

# HV JUICE



# NOW WHAT?

All the solutions for Temporary Earthing and Equipotential Bonding



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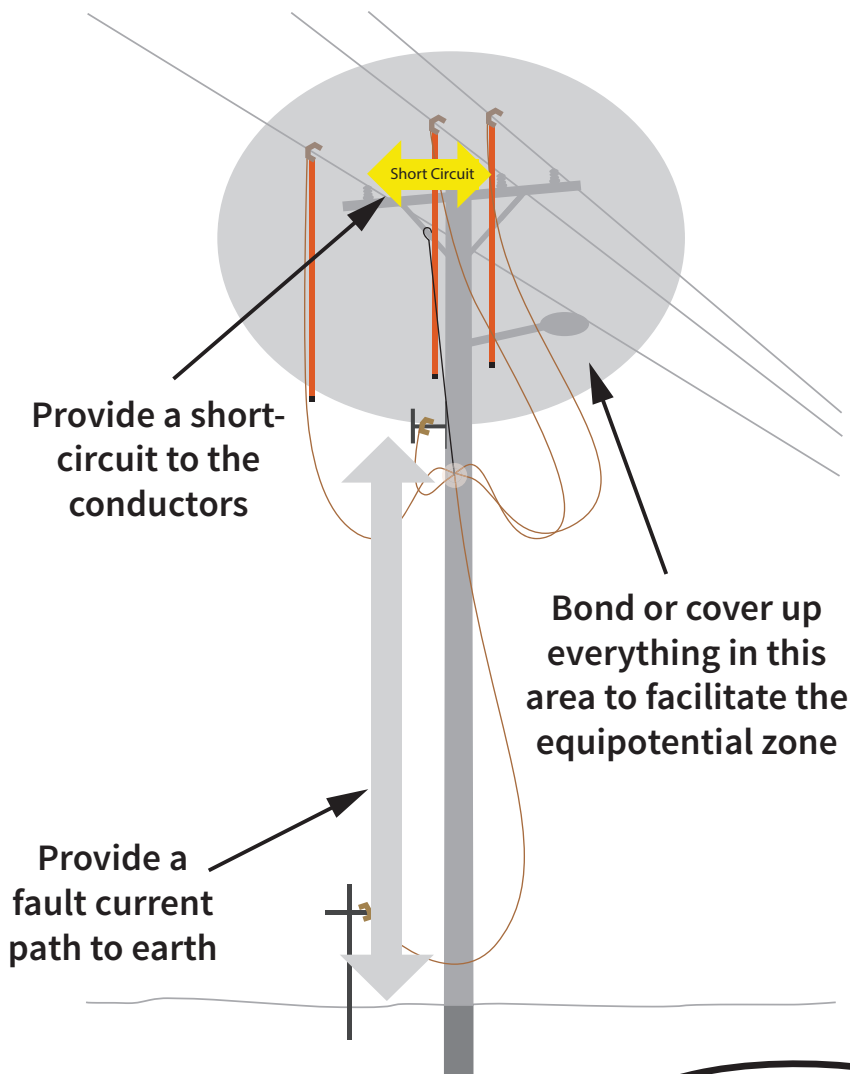
100% NEW ZEALAND



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## THE EQUIPOTENTIAL ZONE



Earthing applied to ensure operation of circuit protection and facilitate creation of equipotential zone at working position.

Talk to us now for all your equipotential bonding requirements.

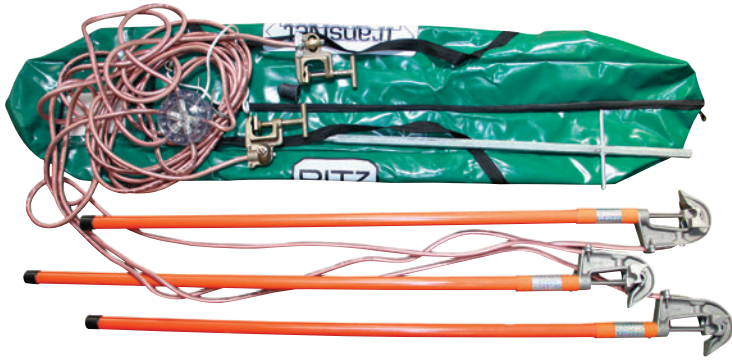
### MORE SHUTDOWNS? WHAT'S REALLY REQUIRED?





Ritz Temporary Earth Sets offer protection to Linemen from accidental livening and offer a direct path to earth for any current that should accidentally enter the work site. These temporary earth sets have 35mm<sup>2</sup> or 50mm<sup>2</sup> flexible Copper conductor and fully insulated hotsticks for safe and easy application. The sticks are permanently attached to the clamps, giving an even greater visual reference of the earthed zone. Easy to install, simply position the clamp and tighten onto the conductor using the attached hotstick.

These earths are a well known and extensively used design here in New Zealand.



Cat No.	Description
CAR/ST-NZ-HG14880	RITZ PORTABLE EARTH SET, 35MM <sup>2</sup>
CAR/ST-NZ-HG14880-5	RITZ PORTABLE EARTH SET, 50MM <sup>2</sup>
TN11-33KV/SET	RITZ PORTABLE EARTH SET, 35MM <sup>2</sup> , 2 PIECE STICKS

## WITH ATTACHED EARTH STICK

### Features

- Reflector at the top of each stick for night time visual check
- Flexible Copper conductor with clear sheath for ease of visual inspections
- Factory test report supplied with every set
- Unique serial number for traceability
- Inspected & tested to IEC 61230 standard

### Set includes:

- 3x 3m leads attached to fully insulated line clamp hotsticks
- 1x 9m lead from cluster to ground with ground clamp
- 1x 1m lead from cluster to pole with ground clamp to bond pole metal work
- 1x heavy duty storage bag
- 1x 1m earth stake
- 1x Acrylic cluster cover for easy fast inspection of connections

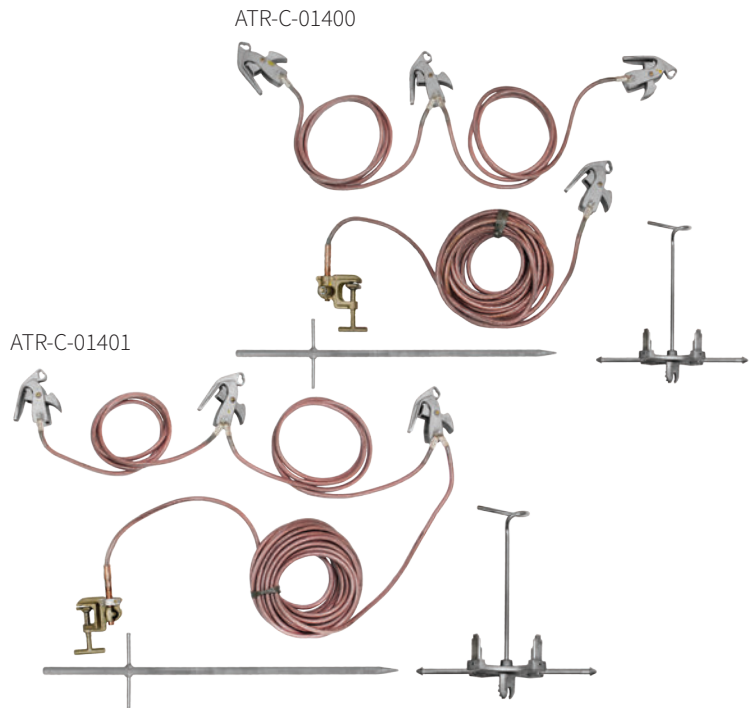
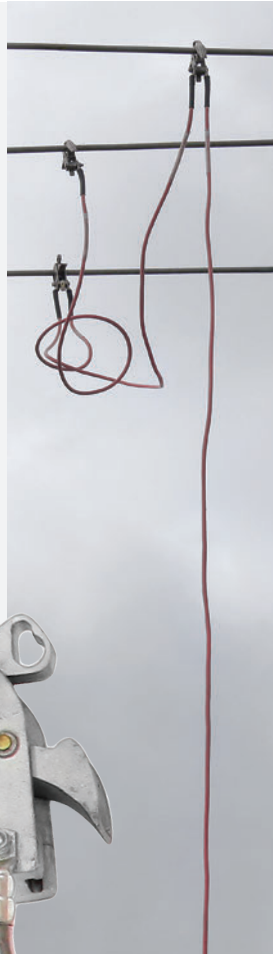
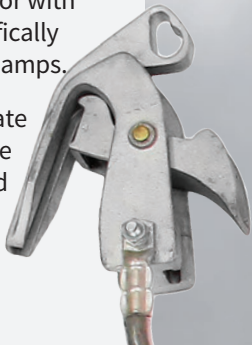


## WITH SNAP-ON CLAMP

These spring loaded clamps are available with a looped or separate earth lead. Extremely fast and easy to install on overhead lines, the operator simply sets the preloaded jaw of each clamp and mounts them onto the application plate which is connected to a hotstick. Once the clamps are mounted to the application plate they are lifted above the conductor and pulled back down over it to snap into place.

Equally easy to remove, simply pull each clamp from the conductor with the clamp removal tool specifically designed for use with these clamps.

A three phase set with separate earth lead helps to reduce the amount of weight being lifted into the air while the looped shorting and earth set offers extra convenience (ideal for urban applications).



Cat No.	Description
ATR-C-01400	RITZ PORTABLE SNAP CLAMP EARTH SET WITH SEPARATE GROUND LEAD, 35MM <sup>2</sup> CU
ATR-C-01401	RITZ PORTABLE SNAP CLAMP EARTH SET WITH COMBINED GROUND LEAD, 35MM <sup>2</sup> CU





Low Voltage Earth Sets and Jumpers are an essential part of any tool kit. With custom design and build available you can determine your very own cable size, lead length and clamp style. All made with Copper Flex cable, these units are easy to use and store.



## LV EARTH SETS

LV earth sets are light weight sets made up of up to six leads connected by a central cluster point protected inside a clear acrylic cluster cover. The flexible copper conductor and the screwdriver handle clamps ensure ease of use.

### FEATURES

- Flexible Copper conductor with clear sheath for visual inspections
- Clear central cluster
- Customisable - simply advise us of your requirements
- Four cable sizes (35mm<sup>2</sup>, 50mm<sup>2</sup>, 70mm<sup>2</sup>, 95mm<sup>2</sup> and two clamp types available
- Sturdy carry bag also available

## LV JUMPERS AND TRUCK EARTHS

All LV jumpers and Truck Earths are available in custom lengths, with either of the two screwdriver handle clamps attached on one or both ends. The beauty of this range is it is completely customisable, so whatever your application, the perfect lead can be assembled.

### FEATURES

- Flexible Copper conductor with clear sheath for visual inspections
- Clear central cluster
- Fast, easy installation and removal
- Customisable - simply advise us of your requirements
- Four cable sizes (35mm<sup>2</sup>, 50mm<sup>2</sup>, 70mm<sup>2</sup>, 95mm<sup>2</sup> and two clamp types available

Cat No.	Number of Leads with Handles	Length of Leads
LVE/SET6X2M35MM2LEAD	6	2M
LVE/SET35MM1.5M10M	5	4 X 1.5M, 1 X 10M
JUMPSETLV5WAY2MTR	5	2M
LVE/SET35MM1.5M5M	5	4 X 1.5M, 1 X 5M
LVE/SET35MM2M	4	2M
LVE/SET35MM5X1.5M/10	6	5 X 1.5M, 1 X 10M

**SEE THE COMPLETE RANGE**



# MARIGOLD RUBBER INSULATING GLOVES



The Marigold range of gloves by Balmoral provides some of the most dexterous and supple feeling gloves in the market while still adhering to robust safety standards.

The Marigold range of low and high voltage gloves by Balmoral are a Utility grade product. They come in a variety of sizes including half sizes, and are available to order in a range of cuff styles and shapes.



balmoral engineering







From Class 00 through to Class 4, these gloves include innovative safety features such as dual layer construction and a proprietary "Aqueous Dipping" technique to ensure the most pure Latex Rubber finish. Marigold gloves are chlorinated for easy donning and duffing which also contributes to a native level of flame resistance.



Complete the package with a range of accessories including premium Leather Outer Gloves, Insulating Sleeves, Glove Bags, Talc and cleaning products. In addition, special Arc Flash rated Cut Resistant Gloves (Powerflex) are also suitable for use as an "Outer" glove when following IEC/EN standards.

## MARIGOLD INSULATING GLOVES - FEATURES & BENEFITS

- Pure latex gloves manufactured under ISO 9001 & ISO 14001
- Certified to EN 60903
- Also available in ASTM D120

Class Colour	Proof Test Voltage AC/DC	Max Use* Voltage AC/DC	Illustrative Labelling
00 BEIGE	2,500/10,000	500/750	 ANSI ASTM D120 EN60903 MAX USE 500V AC TYPE 1 10 CLASS 00
0 RED	5,000/20,000	1,000/1,500	 ANSI ASTM D120 EN60903 MAX USE 1,000V AC TYPE 1 10 CLASS 0
1 WHITE	10,000/40,000	7,500/11,250	 ANSI ASTM D120 EN60903 MAX USE 7,500V AC TYPE 1 10 CLASS 1
2 YELLOW	20,000/50,000	17,000/25,500	 ANSI ASTM D120 EN60903 MAX USE 17,000V AC TYPE 1 10 CLASS 2
3 GREEN	30,000/60,000	26,500/39,750	 ANSI ASTM D120 EN60903 MAX USE 26,500V AC TYPE 1 10 CLASS 3
4 ORANGE	40,000/70,000	36,000/54,000	 ANSI ASTM D120 EN60903 MAX USE 36,000V AC TYPE 1 10 CLASS 4

Insulating Gloves and Sleeves must have a colour coded label to meet appropriate ASTM Specifications.

\* Maximum Usage Voltage when worn with leather protectors.

- Ergonomically shaped
- Excellent strength & durability
- Supreme feel & flexibility
- Outer protector gloves custom designed to perfectly complement the Marigold rubber insulating glove
- Manufactured without the use of solvents & hazardous chemicals utilising a proprietary aqueous dipping process
- Acid resistant
- Ozone resistant
- Low temperature resistant
- Comprehensive range of classes, colours, lengths & sizes, including half sizes
- Various cuff styles available including straight, contour & bell
- Arc Flash certified





## FEATURES AND BENEFITS

- Specifically designed product for use in utility applications
- Touch safe - no bare live parts
- Easy to install
- 185mm<sup>2</sup> to 300mm<sup>2</sup> mains & up to 50mm<sup>2</sup> service connections
- Tested to 600 AMPS
- Capacity to house additional service fuses for street lights or customers
- Galvanised Steel pillar base and UV stable Rotathene 6329 plastic pillar body
- All products come with an installation instruction and components list
- Functional link and isolation capacity allowing minimal customer outage minutes during fault conditions
- To aid quick and easy fault finding in LV networks
- Maximum flexibility control of your LV network



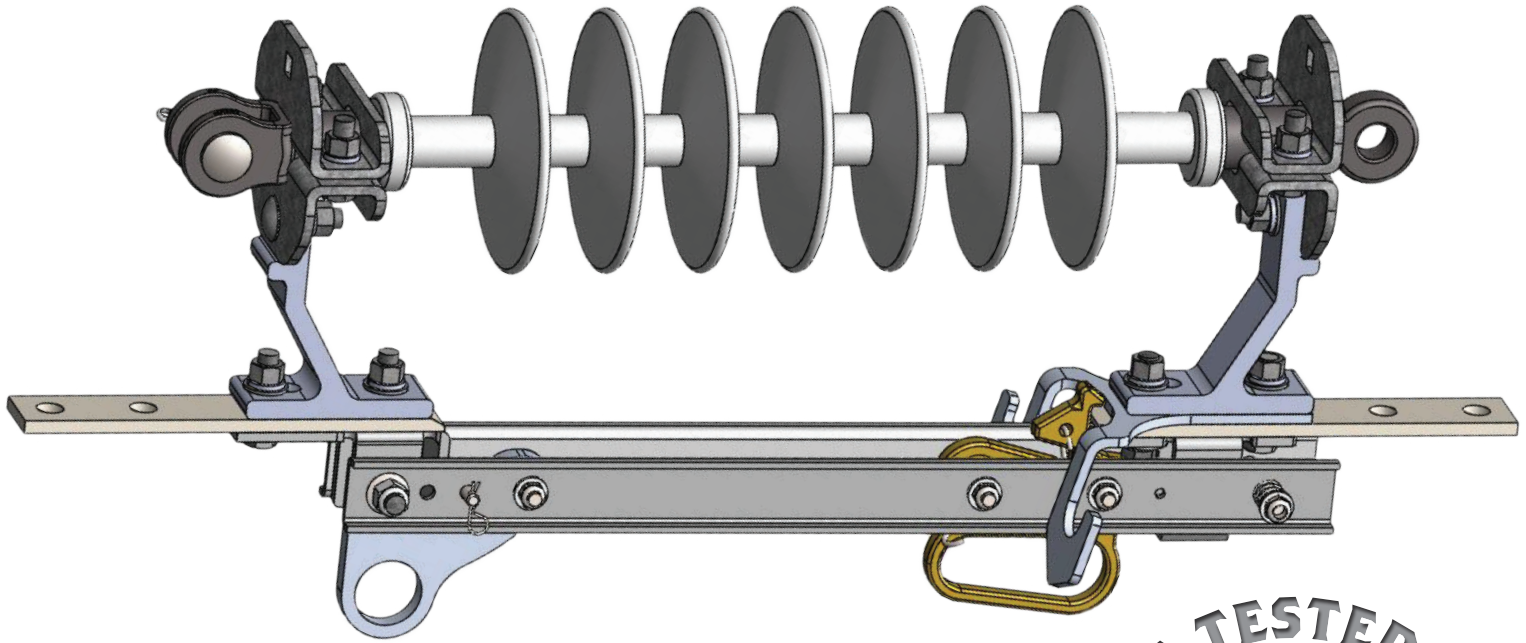
## THE SAFER WAY TO SWITCH & ISOLATE LV MAINS CABLES

This 3-Way Open/Switching Point Link Pillar is predominantly used for standard link and isolation procedures and load balancing. The TE Link Pillar is designed to be used in a 3 phase, 400 Volt, 50 Hz MEN distribution system, to connect/disconnect or parallel LV feeders.

- No bare live parts - completely encased Copper bus for worker safety
- Ability to include service connections if required
- Tinned Brass connections eliminate possibility of corrosion
- Accommodates main cables 185mm<sup>2</sup> up to 300mm<sup>2</sup>
- Tested to 600 Amps

Learn more about the Tappat range of products at [te.com](http://te.com)





This 15-35kV In-Line Disconnect Switch from Aluma-Form is marine grade (316SS hardware and brackets, with all Aluminium components nickel plated and all hex nuts silicone bronze) and features a 200kV BIL silicone insulator.

## FEATURES

- 900A
- 15-35kV
- Polymer Insulator
- Silver plated copper blades
- Aluminium and HDG Steel Bases
- Integral 90° blade stop
- Silver plated brass contact and hinge
- Tin plated copper terminals
- Pull to Open / Pull to Close operation
- All stainless steel option

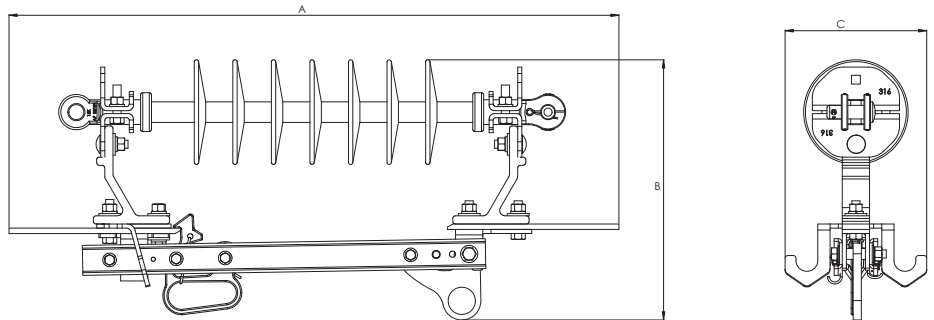


## SUPERIOR MECHANICAL PERFORMANCE

- 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

## SUPERIOR ELECTRICAL PERFORMANCE

- Best electrical conductivity
  - Full silver plating on hinge, contact and blades
  - Maximum contact temperature 10-15% lower than competitors
- Alternative configurations & connections available  
25kA sym 1 sec short-time withstand



ALUMA-FORM®

Cat No.	Rated Voltage (kV)	Rated Current (A)	Dimensions (mm)		
			A	B	C
HDS-900-IN35S-200-NML	15-35	900	711	303	165



# EXTEND YOUR REACH

## Terex Ritz Hotsticks



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**T**erex Ritz hotsticks are part of an extensive range of tools for work on overhead lines. Products manufactured by Terex are recognised worldwide for their quality & durability.

**T**he range includes sectional, telescopic, & measuring hotsticks; gripall sticks; clamps; accessories; and repair kits for overhead line work.

The RITZGLAS® insulating pole contains a polyurethane foam core which prevents humidity, dust absorption and condensation. Its exterior consists of highly treated fibreglass, impregnated with special epoxy resin, ensuring high dielectric and mechanical strength.

The poles are submitted to several tests at Terex laboratory according to the ASTM F-711 and IEC 60855 standards and are approved for work only after complying with all standard requirements.

### TRIANGULAR TELESCOPIC STICKS

RITZGLAS Triangular Telescopic Hotsticks are designed to make work with overhead electrical systems faster and easier for the operator. The aluminium universal head means it can accommodate standard fittings.

- Triangular shape requires no twisting to lock each section
- Comes with a rubber ring and seal to secure the end fitting for storage and transportation
- Also available with metric measuring markers, useful for vertical span measurements (specify M when ordering)
- Modular system enables you to use only the number of sections required for each job. All sections are available separately in order to replace damaged sections
- Assembled with epoxy-resin reinforced fibreglass poles, the VTT range complies with ASTM F-1826/99 and IEC 62193/03

### GRIP-ALL CLAMPSTICKS

Grip-All Clampsticks are primarily used for installing live line and grounding clamps, as well as live line protective cover-up and test instruments. Commonly called a 'shotgun', the operating mechanism incorporates a sliding hand grip that opens the hook to grasp a clamp eye screw and retract it into the tool head. A thumb latch is depressed to release the locked hand grip and open the hook. Complies with ASTM F-1826/99 and IEC 62193/03.

### UNIVERSAL STICKS

RITZGLAS Universal Sticks are made from foam filled unicellular Polyurethane, dielectrically tested to 100kV/ft according to ASTM F711. To make handling, storage, and transportation more practical, universal sticks consist of standardised sectional elements which are interchangeable and attached with quick spring-action locking pins.

- The total length can be increased or reduced by adding or removing sections thus altering the working voltage class
- 38mm OD handle and middle sections, 32mm OD top section



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