

Power Consultants Ltd

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Unitised Rocking Post Isolator-----ED33V4 33kV 600 Amp Air Break Switch

Fully Welded or bolt on cross arms, unitised, strong construction allows the switch frame to be strained against

All metal parts which are not of High Grade Stainless Steel or Silver-plated Copper are Hot Dip Galvanised.

Type tested to BS 5253: 1990 (IEC 129: 1984)

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Standard 600 Amp, ABS adjustable cross arm & operating arm,



Specifications:

Voltage: 33kV Continuous

Lightning Impulse: 210kV

Current: 600 amp single Flexible continuous

Fault: 13.1kA for 1 second (33 kA peak)

Insulation/Insulator: **Power frequency Withstand Test Voltages:**
Power frequency – wet: 100kV
Lightning Impulse- Dry: 210kV

Creepage Distances:

Total creepage distance	690mm
Protected creepage	140mm
Flashover	405mm

Minimum Failing Loads:

Cantilever	1.8kN
Torsion	300Nm
Tension	25kN

Phase Centres: 1000mm and 1300mm standard or to requirement

Main Items: Twin Bolt (NEMA) terminals, tin plated
Stainless steel flicker arc horns,
Silver Plated Cu contacts of V design
Intermediate pipe guide for 25 NB pipe and bottom handle

Options: 600 amp load break heads with Kearney or Duo-gaps
Earth points for live work
Pole top mounting; raised feet, 1.6m long equal spacing
Dropout fuses

FEATURES	BENEFITS
<p><u>Unitised Frame Design</u></p> <p>(Fully welded one-piece frame)</p>	<p><i>Rigidity</i> - Reduce flexing of switch frame providing reliable long term contact alignment</p> <p><i>Ease of installation</i> - Switch supplied fully assembled and factory set up for immediate installation and use. (Have been installed within 30 minutes).</p> <p>Ease of live line installation (one-piece lift).</p> <p><i>Mounting</i> - Additional-mounting brackets not normally required.</p> <p>6mm bearing surface to prevent seizing of moving parts</p> <p>Structure steel is hot dipped, galvanised mild steel.</p>
<p><u>Customised Frame Design</u></p> <p>(Both Unitised and Demountable designs can be customised to customer requirements).</p>	<p><i>Packaging</i> – Fully assembled</p> <p><i>Pole Spacing</i> - Fully adjustable phase spacing.</p> <p><i>Set-up</i> - Contact alignment in factory set.</p> <p><i>Operation</i> - Square axle provides full adjustment of operating lever position relative to pole.</p> <p><i>Installation</i> - Switch frame can be installed independently and switch poles mounted individually.</p>
<p><u>Frame Construction</u></p> <p>High Strength Spar (100x100x3)</p>	<p><i>Range of options to date include :</i></p> <ul style="list-style-type: none"> ◆ Various spar lengths ◆ Various spar mounting hole configurations ◆ Various phase pole spacing ◆ Special earthing tags ◆ Special mounting feet/brackets ◆ Lifting lugs ◆ Extended axle ◆ Vertical mount ◆ Special handle design ◆ Line strain point on end of pole base ◆ Fuse mounting brackets <p>Eliminates flexing due to pole movement or cross arm warping.</p> <p>Enables line termination through dead end insulators mounted directly onto spar.</p> <p>Provides sufficient strength to enable ABS to be mounted directly to the pole as a cross-arm.</p>

FEATURES	BENEFITS
<p><u>Pole Construction</u></p> <p>Strong Switch Pole Base (75x40)</p> <p>Factory Tested Design 2000+ Operations without re-adjustment of contact assemblies or bearing points)</p>	<p>Eliminates the need to regularly re-adjust contact alignment.</p> <p>Strong enough to support line strain point or additional equipment mounting.</p> <p>Proven long reliable switch life.</p>
<p><u>Insulator Construction</u></p> <p>Ceramic</p>	<p>New Zealand Manufactured</p>
<p><u>Contact Assembly Construction</u></p> <p>Materials - Silver plated contacts Plate and Bronze castings</p> <p>Flexible conductor 120mm² double insulated</p> <p>Type Tested</p> <p>One piece plated bronze contact mounted casting bolted directly onto insulator</p>	<p>Improved electrical performance</p> <ul style="list-style-type: none"> ◆ 600A continuous rating with flicker arc breaks <p>Tested designs to IEC 129:1984 BS 5253:1990 Fault level 15 kA / 1 sec</p> <p>Test Results</p> <ul style="list-style-type: none"> ◆ Power Frequency 28/32kV ◆ Thermal Rating 600A ◆ Short Time Rating 250MVA for 1 second ◆ Contacts are 25 micron Tin plated to prevent corrosion ◆ Contacts are 5 micron Silver-plated