TRYSTAR

RADIATOR DUCT MOUNTED LOAD BANKS

10KW - 1200KW

LD Series Radiator Duct Mounted Load Banks

(10KW - 1200KW)

Trystar is a leading manufacturer of high-capacity Load Banks. The LD Series of Radiator Duct Mounted Load Banks offers simple, easy to mount, economical solutions for providing diesel generators with a supplemental load to minimize the effects of wet-stacking during operation under lightly loaded conditions. Trystar is setting the standard with intelligent operator controls, safety indication layouts, and adjustable load step resolution. The LD Series of duct mounted load banks provides a cost-effective solution for regularly scheduled maintenance testing of mission-critical standby emergency power generators.

LD Series Radiator Duct Mount
10KW - 1200KW

15765 Acorn Trail / Faribault, MN 55021 / 507.333.3990

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Benefits

Trystar's LD Series of Radiator Duct Mounted Load Banks

- **Industry-leading durability:** PowerDyne™ resistors are fully supported along their entire length by stainless steel rods and high-temperature ceramic insulators, ensuring rugged performance and stable load steps under demanding conditions.
- **Engineered for reliability:** LD Series load banks feature a galvanized steel open-frame design for direct coupling to engine cooling systems, with integrated enclosures for connections, controls, and fusing—all optimized for airflow and long-term service.
- **Safe, dependable control power:** An integral control power transformer ([T] Adder) delivers 120V AC for control circuits, protected by primary and secondary fuses for maximum safety and uninterrupted operation.
- **Cost-effective generator testing:** Provides a practical solution for routine load testing without excessive operational costs, helping maintain generator health and performance.
- **Reduce wet-stacking and improve emissions:** By applying proper load leveling, the system prevents unburned fuel buildup, reducing wet-stacking and lowering harmful emissions for cleaner engine operation.
- **Enhanced protection with branch circuit fusing:** Individual branch fuses isolate faults, virtually eliminating catastrophic failures and minimizing downtime.
- **Intelligent safety and control systems:** Built-in safety circuits, clear indicators, and user-friendly controls ensure safe operation and simplify testing procedures for operators.

Key Features

- **Cooling System:** The Load Bank is directly mounted In-Line with the Engine Radiator Cooling Fan which delivers the required airflow volume (CFM) for cooling the resistor load elements.
- **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.
- **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 Over-Temperature and Load Dump

Catalog Numbers

Catalog no.	Description
LD	Radiator Duct Mounted Load Banks

Key Features (cont.)

- Operator Controls
  - Illuminated Main Power On/Off switch
  - Master Load On/Off switch
  - Individual Load Step Switches
  - Fault condition smart indicators provide operator display and load disconnect during Over-Temperature or Load Dump.
  - Operator Controls, Auto/Manual Mode for Autoload leveling or manual testing.

Applications

- Data centers and IT hubs with high-density distribution requirements
- Healthcare, education, and government buildings with strict safety standards
- Commercial properties with limited electrical room space
- Light industrial and manufacturing facilities with multiple load centers
- Contractors and engineers needing tailored solutions with a compact footprint

Available Options

- **KW Load Capacity**: The LD Series of Radiator/Duct mounted load banks are available in any size range from 50KW through 1200KW at any available single phase and three phase Voltage (up to 600 Volts AC). They are intended for use as a supplemental load to the generator set and are typically sized at 50% of the generator KW rating.
- Available Options:
  [A] - Automatic Load Level Controller
  [AA] - Automatic Load Level Controller and Regenerative/Reverse Power
  [M] Digital Power Meter: Fully equipped, 3-phase Digital Metering System
  [O] Outdoor Load Bank Construction and Power Connections
  [R] - Remote Operator Control Unit
  [T] - Control Power Transformer

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