

1. Design guidelines.

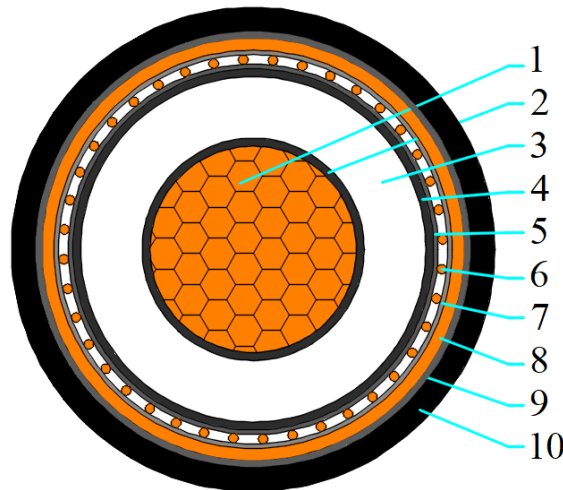
AS/NZS 1429.1	Electric cables-Polymeric insulated Part 1: For working voltages 1.9/3.3(3.6) kV up to and including 19/33(36) kV
AS/NZS 1125	Conductors in insulated electric cables and flexible cords
AS/NZS 3808	Insulating and sheathing materials for electric cables

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 - 300mm² x 1 core Cu(WBY)/TR-XLPE/WBT/CWS(13.1kA)/WBT/PVC/NY/HDPE(Graphite) - HCA414409PWC



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
HENG TONG CABLE AUSTRALIA "YEAR" ELECTRIC CABLE 6.35/11kV
300mm ² 1 core Cu(WBY) TR-XLPE WBT CWS(13.1kA) WBT PVC NY HDPE(Graphite) XXXXm

5. Construction parameters.

Description	Unit	Values
Active Conductor		
Material	-	Copper
Nominal cross-sectional area	mm ²	300
Conductor shape	/	Circular Compacted
Approx. diameter of active conductor	mm	20.6
Conductor screen		
Min. thickness at any point	mm	0.3
Approx. diameter of conductor screen	mm	22.6
Active Insulation		
Material	-	TR-XLPE
Nominal thickness/Min. thickness at any point	mm	3.4/2.96
Approx. diameter over insulation	mm	29.4
Insulation screen		
Type	-	Hand-strippable
Min. thickness at any point	mm	0.6
Approx. diameter of insulation screen	mm	30.9
Metallic screen		
No. & Diameter of copper wires per phase	No./mm	50/1.53
Approx. diameter of metallic screen	mm	34.8
Inner sheath		
Material	-	5V-90
Nominal thickness/Min. thickness at any point	mm	1.0/0.60
Approx. diameter of inner sheath	mm	39.3
Insect protection		
Material	-	Nylon 12
Min. thickness at any point	mm	0.5
Approx. diameter over Insect protection	mm	40.9
Outer sheath		
Material	-	HDPE
Nominal thickness/Min. thickness at any point	mm	2.0/1.40
Approx. diameter of outer sheath	mm	45.1
Max. diameter of cable	mm	47.4
Approx. mass of cable	kg/km	4,744
Electrical data		
Max. D.C. resistance of active conductor at 20°C	Ω/km	0.0601
Max. A.C. resistance of conductor at 90°C	Ω/km	0.0786
Fault current carrying capacity of conductor	kA/1sec	42.9
Fault current carrying of screen	kA/1sec	13.1



**TECHNICAL DATA SHEET
HENG TONG CABLE AUSTRALIA**

Doc No.:
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6.35/11(12) kV PWC

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Description	Unit	Values
Mechanical data		
Maximum pulling tension of conductor	kN	20.4
Min. bending radius during installation	mm	1220
Min. bending radius after installed	mm	810