

MAXIMIZOR 3004 - 4504 & 9004 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) 3 and 30 meters measured to the underside of the appliance. **This minimum distance of 3m must always be respected. Ensure that the appliance is never 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 possible with the air outlet louver blades. 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.

CAUTION: to prevent damaging the louver blades do not bend repeatedly these to extreme angles.

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 creates peripheral turbulence and noise.

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 <i>L</i> °	Primary air volume <i>V</i> ^{PRIM} (m ³ /h)			Mounting height to floor <i>H</i> (m) (fig. 5)			Effective area covered <i>A</i> x <i>A</i> (m ²) (fig.5)		
	3004	4504	9004	3004	4504	9004	3004	4504	9004
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

Subject to modifications without prior notice



INFLUENCE OF THE TEMPERATURE GRADIENT ON THE RECOMMENDED MOUNTING HEIGHT

**Table 2a :
MAXIMIZOR 3004**

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°	3.0	3.0	3.0	3.0	3.0

**Table 2b :
MAXIMIZOR 4504**

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 9004**

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		3004	4504	9004
Electrical	#	230V 1 ~ N 50Hz		
Fan speed	rpm	920	1350	1310
Op. current	A	0.52	1.15	2.40
Absorbed power	kW	0.108	0.250	0.520
Sound Lp (1)	dB(A)	45	53	60
Net weight	kg	13	16	23

(1) : r=5m; Q=1; A=160m²

Table 4 : DIMENSIONS (Fig. 2 & 4)

DIMENSIONS (mm)	3004	4504	9004	
A suspension height	222	528	583	
B height overall	330	671	732	
C suspension points	pos.	□ 462x450	∅515	∅626
	qty	4	4	4
D body dia OD	□ 500	∅475	∅565	
E overall diameter	502	555	665	

MAXIMIZOR 4504 - 9004

Louvre settings

Fig. 1a : Maximizor 4504

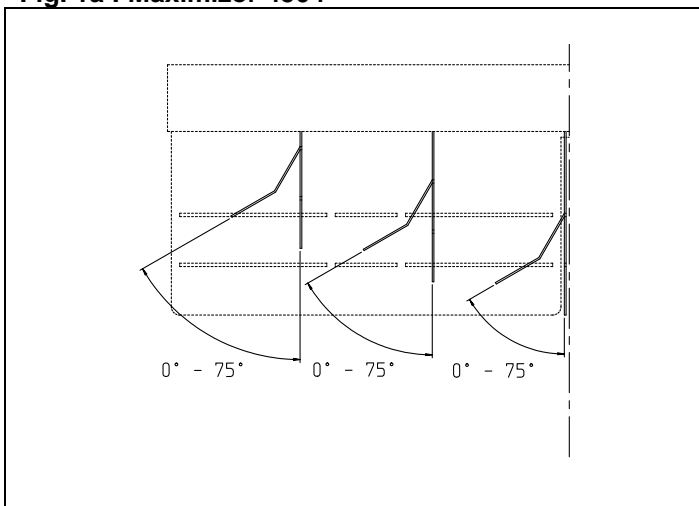
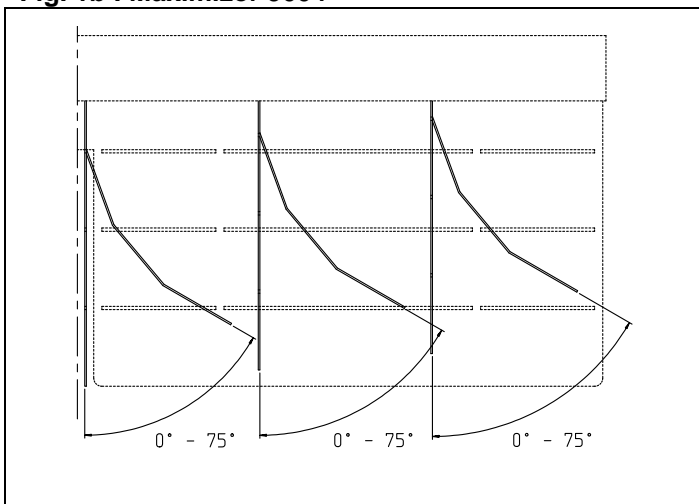
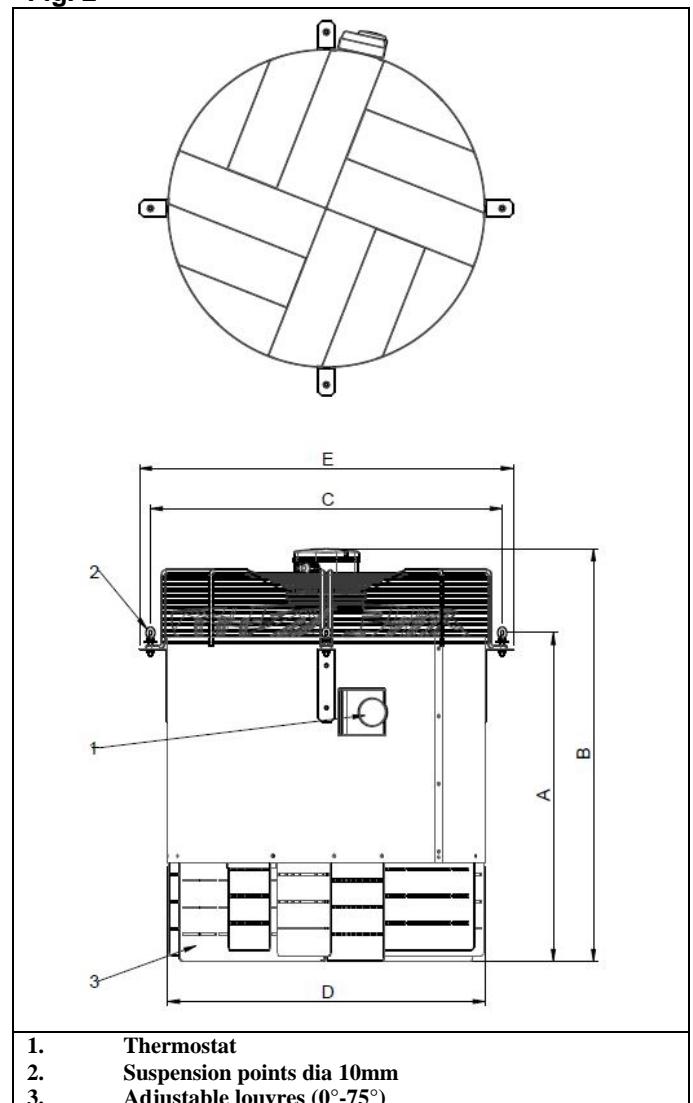


Fig. 1b : Maximizor 9004



DIMENSIONS (tol +/- 2mm)

Fig. 2

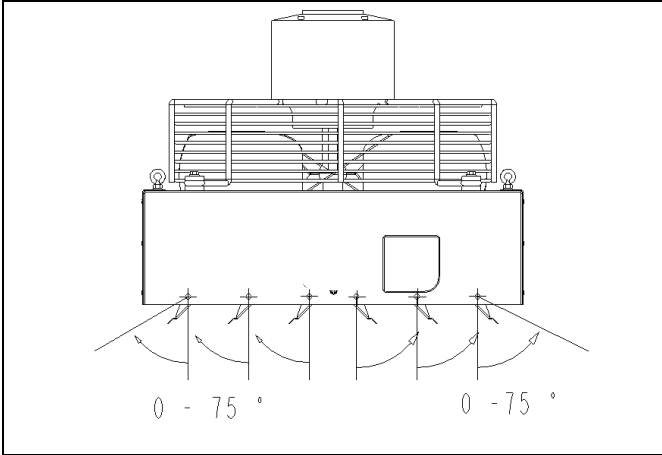


1. Thermostat
2. Suspension points dia 10mm
3. Adjustable louvres (0°-75°)

MAXIMIZOR 3004

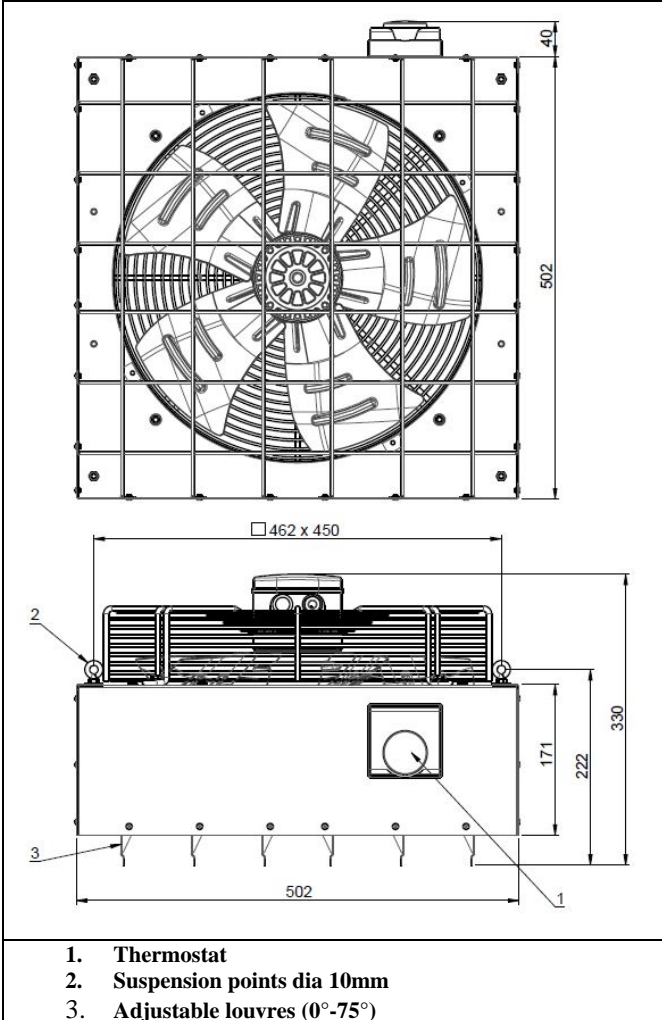
LOUVRE SETTING

Fig. 3



DIMENSIONS (tol. +/- 2mm)

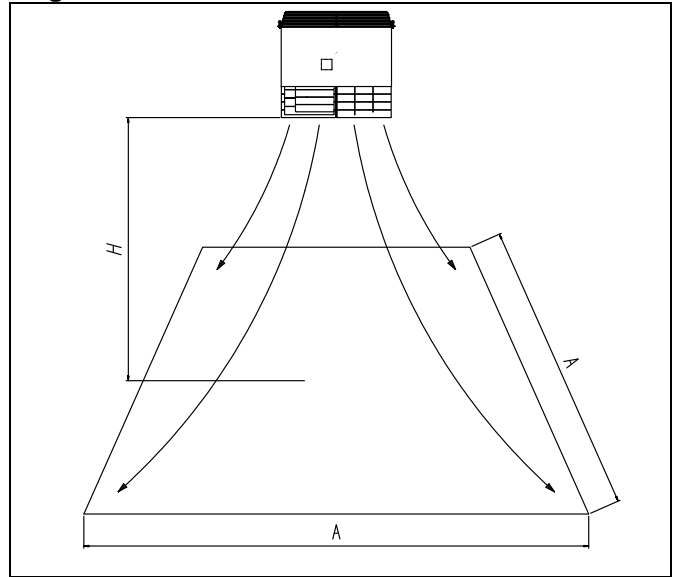
Fig. 4



1. Thermostat
2. Suspension points dia 10mm
3. Adjustable louvres (0°-75°)

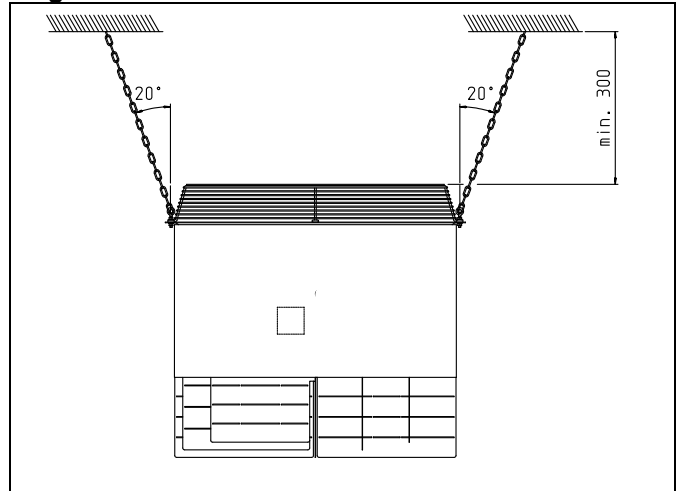
FLOOR PATTERN MAXIMIZOR 3004, 4504 & 9004

Fig. 5



SUSPENSION CRITERIA MAXIMIZOR 3004, 4504 & 9004

Fig. 6



Nortek Global HVAC Belgium nv
J&M Sabbestraat 130/A000
8930 Menen
Belgium

Tel. +32 (0)56 52 95 11

www.reznor.eu