

# **SIMEL LOW VOLTAGE INSULATED OVERHEAD LINES**

Quick Reference Guide

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# SIMEL Low Voltage Insulated Overhead Lines

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### Pre-Insulated Compression Sleeves Non-Tension MJPB

Pre-insulated sleeves are used to link or repair a LV overhead connection made of aluminium conductors.

Pre-insulated compression sleeves for aluminium XLPE service cables, stranded from 4 to 35mm<sup>2</sup>.

#### MATERIAL

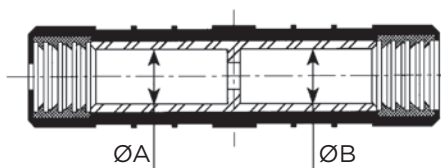
Black thermoplastic sealed with a flexible elastomer ring containing a blocked aluminium sleeve and a neutral contact grease.



#### FEATURES

- Water resistant
- Colour coding for cable sizes:

4 mm <sup>2</sup>	⇒	ivory
6 mm <sup>2</sup>	⇒	brown
10 mm <sup>2</sup>	⇒	green
16 mm <sup>2</sup>	⇒	blue
25 mm <sup>2</sup>	⇒	orange
35 mm <sup>2</sup>	⇒	red



#### ORDERING INFORMATION

Catalogue Reference	Cross Section	Dimensions (mm)			Die	
	(mm <sup>2</sup> )	Ø A	Ø B	Length	A/F (mm)	Die Catalogue Reference
MJPB-04	4	2.7	2.7	70	14	111-140173AL
MJPB-6-4	6-4	3.3	2.7	70	14	111-140173AL
MJPB-10-4	10-4	4.3	2.7	70	14	111-140173AL
MJPB-16-4	16-4	5.3	2.7	70	14	111-140173AL
MJPB-6	6	3.3	3.3	70	14	111-140173AL
MJPB-10-6	10-6	4.3	3.3	70	14	111-140173AL
MJPB-16-6	16-6	5.3	3.3	70	14	111-140173AL
MJPB-25-6	25-6	6.5	3.3	70	14	111-140173AL
MJPB-35-6	35-6	8	3.3	70	14	111-140173AL
MJPB-10	10	4.3	4.3	70	14	111-140173AL
MJPB-16-10	16-10	5.3	4.3	70	14	111-140173AL
MJPB-25-10	25-10	6.5	4.3	70	14	111-140173AL
MJPB-35-10	35-10	8	4.3	70	14	111-140173AL
MJPB-16	16	5.3	5.3	70	14	111-140173AL
MJPB-25-16	25-16	6.5	5.3	70	14	111-140173AL
MJPB-35-16	35-16	8	5.3	70	14	111-140173AL
MJPB-25	25	5.5	6.5	70	14	111-140173AL
MJPB-35-25	35-25	8	6.5	70	14	111-140173AL
MJPB-35	35	8	8	70	14	111-140173AL

### Pre-Insulated Compression Sleeves Full-Tension MJPT

Pre-insulated compression sleeves and kits for 16 to 150mm<sup>2</sup> aluminium XLPE cables.

#### MATERIAL

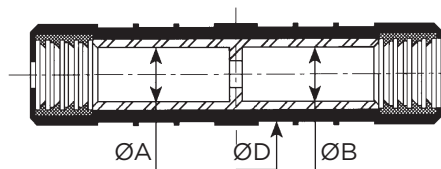
Black thermoplastic sealed with a flexible elastomer ring containing a blocked aluminium (phase) or aluminium alloy (neutral) sleeve and a neutral contact grease.

#### FEATURES

- Mechanical resistance: 50% of cable breaking load
- Water resistant
- Colour coding for cable sizes:



16 mm <sup>2</sup>	⇒	blue
25 mm <sup>2</sup>	⇒	orange
35 mm <sup>2</sup>	⇒	red
50 mm <sup>2</sup>	⇒	yellow
54.6 mm <sup>2</sup>	⇒	black
70 mm <sup>2</sup>	⇒	white
95 mm <sup>2</sup>	⇒	grey
120 mm <sup>2</sup>	⇒	pink
150mm <sup>2</sup>	⇒	violet



#### ORDERING INFORMATION

Catalogue Reference	Cross Section	Dimensions (mm)				Die	
	(mm <sup>2</sup> )	Ø A	Ø B	Ø D	Length	A/F (mm)	Die Catalogue Reference
MJPT-25 ALUS	25	6.5	6.5	20	100	17.3	111-140173AL
MJPT-35 ALUS	35	8	8	20	100	17.3	111-140173AL
MJPT-50 ALUS	50	9	9	20	100	17.3	111-140173AL
MJPT-50-25 ALUS	50-25	9	6.5	20	100	17.3	111-140173AL
MJPT-70 ALUS	70	10.5	10.5	20	100	17.3	111-140173AL
MJPT-95 ALUS	95	12.2	12.2	25	100	17.3	111-140173AL
MJPT-120 ALUS	120	14.2	14.2	25	102	21.5	222-215AL
MJPT-150 ALUS	150	15.5	15.5	25	102	21.5	222-215AL

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### Pre-Insulated Bolted Sleeves BPC

Bolted insulated sleeves to join service aluminium or copper cables from 4mm<sup>2</sup> to 35mm<sup>2</sup>

#### MATERIAL

Suitable to connect under load (90A max.) customers from the service line to the house except BPC P35-P35.

Can be used when changing a customer service line or to reconnect a customer after payment.

- Three versions are available to cover aluminium and copper combinations of the two conductors :

- Stripping / Piercing, ⇨ BPC 35-P35
- Stripping / Stripping, ⇨ BPC 35-35
- Piercing / Piercing, ⇨ BPC P35-P35

#### FEATURES

- Range taking
- Waterproof
- Easy to install
- No specific tools and dies
- Easy to handle when tightening



#### ORDERING INFORMATION

Catalogue Reference	Cross Section	Maxi Current
	(mm <sup>2</sup> )	Ia
BPC-35-P35	4 to 35 Alu or Cu	90 A
BPC-35-35	4 to 35 Alu or Cu	90 A
BPC-P35-P35	4 to 35 Alu or Cu	no
BPC+Tail	10mm <sup>2</sup> Tail Stripped 240mm long	

Catalogue Reference	Cross Section	Tail Details
	(mm <sup>2</sup> )	
P2X95-800M10	16 to 95	16mm <sup>2</sup> Tail 800 long M10
P2X95-500M12	16 to 95	M12

### Fuse Cutout for Service Lines CCFDB

Crimped pre-insulated removable circuit breaker for service cable 16 and 25mm<sup>2</sup>. These removable circuit breakers are used to integrate a break point on a LV insulated overhead line.

#### MATERIAL

Insulation material made of weather and UV resistant polymer.

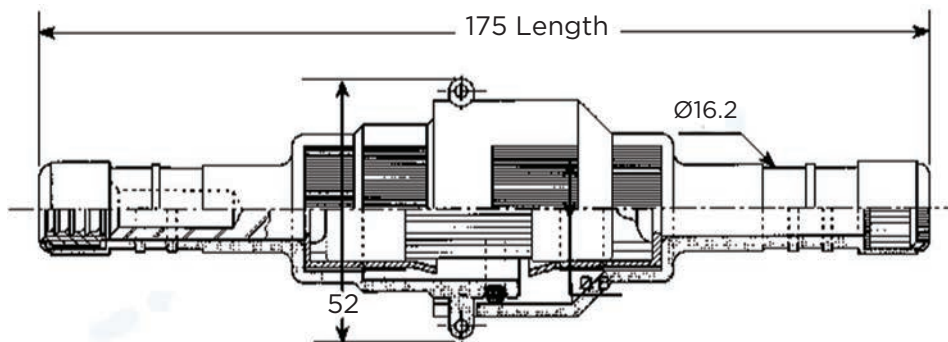
#### FEATURES

- Attached sealing cap allows temporary protection across the network side
- Crimps to the connection side of 6, 10, 16 or 25mm<sup>2</sup>
- Suitable for 22x58 AD fuse cartridges from 4 to 125A
- Water resistant
- Allows connection and disconnection under load up to 60A



#### ORDERING INFORMATION

Catalogue Reference	Cross Section	Die	
	(mm <sup>2</sup> )	A/F (mm)	Die Catalogue Reference
CCFDB-4-4	4	14	111-140173AL
CCFDB-6-6	6	14	111-140173AL
CCFDB-10-10	10	14	111-140173AL
CCFDB-16-16	16	14	111-140173AL
CCFDB-25-25	25	14	111-140173AL



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### Anchoring Clamps & Assembly for Self Supporting System PA

Anchoring clamps for 2 or 4 cores self supporting system 25 to 120mm<sup>2</sup>.

#### APPLICATION

Designed to anchor LV insulated overhead lines from 2 to 4 cables of the self supporting system.

#### DESCRIPTION

- These clamps are composed of lightweight metallic arms hot dip galvanised with bolts M10 (wrench 17mm).  
(Stainless steel bolts also available)
- Anti UV black resistant plastic wedges slide inside the arms to grip the conductors.
- The opening of the wedges is easy thanks to a spring.
- The clamp is fixed to the poles hooks with a M12 screw bolt equipped with a M12 self locking nut. (Stainless steel rivet also available)
- Shear head option also available



#### ORDERING INFORMATION

Catalogue Reference	Cross Section	Breaking Load (N)	Rec Working Load (N)
	(mm <sup>2</sup> )		
<b>Rigid arms</b>			
PA-235	2x35	1230	200
PA-295	2x50 to 95	2000	500
PA-495	4x50 to 95	4300	500
PA-4120	4x120	6000	700
<b>Movable arms</b>			
HEL-5503	4x25-50	1230	300
HEL-5504	4x70-95	4300	500

### Service Aerial Clamp for Service Cable PA

These clamps are designed to anchor LV insulated service lines with 2 or 4 conductors.

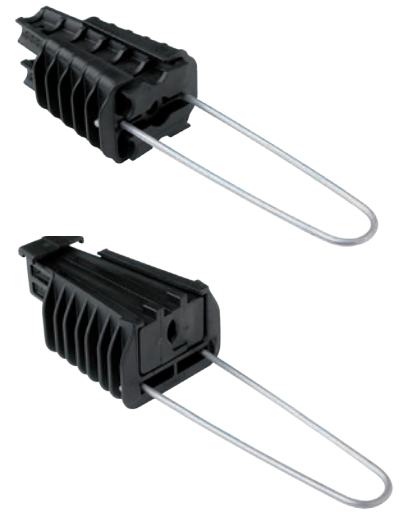
#### DESCRIPTION

- The clamp is composed of an anti UV black resistant body, plastic wedges slide inside the body to grip the conductors
- A flexible stainless or galvanised steel bail attaches to the bracket or pig tail

#### FEATURES

- The clamp is easy to install thanks to the adjustable length
- Resistant to temperature variations and climatic conditions
- Tool free installation with wedges sliding inside the body

#### ORDERING INFORMATION



Catalogue Reference	Cross Section
	(mm <sup>2</sup> )
PA25/10	2x16 or 4x25
PA9-17	Dia. 9 to 17mm
PAS35	Dia. 18 to 25mm



## SIMEL Low Voltage Insulated Overhead Lines

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### Anchoring & Suspension Clamps for Service Cable HEL

The clamp is designed to anchor or suspend insulated service lines with 2 or 4 conductors.

#### DESCRIPTION

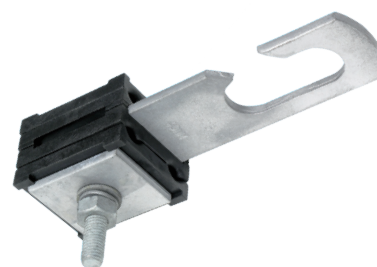
- These clamps are made of weather and UV resistant glass fibre reinforced polymer and hot dip galvanised steel.
- Available with closed eye (32.5 x 22.5 mm) or open eye (opening 18 mm) support strap.
- The opening of the blocks is easy thanks to a spring.

#### FEATURES

- Clamps can be used as suspension clamps by simply rotating blocks
- Clamps with short length of 170mm
- Simple single bolt installation with 17mm spanner
- Stainless steel hardware and shear head options also available

#### ORDERING INFORMATION

Catalogue Reference	Cross Section	Conductor Type	Breaking Load (N)	Tightening Torque
	(mm <sup>2</sup> )			
<b>With closed eye support strap</b>				
HEL-5505	4x(10*) 16-35	4 cores	42 kN	40 Nm
HEL-5505-2	2x(10*) 16-35	2 cores	26 kN	40 Nm
<b>With open eye support strap</b>				
HEL-5505-B	4x(10*) 16-35	4 cores	5 kN	40 Nm
HEL-5505-2B	2x(10*) 16-35	2 cores	5 kN	40 Nm



### Suspension Clamp & Assembly for Self Supporting System PS

Designed to hang LV insulated overhead lines from 2 or 4 cables of the self supporting system.

#### DESCRIPTION

- These suspension clamps are composed of a galvanised steel support and an anti UV black resistant thermoplastic insert to grip 2 or 4 conductors.

#### FEATURES

- The metallic support is the same for all references
- The flexible bushing change with conductors and sections
- Shear head option available

#### ORDERING INFORMATION

Catalogue Reference	Cross Section	Breaking Load (N)
	(mm <sup>2</sup> )	
PS250/435	2x50 to 4x35	7.5
PS450	2x95 to 4x50	7.5
PS495	4x95	7.5



### Universal Suspension Clamp for Self Supporting System USC

Universal suspension clamp for self supporting system for 4x25 to 4x120mm<sup>2</sup>.

Designed to hang LV ABC self supporting system in order to cover a wide range of sizes and limit the number of items.

#### FEATURES

- Range taking: 4x(25-120) \*\*
- Resists to climatic conditions
- Easy to install using only a spanner
- Can be installed on hooks or pigtails
- Shear head option also available

#### ORDERING INFORMATION

Catalogue Reference	Cross Section	Tensile Strength
	(mm <sup>2</sup> )	
USC25-120	4x(25-50) up to 40° 4x(70-120)* up to 20°	18kN

\*\* 4x120 + 2x25 mm<sup>2</sup> if the external diameter of the bundled conductors does not exceed 42 mm

### LV ABC Rolling Suspension Clamp for Self Supporting System RSC

LV ABC rolling suspension clamp for self supporting system for conductor size from 4x25 to 4x120 mm<sup>2</sup>.

#### APPLICATION

Used for the installation and suspension of insulated cables on transmission and angle poles

#### DESCRIPTION

- The assembly rolls can be used to run out a conductor during line mounting
- The rolling suspension clamp is delivery ready to install on the pole
- The deflection angle of the line is 90° maximum

#### FEATURES

- The body is composed of hot dip galvanised steel
- Rubber insert and assembly rolls are resistant to UV radiations
- The M10 bolt is stainless steel
- This clamp is equipped with a stainless steel reinforced ring in the hook attachment
- Simple installation with a 17 mm U wrench or a socket spanner
- All components are secured
- Maximum hook diameter: 20 mm
- Shear head option also available.

#### ORDERING INFORMATION

Catalogue Reference	Cross Section	Tensile Strength
	(mm <sup>2</sup> )	
USC25-120	4x(25-50) up to 40° 4x(70-120)* up to 20°	18kN



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### Facade Saddles BRPF

Mechanical accessories to fix the bundle cable of diameter 20 to 60mm.

#### APPLICATION

Used to install a LV insulated overhead line on a building.

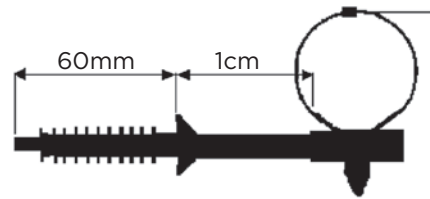
Description

- The BRPF saddles is composed of:
  - A plastic support for the bundle.
  - A plastic plug which allow to fix the saddle into the wall.
  - A galvanised steel nail sliding inside the plastic plug to fix it on the wall.
  - A standard plastic tie in poliamid 12 to wrap the bundle.



#### FEATURES

- Diameter capacity: from 20 to 60mm
- Components are fully insulated
- Reusable in case of line removal by changing the plastic tie:



#### ORDERING INFORMATION

Catalogue Reference	Diameter Range	Offset
	(mm)	D (mm)
<b>Wall mounted saddles for LV ABC installation on concrete wall</b>		
BRPF1	20-60	10
BRPF6	20-60	60
<b>Wall mounted saddles for LV ABC installation on wooden poles or walls</b>		
BRPF-BOIS-70-150-6F	20-56	60
<b>Wall mounted saddles for LV ABC installation on wall</b>		
BRTF-70-10/150-10	35-40	100

### Insulation Piercing Connectors for Overhead Lines P\*X

Insulation Piercing Connector (IPC)- 6kV in water to connect 16-150mm<sup>2</sup> main to 6-150mm<sup>2</sup> tap.

#### APPLICATION

This insulation piercing connector is suitable for all types of LV ABC conductors. This connector has been designed for service connections in LV ABC lines. Ease of installation has been combined with excellent mechanical, electrical and environmental characteristics to provide a connector capable of terminating Aluminium or Copper stranded conductors.

#### FEATURES

- Range taking
- Accepts copper and aluminium conductors
- All fittings supplied with tin plate copper contact teeth
- Waterproof
- Captive end flexible end caps
- All the components are captive
- Equipped with shear head to ensure a reliable tightening torque
- Operating temperature -55°C to 55°C
- Installation temperature -20°C to 55°C
- Can be installed on energised main if tap is not under load

#### ORDERING INFORMATION

Catalogue Reference	Main Al/Cu		Tap Al/Cu	
	Min. (mm <sup>2</sup> )	Max. (mm <sup>2</sup> )	Min. (mm <sup>2</sup> )	Max. (mm <sup>2</sup> )
P2X95U*	16	95	6	35(50)
P2X150*	50	150	6	35(50)
P3X95*	25	95	25	95
P4X150D*	50	150	50	150

- Add suffix "s" for stainless steel hardware

Catalogue Reference	Main Al/Cu		Tap Off Fitting Type
	Min. (mm <sup>2</sup> )	Max. (mm <sup>2</sup> )	
P2X150T	16	150	4mm Male Bayonet



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### Transition Connector between LV ABC & Bare LV Line CDR

Transition IPC from bare line 7 to 148mm<sup>2</sup> to insulated line 16 to 95mm<sup>2</sup>.

#### APPLICATION

These connectors allow the transition between insulated LV ABC lines and bare line (aluminium or copper) by simultaneous action.

#### FEATURES

- The flexible end cap provides the ability to check the correct insertion of the conductor
- The contact area on bare line is a groove which can fit small wires
- Stainless steel hardware also available



#### ORDERING INFORMATION

Catalogue Reference	Cross Section		Bolt
	Main	Tap	
<b>Simultaneous tightening - bare aluminium or copper conductors insulated service cables</b>			
CDR/CN-1S-95-UK	7-100	25-95	2xM7
RDP-25/CN	7-100	16-35	M8
<b>Separate tightening on bare main copper (CNU) or aluminium (CNA) stripping on LV ABC</b>			
KZ31/70-CNU	7-148 Cu	35-70	M8
KZ31/70-CNA	22-75 Al	35-70	M8

### Pre-Insulated Lugs CPTA

Pre-insulated compression terminal lugs and kits for aluminium XLPE cables, 16 to 150mm<sup>2</sup>.

These pre-insulated lugs are used to connect a LV insulated overhead line to the transformer

#### DESCRIPTION

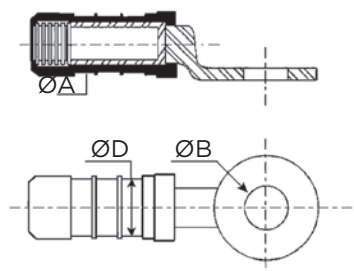
- The lug is composed of an aluminium barrel friction welded to an aluminium or copper palm. The insulation of the barrel is made with a black thermoplastic sealed with a flexible elastomer ring.
- A seal is also installed in between the copper and the aluminium in order to avoid galvanic corrosion.
- The crimping is made directly in the plastic part.



#### FEATURES

- They are water resistant and pass the dielectric test of 6 kV in water.
- The mechanical resistance is 50% of the cable breaking load
- Colour coding for cable sizes:

16 mm <sup>2</sup>	⇒	blue
25 mm <sup>2</sup>	⇒	orange
35 mm <sup>2</sup>	⇒	red
50 mm <sup>2</sup>	⇒	yellow
70 mm <sup>2</sup>	⇒	white
95 mm <sup>2</sup>	⇒	grey
120 mm <sup>2</sup>	⇒	pink
150 mm <sup>2</sup>	⇒	violet



#### ORDERING INFORMATION

Catalogue Reference	Dimensions (mm)		Cable Size mm <sup>2</sup>	Total Length mm	Palm Size mm	Die Catalogue Reference	Die Size mm
	Ø A	Ø B (Hole Dia.)					
CPTAU-16D16	5.3	10.5	16	72	20	111-140173AL	14
CPTAU-25D16	6.5	10.5	25	72	20	111-140173AL	14
CPTAU-35	8	12.8	35	99	25	111-140173AL	17.3
CPTAU-50	9	12.8	50	99	25	111-140173AL	17.3
CPTAU-95	12.2	12.8	95	99	25	111-140173AL	17.3
CPTAU-150D25	15.5	12.8	150	115	30	111-215AL	21.5

Catalogue Reference	Dimensions (mm)		Cable Size mm <sup>2</sup>	Total Length mm	Palm Size mm	Die Catalogue Reference	Die Size mm
	Ø A	Ø B (Hole Dia.)					
CPTA-35	8	16	35	120	38.5	111-140173AL	17.3
CPTA-50	9	16	50	120	38.5	111-140173AL	17.3
CPTA-95-D20	12.2	16	95	120	38.5	111-140173AL	17.3

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### Cable End Cap CEC

Versions available:

1 - A moulded end cap-black-UV resistant thermoplastic (CECT version from 6 to 150 mm<sup>2</sup>).

2 - EPDM end caps version from 16 to 150 mm<sup>2</sup>, under CAP reference

#### FEATURES

- 100% waterproof
- Range taking



#### ORDERING INFORMATION

Catalogue Reference	Cross Section
	(mm <sup>2</sup> )
<b>Moulded end cap-black-UV resistant thermoplastic</b>	
CECT6-35	6 to 35 mm <sup>2</sup>
CECT16-150	16 to 150 mm <sup>2</sup>
<b>EPDM end caps</b>	
CAP35	16-25 mm <sup>2</sup>
CAP45	35-150 mm <sup>2</sup>

# SIMEL Low Voltage Insulated Overhead Lines

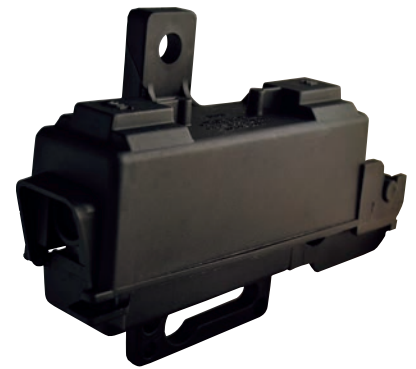
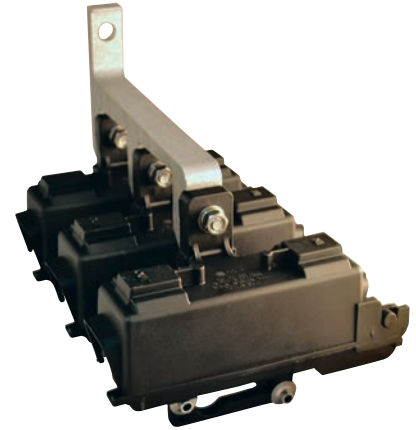
## Quick Reference Guide

### KGH160 Switch 160A

The upper housing, with integral mounting bracket, holds the conductor, terminals and fuse contacts.

The lower housing is hinged for easy opening and closing. It houses the size 00 fuse links (to IEC 269) or connecting links.

Switches may be mounted side by side (with ganged or unganged operation) for two or three pole requirements.



### CABLE TERMINATION

The KGH160 is available with two different terminals;

- Pillar type terminals for stripped copper and aluminium compacted cables ranging from 16- 95mm<sup>2</sup>
- Insulation Piercing Connection (IPC) terminals for copper and aluminium compacted cables ranging from 16-95mm<sup>2</sup>

### FEATURES

- Fully Insulated
- On-load switching capability
- Corrosion proof
- Suits standard hook-stick
- Integral mounting bracket for bolting or strapping

### OPTIONS

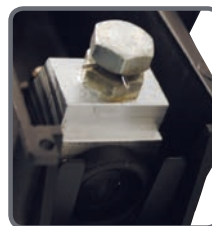
- Pole mounted bracket for up to three switches
- Neon indication if fuse-link has operated

### ORDERING INFORMATION

TCPN	Catalogue Reference	No of Poles	Ganged Switching	Pillar	Insulating Piercing
				Ni plated for 1x16-95mm <sup>2</sup> Al & Cu compacted cables	for 2x25-150mm <sup>2</sup> Al and Cu compacted cables
6459101500	KGH160 NH TUNNEL-TUNNEL	1	-	in/out	-
6459101510	SWITCH KGH 160 NH IPC-IPC	1	-	-	in/out
6459101700	KGH160/3 GANGED	3	yes	in/out	-



Pillar Type Terminal



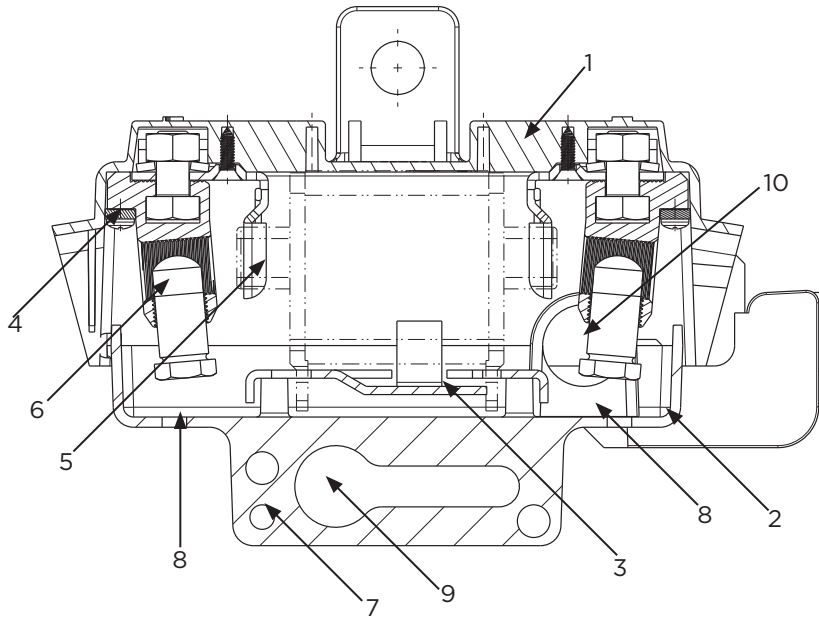
IPC Type Terminal



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### CROSS SECTION KGH160

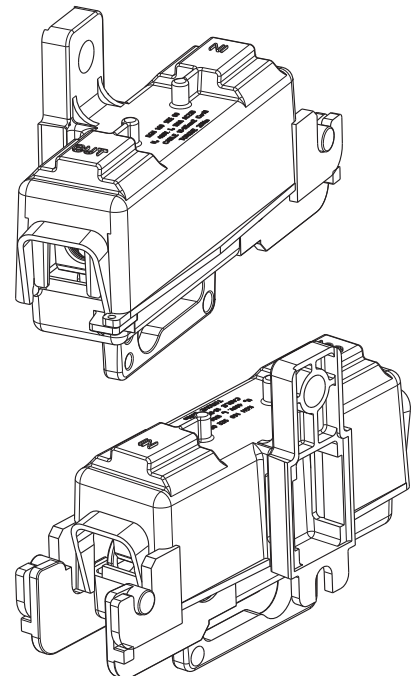


- |                                   |                                       |  |
|-----------------------------------|---------------------------------------|--|
| 1. Upper housing                  | 5. Nickel plated copper alloy contact | 9. Hook stick position for opening/<br>closing               |
| 2. Hinged removable lower housing | 6. Stainless steel terminating screw  | 10. Hook stick position for removal/<br>replacement of cover |
| 3. Fuse-link retaining clip       | 7. Rod actuating pin (optional)       |  |
| 4. Nickel plated pillar terminal  | 8. Voltage test points                |  |

### TECHNICAL DATA

In accordance with tests and requirements to IEC 947-3

Rated operational voltage, $U_e$	480V
Rated insulation voltage, $U_i$	1000V
Rated frequency	50Hz
Rated operational current, $I_e$	
- with connecting links	250A
- with fuse links	160A
Utilisation category	AC22B
Rated conditional short-circuit current with fuse links	50kA
Infrequent operation with current	200
Infrequent operation without current	1400
Degree of protection	IP2L4
Mass (without fuse)	370g



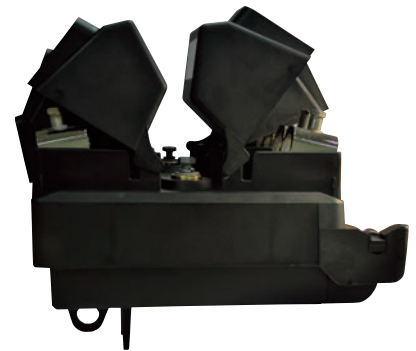
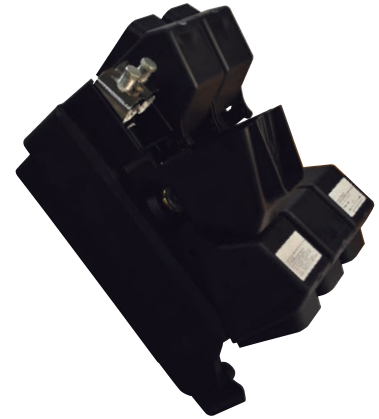
# SIMEL Low Voltage Insulated Overhead Lines

## Quick Reference Guide

### KGH250 Switch 250A

The upper housing holds the conductor, terminals and contacts. The lower housing is hinged for easy opening and closing.

It houses the mounting for size 1-2 fuses, links or short circuiting facilities. The triple pole switch is supplied with mounting bracket.



### CABLE TERMINATION

The KGH250 is available with three different terminals;

- Pillar type terminals for stripped copper and aluminium compacted cables ranging from 16-95mm<sup>2</sup> and 50-150mm<sup>2</sup>.
- 12mm bolted Lug type terminals.
- Insulation Piercing Connection (IPC) terminals for copper and aluminium compacted cables ranging from 16-95mm<sup>2</sup> and 25-150mm<sup>2</sup>.

### FEATURES

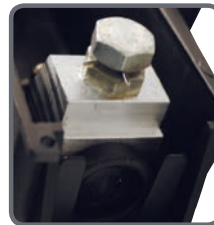
- Extremely compact
- One or three-pole units
- On-load switching capability
- Corrosion proof
- Fully insulated
- Suits standard hook-stick
- Individual, hinged terminal covers for maximum safety

### OPTIONS

- Short circuiting device for load or supply side
- Neon indication if fuse-link has operated
- Operating rod attachments
- Solid links, sizes 1 and 2, rated 250A
- Wall mounting bracket
- Solid link storage position
- Operating pole with universal adaptor



Pillar  
Type Terminal



IPC  
Type Terminal



Lug  
Type Terminal

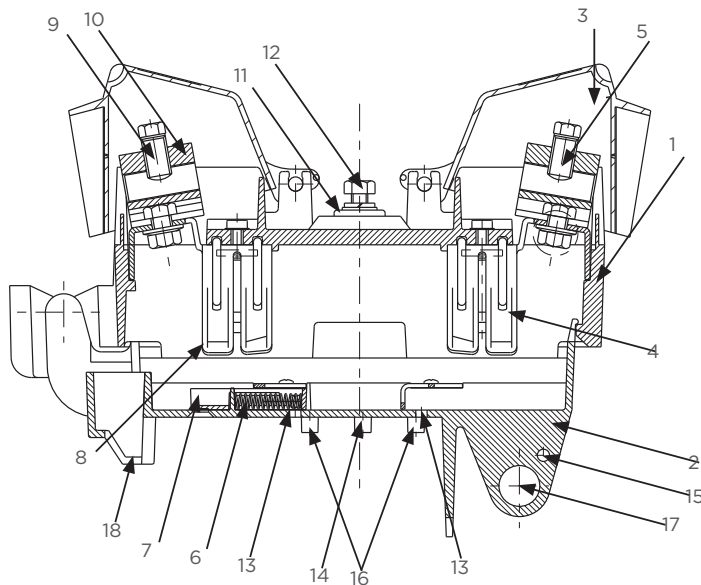
### ORDERING INFORMATION

TCPN	Catalogue Reference	No of Poles	Ganged Switching	Pillar		Insulating Piercing	Lug
				for 2x16-95mm <sup>2</sup> Al compacted cables	Ni plated for 2x16-95mm <sup>2</sup> Al & Cu compacted cables	for 2x25-150mm <sup>2</sup> Al and Cu compacted cables	12mm stud for lugs of palm width up to 40mm <sup>2</sup>
6459100100	KGH250 T95AL-T95AL	3	yes	in/out	-	-	-
6459100101	KGH250 T95AL/C-T95AL/C	3	yes	-	in/out	-	-
6459100110	KGH250 LUG-LUG	3	yes	-	-	-	in/out
645911800	SWITCH ABC IPC 250 2x25-150mm <sup>2</sup>	3	yes	-	-	in/out	-

# SIMEL Low Voltage Insulated Overhead Lines

## Quick Reference Guide

### CROSS SECTION KGH250

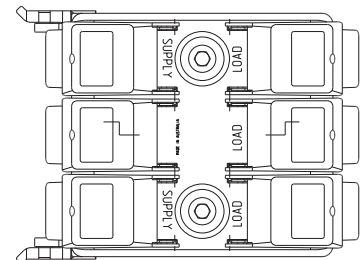
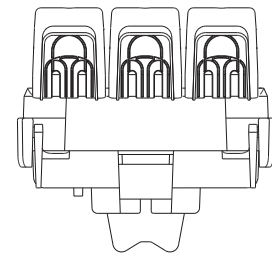


- |   |  |  |
|---|--|--|
| 1. Upper housing  | link installed                           | 14. Neon indicator (option)                              |
| 2. Hinged removable lower housing                         | 8. Nickel plated copper alloy contact    | 15. Rod actuating pin (optional)                         |
| 3. Hinged terminal cover                                  | 9. 13 A/F hexagon head terminating screw | 16. Connecting-link storage position (option)            |
| 4. Arc chute  | 10. Aluminium pillar terminal            | 17. Hook stick position for opening/closing              |
| 5. Stainless steel 12mm bolted lug type terminal (option) | 11. Switch mounting bracket              | 18. Hook stick position for removal/replacement of cover |
| 6. Fuse-link retaining clip                               | 12. Switch mounting screw                |  |
| 7. Yellow indicator fuse-link/connecting-                 | 13. Voltage test points                  |  |

### TECHNICAL DATA

In accordance with tests and requirements to IEC 947-3 and AS2847-3

Rated operational voltage, $U_e$	450V
Rated insulation voltage, $U_i$	1000V
Rated frequency	50-60Hz
Rated impulse withstand voltage, $U_{imp}$	16kV
Rated operational current, $I_e$	
- with fuse links	250A
- with connecting-links	250A
Rated make-break current at 0.65µg	375A
Rated short-time withstand current $I_{cw}$ for one second	
- with connecting links	25kA
Rated short-circuit making capacity $I_{cm}$	
- with connecting links	10kA
Rated conditional short-circuit current	
- with fuse-links	50kA
Utilisation category	AC 22 B
Infrequent operation with current	200
Infrequent operation without current	1400
Degree of protection	IP2L4
Mass (without fuse)	6.2kg



### KGH400 Switch 400A/630A

The upper housing holds the conductor, terminals and contacts. The lower housing is hinged for easy opening and closing. It houses the mounting for size 1-2 fuses, links or short circuiting facilities. Switches are available in single or triple pole versions. The triple pole switch is supplied with mounting bracket.

#### CABLE TERMINATION

The KGH400 is available with three different terminals;

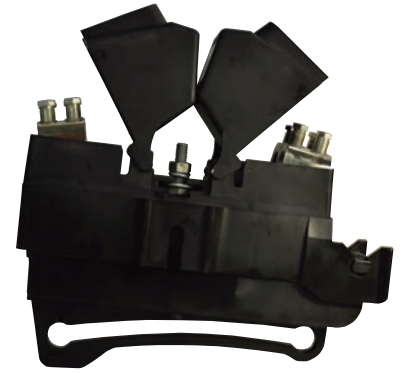
- Pillar type terminals for stripped copper and aluminium compacted cables ranging from 16-95mm<sup>2</sup> and 50-150mm<sup>2</sup>.
- 12mm bolted Lug type terminals.
- Insulation Piercing Connection (IPC) terminals for copper and aluminium compacted cables ranging from 16-95mm<sup>2</sup> and 25-150mm<sup>2</sup>.

#### FEATURES

- Extremely compact
- One or three-pole units
- On-load switching capability
- Corrosion proof
- Fully insulated
- Suits standard hook-stick
- Individual, hinged terminal covers for maximum safety

#### OPTIONS

- Short circuiting device for load or supply side
- Neon indication if fuse-link has operated
- Operating rod attachments
- Solid links, sizes 1 and 2, rated 400A/630A
- Wall mounting bracket
- Solid link storage position
- Pole mounted bracket for up to three KGH400/1 switches.
- Operating pole with universal adaptor.



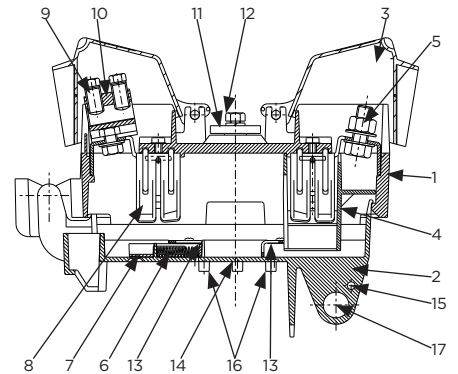
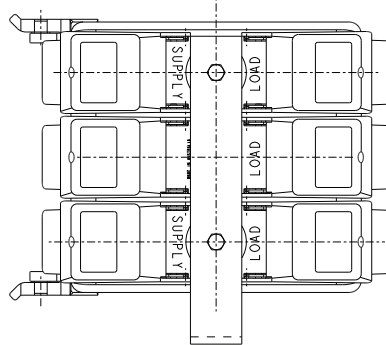
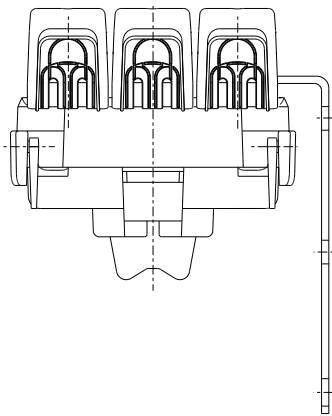
#### ORDERING INFORMATION

TCPN	Catalogue Reference	No of Poles	Ganged Switching	Pillar		Insulating Piercing		Lug
				for 2x16-95mm <sup>2</sup> Al compacted cables	Ni plated for 2x50-150mm <sup>2</sup> Al & Cu cables	for 2x25-150mm <sup>2</sup> Al and Cu compacted cables	for 2x25-150mm <sup>2</sup> Al and Cu compacted cables	12mm stud for lugs of palm width up to 40mm <sup>2</sup>
6459100121	KGH400 T150AL/C-T150AL/C	3	yes	-	in/out	-	-	-
6459100130	KGH400 LUG-LUG	3	yes	-	-	-	-	in/out
6459100131	KGH400 T95AL-LUG	3	yes	in	-	out	-	-
6459111520	KGH400 2X50-185TUN/2X50-150TUN	1	-	-	in/out	-	-	-
6459111550	KGH400/1 IPC 25mm <sup>2</sup> - 150mm <sup>2</sup>	1	-	-	-	-	-	in/out
6459111560	KGH400 LUG/LUG UNGANGED	1	-	-	-	-	-	in/out
6459112200	KGH400 2X25-150mm <sup>2</sup> IPC	3	yes	-	-	-	in/out	-

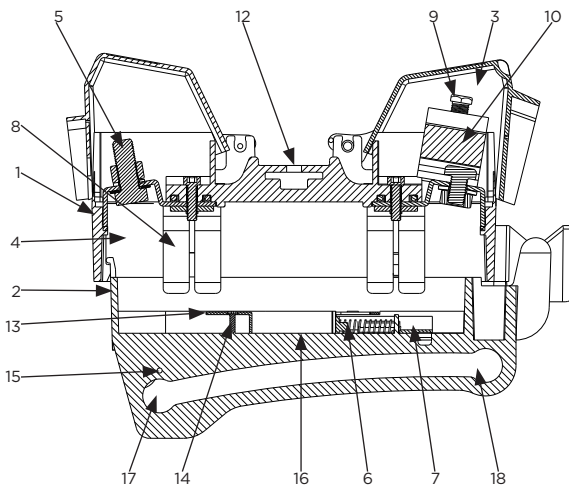
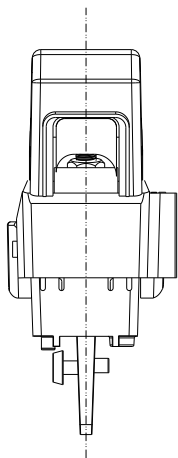
# SIMEL Low Voltage Insulated Overhead Lines

Quick Reference Guide

## CROSS SECTION KGH400/3



## CROSS SECTION KGH400/1



1. Upper housing
2. Hinged removable lower housing
3. Hinged terminal cover
4. Arc chute
5. Stainless steel 12mm bolted lug type terminal (option)
6. Fuse-link retaining clip
7. Yellow indicator fuse-link/connecting-link installed
8. Nickel plated copper alloy contact
11. Switch mounting bracket
12. Switch mounting screw
13. Voltage test points
14. Neon indicator (option)
15. Rod actuating pin (optional)
16. Connecting-link storage position (option)
17. Hook stick position for opening/closing
18. Hook stick position for removal/replacement of cover

## TECHNICAL DATA

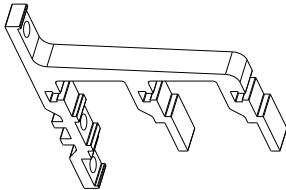
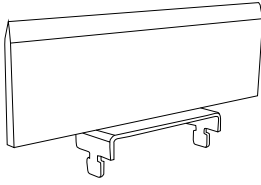
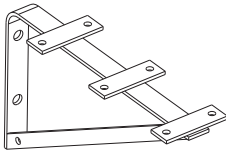
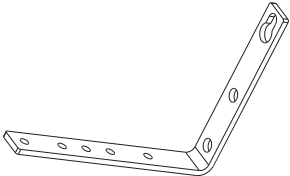
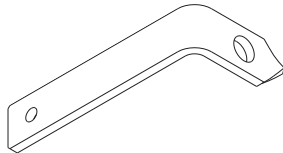
In accordance with tests and requirements to IEC 947-3 and AS2847-3

	KGH400/3	KGH400/1
Rated operational voltage, Ue	450V	450V
Rated insulation voltage, Ui	1000V	1000V
Rated frequency	50-60Hz	50Hz
Rated impulse withstand voltage, Uimp	16kV	16kV
Rated operational current, Ie		
- with fuse links	400A	400A
- with connecting-links	630A	630A
Rated make-break current at 0.65pg	945A	1200A
Rated short-time withstand current Icw for one second		
- with connecting links	25kA	25kA
Rated short-circuit making capacity 1cm		
- with connecting links	10kA	10kA
Rated conditional short-circuit current		
- with fuse-links	50kA	50kA
Utilisation category	AC 22 B	AC 22 B
Infrequent operation with current	200	200
Infrequent operation without current	1400	800
Degree of protection	IP2L4	IP2L4
Mass (without fuse)	6.5kg	1.5kg



### KGH Accessories

#### ORDERING INFORMATION

TCPN	Catalogue Reference	Description	
6459204700	BRKT UNGANG KGH160/3 KIT	Mounting bracket for three KGH160 switches, includes hardware (each)	
6459200600	KIT CONN LINK STORAGE	Connecting Link Storage Kit for fitting to underside of KGH250 and KGH400 (each)	
6469031001	SOLID LINK 400/630A 2 SS	Connecting Link 400A, size 2, for KGH400 (each)	
6469033200	MOUNTING BRACKET APR630	Mounting bracket for three APR630 switches, includes hardware (each)	
6459312200	BRACKET UNIVERSAL KGH400	Mounting bracket for three KGH400/1 switches	
6459312300	BRACKET-SINGLE KGH400	Mounting bracket for one KGH400/1 switch	

# SIMEL Low Voltage Insulated Overhead Lines

## Quick Reference Guide

### OCK 12kV

Type OCK is an outdoor low voltage cable connector designed for use with TE's range of low voltage fuse switch disconnectors. The OCK solves the problem of how to connect neutral cables and, at the same time, giving easy voltage test point access.

### MOUNTING

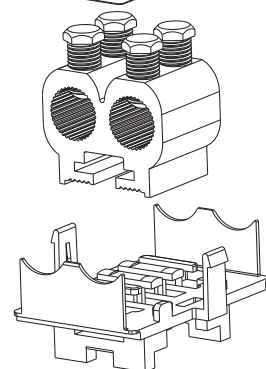
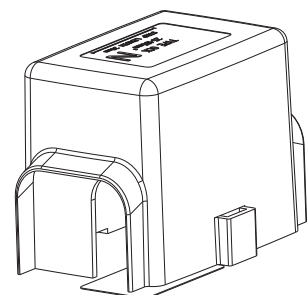
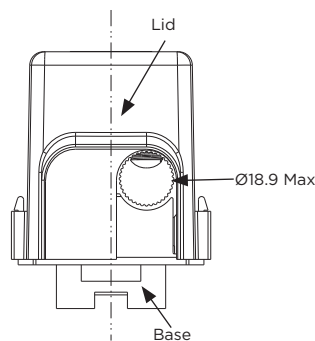
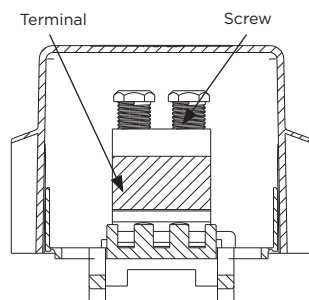
The OCK may be free hanging or secured to a mounting bracket (widths 40 and 24mm) using the cable tie provided.

### Benefits

- Neutral cable connections
- Phase cable connections
- Access point for testing
- Connection point for earth leads
- Connection for different cable sizes

### FEATURES

- Re-usable connector
- Fully insulated
- IP24 protection
- UV resistant polyimide housing
- Corrosion proof
- Flexible easy mounting
- Test access
- Multiple cable connections
- Accepts cable 25-185mm<sup>2</sup> aluminium or copper



### ORDERING INFORMATION

TCPN	Catalogue Reference	Pillar
		for 25 - 185mm <sup>2</sup> Al/Cu
6459112300	OUTDR CON 1 X 25-185MMSQ TUNL	1 cable in / 1 cable out
6459112301	OUTDR CON 2X25-185MMSQ TUNL	2 cables in / 2 cables out

### TECHNICAL DATA

Rated operational voltage, U <sub>e</sub>	450V
Rated insulation voltage, U <sub>i</sub>	1000V
Rated impulse withstand voltage, U <sub>imp</sub>	12kV
Degree of protection	IP24

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- Mining
- Nuclear
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- Rail
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#### Applications

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