

STATIONARY LOAD BANKS

10KW-3000KW



LS SERIES STATIONARY LOAD BANKS

Trystar is a leading manufacturer of high-capacity Load Banks. The LS Series of Stationary Outdoor Load Banks offers the most robust, high-capacity, outdoor designs in the industry. Trystar is setting the standard with intelligent operator controls, safety indication layouts, adjustable load step resolution, and ease of installation. The LS Series of Stationary products is the perfect solution for regularly scheduled testing and commissioning of mission-critical standby emergency power systems.

- Outdoor Weatherproof Construction
- Rated for continuous duty with no cool-down period
- Highest Capacity in the smallest installed footprint
- Branch circuit fusing virtually eliminates catastrophic failure
- Slide Out Resistor Case Assemblies
- Intelligent Safety Circuits, Indicators, and Operator Controls

CONSTRUCTION / BUILT TO LAST

Trystar products are constructed of galvanized steel with the highest quality durable powder-coat paint finish and external stainless steel fasteners. All power, motor, and control connections are provided in a sealed thermostatically controlled heated compartment to limit any harmful effects of moisture and condensation.

Vertical airflow provides the highest capacity in the smallest installed footprint, and exhausts hot-air away from personnel and other installed equipment.

The enclosure is stationary-type, outdoor construction, installed and operated on a floor, roof-top, or concrete pad. Forklift channels are provided within the base for ease of lifting and handling during installation.



POWERDYNE™ / WHEN QUALITY MATTERS

PowerDyne™ Resistors are the most rugged in the industry. The non-corrosive resistance alloy can fully handle the effects of an outdoor installation. They are completely supported across their entire length within the air stream by stainless steel support rods which are insulated with heavy-duty, high-temperature ceramic Insulators. Change in resistance is minimized by maintaining conservative resistor designs.

STATIONARY LOAD BANKS

FEATURES AND OPTIONS



OPERATOR PROTECTION / WHEN SAFETY MATTERS

Trystar Load Banks come equipped with an Emergency-Stop push button allowing the operator to take the unit off-line should a critical hard-stop condition occur. Branch circuit fuse protection provides short-circuit fault protection of all load steps eliminating the potential for catastrophic failure. Blower On, Motor Overload, Air-Flow Failure, and Over-temperature circuits disable all load steps during a fault condition with operator visual indicators. Dual Voltage units feature a Wrong Voltage Applied protection circuit which prevents the application of 480 VAC with the Load Voltage Selector switch in the 240 VAC position. The Load Dump circuit provides the operator visual indication if all load steps have been removed.

OPERATOR CONTROLS

- Emergency Stop (E-Stop)
- Illuminated Main Power On/Off switch
- Illuminated Blower Start/Stop Push Button
- Load Voltage Selector switch (dual voltage units)
- Master Load On/Off switch
- Individual Load Step Switches
- Fault condition smart indicators provide operator display and load disconnect during Air-Flow Failure, Over-temperature, Motor Overload, Load Dump, and Wrong Voltage Applied

DIGITAL POWER METER

A fully equipped, 3-phase Digital Power Metering System that measures a standard range of 16 load parameters. Includes RS485 (Modbus protocol) for remote reading - compatible with PC, PLC, and data loggers.



CONTROL POWER

External 120 Volt AC, 1-phase, 60 Hertz power required for control circuit operation. When 120 VAC control power is not readily available, units can be provided with a control power transformer.

AUTOMATIC LOAD STEP CONTROLLER

Optional load level control provides automatic load regulation helping to minimize engine wet-stacking.



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FEATURES AND OPTIONS



Model	Power Rating (kw)	Voltage Ratings			Load Step Resolution (kw)	Dimensions (W x D x H) (inches)	Weight Total (lbs)
		240/480V 3 Phase	480V 3 Phase	600V 3 Phase			
LS50 - LS200	50 - 200	✓	✓	✓	10 or 25	27 x 31 x 52	400 - 500
LS250, LS300 & LS400	250 - 400	✓	✓	✓	10 or 25	40.25 x 52.5 x 57	800 - 1100
LS500, LS600, LS700 & LS750	500 - 750	✓	✓	✓	10 or 25	40.25 x 52.5 x 69	1300 - 1500
LS800	800		✓	✓	10 or 25	40.25 x 52.5 x 69	1400
LS900, LS1000 & LS1100	900 - 1100		✓	✓	10 or 25	40.25 x 52.5 x 92	1700 - 1900
LS1200 & LS1250	1200 - 1250		✓	✓	25	40.25 x 52.5 x 92	2100
LS1500, LS2000, LS2400 & LS2500	1500 - 2500		✓	✓	25	40.25 x 88 x 69	2600 - 4000
LS3000	3000		✓	✓	25	46 x 111 x x98	4500- 5000

COOLING SYSTEM

- Integrally mounted blower motor with high-performance, direct-driven fan blade delivers the required airflow volume (CFM) for cooling resistor load elements
- Blower motors can be wired to operate internally off the main input load bus or from an external 3-phase power source
- Motor circuits are short-circuit protected by current-limiting fuses and thermally protected by overload relay



REMOTE INDICATION AND ALARM contact closure [form-c-type normally open and normally closed] provides user interface to your building management system for indication, detection, and alarm of “Air-Flow Failure,” “Over-Temperature”, and oh“Load Dump”.

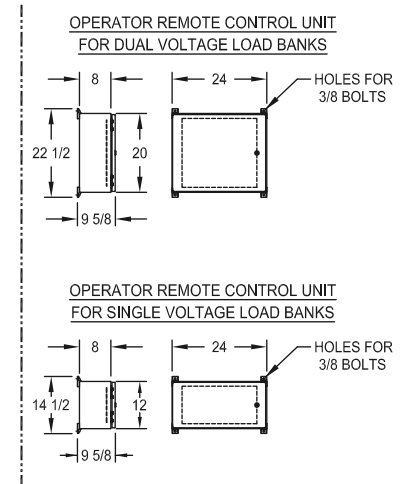
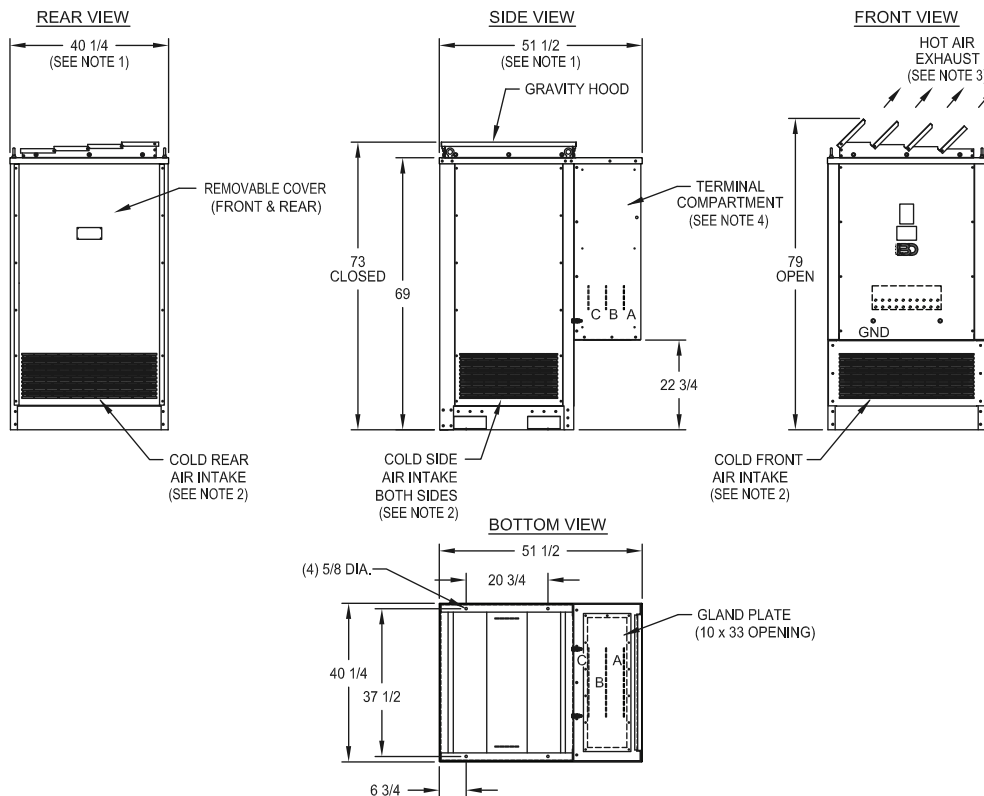
AUTOMATIC LOAD DUMP circuit provides user interface provisions to the generator controls, automatic transfer switch, or building management system, to disconnect and disable all load steps from a normally closed (NC) set of auxiliary contacts. In the event of an actual power failure, all load bank load is removed from the source under test.

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10KW-10,000KW



TYPICAL LAYOUT 400kW · 800kW shown here



YOUR COMPLETE SOLUTIONS PROVIDER

Trystar's complete line of portable and stationary Load Bank products offers industry exclusive load testing solutions for generator set dealer/distributor networks, service arms, rental companies, end users, and original equipment manufacturers of generator sets, UPS systems, turbines, fuel cells, wind power, and battery systems.