

QUICK REFERENCE GUIDE

### **Data center solutions**

Supporting the reliability of electrical systems with a focus on efficiency and sustainability.



Over the last decade, the world has undergone a transformative digital revolution. At the core of this transformation are data centers, processing and storing massive amounts of data per minute to keep up with the ever-increasing demand for information. With millions of customers relying on data centers for access to information, uptime is critical to data center operations.

ABB understands these challenges and is committed to providing an innovative, holistic portfolio of installation products to build and maintain critical electrical systems.

At a time when data centers cannot leave their uptime to chance, our 100+ years of electrification experience across the globe makes ABB your trusted, reliable and proven technology partner to achieve a more productive and sustainable future.



#### Reliability

A data center has 15-30 times the electrical density of a commercial building, and the costs of the electrical

system can approach 70% of overall project cost. Once installed, these complex systems must consistently deliver 24/7 uptime. ABB installation products provide reliable connections and secure cable management to help data centers protect against equipment outages and downtime.

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#### **Efficiency**

Data center efficiency means faster speed to market at start-up as well as the ability to quickly address changing customer needs. The power system must meet the "always-on" demands of today while being flexible enough to accommodate future IT loads. ABB manufactures many of its key brand products in North America

accommodate future IT loads. ABB manufactures many of its key brand products in North America for quick response to data center needs, and the new Lug Express™ program offers fast turnaround on standard and custom lugs to react to urgent requirements. ABB has also identified products vital to the data center market and built up inventory to meet demand for these critical items.

Data centers are leaning into sustainability
with the goal of reducing consumption,
improving efficiencies and using
environmentally safe materials. ABB supports

environmentally safe materials. ABB supports sustainability by using recycled materials, offering halogen-free solutions to ensure a sustainable installation and focusing on innovative product development that emphasizes circularity through product durability, reliability and recyclability.

### **Data center solutions**

# Installation products for data centers



#### Color-Keyed® compression lugs

- · Color-coded connectors and compression tool dies make selecting the correct die easy, helping ensure proper installation for reliability and safety
- Available in both copper and aluminum in one- and two-hole configurations
- 45° and 90° angled lugs
- Stacking lugs
- · Narrow tongue designs offer space savings
- · Comprehensive tooling portfolio includes the widest variety of mechanical, battery-powered and electrically powered hydraulic compression equipment



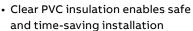
#### Blackburn® mechanical connectors

- · Range-taking designs for SKU reduction
- · Easy installation for reliable and safe connections



### Blackburn® aluminum multi-tap encapsulated cable blocks

- · Dual-rated blocks can be used with copper or aluminum cable
- · Versatile design supports a wide range of cable sizes and number of outlets available in one- and two-way configurations



UL listed



#### Blackburn® grounding

- · Complete portfolio of mechanical, compression and exothermic grounding products
- · Designed for creation of a safe, code-compliant and reliable grounding system



#### T&B Liquidtight Systems® flexible conduit systems

- · Protect connections between critical infrastructure of the data center and backup power systems
- · Conduits provide various color options for circuit identification and halogen-free solutions for green initiatives and safety
- · Includes jacketed metallic-cored conduits as well as non-metallic XTRA FLEX® type B conduit



#### T&B® Fittings T&B® hubs

- · Tightens easily for fast, simple
- Creates a secure connection between threaded rigid conduit and an enclosure
- · Grounding versions available



#### T&B® Fittings BlackJack® grounding bushings

- · For use with threaded or threadless rigid or intermediate metallic conduit
- · Versatile design reduces the overall number of SKUs required
- · Integral grounding lug enhances continuity for performance and safety
- · Flexible mounting design for easy alignment





### Ty-Rap® cable ties

- · High-performance fastening solutions
- · Features the Grip of Steel® stainless steel locking device
- · Ergonomic hand tools for easy installation



#### Ty-Grip® hook-and-loop fasteners

- Flexible cable management
- Won't damage low voltage or fiber optic cable jackets or insulation



#### Steel City® boxes and fittings

- The industry-leading line of metallic boxes used in electrical construction
- · Innovative bracket designs simplify positioning and mounting of electrical outlet boxes
- · Complete portfolio of essential electrical installation components



#### Steel City® flexible liquid-tight unjacketed metallic conduits

- · Commercial-grade liquid-tight flexible metal conduits
- · Available in steel (UL listed), reducedwall aluminum (UL listed) and heavywall aluminum (CSA certified)
- Meet requirements of UL 1 for flexible metal conduits (1/2" to 3" trade sizes)



#### Superstrut® metal framing

- · Flexible mounting solutions for electrical systems and equipment
- Complete portfolio of channels, fittings and accessories
- · Variety of finishes available to suit different environments



#### Kindorf® modular metal framing system and accessories

- · Labor savings Unique punched framing channels and innovative hardware products cut installation time by more than 40% over typical mechanical framing systems
- · Material and inventory savings Unique 1½" design requires fewer fittings, lowering jobsite inventory
- · Reduced waste Integral and easyto-use measuring system means exact cuts and less scrap



#### T&B® Cable Tray cable support systems

- · Available in steel, stainless steel, aluminum and non-metallic materials
- Alternating strut rungs allow for supported mounting

Kindorf Steel City Superstrut T&B Cable Tray

Tv-Rap<sup>\*</sup>









#### Carlon® PVC conduit fittings

The Carlon line of rigid conduit encompasses a full complement of fittings, including:

- Schedule 40 and Schedule 80 radius elbows
- Couplings and adapters
- Sweeps in a variety of radii, lengths and diameters
- · Access pull bodies and conduit bodies
- Junction boxes and device boxes for conduit termination
- Floor boxes and service fitting systems
- Bending and fitting tools
- A variety of solvent cements to make joining quick, clean and easy in any situation







# Ocal® corrosion-resistant conduit systems

Ocal PVC-coated conduit and fittings extend the life of your electrical system for many years beyond that of standard rigid conduit.

- Industry-leading thread protection through hot-dip galvanizing
- Industry-leading UL listed Type 4X PVC-coated conduit bodies
- Conduit supplied with a full undisturbed zinc coating under the PVC coating, complying with NEMA RN-1
- "Double-coat" fittings enhance corrosion protection by applying coating to interior and exterior before PVC coating
- UL listed including UV-resistance testing

Carlon Ocal





#### Sta-Kon® wire termination

- High-performance terminals for superior connections
- Complete line of rings, forks, splices, disconnects, pin terminals and wire ferrules
- High-quality installation tools both manual and battery-powered



### interrupters and switchgear Solid-dielectric dead-front switchgear for pad-mount a

- switchgear for pad-mount and subsurface vault applications
- Switchgear automation packages

Elastimold® medium voltage switches,

 Molded vacuum interrupters and arresters



# PMA® CUS very flexible medium-duty non-metallic conduit

- Specially modified polyamide 6 construction
- Good ductility and reverse bending
- UL 94 V2 self-extinguishing rated and halogen-free
- UL listed







# **Data center solutions**

# Installation products for data centers

Data center solutions from ABB Installation Products help solve the industry's most pressing challenges that you may face:



Sustainability and energy efficiency



Uptime and reliability

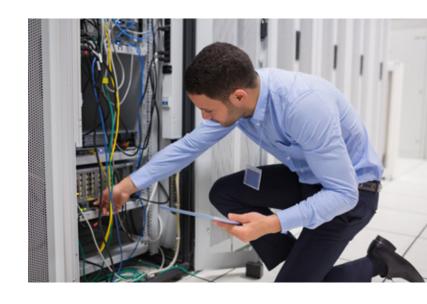


Speed and scalability



Resource utilization and safety

We look forward to empowering your data center and supporting you in meeting the industry demands of today and tomorrow.



### For more information



Visit electrification.us.abb.com/installation-products

or call your local ABB technical sales specialist.

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