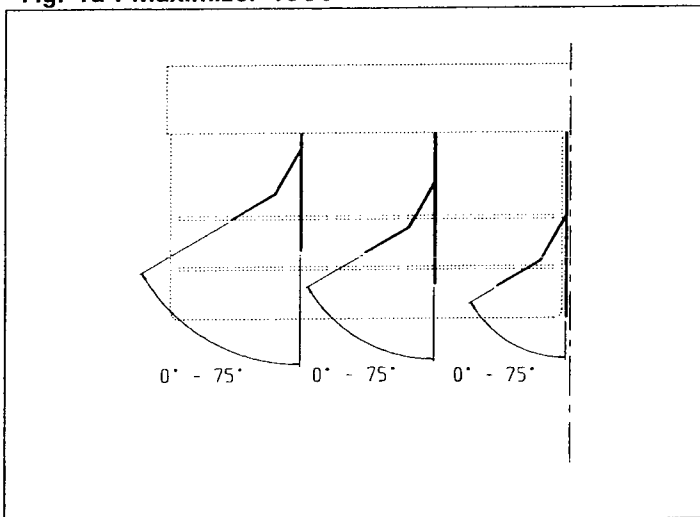
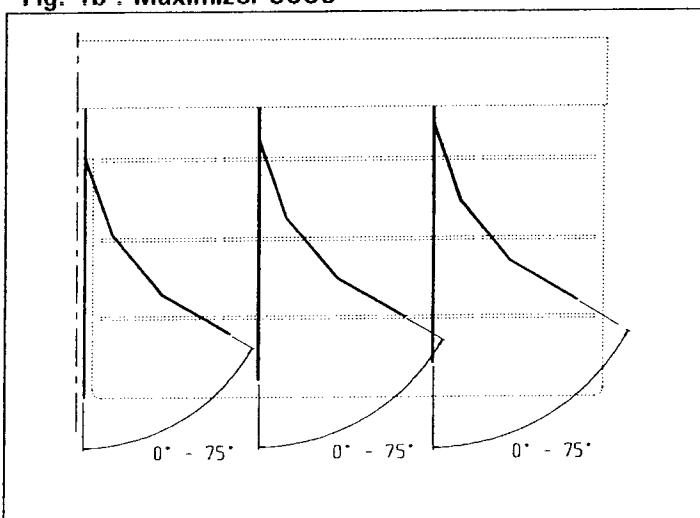
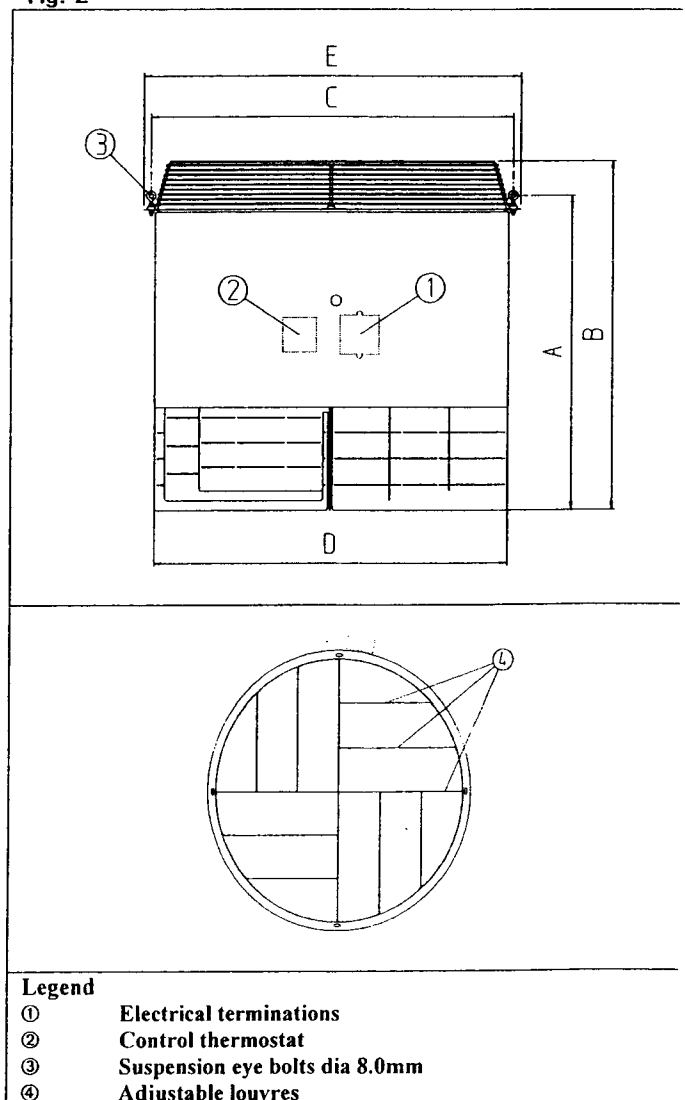


Fig. 1b : Maximizor 9000



DIMENSIONS

Fig. 2



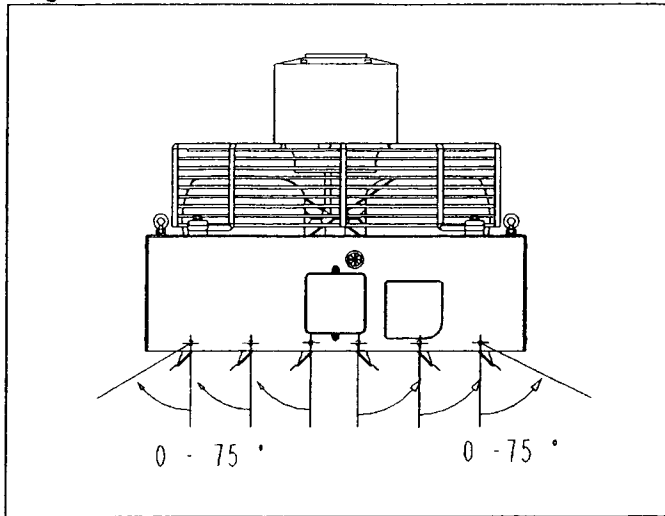
Legend

- ① Electrical terminations
- ② Control thermostat
- ③ Suspension eye bolts dia 8.0mm
- ④ Adjustable louvres

MAXIMIZOR 3000

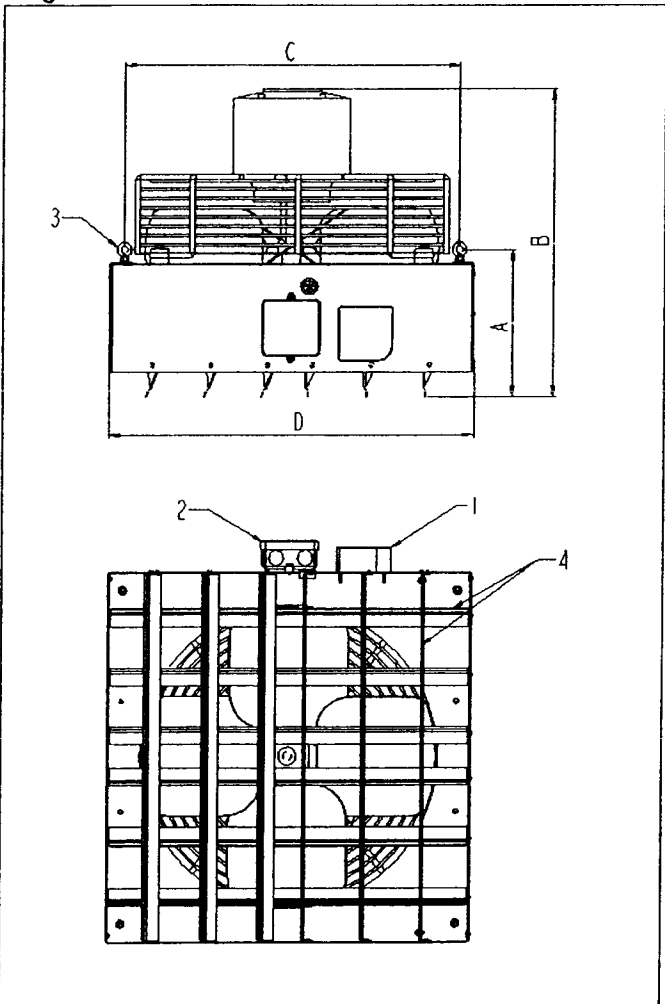
LOUVRE SETTING

Fig. 3



DIMENSIONS

Fig. 4



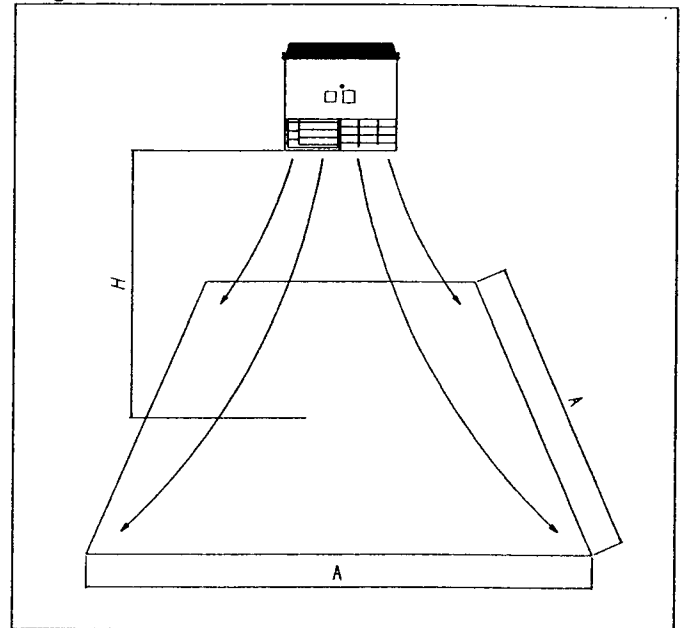
Legend

- ① Electrical terminations
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FLOOR PATTERN

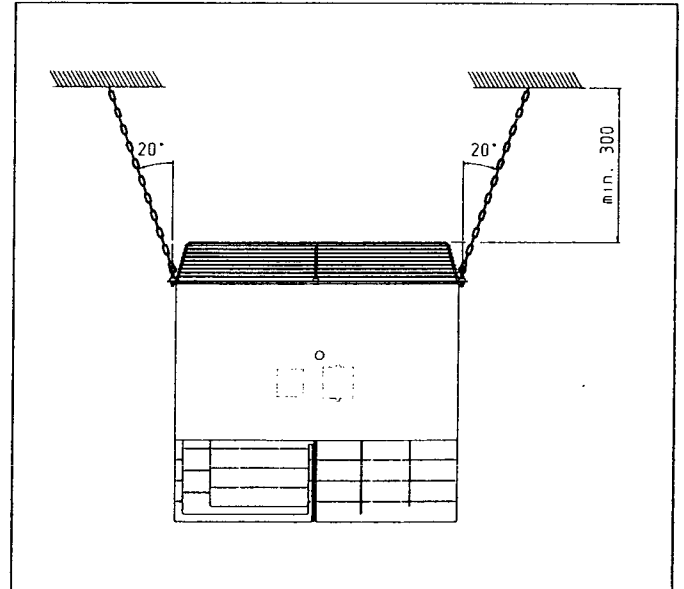
MAXIMIZOR 3000,4500 & 9000

Fig. 5



SUSPENSION CRITERIA

Fig. 6



Subject to modifications without prior notice

