



Engineered installation products Solutions for control panel applications

Solutions for control panel applications

ABB introduces a truly global range of engineered installation products to complement its industry leading circuit breaker, switch, DIN-rail and control products technology.

Access to the world class wire & cable management and low voltage connection expertise of its new North American subsidiary, Thomas & Betts, has enabled ABB to complete a range of installation products that offer panel builders, systems integrators and machine control builders a "complete panel solution".

In fact, ABB now offers more of the components you need every day than any other single manufacturer in the world. Trust ABB for all your control panel needs.

Your challenges. Our solutions

ABB understands the everyday challenges you face. We are focused on providing you with a complete package of engineered installation products that:

- will protect your critical processes in the most demanding conditions whether liquid ingress, corrosion, extreme temperatures or other harsh environments
- will reduce your installation cost and number of part numbers
- · are easy to order
- are available at your local ABB authorised CPS distributors

What new products do we offer?



Spec-Kon® cable ties

ABB offers one of the industry's broadest ranges of innovative solutions for fastening, bundling and securing wire and cable, including the trusted Ty- Rap®, Ty-Fast® and Spec-Kon® cable tie brands in multiple sizes, colors and specialty materials for demanding applications. Our range also covers many mounting bases and easy-to-use tools



Wiring Ducts

Premium quality duct for point-to-point wiring ideal for electrical enclosures, machine building and data/communications panels and cabinets. Offer includes imperial, metric and DIN duct in standard materials and specialty materials such as halogen free



Shrink-Kon® heat shrink tubing

A full line that includes insulated and non-insulated terminals, splices, wire joints, disconnects, ferrules, heat-shrinkable terminals, splices and disconnects in imperial and true metric sizes. Including at complete set of tooling.



Adaptaflex® cable protection

ABB is the global leader in nylon cable protection systems with Adaptaflex brand of nylon and metallic conduits and fittings available through your local wholesaler.



Spec-Kon® metric wire terminals

A full line that includes insulated and non-insulated terminals, splices, wire joints, disconnects, ferrules, heat-shrinkable terminals, splices and disconnects in imperial and true metric sizes. Including at complete set of tooling.



Color-Keyed® metric compression connectors

AWG, IEC and DIN compression connectors, made of the highest-grade materials offering high conductivity/low resistance, meet or exceed all industry standards. Range includes straight and angled connectors and splices, and, a full range of mechanical, pneumatic, and battery operated compression tools.

Circuit protection & control

Circuit breakers

Fused switches

Non-fused switches

Operating mechanisms

Contactors

O/L relays

Pilot devices

Power supplies

PLC's

CAM switches

Relays & timers

HMI

Surge protection

Enclosures

Engineered installation products

1 Cable ties

2 Heat shrink

4 Wire terminals

5 Cable lugs

3 Flexible conduit & fittings

6 Wire duct

7 Cord & cable fittings, braided connectors



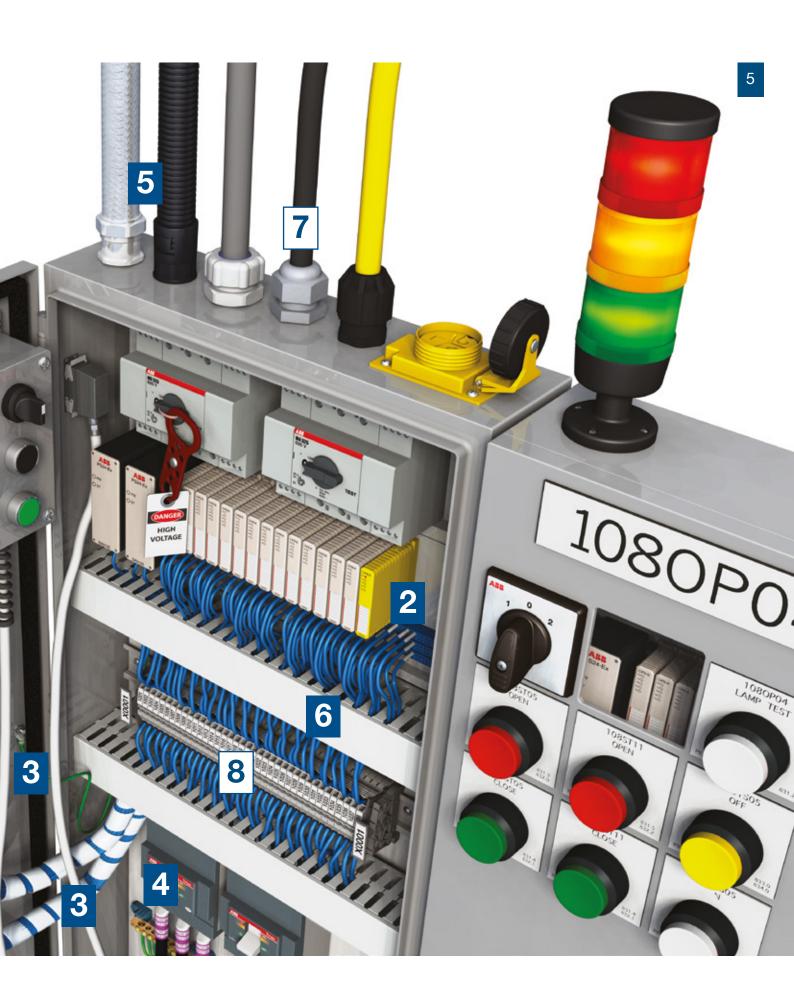
Spec-Kon®

Spec-Kon®

Color-Keyed®

(Adaptaflex)









Complete range of cable ties for control panel applications

- Available in natural and black UV-resistant
- Available in different packaging quantities to respond to the user's need
- Available in different lengths and tensile strengths:
- 80N 100-140-160-200mm
- 180N 140-200-300-370mm
- 220N 188-215-250-300-370mm
- 540N 300-370-450-750mm
- 780N 776-912mm





Tooling

- Sophisticated, ergonomic fastening installation tools and easy to use cable ties dispenser

Part of a broad range of other engineered fastening solutions:

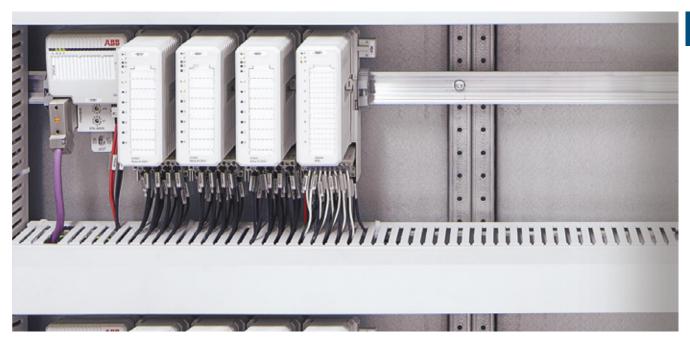








Wiring ducts Manage your cable and wires efficiently



Easily allows for organization, pulling and separation of cables



Slotted Wiring Duct (PVC & Halogen-Free)

- Height: 17 30 40 60 80 100 mm
- Width: 15 25 40 60 80 100 120 150 mm
- Length: 2 meters, 56 part numbers
- Slots: Narrow (4 mm), Wide (8 mm)
- Specs: Color: Grey RAL 7030. Raw material: Ca-Zn stabilized PVC, Pb-free and RoHS compliant



Wiring Duct with circular knockouts

- Dimensions: $50 \times 50 \text{ mm}$ and $100 \times 60 \text{ mm}$
- 2 m standard length, 2 part numbers
- Circular knockouts to facilitate branch connections using rigid and corrugated conduits
- Specs: Color: grey RAL 7030, UL94 V0 (self-extinguishing)
- Ideal in applications where cables require greater protection against external agents (e.g. in the elevator well)



Flexible Wiring Duct

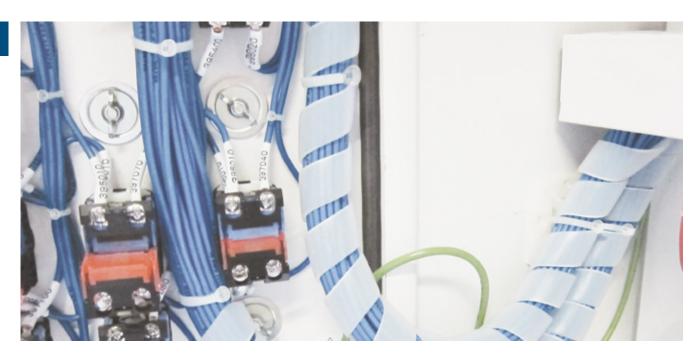
- Dimensions: 12.5 - 16 - 20 - 25 - 30 - 40 - 50 mm

- Length: 5 meters, 7 part numbers

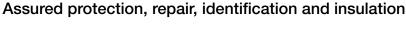
- Specs: Color: Grey RAL 7040. Material: UL94 V2 (self-extinguishing)

- Ideal in applications where twisting / bending is needed

Shrink-Kon® heat shrink tubing A broad range of heat shrink products to cover every application







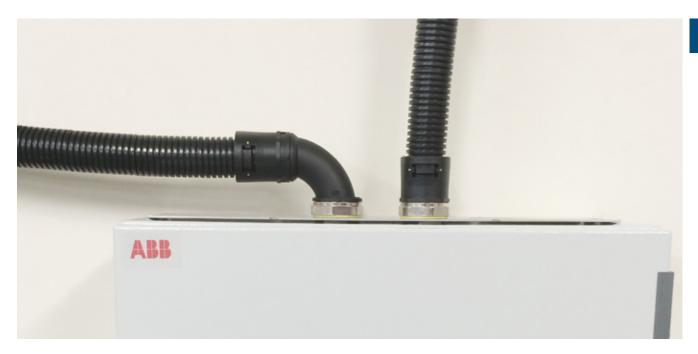
Flexible product with rapid shrinkage for effective electrical insulation. With a broad range of colors, packaging, and shrink ratios, Shrink-Kon® insulation products should meet all of your heat shrink needs.

Available in:

- Different wall thicknesses: thin, medium, thick
- Options: reels, cut lengths, dispenser boxes, pre-cut bags
- Shrink ratios: 2:1, 3:1, 4:1
- Different colours
- Pre moulded parts: designed to seal end of cables against ingress of moisture and contamination
- Depending on the application heat shrink products with or without glue at the inside can be offered (dual)



Adaptaflex flexible conduits systems For critical power and data cable protection





Broadest range of metallic and non-metallic conduits & fittings

- More than 6.000 metallic and non-metallic products
- Solutions for every application: construction, machinery infrastructure and mechanical
- Approved by a range of recognised industry standards



With our innovative one piece Adaptalok ATS fitting, makes installation times very fast and extremely reliable. This system also benefits from the highest IP rating possible.



- Nylon: various polyamide (PA6, PA11/12), PVC and polypropylene (PP) materials
- Metallic: galvanized or stainless steel with/without PVC, polyolefin covering
- Light weight to heavy weight gauge for extra strength with nominal conduit sizes 10mm -106mm
- High specification series for enhanced low fire hazard properties, EMI screening and incorporating high fatigue life
- Overbraided options are available for use in abrasive environments







Complete range of metric terminals

- Complete range of terminals: non-insulated, insulated, male and female disconnect, rings forks, pins, blades, butt splices, bullet connectors.
- Longer, molded barrels, tin plated electrolytic copper and a welded seam mean an easy installation and reliable termination.

Safety & long term reliability

- All terminals are made of electrolytic copper, have butted or brazed (non-insulated, DIN, heat-shrink) seams and to provide both safety and long term reliability.
- Certifications: RoHS compliancy, REACH

Available in:

- Molded easy entry, internal serrations, insulation grip (nylon), proper identification
- Non-insulated
- Insulated: nylon, vinyl and polycarbonate
- Terminals: non-insulated, insulated, male and female disconnects, rings, forks, pins, blades, butt splices, bullet connectors
- Special terminals: "easy entry" (vinyl insulated), "heat-shrink", "double crimp" (nylon)

Tooling

- Standard range hand tool
- Stripping tools



Color-Keyed® solderless metric compression connectors More copper + better crimp = a better, more reliable connection





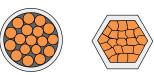
Solid, homogenous connection

System utilizing compression tools with matching dies that forms connector & wire to provide an optimum electrical bond between connector & conductor.

System solution to provide the best and most reliable connection.



Color Keyed® is a system solution designed to meet the most stringent IEC Class A testing requirements. Our Color-Keyed® lugs are made of 99.9% pure, oxygen free copper. The Color-Keyed® color coded crimping system assures the right die is used with the right lug resulting in an accurate, reliable crimp.



before - after: hex crimp

Assured high conductivity, exceeding IEC 61238-1

Circumferential compression creates large area of high pressure contact between cable and connector which in turn result in low resistance and high pull-out values.



- Straight 1 hole / 2 hole : wire sizes from 10mm² till 400mm² with metric bolt hole from M5 to M24
- 45°: Wire sizes from 10mm² till 240mm² with metric bolt hole from M6 to M16
- 90°: Wire sizes from 10mm² till 240mm² with metric bolt hole from M6 to M16

Tooling

- Special hand and hydraulic head tools available for quick & reliable compression





Contact

ABB Ltd

Low Voltage Products Division Tower Court Foleshill Enterprise Park Courtaulds Way Coventry CV6 5NX

Tel: +44 (0) 2476 368 500 Fax: +44 (0) 2476 368 401

E-Mail: LV.enquiries@gb.abb.com

www.abb.co.uk/lowvoltage

Note

We reserve the right to make technical changes or modify the contents of this document without prior notice. ABB does not accept any responibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document en in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents - in whole or in parts - is forbidden without prior written consent of ABB.

Copyright 2015 ABB - All rights reserved