



# DARRAH ELECTRIC COMPANY

Power Conversion Solutions • Distribution • D.C. Power Supplies

## DISTRIBUTOR PRODUCTS



AAVID  
THERMALLOY



RUTTONSHA



ENGINEERING POWERFUL SOLUTIONS™



### Aavid Thermalloy, LLC.

- Standard & Custom Aluminum Extrusions
- Liquid Cooled Chill Blocks
- Bonded Fin Heat Sinks

### ABB Semiconductors

- Phase Control Thyristors
- IGBT Modules
- Power Assemblies
- Rectifier Diodes
- GTO Thyristors
- IGCT, Integrated Gate-Commutated Thyristors

### Dynex Semiconductor, Ltd.

- Fast Recovery and Rectifier Diodes
- Phase Control Thyristors
- Water / Air Cooled AC Switches
- Pulsed Power Thyristors
- GTO Thyristors
- IGBT Modules

### Enerpro, Inc.

- Single & Three Phase SCR Firing Circuits
- Twelve-Pulse Firing Circuits
- Motor Starters
- Voltage and Current Regulator Boards
- Medium Voltage SCR Firing Circuits
- Transient Snubber Circuits

### Iconopower Limited

- Precision Clamps for Press Pack Power Semiconductors
- Highest Di-Electric Strength
- Built-In Force Indicator
- Accurate Pre-Calibrated Force
- 5 Clamp Styles Available
- Single & Double Insulated Modules Available
- General Purpose Low Voltage Fuses

### IXYS Corporation / Westcode Semiconductors Ltd.

- Thyristor / Diode Modules
- SCR's (Thyristors)
- Schottky and Ultra Fast Diodes
- Rectifier Diodes and Bridges
- Power MOSFETS
- Discrete IGBT's & Modules
- Fast Recovery Diodes
- Breakover Diodes (BOD)

### LEM Components

- Isolated Measurements of Current & Voltage
- Open and Closed Loop Technology
- Galvanically Isolated
- PCB and Panel Mountings
- Current Transducers 10mA to 10kA
- Voltage Transducers 10V to 6,400V

### Mersen

#### Ferraz Shawmut Fuses

- Medium Voltage Fuses
- Fuses Blocks & Holders
- Fuse / Switch Disconnects
- Power Distribution Blocks (PDBs)
- General Purpose Low Voltage Fuses
- Semiconductor Fuses

#### R-Theta Thermal Solutions

- Extrusion
- Cooling Systems
- Fabfin® / Hollowfin®
- Aquasink®
- Heat Pipes
- Thermal Compounds

#### ELDRE®

- Laminated Bus Bars
- Multi-Layer Bus Bars

### MOV's / Selenium Suppressors

- Selenium Surge Suppressors
- MOV's / Metal Oxide Varistors
- Selenium Rectifiers
- Voltage Surge Suppressors
- Klip-Sel Suppressors
- Vac-U-Sel Products

### Powerex, Inc.

- Rectifier Diodes
- SCR's (Thyristors)
- IGBT Modules
- SCR / Diode Modules
- Air / Water Cooled Assemblies
- IGBT Gate Drivers
- Pow-R-Paks (IGBT Assemblies)
- DC-DC Converters
- Pow-R-Brik
- Custom Modules
- Intelligent Power Modules

### RoMan Manufacturing, Inc.

- Chokes and Inductors
- Medium Frequency Transformers / Rectifiers
- Water Cooled Transformer / Rectifiers, sizes ranges from 10KA through 40KA
- Water Cooled AC Transformers

### Ruttonsha

- Rectifier Diodes, Stud / Capsule
- Phase Control SCR's, Stud / Capsule
- Inverter SCR's
- Fast Recovery Diodes
- Thyristor / Diode Modules
- Single / Three Phase Module Bridges

### Semikron

- IGBT's
- IGBT Drivers
- Thyristor / Diode Modules
- MOSFET Modules
- Bridge Rectifier Modules
- Miniature Bridge Rectifier

### Siba

- Medium / High Voltage Fuses
- General Purpose Low Voltage Fuses
- Ultra-Rapid Fuses
- Miniature Fuses
- Special Fuses
- Fuse Blocks & Holders

### V&F Transformer

- U.L. Listed 15-500 kVA, Copper or Aluminum Wound, Single and Three Phase Transformers
- Inductors, Chokes, and Line Reactors
- Ripple Filters and Harmonic Filters
- Toroidal Transformers
- Power Distribution Transformers
- Test Supply Transformers
- Constant Voltage / Ferro Resonant

### Wakefield-Vette

- Standard & Custom Aluminum Extrusions
- Bonded Fin Heat Sinks
- Cold Plates
- Folded Fin, Stack Fin & Swage Fin Heat Sinks
- Thermal Greases & Thermal Transformer Products
- Power Semiconductor Clamps
- Board Level Heat Sinks

# POWER CONVERSION SOLUTIONS

## Three-Phase Air Cooled Power Assemblies – AC Controller, Diode & Thyristor Bridges, 4 Quadrant Bridges

Darrah manufactures a complete range of heat sink assemblies designed to integrate into your new or existing power systems. Available as AC Controllers, Diode and Thyristor Bridges. Darrah assemblies mount easily within your cabinet and integrate with various control systems.

### Main Features

- “Ready to use” designs resulting in reduced time to market.
- Compact Designs enable users to mount in existing, standard industrial cabinets.
- Flexible design approach covers multiple Power Levels.
- Various Voltage levels available.
- Modular approach allows for ease of paralleling for higher power requirements.
- 6 Pulse & 4 Quadrant Re-Gen Bridges

To accommodate non-standard requirements, we offer complete custom designs from the ground up or minor modifications to already proven designs.

### Typical Applications

- New or Retrofit Markets
- Industrial Drives
- Conveyors
- Traction, Trackside, Auxiliary, and Main Rectifiers
- Mining
- Steel Mills
- Excitation
- Hoist & Cranes
- Heating Control



MTB35518F1  
Three Phase Fully Controlled  
Thyristor Bridge Rectifier  
Frame Size 1



MTB39018F1-4Q  
4 Quadrant Re-Gen Rectifier  
Frame Size 2



MTB36018F1-4Q  
4 Quadrant Re-Gen Rectifier  
Frame Size 1

## DISTRIBUTOR PRODUCTS



GTO Thyristors

SCR's Thyristors

Rectifier Diodes

IGBT Modules

Silicon Diodes

Voltage Sensors

Current Sensors

## D.C. POWER SUPPLIES



### Controls

- Switchmode, SCR and Variable Transformer Controls
- Regulated and Non-regulated D.C. Current and Voltage
- Tap Switch or Stepped Selection
- PLC Interface Controls
- Six and Twelve Pulse Designs
- D.C. Polarity Reversing Switches
- Rectifier Replacement Parts and Service

### Markets

- Plating & Anodizing
- Electro-Polishing and Electro-Coating
- Battery Eliminators & Chargers
- Glass / Furnace
- Resistance Heating

*Air and Water Cooled Designs – Models available to 50,000 Amps, 1,000 Volts D.C.*



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