

# HV JUICE



ALLIED INSULATORS  
AIR BREAK SWITCH  
P.5



Allied Insulators



## This Issue

STOP CORROSION IN ITS TRACKS  
PAGE 3

NEED A VISUAL AIR BREAK FOR SAFETY?  
PAGE 11

EEA DELEGATES VISIT  
PAGE 12



**11kV Custom Engineered Crucifix Kit**  
PAGE 6-7

www.transnet.co.nz





## 1000V VDE ADJUSTABLE WRENCH

All the 1000V VDE adjustable wrenches in this range have laser etched measuring scales for pre-adjustment and accurate measurements. High quality German made tools.

### FEATURES

- Made from a combination of special steel, hardened & tempered
- Finished with dual layer insulated handles
- 1000V VDE, IEC 60900
- Made in Germany



Cat No.	Description	Jaw Opening
762-150	6" - 200MM ADJUSTABLE WRENCH	22MM
762-200	8" - 200MM ADJUSTABLE WRENCH	25MM
762-250	10" - 250MM ADJUSTABLE WRENCH	30MM
762-300	12" - 300MM ADJUSTABLE WRENCH	35MM

## 1000V VDE PLIER WRENCH

Pliers and a wrench set in a single tool. Excellent for gripping, holding, bending, and turning workpieces. This wrench has been manufactured with a high degree of reliability

### FEATURES

- Made from Chrome vanadium electric steel, forged and oil-hardened
- Finished with dual-layer insulated handles
- 1000V VDE, IEC 60900
- Parallel smooth jaw – 17 adjustment positions
- Jaw cam action gives 10-1 ratio for stronger gripping power
- Made in Germany



Cat No.	Capacity	Length (mm)
KP8607250	UP TO 46MM	250

## 1000V VDE RATCHET WRENCH SET

### FEATURES

- Ratchet wrenches with dual-layer insulated handles
- 1000V VDE, IEC 60900
- Supplied in plastic storage case with foam inlay
- Made in Germany

### SET CONTAINS

- 6 ratchet wrenches - 10, 11, 12, 13, 14, 17 mm



Cat No.	Description
279017	6PC RATCHET WRENCH SET 10 - 17MM

## 1000V VDE 1/2" DRIVE 16 PIECE SOCKET SET

### FEATURES

- Ratchet and accessories finished with dual-layer insulation
- 1 reversible ratchet, quick release 260mm
- 1 T-handle 200mm
- 8 sockets, 10, 13, 14, 17, 19, 22, 24, 27mm
- 2 extension bars, 125 and 250mm
- 3 inhex sockets, 5, 6, 8mm
- 1 screwdriver 3.5mm x 100mm
- Supplied in plastic storage case with foam inlay
- 1000V VDE, IEC 60900
- Made in Germany



Cat No.	Description	Type
TN251600	1/2" DRIVE 16PC METRIC 1000V VDE SOCKET SET 10 - 27MM	1/2"

# STOP CORROSION IN ITS TRACKS



**CORROSIONX IS THE ONLY MILITARY CERTIFIED COMPOUND OF ITS KIND AVAILABLE TO THE PUBLIC. A SUPERB CORROSION PREVENTION COMPOUND, LUBRICANT, AND PENETRANT ROLLED INTO ONE.**

## FEATURES

- Lubricates under heavy loads and high temperatures
- Creates a self-healing, dielectric film
- Completely shuts down electrolysis between dissimilar metals
- Penetrates rust & corrosion faster & further than other penetrants
- Frees parts, bearings and valves that are seized
- Electronically safe
- CorrosionX actually kills existing rust and corrosion
- Will not short sensitive circuits or interfere with electrical connections
- Cleans contact points and improves connectivity
- Prevents and eliminates battery terminal corrosion
- Often restores electronic gear exposed to moisture

CorrosionX XD (far left) versus competitors after 120 hours in salt spray test



## CORROSIONX<sup>®</sup>

CorrosionX is the world's best multi-functional ultra-thin film lubricant, penetrant and corrosion inhibitor, and can be safely used to protect and restore electronics.

The VOC of CorrosionX is ZERO. Other products in the range also offer the absolute minimal environmental impact being gentler on you, your equipment and your world.

## CORROSIONX<sup>®</sup> HD HEAVY DUTY

For those really tough jobs, like those involving direct exposure to rain, snow or seawater, use CorrosionX Heavy Duty, which forms a dripless, non-hardening, self-healing film that stubbornly resists removal – even by complete immersion in salt-water.

## CORROSIONX<sup>®</sup> XD EXTENDED DUTY

CorrosionX Extended Duty combines the best of CorrosionX and CorrosionX HD. Still a fast penetrant and thinly applied, it resists displacement or removal by splash or spray. It leaves a non-hardening, resilient coating that provides maximum protection against moisture intrusion.



## CORROSIONX

Available in aerosol, trigger spray, and bulk quantities



## CORROSIONX HD

Available in aerosol, trigger spray, and bulk quantities



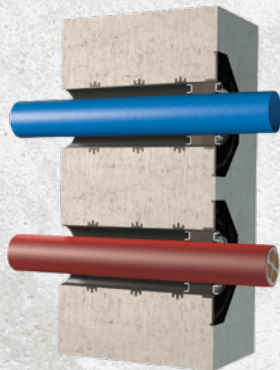
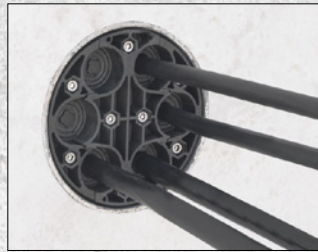
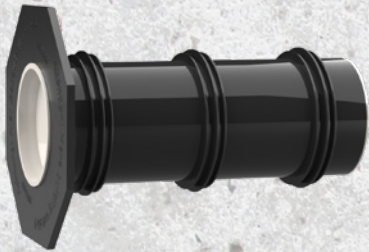
## CORROSIONX XD

Available in trigger spray and bulk quantities





## New Projects

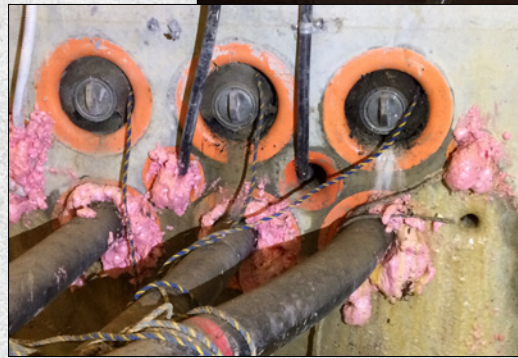


Protect your asset and avoid disaster by planning ahead using Hauff-Technik solutions for your new project. Hauff-Technik solutions start with a waterproof tested entry using a variety of different cast in wall or floor sleeves. Services including cable and pipes are then mechanically sealed using standard press seals inside the sleeve.



View the range of Hauff-Technik products on our website

## Retrofit for Refurbishment



If it's already too late then Hauff-Technik can provide retrofit solutions that include split wall flanges with standard or custom made press seals for those unique situations.

# hauff technik®

# ALLIED INSULATORS AIR BREAK SWITCH



## Why You Need THIS Switch!

- **330 mm open contact clearance distance on 11 kV ABS** as per MAD clearance outlined in EEA SM-EI Part 3 Rules for work on equipment. Section 7.703
- Modular Design offers multiple configurations & mounting
- Unassembled kits for remote access areas with 30 minute build time
- Pre-assembled kits boast installation time of less than 15mins
- Customise creepage distance for individual network requirements (porcelain only)
- Hook stick operating handle can be positioned at the height of your choice for easier operation and safety in high wind situations



**Allied Insulators**



**Self-aligning Spring Loaded Contact Blades & Arcing Horn Blades**, for efficient and precise contact operation



**Interlock Bolt & Padlockable Handle** Make switch operation safe and intentional, and ensure field staff remain safe



**Wide Clearance**  
330mm open contact clearance distance on 11kV ABS

**Designed. Manufactured. Tested. Proven. In the UK for more than 40 years...**

## Product Details & Functionality

Range can be supplied with the following options:

- Silicon Rubber Insulators as standard or Porcelain Insulators if preferred
- High Creepage Insulators for desert / coastal conditions
- Available for 11kV, 22kV and 33kV applications
- Plain Break Arcing Horns
- Load Break Interrupter Heads for increased rating
- Independent Manual closing mechanisms improve capacity
- High Level Hook Stick operation as standard, ground operated handle request

- Two or Three Stage Interlock operations are available to meet the customer's operational safety rules
- Manufactured and tested in accordance with IEC 30265-1, IEC 60694, IEC 62271, BS EN 60129 and ENATS 41-36 at Allied Insulators' ISO 9001 approved UK factory. All products are available in voltages from 11 kV to 36 kV and ratings up to 630 A.



Ph 0800 442 182  
+64 9 274 3340

[sales@transnet.co.nz](mailto:sales@transnet.co.nz)

[www.transnet.co.nz](http://www.transnet.co.nz)

### RAYCHEM CABLE CLAMPS

**FEATURES**

- Integral stainless steel clamping plates for consistent clamping pressure
- Range taking elastomeric inserts to minimise stock holdings
- Range accepts wide variety of cable diameters
- Accommodate round, oval or “tri-round” cable profiles
- Bottom half of clamps can be mounted, prior to cable fitment
- Impact resistant, Halogen free, UV Stabilised, self extinguishing materials
- Easy product identification
- Can be used as a single cable clamp or stacked
- Can be mounted using centre bolt or 2 bolts at extremities
- Fit standard 41mm X 41mm Unistrut (41mm X 25mm Unistrut can be accommodated\*)
- Designed and independently tested to meet all requirements of IEC61914

### MV STAND OFF INSULATORS

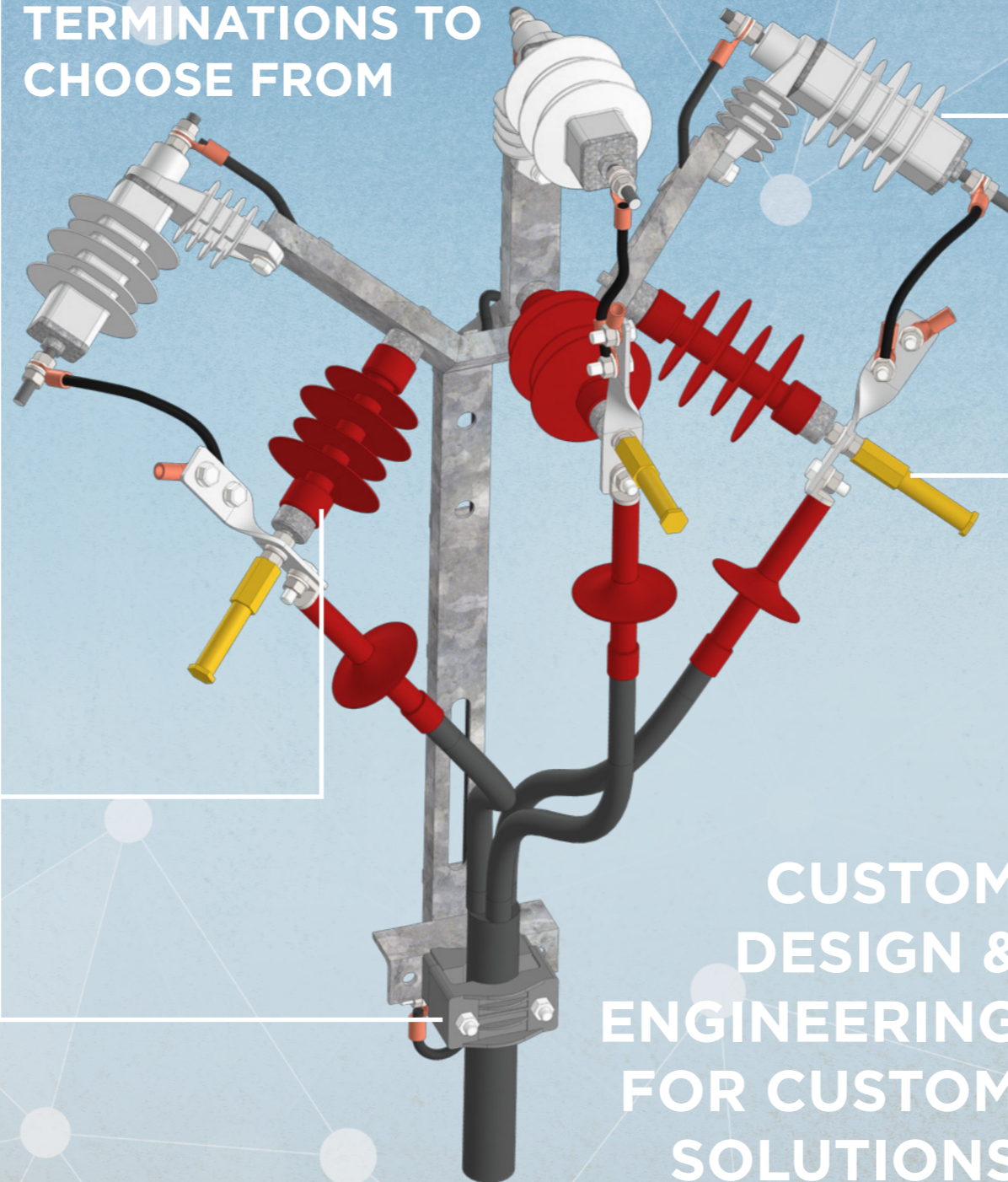
**FEATURES**

- High strength FRP core
- Standard stainless steel fittings
- Impenetrable interfacial sealing
- Pollution resistant EVA HV insulation housing in service since the 1970’s.
- Alternating shed configuration for optimal pollution flashover performance

**BENEFITS**

- Excellent performance in polluted environments
- Lightweight – easy installation and reduced transport costs
- High corrosion resistance
- Excellent resistance to vandalism
- Shatterproof design – breakages eliminated during installation

## COMPREHENSIVE RANGE OF RAYCHEM TERMINATIONS TO CHOOSE FROM



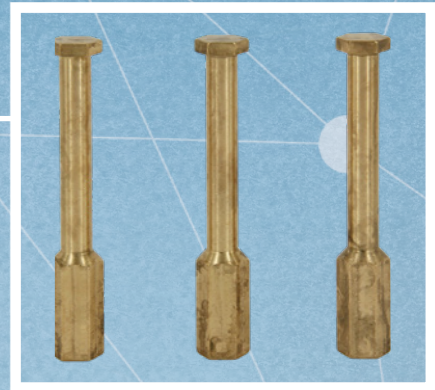
## CUSTOM DESIGN & ENGINEERING FOR CUSTOM SOLUTIONS

### BRASS EARTH STUDS

The perfect piece of equipment to enable staff to apply temporary earths to cable terminations easily and safely.

**FEATURES**

- Easily installed M12 thread
- Made from solid brass
- Attach when installing new terminations
- Can be retro fitted to existing terminations
- Easily installed by glovers ready for a shutdown

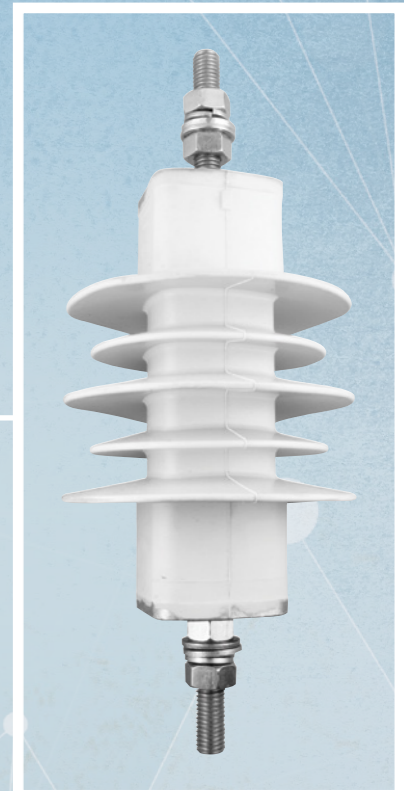


### STATION CLASS ARRESTORS\*

OCP2 Station Class arrestors are widely used in substation applications to protect equipment from over voltages. Surge Arrestors sacrifice themselves to protect the asset they are installed with.

**BENEFITS**

- Tested in accordance with IEC60099-4
- Superior protection margins
- Direct molded housing to prevent moisture ingress
- Low residual voltages
- High-energy handling
- Superior TOV performance
- Safe non-shattering short circuit behavior to higher current levels
- Maintenance free



- Hydrophobic silicone housing: (Tracking and erosion resistant)
- Excellent cantilever and tensile performance
- Excellent mechanical, vibration and impact withstand capability
- Quality design and manufacturing, ISO 9001 and 14001 compliant

# TALK TO TE NOW!

**\* Customise by changing surge arrestors to suit your network. HDA Class 1 version also available, contact us for more information.**

Raychem cable clamps have a patented design which optimises clamping force at both the attachment point, and the cable by securing each clamp half separately. Cables can be aligned and located in the bottom half of the clamp prior to final tightening.





## MI3252 MICROOHM 100A CONTINUITY TESTER

The MI 3252 MicroOhm 100A is a portable low resistance ohmmeter used to measure low contact resistances of circuit breakers, switches and busbar joints using test current from 100 mA to 100 A with very high accuracy of results (0.25%). This instrument can be powered from either mains supply or internal battery. PC SW HVLink PRO supplied as a standard accessory enables downloading, analysis and export of test results and printing of test reports with ease.

### KEY FEATURES

- Accurate: 1 nΩ best resolution with 0.25% accuracy.
- Bar graph: on screen resistance bar graph.
- Battery powered: the instrument enables measurements with 100 A for up to 10 minutes when powered from internal battery only.
- Safe: sustain external voltages in case of wrong connection, protection level (CAT IV/50 V); automatically detects continuity in current circuit.
- Single and continuous measuring modes.
- Custom limits: the limits can be set for PASS or FAIL evaluation of test result.
- Portable: rugged carrying case with a handle and lightweight design (less than 12 kg) enable easy moving the instrument between sites.
- High protection degree: IP64 (case closed).
- Built-in memory enables storage of up to 1000 test results.
- Downloadable: downloads test results via RS232 or USB cable directly to the PC with the help of the HVLink PRO software.
- Two standard 5m, 25mm<sup>2</sup> (100A) test leads with heavy duty clamps (60mm jaw)

### MEASURING FUNCTIONS

- Resistance measurement with adjustable test current (100 mA ... 100 A);
- Voltage drop measurement.
- Technical data
- Dimensions (w x h x l): 410 X 175 X 370 mm
- Weight (with batteries, without accessories): 11.8 kg

### APPLICATIONS

- Electrical Power Systems
- Power Plants
- Distribution
- Connections / Bondings
- Industrial Systems
- Switchboards / Controlgears
- Special Installations / Locations
- Railway Systems



### STANDARDS

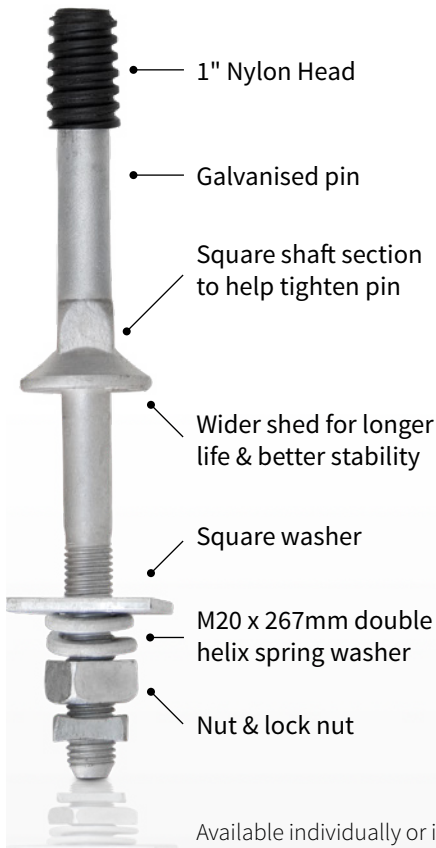
- |                            |                    |
|----------------------------|--------------------|
| • ASTM B 539               | • IEEE C37.09-2007 |
| • NMEA AB 4-2009           | • IEC 62271-1      |
| • El Real Decreto 223/2008 | • IEC 62271-100    |





## INSULATOR PIN FOR 1130W

Use with 0-0361400-0 Porcelain 11kV Pin Insulator.



### FEATURES

- 1" Nylon Head
- Galvanised Pin
- M20 x 267mm Double Helix Spring Washer
- Square Washer
- Nut & Lock Nut

# INSULATOR PIN FOR 1130W 11KV PIN INSULATOR

CAT NO. J211CZS

Available individually or in boxes of 25.

## LV MULTI-PURPOSE CONNECTOR BLOCKS

XK2 connector blocks are designed for a wide variety of electrical systems. They are a perfect upgrade for busbars, traditional power distribution blocks and strip connections. The unique socket design provides customers safe and reliable installation.

### FEATURES

- Provides hundreds of input/output combinations with internal and external parallel connection methods, giving wiring professionals remarkable flexibility
- Low-cost and reliable contact point design
- Supports 10mm<sup>2</sup>-300mm<sup>2</sup> in and 1mm<sup>2</sup>-50mm<sup>2</sup> out
- Can be mounted on TN 35 DIN rail or on base-plate
- Passed UL 94 V-0 flammability test
- IEC 60529 IP20 rated safety protection
- IEC standard colour code (blue, red, yellow, green, and yellow-green)
- Fit for IEC 60947-7-1

## EIGHT BLOCKS



## HUNDREDS OF INPUT/ OUTPUT COMBINATIONS

Cat No.	Voltage (V)	Amp Rating (A)	Input Cable Size	Output Cable Size & Quantity
TNXX235/10X4	690	125	10-35 mm <sup>2</sup>	4 X 2.5-10 mm <sup>2</sup>
TNXX235/4X9	690	125	10-35 mm <sup>2</sup>	9 X 1-4 mm <sup>2</sup>
TNXX250/10X6	690	150	16-50 mm <sup>2</sup>	6 X 2.5-10 mm <sup>2</sup>
TNXX270/10X8	690	192	25-70 mm <sup>2</sup>	8 X 2.5-10 mm <sup>2</sup>
TNXX270/16X6	690	192	25-70 mm <sup>2</sup>	6 X 4-16 mm <sup>2</sup>
TNXX295/25X4	690	232	25-95 mm <sup>2</sup>	4 X 6-25 mm <sup>2</sup>
TNXX2120/16X8	690	309	35-120 mm <sup>2</sup>	8 X 4-16 mm <sup>2</sup>
TNXX2185/35X8	690	353	70-185 mm <sup>2</sup>	8 X 10-35 mm <sup>2</sup>



TNXX235/10X4



# EV CHARGERS - SHARING THE LOAD



The EV revolution is upon us and we need to ensure the increased demand for electricity doesn't impact the existing electricity network too much! How, you might ask?

## ENCOURAGE LOWER CHARGE CURRENT FOR LONGER

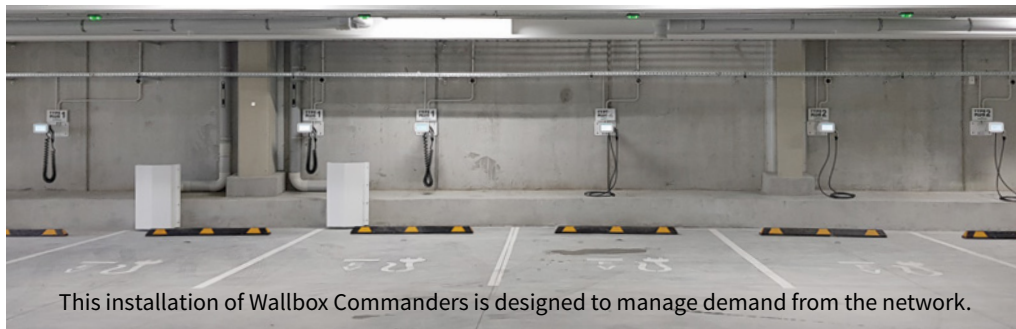
- Delayed charging schedules can be set moving demand away from peak times
- The world's smallest and smartest charging stations for home or work
- Longer charge sessions at lower charge power have less impact on supply
- Increase to faster charge speeds only when you need it
- Auto Learning Charging (ALC) enables the charging station to automatically tune itself to the user's needs, creating an efficient and simple EV charging solution (available August)
- Optional power boost sensor enables the charging station to monitor the total house load
- myWallbox app allows complete control and monitoring of your charging station



## CHOOSE TECHNOLOGY THAT MAKES BEST USE OF THE SUPPLY AVAILABLE



- Flexible systems that work within the constraints of the existing supply
- Power sharing – distributes the available charge current to all cars connected to the same phase. All Wallbox models are set up for power sharing
- Dynamic phase balancing – Wallbox Commander adds to power sharing by internally switching the leading phase to the least loaded phase at the start of charging
- Combine power sharing with dynamic phase balancing for the most efficient solution in a multi EV charging network
- Add the powerful myWallbox cloud-based software business solution to create the most complete charging station installation



This installation of Wallbox Commanders is designed to manage demand from the network.

Make sure you take the time to visit the TransNet stand at EEA 2019 to find out all the latest info on EV charging and how to mitigate the risk on your network.

## USE A SMARTER CHARGER

Wallbox chargers have all of the functionality above and more.

- Variable Charge Current
- Delayed Charging Scheduling
- Auto Learning Charging
- Power Boost Sensor
- Power Sharing
- Dynamic Phase Balancing
- myWallbox Cloud-Based Software



wallbox

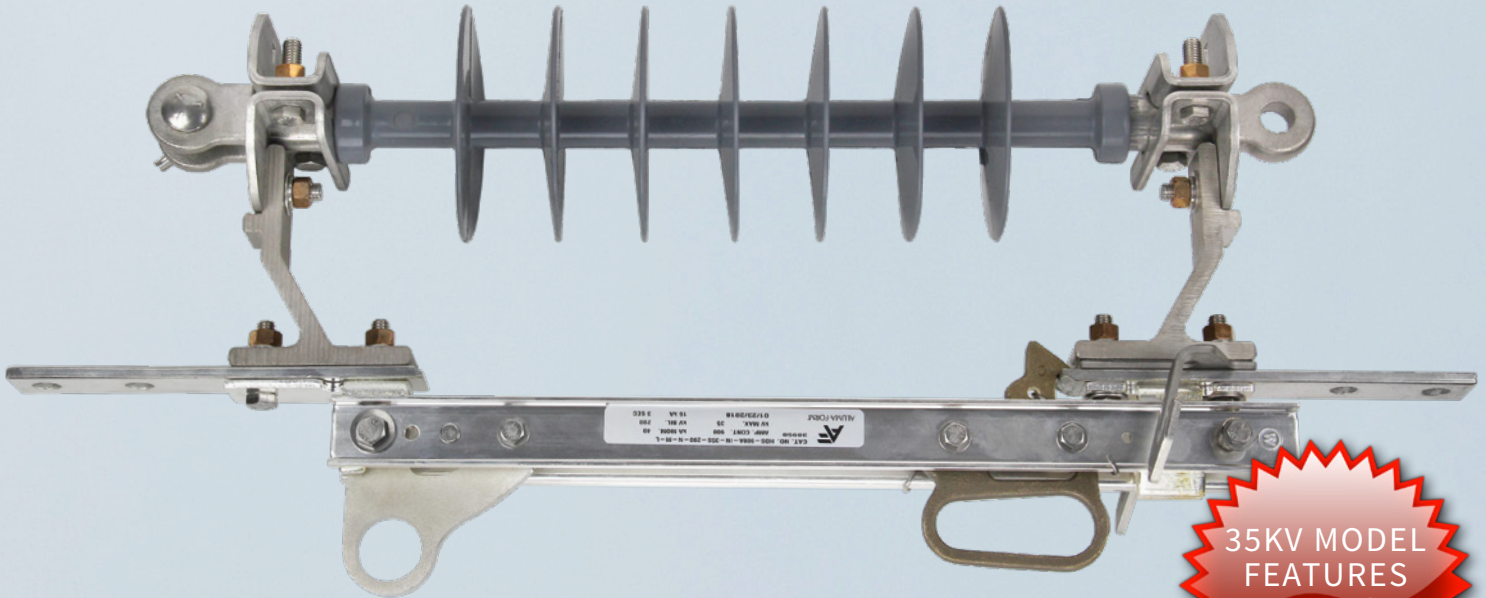
[www.evc.co.nz](http://www.evc.co.nz)  
[ev@transnet.co.nz](mailto:ev@transnet.co.nz)



Ph 0800 442 182  
+64 9 274 3340

[sales@transnet.co.nz](mailto:sales@transnet.co.nz)

[www.transnet.co.nz](http://www.transnet.co.nz)



35KV MODEL  
FEATURES  
**320MM GAP  
CLEARANCE**

## NEED A VISUAL BREAK FOR SAFETY?

Inline Switches from Aluma-Form Offer The Perfect Solution

Great for use on all New Zealand MV networks, this unit is an excellent addition for applications where a visual break is necessary.

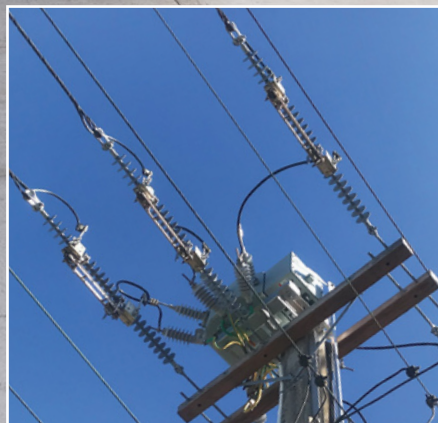
Whether it's a permanent or temporary installation, the Aluma-Form Inline Disconnect Switch is the light weight, robust and reliable solution.

### FEATURES

- 15-35kV, 900A
- Polymer Insulator
- Silver plated cooper blades
- Marine grade 316 Stainless Steel
- Integral 90° blade stop
- Silver plated brass contact and hinge
- Tin plated copper terminals
- Pull to Open / Pull to Close operation

This switch is assembled using the highest quality components – designed and manufactured in the USA and suitable for 15-35kV & 900Amps.

A complete inline kit is also available, contact us for more information.



Product #  
**HDS900A-IN35S-200-NML**

  
**ALUMA-FORM®**

# EEA Delegates To Visit TransNet HQ

## See Our Fully Functioning Micro Grid



### TransNet New Zealand Ltd

#### Auckland

78 Cryers Road  
East Tamaki  
Auckland  
NEW ZEALAND  
Ph 0800 442 182  
Fax 0800 442 183  
PO Box 39 383  
Howick, Auckland

#### Wellington

10 Petone Ave  
Petone  
Wellington  
NEW ZEALAND  
Ph 04 576 2530  
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

As part of the 2019 EEA Annual Conference and Trade Exhibition, two site visits have been offered to delegates. One of those site visits is to our Head Office in East Tamaki to look more closely at the sustainability initiatives around energy generation, storage, and usage that have been implemented by TransNet. What better way to understand how it works than to immerse yourself in it – so that's what we've done.

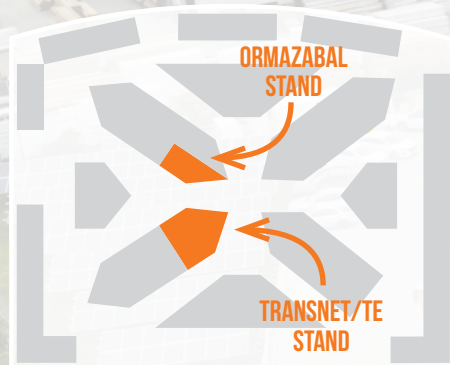
With a fully functioning 150kW Solar Farm, 30kW/130kWh Smart Storage System, energy efficient appliances/fittings, and some very clever software, TransNet has managed to generate, store and efficiently distribute enough energy to run the entire facility for most of the day.

Spaces are limited, so if you haven't already, be sure to register your interest with the conference organisers so you can secure your seat on the bus. Looking forward to showing you around our facility.

## EEA CONFERENCE | 26TH-27TH JUNE | SKYCITY CONVENTION CENTRE

You'll be able to find TransNet and our supply partners TE Connectivity positioned on the same stands as the last conference. This year though, we'll have another supply partner – Ormazabal

– at the trade exhibition with us. They'll be just across the walkway from us so if you're interested in substation solutions make sure you come and see what they have to offer.



## TRANSNET SITE VISIT TUESDAY 25TH JUNE 9AM-NOON

### HOW TO REGISTER

Contact the EEA conference organisers and register now, spaces are limited.

EEA Conference & Events:

04 384 1511 | eea2019@confer.co.nz

### WHAT TO EXPECT

We will have a presentation outlining the project aim, hardware chosen, how it was implemented and what we've learned, followed by morning tea and time to look around then a tour of the facility including the Micro Grid.

TransNet NZ Ltd has made every reasonable effort to ensure the accuracy of this information and it is to the best of our knowledge correct and reliable. Under no circumstances does this constitute an assurance of any particular quality or performance and users should independently evaluate the suitability of products for their desired application. All information in this publication including pricing, drawings, illustrations, images and graphic designs are reflections of our current understanding. TransNet NZ Ltd reserves the right to make any adjustment to this information at any time. Our liability for the products outlined in this publication is set forth in our standard terms and conditions of trade. In case of any potential ambiguities or questions, please contact us for clarification.

