

## TECHNICAL DATA SHEET HENGTONG CABLE AUSTRALIA

### 6.35/11(12) kV PWC

Doc No.: GD/TC/4120001-2020 Rev: 1 Date: 5/18/2023 Page: 1of 3

#### 1. Design guidelines.

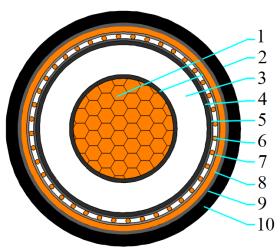
AS/NZS 1429.1	Electric cables-Polymeric insulated Part 1: For working voltages 1.9/3.3(3.6) kV up to and	
A3/NZ3 1429.1	including 19/33(36) kV	
AS/NZS 1125	Conductors in insulated electric cables and flexible cords	
AS/NZS 3808	Insulating and sheathing materials for electric cables	

#### 2. Application.

Normal use operating temperature	90°C
Max. conductor temperature during short circuit(5s)	250°C
Lowest recommended temperature during installation	0°C

#### 3. Construction.

#### HCA - 400mm² x 1 core Cu(WBY)/TR-XLPE/WBT/CWS(13.1kA)/WBT/PVC/NY/HDPE(Graphite) - HCA501797PWC



1	Conductor	Class 2, circular compacted Copper conductor(non-conductive water-blocking yarn) A Semi-conductive tape shall be applied over the conductor	
2	Conductor screen	Semi-conductive compound	
3	Insulation	TR-XLPE	
4	Insulation screen	Semi-conductive compound	
5	Bedding tape	Semi-conductive water-blocking tape	
6	Metallic screen	Plain annealed copper wire screen	
7	Binder tape	Water-blocking tape	
8	Inner sheath	5V-90 Orange	
9	Insect protection	Nylon 12 / Blue	
10	Outer sheath	HDPE Black (with Graphite on the outer surface)	

#### 4. Core identification and mark as listed below, or as purchase order.

Identification of core: Natural	
Marking on cable: by printing in two diametrically opposed lines on the surface of outer sheath	
HENGTONG CABLE AUSTRALIA "YEAR" ELECTRIC CABLE 6.35/11kV	
400mm² 1 core Cu(WBY) TR-XLPE WBT CWS(13.1kA) WBT PVC NY HDPE(Graphite) XXXXm	



## TECHNICAL DATA SHEET HENGTONG CABLE AUSTRALIA

### 6.35/11(12) kV PWC

Doc No.: GD/TC/4120001-2020 Rev: 1 Date: 5/18/2023

Page: 2of 3

#### 5. Construction parameters.

Description	Unit	Values
Active Conductor		
Material	-	Copper
Nominal cross-sectional area	mm²	400
Conductor shape	1	Circular Compacted
Approx. diameter of active conductor	mm	23.4
Conductor screen		
Min. thickness at any point	mm	0.3
Approx. diameter of conductor screen	mm	25.4
Active Insulation		
Material	-	TR-XLPE
Nominal thickness/Min. thickness at any point	mm	3.4/2.96
Approx. diameter over insulation	mm	32.2
Insulation screen		
Туре	-	Hand-strippable
Min. thickness at any point	mm	0.6
Approx. diameter of insulation screen	mm	33.7
Metallic screen		
No.& Diameter of copper wires per phase	No./mm	50/1.53
Approx. diameter of metallic screen	mm	37.6
Inner sheath		
Material	-	5V-90
Nominal thickness/Min. thickness at any point	mm	1.1/0.68
Approx. diameter of inner sheath	mm	42.1
Insect protection		
Material	-	Nylon 12
Min. thickness at any point	mm	0.5
Approx. diameter over Insect protection	mm	43.7
Outer sheath		
Material	-	HDPE
Nominal thickness/Min. thickness at any point	mm	2.5/1.80
Approx. diameter of outer sheath	mm	48.9
Max. diameter of cable	mm	51.4
Approx. mass of cable	kg/km	5,703
Electrical data		
Max. D.C. resistance of active conductor at 20°C	Ω/km	0.0470
Max. A.C. resistance of conductor at 90 ℃	Ω/km	0.0625
Fault current carrying capacity of conductor	kA/1sec	57.2
Fault current carrying of screen	kA/1sec	13.1



# TECHNICAL DATA SHEET HENGTONG CABLE AUSTRALIA

Doc No.: GD/TC/4120001-2020

Rev: 1

Date: 5/18/2023

Page: 3of 3

### 6.35/11(12) kV PWC

Description	Unit	Values
Mechanical data		
Maximum pulling tension of conductor	kN	27.2
Min. bending radius during installation	mm	1310
Min. bending radius after installed	mm	870