

2.000KW Resistive Loadbank

Rigid design for outdoor use



RATED POWER

2000 kW

VOLTAGE

400 VAC

PHASE

3 phase

Specifications

Model name	DPX-30028
Product type	Automatic load bank
Rated voltage / frequency	400 VAC, 3 phase 4 wire, 50 Hz
Maximum load power	2000 kW resistive
Power factor	1
Load steps @400 V	1, 2, 2, 5, 10, 10, 20, 50, 100, 8 x 200 kW
Load tolerance	+/-5% each step / +/-3% overall
Dimensions	400 x 210 x 210 cm
Weight	4.000 kg

Build reference

Control protection	IP54
Insulation	Class F
Cooling	Forced air cooling
Color	RAL Gray 7035

Load bank definitions

RATED LOAD

Resistive AC load bank for generator and power-system testing up to 2000 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, portable remote control box 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	2000 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 / control power input: terminal block
Communication interface	RS232 / RS485
Way of working	Continuous working
Transportation	Lifting eyes and forklift channel
Remote controller dimensions	492 x 395 x 216 mm
Remote controller weight	10 kg



Operating environment

Ambient temperature	-20 C to +50 C
Application	Outdoor
Altitude	<=2500 meters
Relative humidity	<=95%
Noise level	<=90 dB at 1 meter
Atmospheric pressure	86 to 106 kPa
Ventilation distance	Air inlet 3-5 m clear of obstacles; air outlet more than 3 m from roof or other obstacles
Reserved distance	3 m in front of the control room and 2 m in front of the maintenance room
Safe working distance	Isolation fence 1 m outside the load cabinet; no miscellaneous personnel within 3-5 m during operation

Enclosure

Enclosure structure	Sealed container with lockable personnel access doors
Access	Ladder to the top
Protection	Air inlet and outlet protective doors with internal protective net
Cooling path	Horizontal inlet air and upward exhaust cooling

Functions & Protection

Functions

Load control	Load any power within rated power and pre-set power before master load command
Measurements	Voltage, current, resistive power, apparent power, power factor, frequency and running time
Control modes	Local control panel, portable remote control box or intelligent PC control
Local control	Multiple load steps with minimum 1 kW, controlled by buttons
Remote control	Portable LCD touch-screen box, max. 100 meters
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	Panel emergency stop unloads immediately
Electrical protection	Over-voltage, over-heat and short-circuit alarm with automatic unload
Fan protection	Load testing blocked until fan working power is on; alarm/unload on fan abnormality
Grounding	Enclosure grounding terminal installed
Door alarms	Control room, air outlet and maintenance-room status alarms
Pre-heating	Temperature/humidity detection with automatic heating or dehumidifying

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 format

