



50KW with box frame and wheel kit option

## 50KW RESISTIVE POWER PROVING LOAD BANK

- ◆ IP65 STAINLESS STEEL LOAD RESISTORS
- ◆ CIRCUIT BREAKER LOAD STEP PROTECTION
- ◆ MULTI FUNCTION PLC COLOUR TOUCHSCREEN
- ◆ LOW-WATTS DENSITY LOAD RESISTORS
- ◆ OVER TEMPERATURE & FAN FAIL PROTECTION
- ◆ MANUAL OR AUTOMATIC LOAD TESTING CONTROL
- ◆ INSULATED RESISTOR COMPARTMENT
- ◆ ZINC PLATED & POWDER COATED STEEL BODY
- ◆ STAINLESS STEEL GRILLE AND FASTENERS

### SPECIFICATIONS

**DIMENSIONS** Standard : H:1020 mm W:675 mm D:915 mm  
 Installation base (Option): H:1145 mm W:675 mm D:915 mm  
 Box frame (Option): H:1025 mm W:795 mm D:940 mm  
 With wheel Kit (Option): H:1250 mm W:756 mm D:940 mm

**UNIT WEIGHT** Standard : 195KG  
 With Installation base: 212 KG With wheel Kit: 262 KG

**LOAD RATING:** 50KW @ 400 volt AC +/- 10% , 50Hz, 3 wire connection (Other voltages and Hz ratings available)

**LOAD STEPS:** PLC controlled load step selection allowing single step load changes in 1KW increments from 0 - 50KW

**RESISTOR WIRING:** 200 degree 'C' rated silicone insulated

**LOAD CABLE CONNECTIONS:** Shielded terminal links with 1 x M8 bolted connections per phase

**FAN MOTOR:** 0.75KW, 400 VOLT +/- 10%, 50Hz ,6 pole TEFC, IP54. DOL start with thermal overload

**FINISH:** Grey/black UV stabilised Powder Coat with stainless steel discharge grille and fasteners

**ENCLOSURE:** IP54 (control panel door closed)  
 IP44 (control panel door open)

**SOUND LEVEL:** 72dba @ 1 metre (averaged free field)



### OPTIONAL EQUIPMENT

**WHEEL KIT:** Heavy duty 125mm swivel type wheels (4) with brakes (2) (Also requires Box Frame option)

**BOX FRAME:** 50 x 50mm hollow box protection frame with two point top lift (black powder coat finish)

**DIGITAL METERING:** Backlit LCD for Volts, Amps KW, KVA, KWH, PF with RS-485 Mod-Bus communication

**INSTALLATION BASE:** Steel 'C' section mounting rails for permanent installation (black powder coat finish)

**AUXILLARY POWER:** External control/fan power inlet with panel mounted changeover switch (wiring only)

**FAN REVERSE :** Fan motor reversing switch to change air flow direction when supply phase rotation is incorrect

**POWERLOCK:** Powerlock twist type shielded connectors for incoming power supply (400 amp rated)

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## LOAD - LOGIC MANUAL CONTROLLER

**CONTROL INTERFACE:** 7" Colour touch screen with clear and concise menus and navigation pages

**LOAD STEP SWITCHING:** PLC control of single or multiple load resistor combinations to provide load steps in 1kW increments from 0 - 50KW

**MANUAL MODE:** The Load - Logic controller allows the operator to connect the load bank steps in sequence to the generating set for testing or exercising purposes using the load step size selection on the right side of the home screen . On completion there is a 300 second cool down phase .

**AUTO TEST MODE:** Allows the programming of a load test sequence on a generating set or UPS. Parameters such as delay start time, step size (KW) , step duration (minutes) and maximum load (KW) can be pre-set by the operator. A single press of a soft key will then commence the fully automatic running of this test sequence on the equipment.

**HOME SCREEN:** for system mode selection, manual operation and status/fault display

- ♦ Emergency stop (status)
- ♦ Load bank temperature (status and fault)
- ♦ Load bank operation (status)
- ♦ Cooling fan (status and fault)
- ♦ Air Flow (status and fault)
- ♦ Cool down timer countdown

**AUTO SCREEN:** Setup & monitoring for auto test function

- ♦ Generator full load (KW @ 1.0pf)
- ♦ Maximum % of full load for test
- ♦ Soft keys for step size in KW
- ♦ Delay start time for test (1 - 600 minutes)
- ♦ Run time for steps on increase (1 - 600 minutes)
- ♦ Run time for steps on decrease (1 - 600 minutes)
- ♦ Run time at maximum load (1 - 600 minutes)
- ♦ Timers for load change and test duration

**LOAD BANK MONITORING SCREEN:**

- ♦ Voltage (phase to phase)
- ♦ Frequency (Hz)
- ♦ Current (amps per phase)
- ♦ Power factor (PF)
- ♦ Test step size KW (Auto test only)
- ♦ KW on-line and target KW (Auto test only)

**HELP SCREEN:** Separate multi page screen provides detailed operating instructions and assistance with rectification of common faults.

**DIMENSIONS (mm):**

