

Pressurization

LAB9.50 DEHYDRATOR FOR WAVEGUIDES AND COAXIAL CABLES



key features

- output pressure programmable up to 60 kPa
- flow rate up to 1000 NI/h
- dew point better than -45 °C
- two pumps and two drying chambers running alternatively
- continuous duty and automatic operation
- drying chambers automatic regeneration
- microprocessor control, LCD display, two buttons keypad
- low/high pressure, high humidity, high flow, power and system failures alarms
- local and remote alarm signalling
- output pressure, hour meter, alarms readout
- very low power consumption
- low acoustic noise
- high reliability and long life
- mounting: wall, 19", ETSI N3 racks

description

The LAB9.50 dehydrator provides continuous dry air flow up to 1000 NI/h with a dew point better than -45°C. Output pressure is settable from 10 to 60 kPa.

The LAB9.50 achieves reduced mechanical wear and noise and therefore a long lifetime by output pressure measurement, microprocessor control and a pump speed regulation. Pumps speed control avoids mechanical pressure regulators thus eliminating undesirable pressure losses and a worse response to plant air flow regulation.

Two drying chambers contain the desiccant and dry airstream by adsorption process. The chambers operate on alternate cycles so while the first chamber dries, the second one regenerates the desiccant by heating and backwashing with a small reverse dry air flow.

The dehydrator also adjusts the switching interval between the two drying chambers according to the amount of dry air supplied to the plant.

This technology reduces overall power consumption.

The following devices are available on the front panel:

- 2x16 LCD
- two function keys
- bi-color led (power on, alarms)
- on/off outlet valves

The LAB9.50 provides front access keys to set the operating pressure at any time.

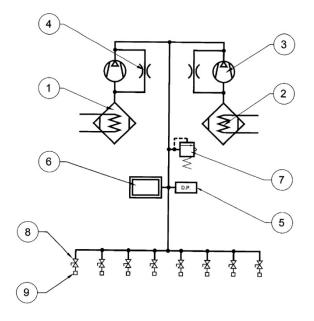
Output pressure measurement and hour meter values are indicated on the LCD.

The basic version offers low pressure, high pressure, high humidity, power and system failures alarms. All the alarm messages are locally signalled and are remoted by SPDT relay.

Power supply and alarm remote connectors, outlets with hose-tail fittings are available on the rear panel.

The LAB9.50 always includes wall, 19" and ETSI N3 rack mountings.

pneumatic scheme



- (1) DRYING CHAMBER
- 2 HEATER
- 3 PUMP
- 4 AIR BACKWASHING HOLE
- (5) HUMIDITY PROBE
- 6 DIGITAL PRESSURE GAUGE
- SAFETY VALVE
- 8 SHUT OFF VALVE
- 9 DRY AIR OUTLET

performance

Output pressure : Programmable from 10 to 60 kPa

Maximum flow rate : 1000 NI/h

Safety valve : built in, factory set at 70 kPa

Output air dew point : better than -45°C at 80% RH at 20°C

Regeneration : automatic by heating

Regeneration phase interval : adaptive according to the amount of dry air supplied

to the plant

Local alarms : low pressure, high pressure, high humidity, high flow

(optional), power and system failures alarms

Remote alarms : all the alarms are remoted by SPDT relay

LED indications : power on, alarms

Readouts : output pressure, low/high pressure alarm thresholds,

hour meter, pump rate (optional)

MTBF : higher than 165000 h, according to MIL HDBK 217F

at Ground Base conditions, 25°C ambient

temperature, 50% flow rate

European Community Directives : 2006/95/CE "Low Voltage Directive"

2004/108/EC "Electromagnetic Compatibility

Directive"

Safety Normative : EN 60950-1 "Safety of information technology

equipment"

Electromagnetic Compatibility Normative : EN 55022 class A and B; EN 55024

Environmental compliance : 2002/95/EC (RoHS)

2002/96/EC (WEEE)

Quality assurance standard : ISO 9001

electrical specifications

Power supply : 220-240 Vac 50/60 Hz, or alternately

100-127 Vac 50/60 Hz

Power consumption

 $\begin{array}{lll} \text{normal operation} & : & \leq 30 \text{ VA} \\ \text{regeneration phase} & : & \leq 160 \text{ VA} \end{array}$

mechanical and environmental characteristics

Temperature °C (°F)

Operating : -10 to + 50 (+14 to +122) Storage : -30 to + 70 (-22 to +158) Mountings : Wall, 19" and ETSI N3 racks

Acoustic noise : ≤ 60 dBA

Dimensions mm (in)

Rack 19" mounting width 482 (19.0)

height 310 (12.2) depth 150 (5.9)

Wall mounting width 482 (19.0)

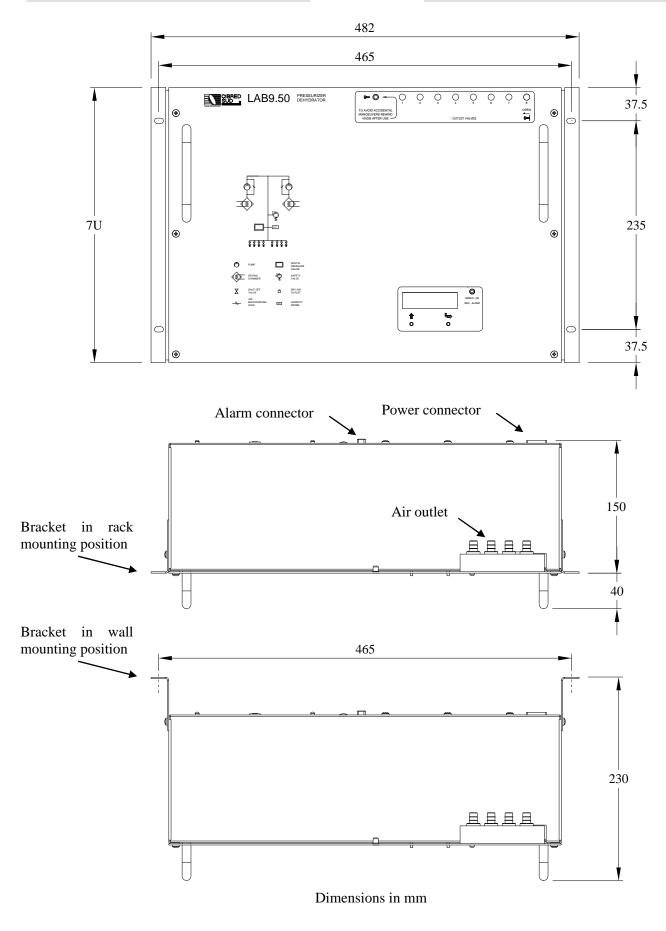
height 310 (12.2)

depth 230 (9.0) ETSI – N3 mounting : width 533 (21.0)

> height 310 (12.2) depth 150 (5.9)

Weight kg (lb) : 14 (35.2)

Standard outlets : 4 or 8 outlets, each with ON/OFF valve
Outlets fitting mm (in) : 9.5 (0.37) diameter, others on request



The equipment illustrated are fully equipped versions. CIBRED SUD reserves the right to modify without notice characteristics and data supplied herein.





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