




Bowthorpe[®]

EFEN 

 **GRIDKEY**

NKT

Langmatz 

PFISTERER

POLARIS[®]

HellermannTyton

 **Lucy Electric**

 **insulect**
VERSATILITY VIA COLLABORATION

Providing quality connection solutions alongside these leading global brands.

Hiko UDP In-Ground Distribution Box

Hiko releases its new 400x400 UDP model in response to network demand.

The Hiko UDP takes asset lifecycle management to the next level: it future proofs the LV network and eliminates the risks associated with above ground pillars. The design of the pit eliminates the need for a concrete vault or collar, reducing time and cost on site.

Secure, watertight underground distribution link switches and services up to 400 A.

The Hiko UDP uses industry standard fusegear / switchgear and structural pits to provide a safe, robust, reliable, flexible and future- proof solution for underground urban distribution reticulation and service supplies up to 400 A.

Hiko uses pits made from Langmatz in Germany which are engineered for a lifetime of over 40 years. The EFEN

fusegear / switchgear used by Hiko is housed horizontally under a watertight composite “bell” which allows continuous operation even in flood conditions. The UDP is available with lids rated to AS3996 Class B for footpaths and driveways right up to Class E for application in carriageways.

Monitoring equipment can also be accommodated. In some configurations, the “bell” is hinged allowing fusegear / switchgear to be lifted up vertically for inspection and operation.

The Hiko UDP takes asset lifecycle management to the next level and future proofs the LV network by eliminating the risks associated with above ground pillars.

Configurations and Dimensions (mm)

Hiko Code	Typical Configurations			Internal Length (mm)	Internal Width (mm)	Nominal Depth (mm)	Max. Cable Tails (mm ²)
	250 A	400 A	650 A				
UDP05xx	1x 3P	1x 3P	1x 3P	400	400	700	185
UDP07xx		3x 3P	3x 3P	800	400	700	185
UDP11xx		5x 3P	5x 3P	800	650	700	185
UDP10xx		6x 3P	6x 3P	800	800	700	185



Hiko Top Hat Low Voltage Frames

Safe operating performance and long-term reliability are assured.

Hiko top hat low voltage frames are ideal for single supply customers using Tyree, ABB, and ETEL transformers in commercial, industry, farming and irrigation environments. The frames are designed, engineered and built for safety and reliability to deliver value throughout the asset lifecycle.

Safety is embedded into Hiko top hat frames through:

- Fully insulated busbars
- Generously sized high temperature rated polycarbonate transparent covers
- Latest generation EFEN vertical fuse-switch disconnects (and optional circuit breakers and other arc-flash mitigating treatments)

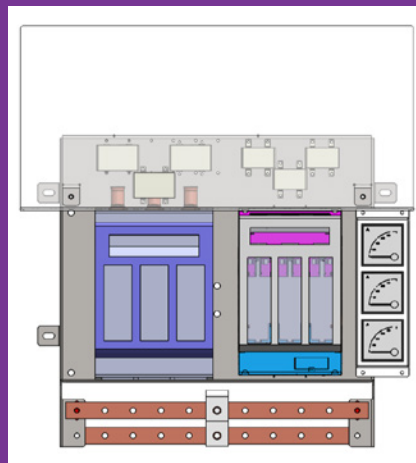
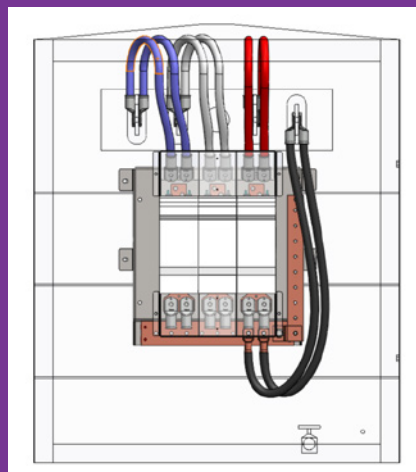
Safe operating performance and long-term reliability are assured by our design methodology that includes mechanical, electrical and thermal modelling and testing, and our manufacturing process in line with the requirements of AS/NZS 61439.1 and 61439.5.

The modular range of top hat frames are available, using laser-cut stainless steel structural components and accommodating a wide range of sizes and configurations. Precision engineered designs are combined with light weight construction to support ease of installation. An almost unlimited variety is available.

Service panels are available for the top hat frame to suit customer requirements. These can be fitted pre-wired with analogue or digital metering, MDIs, street-lighting and hot water pilot wire connections and LV network monitoring systems.

Also available as 1600A DIN4 disconnects with PEN and MEN earth neutral bars.

Hiko Top Hat Low Voltage Frames are designed, engineered and built for safety and reliability to deliver value throughout the asset lifecycle.



Hiko Top Hat Low Voltage Frames available in New Zealand.

Contact Hiko Power on **0800 473 999**

Hiko is proud to be certified to the following ISO standards:

Environment ISO 14001	Health & Safety ISO 45001	Quality ISO 9001	ISO 9001 ISO 14001 ISO 45001

Aegis³⁶ Ring Main Unit

Aegis³⁶ RMU available for demonstration on site today!

Aegis³⁶ Ring Main Unit is specially designed for secondary distribution networks, wind farms and photovoltaic power stations with ratings up to 36 kV. This range is available for indoor and outdoor environments, suiting various application needs. Aegis³⁶ RMU offers high levels of reliability and operator safety. It is a compact, cost-effective and virtually maintenance free product.

Aegis³⁶ RMU offers numerous functional configurations insulated in a single robot-welded sealed tank. This robust range has been built for the toughest environments, with an option to convert units from indoor to outdoor, extending its environmental protection rating.

All of these enhancements have been achieved whilst reducing the spatial footprint, resulting in a design that is more compact and easy to install.

Aegis³⁶ RMU offers high levels of reliability and operator safety. It is a compact, cost-effective and virtually maintenance free product.



IP54 Outdoor Non-Extensible Range

Rapier GX Load Break Switch (Pole Top)

Rapier pole top switch available for demonstration on site today!

Rapier GX is a pole-mounted gas-enclosed switch and performs as a sectionaliser unit.

Available up to 38kV, Rapier GX has been designed utilising the latest SF6 puffer switching technology to achieve high performance and reliability. The structural tank welding is performed by a robotic welding process to ensure the highest manufacturing standards.

Able to be operated manually via hookstick, locally via a control cabinet, or remotely using automation equipment, Rapier GX provides the answer to your sectionalising and network automation requirements.

All switch tanks are manufactured from stainless steel, sealed for life and maintenance free. The "tulip" type contact system ensures long contact life and high short-circuit making capability up to 41.6 kA. Load breaking up to 630 A is achieved with very short arcing times of less than half a cycle of power frequency.

Full ratings are guaranteed at atmospheric gas pressure.

A number of safety features have been designed into the GX switch, ensuring maximum operator safety.



All switch tanks are manufactured from stainless steel, sealed for life and maintenance free.

Pre-Moulded Cold Applied Slipover Cable Terminations

NKT manufactures a wide range of cables and cable accessories and is the leading supplier of medium voltage screened connectors across much of Australasia.

NKT was the first to manufacture silicone rubber cable terminations and now has 50 years' experience, in applications up to 400 kV.

NKT pre-moulded cold applied slipover cable terminations are made of silicone rubber with integrated field control and top sealing.

The silicone rubber grade used in SOT terminations is durable, UV and ozone resistant, waterproof, non-flammable, self-extinguishing and heat resistant, and environmentally friendly.

Together with its excellent mechanical and electrical

properties, this makes it the preferred material for 11- 33kV terminations.

In addition to offering high quality electrical insulation and superior corona and tracking resistance, the elasticity of silicone rubber facilitates a wide application range. So, one product can be used for many different conductor cross-sections.

The single-piece design makes the termination quick and easy to install, saving you valuable time and money.

The outdoor types are provided with permanent sheds for extended creepage distance.

The terminations are supplied in indoor or outdoor kits for 1- or 3-core cables, with or without shear-bolt lugs.

Product Features

- Current rating from 63A to 160A
- Single or four core connections for branching network
- From 1 to 6-way service connection
- Single core connection for looping network
- U-Pillar is an Arc Initiation Protected Zone
- IP: IP4x / Flammability: UL94
- Service connection: single phase or three phase
- Looping maximum current rating: 230A
- Dimension: 375 x 375
- Lid load: class B and D
- Designed to have an air chamber (water bell principle) for switch gear to guard against underground water level
- Unique design provides a "pull up" feature to allow inspection, maintenance and later connection above ground level
- Conduit U-Pillar also provides 1-to-3-way internal connection solution for drive way and footpath
- Service cable can be changed to any three directions of U-Pillar



Air Clearances to AS 2067					
Voltage	BIL	Ph/Ph (B)	(C)	(D)	PH/Grd (A)
6.6kV	60	104	10	10	90
11kV	95	184	10	15	160
22kV	150	320	20	25	280
33kV	200	440	30	35	380

The single-piece design makes the termination quick and easy to install, saving you valuable time and money.

Electronic Sectionalisher

Sectolink

12kV, 24kV, 36kV

Electronic Sectionalisers have been developed for usage on overhead distribution lines to eliminate transient faults. They are typically used in conjunction with a recloser and replace the traditional dropout fuse protection.

Available in two sizes of 12/24kV and 36kV with pickup current ratings from 8A up to 400A.

The sectionaliser performance settings can be manually adjusted with ease. Single, double or three pole ganged mounts available with hotstick operation. Fits standard single venting 150kV BIL and 170kV BIL EDO mounts.



Available in two sizes of 12/24kV and 36kV with pickup current ratings from 8A up to 400A.

Product Benefits

- The sectionaliser suits installation in low and high current applications such as SWER lines or rural locations. a more reliable termination
- With fully customized reclaim time, the sectionaliser can be programmed at time of manufacture to suit any network and recloser protection requirements
- Our custom design two and three phase mounts include a fully ganged operation ensuring sectionaliser dropout of all 3 phases and reducing any ferro-resonance problems



MSA Joints

Minimise sheath currents and provide sheath voltage protection.

One-piece type MSA joints for 72.5 kV to 550 kV can be fitted with minimal installation work and safely join copper or aluminum conductor cables for their lifetime.

They consist mainly of a pre-assembled silicone joint body, and different variants are available.

For individual configuration there are numerous joint features to choose from, such as diverse outer and inner housings as well as various screen versions.

Fitted with minimal installation work MSA joints can safely join copper or aluminum conductor cables for their lifetime.



MSA Joints Technical Details

Designation	Highest Voltage U_m (kV)	Nominal Voltage U_m (kV)	BIL** (kV)	Partial Discharge Test (pC)	Conductor Cross-Section Range (mm ²)	Ø Over Prepared Insulation (mm)
MSA 72	72.5	60 - 69	325	< 5	150 - 2000	37 - 87
MSA 123	123	110 - 115	550	< 5	240 - 2500	45 - 122
MSA 145	145	132 - 138	650	< 5	240 - 2500	45 - 122
MSA 170	170	150 - 161	750	< 5	240 - 2500	45 - 122
MSA 245	245	220 - 230	1050	< 5	240 - 2500	69 - 122
MSA 300	300	275 - 287	1050	< 5	240 - 2500	69 - 122
MSA 420	420	380 - 400	1425	< 5	630 - 2500	71 - 131
MSA 550	550	500	1550	< 5	630 - 2500	71 - 131

Product Benefits

- Lifelong reliable connection
- Numerous different versions available according to individual configuration
- Resilient design in all variants
- For cable cross-sections up to 2500 mm² and bonding cross-sections up to 630 mm²
- Individually tested before delivery

Hiko is proud to be certified to the following ISO standards:

 Environment ISO 14001	 Health & Safety ISO 45001	 Quality ISO 9001	 ISO 9001 ISO 14001 ISO 45001
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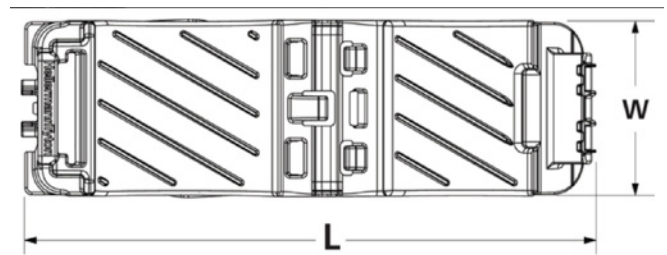
IRCCSTRUT Clamps

Fast and versatile installation of lines, hoses and cables.

The clamp is robust and reusable and will not let you down - even in the most demanding environments or at temperatures ranging from -40°C to $+105^{\circ}\text{C}$. The clamp comes in 3 sizes – B, C and D.

Designed for applications where space is limited or when a staggered mounting option is not ideal, the highly-engineered UV resistant material is suitable for standard UV and subpolar/temperate climate zones.

Easy to install and close ratchet by hand; serviceable with just a screwdriver. Depending on the variant, the CMRC can be screwed on with an M6/M8/M10 screw or attached to an M8 threaded bolt. The variants for bolt attachment enable time-saving installation with a reliable hold.



Product Benefits

- Building on the Ratchet P-Clamp family, the Center Mount Ratchet Clamp (CMRC) family offers fast and versatile installation of lines, hoses and cables
- Designed for applications where space is limited or when a staggered mounting option is not ideal
- Depending on the variant, the CMRC can be screwed on with an M6/M8/M10 screw or attached to an M8 threaded bolt
- The variants for bolt attachment enable time-saving installation with a reliable hold

The clamp is robust and reusable and will not let you down - even in the most demanding environments or at temperatures ranging from -40°C to $+105^{\circ}\text{C}$.

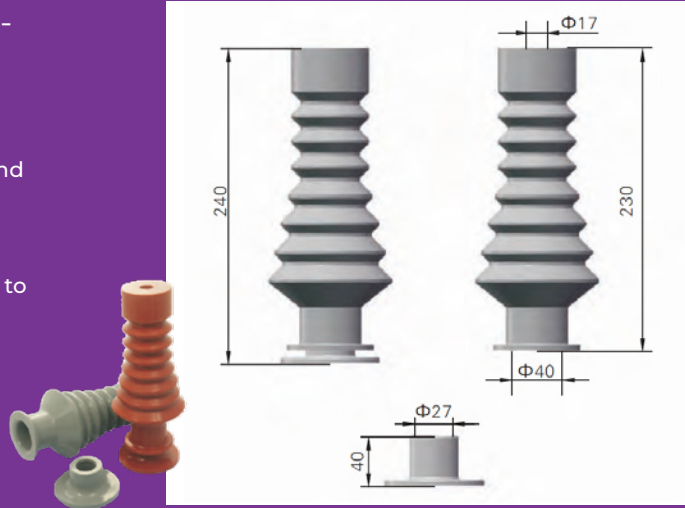


WCAB Cold Applied Insulation Boot

Improve phase-to-phase and phase-to-ground insulation.

Wear elastomeric insulating boots are molded parts which fit over the connection between the cable lug and the inline or right-angled bushing.

They are used in switchgears and transformers where the clearances are insufficient for normal operation, or to protect against flashover rodents or high humidity.



IP67 Waterproof Split Core Current Transformer

Suitable for multiple applications including power quality monitoring for pole top applications and ground base transformers.

The IP67 waterproof split core current transformer (CT), size 4, up to 72.5kV, from Hiko Power has split unit design allows for user friendly set up and can be installed live.

The CT provides protection against moisture, humidity and rain allowing access to critical data for proactive maintenance and optimisation.



Product Features

- Standard: GB/T 20840.1 and .2
- Voltage Rating: 0.4 / 0.66 / 0.69 / 0.72kV
- Current Rating: 100-3000A
- Frequency: 50 / 60HZ
- Rated for 600 Volts
- IP Rating: IP67
- Operating Temperature: -25°C - +50°C

Product Applications

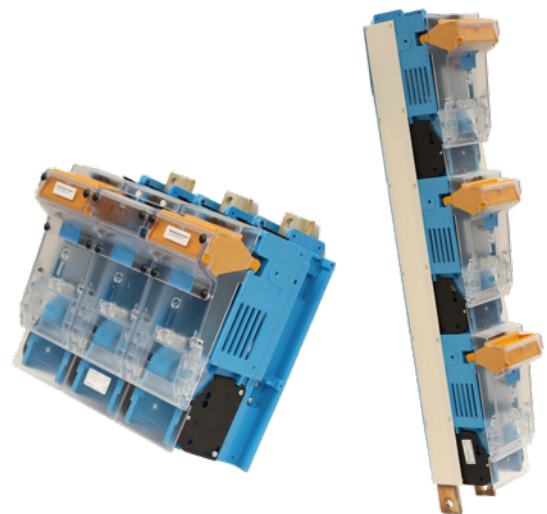
- IP67 Waterproof
- Existing System Current Monitoring
- Outdoor Current Monitoring
- Power Pole Current Monitoring
- Transformer LV Current Monitoring

EFEN NH Fuse-Switches 1600 A, Size 4 Horizontal & Vertical

All insulating parts are made of halogen-free, flame retardant polymers with excellent temperature performance.

They allow fast and multiple assembling and are usable in all current distribution systems. Due to a wide range of accessories mounting under voltage is possible.

Sophisticated technology for universal and industrial applications.



NH Fuse-Switch 3-Pole Switching Horizontal Design

Parameter*	Requirement
Size	4a
Switching (1-pole or 3-pole)	3-pole
Rated Operational Current $U_n = 690V$ (A)	1600
Rated Operational Voltage U_e (V)	690
Type of Protection	IP 3X
Type of Mounting	Baseplate
Terminal Side	Top or Bottom
Terminal Connection	Screw M12



NH Fuse-Switches Vertical Design

Parameter*	Requirement
Size	4a
Rated Operational Voltage U_e (V)	690
Switching (1-pole or 3-pole)	1-pole
Type of Protection	IP2X
Busbar Mounting	Screw M16
Terminal Side	Bottom
Terminal Connection	Screw M12
Type of Mounting	185mm Busbar System



*Additional technical information available on request.

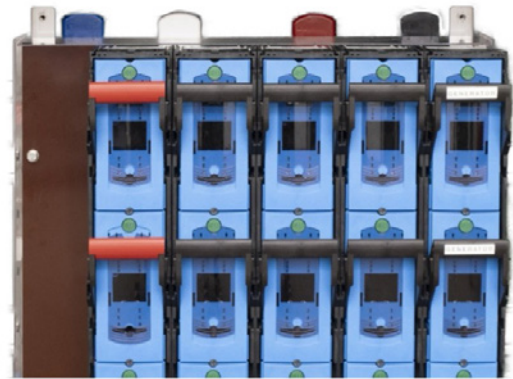
Hiko LV Protective Caps

Order our LV protective caps with your custom Hiko frame today!

The Hiko low voltage protective caps provide a cost effective and convenient way to protect LV transformer bushings and other live metalwork applications from accidental contact.

LV protective caps are quick and simple to install, compared to other methods, such as using PVC tape. In addition, as a factory made moulding, with defined wall thickness and materials characteristics, they provide greater assurance of safety than adhoc methods. The caps are supplied as a set of four, in standard colours, to provide a clear visual indication to phase identification.

They are designed so that one size fits most New Zealand bushing types and sizes. LV Protective Caps can also be modified to fit different cable entry positions.



Quick and easy to install providing increased safety for transformer bushings and other live application.

Power Engineering Solutions

for electricity and distribution.

REBAr Earth Bonding Anchor

The REBAr provides a secure means of bonding the internal reinforcing cage of older hollow spun concrete poles to the external copper cable earthing system.

The REBAr is a stainless steel ferrule suitable for retrofitting onto poles that have external earthing leads fitted from the crossarms down to a driven earthing pin. It is fixed to the reinforcing cage under the pole cap and bonded via a bonding lead to the top crossarm earthing point.

Three grub screws are supplied for fixing to the reinforcing cage, and a stainless steel bolt and Belleville washer supplied for attaching the bonding lead.

A work procedure is available developed in conjunction with Linetech Consulting.

REBAr Earth Bonding Anchor

Short circuit current rating

10 kA x 0.5 s

Requirement

One anchor per pole

Product code

FECHR044458

Grub screws

M10 x 10 stainless steel

Attachment bolt

M12 x 40 stainless steel

Belleville washer

M12 stainless steel

Anchor body

Stainless steel 304

