



Pressurization

LAB2



# LAB2 DEHYDRATOR FOR WAVEGUIDES AND CABLES

# CE

### key features

- output pressure factory presettable from 1 to 6 kPa
- flow rate up to 150 NI/h
- dew point better than -50 °C
- continuous duty and automatic operation
- disposable desiccant cartridge replaceable from front side
- microprocessor control
- low/high pressure, high humidity, power and system failures alarms
- local and remote alarm signalling
- very low power consumption
- low acoustic noise
- high reliability and long life
- mounting: wall, floor, 19" racks, ETSI N3 racks

### description

The LAB2 dehydrator provides continuous dry air flow up to 150 NI/h with a dew point better than -50°C. Output pressure is factory presettable from 1 to 6 kPa.

The LAB2 achieves reduced mechanical wear and noise and therefore a long lifetime by output pressure measurement, microprocessor control and pump speed regulation. Pump speed control avoids mechanical pressure regulator thus eliminating undesirable pressure losses and a worse response to plant air flow regulation.

This technology reduces overall power consumption.

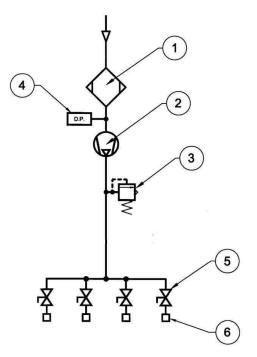
A disposable cartridge, accessible from the front panel, contains the desiccant and dries airstream by adsorption process. The cartridge must be replaced when the color of the detector, integrated in the desiccant cartridge and visible on the front panel, turns color from brown to light green. As option it is available the high humidity alarm switching on when the cartridge is exhausted.

A led (power on, alarms) and four on/off outlet valves are available on the front panel.

The basic version offers low pressure, high pressure, power and system failure alarms. The high humidity alarm is available as option. All the alarms are remoted by SPDT relay

Connectors (power supply and remote alarm) and air outlets are available on the rear side.

The LAB2 always includes wall, floor, 19" rack, ETSI N3 racks mountings.



#### pneumatic scheme

- 1 DRYING CARTRIDGE
- 2 PUMP
- 3 SAFETY VALVE
- 4 HUMIDITY PROBE (OPTIONAL)
- 5 SHUTOFF VALVE
- 6 DRY AIR OUTLET

# performance

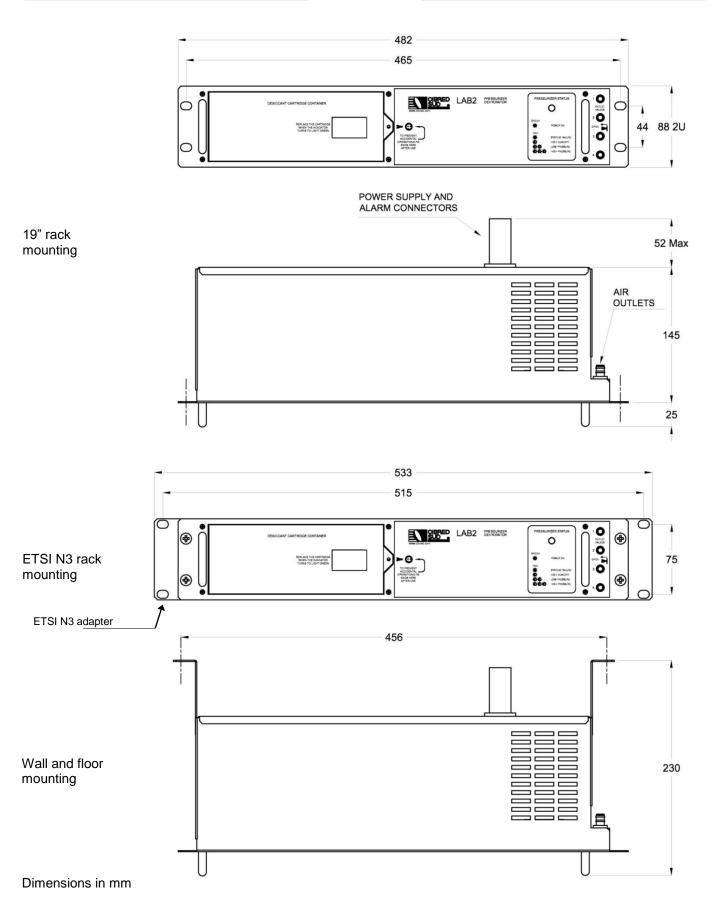
Output pressure	:	2 kPa standard on request factory presettable from 1 to 6 kPa
Maximum flow rate	:	150 NI/h
Safety valve	:	built in, factory set at 7 kPa
Output air dew point	1	better than -50°C at typical ambient conditions
Regeneration	:	disposable desiccant cartridge
Desiccant cartridge water-retention capacity g (lb)	:	200 (0.44)
Desiccant cartridge exhaustion check	:	front visual indicator (high humidity alarm as option)
Local alarms	:	low pressure, high pressure, high humidity (optional), power and system failure alarms
Remote alarms	:	all the alarms are remoted by SPDT relay
MTBF	:	higher than 180.000h, calculated according to MIL HDBK 217F at Ground Base conditions, 25°C amb. temp., 50% flow rate
Shock and vibration	:	Transportation ETSI EN 300 019-1-2, Class 2.3 Stationary use ETSI EN 300 019-1-3, Class 3.1E
Low Voltage Directive	1	2006/95/EC
Electromagnetic Compatibility Directive		2004/108/EC
Safety Normative	1	EN 60950-1
Electromagnetic Compatibility Normative	:	EN 55022 class A and B; EN 61000-6-1; ETSI EN 301 489-1; ANSI CFR 47 part 15
Environmental compliance	:	2002/95/EC (RoHS) 2002/96/EC (WEEE) 1907/2006 (REACH)
Quality assurance standard	:	ISO 9001

### electrical characteristics

Power supply	1	48/60 Vdc 100-240 Vac, 50/60 Hz, with optional kit code K15105
Power consumption	1	$\leq$ 2.5 W

# mechanical and environmental characteristics

Temperature °C (°F) Operating Storage	:	-10°C to + 50°C (+14 to +122) -40°C to + 70°C (-22 to +158)				
Mountings	1	wall, floor, 19" rack, ETSI N3 rack				
Acoustic noise	1	$\leq$ 50 dBA				
<b>Dimensions mm (in)</b> Wall and floor mounting	:	width 482 (19) height 88 (3.5) depth 230 (9)				
19" rack mounting	:	width 482 (19.0) height 88 (3.5) depth 150 (5.9)				
ETSI - N3 rack mounting	1	width 533 (21.0)				
		height 88 (3.5)				
		depth 150 (5.9)				
Weight kg (lb)	1	4.3 (9.5)				
Standard outlets	1	4, each with independent 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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