

## BRAKING RESISTORS FOR VARIABLE FREQUENCY DRIVES

- Double insulated for 1,000 Volts
- Resistor wired to terminal block with high temperature wire
- Thermal overload available (N.C. or N.O. contacts)
- Well ventilated enclosure with durable ASA70 Gray Powder coated finish
- Built-in junction box with multiple conduit knockouts for easy wiring
- Wall or roof mounted
- Front mounted nameplate with complete ratings.



GET A QUOTE



## Application

### REGENERATION OF VARIABLE FREQUENCY DRIVES

When a drive unit is attempting to rapidly brake a motor "Deceleration Braking Cycle" or when an "overhauling load" condition exists, the spinning motor acts as a generator. This freewheeling condition will force some voltage back into the drive unit (regeneration) which, depending upon the amount of regeneration, may cause an over voltage condition if the energy is not "dumped" somewhere else. Fifteen to twenty percent of this regenerated energy will be absorbed by the drive itself and natural mechanical / motor losses which leaves about eighty percent of the energy to be absorbed by some other means.

### Solution: DB RESISTORS

Dynamic braking resistors are used to absorb energy that is being regenerated back into a drive unit by a freewheeling motor and will release that energy in the form of heat.

### Filnor Inc. DB Resistors are sized based on the following customer supplied information:

1. Voltage:
  - Drive input voltage.
2. Drive horsepower.
3. Braking Torque.
4. Duty Cycle.
  - On time / Off time
5. The maximum braking current or minimum ohmic value as specified by the drive manufacturer.
6. Regeneration type:
  - Deceleration braking.
  - Overhauling load.

Contact us at **Hillcrest Enterprises** to learn more about possible applications for your business.

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