

# Specializing in AC Power Quality & DC Current and Voltage Control



# **POWER QUALITY**

Power disturbances such as voltage transients, surges and spikes, harmonics and voltage imbalance will have an impact on the quality of electricity. Our goal is to avoid disruptions that interfere with production, damage equipment and corrupt data in automated environments.

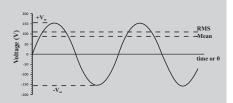
- LINE REACTORS Minimize Noise to Reactive Power Components and Improve PF.
- FILTERS EMI / RFI, Harmonic Distortion, dv/dt, and Sinewave
- UPS SYSTEMS AND ENERGY STORAGE



# **ELECTRICAL MEASUREMENT**

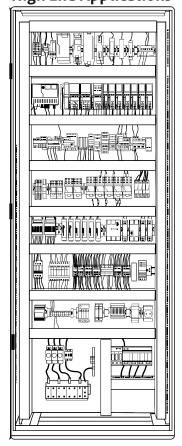
DC power measurement is relatively simple watts = volts x amps. AC power measurement, is more complex due to the power factor (PF). AC power calculations also depend on Sinewave, Frequencies, and Phase Balance (reactance and resistance)

- AC CURRENT TRANSDUCERS
- **o** DC VOLTAGE TRANSDUCERS
- o MONITORING RELAYS
- O POWER METERS



# **ELECTRICAL CONTROL AND POWER DISTRIBUTION**

# Rugged Products for High End Applications

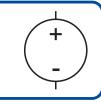


Industrial Grade Devices for High Precision, Accuracy, and Continuous use.

Control components are used extensively in industrial equipment and within control cabinet circuits involving switching, starting, protecting, detecting, monitoring, communicating, and other electro-mechanical functions.

- MAIN BREAKERS AND SURGE SUPPRESSORS
- O TRANSFORMERS
- DC POWER SUPPLIES
- CIRCUIT BREAKERS
- CONTACTORS AND RELAYS
- TERMINAL BLOCKS AND POWER DISTRIBUTORS
- SWITCHES AND CONNECTORS







# **Electrical Control Components for Machine Designers and Industrial Equipment**



**Transformers** Line and Motor Reactors Filters for EMI, Harmonics and Sinewave DC Power Supplies and UPS Systems **Electronic Circuit Breakers** 











Power Contactors for AC/DC Bi-Directional and Battery Contactors **Emergency Disconnects Snap-Action Switches** Rugged and High-Power Connectors











AC/DC Voltage Transducers **High Current Shunt Resistors** Threshold and Protective Relays High Precision Signal Conditioning Loop Isolators, Splitters, and Repeaters











Time Delay Relays, Timers, and Pulse Counters Monitor; Voltage, Current, and Temperature Phase Monitoring; Failure, Sequence, Asymmetry Power Meters with Modbus RTU interface **Motor Soft Starters** 













Din Rail Terminal Blocks; Screw, Spring, Push-In, Stud Din Rails, Wire Ducts, Connectors, Ferrules Cable Entry Systems, Cable Glands and Cord Grips Power Distributor Blocks Marking and Labeling









IEC Pin & Sleeve Connectors **Industrial Rectangular Connectors** Mechanical Interlocks & Disconnect Switches Portable Power Distribution Solutions









### **ENCLOSURES - THERMAL MANAGEMENT - PLC - I/O - NETWORKING - HMI**



**Edge Controllers** 

Network Switches

Gateways



- Enclosure Coolers
- Thermal Control Products
  - Heat Pipes
  - Heat Sinks
  - Thermoelectric

## **ENSTO**

- Non-Metallic Enclosures
  - Polycarbonate
  - Fiberglass

# R&M

- Industrial LAN Solutions
- Data Cables and Connectors

- Cord Grips and Cable Glands
- Thread Adaptors, Vents, and Hole Plugs
- Cable Tray and Raceway

#### OTHER SOLUTIONS INCLUDE:

- Control Panel Design and Engineering Services
- Contract Manufacturing; Cable and Harness, Box Builds, & PCB Assembly

NEED A CUSTOM PRODUCT? THAT'S OUR SPECIALTY, JUST ASK!

