

500KW Resistive Loadbank

Rigid design for outdoor use



RATED POWER

500 kW

VOLTAGE

400 VAC

PHASE

3 phase

Specifications

Model name	DPX-30022
Product type	Automatic load bank
Rated voltage / frequency	400 VAC, 3 phase 4 wire, 50 Hz
Maximum load power	510 kW resistive
Power factor	1
Load steps @400 V	1, 2, 2, 5, 10, 20, 20, 50, 100, 100, 200 kW
Load tolerance	+/-5% each step / +/-3% overall
Dimensions	155 x 125 x 168 cm
Weight	690 kg

Build reference

Insulation	Class F
Cooling	Forced air cooling
Color	Gray RAL7035

Load bank definitions

RATED LOAD

Resistive AC load bank for generator and power-system testing up to 510 kW at 400 VAC. When voltage is below 400 V, power derates according to Ohm's Law.

OPERATION

Designed for continuous outdoor operation with forced-air cooling, horizontal air inlet and upward exhaust cooling.

CONTROL

Operation by local panel or PC software, with RS232/RS485 communication interface.



Technical Data

Technical parameters

Rated voltage & frequency	400 VAC, 3 phase 4 wire, 50 Hz
Max load power	510 kW resistive
Display meter	Multiple function meter
Fan control power	External power 400 VAC, 3 phase 4 wire, 50 Hz
Wire connection	Load bank input: busbar (star coupling Y) / control power input: terminal block
Communication interface	RS232 / RS485
Way of working	Continuous working
Transportation	Lifting eyes and wheel castors



Operating environment

Ambient temperature	-20 C to +50 C
Application	Outdoor
Altitude	<=2500 meters
Relative humidity	<=95%
Atmospheric pressure	86 to 106 kPa

Enclosure

Enclosure structure	Industrial cabinet with lockable access doors
Access	Front control panel access
Protection	Protected air intake and exhaust openings
Cooling path	Horizontal inlet air and upward exhaust cooling

Functions & Protection

Functions

Measurements	Voltage, current, resistive power, apparent power, power factor, frequency and running time
Load control	Pre-set the power then press the master load button
Control modes	Local control or intelligent PC control through data management software
Local control	Multiple load steps with minimum 1 kW, controlled by buttons
PC software	Automatic load/unload, display, record and manage test data
Mode interlock	Selected control mode makes other modes invalid
Auxiliary functions	Lighting switch and AC220 V / 50 Hz socket for computer or temporary power

Protection

Emergency stop	Emergency stop button
Electrical protection	Over-load, over-heat and short-circuit alarm with automatic unload
Fan protection	Load bank cannot load before fan power is on
Fan alarm	Alarm when any fan is abnormal or with insufficient air volume
Protection buttons	Can be switched off for false alarm or special requirements

Software functions

Communication	RS232 / RS485
Load mode	Manual load or automatic load
Automatic testing	User-defined power/time periods including 0%, 25%, 50%, 75%, 100% or 110%
Parallel testing	Displays and records parameters of each load bank and final parallel system
Real-time data	Current, voltage, power, power factor, frequency and time
Data interval	Minimum saving interval 1 second
Outputs	Graphs/charts in JPG and testing data in Excel/Word format

