



MINILAB DEHYDRATOR FOR WAVE GUIDES AND COAXIAL CABLES

Recognize

Intertek 4002569



Conforms to UL Std 60950-1 vs Certified to CSA Std. C22.2 No. 60950-1

key features

- output pressure factory presettable from 1 to 6 kPa
- flow rate up to 150 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
- 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", ETSI N3 racks

description

The MINILAB dehydrator provides continuous dry air flow up to 150 NI/h with a dew point better than -45°C. Output pressure is factory presettable from 1 to 6 kPa.

The MINILAB achieves reduced mechanical wear and noise and therefore a long lifetime by output pressure measurement, microprocessor control and 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.

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

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

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

The MINILAB always includes wall, floor, 19" and ETSI N3 rack mountings.

pneumatic scheme



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

performance

| Output pressure | : | 2 kPa standard |
|---|-----|--|
| | | on request factory presettable from 1 to 6 kPa |
| Maximum flow rate | 1 | 150 NI/h |
| Safety valve | 1 | built in |
| | | factory set at 7 KPa |
| Output air dew point | 1 | better than -45°C at typical ambient conditions |
| Drying chambers regeneration | 1 | automatic by heating |
| Regeneration phase interval | 1 | to the plant |
| Local alarms indications | 1.1 | power off, low pressure, high pressure, high humidity, |
| | | power and system failure alarms |
| Remote alarms | 1.1 | all the alarms are remoted by SPDT relay |
| MTBF | 1.1 | higher than 165.000 hours, according to MIL HDBK |
| | | 217F at Ground Base conditions, 25°C amb. temp., |
| | | 50% flow rate |
| Shock and vibration | 1. | 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 | 1 | 2004/108/EC |
| Safety Normative | 1 | IEC/EN 60950-1 |
| Electromagnetic Compatibility Normative | 1 | EN 55022 class A and B; EN 61000-6-1; |
| | | ETSI EN 301 489-1; ANSI CFR 47 part 15 |
| Marking and Certification | 1 | Recognized Component |
| | | |
| | | Intertek |
| | | 4002569 Conforms to LIL Std 60950-1 |
| | | Certified to CSA Std. C22.2 No. 60950-1 |
| | | Certified to CB, test ref. nº SE-64590 |
| Environmental compliance | | 2002/95/EC (BoHS) |
| | | 2002/96/EC (WEEE) |
| Quality assurance standard | | ISO 9001 |
| | | |
| | | |

electrical characteristics

| Power supply | : | 48/60 Vdc 100-240 Vac, 50/60 Hz, with kit code K14524 24 Vdc on request |
|--------------|---|---|
| consumption | | |

Power consumption

 $\begin{array}{rll} \mbox{normal operation} & : & \leq 2,5 \ \mbox{W} \\ \mbox{regeneration phase} & : & \leq 55 \ \mbox{W} \end{array}$

mechanical and environmental characteristics

| Temperature °C (°F) | | | |
|----------------------------------|-----|--|--|
| Operating | 1 | -10 to + 50 (+14 to +122) | |
| Storage | 1 | -40 to + 70 (-40 to +158) | |
| Mounting | 1 | Wall, floor, 19" Rack and ETSI - N3 Rack | |
| Acoustic noise | 1.1 | \leq 50 dBA | |
| Dimensions mm (in) | | | |
| 19" Rack - Wall – Floor mounting | 1 | width 482 (19.0) | |
| | | height 88 (3.5) | |
| | | depth 190 (8.5) | |
| ETSI - N3 Rack mounting | 1 | width 533 (21.0) | |
| _ | | height 88 (3.5) | |
| | | depth 190 (7.5) | |
| Weight kg (lb) | 10 | 4,2 (8.8) | |
| Standard outlets | 1 | n. 6, each with ON/OFF valve | |
| Outlets fitting mm (in) | | : 9,5 (0.37) diameter | |
| o (<i>i</i> , <i>i</i> , | | Other on request | |

MINILAB



Dimensions in mm

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



Via Catania 2 • 00041 Albano Laziale Loc. Pavona (RM) - Italy Tel. +39 069344009 (6 linees a.r.) • Fax +39 069344035 www.cibred.com • e-mail: cibred@cibred.com

CI4336-CI4600-E.DS4 DEL 04.II