P-CRCB Series



Dynamic Braking Resistor Load

This dynamic braking load was designed for an oil and gas drilling rig. Ohmite configured multiple resistors into four 32-resistor towers. Each tower is connected in a series configuration for 3.9 ohms. The four towers are parallel connected for a resistance value of one ohm total. The towers are two stacked semi-custom versions of the Ohmite HCLB product line. This is a custom product, please contact Ohmite for more information and design assistance.

FEATURES

- Design makes use of Ohmite WLRD6G3053E
- 1 ohm, 1100VDC, 1100A, 1.2MW peak power
- Outdoor enclosure
- Forced air cooled
- 6000VDC hipot isolation
- Pressure wash compatible



CHARACTERISTICS

Forced Air Cooling

There are 4 fans, three phase 230VAC, delta, 1A, 310W each.

The total airflow is estimated at 310 LFM. The fan noise is low.

The 4 fans are designed to be removed and replaced through the front of the enclosure with simple tools and ease of accessibility.

PLC Control

The PLC control has 5 features:

1) Operates from 3 phase, 230VAC, 4 wire input, about 1500W

2) 2 wire relay controlled fan turn On/Off input signal

3) 2 wire relay controlled fault signal output signal

4) Water sensor in the enclosure bottom pan

5) Heater elements for water evaporation in the bottom pan

The PLC controls are basic since it controls and monitors the fans, water sensor and evaporative heaters.

Enclosure

The enclosure was designed to minimize dust, dirt and water intrusion under normal operation, and allows for power wash with the fans Off.