

## TECHNICAL DATA SHEET HENGTONG CABLE AUSTRALIA

Doc No.: GD/TC/4120001-2020 Rev: 1

# 6.35/11(12) kV PWC

Date: 11/3/2022 Page: 1of 3

## 1. Design guidelines.

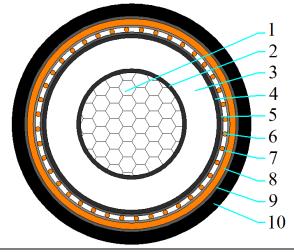
AS/NZS 1429.1	Electric cables-Polymeric insulated Part 1: For working voltages 1.9/3.3(3.6) kV up to and including 19/33(36) kV
AS/NZS 1125 Conductors in insulated electric cables and flexible cords	
AS/NZS 3808	Insulating and sheathing materials for electric cables

#### 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 - 400mm<sup>2</sup> x 1 core AI(WBY)/TR-XLPE/WBT/CWS(13.1kA)/WBT/PVC/NY/HDPE(Graphite) - HCA286039PWC



1	Conductor	Class 2, circular compacted Aluminium conductor (non-conductive water-blocking		
	Conductor	yarn) A Semi-conductive tape may be applied over the conductor		
2	Conductor screen Semi-conductive compound			
3	Insulation TR-XLPE			
4	Insulation screen Semi-conductive compound			
5	Bedding tape	tape Semi-conductive water-blocking tape		
6	Metallic screen Plain annealed copper wire screen			
7	Binder tape	Water-blocking tape		
8	Inner sheath	nner sheath 5V-90 Orange		
9	Insect protection	rotection 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

400mm<sup>2</sup> 1 core AI(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: 11/3/2022 Page: 2of 3

### 5. Construction parameters.

Description	Unit	Values
Active Conductor		
Material	-	Aluminium
Nominal cross-sectional area	mm <sup>2</sup>	400
Conductor shape	/	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	1.5/1.00
Approx. diameter of inner sheath	mm	43.0
Insect protection		
Material	-	Nylon 12
Min. thickness at any point	mm	0.50
Approx. diameter over Insect protection	mm	44.6
Outer sheath		
Material	-	HDPE
Nominal thickness/Min. thickness at any point	mm	2.5/1.80
Approx. diameter of outer sheath	mm	49.8
Max. diameter of cable	mm	52.3
Approx. mass of cable	kg/km	3,386
Electrical data		
Max. D.C. resistance of active conductor at 20 $^\circ\!\!\!{}^\circ\!\!\!{}^\circ\!\!\!{}^\circ$	Ω/km	0.0778
Max. A.C. resistance of conductor at 90 °C	Ω/km	0.101
Fault current carrying capacity of conductor	kA/1sec	37.8
Fault current carrying of screen	kA/1sec	13.2



# TECHNICAL DATA SHEET HENGTONG CABLE AUSTRALIA

Doc No.: GD/TC/4120001-2020

Date: 11/3/2022

Rev: 1

# 6.35/11(12) kV PWC

	0.33/11(12) KV FW	Page: 3of 3	
Description		Unit	Values
Mechanical data			
Maximum pulling tension of conductor		kN	15.6
Min. bending radius during installation		mm	1330
Min. bending radius after installed		mm	890