

Drive Solutions

HITACHI

www.hitachi-america.us/ice/inverters

NE-S1 Series AC Variable Speed Drives

- Among the smallest form-factors in their category
- Economical and simple to use speed control inverter solution; range of 1/2 to 5hp
- Designed with both OEMs and System Integrators needs in mind with its ultra-compact design, and pre-configured for out of the box integration in most applications



WJ200 Series AC Variable Speed Drives

- Designed for excellent performance and user friendliness
- From 100-200VAC single phase, and 200/400VAC three phase input, to 200/400VAC three phase output; range 1/8 to 20hp
- The WJ200 Series comes with an integrated auto-tuning function for easy sensor-less vector control that realizes high starting torque of 200% or greater, suitable for a variety of applications



SJ Series, Type P1 – High Performance Inverter

- Easy operation and setup via LCD color keypad
- Powerful high-torque performance – 200% @ Hz
- Internal Dynamic Brake transistor up to 22 kW (30 hp)
- EzSQ “Soft PLC-like” Programming Software
- Position control function offers servo-like performance
- Pump specific PID with sleep mode and line fill features
- NEMA1 conduit boxes available (in early 2018)
- EMI filter integrated, Category C3



SJ700 High HP Series AC Variable Speed Drives

- From 380-480VAC; range 250-600hp/370/800 Amp
- Includes separate DC choke
- EzSQ (Easy Sequence) built-in programming function, which provides the functionality of a PLC built into the inverter
- High Starting Torque 200% at 0.3Hz (75 to 132kW : 180% at 0.3Hz, 185kW and over : 150%, at 0.3Hz)
- Full Vector Control with Feedback option (Torque Control, Position Control)
- Easily replaceable cooling fans and bus capacitors speed field maintenance



Vortex Blowers (Oil Less)

- E-Series – Smaller more efficient blowers that generate air by non-interference, single path air compression, enabling greater efficiency for larger air volume applications.
- G-Series – Three-dimension impeller that generates high-speed air. Suitable for vacuum applications and pressure applications.



Schaefer's ELECTRICAL ENCLOSURES

Metallic Electrical Enclosures
Carbon • Stainless • Aluminum • Galvanized

Climate Air Drive Enclosures

- NEMA 3R sized for 5 hp – 250 hp
- Vented cantilevered roof with optional snow filter
- Options:
 - HMI hinged window kit
 - Flange mount disconnect cut out
 - Multiple fan & filter choices



www.electrical-enclosures.com

COSMOTEC Industrial Cooling

www.stulz-cosmotec.com

Air Conditioning

- Capacity Range: 380 W - 5,950 W
- Digital Controller
 - Smart Energy Management
 - Sequencing Capabilities
 - MODBUS Communication
- Outdoor Low Ambient Package Standard (-40°F to 131°F)
- Alarm Outputs
- Remote Door Switch Capable
- UL Listed Type 12 / 4 / 4X (SA12046)



Air to Air - Heat Exchanger

- Indoor / Outdoor Units
- Large Capacity Ranges
 - Indoor 16 W/C - 80 W/C
 - Outdoor 30 W/C - 160 W/C
- Outdoor units rated for Low Ambient use (-40°F)
- UL Listed Type 12 or Type 4/4x (E 194435)



Air to Water - Heat Exchanger

- Large capacity range
 - 810 W - 12.5 kW @ DT25
- Patented construction to prevent water penetration
- Solenoid valve
- Mechanical thermostat
- UL Listed Type 12 (E194435)



Filter Fans

- Wide range of sizes
- Wide range of voltage options
- Industry standard cutouts with snap in mounting
- IP54 standard / IP55 available with rain hood
- Simple adjustment for air flow reversal; push/pull
- Retention clips designed to accept wide range of enclosures
- Designed for easy filter replacement
- Spring loaded terminal blocks
- UL Recognized (E194444) / CSA Listed



BLOCK

www.blockusa.com

Harmonic Filters

- With Minimum capacitive idle reactive power
- IEEE 519 THD \leq 5% compliant
- Up to 480 V
- Power range of 7.5 to 384 hp



Line Reactors

- Peak and inrush current limitation
- Spike protection
- High reliability
- 240 V. 480 V. 600 V



DC Reactor

- Reduces unwanted harmonic distortion
- Improvement of the efficiency of a converter
- Rated voltage – 600 Vdc
- Rated current – 8 – 100 A
- Inductance - 0.67 – 9.4 mH



BONITRON

"If you have VFDs, you'll need some of these!"

Undervoltage

- SAG & Outage Protection Systems

Modules

- Voltage Regulators
- Chargers
- Dischargers
- Energy Storage

Overvoltage

- Line & Capacitive Regeneration
- Braking Transistors & Resistors
- Combo Units
- Servo Motor Braking

Common Bus

- 1, 3 Phase & 24 VDC
- Power Supplies
- Common Bus Diodes
- Bus Filter Capacitance

Power Quality

- 12 & 18 Pulse Solutions
- Filtering

Maintenance

- Portable Capacitors Maintenance

www.bonitron.com

Control Panel Toolbox



Electrical Connectors & Tools

Thermal Transfer Printers

- Cables
- Terminal Blocks
- Push Buttons
- Electrical Cabinet Components

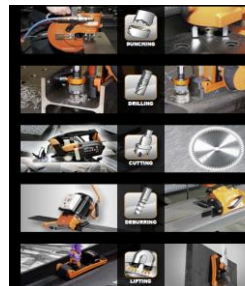


www.cembre.com



Exceptional Metal-Working Tools

- Punching
- Drilling
- Cutting
- Deburring
- Lifting
- Mounting Tables



www.alfratools.com

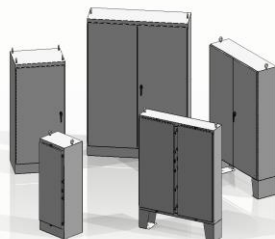
Control Panel Solutions



Metallic Electrical Enclosures
 Carbon • Stainless • Aluminum • Galvanized

Standard and Custom Enclosures

- Free Standing, Floor & Wall Mount
- Operator Interface
- Rain Tight
- Disconnect/Modular
- Climate Control
- Accessories



Custom Capabilities

- Height, Width & Depth
- Special size or material type
- Powder paint colors (any RAL)
- Factory cutouts & forming
- Installed accessories (drip shields, rain hoods, etc.)

www.electrical-enclosures.com



Control Transformer

- Fused Version Available
- Versions with DIN Rail for additional components available
- 100% Finger-Safe
- Jumpers included for primary voltage selection
- Up to 2500 VA



Insulation Class

B (266°F)

Input Voltage

240x480 VAC or 600 VAC

Power

50 – 2500 VA

Ambient Temperature

104°F

Approvals

UL 5085-1/-2, CSA 22.2

Frequency

50 – 60 HZ

Switched Mode Power Supplies

- 1, 2, 3 Phase
- 5 Vdc, 12 Vdc, 18 Vdc, 24 Vdc, 30 Vdc, 48 Vdc, 60 Vdc



www.blockusa.com



Air Conditioning

- Capacity Range: 380 W - 5,950 W
- Outdoor Low Ambient Package Standa (-40°F to 131°F)
- UL Listed Type 12 / 4 / 4X (SA12046)



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