

100 kW Load Bank

Our DATA-100 model is developed for the commissioning of a data center. In your Data Center projects, this bank is designed to faithfully reproduce the energy and thermal behavior of a computer server room under real operating conditions

Operating principle

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

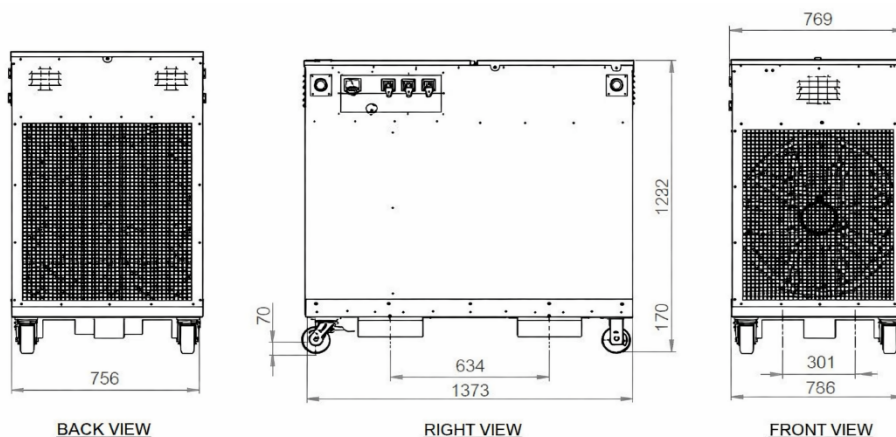
The absorbed power is dissipated as heat, removed by a forced-ventilation cooling system that maintains operating conditions and ensures test continuity.

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



Technical Specifications

<i>Load Type</i>	Resistive	<i>Height</i>	1280 mm
<i>Rated Power</i>	100 kW	<i>Width</i>	770 mm
<i>Rated Voltage</i>	400 Vac $\pm$ 5% 3-phase	<i>Depth</i>	1230 mm
<i>Power Factor</i>	1	<i>Weight</i>	180 kg
<i>Frequency</i>	50/60 Hz	<i>Cooling</i>	1 Fan
<i>Resolution</i>	5 kW		



Technical Architecture

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

Design		Cooling system	
Use	Indoor & Outdoor	Air extraction	Horizontal
Frame	Galvanized steel monocoque 1.5 mm	Rated Power	1.5 kW
Paint	Blue Grey RAL7035 80µm	Air flow	13,300 m3/h
Handling	Fork pockets	Average air T°C rise	≈ 40°C
	Lifting eyes	Sound level at 1 m	86 dBA +/- 3dBA ⁽²⁾
Resistive elements		Protections	
Technology	Finned stainless steel tube	Resistive elements	Fuse protection
Resistive Alloy	Nickel-chromium resistance wire	Fan motor	Circuit-breaker protection
Element tolerance	+/- 5%	Safety devices	Safety thermostat
Temperature drift	< 2%		Air-flow detector
Resistive elements	Resistive elements		Emergency stop

Control system

A simple interface for ease of use.

Control system	
Power ramp-up	3-pole AC contactors
Supervision	Echo-A (Advanced)
HMI	7" touchscreen
Manual mode	☒
Cycle mode	☒
Measurements (U, I, P, F, pf)	☒
Data logging	☒
Ballast mode	N/A
Communication ModBus	Option
Remote control	Control cable 100 m max

Environmental Characteristics

Capable of operating in all environments.

Operating T°C	-15°C to +50°C	IP electrical enclosure	IP 54
Storage T°C	-20°C to +70°C	IP air duct	IP 23
Ambient Humidity	95% relative ⁽¹⁾		
Operating altitude	800 m		



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