WHAT'S UP WITH AUTOMATIONDIRECT.com

2011 SUMMER

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& much more...

Smiley's always been green!

And taking our cue from him, we're carrying more and more products that help you with green initiatives. Premium efficiency motors, as well as soft starters and AC drives, can lower energy costs, improve performance and reduce maintenance. Our PLCs can be programmed to perform a multitude of applications that conserve energy or produce alternative sources. We've got controllers making biodiesel from waste vegetable oil, tracking the sun to operate a multi-mirror solar array, coordinating powerful wind turbines, and supervising a small-scale hydro-generation plant. Most of these stories are on our Automation Notebook site *(www.automationnotebook.com)* or have been recently published in trade magazines. Check out those magazine links on our Twitter feed, www.twitter.com/automationdirec *(with no 't' on the end!)*

- The AutomationDirect Team

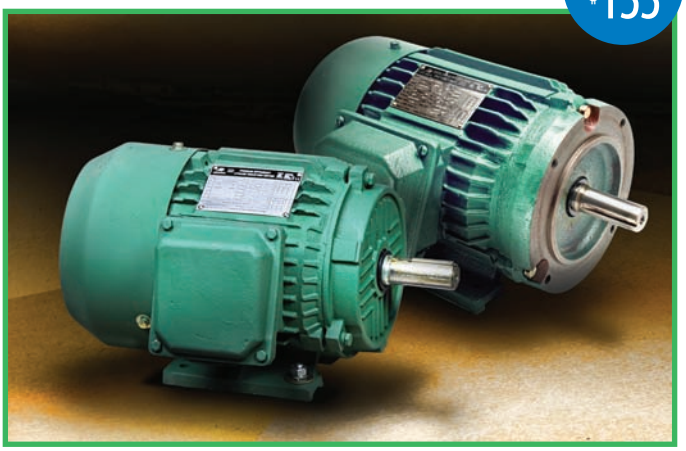
1-800-633-0405 | WWW.AUTOMATIONDIRECT.COM

IRONHORSE NEMA PREMIUM MOTORS

starting at: $155

The new Ironhorse Premium Efficiency AC motors meet the EISA Act of 2007.

- Available from 1 hp to 300 hp
- 1200, 1800 and 3600 RPM
- Three-phase at 208-230/460V
- T or TC frame, TEFC style, Class F insulation
- C-flange kits for flange mounting of IronHorse™ 3-phase cast iron T-frame motors
- Replacement fans, fan shrouds and junction boxes available
- STABLE adjustable motor slide bases for any NEMA motor from 56 - 449T
- In stock and ready to ship
- 2-year warranty



Premium Efficiency (EISA 2007)

The Energy Independence and Security Act of 2007 mandated that all applicable AC industrial motors manufactured or imported into the U.S. after December 2010 must meet the Premium Efficiency standards. Because this initiative was driven by the NEMA organization, the Premium Efficiency standard is commonly referred to as "NEMA Premium". IronHorse MTCP Series Premium Efficiency motors meet or exceed the Premium Efficiency guidelines in the EISA 2007 standard.

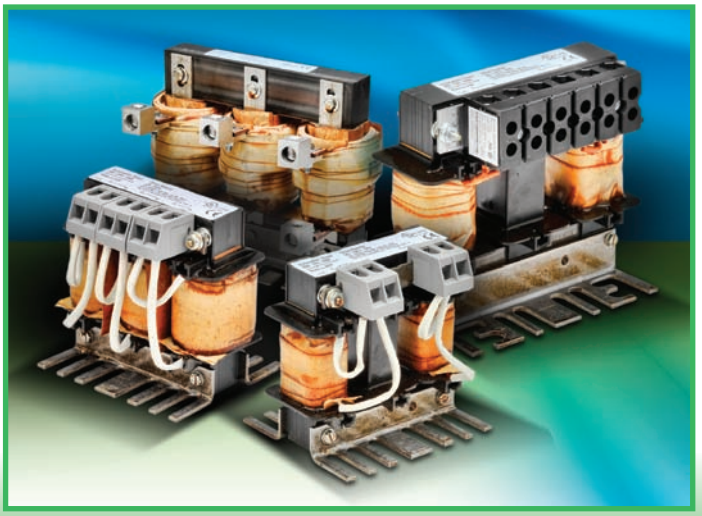
Applications include:

- Fans
- Conveyors
- Pumps
- Material handling
- Metal processing
- Textile processing

www.automationdirect.com/ac-motors

AC DRIVE LINE REACTORS

starting at: $56



We now carry input and output line reactors at great prices that work with many manufacturers' AC drives.

- Sizes from 0.25 hp to 300 hp
- Single-phase VFD line reactors in 115 and 230 VAC models (true single phase reactors, no center phase winding)
- Three-phase VFD line reactors in 230, 460, and 575 VAC models
- Universal mounting feet with multiple mounting slots; can replace most reactors using existing mounting holes

www.automationdirect.com/line-reactors

COMPACT LIMIT SWITCHES

starting at: $24

The new AEM2G series compact limit switches have 35mm wide die cast metal housings with standard U.S. 25mm mounting hole spacing.

- Wide offering of limit switch actuator styles :
  - Metal plungers with -
    - roller
    - cross roller
    - dust cap
    - fixing nut
    - roller with fixing nuts
    - cross roller with fixing nuts
  - Levers with -
    - roller
    - ball bearing roller
    - spring
  - Round and square rods
  - 360 degree spring, with or without nylon tip
- Epoxy resin-filled for IP67 rating
- Models with snap-action or slow-make/slow-break contacts

Limit Switch Contact Types

- **Snap-action contact (Z11):** A contact element in which the contact motion is independent of the speed of the limit switch actuator. This feature ensures reliable electrical performance even in applications involving very slow moving actuators.
- **Slow-make/slow-break contacts (X11):** A contact element in which the contact motion is dependent on the limit switch actuator speed.

www.automationdirect.com/limit-switch

WERA TOOLS

starting at: $3.25

AutomationDirect is now selling the Wera brand, one of the world's leading manufacturers of hand tools. They are known for their attention to quality, ease of use, and a safety-friendly design.

- Standard, insulated and miniature screwdrivers and screwdriver sets
- Hex key sets (Allen wrench sets)
- Bit drivers and screwdriver bits
- Torque tools (torque drivers)

www.automationdirect.com/tools

24VDC SOLO CONTROLLERS

starting at: $89

SOLO temperature/process controllers are now available in 24VDC powered versions.

- 1/32 DIN, 1/16 DIN, 1/8 DIN, or 1/4 DIN panel sizes
- Accepts thermocouple, RTD, or analog inputs
- Four types of control modes: PID, ON/OFF, Ramp/Soak and Manual
- Available outputs include relay, voltage pulse, current, and linear voltage (depending upon controller model)
- Built-in RS-485 interface using Modbus slave (ASCII or RTU) communication protocol

www.automationdirect.com/temp-controllers

BASIC DISCRETE SENSORS

starting at: $13.50

A new line of low-cost high-performance sensors are available in a wide range of styles.

- M18 plastic DC photoeletric sensors in diffuse, polarized reflective and through-beam models with sensing ranges from 70mm to 8 meters
- DC inductive proximiy sensors in 12, 18, and 30mm diameters, shielded and unshielded housings, and sensing ranges from 2mm to 15mm
- M12 disconnects

www.automationdirect.com/sensors

PRESSURE AND TEMP SENSORS

starting at: $65

Now available are IP68/IP69K-rated 5,000 psi pressure transmitters with 0-10V or 4-20mA outputs.

TTD temperature transmitters, for use with RTD probes, are available in three temperature ranges. With M12 quick-disconnects, the transmitters convert low-level RTD probe signals to a high accuracy two-wire or three-wire 4-20mA signal output.

www.automationdirect.com/pressure-sensors
www.automationdirect.com/temp-sensors

MODBUS GATEWAY

starting at: $185

This Ethernet to serial converter supports up to 12 simultaneous Modbus TCP Client (master) Ethernet connections, and up to 128 RTU Server (slave) serial connections.

- Supports NetEdit or Web browser based configuration tools
- Automatic read function
- RJ45 10/100 Mbps Ethernet port
- RS-422/485 2-or 4-wire serial port
- 35mm DIN rail mount

www.automationdirect.com/ethernet

EDRV100 MODULE

starting at: $185

The GS-EDRV100 processes signals between GS /DuraPulse drives and a control system over a 100Mbps Ethernet link.

- Communicate between drives and an H2-ERM or H4-ERM, Productivity3000, KEPDirect OPC Server, KEPDirect EBC I/O Server, or independent controller with a Modbus TCP/IP driver
- Built-in Web browser allows users to configure and control the drive from any Web browser via the IP address of the GS-EDRV100 card.
- Mounts on standard 35mm DIN rail
- GS series drives have a provision for shutting down control or power to the inverter in the event of a communications time-out

www.automationdirect.com/ac-drives

MULTI-WIRE CONNECTORS

Various

Heavy-duty ZIPport connectors quickly and reliably connect and/or disconnect wiring in applications such as machinery, robots, and control and signal circuits. Select the components you need:

- 3A, 6B, 10B, 16B and 24B rectangular connector sizes
- Heavy duty metal (die cast aluminum) or thermoplastic housings
- Single and double locking systems
- Screw termination or crimp termination inserts
- UL and CE approvals, NEMA certified

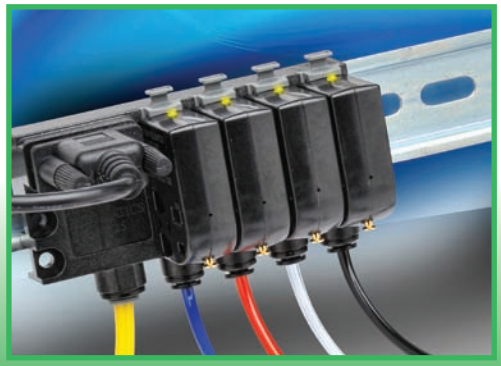
www.automationdirect.com/multi-wire-connectors

MODULAR SOLENOID VALVES

starting at: $28

NITRA™ BVS series modular solenoid valves are body ported 3-port (3-way) poppet valves available in 2-position, normally open or normally closed configurations.

- 12VDC, 24VDC or 120VAC solenoid coils with LED indication
- Flying leads or 8mm DIN connection
- DIN rail mountable when used with BVM valve manifolds
- 4- and 8-station manifolds
- 2-year warranty



www.automationdirect.com/pneumatic-solenoid-valves

RECTANGULAR SENSORS

starting at: $39

GX Series rectangular non-metal photoelectric sensors feature an 18mm diameter threaded lens with included mounting hex nut and an M12 quick-disconnect (purchase cable separately).

- Diffuse with background suppression, polarized reflective, and through-beam models
- Fixed sensing ranges, no adjustment required
- Visible red LED emission
- NPN or PNP, Light-on, Dark-on output models

www.automationdirect.com/photoelectric

65MM PUSHBUTTONS

starting at: $19

These Fuji Command (AR30B0R series) large pushbuttons feature 65mm diameter non-illuminated plastic operators and mount in a standard 30.5mm hole.

- All mushroom switches include pushbutton operator, support base and contact block(s)
- Available with red, green, yellow or black operators
- Momentary button operation
- Contact blocks can be arranged up to four deep by two wide

www.automationdirect.com/pushbuttons

FEATURED PRODUCTS

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AUTOMATIONDIRECT

DC CURRENT SENSORS

starting at: $90

AcuAMP DCT series of DC current sensors and switches offers outstanding features, flexibility, and durability at an incredible price.

- Transducers combine a Hall Effect sensor and signal conditioner for DC applications up to 400A. In split or fixed core models, with 4 to 20 mA or +/-10 VDC bidirectional outputs.
- Switches combine a Hall effect sensor, signal conditioner and a limit alarm in a single solid-core package

www.automationdirect.com/current-sensors

GROUND FAULT SENSORS

starting at: $136

AcuAMP Ground Fault Sensors help protect people, products, and processes from damage that can be caused by ground fault conditions.

- Sensor monitors all current carrying conductors in grounded single and 3-phase delta or wye systems
- Jumper-selectable setpoints of 5, 10 or 30 mA (fixed-core only)

www.automationdirect.com/ground-fault-sensors

KEPDIRECT OPC SERVER

only $399

The KEPDirect OPC Server software provides a way to connect your favorite Windows-based HMI or SCADA software to AutomationDirect communication-enabled devices such as programmable controllers, remote I/O and variable frequency drives (VFDs). Design a low-cost data acquisition/monitoring system using affordable AutomationDirect control devices.

www.automationdirect.com/kepdirect

COMPACT FUSIBLE SWITCHES

starting at: $18

The Gladiator® series of UL 98 and UL 508 compact fusible disconnect switches are suitable for feeder and branch circuit protection.

- UL 98 models utilize Class CC fuses
- UL 508 models utilize Midget class fuses
- Up to 30A, with open fuse indication
- Lockout/Tagout capability
- DIN rail mount

www.automationdirect.com/circuit-protection

FULL FEATURED SOFT STARTERS

starting at: $769

Stellar SR44 soft starters can be used for motor reversing, with external contactors, and can be connected "in-delta", allowing for use of a smaller soft starter.

- 9A to 370A rated @ 230-460V
- Fully digital, use thyristors in all 3 motor phases for controlled reduced voltage motor starting and stopping
- Built-in "Optimizing" mode reduces energy costs when used on lightly loaded and oversized AC motors

www.automationdirect.com/soft-starters

SAFETY PRODUCTS

starting at: $15.00

The YBB series light curtains provide finger or hand protection; send/receive pairs start at $525.

Safety switches are available in tongue key, shaft hinge, lever hinge and cable-pull styles, starting at $15.

Safety relays include single and dual-channel for E-stop and safety gates; two-hand control units; and light curtain controller modules. Relays start at $88.

www.automationdirect.com/safety

IP69K RATED SENSORS

starting at: $35.00

Food and beverage sensors are rated for harsh duty applications.

- 12mm, 18mm and 30mm DC proximity sensors with M12 Q/D
- 18mm and 30mm proximity sensors with half-inch micro AC Q/D
- 12 and 18mm magnetic proximity sensors
- 18mm photoelectric sensors

www.automationdirect.com/food-beverage-sensors

THERMOCOUPLE AND RTDS

starting at: $15.25

ProSense thermocouple and RTD sensors are available pre-assembled and ready to ship.

- Thermocouple probes in styles with connection heads, hex nipples, attached plug and lead wire transition; J and K types
- RTD (PT100) probes in similar styles
- Thermowells and extension wire

www.automationdirect.com/temp-sensors

Lots of great application stories

AutomationDirect has been in the trade magazines a lot lately - some great stories of users saving time and money, and making their processes more efficient with PLC controls. Here are some of the latest:

PLC-based temperature control works where single loop controllers fell short - http://bit.ly/iwszwq

Small-scale hydroelectric plant promises profit - http://bit.ly/r75Q5j

Upgrading Centrifuge Control System for Water Plant - http://bit.ly/pUuQmB

Video demonstrates DirectLOGIC PID; Productivity3000 Software video series

Our library of tutorial videos continues to grow. The newest video demonstrates a working PID loop using the DL06 PLC and DirectSOFT5 programming software. Watch as one of our Tech Experts explains how to set up the PID instruction in ladder logic, configure loop parameters, and operate and troubleshoot the PID loop application.

In the newest video series for the Productivity3000, product manager Jeff Payne shows you how to use the many features of the programming software. It's broken into four parts so you can watch each one at a convenient time.

For these and many more pre-recorded tutorials, visit http://learn.automationdirect.com.

Get your warranty return number the easy way - online!

We have tried to make our product return process one of the easiest and least stressful you've experienced. As a matter of fact, we get "love letters" from customers telling us how pleasant it was to return a product to us! (We love to hear that, but we don't recommend doing it just for the experience.) But when you really do need to return a product that is under warranty, you can now obtain the Return Authorization under your account via the Web. (All date codes and/or serial numbers must be supplied before the RA can be issued.) The process is this easy:

1. After you have logged in to your AutomationDirect account, visit our Returns page and choose the appropriate return reason.
2. You'll see a list of your orders which fall within the selected return window. Choose the order which contains the items you wish to return.

3. Verify your contact information, view the list of items from your order, and enter the quantities you need to return. Then "Submit" the return.
4. The Returns Team will look over your return request, and if everything checks out, the necessary paperwork and instructions will be sent to you immediately. (You can also obtain a 30-day money-back return authorization online.)

automationtalk

Upcoming Webinars

CLICK PLC SOFTWARE - ADVANCED

August 24, 2011
2:00 pm EST

This 40-minute show helps you hone your programming skills using the CLICK PLC programming software. Learn time-saving suggestions and some advanced programming techniques; see examples common on simple automation controls.

MOTOR CONTROLS

Spetember 14, 2011
2:00 pm EST

Applying AC or DC drives requires understanding the application so that the correct size drive, motor, and control scheme are used. Applications that don't require drives can use soft starters or motor contactors. This 30-minute review covers these motor control options.

ETHERNET COMMUNICATIONS

October 5, 2011
2:00 pm EST

In this 30 minute seminar, we will cover all of the devices that will allow your automation equipment to communicate faster and more reliably with Ethernet. Learn advantages of Ethernet over serial communications, and see brief overviews of Ethernet products, including hubs, switches, Ethernet PLC modules, Ethernet Remote IO, C-more touch panel Ethernet, and Ethernet AC drive modules.

All seminars end with a question/answer period.

Sign up at www.AutomationTalk.com