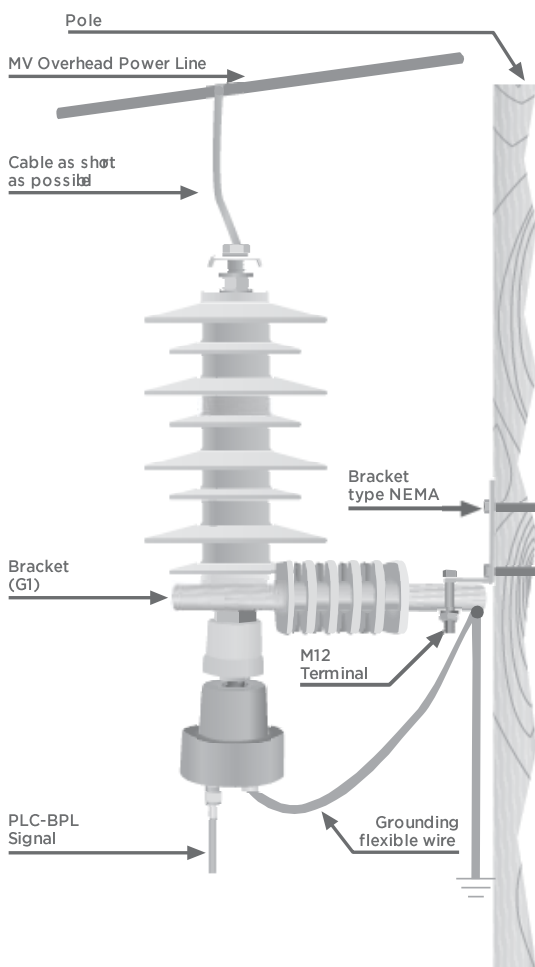


# comART OVERCAP

Capacitive coupling solution comART OVERCAP has been specially designed for overhead PLC-BPL applications over power lines up to 36kV.



## APPLICATIONS

- > Arteche PLC / BPL coupling devices are essential components to deploy telecommunications networks over medium voltage power lines.
- > A highly reliable, versatile, scalable technology that supports the most advanced smart grid functions, such as Advanced Metering Infrastructure (AMI), operation management, Fault Location, Isolation and Service Restoration (FLISR), Demand Response (DR) and other advanced distribution automation applications.

## MAIN FEATURES

- > Capacitive coupling solution for overhead MV power lines.
- > Up to 36 kV.
- > Silicon polymer housing with specific design for outdoor service.
- > Integrated ground lead disconnecter for maximum safety.
- > Easy, safe and quick installation using hot-line connections.
- > A full range of tests applied to guarantee the maximum safety.
- > Full control over the physical medium

## TECHNICAL SPECIFICATIONS

### Electrical Characteristics

Insulation Voltage		17.5 kV	25 kV	36 kV
	Dielectric strength	At 50 kV	At 50 kV	At 70 kV
Routine test	Partial discharges	<50pC at 28.8 kV	<50pC at 28.8 kV	<50pC at 43.2 kV
	Galvanic insulation (communication port)	5 kVrms		
Type tests	AC Voltage test, dry and wet	At 50 kV	At 50 kV	At 70 kV
	Lightning impulse voltage test (BIL)	At 150 kV	At 150 kV	At 200 kV
	Capacitor discharge	At 150 kV	At 150 kV	At 200 kV
Ground Disconnecter	According to IEC 60099-4 2004-2005			
Operating conditions (according to EN60870-2-2 Class D1)	Temperature from -25°C to +75°C Relative humidity from 15 to 100%			
Storage conditions (according to EN60870-2-2 Class C3)	Temperature from -40°C to +75°C Relative humidity from 10 to 100%			
Reference standards	IEC 60358-190 / IEC 61334-3-22-2001-01 / ANSI C93.1-1999			
Arcing distance		7.08" - 180 mm	10" - 260 mm	14.2" - 360 mm
Leakage distance		22" - 565 mm	33.7" - 857 mm	44.5" - 1130 mm

### Communication Characteristics

Frequency range	2 – 40 MHz		
Insertion losses	≈ 3dB		
Impedance	Line side	200 Ω	
	Equipment side	50 Ω	
PLC-BPL connector	TNC Connector (F Type)		

### Mechanical Characteristics

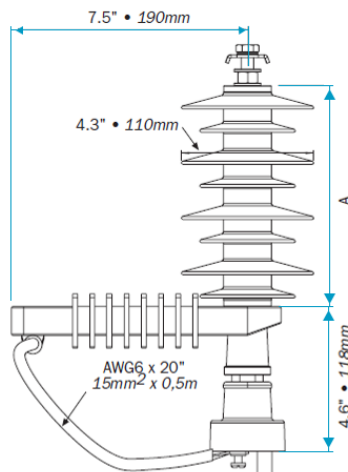
Materials	Insulation	Silicone
	Circuitry	Polyamide 6
	RoHS compliant 2002/95/EC	

## SELECTION TABLE

OVERCAP		
Line connection	Line terminal	TL1
	Line terminal	TL2
	Hot line clamp	HCL3
Insulation level	17/50/150 kV	17
	25/50/150 kV	25
	36/70/200 kV	36

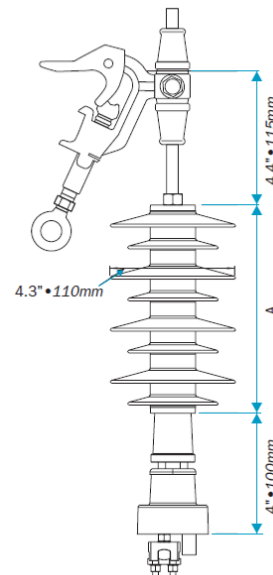
## RECOMMENDED CONFIGURATIONS

### For Installation On The Pole



**OVERCAP**  
[L1][G1][17/25/36]

### For Installation Hanging From The Line



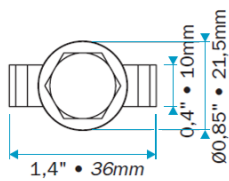
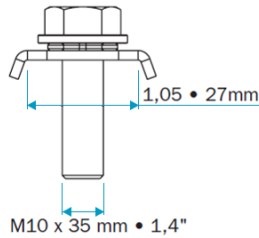
**OVERCAP [L3][G2][17/25]**  
Hot Line Clamp

## DIMENSIONS

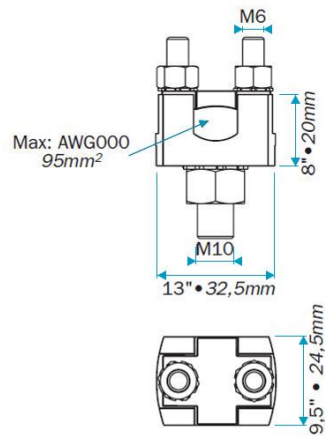
OVERCAP						
	17 kV		25 kV		36 kV	
A (arcing distance)	7.08" - 180 mm		10" - 260 mm		14.2" - 360 mm	
Weight	min: 2.9 Lb	max: 3.7 Lb	min: 3.7 Lb	max: 4.6 Lb	min: 4.8 Lb	max: 5.5 Lb
	min: 1,3 kg	max: 1.7 kg	min: 1,7 kg	max: 2,1 kg	min: 2,2 kg	max: 2,5 kg
Diameter	max: 4.3" - max: 110 mm					

## STANDARD ACCESSORIES

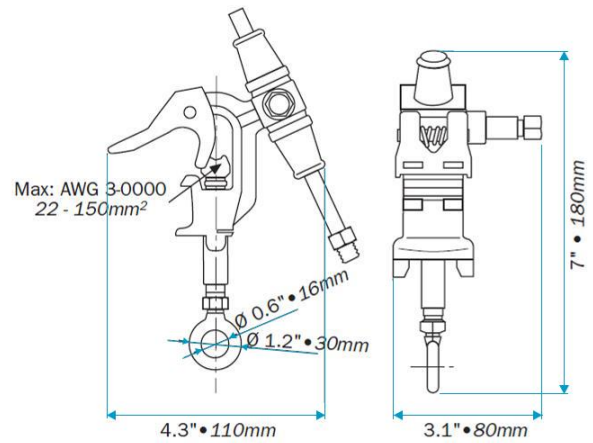
### LINE CONNECTION



**L1 Line Terminal**

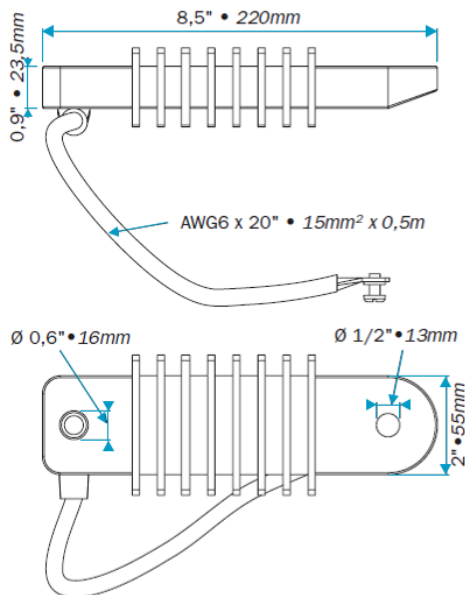


**L2 Line Terminal**

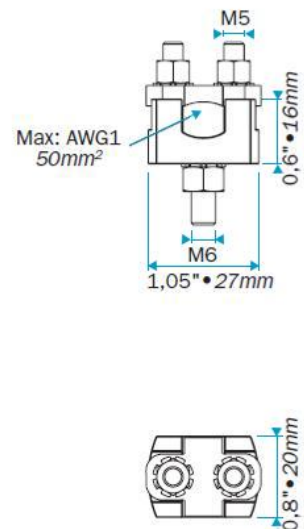


**L3 Hot Line Clamp**

### GROUND CONNECTION



**G1 Bracket With Grounding Wire**



**G2 Ground Terminal**