## 100 kW Load Bank

Our PLB100 model is developed to test and validate performance for an energy source of up to 100 kW

### Operating principle

Our load banks apply an adjustable electrical power to the tested source using resistive elements with high thermal stability.

The absorbed power is dissipated as heat, removed by a forced-ventilation cooling system that maintains operating conditions and ensures test continuity.

The load levels are segmented into switchable steps, allowing precise adjustment of the applied power and the execution of test sequences.

## Technical Specifications

| | |
|---|---|
| *Load Type* | Resistive |
| *Rated Power* | 100 kW |
| *Rated Voltage* | 400 Vac +/- 5% 3-phase<br>230Vac +/- 5% 1Ph+N |
| *Power Factor* | 1 |
| *Frequency* | 50 Hz |
| *Resolution* | 2 kW @400Vac<br>0.33 kW @230Vac |

| | |
|---|---|
| *Height* | 720 mm |
| *Depth* | 310 mm |
| *Length* | 545 mm |
| *Weight* | 35 kg |
| *Cooling* | 8 Fans |

## Technical Architecture

The clean architecture of our load bank simplifies its installation and use.

| **Design** | |
|---|---|
| *Use* | Indoor |
| *Frame* | Galvanized steel monocoque 1.5 mm |
| *Paint* | Blue Grey RAL7031 80µm |
| *Handling* | Handle |

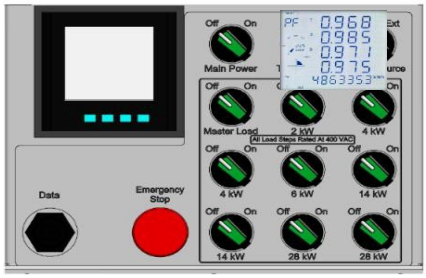
| **Resistive elements** | |
|---|---|
| *Technology* | Helical |
| *Resistive Alloy* | Nickel-chromium |
| *Element tolerance* | +/- 5% |
| *Temperature drift* | < 2% |
| *Resistive elements* | Resistive elements |

| **Cooling system** | |
|---|---|
| *Air extraction* | Horizontal |
| *Air flow* | 8 × 500 m3/h |
| *Sound level at 1 m* | 86 dBA +/- 3dBA (2) |

| **Protections** | |
|---|---|
| *Resistive elements* | Fuse protection |
| *Safety devices* | Emergency stop |
| | |

## Control system

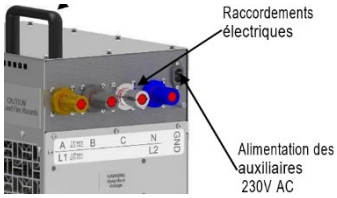
A simple interface for ease of use.

| Control system | |
|---|---|
| *Power ramp-up* | 3-pole AC contactors |
| *Supervision* |  |



## Connections

The clean architecture of our load bank simplifies its installation and use.




| Protections | |
|---|---|
| *Power section* | Type Powerlock |
| *Auxiliary section* | C19 type socket - 230Vac |
| | |

## Environmental Characteristics

Capable of operating in all environments.

| | |
|---|---|
| *Operating T°C* | 0°C / +40°C |
| *Storage T°C* | -20°C / +45°C |
| *Ambient Humidity* | 95% relative (1) |
| *Operating altitude* | <1000 m |

| | |
|---|---|
| *IP electrical enclosure* | IP 54 |
| *IP air duct* | IP 21 |
| | |


(1) Relative humidity, non-condensing
(2) At 50 Hz & Q=2