







WHAT WE ARE

"Connecting safety to the ground, our expertise in earthing and lightning protection solutions ensures a path of reliable connection protecting from dangerous lightning strikes." We are a leading lightning protection solution provider, specializing in state-of-the-art technologies for lightning protection and earthing solutions.

Our team of experts is committed to delivering innovative solutions tailored to safeguard structures and ensure the safety of people. With a focus on cutting-edge research and development, we aim to set the industry standard for lightning protection systems. We provide power cables and the right solutions for jointing and termination, and we offer customized cable and cable accessories for every project-specific requirement.

Our in-built design and engineering team can design cable and lightning protection accessories from scratch, analyzing special environments and protecting conditions. Our commitment is 24 hours to offer the 2D design, three working days for the 3D design by e-mail, and we also send a real 3D printed model across the world in seven working days.

We provide an array of products to address the needs of earthing and lightning protection to fit your design needs as per relevant standards. With an established manufacturing and solution centre, we can manufacture products to meet your specific needs as well.





PURPOSE

Protecting assets and people. You are important to us.

VISION

To be a global leader in the lightning protection solutions, cable and accessories industry, recognized for our innovative products, exceptional quality, and commitment to utilize advanced technologies for a safer and more sustainable future.

MISSION

To design and manufacture cutting-edge lightning solutions that prioritize safety, sustainability, and efficiency, meeting the evolving needs of our clients while minimizing environmental impact.

Partnering Brands























PRODUCT RANGE

Lightning Protection Product

Earthing Protection Product

Exothermic Welding

Cable Lugs & Connectors

Cable Gland

Clamping Solutions

Enclosure

Termination & Jointing Kit

Personal Protection Equipment

Lifts & Escalators

Air rods on the roof are selected and positioned based on the design and class of protection required, a group of air rods makes the air termination network for the lightning protection system. Hard-drawn externally threaded rods with knurling to fix multi-points. (multi-points are supplied as separate accessories).

Lightning Protection

Air rod Accessories



Air Rod Base





Flat Conductor Saddle



Ridge Saddle







Rod Brackets



Free Standing Air Terminal Rods













Air rod Accessories

DC Tape Clip







Cable Saddle





Bi Metallic Connectors



Square Tape Clamp







Cable to Cable Square Clamp



Interface Test Clamp





Universal Cable Clamp



Cable to Cable T Clamp



Back plate hold fast



Conductors



Bare Copper Tape

Bare copper tapes are soft drawn from 99.99% pure copper cathodes ensuring higher conductivity. These tapes are radially edged making it easier to install and are tested as per IEC62561 & BS EN 50164 with harsh atmospheric conditions and impulse current of 100000 Amperes.





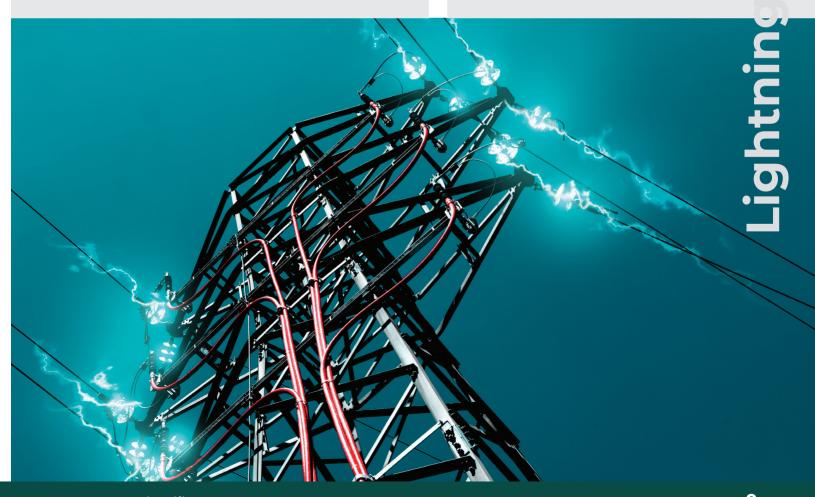
Bare Aluminium Tape

Bare aluminium tapes are alternatives to copper tapes.



Bare solid circular

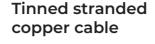
Bare solid circular used on lightning protection applications.





Stranded copper cable

When an application needs conductors with higher flexibility, copper stranded conductors are the best alternative to copper tapes. Also, stranded conductors offer a larger surface area compared to solid conductors of the same cross-sectional area. The larger the surface area, the higher the conduction as current flows on the surface of the conductor.



Tin plated conductors are highly resistant to oxidation recommended for harsh environments.



Tinned copper tape

Tinned copper tapes are made from state of the art continuous tin plating facility. Tin plating prevents oxidization.

Conductors



Coated copper tapes



In modern structures, PVC covered tapes maintain the aesthetics of the building, with the wide colour range available in PVC coating it becomes much easier to match the building colour. Yellow PVC covered tapes are available for easier identification of earthing or down conductors.



Lead covered copper tapes are widely used in power stations, all lead covered copper tapes are made with a lead thickness of 2.1 mm.



PVC Covered Copper Solid Circular

PVC Covered Copper Solid Circular used on lightning protection applications and available in a wide colour range.





Bare Busbar

The multipurpose bare Busbars are used as Earth Bar/Ground Busbar for connecting equipment's ground terminals / Telecommunication grounding etc., For Busbars with insulation base and with connection terminals refer to the Earth Bars section.







Earthing Protection

Earthing systems play a vital role in lightning and surge protection by safely dissipating the power surges to ground. At Electric Way, we advocate a complete approach to earthing safety to protect your building structure, electronic systems and personnel therein





Earthing Electrodes

Copper Bonded Earth Rod

Copper-bonded earth rods are made by molecularly bonding 99.9% pure electrolytic copper on a high-tensile steel rod.



Accessories

Couplers

Earth Rod Couplers are designed for coupling two or more threaded copper bonded earth rods or to couple with a driving stud during installation. They ensure continual contact between the rods and are used to aid deep rod driving.



Driving stud

Driving Studs made from high tensile steel are designed for driving threaded copper bonded rods by hand tools or power hammers. These reusable studs are fixed on the top of the rod with the help of the coupler.



Solid Copper Earth Rod

Solid copper rods are highly conductive and hard drawn from 99.99% pure copper cathodes. They are ideally used in conditions where soils are with high salt and moisture content.



Stainless Steel Earth Rod

Stainless steel rods are used to overcome galvanic corrosion which can be caused by dissimilar metals or components having different electronegativity buried on adjacent sides



Earthing Protection

Earth Inspection Pit

Concrete Inspection Pit

concrete earth inspection pits are tested as per IEC 62561-5 withstanding 3500 kg load tests, Stainless Steel 304 hooks by default in all the concrete inspection pits ensure less corrosion, durability, and low maintenance.



Accessories

Earth Bar:

Earth bars are an efficient and convenient way of providing a common earth point, and integral disconnecting links allow easy isolation for testing purposes.



Polymer Inspection Pit

Polymer inspection pits are highly recommended for areas where higher loads are standard, with a load rating up to 5000 kg polymer lids are recommended, and for load ratings up to 1000 kg, these polymer pits can be used with concrete lids.



Earth Rod Seal for Light Weight Inspection Pit

Earth Rod Seal acts as a barrier from water entry into the Earth pits When Earth inspection pits are installed under the water level.



Earth Rod Alternatives

Earth Plate

Earth plates fulfil the earthing requirements where driving earth rods is not ideal due to hard rocks or highly resistive soils.

Types

- 1. Solid Copper Earth Plate
- 2. Stainless Steel Earth Plate

Earth Lattice/ Mesh/ Mat

Earth lattice/Mesh/Mat are manufactured from high conductivity copper tapes as per IEC 62561-1, it is recommended in areas where step & touch potential hazards are high.

Types

- 1. Copper Earth Lattice/ Mesh/ Mat
- 2. Stainless Steel Earth Lattice







Earthing Accessories

Bonds

- 1. B Bond:
- 2. Metalwork Bond:
- 3. RWP Bond:
- 4. Watermain Bond:
- 5. Pipe Bond



C shape connectors (C Crimp)

C-shaped connectors are specially designed to connect the two parallel cables.







Earth Points

Earth points are used when a steel rebar needs to be grounded or connected to the down conductor. They are used with U-bolt clamps that are connected to the rebar with a conductor. Another end of the conductor is exothermically welded to an earth point which is connected to a tape or down conductor.

Earth points are also available with standard, and customised pre-welded tails (Green Yellow PVC earthing cable).

- 1. Single Hole Earth Point
- 2. Single Hole Earth Point with Single Pre-Welded Tail
- 3. Two Hole Earth Point
- 4. Two Hole Earth Point with Single Pre-Welded Tail
- 5. Two Hole Earth Point with Double Pre-Welded Tail
- 6. Four Hole Earth Point
- 7. Four Hole Earth Point with Single Pre-Welded Tail
- 8. Four Hole Earth Point with Double Pre-Welded Tail









Flexible Braids

Flexible braids are used for bonding metallic items such as metal doors, fences, handrails, etc.

Types:

- 1. Bare copper flexible braid
- 2. Tinned copper flexible braid



Earthing Accessories



Rods and Rebar Clamps

- 1. Rod to Tape Clamp (Type A)
- 2. Rod to Conductor Clamp (Type G)
- 3. U Bolt Rod Clamp (Type E): (Single-plated Horizontal type)
- 4. U Bolt Rod to Tape Clamp (Type E): (Double plated vertical type)
- 5. U Bolt Rod to Cable Clamp (type GUV): (Double Plated Vertical Type)
- 6. U Bolt Rod to 3 parallel Cable Clamp (Type V): (Double Plated Vertical Type)
- 7. Rod to Cable Lug Clamp (Type B)
- 8. Rebar Clamp
- 9. Tower Earth Clamp
- 10. Pipe Clamp



Split Bolt Connectors

Split bolt connectors are designed to join two or more wires. They will allow electricity to flow from one wire to the other wires





www.electrific.net 15

arthing Protection



1. Earth Bar without Disconnecting Link

- i. Copper Earth Bar
- ii. Tinned Copper Earth Bar

2. Earth Bar with Single Disconnecting Link

- i. Copper Earth Bar
- ii. Tinned Copper Earth Bar

3. Earth Bar with Twin Disconnecting Link

- i. Copper Earth Bar
- ii. Tinned Copper Earth Bar



Earth Bar Accessories

Disconnecting Links

The disconnecting link creates a temporary break in the earth connection for the purpose of inspection and testing of the earth electrode.

Telecomm Earth Bar

It serves as a common grounding point for an Extra Low Voltage system.

Earth bar Insulator

Earth bar insulators are commonly used in earth bars to provide mounting and electrical insulation from metallic surfaces.

Earth Boss

Earth boss provides a secure earth connection point on a steel structure.



Backfill Compound

A backfill compound is a product that can consist of various materials that help to retain moisture levels in the soil around earthed electrodes. This backfill compound will help to prevent electrical currents from leaking from your earthing system, keeping your property, its contents and occupants safe

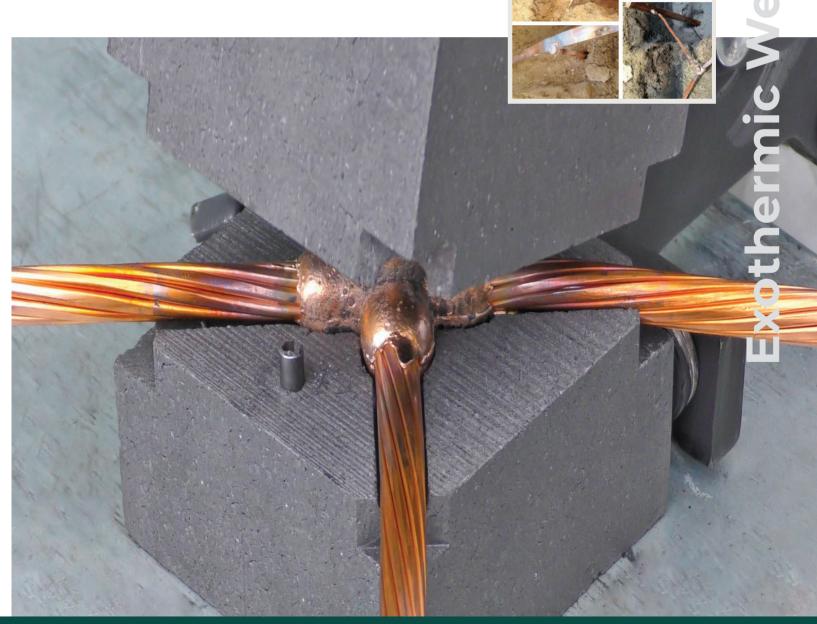




ExothermicWelding

Exothermic welding is preferred where highly conductive, strong connections are required, these connections are permanent and do not loosen over time and withstands under repeated fault conditions.

The main parts that comprise this welding system are,





Moulds

Moulds are made from optimum density graphite that lasts for 50 to 80 welds. The density of graphite and design of the Mould is selected based on various factors,



Weld Metal

Weld metals are available in the form of powders and tablets. Weld metals are made from copper and aluminium oxides. The content of metal varies based on the size and type of the joint required. Ignition/ Starting powder is an explosive that initiates the combustion process of weld metal.



Exothermic Welding Accessories

Welding powder
Handle Clamps
Cable cleaning brush
Mould cleaning brush
Tape cleaning brush
Flint gun
Replacement Flints (Pack of 100)
Mold cleaning scraper
Welding toolbox
DUX Seal Compound



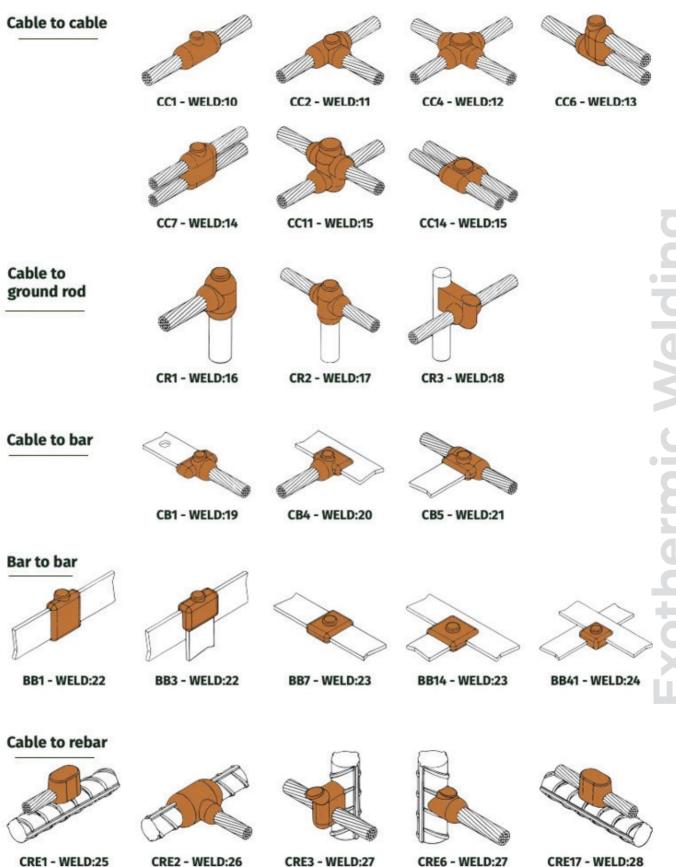
Type of Weld Connections

Bar to Bar
Bar to Earth Rod
Bar to Steel Surface
Cable to Bar
Cable to Cable
Cable to Earth Rod
Cable to Reinforcing Bar
Cable to Steel Surface & Pipe
Stud to Steel Surface

Type of Weld Connections







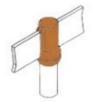


Type of Weld Connections

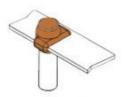
Bar to ground rod



BR1 - WELD:29



BR2 - WELD:30

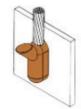


BR7 - WELD:31

Cable to surface



CS3 - WELD:32



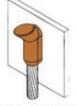
CS7 - WELD:32



CS8 - WELD:33



CS9 - WELD:33



CS25 - WELD:34



CS27 - WELD:34



CS32 - WELD:35

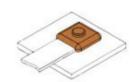


CS34 - WELD:35

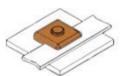
Bar to surface



BS1 - WELD:36

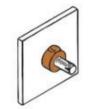


BS2 - WELD:36



BS3 - WELD:37

Stud to surface

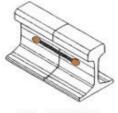


RS1 - WELD:38



RS2 - WELD:38

Rail



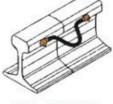
R4 - WELD:39



R6 - WELD:39



R10 - WELD:40



R12 - WELD:40

Cable Lugs and Connectors



Material - Aluminium, Copper & Bi-Metallic

Type - Long and Short Barrel, One and Two Hole, Transformer

Finish - Tinned / Natural

CABLE LUGS

- 1. Standard Range
- 2. Lugs Bell Mouth Lugs
- 3. Four Hole Transformer Lugs
- 4. Narrow Palm Lugs
- 5. Tubular Lugs (45 & 90 Degree Angle)
- 6. DIN Series
- 7. NFC Series
- 8. Bi-Metallic
- 9. Battery Series

CABLE CONNECTORS

- 1. Standard Aluminum and Copper Connectors
- 2. Reducing Link Connectors
- 3. DIN Series
- 4. Bi-Metallic

CABLE TERMINALS

- 1. Snap on Terminals (Female/male)
- 2. Fork Type Terminals (Insulated and Non Insulated)
- 3. Ring Type Terminals (Insulated and Non Insulated)
- 4. Pin Type Terminals (Insulated and Non Insulated)
- 5. Blade Type Terminals (Insulated and Non Insulated)
- 6. DIN Terminals (Insulated and Non Insulated)





Cable glands provide sealed entry into enclosures, motors, panels or any other device, limiting the ingress of water and dust.

Industrial Cable Glands Category A

- 1. Finish Brass and Nickle plated brass.
- 2. Sealing Mechanism Single compression and double compression
- If neoprene -40°C to + 100°C, 3. Operating temperature – If silicone -50°C to +160°C
- 4. Ingress protection IP66, IP3X
- 5. Accessories Lock Nut, Earth tag, Shrouds, Adaptor.
- 6. Material Brass, stainless steel, nickel-plated brass. Thread type – Metric/NPT.

Types

- 1. Al/A2 -For unarmoured cable with an elastomeric or plastic outer sheath, with a sealing function between the cable gland. (For A2 - seal protection degree IP66)
- 2. BW-No Seal/Single wire armour
- 3. CW-Single outer seal/Single wire armour
- 4. E1W-Double (inner and outer seal)/Single wire armour









Industrial Cable Glands Category B

- 1. Mechanical Category-Impact category 8 (IK 10), Retention 2.Level of Ingress Protection-IP66 (EN 60529), (IP67, IP68)
- 3. Seal Operating Temperature- Nitrile From -20°C to +130°C,

Silicone From -20°C to +200°C Neoprene - 20°c to 120°c Chloroprene - 20°C to 120°c

- 4. Material-Brass, Stainless-Steel, Nickel-Plated Brass 5. Thread type- Metric / NPT,

(Other thread type also available upon request: PG / ANS)

Types

- 1. RSU (For unarmoured cable Single Compression)
- 2. RSA (For armoured cable Single Compression)
- 3. RDA (For armoured cable)- Double Compression



















Cable Glands



Ex Cable Glands

- 1. Finish-Brass and Nickel Plated Brass, Stainless Steel, Aluminium
- 2. Sealing Mechanism-Single Compression and Double Compression
- 3. Level of Protection-IP66, IP68
- 4. Gas Group -Zone 1/Zone 2
- 5. Dust Group- Zone 21/Zone22
- 6. Type of protection- Ex d, Ex e, Ex tb
- 7. Application-Indoor and Outdoor

Types

- 1. E1RW
- 2. RA2



PG Cable Glands

- 1. Body: Polyamide 6
- 2. Sealing: TPR / EPDM
- 3. Temperature

Dynamic -30°C to 120°C

Static -10°C to 80°C

- 4. Protection Class: I.P. 67
- 5. Color: Black/Grey
- 6. Certification: RoHS
- 7. Connecting thread: PG Standard



Cable Glands



Clamping Solution

Bands (Straps)

Type of the band straps:

- 1. Utility Bands
- 2. Aluminium Perforated Strip
- 3. Heavy Duty Bands
- 4. PVC Coated Bands
- 5. PPA 571 Coated Bands for Highly Corrosive Applications
- 6. All Purpose Bands
- 7. Precut Assembled Straps





Cable Ties

Material

A: 316 grade non-magnetic stainless steel

B:304 grade non-magnetic stainless steel

Surface finish

Metallic (Uncoated)
Pure Polyester, PPA 571 & Epoxy Coating (Coated)

Temperature Range

A: -60°C to + 300°C (Uncoated) **B:** -60°C to + 150°C (Uncoated)

Flammability

UL94 Fireproof, Halogen free and UV resistant

Type of cable ties

- 1. Ball Lock Cable Ties
- 2. Spring Type
- 3. Ladder Cable Tie
- 4. Releasable Cable Tie
- 5. Multicolor Spectrum Ball Lock Ties





Clamping Solution



Identification and Marking System

Marker Plate & Tags

- 1. Identify pipes, conduits, valves, cables and equipment in petrochemical plants, pulp and paper mills, refineries, offshore oil rigs and any other harsh environments.
- 2. Marking Systems: Marker tags (Alpha Numeric Characters) and Marker plates
- 3. Carrier strip available to create your own marking using tags in multiple colours
- 4. Marking Process: Laser Marking System and Embossing System
- 5. Complete range of individual letters, numbers and symbols
- 6. 316 Stainless Steel
- 7. Easy to read in dim light and inaccessible places







Buckles

Type of Buckles

- 1. Jaw Type
- 2. Wing Type
- 3. Screw Type









Clamping Solu







An Enclosure is a cabinet or box that protects electrical or electronic equipment and prevents electrical shock. Enclosures are usually made from steel, stainless steel, aluminium and rigid plastics.

1. Aluminium Enclosures

White RAL 9010 (other on request)

Material- ALSi 12
Surface- Plain or powder coated
Lid Screw -Stainless Steel, Captive Screw
Service temperature- -50°C to + 135°C (Silicone)
-40°C to + 100°C (Neoprene)
Ingress Protection-IP66, IP67 and IP68 as per IEC 60529
Colour-RAL 7001, 7013, 7032, 7035, 7038, Black RAL 9004,



2. Stainless Steel & Galvanized Iron (GI) Enclosures

Material Stainless steel 1.25mm or 1.5mm; Galvanized Iron sheet 2mm Ingress Protection IP 66, EN 60529 Seal VMQ. (Silicone)

Surface SS Grinded, grain 240 (GI box/ Sheet steel powder coated) Temperature Range - 55°C to + 100°C



3. Glass reinforced Plastic (GRP) Enclosures

Shade- RAL 7000 Grey,RAL 9011 Black
Ingress protection- IP 66,EN 60529
Impact Resistance- > 7 Joule, IEC 62262
Temperature Range- -50°C to +100°C (Silicone)
-40°C to +80°C (Neoprene)

Flammability-VO/ self-extinguishing, UL 94 Dielectric Strength-18 kV/ mm Toxicity- free from halogen



4. Fire Rated Enclosures

Material- Sheet Steel
Surface- Powder Coated
Ingress Protection-IP 66
Colour-Orange, RAL 2003 (other on request)
Impact Resistance-IK 10 (20 Joule)
Product design- IEC 62208:2011
Product testing- DIN 4102-12 (E30, E60, E90),
BS 6387:2013 (Cat. C, W, Z) IEC 60529 (IP), IEC 62262 (impact)



Cable Termination & Jointing Kit



Cable Termination Kit

Heat shrink cable terminations can be used for LV-MV-HV power cables present indoors and outdoors. Indoors, these cable terminations connect to substation switchgear, transformers and insulated cable boxes. Outdoors, they are used in overhead and underground distribution lines.



Cable Jointing Kit

They are used for connecting cables to switchgear terminals, transformer terminals, and poles in both indoor and outdoor installations. Heat shrinkable jointing cable end termination kits are essential components for ensuring secure and reliable connections in medium to high voltage electrical cables.

Type of cable ties

- 1. Heat-shrink type
- 2. Cold-shrink type





PPE

Wearing personal protection equipment (also known as "PPE") helps reduce exposure to potential risks such as chemical, radioactive, physical, electrical, mechanical, or other workplace hazards that can result in significant health issues or injuries.

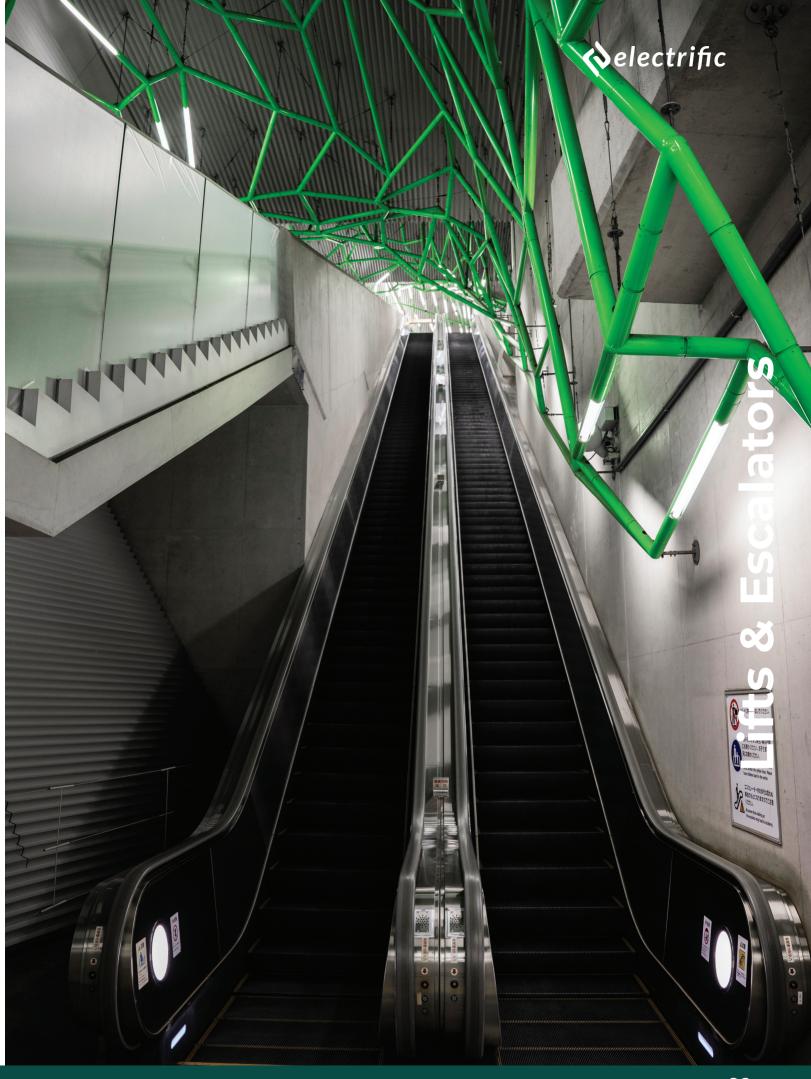
- 1. Rubber Mat
- 2. Electrical Insulating Boots
- 3. Electrical insulating Gloves
- 4. HARDHATS













People lifting

Our temporary and permanent suspended platforms, nacelles and fifth wheels are equipped with winches for electric (LIFTHO, e.lift), manual (m.lift) or pneumatic (p.lift) people lifting.

- 1. LIFTHO 600/800/1000 NEO hoists
- 2. Winches e.lift 600/800/1000 NEO
- 3. Winches e.lift 350/501/601
- 4. Winch m.lift 400 (CE/UL)
- 5. Winch p.lift 500
- 6. e.lift 1500/2200 lbs NEO winches
- 7. e.lift 1000 lbs winch















Winches



Material Lifting:

MOTRIX and LM wire-rope winches can be used in the Building, Industry, and Elevator sectors (for transporting cabins inside shafts, lifting guide rails, and fitting out ducts) and wind power (maintenance work), at an unlimited working height.

- 1. LM 90/250 winches
- 2. LM 300S+/300S+ VFD/500+ winches
- 3. Motrix 750/1000/1500 winches
- 4. LM 220/300S+/450/500+ winches
- 5. Manual winch 3510
- 6. Hand crank geared winches
- 7. Winch for basketball hoop



Lifts & Escalators





Rigging

The use of suspended platforms, nacelles and harnesses requires the installation of hanging devices on the roof, on the parapet, or the façade

- 1. Fixabeam suspension beams
- 2. Parapet console
- 3. Under-lead console
- 4. Gallows
- 5. bi-m platformhasts Fixeo











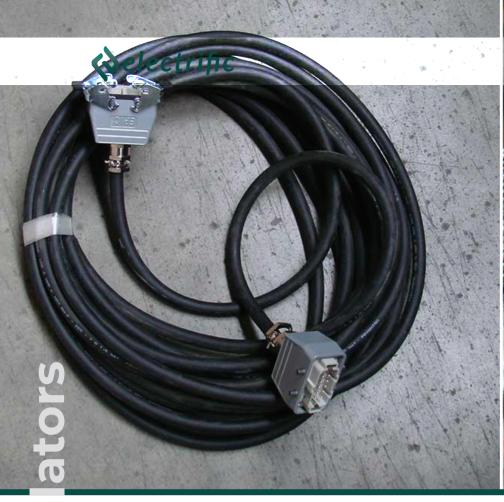
Exolift climbing aid



Exolift climbing aid

Exolift is a motorized and autonomous portable system that assists the technician when ascending and descending on the wind turbine ladder, limiting his physical and cardiac efforts and greatly facilitating maintenance or repair operations on wind turbines.







Anti Fall System

Electric winches with passing cables intended to lift people onto platforms, nacelles or temporary suspended harnesses must be equipped with safety blocks (fall arrest systems).

1. Securichute:

Our SECURICHUTE safety blocks (fall arrest systems) are triggered in the event of platform tilt and overspeed > 30m/min.

2. Securistop:

Our SECURISTOP safety blocks (fall arrest systems) are triggered in the event of the inclination of the platform (> 14° or lack of tension in the cable).





Lifts & Escalators

Gyrostop control box



GYROSTOP SYSTEM (tilt control and anti-tip)

The electrical control boxes are designed to control the operation of electric winches for lifting people with passing cables. They can control one or more winches. They are available in single-phase or three-phase version EN 1808.





Temporary Equipment

Temporary Equipment

Our temporary nacelles, harnesses and suspended platforms are used to raise and lower people and materials using a system of manual, electric or pneumatic winches with passing cables, and allow work to be carried out on facades.

- 1. Temporary platforms
- 2. Temporary pods
- 3. Temporary harnesses











Permanent Equipment



Our permanent pods, harnesses and suspended platforms have been specially designed to be permanently installed on a building.

1. Permanent platforms

FIXATOR permanent suspended platforms allow you to carry out cleaning work on windows, curtain walls and atriums.

2. Permanent nacelles

FIXATOR permanent suspended nacelles allow you to carry out cleaning work on windows, curtain walls and atriums.

3. Permanent harnesses

The permanent individual harness PERM 06 is specially designed to carry out work in narrow accesses.







UPS2T Lifting Pulley

The UPS2T pulley is a universal opening pulley with a capacity of 2T and innovative features. Designed using the NF EN 1808 standard, it can:

Be used as a load return function to change the direction of the lifting cable

Be used as a reeving function to double the lifting capacity of your winch to avoid its replacement with another with a greater lifting capacity.

The UPS2T lifting pulley allows you to lift materials or people for installation work in elevator shafts or other lifting needs up to 2000 kg (2 tons).



Notes		





Bahrain

Office: 922, Level 9, West Tower, Bahrain World Trade Centre, Manama. Kingdom of Bahrain T: +973 1616 1566 | +973 3391 0871 support@electrific.net

KSA

Office: 8323, Ar Rawabi Dist., Unit No:4215, Jeddah 22348-3482. Kingdom of Saudi Arabia M: +966 55 517 7865 | +966 55 517 7861 support@electrific.net

UAE

Office No 703 Aljiyadbusiness Center 7th floor Al Fahidi Heights Al Mussallah Rd -Al Hamriya, UAE M: +971 569 58 78 65 Info@electrific.net

ndia

Office: 23/53, Ram Nagar 3rd Street, SS Colony, Madurai 625016, Tamil Nadu. India T: +91 452 350 1044 | +91 83000 71111 sales@electrific.net