VITAL CONNECTIONS TO EMPOWER RELIABLE GRIDS

NETWORK COMPONENTS AND ACCESSORIES FOR TRANSMISSION AND DISTRIBUTION APPLICATIONS

prysmian

The planet's pathways

CONNECTING THE WORLD. TODAY AND IN THE FUTURE

PRYSMIAN

The global cable player leading the energy transition and digital transformation.

CONNECT TO LEAD

We’re seizing the opportunities offered by market trends to become a global cable solution provider. From the depths of the ocean to the pinnacles of the world’s tallest buildings, we drive new forms of energy and information to each and every corner of the earth.
We offer the widest range of services and know-how in the industry. Each year, Prysmian manufactures thousands of miles of underground and submarine cables and systems for power transmission and distribution, as well as medium and low voltage cables for the construction and infrastructure sectors. We also produce a comprehensive range of optical fibres, copper cables and connectivity systems for voice, video and data transmission for the telecommunications sector.

Connecting people and businesses everywhere.

We’re not just close to our customers, we’re right there with them.

150
Years of experience

+50
Countries

30k
Our employees

+15 Billion
Sales in euros

As of December, 31st 2023

TOGETHER WE ARE PRYSMIAN

Navigating the way forward.

Leveraging our geographical footprint and breadth of products, valuable customer partnerships, unique people and strong commitment to sustainability and innovation, we’re pushing the boundaries of electrification and digitalisation.

Connect, to lead.

ACCESSORIES FOR TRANSMISSION AND DISTRIBUTION APPLICATIONS

Power grids are feeding the much-need energy the world requires and as demand for power increases, grid expansion and reliability becomes ever-more critical to enable electrification of metropoles and communities and ensure a better life and a more sustainable future for everyone.
Choosing the right component is critical. Our accessories are the vital link to connect power systems and support utilities in developing efficient, reliable, and safe power grids.
Our technical sales teams will help you select the right component for your application. For special requests, our engineering and R&D teams will develop the right product to ensure safety and continuity of service.

At Prysmian, we have spent decades building our expertise and global experience to become a world leader within the cable industry and have developed an unrivalled portfolio of network components and accessories to offer complete and highly reliable cable systems.
From joints to terminations, connectors to glands, cleats, fixings, link boxes and resins - we offer the widest range of jointing and terminating solutions on the market. Every product is conceived to be fully integrated with our customers' power systems with tailored designs for any installation condition into new and existing grids.
With a reputation for delivering innovation, quality, and reliability, we actively contribute to drive industry development, with our leading presence in all major standardisation committees around the world.

As leaders in the market, we have taken our knowledge and technology leadership and deployed it to our full range of solutions, as we elevate cable accessories from passive network components, to active, IoT-enabled solutions throughout every voltage class.
As a global leader, we also uphold a commitment to sustainability, with R&D teams who dedicate their expertise to making our products more sustainable - for business, and for the environment. Innovation is in our DNA, and has been for decades, as we continue to set industry standards for best-in-class technology. Above all, we offer complete, end-to-end solutions that add value to your business, with cables that meet the highest standards of excellence, complemented by a portfolio of unrivalled accessories.

A SOLUTION FOR EVERY REQUIREMENT

Our accessories product portfolio includes joints, terminations (indoor and outdoor), connectors, separable connectors, glands, cleats and fixings, low voltage, tooling and resins tested according to international standards. Prysmian also provides engineering and design support services for all power system specifications and requirements and across all voltage classes for both AC and DC applications. Recently we have also developed solutions that support optical fibre integration and electrical asset monitoring systems.

EASY INSTALLATION AND ENHANCED RELIABILITY FOR GREATER GRID STABILITY

Prysmian has developed a comprehensive product portfolio: our r&d team has engineered a wide range of solutions to satisfy the most diverse requirements. Innovation has been focusing on ensuring an easy, fast, and tool-free installation for example by pre-expanding the component in the factory or removing the need for expansion altogether.

GLOBAL GROUP LOCAL FORCE

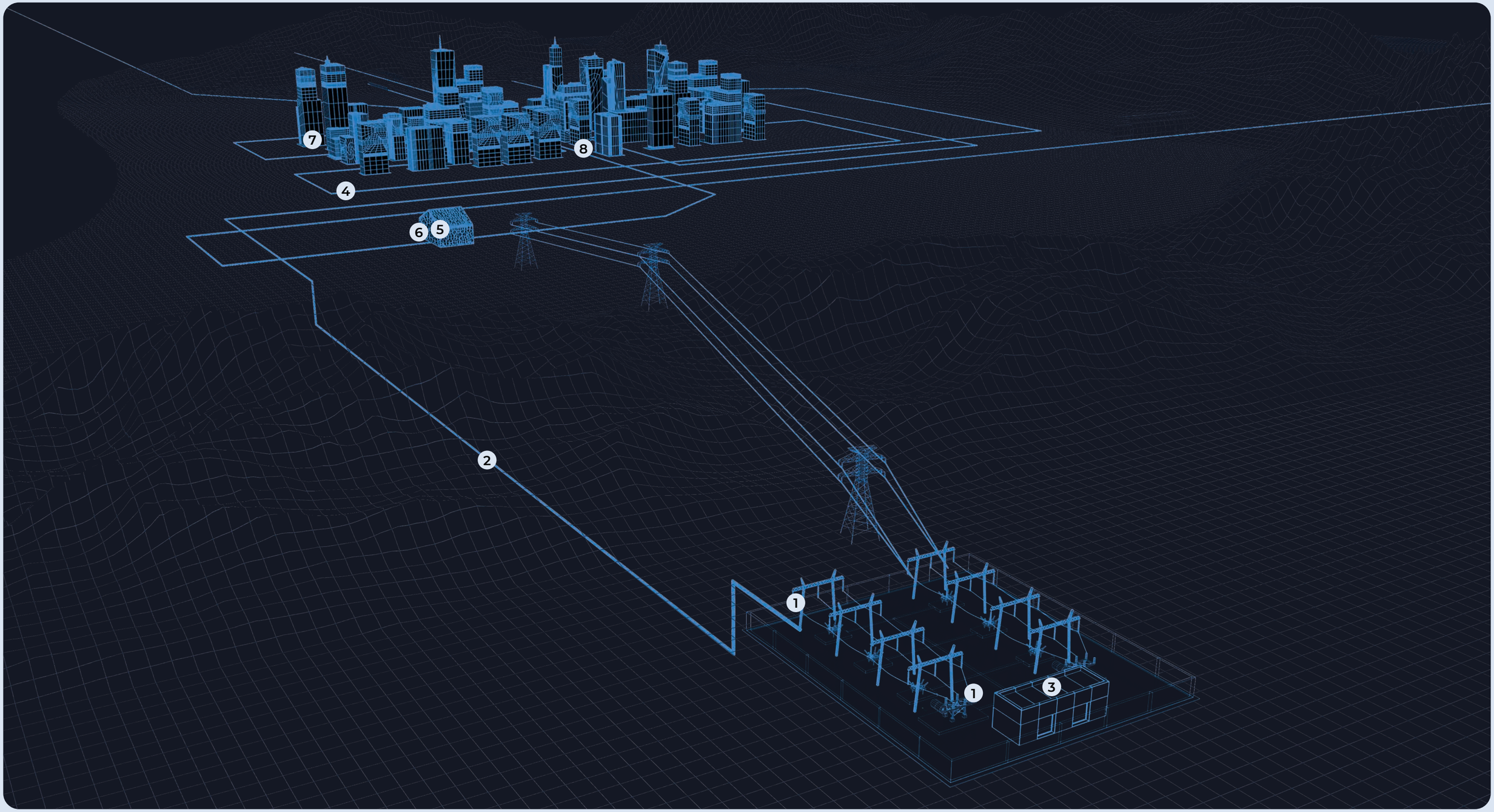
As world leader in the cable systems industry, we are present to serve both our global and local customers. To offer our tailor-made solutions, we appreciate the importance of understanding local preconditions and special needs. Therefore, we believe that it is crucial to be present within local geographies, while being backed-up by the capacity that only a truly global group possesses.

TRAINING PROGRAMMES

To complement the accessories product portfolio, Prysmian has established a state-of-the-art Jointer Training Program. With training schools deployed all over the world, Prysmian works to ensure that common methodology, best practices, and proven tools are the standard for jointers around the globe. Training programmes are tailor-designed and delivered at a regional level, both at our Training Centres of Excellence and at customers' premises.

PRODUCT FAMILIES AT A GLANCE

1. HV OUTDOOR TERMINATIONS
2. HV JOINT
3. HV INDOOR TERMINATIONS
4. MV JOINT
5. MV INDOOR TERMINATION
6. MV SEPARABLE CONNECTORS
7. CLEATS & GLANDS
8. LV JOINTS



PRODUCTS & BRANDS

JOINTS

Pairing reliability with innovation, our joints ensure fast and easy installation, thanks to pre-expanded or no-expansion solutions.
Each joint is mechanically and electrically routine tested in the factory, according to standards. Our solutions are engineered for voltage class (Umax) up to 550 kV, both AC and DC.
Prysmian is able to develop solutions according to partner and project's needs.

CFJ JOINTS

Click-Fit HV joints can connect all combinations of conductors with minimum effort and in less time than conventional joints. The pre-moulded, factory tested Click-Fit joints offer a fail-safe connection every time.

PRY-MOULD

The HV joint is made of EPR one-piece pre-moulded sleeves. All units are electrically tested in the factory. Thanks to the high reliability, it is considered a key component in the safe operation of HV and EHV cable systems. There are available installation solutions such as slip on, coldshrink and site expanded.

TRANSITION JOINTS

Transition joints enable cable combinations, connecting existing networks to new extruded cables, complementing fluid filled systems with XLPE extruded ones. Prysmian has been manufacturing and innovating transition joints since the 1980's.

SUBMARINE JOINTS

These HV custom solutions are applicable up to 525 kV DC for cross sections up to 2000 mm^2 and installation depth up to 1500 m.

TWIN PLUG

This new HV jointing solution eases the installation process and reduces installation errors. It allows the connection of different cable sizes, and it is particularly relevant for DC applications.

COLDSHRINK

These MV accessories are delivered pre-expanded on a carrier. Their Installation requires standard tools and no heating. The solution is applicable on one or three-core cables, with or without armour. LS0H and sensorized versions are available. The extruded insulation core is fully electrically tested as cables.

LV JOINTS

Various straight or branching joints unarmoured or armoured are available. They can be energized immediately after resin injection. They are tested and approved according to EN 50393 and IEC 61238. The special solutions for different applications are available as well.

TERMINATIONS

Prysmian terminations portfolio is optimised to ensure easy and fast installation, dependability, and proven service quality.
In line with Prysmian's sustainability targets and ambition, our newest HV accessories are all developed to be sustainable and environmentally friendly. Now available up to 170kV, a complete portfolio of components, fully dry-type (they do not require any fluid- or gas-filled components).

PRE-ASSEMBLED (CFT)

CFT is a HV full dry-type design, it does not require insulating mediums such as oil or gas. Dry solutions use solid materials to insulate and control the electrical field stresses. Installation time and costs are reduced compared to conventional oil filled terminations. Thanks to its ease of installation, this solution is specifically recommended for substituting faulty terminations in a short time.

EXPLOSION PROOF

To provide extra-safety, Prysmian has developed HV explosion proof terminations, for high-risk sites such as industrial and urban areas. These products ensure that, if a fault happens (e.g., due to a short circuit), the termination does not explode (TES).

FLEXIBLE SOLUTIONS FOR HV AND MV

The coldshrink pre-expanded MV terminations shrink evenly on the cable as the inner support core is removed. The top mastic water seal is built into termination.
The slip-on dry flexible HV outdoor terminations provide high quality service with easy installation for the client.

CONNECTIONS TO SWITCHGEARS

Separable connectors are designed to connect the network to switchgears (GIS), transformers or similar. Innovative products allow disconnection during maintenance operations without requiring cable cutting.

PRY-CON

A new HV interchangeable GIS is now being introduced in the market. It has been developed according to CIGRE784, which defines common inner dimensions. Therefore, Prysmian products are compatible with all GIS female parts designed according to this international standard. The Pry-con can be paired with any already installed male or female component in the switchgear.

INDOOR INSTALLATION TO SWITCHGEAR

The new HV technology allows installation with SF6 or alternative gases to guarantee a roadmap for a sustainable future.

PUSH-ON

The push-on technology allows to install MV or HV separable connectors without special tools nor heating. The product is designed to create interference with the cable, so that the accessory can be pushed into position.

ELASCON

The insulating and semi-conducting MV components are moulded with special formulations of an EPDM elastomer. The material and the moulded outer screen provide superior safety and allow for disconnectability during network maintenance operations.

OTHER ACCESSORIES

BICON CLEATS

BiCon cleats, clips and fixings are designed and manufactured to the highest performance standards to ensure safe and efficient installation and cable operations even in the event of short circuits or faults. They also allow a neat and orderly arrangement of cables which is aesthetically pleasing. Prysmian offers a wide variety of cleats: single way cable cleats, fire resistant cable cleats, trefoil cable cleats, quad cleats, and other cable fixing solutions including rigid tunnel clamping cleats, auxiliary stand-off cable cleats, system repair cleats and installation equipment. LS0H solutions are available as well.

RESIN

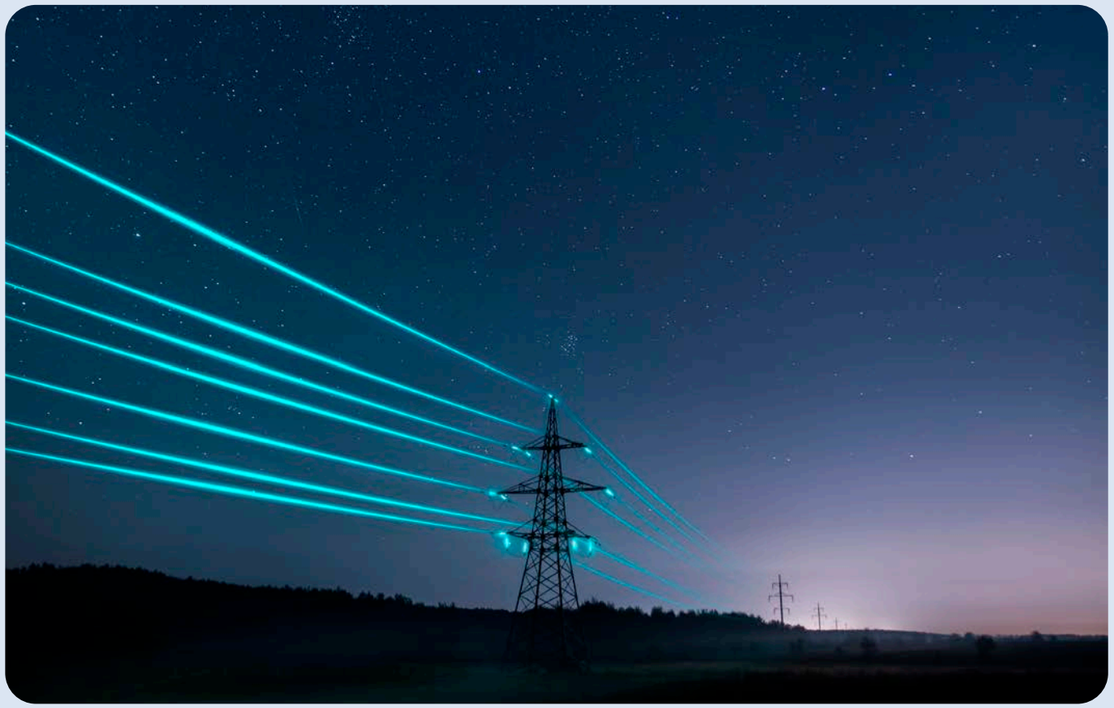
Prysmian supplies JEM, 2 part Polyurethane and 3 part Polyurethane resin.
JEM Resin is a non-isocyanate system ensuring low viscosity and easier mixing, even at low temperatures (e.g. -15°C). In addition, the curing reaction is not sensitive to moisture (will cure under water). Filled joints may be energised immediately if left undisturbed. The resin has excellent adhesion to XLPE, PVC, Lead etc and it is tested in accordance with ENA TS C81/3, BS EN 50393 and Specification HD631.1.

BICON GLANDS

BiCon cable glands are suitable for the safe termination of Low Voltage cables in all type of applications from simple industrial applications to hazardous areas, both for onshore and offshore. Manufactured in either aluminium, brass or nylon as standard; electroless nickel plated brass can be supplied as well. They are designed to attach and mechanically secure cable ends to enclosures or directly into equipment, providing mechanical support, earth continuity and protection against the ingress of dust and moisture. In hazardous areas (fireproof, explosion proof solutions) they prevent gas migration, control and containment of potential explosions (LS0H version is available). All industrial cable glands are designed and manufactured in accordance with either BS6121 or EN50262 design and performance standards. All Hazardous Area Cable Glands are designed and manufactured in accordance with the requirements of the ATEX Directive -94/9/EC.

LINK BOXES

It is a low voltage cable joint buried below ground with solid links that switch on or off a circuit when links are removed or inserted from its contact posts. The Links can be swapped out for fuses for protection if required. They allow for a connection to, or isolation of, adjacent sections of the network. They are available in Pre-cast and Tailed both in 2 way and 4 way.



PRODUCT MAPPING

JOINTS

Product		Main Features / Technology / Application	Voltage Class Umax	Cross sections	Standard
Click-Fit		AC applications. No expansion required. Easy and fast installation. Plug-in.	72 - 550 kV	Up to 3500 mm²	IEC-60840 / IEEE Std.404 IEC-62067 / NEN-3629
Pry-Mould		AC and DC applications. Field-expanded. High expertise product and proven quality service.	72 - 550 kV	630 mm² - 3500 mm²	IEC-60840 IEC-62067
“Speed” Line		Pre-expanded. Easy and fast installation.	Up to 72 kV	400 mm² - 2000 mm²	IEC-60840 IEEE Std.404
Slip-on		No expansion required. No tools required. Easy and fast installation.	Up to 170 kV	Up to 1600 mm²	IEC-60840
Elaspeed		Coldshrink joint, available: - Straight - Branch - Transition - Stop-End	Up to 19/33 (36) kV Up to 35 kV (IEEE)	25 mm² - 1200 mm²	HD629.1 S3 IEEE Std.404
Ecospeed		Coldshrink joint, available: - Straight	Up to 19/33 (36) kV	25 mm² - 630 mm²	HD629.1 S2 GB/T12076.4
Retractfit		Coldshrink core with hybrid outer protection, available: - Straight - Branch - Transition	Up to 19/33 (36) kV Up to 35 kV (IEEE)	25 mm² - 1200 mm²	HD629.1 S2
Injectfit		Taped Joint with Resin protection, available: - Straight - Transition	Up to 19/33 (36) kV	25 mm² - 1000 mm²	HD629.1 S2
Low Voltage joints		Branch/Straight Jointing. General Cu SWA armoured & unarmoured. Allow Jointing of variable materials and conductor sizes. Available special solutions	Up to 0,6/1 kV	1,5 mm² - 400 mm²	BS EN 50393 IEC 61238 ENATS TS C81/3

TERMINATIONS

Product		Main Features / Technology / Application	Voltage Class Umax	Cross sections	Standard
Flex-Dry		Outdoor Flexible and dry termination Easy installation	Up to 145 kV	240 mm² - 2500 mm²	IEC-60840 IEEE Std.48

TERMINATIONS

Product		Main Features / Technology / Application	Voltage Class Umax	Cross sections	Standard
Slip-on ColdFit		Outdoor Flexible and dry termination Easy installation	Up to 72.5 kV	150 mm² - 2000 mm²	IEC-60840 IEEE Std.48
Explosion proof HVAC		Outdoor Safe breakdown	170 - 550 kV	400 mm² - 2500 mm²	IEC-60840 IEC-62067
Explosion proof HVDC		Outdoor Safe breakdown	320 - 640 kV	Up to 3500 mm²	IEC-60840 IEC-62067
Pre-assembled (CFT)		Outdoor Prefabricated, dry-type Self-supporting Plug-in	123 - 170 kV	Up to 2500 mm²	IEC-60840 IEEE Std.48
Sealing-end		Outdoor high expertise designed for very high pollution environments with proven quality	72.5 - 550 kV	Up to 2500 mm²	IEC-60840 IEEE Std.48
Pre-expanded Coldfit		Coldshrink All-in-one design, available: - Outdoor shed design - Indoor shed-less design	Up to 19/33 (36) kV Up to 35 kV (IEEE)	25 mm² - 630 mm²	HD629.1 S2 (24kV) IEEE Std.48
Termfit		Coldshrink available: - Outdoor shed design - Indoor shed design	Up to 19/33 (36) kV	35 mm² - 630 mm²	IEC-60502-4 GB/T12076.4
SFTO/SFTI		Modular Slip-On available: - Outdoor & indoor shed design	Up to 19/33(36) kV	25 mm² - 630 mm²	HD629.1 S3 (36 kV) IEC 60502-4
Elasticfit		Modular Slip-On available: - Outdoor shed design - Indoor shed-less design	Up to 19/33(36) kV	25 mm² - 1200 mm²	HD629.1 S1

SEPARABLE CONNECTORS

Product		Main Features / Technology / Application	Voltage Class Umax	Cross sections	Standard
EGS		Indoor Installation in Switch-gear (SF6)	Up to 550 kV	300 mm² - 2500 mm²	IEC-62067 IEC-60840 IEC-62271-209
CFC		Indoor Installation in Switch-gear (SF6)	123 - 170 kV	Up to 2500 mm²	IEC-60840 IEEE Std.48
Pry-Plug		Indoor Installation in Switch-gear (SF6)	Up to 145 kV	150 mm² - 2000 mm²	IEC-60840 IEC-62271-209

SEPARABLE CONNECTORS

Product		Main Features / Technology / Application	Voltage Class Umax	Cross sections	Standard
Pry-Con		Indoor Interchangeability according to CIGRE784 Female/Male plug in for standard GIS application	Up to 145 kV	Up to 1600 mm²	IEC-60840 CIGRE784
Pry-Tee		Push-On Range-taking design available: - Interface F 1250A Separable T connector / Coupling / Surge Arrester	Up to 72 kV	70 mm² - 1600 mm²	IEC-60840
Elascon		Push-On Range-taking design available: - InterfaceA 250A(Elbow/Straight) - InterfaceB 400A (Elbow/Straight) - InterfaceC 630A/1250A (Short T/ Coupling/Surge Arrester/T shape)	Up to 20.8/36 (42) kV	25 mm² - 1200 mm²	HD629.1 S2 IEC-60502-4
Formfit Dead Break		Push-on available: - 600A (T shape) - 900A (T shape)	Up to 35 kV (IEEE)	Up to AWG – 1500kcm	IEEE Std.386
Formfit Load Break		Push-on available: - 200 Amps (Elbow shape)	Up to 25 kV (IEEE)	Up to AWG – 250kcm	IEEE Std.386
Ginex		Push-on available: -Interface number 3 1250 A	Up to 26/35 (40.5) kV	50 mm² - 630 mm²	GB/T12076.4 IEC-60502-4

OTHER

Product		Main Features / Technology / Application	Standard
Cleats		From LV to HV applications	IEC 61914
Glands		From LV to HV applications Available for Industrial, hazardous and offshore applications	IEC62444 / BS6121
Resin		Available JEM Isocyanate free Available PU 2 parts and 3 parts Easy to mix	EN50393 / IEC-60455
Link Box		Available 2 way and 4 way for both “tailed” and “Pre cast” Easy Installation	Validated and tested based on various standards

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