



# Industry Applications

## — BONITRON SOLUTIONS FOR INDUSTRY —

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

With over 45 years of experience in the toughest applications, Bonitron prides itself in providing quality solutions for your industry. Specializing in power electronics, our products drive the machines of business. Continuous process reliability, heavy machinery, conveyance, mobility and instrumentation - we have a product for your process or facility. We have solutions for all industries and commercial applications.

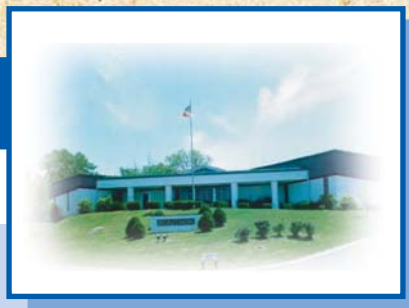


## — WWW.BONITRON.COM —

### **SATISFIED CUSTOMERS — SINCE 1962**

Bonitron is known worldwide to be a provider of quality and reliability in dozens of industries. The Bonitron sales team and engineers work with your engineers to ensure you receive the best and most cost effective solutions.

Bonitron leads with continuous innovation to existing and new products and responds to market and customer needs. Integrated design and production teams allow for high quality and quick response. All products and systems are designed and manufactured in house to ensure great service and reliability.



## AGRICULTURE



### **APPLICATIONS**

- Pumps -
- Material Handling Dryers -

#### **Filtering Modules**

- M3464  
Sine Wave Filter
- M3484  
Industrial Noise Filter

#### **Single Phase Power Supply**

- M3712  
Single Phase Power Supply

#### **Power Factor Correction**

- Power Factor Correction Module

## AUTOMOTIVE



### **APPLICATIONS**

- Assembly Lines -
- Downhill Conveyors -
- Cranes -
- Automated Paint Booths -
- Pick & Place -

#### **Braking Modules**

- M3452  
Heavy Duty Braking Transistor
- M3575T  
Standard Duty Braking Transistor
- M3775RK  
Resistive Load Bank
- M3575R  
Standard Duty UL Braking Resistor

#### **Line Regeneration Modules**

- M3345 Line Regen

#### **Ride-Thru Modules**

- S3534 Low Power Series  
Below 67hp / 50kW
- S3460 High Power Series  
67hp / 50kW and Above

#### **Power Factor Correction**

- Power Factor Correction Module

## CHEMICAL PROCESSING



### APPLICATIONS

- Mixers -
- Centrifuges -

#### Line Regeneration Modules

- M3345 Line Regen

#### Braking Modules

- M3452  
Heavy Duty Braking Transistor
- M3575T  
Standard Duty Braking Transistor
- M3775RK  
Resistive Load Bank
- M3575R  
Standard Duty UL Braking Resistor

- Pumps and Process -

#### Filtering Modules

- M3464  
Sine Wave Filter
- M3484  
Industrial Noise Filter

#### Ride-Thru Modules

- S3534 Low Power Series  
Below 67hp / 50kW
- S3460 High Power Series  
67hp / 50kW and Above

#### Power Factor Correction

- Power Factor Correction Module

## CRANES



### APPLICATIONS

- Hoist Motors -
- Axis Motors -
- Rail Drive -

#### Braking Modules

- M3452  
Heavy Duty Braking Transistor
- M3575T  
Standard Duty Braking Transistor
- M3775RK  
Resistive Load Bank
- M3575R  
Standard Duty UL Braking Resistor

#### Line Regeneration Modules

- M3345 Line Regen

#### Power Factor Correction

- Power Factor Correction Module

## CRITICAL DATA



### APPLICATIONS

- Data Center -

#### Ride-Thru Modules

- S3534 Low Power Series  
Below 67hp / 50kW
- S3460 High Power Series  
67hp / 50kW and Above

#### Filtering Modules

- M3464  
Sine Wave Filter
- M3484  
Industrial Noise Filter

#### Power Factor Correction

- Power Factor Correction Module

## FIBER



### APPLICATIONS

#### - Extruders -

##### *Ride-Thru Modules*

- S3534 Low Power Series  
Below 67hp / 50kW
- S3460 High Power Series  
67hp / 50kW and Above

#### - Pumps -

##### *Filtering Modules*

- M3464  
Sine Wave Filter
- M3484  
Industrial Noise Filter

##### *Ride-Thru Modules*

- S3534 Low Power Series  
Below 67hp / 50kW
- S3460 High Power Series  
67hp / 50kW and Above

##### *Power Factor Correction*

- Power Factor Correction Module

#### - Roller Tension Systems -

##### *Ride-Thru Modules*

- S3534 Low Power Series  
Below 67hp / 50kW
- S3460 High Power Series  
67hp / 50kW and Above

##### *Braking Modules*

- M3452  
Heavy Duty Braking Transistor
- M3575T  
Standard Duty Braking Transistor
- M3775RK  
Resistive Load Bank
- M3575R  
Standard Duty UL Braking Resistor

##### *Filtering Modules*

- M3464  
Sine Wave Filter
- M3484  
Industrial Noise Filter

##### *Line Regeneration Modules*

- M3345 Line Regen

##### *Power Factor Correction*

- Power Factor Correction Module

## FOOD PROCESSING



### APPLICATIONS

- Mixers -
- Conveyors -
- Tumblers -
- Clarifiers -

##### *Braking Modules*

- M3452  
Heavy Duty Braking Transistor
- M3575T  
Standard Duty Braking Transistor
- M3775RK  
Resistive Load Bank
- M3575R  
Standard Duty UL Braking Resistor

##### *Line Regeneration Modules*

- M3345 Line Regen

##### *Power Factor Correction*

- Power Factor Correction Module

#### - Ovens -

##### *Ride-Thru Modules*

- S3534 Low Power Series  
Below 67hp / 50kW
- S3460 High Power Series  
67hp / 50kW and Above

##### *Power Factor Correction*

- Power Factor Correction Module

## MATERIAL HANDLING



### APPLICATIONS

- Cranes/Hoists -
- Downhill Conveyors -
- Palletizers -
- Elevators -

#### **Braking Modules**

- M3452  
Heavy Duty Braking Transistor
- M3575T  
Standard Duty Braking Transistor
- M3775RK  
Resistive Load Bank
- M3575R  
Standard Duty UL Braking Resistor

#### **Line Regeneration Modules**

- M3345 Line Regen

#### **Power Factor Correction**

- Power Factor Correction Module

## METALS



### APPLICATIONS

#### - Mills - Presses -

##### **Ride-Thru Modules**

- S3534 Low Power Series  
Below 67hp / 50kW
- S3460 High Power Series  
67hp / 50kW and Above

##### **Braking Modules**

- M3452 Heavy Duty Braking Transistor
- M3575T Standard Duty Braking Transistor
- M3775RK Resistive Load Bank
- M3575R Standard Duty UL Braking Resistor

##### **Line Regeneration**

- M3345 Line Regen

##### **Power Factor Correction**

- Power Factor Correction Module

#### - Coilers/Decoilers -

##### **Braking Modules**

- M3452 Heavy Duty Braking Transistor
- M3575T Standard Duty Braking Transistor
- M3775RK Resistive Load Bank
- M3575R Standard Duty UL Braking Resistor

##### **Line Regeneration**

- M3345 Line Regen

##### **Power Factor Correction**

- Power Factor Correction Module

#### - Extruders -

#### - Roll Formers -

##### **Ride-Thru Modules**

- S3534 Low Power Series  
Below 67hp / 50kW
- S3460 High Power Series  
67hp / 50kW and Above

##### **Braking Modules**

- M3452 Heavy Duty Braking Transistor
- M3575T Standard Duty Braking Transistor
- M3775RK Resistive Load Bank
- M3575R Standard Duty UL Braking Resistor

##### **Power Factor Correction**

- Power Factor Correction Module

## MINING



### APPLICATIONS

- Product Lift -
- Drilling Rigs -
- Rock Crushers -

#### Braking Modules

- M3452 Heavy Duty Braking Transistor
- M3575T Standard Duty Braking Transistor
- M3775RK Resistive Load Bank
- M3575R Standard Duty UL Braking Resistor

#### Power Factor Correction

- Power Factor Correction Module

### - Ventilation -

#### Ride-Thru Modules

- S3534 Low Power Series  
Below 67hp / 50kW
- S3460 High Power Series  
67hp / 50kW and Above

#### Power Factor Correction

- Power Factor Correction Module

### - Conveyors -

#### Braking Modules

- M3452 Heavy Duty Braking Transistor
- M3575T Standard Duty Braking Transistor
- M3775RK Resistive Load Bank
- M3575R Standard Duty UL Braking Resistor

#### Power Factor Correction

- Power Factor Correction Module

#### Line Regeneration Modules

- M3345 Line Regen

#### Single Phase Power Supply

- M3712  
Single Phase Power Supply

## OIL



### APPLICATIONS

- Hoists/Cranes -
- Drilling/Top Drive -

#### Line Regeneration

- M3345 Line Regen

#### Braking Modules

- M3452  
Heavy Duty Braking Transistor
- M3575T  
Standard Duty Braking Transistor
- M3775RK  
Resistive Load Bank
- M3575R  
Standard Duty UL Braking Resistor

#### Power Factor Correction

- Power Factor Correction Module

### - Pumps -

### - Extraction/Transport -

#### Filtering

- M3464  
Sine Wave Filter
- M3484  
Industrial Noise Filter

#### Ride-Thru Modules

- S3534 Low Power Series  
Below 67hp / 50kW
- S3460 High Power Series  
67hp / 50kW and Above

#### Single Phase Power Supply

- M3712  
Single Phase Power Supply

#### Power Factor Correction

- Power Factor Correction Module

## PACKAGING



### APPLICATIONS

- Pick & Place -
- Palletizers -

#### **Braking Modules**

- M3452  
Heavy Duty Braking Transistor
- M3575T  
Standard Duty Braking Transistor
- M3775RK  
Resistive Load Bank
- M3575R  
Standard Duty UL Braking Resistor
- M33500DB  
Dynamic Safety Brake Module

#### **Line Regeneration Modules**

- M3345 Line Regen

#### **Power Factor Correction**

- Power Factor Correction Module

- Injection Molders -

#### **Ride-Thru Modules**

- S3534 Low Power Series  
Below 67hp / 50kW
- S3460 High Power Series  
67hp / 50kW and Above

#### **Power Factor Correction**

- Power Factor Correction Module

## PAPER



### APPLICATIONS

- Mixers -

#### **Ride-Thru Modules**

- S3534 Low Power Series  
Below 67hp / 50kW
- S3460 High Power Series  
67hp / 50kW and Above

#### **Braking Modules**

- M3452 Heavy Duty Braking Transistor
- M3575T Standard Duty Braking Transistor
- M3775RK Resistive Load Bank
- M3575R Standard Duty UL Braking Resistor

#### **Power Factor Correction**

- Power Factor Correction Module

- Tension Systems -

#### **Braking Modules**

- M3452 Heavy Duty Braking Transistor
- M3575T Standard Duty Braking Transistor
- M3775RK Resistive Load Bank
- M3575R Standard Duty UL Braking Resistor

#### **Line Regeneration**

- M3345 Line Regen

#### **Ride-Thru Modules**

- S3534 Low Power Series  
Below 67hp / 50kW
- S3460 High Power Series  
67hp / 50kW and Above

#### **Power Factor Correction**

- Power Factor Correction Module

- Hoists/Cranes -

#### **Braking Modules**

- M3452 Heavy Duty Braking Transistor
- M3575T Standard Duty Braking Transistor
- M3775RK Resistive Load Bank
- M3575R Standard Duty UL Braking Resistor

#### **Line Regeneration**

- M3345 Line Regen

#### **Power Factor Correction**

- Power Factor Correction Module

# PETROCHEMICAL



## APPLICATIONS

### - Separators -

#### **Ride-Thru Modules**

- S3534 Low Power Series  
Below 67hp / 50kW
- S3460 High Power Series  
67hp / 50kW and Above

#### **Power Factor Correction**

- Power Factor Correction Module

### - Pumps -

#### **Ride-Thru Modules**

- S3534 Low Power Series  
Below 67hp / 50kW
- S3460 High Power Series  
67hp / 50kW and Above

#### **Filtering Modules**

- M3464  
Sine Wave Filter
- M3484  
Industrial Noise Filter

#### **Power Factor Correction**

- Power Factor Correction Module

### - Mixers -

#### **Ride-Thru Modules**

- S3534 Low Power Series  
Below 67hp / 50kW
- S3460 High Power Series  
67hp / 50kW and Above

#### **Braking Modules**

- M3452  
Heavy Duty Braking Transistor
- M3575T  
Standard Duty Braking Transistor
- M3775RK  
Resistive Load Bank
- M3575R  
Standard Duty UL Braking Resistor
- M33500DB  
Dynamic Safety Brake Module

#### **Power Factor Correction**

- Power Factor Correction Module

# PHARMACEUTICAL



## APPLICATIONS

### - Centrifuges -

#### **Braking Modules**

- M3452 Heavy Duty Braking Transistor
- M3575T Standard Duty Braking Transistor
- M3775RK Resistive Load Bank
- M3575R Standard Duty UL Braking Resistor

#### **Line Regeneration**

- M3345 Line Regen

#### **Filtering Modules**

- M3464  
Sine Wave Filter
- M3484  
Industrial Noise Filter

#### **Power Factor Correction**

- Power Factor Correction Module

### - Pumps -

#### **Filtering Modules**

- M3464  
Sine Wave Filter
- M3484  
Industrial Noise Filter

#### **Ride-Thru Modules**

- S3534 Low Power Series  
Below 67hp / 50kW
- S3460 High Power Series  
67hp / 50kW and Above

#### **Power Factor Correction**

- Power Factor Correction Module

### - Mixers -

#### **Ride-Thru Modules**

- S3534 Low Power Series  
Below 67hp / 50kW
- S3460 High Power Series  
67hp / 50kW and Above

#### **Power Factor Correction**

- Power Factor Correction Module

## RECYCLING



### APPLICATIONS

- Conveyors -
- Cranes -
- Centrifuges -
- Shredders -

#### Braking Modules

- M3452  
Heavy Duty Braking Transistor
- M3575T  
Standard Duty Braking Transistor
- M3775RK  
Resistive Load Bank
- M3575R  
Standard Duty UL Braking Resistor

#### Line Regeneration Modules

- M3345 Line Regen

#### Power Factor Correction

- Power Factor Correction Module

## SECURITY



### APPLICATIONS

- Railroad Crossing -
- Security &  
Access Gates -

#### Ride-Thru Modules

- S3534 Low Power Series  
Below 67hp / 50kW
- S3460 High Power Series  
67hp / 50kW and Above

#### Single Phase Power Supply

- M3712  
Single Phase Power Supply

#### Power Factor Correction

- Power Factor Correction Module

## SEMICONDUCTOR



### APPLICATIONS

- Water & Vacuum -
- HVAC -

#### Ride-Thru Modules

- S3534 Low Power Series  
Below 67hp / 50kW
- S3460 High Power Series  
67hp / 50kW and Above

#### Filtering Modules

- M3464  
Sine Wave Filter
- M3484  
Industrial Noise Filter

#### Power Factor Correction

- Power Factor Correction Module

## TEXTILES



### APPLICATIONS

- Web Presses -
- Positional Fiber Lines -

#### **Line Regeneration Modules**

- M3345 Line Regen

#### **Power Factor Correction**

- Power Factor Correction Module

- Spin Agent Injection Pumps -

#### **Ride-Thru Modules**

- S3534 Low Power Series  
Below 67hp / 50kW
- S3460 High Power Series  
67hp / 50kW and Above

#### **Power Factor Correction**

- Power Factor Correction Module

- Fabric Roller & Tension -

#### **Braking Modules**

- M3452 Heavy Duty Braking Transistor
- M3575T Standard Duty Braking Transistor
- M3775RK Resistive Load Bank
- M3575R Standard Duty UL Braking Resistor

#### **Power Factor Correction**

- Power Factor Correction Module

#### **Line Regeneration Modules**

- M3345 Line Regen

#### **Ride-Thru Modules**

- S3534 Low Power Series  
Below 67hp / 50kW
- S3460 High Power Series  
67hp / 50kW and Above

## TIMBER



### APPLICATIONS

- Cranes/Hoists -
- Conveyors -

#### **Braking Modules**

- M3452  
Heavy Duty Braking Transistor
- M3575T  
Standard Duty Braking Transistor
- M3775RK  
Resistive Load Bank
- M3575R  
Standard Duty UL Braking Resistor

#### **Line Regeneration**

- M3345 Line Regen

#### **Single Phase Power Supply**

- M3712  
Single Phase Power Supply

#### **Power Factor Correction**

- Power Factor Correction Module

## TRANSPORTATION



### APPLICATIONS

- Cranes/Hoists -
- Conveyors -
- Lifts -

#### **Braking Modules**

- M3452  
Heavy Duty Braking Transistor
- M3575T  
Standard Duty Braking Transistor
- M3775RK  
Resistive Load Bank
- M3575R  
Standard Duty UL Braking Resistor

#### **Line Regeneration**

- M3345 Line Regen

#### **Power Factor Correction**

- Power Factor Correction Module

### - Moving Walkways -

#### **Ride-Thru Modules**

- S3534 Low Power Series  
Below 67hp / 50kW
- S3460 High Power Series  
67hp / 50kW and Above

#### **Power Factor Correction**

- Power Factor Correction Module

## WATER / WASTEWATER



### APPLICATIONS

### - Centrifuges -

#### **Line Regeneration Modules**

- M3345 Line Regen

#### **Power Factor Correction**

- Power Factor Correction Module

### - Pumps -

#### **Filtering Modules**

- M3464  
Sine Wave Filter
- M3484  
Industrial Noise Filter

#### **Single Phase Power Supply**

- M3712  
Single Phase Power Supply

#### **Ride-Thru Modules**

- S3534 Low Power Series  
Below 67hp / 50kW
- S3460 High Power Series  
67hp / 50kW and Above

#### **Power Factor Correction**

- Power Factor Correction Module

## UNDERVOLTAGE

Reliability is the key to constant production. Sags, dips, outages, and transients on the power grid can cause variable frequency drives (VFDs) to trip off-line. This can stop your process and damage your product or equipment. The cost of repair, lost product, and lost productivity can be staggering. Now you can protect your VFDs from power fluctuations from the utility or within the plant with Bonitron's Ride-Through Solutions. **Bonitron Ride-Through Systems allow your VFD to maintain full power through sags and outages so your process never sees a disturbance.** Bonitron defines Ride-Through as having no effect on motor speed or torque. Bonitron's Ride-Through Modules allow your VFDs to meet or exceed: SEMI-F47, Samsung Power Vaccine, and IEC 61000-4-34.



## OVERVOLTAGE



The need for regenerated voltage control occurs in applications where the speed of the AC motor exceeds that of its variable frequency drive (VFD). In these cases, the motor acts as a generator. The energy generated by the motor must be dissipated as heat or returned to the power line. If this energy is not controlled, the drive may trip on an overvoltage condition or the energy may be dissipated as heat in the motor. Either situation can cause extensive damage to costly motors and result in loss of materials and stops in production. Bonitron Braking Solutions allow you to manage regenerated energy in a cost effective manner while protecting your drives. **Also, a Bonitron Line Regen returns regenerated energy to the line at 95% efficiency, making both your company and your wallet a little "greener."**

For over 45 years Bonitron has developed over 3,500 different modules and instruments for monitoring and controlling industrial electronics. Through ongoing research and development, Bonitron continues to work with OEMs and integrators in order to design the best solutions for today, as well as tomorrow. **For custom or application-specific solutions our design team will be glad to work with you in order to provide the absolute best solutions for your industrial electronic needs.** Bonitron Accessories are for Undervoltage, Overvoltage, or stand alone models. Please see our Accessories brochure for more information. Also, check our website for more specific sales literature and product manuals.

## ACCESSORIES

