

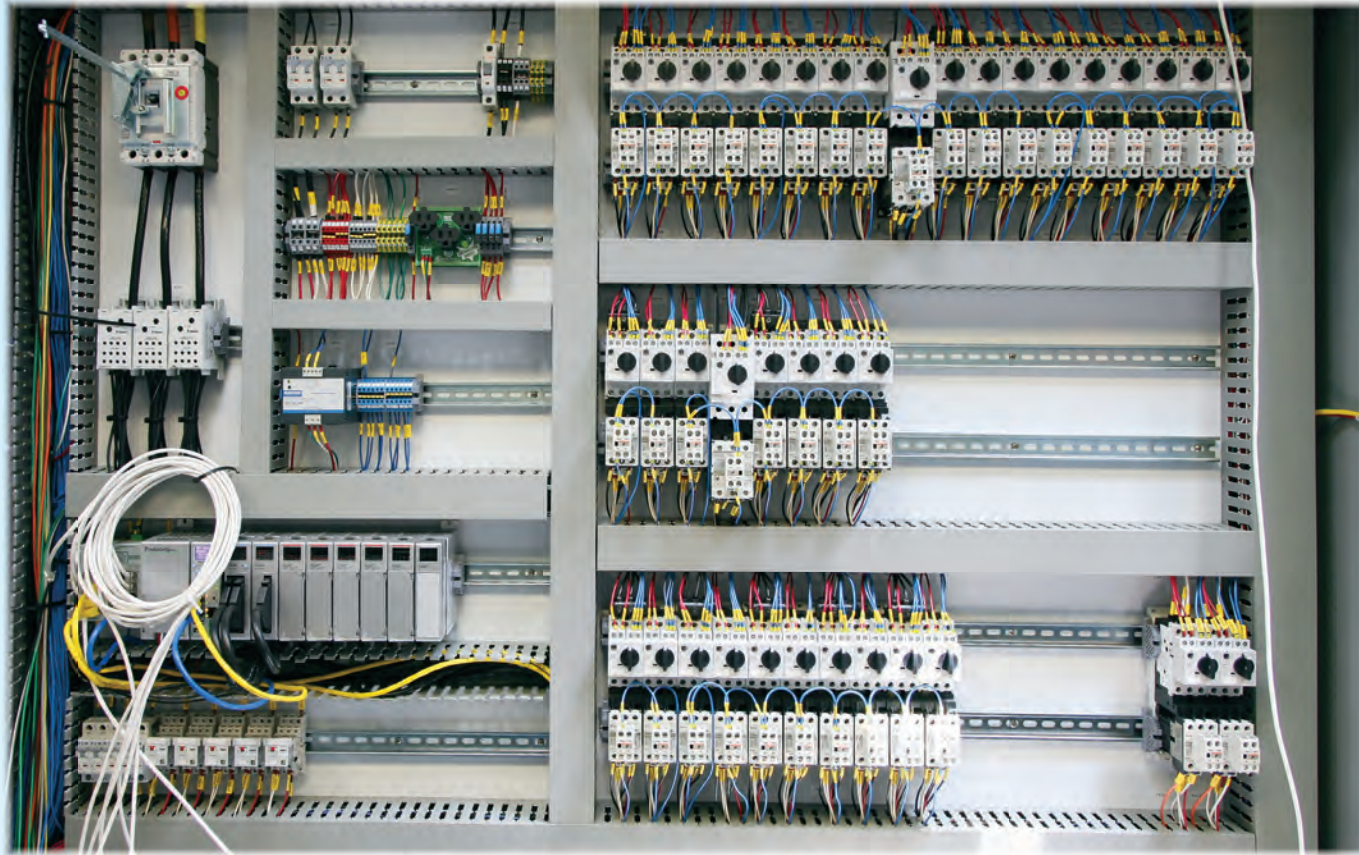


**GET MORE THAN
YOU PAY FOR...**

from  **AUTOMATIONDIRECT**.com

Product Focus: Wiring Solutions

Wiring Solutions



Wiring solutions include equipment and components used to supply and install electrical connections required to build, upgrade or maintain electrical panels/enclosures for industrial applications. This includes practically everything needed to properly and efficiently build a panel, ensuring all safety requirements are met.

Wiring solutions products include:

- **Electrical hook-up wire**
- **Multi-conductor cables**
- **Wire labeling systems**
- **Cable entry systems**
- **Cable glands**
- **Conduit connectors**
- **Multi-wire connectors**
- **Wire duct**
- **Flexible tubing and conduit**
- **Electrical plugs, receptacles, field wireable connectors and wire end connectors**
- **Multi-port junction blocks**
- **Cable ties and accessories**
- **Strain relief, support cord grips, and pull grips**

Wiring Solutions

Electrical Wiring

Wires are used to safely and efficiently provide power or connect electrical signals to machinery, equipment and components for industrial applications. The most common wire types include MTW, TFFN, THHN, and DLO ratings.

Multi-conductor cables are used for power, input/output signaling, and communications in many different environmental conditions and installations. Designers must consider cable materials of construction, ampacity, shielding, NFPA 70: National Electrical Code (NEC) designations, and more.

Most control panels use some type of terminal strip or electrical terminal block connector to connect the control wiring (PLCs, relays, contactors, etc.) to the field wiring. Terminal block connection systems that meet the demands of the industrial environment are suitable for factory wiring as well as field wiring connections.

Other products used for electrical wiring include connectors and fittings, which are used for cable and wire termination and provide a secure, safe and permanent connection.

Wiring Mounting and Routing

Wiring mounting and routing products provide solutions that ensure the wiring will be properly secured, protected from hazardous situations, and organized. Products used for wire mounting and routing include wire trough and wireway, duct and tubing, glands, cable entry systems and wire ties. Pre-made cables for sensors and controller I/O can reduce manual wiring time and errors.



Metal and plastic cable glands provide protected cable entry into enclosures or electrical equipment, securing cables or wires while maintaining enclosure sealing requirements.



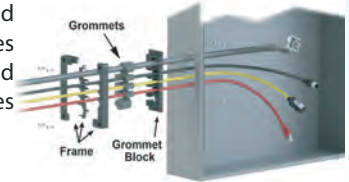
Electrical wire trough, duct, conduit and tubing house and protect wiring and cables for motors, lighting, enclosures or anywhere environment is a concern. Conduits are available in metallic, non-metallic and shielded styles and serve many applications including hazardous locations. Tubing is ideal for tight, non-linear wiring runs, including where liquid or ultraviolet resistance is required.



Cable ties quickly and economically secure cables/wires as a group or to a surface and include specialty types such as self-extinguishing nylon, metal detecting, releasable, and double-headed types.



Cable entry systems provide safe cable entry into enclosures and equipment, secure cables, provide strain relief, and maintain enclosure sealing requirements. The KDL/D series cable entry system consists of a split frame with ports and grommets that allow installation of pre-terminated cables without disassembling terminations.



Specialty Products

Specialty products include multi-port interconnection junction blocks, which provide simple and effective machine wiring organization as well as reduce cabling costs and termination errors. Panel interface connectors mount on a cabinet to provide pass-through connections that allow safe interface with internally-mounted devices such as PLCs without opening the enclosure.



Electrical Wiring

Bulk Multi-Conductor Cable

Cables provide connectivity for electrical power and signals. Portable cord is used for heavy-duty indoor/outdoor power applications; communication cable for low-capacitance data signals transmission; control/sensor cable for most discrete signals; instrumentation cable for analog signal transmission.

Hookup Wire

While the NFPA allows the use of MTW or THHN wire inside control panels, MTW is often preferred for its flexibility and easier handling. Type TFFN (stranded) wire is primarily used as fixture wire as specified by the National Electrical Code (NEC). Type THHN wire is intended for general purpose applications. Type DLO is ideal for heavy-duty wet/dry power connections requiring flexing capability.

Terminal Blocks

Terminal block systems facilitate connections of panel-mounted electronic components to device power and field wiring. Modular terminal blocks, power distribution blocks, multi-port junction blocks and pre-wired connection cables and modules make quick, clean, safe and efficient installations.

End Connectors

End connectors provide a secure, reliable connection from wire to termination point. Wire end connector styles include cylindrical ferrules, a variety of terminal shapes, and butt connectors, available in a selection of colors and wire size capacity.



Field Wireable Connectors

Field wireable connectors are used to build custom patch cables, provide a quick-disconnect for a device, terminate field devices on an I/O block, or bring multiple sensor signals into one port.



Receptacles

Field-wireable bulkhead connectors provide a mating point for applications such as wiring through a panel. Styles include male or female receptacles available in a variety of pole configurations. Accessories include closure caps and adapters.



Wiring Devices

These include a range of components for connecting and terminating power wiring in industrial and commercial settings, including electrical plugs, connectors and receptacles; as well as wire management products such as cord/cable installation, support and strain relief devices.



Electrical Connectors and Fittings

Connectors and fittings provide transitions between components of wired or piped systems. Fittings connect conduit or pipe at splice or directional points, or to the mechanical termination of electrical devices.



Pre-wired Sensor Cables

Pre-wired sensor cables used to supply power to and exchange signals with sensors and switches are very convenient for industrial installations. Reliable, high-quality cables are typically available in a variety of connector styles, pole configurations and lengths to accommodate many panel and field wiring needs. Separate components can be used for custom wiring.



Electrical Wiring Tips

Cut-To-Length Cable Services

OEMs use many cable types to fabricate their equipment and machinery. While they standardize to the greatest extent possible, sometimes the best technical and commercial option is to specify cut-to-length (CTL) cables from a responsive supplier, so the OEM can get just what they need, right when they need it.

Cable Specifications

Cables must be specified to fit the physical conditions and code requirements for applications as varied as power distribution, motor connections, PLC I/O and instrumentation signals, communications, and more. Specialty cables exist for extreme temperature and high flexibility applications.



Making the Cut: Certification

One thing prospective cut-to-length cable customers may not know is Underwriters Laboratories (UL) requires traceability of a cable back to its manufacturer; surface printing on the cables alone isn't enough to fulfill this requirement. A certified label must be affixed to the spool or cable shipped from the manufacturer.



Where bulk cable is respooled into smaller quantities, these special certification labels must be applied in a process defined by UL as "Processed Wire – Respooled." The supplier must also track master reels by lot number. Even for small one-time installations by end users or integrators, cut-to-length cable service can save money and time.

With cut-to-length services, designers can pick exactly what cables are needed. Their installers perform a physical takeoff and place an order with the CTL supplier certified by Underwriters Laboratories (UL). The most efficient suppliers must have an online order-taking system, a large variety and inventory of products, fast delivery, and competitive pricing.

Avoid Wiring Errors

In a *Control Design* magazine Automation Basics column titled "Terminate the Rat's Nest", author Dave Perkon writes, "For those who think it's okay to open a control enclosure and see a monochromatic rat's nest of wires without any wire labels, you should be aware, that's worst-case practice."

To ensure this doesn't happen, there are many standards to follow and panel designers and builders must avoid going their own way. A good source for these wiring practices and much more can be found in NFPA 79: Electrical Standard for Industrial Machinery, 2018 edition.



While it's just one of many standards automation engineers should use, NFPA 79 is a must-have for any machine builder, OEM, system integrator or end user with automated machines. It provides control design standards and how to install electrical equipment properly to protect operators, equipment and facilities from electrical hazards and fire.

The column points out that proper I/O termination does not just include where the wire is connected to the terminal in the control enclosure; it starts in the field where the cable must be properly routed and supported. Once the field cable enters the enclosure through a suitable cable gland or conduit fitting, it cannot just be terminated to an internal device such as a power supply or motor starter. Instead, it must pass through a terminal strip. Just as breakers and fuses must be properly sized for the expected ampacity, terminals must be properly sized.

For the full AutomationDirect Library post and link to the original article, go to <https://library.automationdirect.com/avoid-wiring-errors/>

Wiring Mounting and Routing

Cable Ties

Cable ties quickly and economically secure cables/wires as a group or to a surface. Most cable ties are self-extinguishing nylon for general purpose use; special-purpose styles such as metal detecting, releasable, and double-headed are helpful for special applications. Accessories are available for installing, mounting and marking wire ties.



Cable Glands

Cable glands provide cable entry into enclosures or electrical equipment, securing cables or wires and providing strain relief while maintaining enclosure sealing requirements.



Wire Duct

Wire duct is used to route, protect and/or organize electrical cables and wires, typically within a control panel. Rigid and flexible duct in a variety of sizes and styles offer installation flexibility; spiral wire wrap and braided sleeving allow easy wire grouping and protection.



Trough

Wire trough encloses and protects wiring runs from dirt, dust, oil, and dripping water, rain, sleet and snow. Carbon steel and stainless steel models with a range of NEMA ratings are available in various styles and sizes, including models with windows.



Conduit / Tubing

Conduit provides liquid-tight protection of wires and cables for motors, lighting, enclosures or anywhere environment is a concern. They are available in metallic, non-metallic and shielded styles suitable for use in many applications, including hazardous locations.



Tubing also provides liquid-tight protection of wires and cables. Tubing houses and protects wiring and cables, providing simple and fast installation. Available in a range of diameters, flexible non-metallic tubing is ideal for tight, non-linear wiring runs, including where liquid or ultraviolet resistance is required.



Industrial Labeling

Label making tools create labels used in industrial and commercial applications where moisture, chemical, and UV resistance are required. Industrial labeling machines can print using continuous tape, pre-sized labels, heat-shrink tubes, wire and cable wrap labels, small format safety labels, and more.



Cable Entry Systems

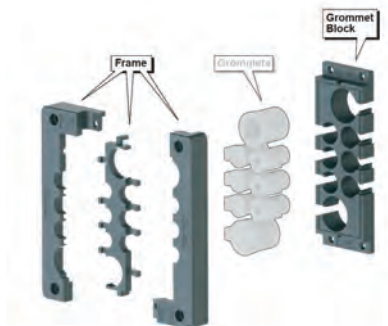
These systems provide safe cable entry into enclosures or electrical equipment, secure cables and provide strain relief while maintaining enclosure sealing requirements. Helpful cable entry systems typically consist of a split frame with ports and grommets, allowing installation of pre-made terminated cables without disassembling terminations.



Benefits of Cable Entry Systems

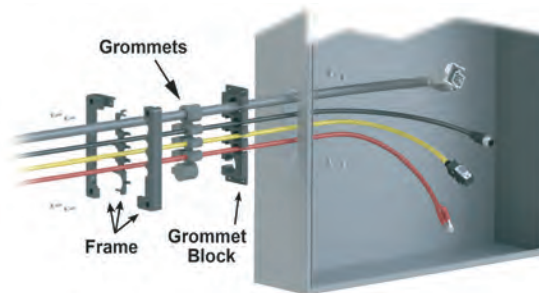
Cables entry systems such as the Murrplastik KDL/D series provide a safe and secure way to install pre-terminated wires and cables into enclosures and electrical equipment without having to disassemble them.

The KDL/D series is a multi-part split-frame system that clamps together with a grommet block, providing a high-density cable entry point with an IP65 environmental rating. This system allows for easy installation of preassembled cables as well as non-terminated cables.



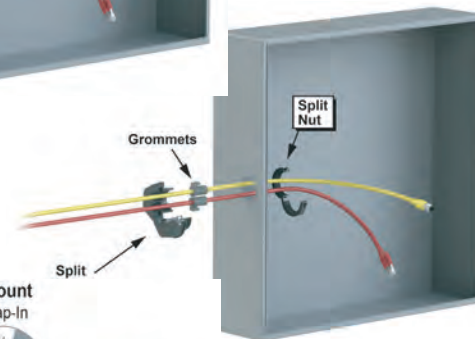
This cable entry system includes various frame options, including a selection of frame sizes and cable entry access points to fit application needs. The KDL/D series allows installation of up to 48 cables in a single frame.

The KDP/X series is a one-piece cable entry system that allows up to 29 non-terminated cables to be installed through an enclosure or other bulkhead surfaces; the robust frame design offers better mechanical stability.



KDL/D Split Frame Installation

KDL/D Mono Split Frame Installation



KDP/X One-Piece Frame Installation

Specialty Wiring

Multi-Port Junction Blocks

Single-wire connectivity in machines and installations is troublesome and error-prone. Multi-port junction blocks provide a simple, effective method of organizing machine wiring, as well as reducing cabling cost and termination errors.



Panel Interface Connectors (PIC)

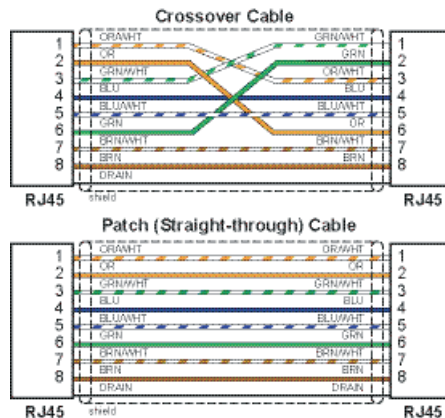


Panel interface connectors (NEMA / UL Type 4, 4X, 12 / IP65) mount on a cabinet to provide pass-through connections that allow safe interface with a PLC and other devices without opening the enclosure. Installing a PIC on an enclosure allows the operator to access the components inside the enclosure without opening the door. This removes the risk inherent in working with an open electrical panel.



Pre-Wired Connection Cables and Modules

Pre-wired PLC I/O module cables and termination modules save valuable time, keep installations clean and efficient, and use half the space at a fraction of the cost of standard terminal blocks. Other pre-wired cables include HMI, servo and stepper, field I/O expansion and VFD (drives) cables for specific AutomationDirect products.



Cat5e Patch Cables

Cat5e Ethernet patch cables designed for industrial use make connecting communication devices easier. These Ethernet patch cables reduce the effects of (EMI) electromagnetic interference, and are available with M12 and/or RJ45 connectors.



Quick and Clean Automation Implementation

In the midst of the COVID-19 pandemic during the summer of 2020, a St. Louis manufacturer wanted to utilize available factory space to produce pails filled with sanitizing wipes. They engaged with their longtime HVAC partner Rock Hill Mechanical Corporation (RHMC), and they were able to quickly develop the necessary automation and instrumentation systems using AutomationDirect products. Two members of the RHMC team, Josh Stefaniak and Blake Young, wrote an article published by Hydraulics & Pneumatics in June 2021 titled “Quickly Filling the Need”, describing how they developed these projects.



Efficient and clean wiring installation for PLC system

For the first machine, RHMC removed an old PLC and added hardwired switches, relays, and timers. This resulted in a functional, but largely manual, filling process. Improvements were made on the second machine, where RHMC salvaged what they could and then added an AutomationDirect CLICK PLC, supplemented with other parts and fittings.

Pulling Together Parts and Pieces

The project would rely on some preowned water jug filling equipment sourced by the manufacturer, repurposed to quickly fill pails instead. However, the first two machines were in disrepair and needed extensive rehabilitation.

Based on the success of these two machines, the manufacturers commissioned RHMC to create three more filler machines from the ground up, using knowledge gained from the first two builds—and increasing the automation to include associated conveyors, box/tub handling, a supply manifold, and movable filler heads.

PLC Performance

RHMC regularly works with building automation systems but had not created PLC projects from the ground up before this engagement. However, they found the AutomationDirect CLICK PLC and free software easy to use, with an excellent price/performance ratio. By using some online resources and AutomationDirect YouTube videos, the team quickly designed and built the control panel and developed the PLC program.

Using AutomationDirect PLCs and other devices enabled RHMC to support their customer on a time-critical project that also benefited society. PLC-based automation was key to quickly developing and improving these systems, and it has helped RHMC expand their expertise and grow their business.

For the full AutomationDirect Library post and link to original article, visit <https://library.automationdirect.com/quick-clean-automation-implementation/>



Later versions of the machines accept cases with the pails already in them, speeding up throughput

All photos on this page courtesy of Rock Hill Mechanical Corporation

If it's in your cabinet it's online at AutomationDirect.com



Programmable
Controllers



- Productivity[®]Open Arduino-compatible industrial controller
- Productivity1000 micro-modular PLCs
- Productivity2000 micro-modular PLCs
- Productivity3000 modular PLCs
- Do-more[®] BRX, H2 and T1H series PLCs
- CLICK[®] and CLICK PLUS micro brick PLCs
- Numerous I/O expansion modules available including discrete, analog, temperature and high-speed (depending on model)
- DirectLOGIC[®] components still available for maintaining legacy systems

YouTube



Universal
Field I/O

- Distributed I/O with Modbus TCP, EtherNet/IP, Modbus RTU, DeviceNET communication options
- Various combinations of discrete (AC, DC, relay, high-speed) and analog inputs and outputs available

PLC CPU and I/O Comparison	AutomationDirect Productivity2000	VS.	Allen-Bradley CompactLogix
Base (if required)	\$81.00 P2-04B		N/A N/A
Power Supply	\$79.00 P2-01AC		\$542.00 1769-PA4
CPU	\$273.00 P2-550		\$3,370.00 1769-L33ER
16 AC Inputs	\$113.00 P2-16NA		\$343.00 1769-IA16
16 24VDC Inputs	\$74.00 P2-16NE3		\$289.00 1769-IO16
8 Relay Outputs	\$54.00 P2-08TRS		\$354.00 1769-OW8I
8 Analog Input Channels (mA)	\$222.00 P2-08AD-1		\$943.00 1769-IF8
ASCII Comm Module	\$0.00 Built in to CPU		\$851.00 1769-ASCI
Modbus RTU Comm Module	\$0.00 Built in to CPU		\$940.00 1769-SM2
Total System Price with USB, Ethernet and Serial	\$896.00 		\$7,632.00 

All prices are U.S. published prices. AutomationDirect prices as of 8/23/2021.
Allen-Bradley retail prices taken from www.radwell.com 11/5/2020.



HMI/Operator
Interface

- C-more[®] operator interface HMI touch panels in various sizes up to 15 inches with wide screen options available
- C-more headless HMI - same functionality as C-more touch panels without display size restrictions
- C-more Micro text and touch panels - 3, 4, and 6-inch models available starting at only \$101
- C-more and C-more Micro HMI design software free to download
- ViewMarq[®] LED message displays
- ATLAS[®] industrial monitors

AC and DC Drives

- DURA^{PULSE} variable frequency AC drives up to 300hp, featuring GS20, GS20X, and GS4 series
- WEG CFW100 and CFW300 AC drives up to 5hp
- IronHorse[®] AC drives up to 30hp and DURAPulse GS20X drives up to 10hp available in a NEMA 4X enclosure
- IronHorse DC drives up to 3hp
- Cost-effective GS1 series VFDs up to 2hp
- Drive accessories
- Soft starters up to 480A



What our current customers think:
www.automationdirect.com/reviews

- Free PLC programming software (download)
- Free process control and measurement software (download)
- Free motion control software (download)
- Free HMI programming software (download)
- Free AC drive configuration and programming (built-in PLC) software (download)

Software

www.AutomationDirect.com 1-800-633-0405

Motors and Motor Controls

- IronHorse general purpose AC motors up to 300 hp
- Stainless steel AC motors
- IronHorse Farm Duty up to 10 hp
- IronHorse three-phase ODP motors up to 10 hp
- Marathon inverter duty AC motors up to 100 hp
- Marathon single-phase ODP motors up to 5 hp
- Compressor duty AC motors up to 5 hp
- DC motors up to 2 hp
- Motor controls and contactors up to 300 hp



Process

- Temperature and process controllers
- Digital and process panel meters
- PID, Batch PID, and Loop Control
- Temperature sensors and transmitters
- Pressure sensors and gauges
- Level sensors and controllers
- Flow sensors and transmitters
- Signal conditioners
- Pipeline valves
- Solenoid /media separated process pipeline valves
- Current to pneumatic (I/P) transducers
- Timer relays, counters and tachometers
- Power monitoring
- Cloud data logger with I/O



AUTOMATIONDIRECT.com



Safety

- Reer MOSAIC safety controllers
- IDEM® and Dold® safety relays
- Speed/Standstill safety relay modules
- Safety laser scanners
- Magnetic safety switches
- Magnetic coded safety switches
- RFID coded safety switches
- Light curtains from Contrinex, Reer and Datalogic
- Two-Hand controls
- Trapped key interlocks
- Safety mats and edges
- Safety bumpers
- Intrinsically safe isolators
- Hazardous location devices

Jose in

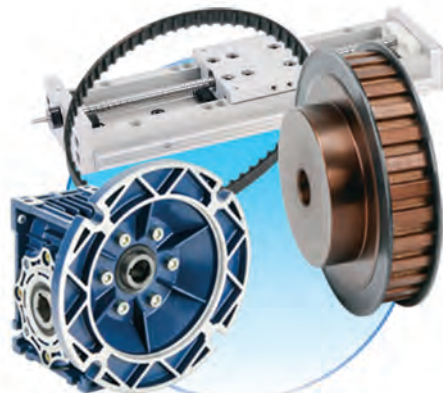
SAN DIEGO, CA wrote:

"I have been customer for about 15 years, I like a lot that is here. I can find almost all the devices for developing a full automation and control system project. I recommend working with AD!!! best regards."

Nathan in

BELLEVUE, OH wrote:

"I've been using AutomationDirect as a supplier for over 10 years and have had nothing but good experience with them. Their product availability and value is by far the best in the industry. It's exciting to see their product line expanding rapidly and I've been choosing them more and more often because of it."



Power Transmission

- Worm gearboxes
- Helical gearboxes
- Precision gearboxes
- Shaft mount gearboxes
- Timing belts and pulleys
- Couplings and bushings
- Shafting and shaft supports
- igus polymer bearings
- GAM rack and pinions
- Linear bearings and rail



Relays & Timers

- Electro-mechanical relays
- Intrinsically safe relays
- Phase monitoring relays
- Alternating relays
- Optocoupler relays
- Pump seal failure relays
- Solid state relays
- Relay sockets and accessories
- Timer relays
- Counters
- Tachometers
- Motor control relays
- Force-guided relays



Tools

- Multimeters and testers
- Wera screwdrivers and torque tools
- Wera wrenches, ratchets and sockets
- Pliers, stripping and crimping tools
- Cable tie tools
- Hole cutting tools
- RUKO grinders and burrs
- SapiSelco® wire ties
- AutomationDirect interchangeable die crimping tool, self-adjusting crimper and rotatable die crimpers

Stepper Systems

A Complete 2-axis SureStep® Stepping System* for less than just the competition's stepping drives.

AutomationDirect

VS.

Competition

Ours includes:

- Two Microstepping Drives (STP-DRV-6575)
- Two Stepper Motors (STP-MTR-23079)
- One Power Supply (STP-PWR-3204)
- Two Extension Cables (STP-EXT-020)

\$460.00

Complete 2-axis system SureStep® NEMA 23 System Long Slack



\$880.00

(p/n E-DC)
For 2 Drives



All prices are U.S. published prices. AutomationDirect prices as of 8/23/2021.
Parker prices are from <http://buy.compumotor.com> 11/5/2020. * All components sold separately.



Identification

- Imagers capable of reading 1D/2D/DPM images
- All handheld scanners are industrial grade and can read all common barcodes such as Code 128 and QR codes
- Convert code into human readable characters and transmit over communications network



Motion Control

- ProductivityMotion controller
- SureServo™2 drives and motors, up to 15kW
- Stepper and servo gearboxes
- SureStep® drives and NEMA motors
- Stepper motor linear actuators
- Leadshine® stepper drives
- Linear slides
- Koyo® encoders
- CUI Devices® Kit Encoders
- XYZ Ganties



Sensors

- Photoelectric sensors
- Limit switches
- Precision limit switches
- NEMA limit switches
- Laser sensors
- Color and contrast sensors
- Area sensors
- Encoders
- Current and voltage sensors
- Pressure sensors and gauges
- Temperature sensors, switches, transmitters and thermometers
- Liquid level sensors
- Flow sensors
- Ultrasonic sensors
- Fork sensors
- Linear position sensors



Circuit Protection

- Eaton UL 489 miniature circuit breakers
- Fuji UL 489 molded case circuit breakers
- Eaton UL1077 supplementary protectors
- Edison fuses, fuse holders and fuse blocks
- Socomec, Gladiator and Bryant disconnect switches
- Bryant UL 508 manual motor controllers
- Socomec Manual Transfer Switches



Terminal Blocks and Wiring

- Electrical hook-up wire / building wire
- Konnect-It® and DINnectors® terminal block systems
- Edison power distribution blocks
- Bryant power wiring devices
- Wire duct and tubing
- Cable entry systems for enclosures
- Wire end connectors, cable glands, connectors and fittings
- ZIPport® connectors
- Multi-wire connectors
- Sensor cables
- DYMO XTℓ label makers and labels
- General- and special-purpose cable ties















All of our cable is now available cut to your specified length so you can eliminate waste and purchase only what you need - **plus it's cut and shipped FAST!!**

Types of cable we offer:

- Flexible Portable Cord
- RS-485 / RS-422 / RS-232 Cable
- Flexible Control Cable
- Tray Cable for VNTC and Power Machine
- 600V Control Cable
- VFD Cable and
- VFD / Servo Cable
- DLO / RHH Cable
- Large Gauge MTW
- Instrumentation Cable
- Continuous Flexing: Control, Tray Rated, Motor Supply, Control and Signal, Industrial Ethernet, and Profnet Cables
- Cat5e Industrial Ethernet Cable
- ProfiBus Cable
- Sensor / Actuator Cable
- Thermocouple & RTD Extension Cable

Minimum lengths of 10ft unless otherwise indicated

Enclosures	AutomationDirect Hubbell/Wiegmann Price/Part Number	US.	Hoffman Price/Part Number	
NEMA 1 wall mount 24 x 24 x 08"	\$289.00 N1C242408LP		\$354.01 A-24N24BLP	
NEMA 12 wall mount 20 x 16 x 08"	\$367.00 N12201608		\$491.96 A-201608LP	
NEMA 12 free-standing mount 60 x 60 x 12"	\$2,487.00 N12606012		\$2,849.47 A-606012LP	
NEMA 4 wall mount 20 x 20 x 06"	\$502.00 N4202006		\$622.59 A-20H20ALP	
NEMA 4X wall mount 20 x 20 x 06"	\$892.00 SSN4202006		\$1,518.12 A-20H2006SSLP	
NEMA 4/12 wall mount 36 x 24 x 08"	\$436.00 N412362408C		\$621.03 C-SD36248	

*All prices are U.S. published prices. AutomationDirect prices as of 8/23/2021. Hoffman prices are taken from: www.alliedelec.com 11/5/2020. Prices may vary by dealer. Many other part numbers are available from all vendors.



- Over 7,000 NEMA rated enclosures from Saginaw, Hammond, Wiegmann, Integra and AttaBox
- Stainless steel, carbon steel and aluminum enclosures
- Polycarbonate enclosures and PVC enclosures
- Thermoplastic ABS enclosures
- NEMA rated fiberglass, polycarbonate enclosures
- Sanitary Enclosures
- Heating, cooling and climate control
- Lighting
- Over 2,000 enclosure accessories

Enclosures

AutomationDirect.com
Product Engineering and Development



AutomationDirect.com HQ campus and warehouses

AutomationDirect
3505 Hutchinson Rd
Cumming GA 30040

Our campus is located about 45 minutes north of Atlanta, GA, USA. [We're all here](#)
- our sales and technical support teams, purchasing, accounting, and of course our multiple huge warehouses and speedy logistics team.

- Honest up-front pricing (no gimmicks)
- Quick delivery - order today, it ships fast!
- Top technical support as rated consistently from our customers
- FREE shipping on orders over \$49



AutomationDirect.com has been a leader in providing affordable, quality industrial control products to the U.S. and Canada for more than two and a half decades.

As a privately-held efficiently run company, we take pride in serving our customers the way they want to be served - honestly and fairly. We do everything we can to accomplish this day in and day out.



 **AUTOMATIONDIRECT**.com
www.AutomationDirect.com 800-633-0405