

500 kW Load Bank

Our LSKR500 model is developed to test and validate performance for an energy source of up to 500 kW

Operating principle

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

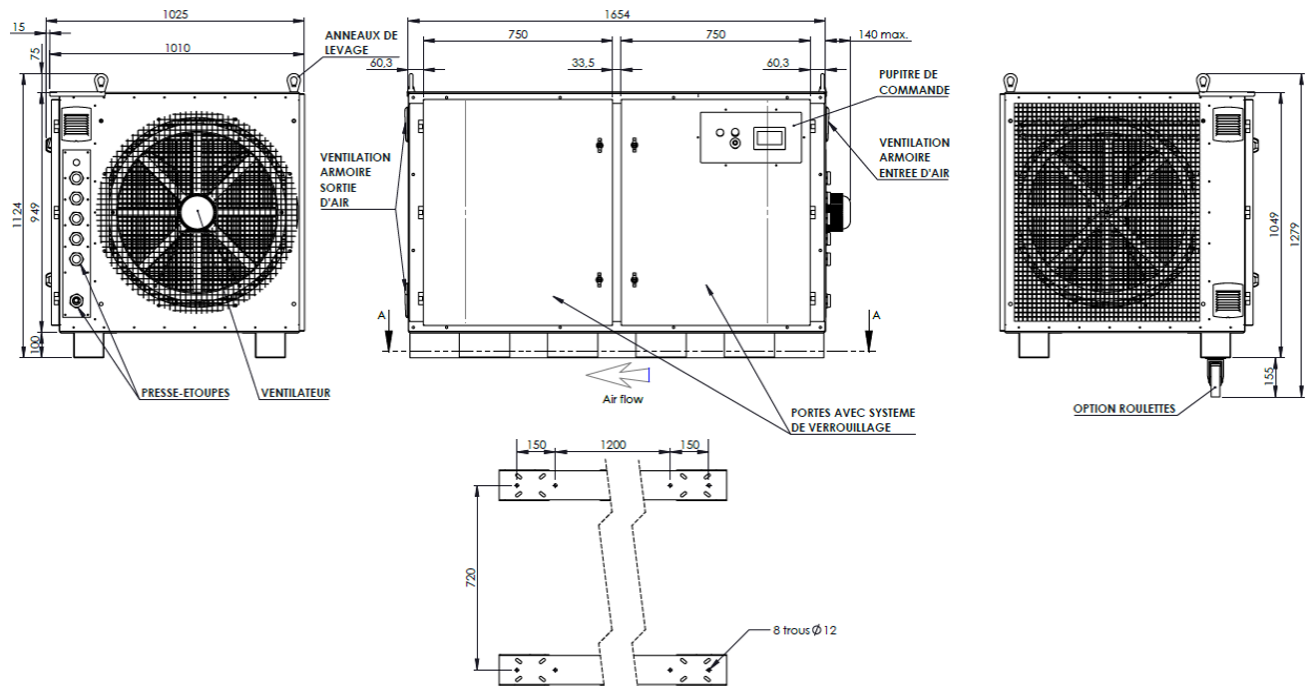
The absorbed power is dissipated as heat, removed by a forced-ventilation cooling system that maintains operating conditions and ensures test continuity.

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	Height	1050 mm
Rated Power	500 kW	Depth	1025 mm
Rated Voltage	400 Vac $\pm$ 5% 3-phase	Length	1794 mm
Power Factor	1	Weight	430 kg
Frequency	50 Hz	Cooling	1 Fan
Resolution	1 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	4 kW
Paint	Blue Grey RAL7040 80µm	Air flow	26,600 m3/h
Handling	Fork pockets	Average air T°C rise	≈ 100°C
	Lifting eyes	Sound level at 1 m	92 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-B (Basic)	Echo-A (Advanced)
HMI	4.3" touchscreen	7" touchscreen
Manual mode	☒	☒
Cycle mode	☐	☒
Measurements (U, I, P, F, pf)	☐	☒
Data logging	☐	☒
Ballast mode	N/A	Option
Communication ModBus	Option	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

