

— BONITRON SOLUTIONS FOR INDUSTRY —

"Bonitron designs and manufactures electronic instruments and control systems with the highest degree of quality and reliability."

Many companies in the Mining industry are now relying on variable frequency drives (VFDs) in order to use energy more efficiently and save in energy costs. Bonitron has numerous products that can maximize both the effectiveness and efficiency of these drives while solving many problems you may be experiencing with equipment. This brochure briefly describes our most popular products used in the Mining industry. Feel free to check out our individual brochures on each product that are available through Bonitron or at www.bonitron.com.



MINING

APPLICATIONS:

**PRODUCT LIFTS | DOWNHILL CONVEYORS |
VENTILATION | CONVEYORS**

- Product Lift -
- Downhill Conveyors -

Braking

- **M3452 Heavy Duty Braking Transistor**

- Up to 1200hp | Up to 100% Duty -

M3452 Heavy Duty Braking Modules provide drive protection from overvoltage faults due to regenerated voltage. They consist of braking transistor modules that contain braking chopper control electronics. Heavy duty modules are rated up to 1200 Amps and UL & CUL modules are available.

- **M3575T Standard Duty Braking Transistor**

- 15 to 600hp | 20% Duty

The M3575T modules are designed to be used with drives that do not include a braking transistor. They monitor the DC drive bus levels and control the IGBT power switch that connects the load across the bus.



MINING



APPLICATIONS

- Product Lift -
- Downhill Conveyors -

Braking Modules (continued)

- **M3575R Standard Duty UL Braking Resistor**

1 to 33hp | 6 to 20% Duty

M3575R modules may be used with drives with internal or external braking transistor modules. Bonitron M3575R modules are UL & CUL Certified - denoting a high level of quality.

- **M3775RK Resistive Load Bank**

10 to 100% Duty

Bonitron understands that no one resistor technology can suffice for all resistive needs so we offer a wide range to meet your application needs. Some of which can withstand temperatures up to 800° C. Please see the M3775RK brochure for more information.

- Ventilation -

Ride-Thru Modules

- **M3534 Low Power Series**

- Drives below 67hp or 50kW -

Need constant, uninterrupted power for drives? The M3534 Low Power Series Ride-Thrus offer Ride-Thru protection for up to 15 minutes in some situations and up to 50kW for 2 minutes.

- **M3460 High Power Series**

- Drives 67hp or 50kW and Above-

Like the M3534 Series, the M3460 Series offer Ride-Thru protection for up to 15 minutes in some situations and up to 1080kW for 2 minutes.

- Conveyors -

Line Regeneration Modules

- **M3345 Line Regen**

- Up to 100hp | 100% Duty -

In applications with extended braking times, high horsepower, or where frequent regeneration occurs, the M3345 is the most economical solution due to substantial energy savings! When a resistive absorber kit is used, the regenerated energy is dissipated as heat and the energy is wasted. With Bonitron's M3345 Regen Module, the regenerated energy is returned to the input AC line at **95% efficiency**. Substantial energy savings result as the regenerated energy can now be used to power other equipment and the cooling requirements for the control room are reduced.

Braking Modules

- Options shown above and on page 1