









Dynamic Braking Resistors and Power Distribution





High Current Load Banks

Design-to-Fit Oval Edgewound

The choice when conditions demand top-notch performance, these resistor load banks are commonly used for dynamic braking on Transit applications or where high current handling and wattage are required. Ohmite's unique Oval Edgewound design allows for more wattage in a smaller package. Choose from four bank wattages with up to thirty-one current ratings per bank.

Built to perform in rugged environments, Ohmite Load Banks feature corrosion-resistant stainless steel insulator supports, solid nickel terminals, and special electroless nickel-plated solid copper terminal supports. The resistance element is made of a stainless steel resistance alloy. Terminals are welded or silver brazed to the oval, spiral edgewound resistance element. Toothed ceramic insulators isolate the resistance element from the center support. Ceramic end bushings insulate the center support from the mountings.

Current Rating: Continuous duty as listed below.

- Wattage Rating: Continuous duty based on a 375°C temperature rise.
- Working Voltage: Limited to 1000 Volts if mounting is grounded. Special higher voltage mounting is available.

Resistance Tolerance: ±10%.

- Terminals/Jumpers: Standard terminals have 5/16 stainless hardware for ring lug connections. Brass tags can be placed at connection points for identification. If necessary, all connections can be made on one side of grid. Fixed tap terminals are also available. Jumpers between resistors are nickel plated solid copper.
- Mounting: Resistor Banks can be produced in grid arrays of 2 x 4 to 4 x 4. All resistors in one grid are the same length. Frames are constructed of heavy gauge zinc plated steel. Either "bolt up" or "bolt down" type frames are available. Frames may be grounded if voltage potential is below 1000 Volts.

SGM Series

Stamped Grid Module Resistors

Stamped grid brake resistors consist of several plates fitted on steel rods, separated by ceramic rings. To insure a good electrical connection, plates are welded together in a combination of series or parallel, depending on the ohm value. Stamped grids are offered in two main materials, AISO 304 and Cr-AL alloy. These resistor grids can be used in applications such as dynamic braking, brake choppers or crowbars. Our brake resistors are offered as open units or with an enclosure. The enclosure is NEMA 3R rated, and is suitable for indoor and outdoor applications. Standard enclosures are manufactured from galvanized steel; stainless steel 304 is available on request.

Working Voltage: 1000VAC / 1400VDC.

- Dielectric Test: 3kV 50Hz, 1 minute.
- Thermal Coefficient: (1/°C); AISI 304: 1100ppm; Cr-AI: 145ppm.
- Standards Reference: IEC 60071-1 insulation coordination.
- Derating at Altitude: According to IEE Standard 32.
- Resistor Tolerance: ±10% standard; others on request.
- Resistor Materials: AISI-304 / Cr-AI; value dependent.
- Enclosure Materials: Galvanized steel standard; others on request.







Founded in 1925, Ohmite Manufacturing has over 90 years of experience in High Current / Dynamic Braking, Load Bank, and Power Distribution products. Many of our Power Resistor and Rheostat applications involve multiples of those components, assembled in series or parallel, to gain the required power output. Mounting brackets, wiring, soldering, and welding are among the techniques we use to fabricate these assemblies, which range from single-mounted resistors to 24KW braking resistor assemblies for the light-rail and power distribution industries.

- Punch Presses, Fly Cutters, and Progressive Dies operate in our tool shop to manufacture the necessary subcomponents for your application.
- Molding Presses are used to supply epoxy-molded subcomponents.
- Glass Frit is made every day, on site, to provide high-temperature protective coating compounds.
- Wire Strippers and Terminating Tools are on site for connector fabrication.
- Wire Winding and Welding Equipment are abundant in our 75,000 square foot Matamoros, Mexico, manufacturing site as part of our ongoing components business.
- Competitive Labor Rates keep our products cost-effective, while our location (just across the border from Brownsville, Texas) gives us the proximity to support timely deliveries into North America.

