



20KW ALS with optional box frame and installation base

## 20KW RESISTIVE AUTO LOAD SHEDDING LOAD BANK

- ◆ AUTO CONNECT & DISCONNECT OF LOAD STEPS TO MAINTAIN PRESET GENERATOR LOADING
- ◆ CONTINUALLY MONITORS EXTERNAL GENERATOR LOAD TO PREVENT UNDER OR OVER LOADING
- ◆ MANUAL LOAD TESTING FACILITY
- ◆ MULTI FUNCTION PLC COLOUR TOUCHSCREEN
- ◆ IP65 STAINLESS STEEL LOAD RESISTORS
- ◆ CIRCUIT BREAKER LOAD STEP PROTECTION
- ◆ OVER TEMPERATURE & FAN FAIL PROTECTION
- ◆ STAINLESS STEEL (304) 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

**UNIT WEIGHT:** Standard : 135KG  
With Installation base: 153 KG With wheel Kit: 167 KG

**LOAD RATING:** 20KW @ 400 volt AC +/- 10% , 50Hz, 4 wire connection (Other voltages and Hz ratings available)

**LOAD STEPS:** Four load steps 4 x 5kW

**LOAD SELECTION:** PLC controlled 4 step loading in 5kW increments to maintain programmed generator KW load

**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 discharge grille and stainless (304) fasteners

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

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



### OPTIONAL EQUIPMENT

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

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

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

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

**CUSTOM STEP SIZE AND LOADING:** Custom kW step sizes and number. Minimum step size is 2 KW and maximum step number is five (5)

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## LOAD-LOGIC ALS CONTROLLER

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

**LOAD STEPS:** Four (4) load steps are standard however up to a maximum of five (5) steps with identical or different Kilowatt ratings on each step are an available option.

**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. On completion there is a 300 second cool down phase. If auto operation is called for during manual testing the controller will automatically disconnect all load steps and enter the auto mode.

**AUTO MODE:** Uses a single current transformer (CT) in an outgoing generating set cable enabling the controller to maintain a pre-set load on the generating set. Using the load bank steps available. As the external load on the generating set either increases or decreases the Load-Logic controller will connect and disconnect load steps to maintain a generator loading as close as possible to the set percentage without exceeding this load figure. Operation of the control system is totally automatic after the initial set-up.

**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)
- Load sensing input (status and fault)
- Generating set (status and fault)
- Cool down timer countdown

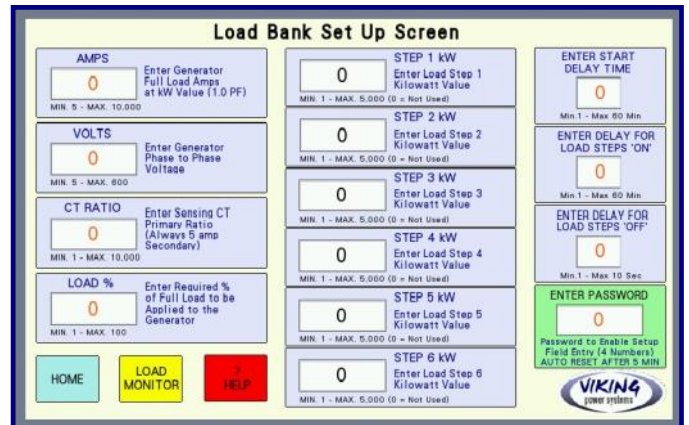
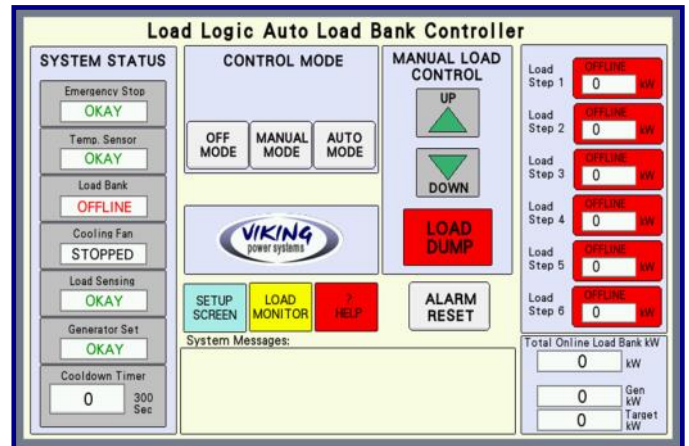
**SET-UP SCREEN:** For installation of system parameters

- Generating set rating (amps @ 1.0pf)
- Generating set Voltage
- Load sensing current transformer ratio
- Required generating set load percentage
- Delay start load monitoring (1- 60 minutes)
- Delay load step on (1 - 60 minutes)
- Delay load step off (1 - 10 seconds)
- Load bank cool down (fixed 300 seconds)

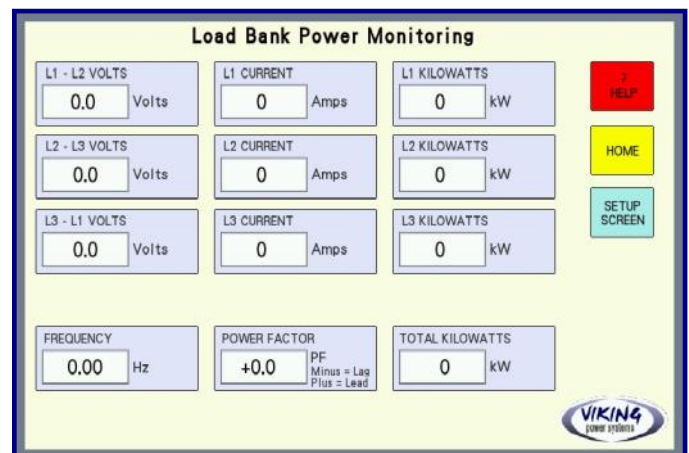
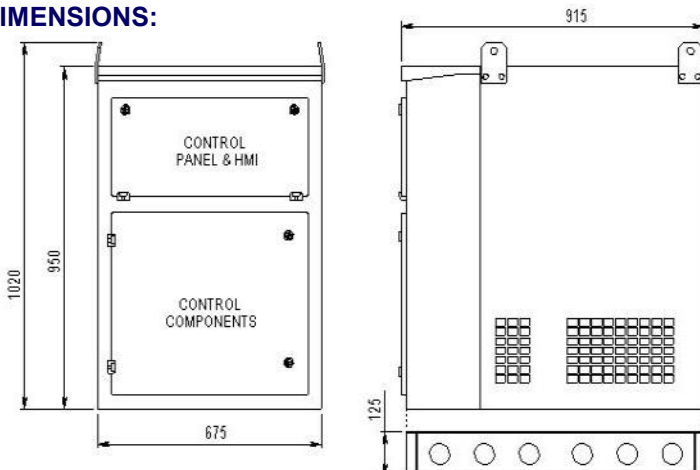
**LOAD BANK MONITORING SCREEN (OPTIONAL) :**

- Voltage (phase to phase)
- Frequency (Hz)
- Current (amps per phase)
- Total Kilowatts (generator and load bank)
- Load Kilowatt set point status

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



**DIMENSIONS:**



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Due to on-going product development these specifications are subject to changes or modification