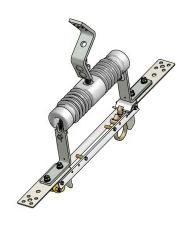


## Section 1 - Distribution Switchgear

Table of Contents Section	n/Pa
Single Phase Overhead Distribution Disconnectors - Type SIL  Specifications	1-2 1-3
Single Phase Overhead Distribution Disconnectors - Type DIL.  Specifications	1-4 1-5
Single Phase Overhead Distribution Disconnectors - Type SL  Specifications  Mounting Options	1-6
MV Single Phase Disconnector - Line Tap (Tee-off)	1-8 1-9
Overhead Distribution - Smart Bypass Kit  Specifications  Mounting Options  Insulator Options	1-10 1-11
MV Switch Disconnectors - Side Break.  Specifications.  Mounting Options.  Insulator Options.	1-12 1-13
MV Switch Disconnector - Vertical Break	1-15



# Single Phase Overhead Distribution Disconnectors Type SIL

The SIL Disconnect is a single phase, single insulator disconnector designed for medium voltage outdoor overhead distribution systems rated up to 36kV.

The SIL Disconnect is used on overhead distribution feeders to provide a visible isolation point for line or equipment maintenance purposes. It is easily operated from ground level using a standard extendable hook stick.

The SIL Disconnect is designed for mounting on the crossarm and offers light, reliable and quick installation without disturbing existing line infrastructure.

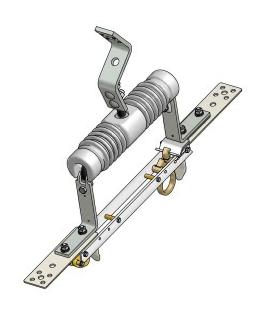
#### **FEATURES**

- · Standard hook stick operation.
- Light construction minimises installation OH&S issues.
- · Quick and easy to mount on to existing crossarm
- · Mounting bracket allows angled or underslung horizontal mounting
- · Minimal site disruption
- Self wiping contacts and hinge end contact blades ensure low contact resistance and temperature rise
- · Hinge end contact blade ensures current does not flow through the pivot joint
- Silver plated contact to contact interface for low temperature rise, low maintenance and long life
- Insulator available in porcelain or polymer
- · Positive latch mechanism prevents opening during faults, vibration and wind loading
- Earth points can be provided
- Complies with AS62771.102.2005 and IEC 62771.102.2003 standards

Technical Characteristics					
Rated Voltage	kV	12, 24, 36			
Load Current Rating	Amp	630, 1000			
Rated Short Time (3 sec) Withstand Current	kA	25			
Rated Frequency	Hz	50/60			
Insulator Material Options		Porcelain & Polymer			
Rated Voltage		12 & 24kV   24kV   36kV		36kV	
Insulator BIL	kVp	125	150	170	
Insulator Length	mm	609	609	698	
Angle from vertical (Angled mount option)	Degrees	ees 36 36 36			

**Mounting Options** 

'Z' or NEMA Mounting Bracket





Porcelain



Polymeric







# Single Phase Overhead Distribution Disconnectors Type DIL

The DIL Disconnect is a single phase, underslung, double insulator, disconnector designed for medium voltage outdoor overhead distribution systems rated up to 36kV.

Rated up to 1,000A continuous current and 25kA for 3 seconds fault level, the proven safety and reliability of the DIL series makes it a first choice for a quality long life disconnecting link

The DIL Disconnect is used on overhead distribution feeders to provide a visible isolation point for line or equipment maintenance purposes. It is easily operated from ground level using a standard extendable hook stick.

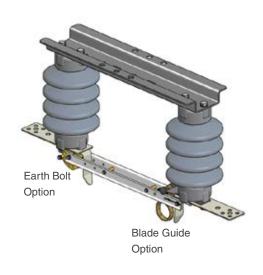
The disconnector may be mounted horizontally underneath a pole crossarm, at an angle or horizontally, depending on system design requirements.

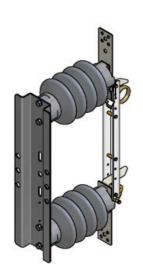
#### **FEATURES**

- · Standard hook stick operation
- · Light construction minimises installation OH&S issues
- · Positive latch mechanism prevents opening during faults, vibration and wind loading
- · Quick and easy installation
- Self wiping contacts and hinge end contact blades ensure low contact resistance and temperature rise
- Hinge end contact blade ensures current does not flow through the pivot joint and ensuring correct blade alignment
- Silver plated contacts for low temperature rise, low maintenance and long life
- · Robust, long life insulator
- Complies with AS62771.102.2005 and IEC 62771.102.2003 standards

Technical Characteristics				
Rated Voltage	kV	12, 24, 36, 72.5		
Load Current Rating	Amp	800, 1000,	1250, 1600	
Rated Short Time (3 sec) Withstand Current	kA	2	25	
Rated Frequency	Hz	50	)/60	
Insulator Material		Porcelain Polymeric		
Options		Cycloaliphatic		
Rated Voltage		12 & 24kV	36kV	
Insulator BIL	kVp	125, 150	200	
Dimensions below are for 150kV BIL Porcelain Insulator				
Insulator Spacing	mm	505	595	
Link Blade Width	mm	450	540	
Terminal Palm Centre to Centre Dimension	mm	700	790	
Insulator Height	mm	300	350	
Mounting Channel Depth	mm	m 40		

## **Mounting Options**





Horizontal Vertical

## **Insulator Options**



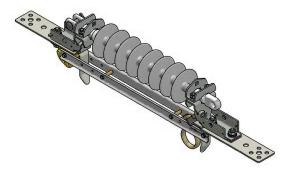
Porcelain



Cycloaliphatic



Polymeric



# Single Phase Overhead Distribution Disconnectors Type SL

The SL Line Tension Disconnect is a single phase, single insulator disconnector designed for medium voltage outdoor overhead distribution systems rated up to 36kV.

Rated up to 1,000A continuous current and 25kA for 3 seconds fault level, the proven safety and reliability of the SL series makes it a first choice for a quality long life disconnecting link.

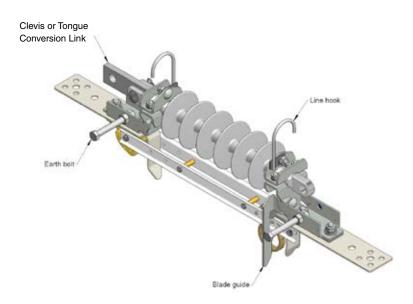
The SL line tension disconnector offers light, reliable and quick installation without disturbing existing line infrastructure. When combined with a single phase bypass disconnectors in a 3 phase smart bypass kit, substantial cost and time savings for recloser, sectionaliser and load break switch bypass applications can be achieved.

#### **OPTIONS:**

- · Standard hook stick operation
- · Light construction minimises installation OH&S issues
- · Positive latch mechanism prevents opening during faults, vibration and wind loading
- Fast installation. Quick and easy to rig on to existing line
- · Minimal site disruption
- Self wiping contacts and hinge end contact blades ensure low contact resistance and temperature rise
- Hinge end contact blade ensures current does not flow through the pivot joint
- Silver plated contacts for low temperature rise, low maintenance and long life
- · Robust, long life insulator
- Complies with AS62771.102.2005 and IEC 62771.102.2003 standards

Technical Characteristics		
Rated Voltage	kV	12, 24, 36
Insulator Material		Polymeric
Insulator BIL	kVp	200
Dry Withstand Voltage	kV/1 minute	80
Load Current Rating	Amp	800, 1000
Rated Frequency	Hz	50/60
Rated Short Time (3 sec) Withstand Current	kA	25
Line Tension	kN	70
Rated Torsion	N-m	47
Width, Palm to Palm	mm	668
Width, Insulator Eye Centres	mm	460
Height, Insulator Centre Line to Hook Stick Ring	mm	197

Mounting Options (for installation only)





## MV Single Phase Disconnector

## Line Tap (Tee-off)

The AEM Bypass Disconnector is a line mounted single phase Air Break Disconnector designed for Medium Voltage (MV) outdoor overhead Distribution Systems up to 36kV.

Rated up to 1,000A continuous current and 25kA for 3 seconds fault level, the proven safety and reliability of the SLB series makes it a first choice for a quality long life disconnecting link

The bypass disconnector offers light, reliable and quick installation without disturbing existing line infrastructure. When combined with AEM single phase suspension disconnectors in a 3 phase smart bypass kit, substantial cost and time savings for recloser, sectionaliser and voltage regulators bypass applications can be achieved.

Complies with AS62771.102.2005 and IEC 62771.102.2003 standards.

#### SAFETY:

- · Standard hook stick operation
- · Light construction minimises installation OH&S issues
- Positive latch mechanism prevents opening during faults, vibration and wind loading

#### **PERFORMANCE:**

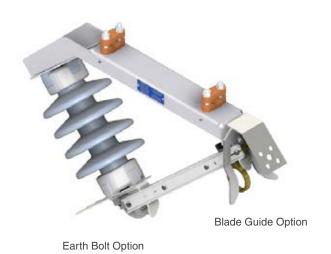
- Fast installation. Quick and easy to rig on to existing line
- · Minimal site disruption
- 800A and 1,000A Rated current
- · 25kA for 3 seconds fault rating
- 200kV peak insulator BIL rating
- Self wiping contacts and hinge end contact blades ensure low contact resistance and temperature rise

#### **RELIABILITY:**

- · Hinge end contact blade ensures current does not flow through the pivot joint
- Silver plated contacts for low temperature rise, low maintenance and long life
- · Robust, long life insulator

Technical Characteristics				
Rated Voltage	kV	12, 24, 36		
Load Current Rating	Amp	800, 1000		
Rated Short Time (3 sec) Withstand Current	kA	25		
Rated Frequency	Hz	50/60		
Insulator Material Options		Porcelain Polymeric		
		Cycloaliphatic		
Rated Voltage		12 & 24kV 36kV		
Insulator BIL	kVp	125, 150 200		
Dimensions below are for 125kV BIL Cycloaliphatic Insulator				
Insulator Height	mm	286 595		
Vertical Height (top to lowest palm tip)	mm	440 558		
Length	mm	713 868		

## **Mounting Options**





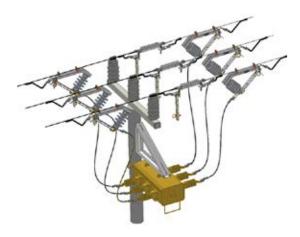
Porcelain



Cycloaliphatic



Polymeric



### Overhead Distribution

## Smart Bypass Kit

The PLP Smart Bypass kit is a 3 phase line-mounted line tension disconnector and line tap (Tee-off) disconnector set for use in overhead Medium Voltage (MV) systems up to 36kV.

Rated up to 1,000A continuous current and 25kA for 3 seconds fault level, the proven safety and reliability of the kit makes it a first choice for a quality long life bypass solution.

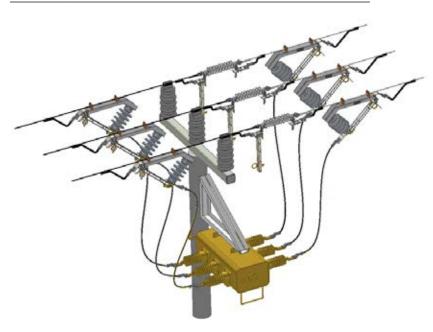
The Smart Bypass kit offers light, reliable and quick installation without disturbing existing line infrastructure. Substantial cost and time savings for recloser, sectionaliser, voltage regulators and other pole mount devices may be achieved.

#### **FEATURES:**

- Standard hook stick operation
- Light construction minimises installation OH&S issues
- Positive latch mechanism prevents opening during faults, vibration and wind loading
- Fast installation. Quick and easy to rig on to existing line:
  - No need to replace pole
  - No extra crossarms
  - No air break disconnector
  - No conductor re-stringing
- Self wiping contacts and hinge end contact blades ensure low contact resistance and temperature rise
- Easy isolation and bypass to allow testing, programming and repair
- Hinge end contact blade ensures current does not flow through the pivot joint
- Silver plated contacts for low temperature rise, low maintenance and long life
- Robust, long life insulators
- Complies with AS62771.102.2005 and IEC 62771.102.2003 standards

Technical Characteristics				
Rated Voltage	kV	12, 24, 36		
Load Current Rating	Amp	800, 1000		
Rated Short Time (3 sec) Withstand Current	kA	25		
Rated Frequency	Hz	50/60		
Insulator Material Options		Porcelain Polymeric		
		Cycloaliphatic		
Rated Voltage		12 & 24kV	36kV	
Insulator BIL	kVp	p 125, 150 200		

## **Mounting Options**





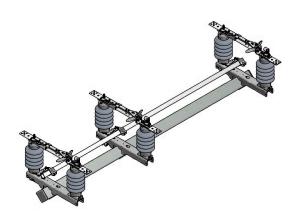
Porcelain

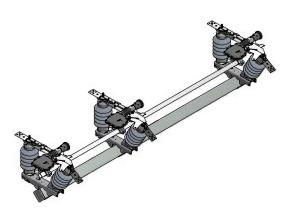


Cycloaliphatic



Polymeric





### **MV Switch Disconnectors**

### Side Break

The PLP Side Break Switch Disconnector is a pole mounted 3 phase Air Break Switch designed for Medium Voltage (MV) outdoor overhead Distribution Systems.

Rated up to 1,250A continuous current and 25kA for 3 seconds fault level, the proven safety and reliability of the SB series makes it a first choice for a quality long life network switch.

#### OPTIONS:

- 630A load break & make switching to AS60265.1:2001, class E2 limited purpose switch standard
- Light construction (70kg 100kg) minimises installation OH&S issues
- Optional hook stick actuator eliminating street level copper theft. Mistake proof operator switching action with positive drive and directional locking
- · Fast installation:
  - Quick/easy to rig optional pole position markings for fast and mistake-proof mounting
  - Minimal site adjustment Single telescopic downrod clamp eliminates cutting/ drilling
  - Quick and easy phase spacing adjustment
- 630A load break and make switching to AS60265.1:2001, class E2 (Australian Patent Applied for)
- Self wiping contacts ensure low contact resistance and temperature rise.
- · Low operating force for easy manual operation
- Stainless steel phase bearers and components for corrosion free lifetime, even in coastal environments
- Powder coated aluminium cross arm and interface.
- Drawings plus Installation, operation and maintenance manuals provided (also downloadable)
- Teflon coated long life low torque bearings
- Minimal maintenance, no periodic field adjustments needed
- Field replaceable parts
- Complies with AS62771.102.2005 and IEC 62771.102.2003 standards

Technical Characteristics		Switch Disconnector	Disconnector	
Rated Voltage	kV	12,24,36		
Insulators				
a) Material		Porcelain or Cycloaliphatic or Polymer		
b) BIL	kVpk	125, 150, 170, 200		
c) Creepage	mm	500, 610, 750, 1000		
d) Orientation		Parallel (Vertical) or Angled		
Load Break Current	Amp	630	<= 15	
Load Make Current	kVpk	630 (If make guard fitted)	<= 15	
Rated Frequency	Hz	50/60		
Normal Current Rated	Amp	630, 800, 1000, 1250		
Rated Short Time (3 sec)	kA	25		
Withstand Current				
Actuator Type		Handle or Auto Locking Mid	Pole Hook Stick Operator	
a) Drive Type		Rotary or Up - Down		
Switch Orientation		Horizontal or Vertical		
Switch Pole Position		Front & Top or Top or Mid Pole		
Pole Bracket Mounting		Pole Front or Pole Side or Structure		
Cross Arm Material		Aluminium or Galvanised Steel, or Composite		
Downrod Material		Insulated (composite) or 32NB Galvanised Pipe		

## **Mounting Options**





Porcelain



Cycloaliphatic



Polymeric



### **MV Switch Disconnector**

### Vertical Break

The AEM Vertical Break Switch Disconnector is a pole mounted 3 phase Air Break Switch designed for Medium Voltage (MV) outdoor overhead Distribution and Substation Systems.

Rated up to 1250A continuous current and 25kA for 3 seconds fault level, the AEM vertical break disconnector's proven safety and reliability make it a first choice for a quality long life switch in high current applications.

#### **OPTIONS:**

- 630A load break & make switching to AS60265.1:2001, class E2 limited purpose switch standard
- Light construction (70kg ~ 100kg) minimises installation OH&S issues
- Optional hook stick actuator eliminates street level copper theft. Mistake proof operator switching action with positive drive & directional locking
- Fast installation:
  - Light and easy to rig optional pole position markings for fast and mistake-proof mounting
  - Minimal site adjustment. Single telescopic downrod clamp eliminates cutting and drilling
  - Quick and easy phase spacing adjustment
- 630A load break & make switching to AS60265.1:2001, class E2 (Australian Patent Applied for)
- Self wiping contacts and hinge end contact blades ensure low contact resistance and temperature rise
- Low operating force for easy manual operation
- Stainless steel phase bearers and components for corrosion free lifetime, even in coastal environments
- Powder coated aluminium cross arm and interface
- Drawings plus Installation, operation and maintenance manuals provided (also downloadable)
- Minimal maintenance, no periodic field adjustments needed
- Field replaceable parts
- Complies with AS62771.102.2005 and IEC 62771.102.2003 standards

## **Specifications**

Technical Characteristics		Switch Disconnector	Disconnector
Rated Voltage	kV	12,24,36	
Insulators			
a) Material		Porcelain or Cycloaliphatic or Polymer	
b) BIL	kVpk	125, 150, 17	0, 200
c) Creepage	mm	500, 610, 750	0, 1000
d) Orientation		Parallel (Vertical	) or Angled
Load Break Current	Amp	630	<= 15
Load Make Current	Amp	<= 15	<= 15
Rated Frequency	Hz	50/60	
Normal Current Rated	Amp	630, 800, 1000, 1250	
Rated Short Time (3 sec) Withstand Current	kA	25	
Actuator Type		Handle or Auto Locking Mid Pole Hook Stick Operato	
a) Drive Type		Up - Do	wn
Switch Orientation		Horizontal or Vertical	
Switch Pole Position		Front & Top or Top or Mid Pole	
Pole Bracket Mounting		Pole Front or Pole Side or Structure	
Cross Arm Material		Aluminium or Galvanised Steel, or Composite	
Downrod Material		Insulated (composite) or 32	2NB Galvanised Pipe







Cycloaliphatic



Polymeric