

# GRID RESISTORS

# High Power, High Current EDG Mica Grid Resistors, Grid Mill Bank Design



## **KEY BENEFITS**

- EDG technology support system improved for lighter weight, better heat transfer, and higher power
- GREM assembly: 8 kW at 40 °C
- Superior watt density for higher power capacity in same space
- Full range of standard mill bank ratings available

# **APPLICATIONS**

- Load banks
- Dynamic braking

## RESOURCES

- Datasheet: GREM <u>www.vishay.com/doc?31884</u>
- · For technical questions, contact vishaymilwaukee@vishay.com
- Material categorization: for definitions, please see www.vishay.com/doc?99912







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### **OVERVIEW**

Vishay Milwaukee resistor GREM is a new offering that offers improvements to the standard mill bank size GRE1 used in motor control applications. With significant improvements in power capacity, reduction in weight, and increased watt density, these standard banks can work great in load applications, braking applications, motor control, and testing applications as well.

#### **MOTOR CONTROL**

Many large wound rotor motors use resistors to step in and gently start the large drives.

#### **APPLICATIONS OF GRID RESISTORS**

#### **Dynamic Braking**

When an electric motor driven load is being decelerated, the motor acts as a generator, converting kinetic energy of the load to electrical energy. The dynamic braking circuit converts this electrical energy into heat to slow the load, through the use of dynamic braking resistors. Braking resistors ensure proper motor operation, allow heavy loads to stop quickly and protect the drive from damage. Furthermore, dynamic braking resistors that are improperly cooled, incorrectly sized, physically damaged or electrically failed can cause costly unwanted down time.

#### Load Banks

Custom designed resistive load banks allow for load simulation of many electrical applications for testing purposes.

STANDARD ELECTRICAL SPECIFICATIONS				
GLOBAL MODEL	POWER RATING OF RESISTOR BANK W	$\begin{array}{c} \textbf{RESISTANCE RANGE}\\ \Omega \end{array}$	TOLERANCE ± %	TEMPERATURE COEFFICIENT ± ppm/°C
GREM	8000	0.067 to 24.273	10	365, 130