Complete Braking Kit

Transistor and Resistor

Like separate transistor and resistor options, the M3452 Complete Braking Kit works with VFDs to monitor the DC bus. If overvoltage occurs, the M3452 Complete Braking Kit transfers the excess energy through an **internal braking resistor** to prevent overvoltage faults. Since the resistor is already installed internally, installation time is reduced, while production uptime is increased.

Servo Braking

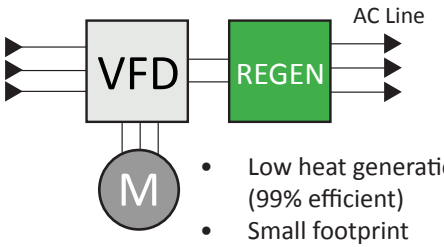
(for Servo motors)

The M3500DB series provides e-stop braking for servo motion systems and conforms to EN-954 category II or category IV safety requirements. As the secondary brake, the M3500DB stops the motor in case of motion controller or power failure. It also isolates the motor from its power source once it is stopped to increase safety.

Assembly Lines | Centrifuges | Conveyors | Cranes | Dynamometers | Elevators | Hoists | Pick and Place | & More!

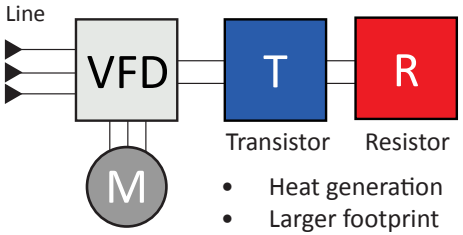
Configuration

Line Regeneration



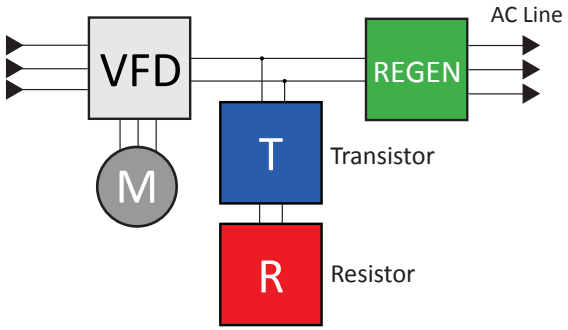
- Low heat generation (99% efficient)
- Small footprint
- Up to 150A per unit
- Requires AC utility

Dynamic Braking



- Heat generation
- Larger footprint
- High load capacity
- Up to 1600A per unit
- No utility required

Combination



Transistor/resistor and regen units can be used together for a more efficient solution where the regen handles continuous braking needs and the dynamic brake activates when the regen's capacity is surpassed.

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BONITRON

Control Regenerative Energy

- *Eliminate overvoltage faults*
- *Utilize full power braking*
- *Ideal for drives with no internal brake*
- *Maximize uptime and increase profit*

Overvoltage Solutions

615-244-2825

521 Fairground Court | Nashville, TN 37211 | U.S.A.
Phone: 615-244-2825 | Fax: 615-244-2833
Web: www.bonitron.com | Email: info@bonitron.com

Bonitron.com

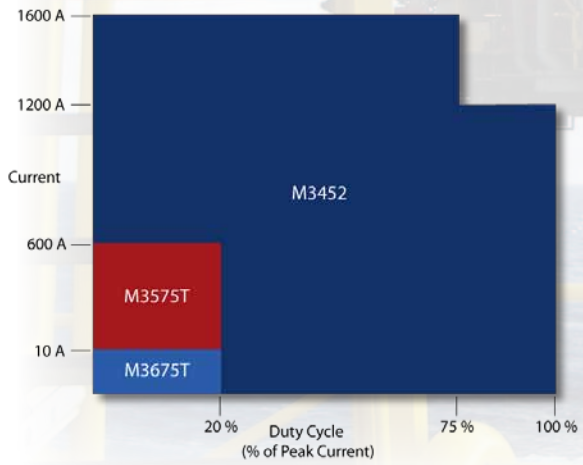
Transistors

Up to 1600A per Unit

Industry-proven leader!

Bonitron Braking Transistors are used with AC drives to allow full power braking and eliminate overvoltage faults. This permits controlled braking and dramatically shortens motor stopping time. Our transistors monitor the DC bus, and if overvoltage occurs, the Bonitron Transistor transfers the excess energy through a separate resistive load bank to prevent overvoltage faults.

- Local and remote status monitoring
- Ethernet IP and Profibus networking options
- System discharge option



Resistors

Up to 100% Duty Cycle

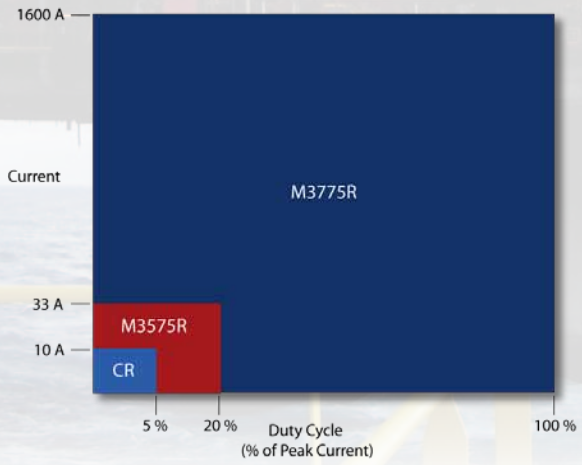
Versatile sizes and designs!

Whether you're buying a reputable Bonitron Transistor or using your drives' internal brake, there's no need to go anywhere other than Bonitron - we're your one stop shop! Bonitron has a resistor selection rated up to the megawatts. Need a custom resistor? We do those too!

Enclosure

- Mill Galvanized Steel Enclosure
- Stainless Steel Options
- NEMA-3R Options

Thermal switches come standard



Line Regen

Up to 150A per Unit

Maximum efficiency!

The M3545 and M3645 Series replace the legendary M3345 Series, but continues its legacy with additional features, simplicity, and reliability.

Bonitron Line Regens replace traditional braking transistor and resistor options that waste energy as heat during braking. **Instead of dissipating the excess energy as heat in a resistor, the Line Regen returns this energy to the power grid with minimal heat loss, allowing the entire braking system to be installed in the drive cabinet.** This reduces installation footprint and facility cooling costs.

The M3545 Series offers both single and 3-phase operation for applications up to 22.5A.

The M3645 Series offers an interactive digital display that allows quick access to current, voltage, status logs, and energy monitoring data.

From intermittent braking, to processes with long or continuous braking cycles, Bonitron Line Regens offer reliability, efficiency, and cost savings, all in a compact, simple installation.

Line Regens

M3545

For applications below 22.5A.

M3645

For applications above 30A.

What is Regenerative Braking?

When variable speed drive systems are braking, they generate power that must be dissipated. If the excess power is not dissipated, the drive system can lose control of the process due to an overvoltage trip, or it must extend the braking time.

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