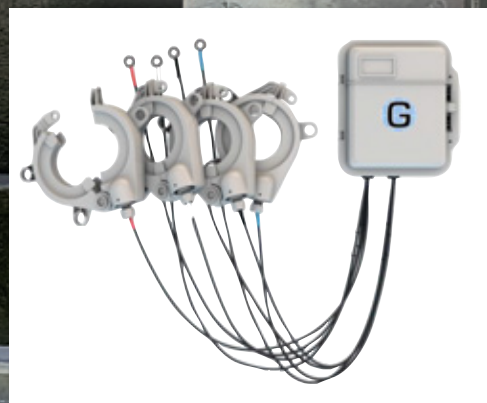


HV JUICE

GRID20 20[®]
Optimize Energy Efficiency



**GRID20/20
INSTANT
SMART
TRANSFORMER**
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FIBREGLASS PRODUCTS**

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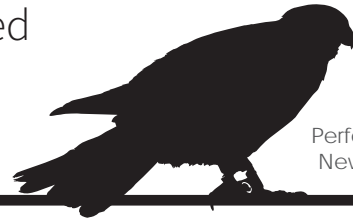
100% NEW ZEALAND



**Raysulate
Asset
Protection**
PAGE 2



“Damage to electrical substations could be eliminated and a reduction in outages achieved by proactively applying TE’s Wildlife & Asset Protection products.”



Perfect to protect the New Zealand falcon

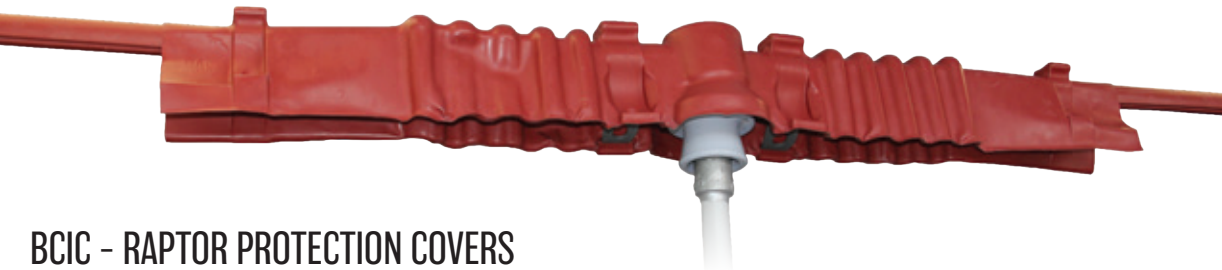
Superior high voltage outdoor materials are used in all BCAC & BCIC cover designs. The rugged, track resistant, UV resistant polymer ensures long-term performance even in the most extreme environmental conditions.

BCAC - BUSHING CONNECTION COVERS

These BCAC covers are designed to prevent animal caused outages on transformer bushings up to 35kV.

FEATURES

- Fit a wide range of bushing skirt diameters in both substation and network applications
- Fast and easy to install, no cutting required
- Can be installed live
- Feathered edges act as thermal scan sites for true temperature evaluation of covered hardware
- Proven Raychem polymer material offers rugged, non tracking, UV resistant products which ensures long term performance in even the harshest environmental conditions
- Visual inspection of connection and oil levels
- Conductors and leads exit easily through cover
- Robust latching and hinging mechanisms
- Reliable Outage Protection, proven over many years
- Facility for conductors to exit from both the top and side interfaces



BCIC - RAPTOR PROTECTION COVERS

These insulating covers are designed to prevent raptor caused outages on distribution equipment up to 35kV. Raptor covers use a bi-material design to allow for hot-stick installations on pin, horizontal and deadend type insulator applications.

FEATURES

- Reliable outage protection
- Fast and versatile installation
- High performance material
- Rugged, non-tracking, UV-resistant polymer
- Long-term performance in extreme conditions
- Designed to fit a variety of porcelain and polymer type insulators without disturbing the BIL levels of the insulators
- The flexible centre cover allows conductors to exit from the insulator at angles up to 30° from any axis, all without having to trim the cover
- Range includes covers for single or double porcelain pin insulators, vertical clamp top insulators, horizontal post insulators and dead end applications
- Suitable for applications up to 35kV
- Perfect for retrofit situations



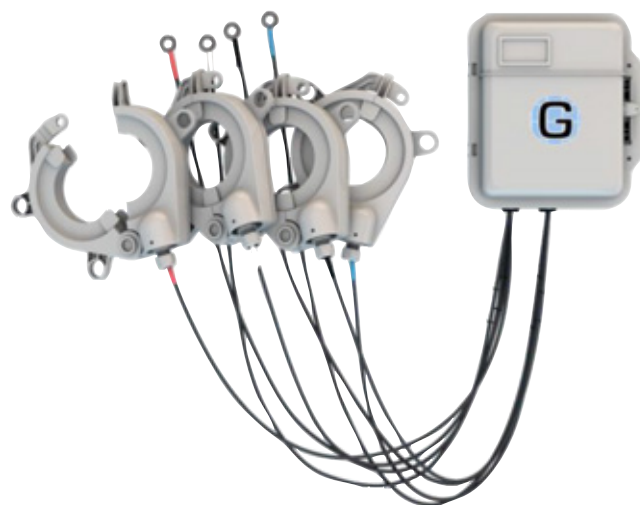
“TE estimates that damage to electrical substations could be reduced by as much as 80% simply by applying insulation”.

GRID20/20 - OPTANODE DISTRIBUTION TRANSFORMER MONITORING SYSTEM



OptaNODE Distribution Transformer Monitors (DTM) enable standard transformers to become 'smart transformers' with simple retrofittable hardware.

GRID20/20[®]
Optimize Energy Efficiency



POWERFUL INTRA-GRID INTELLIGENCE IN THE PALM OF YOUR HAND

- Distribution Transformer Health Monitoring
- Quick and easy, plug & play deployment
- Designed for Pole-mount and Pad-mount Transformers
- Reverse energy (Distributed Generation)
- SCADA integration DNP3/Webservices API
- LV Distribution analysis
- Outage Notification (Last-Gasp)
- Energy Balancing and theft detection
- Easiest and most complete solution for asset feedback on LV network

KEY ADVANTAGES

- Self-contained/Maintenance Free unit: Metering, Sensing, and Communications fully integrated.
- High accuracy of monitored transformer parameters within all ranges of operation
- Speed and simplicity of installation. No on-site calibration.
- AMI, SCADA, MDM, 3rd party platforms integration via DNP3, FTP, Web-services and MultiSpeak Interfaces.
- Reduced complexity – all backhaul infrastructure is operated by Grid20/20 meaning no on-site expertise required.
- Web Based, secure graphical user interface available anywhere in the world.
- Suitable for permanent pole-top & pad-mount installations.
- Complete solution designed purely for network LV visibility.
- Outage notification – know when and where an outage has happened instantly (Last-gasp).
- Alert notification for current/voltage/outage notifications (email/sms).



**FIND
OUT
MORE**





Aluma-Form, Inc. specialises in innovative, custom-engineered overhead utility and communications solutions. They offer industry-leading fibreglass, aluminium, and apitong wood products for the electric utility and communications industries. Our customers recognise Aluma-Form products for their unique designs, high quality, fair prices, and the superior customer service that accompanies each one.



Hookstick Disconnect Switch

Single Insulated Disconnect Switch

Line Tap Switch

Cutouts

Aluma-Form hookstick operated disconnects are a best-in-class design that delivers simple and reliable operation. Our "HOS" switches feature the following:

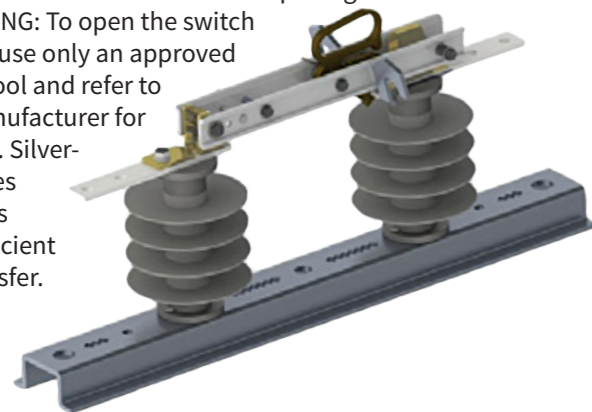
- Silver plated blade assembly that provides superior electrical conductivity
- Blade design that provides mechanical rigidity
- Silver plated contact designed to maintain contact pressure
- Positive latch, effective pry-out mechanism
- Precision formed hinge terminal for low resistance connection
- Integral 90° blade stop

Application

The HOS is a single-phase hookstick operated switch for manual switching of overhead lines on electrical distribution systems up to 38kV. Our HOS switches have ratings for 600 or 900 amps continuous, 40,000 amps momentary and 25,000 amps sym. 1-second short-time withstand.

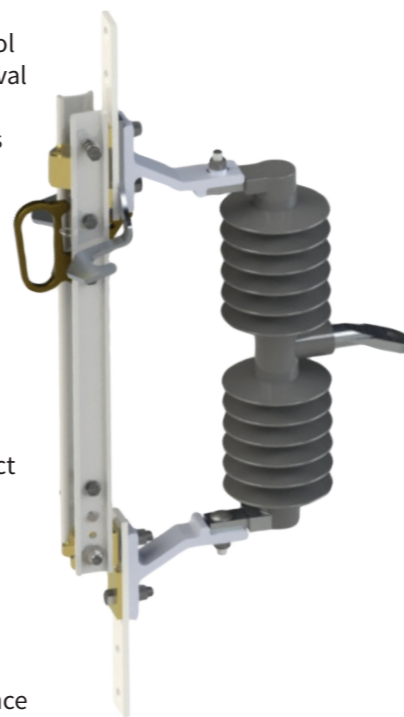
Operation

All HOS disconnect switches include loadbreak hooks which are for use with a loadbreak tool for opening the switch under load. **WARNING:** To open the switch under load, use only an approved loadbreak tool and refer to the tool manufacturer for instructions. Silver-plated blades and contacts enhance efficient current transfer.



Features

- Rigid Blade Design
- Easiest blade to pull and close (longest mechanical advantage)
- Contact design avoids any areas for trapped ice to interfere with blade structure
- Large formed galvanised steel load buster hook
 - Optimally positioned for easy loadbuster tool attachment and removal after opening
 - Stronger than castings
- 600 & 900A options available
- 15, 27 & 35kV
- Polymer & Porcelain Insulators
- Silver plated copper blades
- Integral 90° blade stop
- Silver plated brass contact and hinge
- Tin plated copper terminals



Superior Electrical Performance

- Best electrical performance
- Full silver plating on hinge, contact & blades
- Maximum contact temperature 10-15% lower than competitors'

Features

- 15kV, 28kV and 35kV ratings available in both 600A and 900
- Available in Porcelain and Polymer
- Silver plated blades and hinges
- Tin plated contacts
- Best electrical conductivity
- Corrosion resistant style available
- Multiple hanger options
- Pull to open and pull to close optional handle



- All copper current path provides minimum electrical resistance
- Available in Porcelain and Polymer variants
- Available with 316 Stainless Steel fittings
- Lower contacts are backed up by stainless steel springs to ensure excellent current transfer with the fuse tube trunion
- Rugged construction designed to withstand heavy fault interrupt and reclosure forces
- Interchangeable fuse holder design compatible with other cutouts in the utility market
- Moisture resistant fibreglass reinforced fuse tube with arc-quenching inner liner and a UV resistant exterior coating
- Grooved flipper with stainless steel torsion spring on all Aluma-Form fuse tubes provides proper fuselink tension and prevents breakage
- Silver plated movable contacts for steady current transfer and low operating temperatures
- RUS approved
- **Customised designs available**



Approvals

- IEEE 37.41-2016, IEEE 37.42-2016, CSA C310-09





Bratts Timber Ladders are manufactured from Douglas Fir stiles with Ash rungs housed full section, glued and pinned into blind holes at 250 mm centres. Tie rods are fitted at intervals or every rung if required. All ladders marked with an asterisk are reinforced with steel wire or non-conductive materials for use where there are Electrical Hazards. All British Standard Extending Ladders and Three Section Ladders over 3.00m closed length should be rope operated. All metal fittings are rust-proofed. Varnished Finished.

ACCESSORIES

- Suction Feet
- Octopus Feet
- Serrated R/Blk Feet
- Rubber Block for WC Ladder
- Bows
- Web Bow
- GF/Bow
- B/Bow
- Fixed Bow
- V/Bow
- A/Bow
- Clam Cleat & Rope
- Engraving up to 10 Characters

WHO ARE BRATTS?

Bratts have been making ladders since 1895 and are suppliers of non-conductive access equipment to all major electricity company in the UK. Bratts also supply telecom and gas utilities, chemical, oil, rail, aviation, construction and similar industries worldwide. Bratts are well known as a quality manufacturer of BS1129 Class 1 Kitemark Timber and BS EN131 Kitemark Glassfibre ladders, stepladders and specialist access products for industrial use.

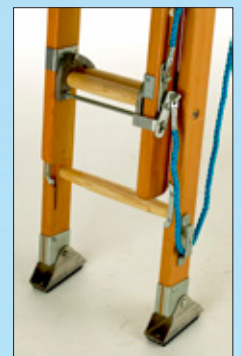
WHY BRATTS?

- Lightweight
- Two Section & Three Section timber ladders
- Meet requirements of BS1129 Class I (Timber) & BS EN 131 (Glassfibre) Standards
- Made in the UK for more than 120 years

| Cat No. | Size Closed | Size Extended | Approx. Weight |
|---------------------------------------|-------------|---------------|----------------|
| CLASS 1, TWO SECTION LADDERS | | | |
| HHD08 | 2.36M | 4.14M | 15.0 KG |
| HHD09 | 2.67M | 4.80M | 17.0 KG |
| HHD10 | 3.00M | 5.41M | 18.0 KG |
| HHD11 | 3.28M | 5.79M | 21.0 KG |
| HHD12 | 3.63M | 6.68M | 24.0 KG |
| HHD14 | 4.19M | 7.70M | 29.0 KG |
| HHD16 | 4.75M | 8.71M | 34.0 KG |
| *HHD18 | 5.41M | 9.98M | 43.0 KG |
| *HHD20 | 6.00M | 11.0M | 52.0 KG |
| CLASS 1, THREE SECTION LADDERS | | | |
| HDT08 | 2.36M | 5.41M | 28.0KG |
| HDT10 | 3.00M | 7.70M | 30.0KG |
| *HDT12R | 3.63M | 9.22M | 38.0KG |
| *HDT14R | 4.19M | 10.0M | 47.0KG |
| *HDT16R | 4.75M | 12.80M | 70.0KG |
| *HDT18R | 5.41M | 14.30M | 90.0KG |
| *HDT20R | 6.00M | 15.82M | 101KG |



Cleat and Rope



Auto clutch, Rope op & Octopus feet



Web Pole Bow





**PREVENT
ACCIDENTAL
FIRES**

REPLACE CUTOFF EXPULSION FUSE-LINKS

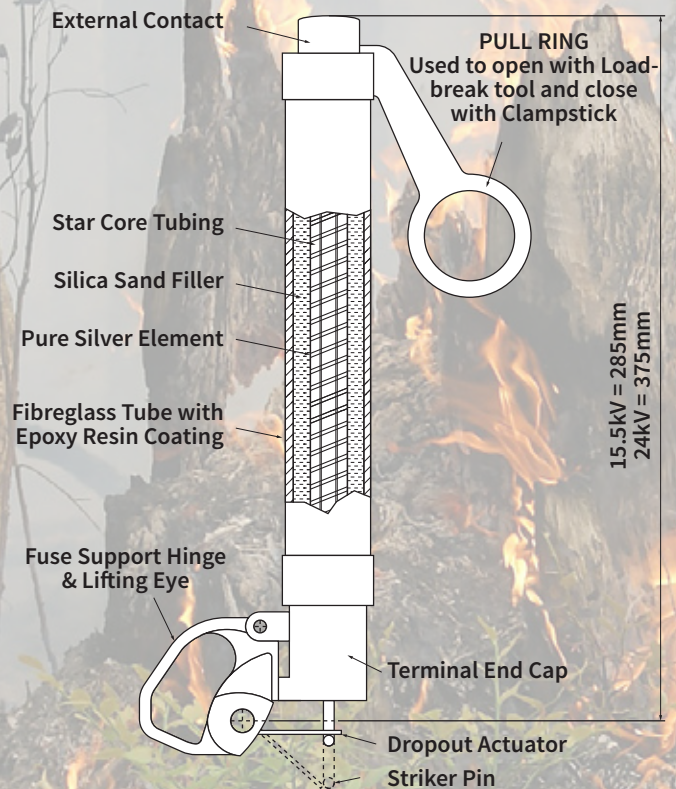
DENCO Fuses have a high rupture capacity and feature a new system of cut-off that guarantees a rapid extinguished arc, tripping fast and safely without the possibility of explosion, expulse of gases or molten fragments, eliminating the result of sparks and/or fire accidents in an urban or rural area.

SUITABLE FOR

- Substation networks
- Aerial urban and rural distribution power lines

IT'S WHAT'S INSIDE THAT COUNTS

The fuse element is composed of pure silver. Electric solder points secure it to the end terminal at both extremities. The silver element is protected by epoxy resin coated fibreglass tubing. The cavity of the fuse is filled with granulated quartz silica sand carefully compacted by a controlled process.

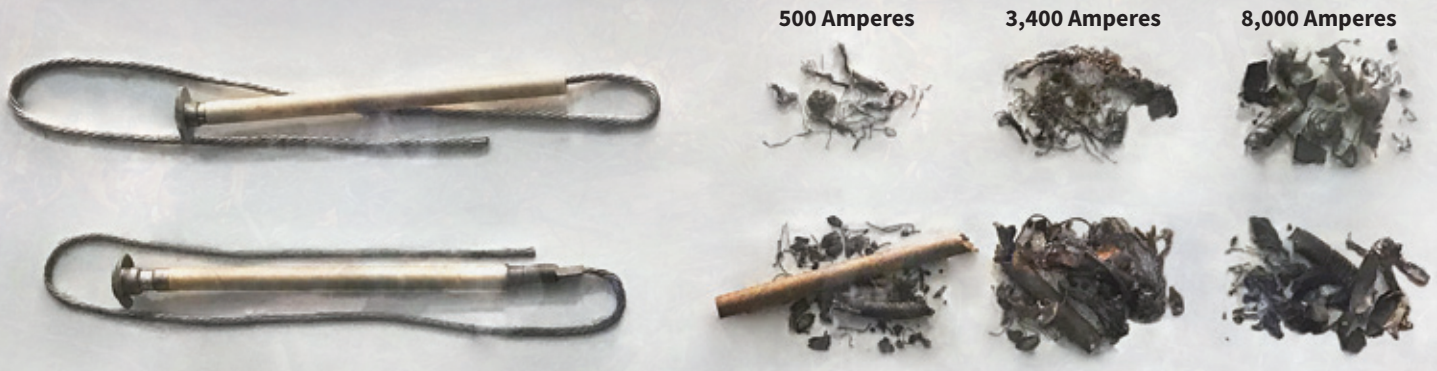


WHY DO YOU NEED A DENCO DROPOUT FUSE?

- **No Sparks or Molten Fragments**
- **No Release of Hot Gases**
- Current Limiting
- High Rupture Capacity
- Low Voltage Arc
- Low Watt Loss
- Pure Silver Element
- Cut Off Time U.R.

Switchgear Fuses for Energy Distribution conforming to NBR 8124, IEC 060282-2, ANSI / ABNT

PARTS EXPELLED FROM A FUSE CUTOUT



Rising To The Occasions

TransNet's Event Calendar



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Fax 0800 442 183
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Petone
Wellington
NEW ZEALAND
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Fax 04 576 0040
PO Box 39 383
Howick, Auckland

NEW ZEALAND

sales@transnet.co.nz

TransNet Tonga

Ma'ufanga

Small Industries
Ma'ufanga
TONGA
Ph +67 627 939
Fax +67 627 976
PO Box 2932
Nuku'alofa

TONGA

transnet@kalianet.to



EEA CONFERENCE 2018

20-22 JUNE

As quickly as it came around, it's gone – the EEA Conference & Trade Exhibition is done and dusted for another year. We had a lot of interest in our display, and if you'd like to know more about the following EEA products we can answer any of your questions:

- ALUMA-FORM fibreglass crossarms, equipment mounts and porcelain & polymer cutouts
- TE CONNECTIVITY Raychem conductor covers and bushing covers for animal protection, terminations, elbows, insulators, AMPACT, surge arrestors
- WALLBOX charge stations for EV
- GRID2020 LV Distribution Network Monitoring
- ORMAZABAL Switchgear

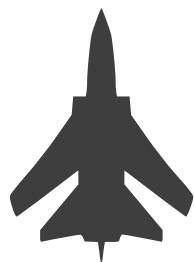


CONNEXIS ANNUAL CONNECTION 2018

2-4 OCTOBER



Missed the Connexis Annual Connection last year? Don't worry, it's back again fresh for 2018 with some great teams, tournaments, and talent. TransNet will be there as usual supporting the vital work being done in our industry and providing information about the products that help get the job done. If you'd like to come along to watch the Line Mechanic & Cable Joints competitions they will begin on Tuesday the 2nd of October at the Airforce Museum in Christchurch.



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