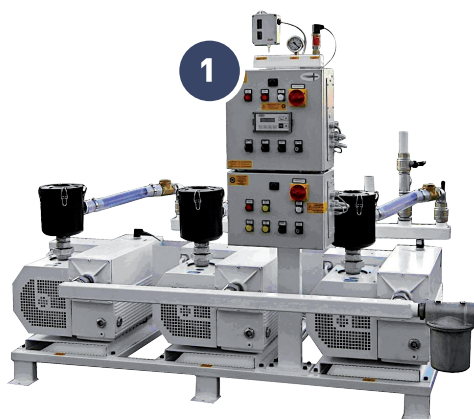


# Hospital vacuum stations

## **ISO 7396-1**



## Key features

### 1 HORIZONTAL HOSPITAL VACUUM STATION

- 3 pumps horizontal configurations
- A vertical reservoir complete with a condense exhaust system and two bactericidal filters (UNI EN 7396-1:2007 5.7.1).
- Designed to meet the normal requirements of the user by operating a single pump.
- Running hours are shown on the display
- Compliant with 93/42/EEC Directive, ISO 7396-1,
- From 220 to 340 Nm<sup>3</sup>/h for each pump



### 4 BACTERICIDAL FILTER

Designed to hold micro-organisms up to 0.01 microns. It must be assembled with the container set vertically and the sterilised container on the lower side. This set must be connected to the vacuum unit suction connector.



### 2 VERTICAL HOSPITAL VACUUM STATION

- 3 pumps vertical configurations
- A vertical reservoir complete with a condense exhaust system and two bactericidal filters (UNI EN 7396-1:2007 5.7.1).
- Designed to meet the normal requirements of the user by operating a single pump.
- Running hours are shown on the display
- Compliant with 93/42/EEC Directive, ISO 7396-1,
- From 12 to 100 Nm<sup>3</sup>/h for each pump.



### 5 PUMPS

Cast-iron pumping unit, coupled to the motor by means of a flexible coupling and centrifugal fan for cooling. Aluminium oil tank with a compartment for separation and recovery of air/oil for eliminating oil mists on the delivery side. Check valve on the suction side. If required, gas ballast valve and supporting base.



### 6 CONTROL PANEL

It offers a high technology and a large flexibility in the management of all the necessary information for a good operation of the groups.  
Back-lighted Display LCD 16\*2 digits  
8 keys keyboard  
Control from 1 to 4 pumps  
Automatic control and optimization of the consumption of the single pumps, with adjustable automatic exchange  
Alarms display (insufficient vacuum – oil lacking – blocked pump – etc.)  
Adjustable connected pumps number  
On/Off programmable intervention thresholds for each pump  
Adjustable threshold of minimum vacuum degree for alarm generation  
Management and visualization of hour counters of each pump  
Visualization of the programmed maintenance operations for each pump - Automatic and manual operation.



### 3 HOSPITAL VACUUM STATION ON HORIZONTAL TANK CONFIGURATION

- 2 or 3 pumps on horizontal tank configurations
- Digital control panel and double bactericidal filter
- Running hours are shown on the display
- From 12 to 340 Nm<sup>3</sup>/h for each pump.

## General Description

**DELTA P** hospital vacuum stations are **CE CERTIFIED** in accordance with **93/42/EEC Directive** and are provided in different shapes according to different requirements.

They can be supplied in the following versions:

- VERTICAL CONFIGURATION PUMP WITH VERTICAL TANK
- HORIZONTAL CONFIGURATION PUMP WITH VERTICAL TANK
- ON HORIZONTAL TANK CONFIGURATION
- 2 OR 3 PUMPS ARRANGEMENT

## Working principles

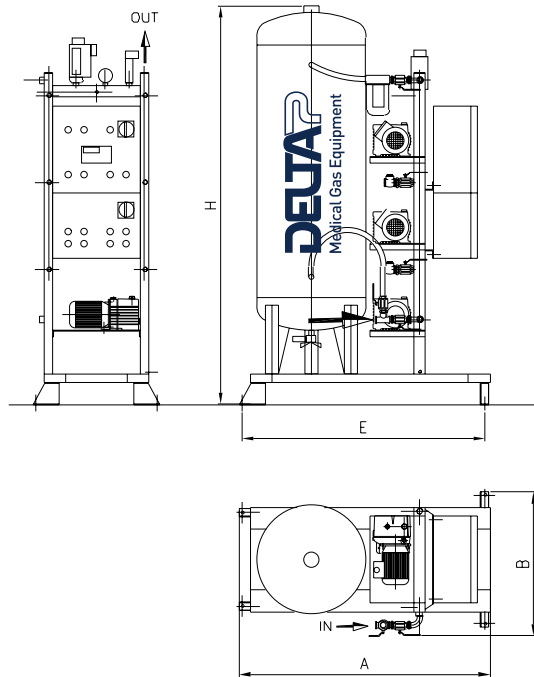
After the first manual start up, the unit runs automatically, maintaining the required vacuum level in the reservoir. The unit is designed to meet the normal requirements of the user by operating a single pump. The units are set according to an experimental simultaneity coefficient accounted for in the calculation of the system capacity (UNI EN 7396-1:2007 Paragraph 5.7.2).

The units are set according to an experimental simultaneity coefficient accounted for in the calculation of the system capacity (UNI EN 7396-1:2007 Paragraph 5.7.2). When needed, the second pump starts running and doubles the capacity in order to re-adjust the system to the required vacuum conditions. If even the second pump cannot meet the required vacuum, then the third pump starts working. (UNI EN 7396-1:2007 Paragraph 5.7.3). On each starting, the control board makes it possible to exchange pumps in order to get equal wearing for the three pumps. Running hours are shown on the display in the centre of the main control board. The third pump, called emergency pump, is driven electronically by the main board, but supplied by a separate emergency control board (UNI EN 7396-1:2007 Paragraph 5.7.5). When needed, the emergency pump starts working even in case of control board fault or disconnection (UNI EN 7396-1:2007 Paragraphs 5.7.7). The by-pass system allows to carry out reservoir replacement and/or maintenance without stopping the unit.

## VERTICAL HOSPITAL VACUUM STATION TECHNICAL SPECIFICATION

### 3 X 12 - 3 X 28

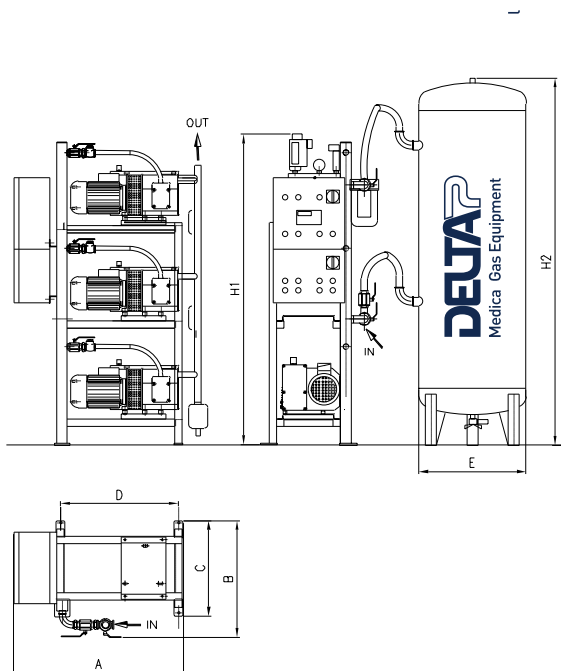
#### VERTICAL HOSPITAL VACUUM STATION



MODEL	3x12	3x28
CAPACITY	12 m3/h	28 m3/h
TOTAL CAPACITY	36 m3/h	84 m3/h
VACUUM	10 mbar	
TANK (Lt)	270 Lt	
POWER SUPPLY	400 V / 3ph / 50-60 Hz	
KW		
MAIN BOARD	0,74 KW	1,5 KW
EMERGENCY BOARD	0,37 kW	0,75 KW
SUCTION CONNECTION	G 3/4"	
DELIVERY CONNECTION	G 3/4"	
WEIGHT	180 kg	240 Kg
DIMENSIONS		
A (mm)	1153	1248
B (mm)	661	701
E (mm)	1113	1213
H (mm)	1830	1830

### 3 X 40 - 3 X 60 - 3x100

#### VERTICAL HOSPITAL VACUUM STATION

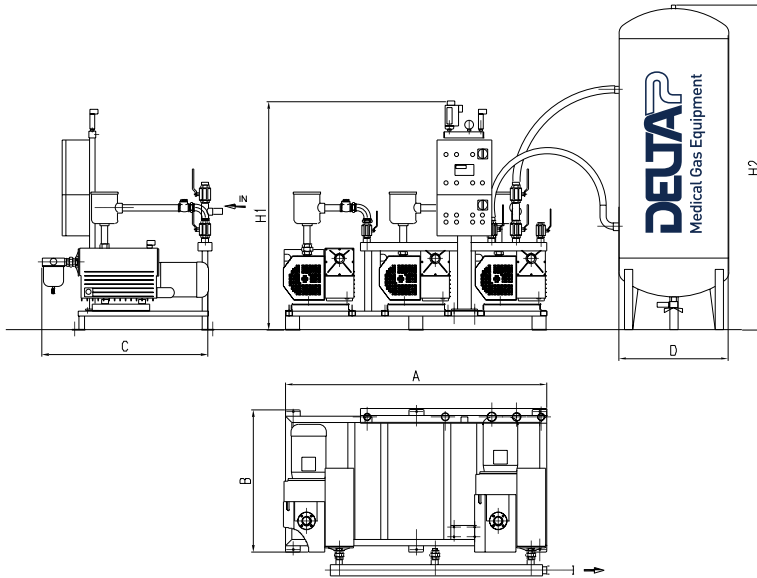


MODEL	3x40	3x60	3x100
CAPACITY	40 m3/h	60 m3/h	100 m3/h
TOTAL CAPACITY	120 m3/h	180 m3/h	300 m3/h
VACUUM	10 mbar		
TANK (Lt)	270/500	500/1000	1000
POWER SUPPLY	400 V / 3ph / 50-60 Hz		
KW			
MAIN BOARD	2,2 KW	3,0 KW	4,4 KW
EMERGENCY BOARD	1,1 kW	1,5 KW	2,2 KW
SUCTION CONNECTION	G 1"	G 1"	G 1" 1/2
DELIVERY CONNECTION	G 1"	G 1"	G 1" 1/4
WEIGHT (Kg)	360/420	380/440	510
DIMENSIONS			
A (mm)	948	948	1171
B (mm)	654	654	888
C (mm)	553	553	696
D (mm)	660	660	666
E (mm)	500 (270 Lt) 600 (500 Lt)	500 (270 Lt) 800 (1000 Lt)	800
H1 (mm)	1735	1735	1885
H2 (mm)	1830 (270 Lt) 2120 (500 Lt)	2120 (500 Lt) 2410 (1000 Lt)	2410

## HORIZONTAL HOSPITAL VACUUM STATION TECHNICAL SPECIFICATION

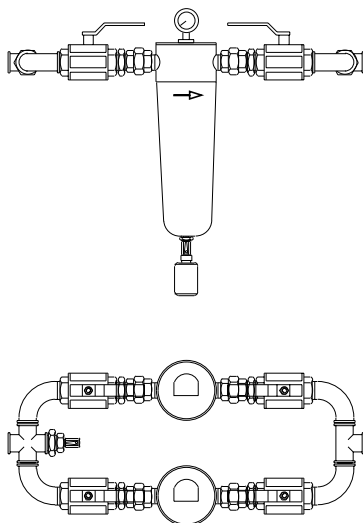
**3 X 220 - 3 X 340**

**HORIZONTAL HOSPITAL VACUUM STATION**



MODEL	3x220	3x340
CAPACITY	220 m3/h	340 m3/h
TOTAL CAPACITY	660 m3/h	1020 m3/h
VACUUM	10 mbar	
TANK (Lt)	1000 Lt	
POWER SUPPLY	400 V / 3ph / 50-60 Hz	
KW		
MAIN BOARD	8,0 KW	15,0
EMERGENCY BOARD	4,0 KW	7,5 KW
SUCTION CONNECTION	G 1" 1/2	
DELIVERY CONNECTION	G 1" 1/2	
WEIGHT	750 kg	950 Kg
DIMENSIONS		
A (mm)	1910	
B (mm)	1039	
C (mm)	1213	
D (mm)	800	
H1 (mm)	1670	
H2 (mm)	2410	

### BACTERIAL FILTER



SIZE CONNECTION	UTILIZATION
G 1/2"	12 X 3
G 3/4"	28 X 3
G 1"	40 X 3 - 60 X 3
G 1" 1/2	100 X 3 / 220 X 3 / 340 X 3