

APPLICATION BROCHURE

Installation Products

Grounding and bonding



Installation Products Division

- Wire and cable management
- Cable protection systems
- Boxes and fittings
- Connectivity and grounding
- Medium voltage

Thomas & Betts is now part of ABB's Installation Products Division, but our long legacy of quality products and innovation remains the same. From connectors that support wire buildings on Earth to cable ties that help put machines in space, we continue to work every day to make, market, design and sell products that provide a smarter, safer and more reliable flow of electricity, from source to socket.

Table of contents

004–005	Reliable power starts with the right products
006–007	Designed to perform
008–009	Grounding & bonding solutions
010	Installation Products for applications
011	Installation Products for industries

An improperly installed or grounded electrical system can cause power failure, which often leads to significant safety, production and operational concerns.



Reliable power quality starts with the right products

To ensure employee safety, prevent job interruptions and provide electrical continuity and reliability, choosing the right grounding & bonding products is essential.

ABB has a wide range of proven bonding & grounding products for commercial, industrial and communications applications

Used together, ABB Grounding & Bonding products will:

- Ensure personnel safety
- Eliminate lightning interruptions
- Protect critical equipment
- Meet IEEE, UL® and CSA obligations

Provide electrical continuity and reliability
Additionally, we support our customers with comprehensive, on-site training to ensure smooth, safe operation after installation is complete, including full NEC® code update training as necessary.

Our goal is to help you increase safety, reduce failure rates, extend the life cycle and effectiveness of your equipment and ensure the product you need is available when you need it. You can trust ABB to provide durable, code-compliant grounding and bonding solutions to help optimize productivity in any industry.

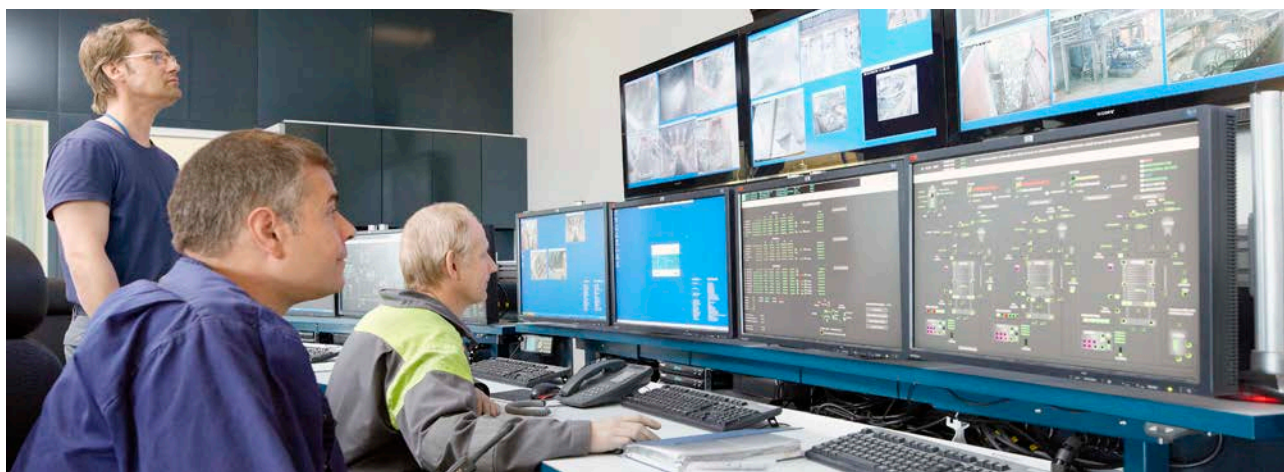
Plagued by Power Issues?

The saying “the devil is in the details” has a perfect application in the areas of grounding & bonding. Ensuring a facility is properly grounded and bonded at the design and construction phase can reduce expensive downtime and equipment failure in the future. Most important, it can eliminate any potential safety issues.

A stable power supply is quite simply the backbone of any building, plant or facility. Power failure or instability as the result of inadequately designed systems can cause major safety, production and operational concerns. All of these things can significantly impact a company’s bottom line.

Ineffective grounding can cause voltage variances that damage electrical equipment or sensitive electronic devices, leading to power loss and costly, unplanned downtime. Most often, power problems stem from the incorrect bonding of electrical transformers, main electrical panels, and sub-panels, uninterruptible power supplies (UPS) and generator systems.

Proper grounding & bonding are crucial factors in any company’s quest for power quality and stringent installation rules established by the National Electrical Code (NEC®) must be followed.



Designed to perform

Installation Products business line

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Wire and cable management

- Industry's broadest range of innovative solutions for bundling, securing and routing wire and cable
- Designed to perform in the most demanding conditions
- Overview in fastening, bundling and managing wires
- For electrical installers, panel builders, OEM professionals and many more

Connectivity and grounding

- Covering IEC/EN, NFC, UL and NFPA projects
- Reliable and high quality manufactured components
- Low installed costs through intelligent design
- Design services support and technical advice
- Protecting people, assets and electrical equipment

Boxes and fittings

- Highest quality, most versatile, innovative range of boxes, fittings and enclosures
- Comprehensive line of boxes – metallic/non-metallic, indoor/outdoor, weatherproof and floor
- Fast and flexible enclosure solutions
- Specified in the industrial, construction and utility markets

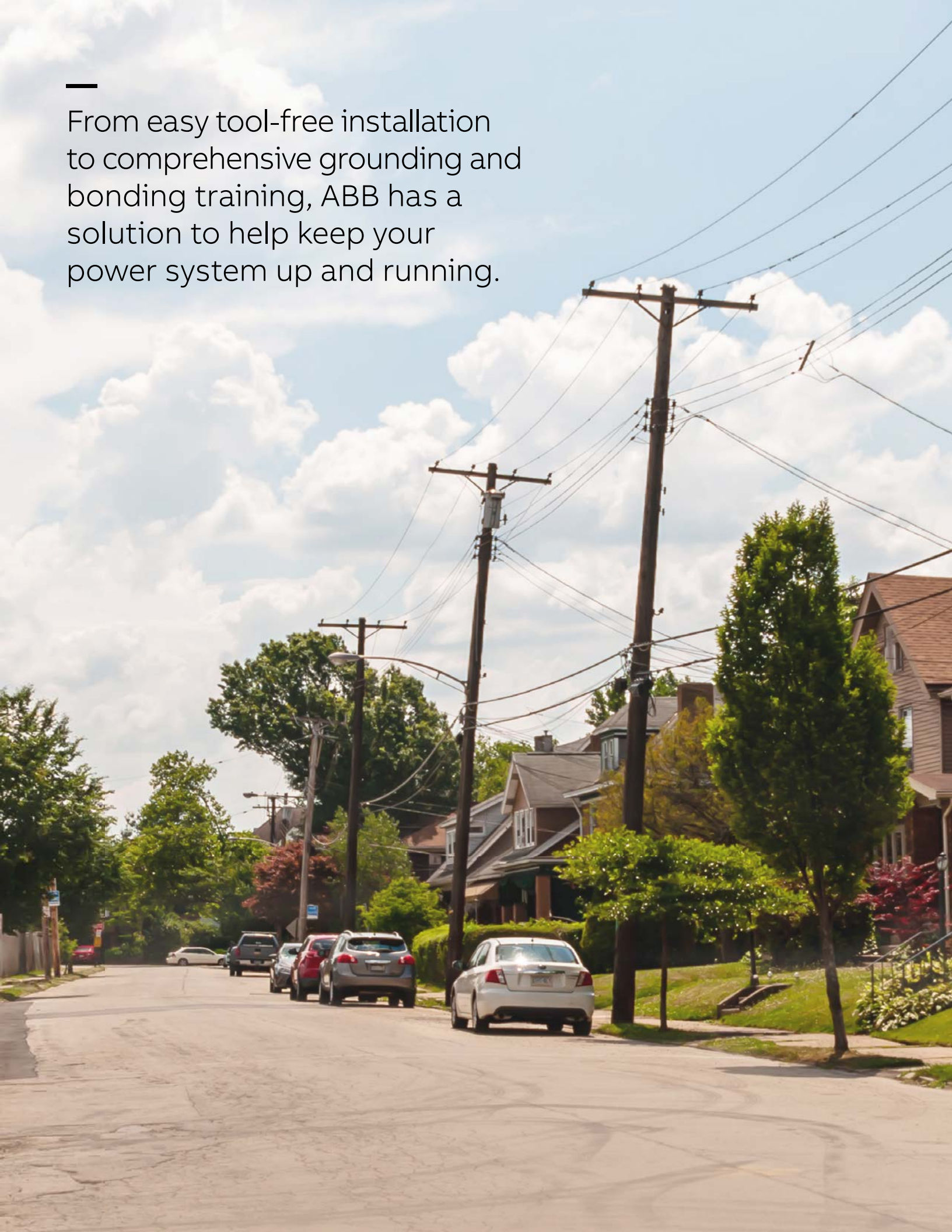
Cable protection systems

- Unsurpassed protection for wire and cables in the most demanding applications
- Customized specific solutions – through innovation & material science expertise
- Conform all international certifications – such as IRIS and end user approvals
- Comprehensive support service – worldwide close to the customer
- Over 12.000 high performance products – for outdoor & indoor, static & dynamic

Medium voltage

- Intelligent control and reliable connection of electrical power
- Reducing maintenance, repair and operational costs in the field – overhead or underground
- Solid dielectric switchgear, solid dielectric reclosers, capacitor switches and controllers, air break switches, electric arc furnace switches, current-limiting fuses, fault current indicators, underground cable accessories, overhead connectors, underground and network connectors, substation connectors, and street lighting connectors
- Specified Industrial, construction and utility markets

From easy tool-free installation to comprehensive grounding and bonding training, ABB has a solution to help keep your power system up and running.



Grounding & bonding solutions

Blackburn®

Blackburn®

Grounding & bonding connectors

E-z-ground® compression connectors

- High-conductivity copper and bronze allow connectors for direct burial, OEM or telecom applications

Mechanical Grounding Connectors

- High-strength split-bolt connectors for copper-to-copper connections
- Service post connectors for steel structures, fence posts or transformers using one or two cables
- ViceLock® connectors for cable tray, channel and strut applications

Exothermic welding system

- Simple, self-contained system to form high-quality electrical connections UL® Listed and CSA Certified



Sta-Kon®

Sta-Kon®

Shield-kon® grounding connectors

- One- and two-piece coaxial connectors for grounding
- Save time and reduces assembly costs
- Safe monitoring and simple operation
- Low profile and compact

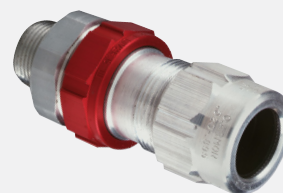


T&B® Fittings

T&B® Fittings

Ground fittings

- Bonding locknuts ensure positive bonding of conduit to box
- Grounding fittings available in steel or aluminum
- Grounding fittings available include XD Fitting, XJG Fitting®, Internal Bonding Strap, Star Teck®, Star Teck® XP, Wedge Fitting, Hub Grounding Fitting, Blackjack® Grounding Bushing



Star Teck® XP



Hub Grounding fitting



XD Fitting



Blackjack®
Grounding
bushings



Star Teck®

Grounding & bonding solutions

Steel City®



Steel City® Grounding pigtails, clips and mud rings

- Solid and stranded grounding pigtails for rough-in electrical systems
- Grounding clips for easy attachment of groundwires to rough-in electrical boxes
- Only Steel City® Adjustable mud rings pass the standard UL® Grounding Continuity Test; Installation Of Other Mud Rings May Lead To Potentially Unsafe Electrical Systems



Blackburn®

Blackburn® Crimp tools and die code systems

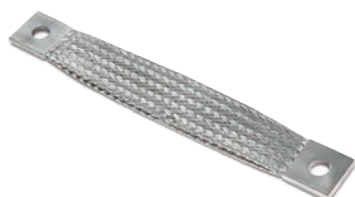
- Blackburn® crimp tools utilizing the Color-Keyed® die code system provide proper terminations for grounding and bonding connections



Sta-Kon®

Sta-Kon® Dragon tooth® insulation-piercing connectors and tools

- Provide continuity without the need to remove insulation, finishes or other coatings



Blackburn®

Blackburn® Braids

- Wide variety of grounding straps and accessories for grounding applications

ABB

Service and training

- **ABB offers onsite:**
NEC® Update Training
Grounding & Bonding Training Ocal® Certification Training
- ABB provides a wide variety of service and training programs to ensure that your electrical system is installed and maintained in the safest and most appropriate way
- For many of our product lines, we offer Field Application Engineers who are available for field training on a variety of topics
- Tech Support staff are available for many of our product lines, as is onsite installation training and certification



Installation Products for applications

01 Continuous operation and sustainability.

02 Corrosion and harsh environment protection.

03 Safety and contamination.

04 Emergency electrical solutions.

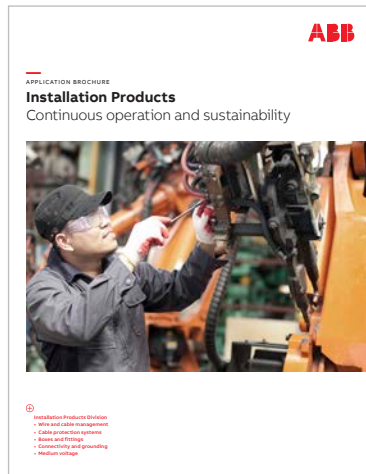
05 Total project cost reduction.

06 Liquid ingress protection.

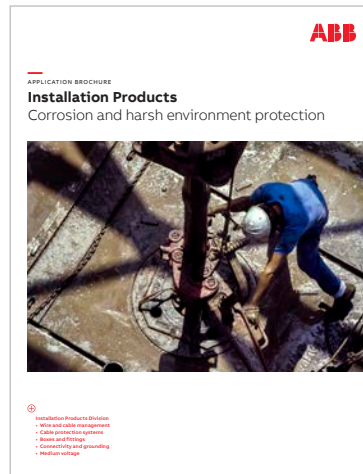
07 Extreme temperature protection.

08 Grounding and bonding.

09 SKU Reduction.



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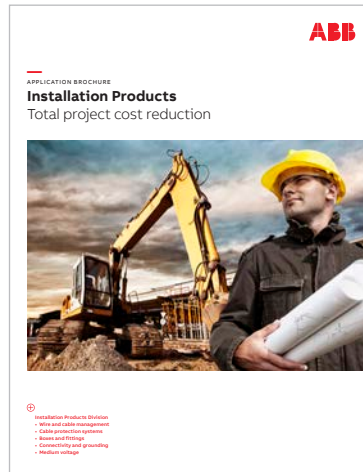
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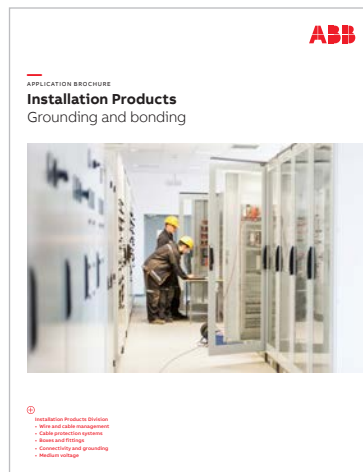
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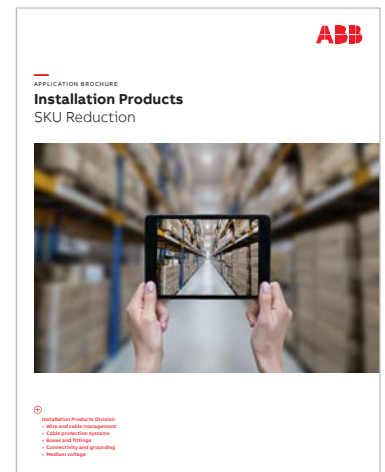
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Installation Products for industries

01 Commercial and institutional buildings.

02 Data centers.

03 Food and beverage industry.

04 Food and beverage industry - plant assessment.

05 Utility industry.

06 Power generation industry.

07 Chemical industry.

08 Oil and gas industry.

09 Wind power industry.

10 Renewable energy industry.

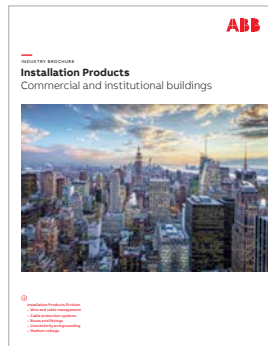
11 Water and wastewater treatment industry.

12 Single and multi-family housing industry.

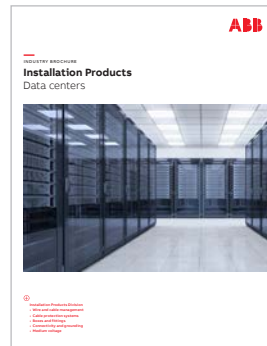
13 Rail industry.

14 Civil infrastructure industry.

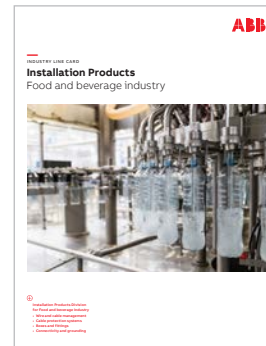
15 Metals and mining industry.



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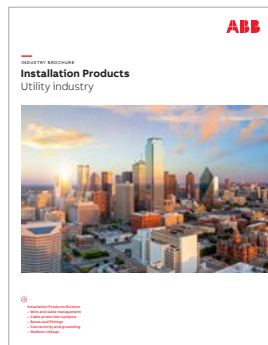
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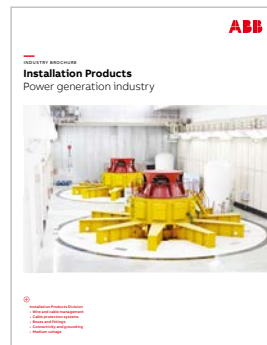
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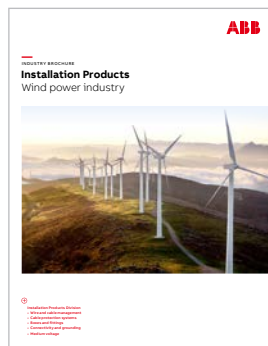
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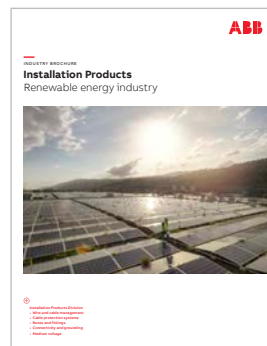
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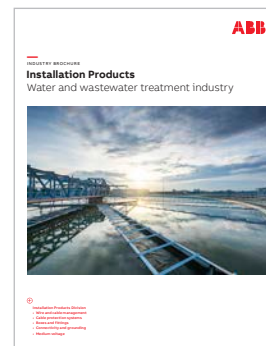
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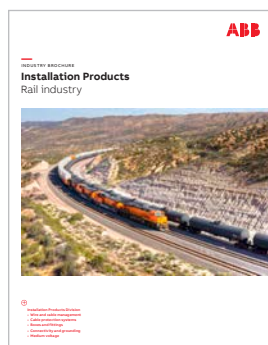
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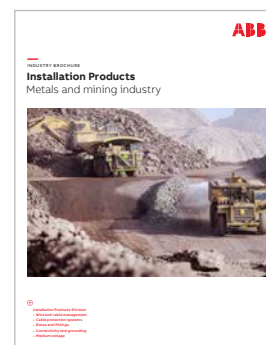
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US

ABB Installation Products Inc.

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