

ABB Solutions

Low Voltage Products & Systems



Industrial Controls

Contactors
Overload Relays
Starters
Electronic Motor Protectors
Manual Motor Protectors
Miniature Controls
Softstarters & Electronic Brakes
Liquid Level Controls
Electronic Timers / Controls, Flashers
Current Sensors & Monitors
Tower Lighting
Safety Relays
Pilot Devices
Limit Switches
Cam Switches
Transformers

Circuit Protection Devices

Miniature Circuit Breakers
Circuit Breakers
Power Breakers
Disconnect Switches
Arc Guard Systems
Surge Protection
Residual Current Devices

Automation

PLC® Wiring Systems
Power Supplies
Electronic Interface
Sensors
Micro PLCs & Remote I/Os
Modular PLCs

Wire Management & Connection

Terminal Blocks
Power Distribution Blocks
PCB Terminals & Connectors
Cable Management Systems

Systems

Low Voltage Network Quality (LVNQ)
Power Factor Correction
Harmonic Correction
Power Distribution Systems
Motor Control Centers

ABB, Entrelec, and SSAC low voltage products and systems are UL recognized or UL listed, CSA certified, and comply with VDE and IEC specifications. Our products also feature approvals by many other national and international authorities.

Products comply with the two applicable EEC directives:

- LVD (low voltage)
 - EMC (electromagnetic compatibility)
- Products have the CE mark in accordance with the product directives.

All ABB and SSAC production sites have received ISO 9001 approval and all major Entrelec manufacturing facilities are registered to the ISO 9001 international quality standard.



ABB Solutions

ABB, a powerful source for control solutions, offers the widest range of low voltage products and systems. With nationwide sales offices, ABB provides immediate service and personalized support.

Our broad product lines include high quality solutions for:

- Industrial Controls
- Circuit Protection Devices
- Automation
- Wire Management & Connection
- Systems

All of our sales engineers and technical support personnel are ready to help you to select the best solution for your requirement.

At ABB, we continue an aggressive research and development program. As a result, innovative new and improved products ensure our continued competitiveness.

ABB products meet the highest quality standards worldwide, including UL, CSA, VDE, IEC, EN, and other approvals. All ABB manufacturing sites have received ISO 9001 approval. Our mission is to be a leader in supplying high quality products and services that consistently meet the needs and requirements of our customers.

For your nearest sales office contact:

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www.abb-control.com

ABB ENTRELEC

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ABB SSAC

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www.ssac.com



Industrial Controls

ABB introduces its innovative A-Series contactors and overload relays, combined with an expanded line of pilot devices, starters, manual motor starters, and sensors. Reliability and superior quality are built into every unit, assuring consistent performance for the most demanding applications.

Contactors



Our new line of contactors provides complete coverage of virtually any contactor requirement from 9 A to 720 A (5 HP to 600 HP UL/CSA motor switching at 480 V) or 21 A to 900 A (UL/CSA general purpose). All meet IEC947-4-1 requirements and carry the CE mark.

Electronic Motor Protectors



Three phase voltage monitors protect against motor failure caused by phase loss, phase reversal, over, under, and unbalanced voltages. Universal design protects any size motor. Voltage monitors not affected by regenerated voltages. Solid-state overload protects against phase faults plus overloading. Thermistor relays protect motor windings with integrated PTC resistor sensors. Power factor relays monitor operation of single or three-phase motors. Select from a full range of adjustment, mounting, and connection options.

Manual Motor Protectors



A broad range of units available to protect 3-phase motors up to 100 A/75 HP. UL listed and CSA certified for group motor installations and self-protected combination motor controllers. Short-circuit protection, adjustable overload protection, and manual disconnect capability. Common bus bars, auxiliary contacts, and many other standard accessories available.

Starters



ABB provides a full range of motor starters, open type or enclosed, with UL type 1, 12, 4, 4X, 3R and explosion proof enclosures. UL/CSA combination type starters can be provided with short circuit coordination up to 85 kA using our Isomax molded case circuit breakers and 200 kA using our PowerLine fusible disconnect switches. ABB starters are available for most required motor starting methods.

Miniature Controls



Includes contactors, overload relays, and control relays. Panel or DIN rail mounting. Touch safe design protects personnel against accidental touch. Low power consumption coils reduce temperature levels. Wide range of accessories.

Industrial Controls

Softstarters & Electronic Brakes



Ideal for controlled starting of motors. Type PSS features solid-state design to eliminate moving contacts in the power circuit, a feature particularly suited for applications with many starts per hour. Power electronic brakes assure smooth deceleration and elimination of excess braking current, extending motor life.

Electronic Timers & Flashers



Choose multifunction and single function models from the industry's widest selection of timers and flashers. New ProgramaCube™ offers standard and custom time delays and functions at standard lead times. Popular packages include 8 and 11 pin plug-ins, surface mount 2" x 2" timing modules, DIN rail mounting 17.5 and 22.5 mm wide, encapsulated or open PC board designs. Relay outputs to 15 A or solid-state outputs to 20 A. Knob, fixed, or accurate switch adjustable time delays with repeat accuracy to 0.1%. Solid-state flashers designed for 100 million operations.

Liquid Level Controls, Alternators, Safety Relays



Liquid level relays control the level of conductive liquids. Fill or drain operation. AC voltage on the level probe prevents contamination. Octal plug-in, open PC board, or DIN rail mounting designs available. Alternating relays share the running time of two pumps or motors. Safety relays provide reliable protection for operators and equipment in industrial environments.

Current Sensors & Monitors



Current monitors sense jams, broken belts, failed lamps, and more; overcurrent, undercurrent or linear output. Select single or dual trip point controls or analog output transducers. Wide range of designs sense milliamps to hundreds of amps using an attached or external current transformer. Unique current indicator shows operator when load is operating. Features include relay or solid-state output, fixed or knob adjustment, surface or DIN rail mounting.

Switches, Pilot Devices



Compact, 10 A to 200 A rotary cam switches rated to 600 V. Accessories include handles, nameplates, and more. Pilot lights include 22 mm and 30 mm lights and pushbuttons ready for panel mounting or enclosure mounted applications. Limit switches, made from plastic or metal material, feature various ranges to cover many applications.

Transformers

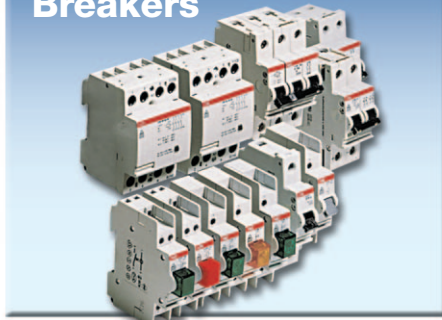


Select from two families of industrial control transformers, one family available with the CE mark. Primary voltage rating to 600 V. Transformers feature epoxy encapsulated coils through 750 VA, high quality silicone steel laminations, and optimized performance.

Circuit Protection Devices

Circuit breakers, disconnect switches, and lightning and overvoltage surge protection products comprise a complete offering to guard against equipment damage in power systems, computer networks, circuits, and data lines. Our products offer the best solution for rapidly restoring the service condition in case of a fault and, at the same time, offer maximum protection of the electrical installation.

Miniature Circuit Breakers



Miniature circuit breakers offer a compact protection solution. Application-specific trip characteristics offer current-limiting short-circuit and overload protection from 0.1 A to 125 A. For the worldwide market, the MCBs carry UL, CSA, IEC, CE, and many other agency approvals. UL 1077 and UL 489 listed versions available.

Circuit Breakers



Ideal for all electrical power generation and distribution applications. Isomax molded case circuit breakers, UL/CSA rated 600 VAC, feature continuous currents from 15 A to 2500 A. Emax power circuit breakers, UL rated 600 VAC, operate with continuous currents to 5000 A. Extended working life of all internal parts ensures high reliability and continuous operation.

Disconnect Switches



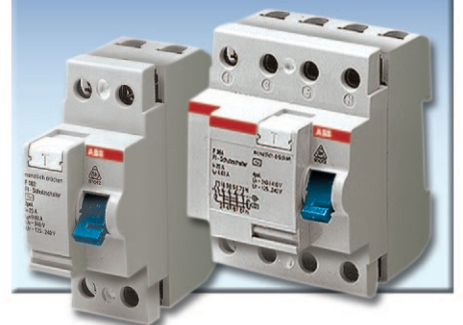
Non-fusible and fusible heavy duty disconnect switches in 16 amperage sizes from 16 A to 3150 A, UL/CSA rated 600 V, IEC rated 690 V. The design provides flexibility, safety, and high performance in an extremely compact size. Choose ABB disconnect switches for all switching applications from industrial motor control to construction safety switches.

Arc Guard Systems



Arc Guard Systems disconnect the energy source in the event of an arcing fault. A trip signal causes a circuit breaker to remove power, protecting equipment and personnel.

Residual Current Devices



Residual current devices provide equipment protection from fires and electrocutions caused by ground faults. These compact units feature DIN rail mounting and are available in a wide array of thresholds: 10, 30, 100, 300, and 500 mA. UL, CSA, IEC, CE, and many other agency approvals.

Surge Protection

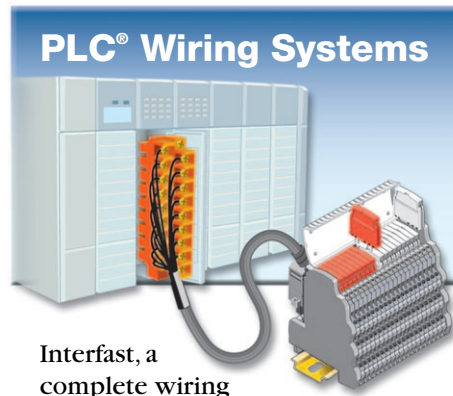


Lightning current arresters guard against equipment damage from direct and nearby lightning strikes. Overvoltage arresters divert surge currents to protect computers, power supplies, instruments, and data lines.

Automation

Automation products improve productivity, simplify packaging, and reduce the time to get your products to market.

PLC® wiring systems include prewired and tested PLC cables plus hundreds of interface assemblies to allow you to easily connect your PLC to field equipment. Compact, rail mounted switching power supplies, UL/CSA rated Class I, Div. 2, offer fast assembly and high efficiency.



Interfast, a complete wiring system including prewired PLC cables plus ready-to-go interface modules, allows you to easily connect all PLCs to control equipment. Replaces point-to-point discrete wiring with prewired and tested connectors and cables.



Switching power supplies, 5 - 48 VDC, 0.3 A - 20 A. Compact, 22.5 mm to 220 mm wide. Models are CE marked, UL 508, and CSA rated. No derating necessary. 0.3 A to 5 A Class I, Div. 2. Power factor correction available on several models.



Electronic Interface

Extensive selection of AC and DC operated relays and optocouplers for input output isolation. Analog converter family, UL/CSA rated Class I, Div. 2, meets your PLC® I/O requirements with hundreds of conversions. Includes universal analog converter, RMS voltage or current, thermocouple, PT 100 probe, and more!



Sensors

Family includes proximity, photoelectric, and ultrasonic sensors. Proximity sensors feature inductive or capacitive design for non-contact sensing and long life. Photoelectric sensors offer diffused mode or retro-reflective models. Ultrasonic sensors provide switch or analog outputs.



Micro PLCs & Remote I/Os

Select our flexible analog and digital I/O modules, for both dedicated local PLC applications or remote I/O fieldbus networks. Add our CPU to our I/O modules to create a powerful micro PLC. Add our fieldbus node to our I/O modules to control remote I/O locations. CPUs, fieldbus nodes, and I/O modules are UL/CSA rated, Class I, Div. 2.

Model 40 and 50 series PLCs, economical and powerful, feature built-in power supplies and I/O. Convenient plug-in connectors simplify connections. The series 40 is locally expandable while the series 50 is locally and remotely expandable.



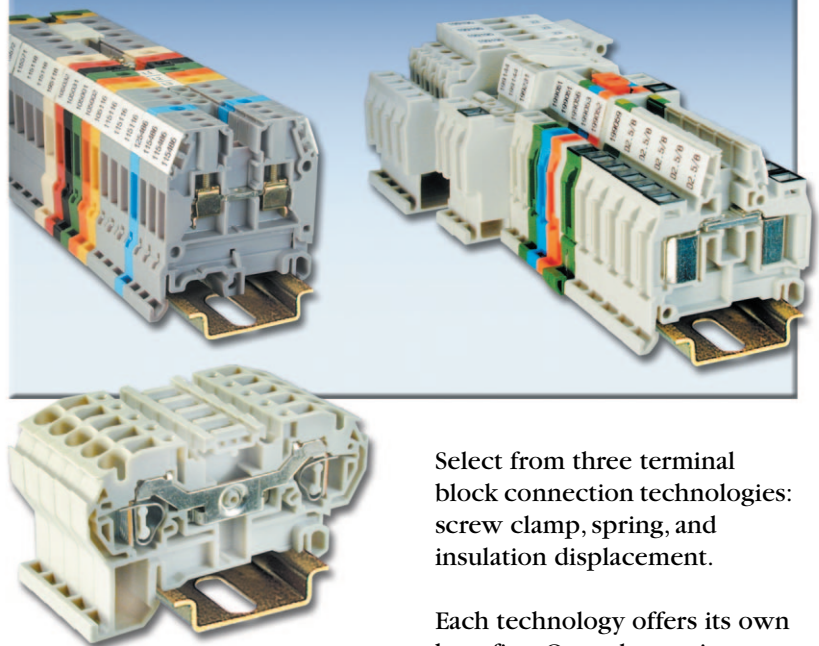
Modular PLCs

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Wire Management & Connection

ABB offers three terminal block connection technologies — screw clamp, spring connection, and insulation displacement to answer every design, packaging, and testing requirement. Each of these technologies are also present in our complete line of printed circuit board (PCB) terminal blocks and connectors. To complement our connection products, we offer wire management products including wire duct, cable ties, spiral wrap, DIN rail and accessories, and marking equipment.

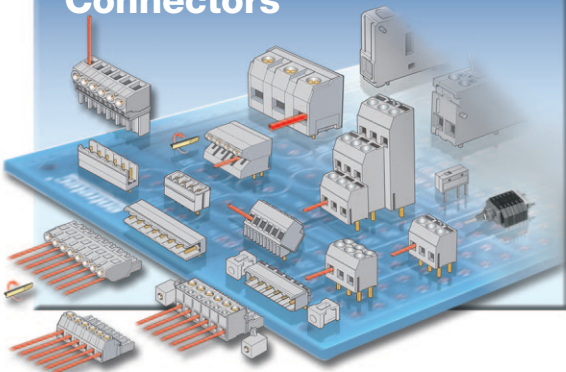
Terminal Blocks



Select from three terminal block connection technologies: screw clamp, spring, and insulation displacement.

Each technology offers its own benefits. Our sales engineers and technical support personnel will help you to choose the right terminal block technology for every connection application.

PCB Terminals & Connectors



Our complete line includes over 2,500 printed circuit board terminal blocks and connectors, specialty blocks, accessories, and more! Select the technology that meets your design needs: screw clamp, spring connection, or insulation displacement connection (IDC).

Products include wire duct, DIN rail and accessories, cable ties, and spiral wrap.

Use to solve wire management problems in electrical panels and switchboards.

Cable Management Systems



Power Distribution Blocks

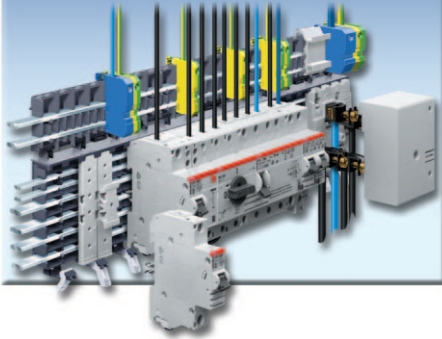


Select from a wide range of rail mounted power distribution blocks with maximum ratings from 80 A to 310 A. Single pole models feature finger contact protection to IP 20 and multi-block jumpering capabilities. Multi-pole bus systems are also available.

Systems

ABB employs proven components in power distribution, motor control, and power quality. Power distribution systems are available up to 5000 A and 600 V. A motor control system can be combined with a power distribution system or provided as a standalone system. Custom control packages feature timely availability.

Power Distribution Systems



The Smissline provides a versatile and flexible means of distributing power to a wide variety of electrical components. Ideal for group motor installations, power distribution panelboards, and other applications. UL and IEC approved for up to 150 A and 600 V.

ABB Low Voltage Network Quality products improve the power quality of your low voltage network by eliminating harmonics and improving power factor. This broad product line includes capacitors, automatic capacitor banks, thyristor switched capacitors, power factor controllers, and harmonic active filters. Capacitors feature a self-healing design which significantly lengthens their life.

Low Voltage Distribution Systems



Low voltage power distribution switchboards are equipped with ABB Isomax and Emax breakers. Modular construction and a flexible bus design make the system easy to construct, install, and expand with additional controls, starters, and instrumentation compartments.

Low Voltage Network Quality Capacitors



Systems

At ABB, we help you define your needs and then cost effectively design or retrofit systems tailored to your demands. All ABB products guarantee quality, reliability, and personnel safety.

Control Panels, MCCs, Distribution Systems



The Modular New System (MNS) offers compact, space saving design and easy project engineering through the use of standardized components. MNS systems are suitable for applications requiring the distribution and use of electrical energy as required by utility companies, power plants, oil refineries, off-shore drilling, and many other industries.



FAX BACK

For More Information

Please fill in the form below, check the items which apply and fax this questionnaire to us.

FAX: 800-862-5066

Name _____

Company _____

Address / Mail Stop _____

City / State / Zip Code _____

Telephone _____

Fax _____

E-mail (for new product information) _____

Please have a sales engineer call me.

Please send your free ABB:

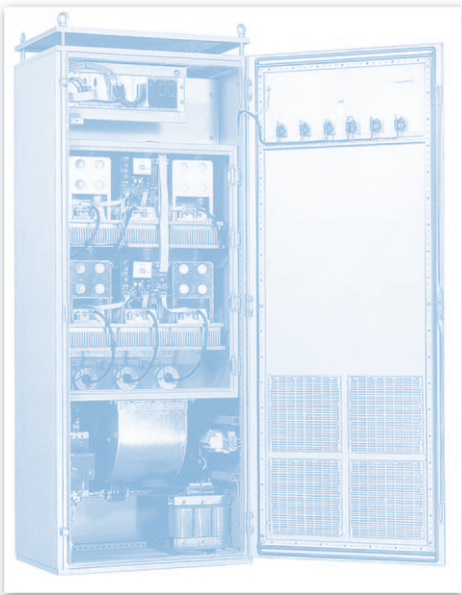
CD-ROM Catalog

Product Selector

Please send your free Entelec:

CD-ROM Catalog

Product Guide



I am interested in the following products:

Industrial Controls

- Contactors
- Overload Relays
- Starters
- Electronic Motor Protectors
- Manual Motor Protectors
- Miniature Controls
- Softstarters & Electronic Brakes
- Liquid Level Controls
- Electronic Timers / Controls, Flashers
- Current Sensors & Monitors
- Tower Lighting
- Safety Relays
- Pilot Devices
- Limit Switches
- Cam Switches
- Transformers

Circuit Protection Devices

- Miniature Circuit Breakers
- Circuit Breakers
- Power Breakers
- Disconnect Switches
- Arc Guard Systems
- Surge Protection
- Residual Current Devices

Automation

- PLC® Wiring Systems
- Power Supplies
- Electronic Interface
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- Micro PLCs & Remote I/Os
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Wire Management & Connection

- Terminal Blocks
- Power Distribution Blocks
- PCB Terminals & Connectors
- Cable Management Systems

Systems

- Low Voltage Network Quality (LVNQ)
- Power Factor Correction
- Harmonic Correction
- Power Distribution Systems
- Motor Control Centers

Other (please specify)

- _____
- _____
- _____
- _____

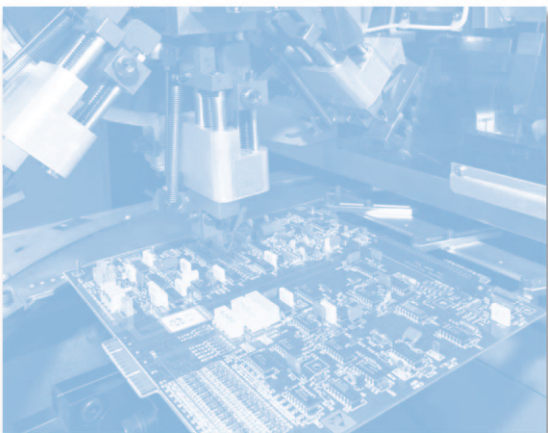




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