**MODEL: OSM4-0800.1-380V33-5000-10**

**RATING:** 800 KW @ 415 V, 3, 3W, 50 Hz, 1.0 P.F.

**RESOLUTION:** 10KW nominal load step adjustment from 0-100% of unit rating.

**TOLERANCE:** 0 -+5% overall tolerance, +/- 2% phase-to-phase balance

**DUTY CYCLE:** Continuous

**CONFIGURATION:** The Load Bank consists of two (2) separate items: 1) An outdoor weatherproof load enclosure

containing the load resistors, power control devices, and cooling fan. 2) A Wall mounted

Operator Interface Panel

**ENCLOSURE: Load:** Outdoor Weatherproof, Nema 3R, with bolt down provisions for permanent mounting;

captive fork lifting provisions and lifting eyes for handling during installation. The enclosure is

fabricated of galvanized steel that is primed and painted as described below. The exhaust

louvers are fabricated of stainless steel. **Control:** (1)Nema 3R/12 Wall Mounted Enclosure

**PHYSICAL: Load Enclosure:** 56.5"H x 78.5"L x 54"D, 2000 LBS

**Control Enclosure:** 20"H x 16"W x 8"D, 30 LBS

**PAINT:** Environmentally friendly waterborne enamel

**Preparation:** SSPC Surface Preparation Standards # SP1

**Primer:** Acrylic direct-to metal (DTM) primer (high solids); MIL-P-28577B and TT-P-1975

**Finish:** Premium High Performance UV Resistant Acrylic Enamel

**Color:** ASA 61 Lt. Gray

**AMBIENT: Temperature.:** -20 F./-30 C. to +120 F./+540 C.

**Humidity:** up to 100 %

**Altitude:** 4000 Ft / 1200 M

**LOAD RESISTOR:** The Loadtec RESISTAR is designed specifically for high density applications. The resistor is

continuously supported to eliminate possible shorting contact with surrounding resistors. Load

resistors are mounted in trays that are independently mounted so each is removable without

affecting any other tray. The RESISTAR has an industry exclusive 3 year limited warranty.

**COOLING:** Forced air cooled by a TEFC motor with a direct drive airfoil propeller.

**CONTROL POWER : Internal**

**Cooling Motor:** (1)10HP, 380-415V, 3, 50Hz., internally derived from the connected test power source.

**Control:** 24 VAC, 1, 50 Hz., derived from the fan power 3 source via a control power transformer.

**CONTROL POWER : External**

**Processor** 24VDC from engine starting batteries.

**CONTROL: Processor Control / Metering System**

**Features:**  The control system provides integrated control and metering for the load bank

 Serial interface to Control Panel(s) using conventional Category 5 data cable connection.

 Up to (4)Control Panels can be connected on a single unit with a simple “daisy chain” wiring.

 Remote Control Panel(s) install with up to 1,000ft of control cabling without external control

power required for the control panel.

 Control Module installed in the load enclosure and the OIP installed in the control panel are

both upgradeable with firmware flash capability.

 Additional serial RS232, RS422 and RS485 ports are available for optional Modbus and

optional Windows DLL external control interfaces.

 Ethernet port for optional TCP/IP interface functions.

**Operation:**  The control system is accessed at the Operator Interface Panel (OIP) installed in the Control Panel

(External optional items such as CT’s and interface wiring is required for the programmed

functions to properly operate in the installation)

 The control system provides the following programmable functions:

 Manual Load Step Control

 Automatic Loading Operation

 Regenerative Absorption Operation

 Base Load Control for enhanced transfer and block load response.

 Automatic Exercise Operation (Internal Clock)

 Exercise Monitoring and Alarm Circuitry

 Automatic Load Sequencing (External Exercise Clock)

 Transfer Switch position monitoring for operational logic coordination

**Metering:**  The control system provides metering values on the Operator Interface Panel.

 All values are true RMS

 The metering values available for selected display:

 Voltage each Ø-Ø, +/-1.0%

 Voltage Average, +/-1.0%

 Current each Ø, +/-1.0%

 Current Average +/-1.0%

 Frequency: 45-65 Hz, +/-0.2%

 Kilowatts Average, +/-1.0%

**Aux. Contacts:**  (4) Addressable “C” Form Auxiliary contact signals are provided. Standard Signals:.

 Generator Start – for Automatic Exercise Operation

 Exercise Failure – for Automatic Exercise Operation

 Normal Operation

 Common Failure

**Operator Interface:**  Wall mounted Panel.

 The features of the system is accessed by the Operator Interface Panel.

 Serial interface to Control Panel(s) using conventional Category 5 data cable connection.

 Up to (4)Control Panels can be connected on a single unit with a simple “daisy chain” wiring.

 The panel consists of the following components:

 LCD Graphics Display Screen

 Control Keypad

 Audible Input Signal

 LED General Operational Indicators

 Lamp & Graphical Display Test

 The LCD Display provides:

 Soft Key Legend

 Metering display

 Operational Mode

 Operational status and alarm condition details

**PROTECTIVE SYSTEM**

**Cooling:** A temperature & air flow sensors monitors cooling and disconnects the unit on failure.

**Voltage:** Voltage monitoring circuits monitor for connected sources and alarms and disconnects on

faults.

**Cooling Motors:** Thermal overload relays with thermal magnetic circuit breaker for protection and disconnect.

**FUSES:** Fuse protection is provided for each individual load section and control circuit.

**POWER CONTROL:** The load is controlled by contactors that are applied for continuous and cycling operation.

**MANUALS:** (2) As built drawing manuals are provided at time of shipment.

**WARRANTY:** Tier 1 Standard Limited Warranty.