



LAB 4MP/30 DEHYDRATOR FOR WAVE GUIDES AND COAXIAL CABLES



key features

- output pressure programmable up to 30 kPa
- maximum flow rate up to 300 nl/h
- dew point better than -40 °C
- two pumps running alternatively
- continuous duty and automatic operation
- automatic desiccant regeneration
- microprocessor control, LCD display, two button keypad
- programmable low/high pressure, high humidity alarms
- remote alarms connector
- output pressure, elapsed time, alarms digital readout
- very low power consumption
- low acoustic noise
- high reliability and long life
- multiple outlet arrangement
- rack or wall mount installation

description

The LAB 4 MP/30 dehydrator supplies continuous dry air up to 300 nl/h, with a dew point better than -40°C , and an output pressure programmable from 5 to 30 kPa.

Two drying towers operating on alternate cycles contain the desiccant which dries the air through chemical absorption; while the first tower dries, the second one regenerates the desiccant by heating and backwashing with a reverse dry air flow.

The amount of air supplied determines the exchange interval between the two drying towers, thereby reducing the power consumption.

The operating pressure is set by the keys located on the front panel.

A fundamental characteristic of this dehydrator is the automatic flow rate regulation by the two pumps due to feed-back control of the output pressure. The dehydrator's flow rate is controlled according to the plant's requirements by the control and operating logic which maintains the output pressure at set point value by adjusting the speed of the pumps. This limits to a minimum pump duty, reduces wear and tear, power consumption and noise level so that the system's overall reliability increases and the dehydrator is capable of meeting all of the plants requirements.

Automatic control of the pump's speed eliminates mechanical pressure regulators that introduce undesirable pressure losses and a worse response to flow rate regulations. LAB 4 MP/30 is designed for wall mount, rack 19" and N3.

It can be mounted on a standard 19" rack by removing the case.

The following devices are located on the front panel:

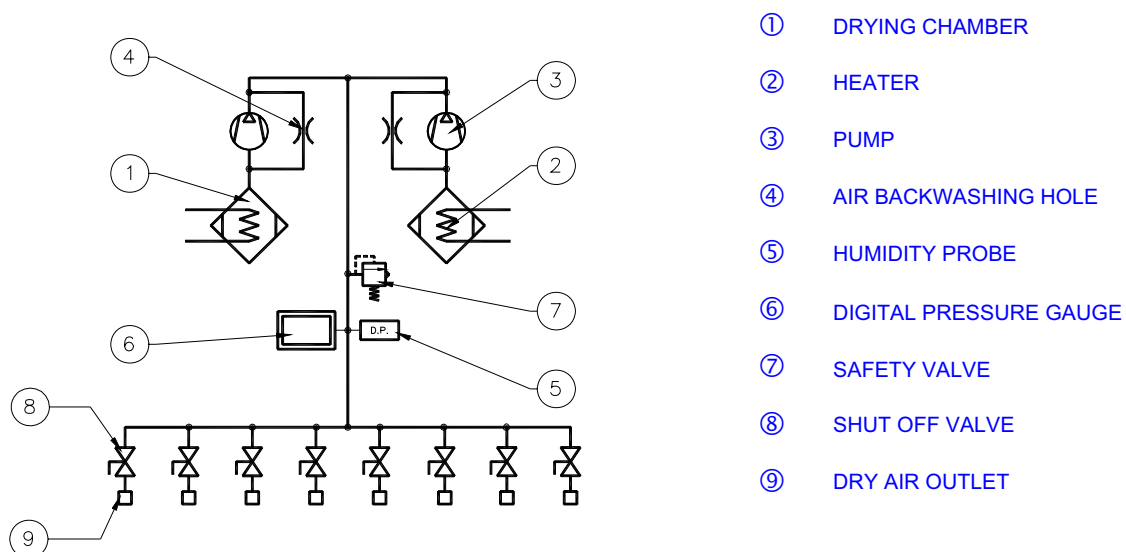
- power switch and fuses
- two function keys
- led indications (Power on Warning)
- on/off outlet valves (max 8).

The actual output pressure and the elapsed time are available on the liquid crystal display on the front panel.

On top the unit are located: the power connector, the outlets with hose-tail fittings and the remote alarm connector .

The basic version comes with power off, low pressure, high pressure and high humidity alarms. All of the alarms are signalled locally and remotely.

pneumatic scheme



performance

Output pressure	:	programmable from 5 to 30 kPa
Maximum flow rate	:	300 nl/h
Safety valve	:	built in, factory set at 50 kPa +/- 15%
Output air dew point	:	better than - 40°C at 20°C amb. temp., 80% R.H.
Desiccant regeneration	:	automatic by heating
Regeneration phase duration	:	75 min.
Regeneration phase interval	:	from 4h 30 min to 14 h, according to the flow rate
Local alarms	:	power off, high humidity, low pressure, high pressure
Remote alarms	:	all the local alarms can be remotod
Indications	:	power on, warning
Readout	:	actual output pressure, low pressure alarm threshold, high pressure alarm threshold, elapsed time
MTBF	:	higher than 165.000h, according to MIL HDBK 217F at Ground Base conditions, 25°C amb. temp., 50% flow rate
European Community directives	:	Low Voltage Directive: 73/23/CEE (as modified by directive 93/68/CEE) Electromagnetic Compatibility Directive: 89/336/CEE (as modified by directives 92/31/CEE and 93/68/CEE)
Safety Normative	:	EN 60950 Safety of information technology equipment, including electrical business equipment
Electromagnetic Compatibility Normative	:	EN 55022 class A and B EN 50082-1
Quality assurance standard	:	ISO 9001

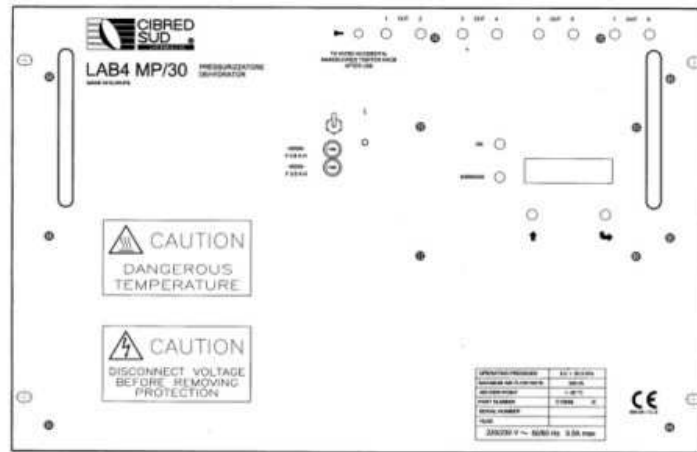
electrical characteristics

Power supply standard	:	230 Vac \pm 15% 50/60 Hz
Power supply optional	:	Others on request
Power consumption	:	
normal operation	:	\leq 13 W (at steady state without system leakage)
regeneration phase	:	\leq 110 W

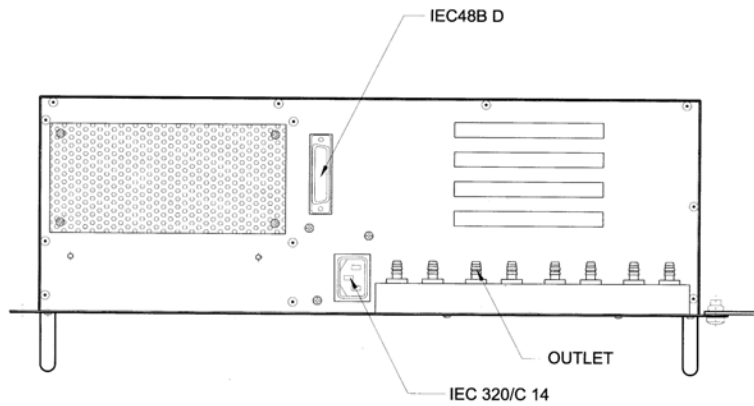
mechanical and environmental characteristics

Mounting	:	wall - 19" rack - N3 rack
Acoustic noise	:	\leq 50 dBA at 1 m far and 1.5 m high
Operation temperature	:	-10 to + 50°C
Storage temperature	:	-30 to + 60°C
Dimensions	:	
Wall mounting	:	L = 486; H = 311; D = 170 mm.
Rack 19" mounting	:	L = 482; H = 310 (7U); D = 148 mm.
Frame N3 mounting	:	L = 533; H = 310; D = 148 mm
Weight (with desiccant)	:	
Rack mounting	:	13 kg (28.6 lb)
Wall mounting	:	17 kg. (37.4 lb)
Standard outlets	:	up to 8, each with ON/OFF valve
Output pneumatic connector standard	:	hose- tail fitting with 7 mm diameter other on request

LAB 4 MP/30

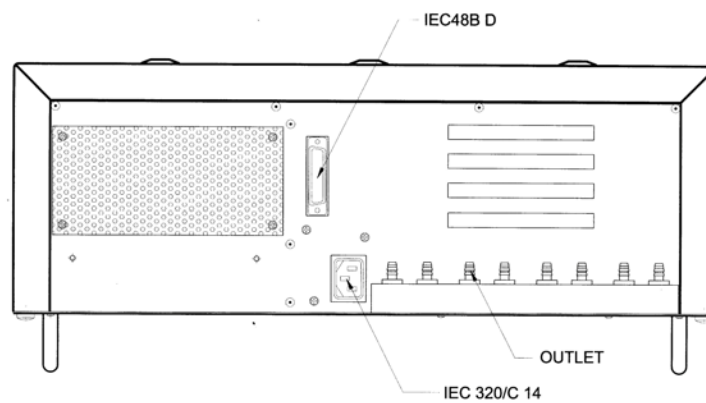


FRONT VIEW



19" mounting upper view

N3 mounting upper view



Wall mounting upper view

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



ISO 9001 AQAP-110