

1. Design guidelines.

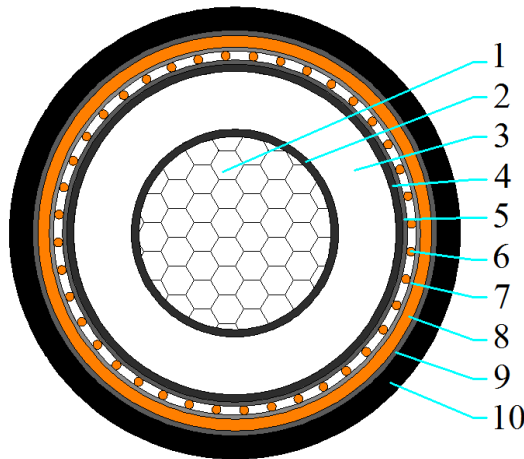
AS/NZS 1429.1	Electric cables-Polymeric insulated Part 1: For working voltages 1.9/3.3(3.6) kV up to and including 19/33(36) kV
AS/NZS 1125	Conductors in insulated electric cables and flexible cords
AS/NZS 3808	Insulating and sheathing materials for electric cables

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 - 95mm² x 1 core Al(WBY)/TR-XLPE/WBT/CWS(9.2kA)/WBT/PVC/NY/HDPE(Graphite) - HCA286013PWC



1	Conductor	Class 2, circular compacted Aluminium conductor (non-conductive water-blocking 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	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 95mm ² 1 core Al(WBY) TR-XLPE WBT CWS(9.2kA) WBT PVC NY HDPE(Graphite) XXXXm

5. Construction parameters.

Description	Unit	Values
Active Conductor		
Material	-	Aluminium
Nominal cross-sectional area	mm ²	95
Conductor shape	/	Circular Compacted
Approx. diameter of active conductor	mm	11.4
Conductor screen		
Min. thickness at any point	mm	0.3
Approx. diameter of conductor screen	mm	13.5
Active Insulation		
Material	-	TR-XLPE
Nominal thickness/Min. thickness at any point	mm	3.4/2.96
Approx. diameter over insulation	mm	20.3
Insulation screen		
Type	-	Hand-strippable
Min. thickness at any point	mm	0.6
Approx. diameter of insulation screen	mm	21.8
Metallic screen		
No. & Diameter of copper wires per phase	No./mm	35/1.53
Approx. diameter of metallic screen	mm	27.5
Inner sheath		
Material	-	5V-90
Nominal thickness/Min. thickness at any point	mm	1.0/0.60
Approx. diameter of inner sheath	mm	31.1
Insect protection		
Material	-	Nylon 12
Min. thickness at any point	mm	0.5
Approx. diameter over Insect protection	mm	32.7
Outer sheath		
Material	-	HDPE
Nominal thickness/Min. thickness at any point	mm	2.0/1.40
Approx. diameter of outer sheath	mm	36.9
Max. diameter of cable	mm	38.9
Approx. mass of cable	kg/km	1,756
Electrical data		
Max. D.C. resistance of active conductor at 20°C	Ω/km	0.320
Max. A.C. resistance of conductor at 90°C	Ω/km	0.411
Fault current carrying capacity of conductor	kA/1sec	9.0
Fault current carrying of screen	kA/1sec	9.2



**TECHNICAL DATA SHEET
HENG TONG CABLE AUSTRALIA**

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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	3.7
Min. bending radius during installation	mm	980
Min. bending radius after installed	mm	650