

ADJUSTABLE FREQUENCY DRIVES



SVG17ED Series Dynamic Braking Resistors

Description

Dynamic Braking resistor assemblies are designed to meet the braking requirements of the Cutler-Hammer line of Adjustable Frequency Drives. Consisting of durable edgewound and wirewound resistors, each assembly is packaged in a vented, modular enclosure designed for indoor use.

Dynamic brake resistors, in conjunction with a factory installed brake chopper, are used when the motor and its load must be braked quicker than power losses from the motor and AFD will allow. The extra energy created during braking is dissipated in the brake resistor.

Application

Typical applications include centrifuges, cranes, conveyors, and applications requiring rapid reversing.

Features and Benefits

- Available with 20% and 50% duty cycles
- Available for field installation or as factory assembled option with an enclosed drive
- Modular Enclosure with Overtemperature Protection



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Ordering Information

Ordering a Field Installable Brake Resistor Assembly

When ordering a dynamic brake resistor for field installation, check that the base catalog number on the nameplate of the base drive includes the designation "B – Chopper Circuit Included" as the Dynamic Braking Chopper Circuit digit of the Base Catalog Number. The Chopper Circuit is included as standard when the Base Drive is a Compact NEMA 1.

Note: Dynamic Brake Choppers are not field installable.

Select the Dynamic Braking Resistor Option using the following:

- Determine the Dynamic Braking duty requirements:
 - either 20% duty cycle with 100% braking torque
 - 50% duty cycle with 150% braking torque

Find the catalog number of your base drive in the left-hand column of the price list.

The Dynamic Brake Resistor catalog number will be shown in the right hand column of the price list.

Ordering a Factory Installed Brake Resistor with an Enclosed Drive

Step 1: Select the Base Catalog Number that meets the requirements—nominal horsepower, voltage and enclosure rating (the enclosed drive's continuous output amp rating should be equal to or greater than the motor's full load rating). The base enclosed package includes a standard drive, door mounted SVMulti-line Control Panel and enclosure.

Step 2: For dynamic braking, select "B – Chopper Circuit Included" for the Dynamic Braking Chopper Circuit digit of the Base Catalog Number. The Chopper Circuit is included as standard with Compact NEMA 1 drives.

Step 3: Select the Dynamic Braking Resistor Option using the following:

- Determine the Dynamic Braking duty requirements:
 - either 20% duty cycle with 100% braking torque
 - 50% duty cycle with 150% braking torque
- Select the enclosed drive option number as illustrated in Figure 1.
- Add the code as a suffix to the Base Catalog Number in alphabetical and numeric order.

Notes: The MotoRx™ option cannot be used with the Dynamic Braking option.

An input circuit breaker with undervoltage trip is supplied with all factory installed dynamic braking packages

The DB Resistor package will ship attached to the top of the enclosed drive or separate for wall or floor mounting.

All Dynamic Brake Resistor enclosures will be rated NEMA 1, regardless of the enclosed drive rating.

