

1. Design guidelines.

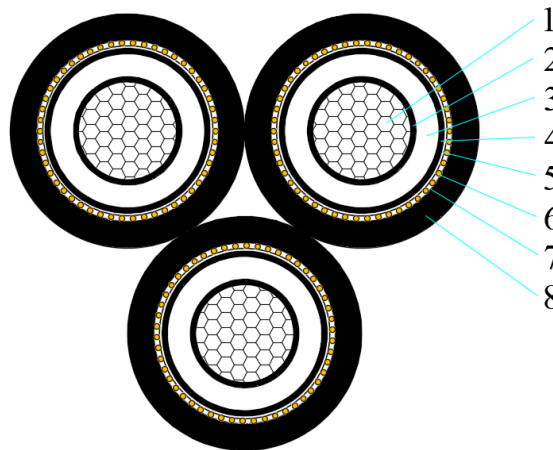
AS/NZS 1429.1	Electric cables-Polymeric insulated Part 1: For working voltages 1.9/3.3(3.6) kV up to and including 19/33(36) kV
AS/NZS 1125	Conductors in insulated electric cables and flexible cords
AS/NZS 3808	Insulating and sheathing materials for electric cables

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 - 400mm² x 3*1 Core Al/TR-XLPE/WBT/CWS(13.1kA)/WBT/MDPE(Graphite)(Triplex) 11kV - HCA2433811EQL



1	Conductor	Class 2, circular compacted Aluminium 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	Outer sheath	MDPE Black with Graphite on the outer surface

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

Identification of core: Printing 1 ONE, 2 TWO, 3 THREE
Marking on cable: by printing in two diametrically opposed lines on the surface of outer sheath (one phase)
HENGTONG CABLE AUSTRALIA "YEAR" ELECTRIC CABLE ERGON 452 6.35/11kV 400mm ² x 3*1 core Al TR-XLPE WBT CWS(13.1kA) WBT MDPE Triplex XXXXm
<i>Note: Meter mark indicates the length of each core, not completed cable.</i>

5. Construction parameters.

Description	Unit	Values
Active Conductor		
Material	-	Aluminium
Nominal cross-sectional area	mm ²	400
Conductor shape	/	Circular Compacted
Approx. diameter of active conductor	mm	23.6
Conductor screen		
Min. thickness at any point	mm	0.3
Approx. diameter of conductor screen	mm	25.5
Active Insulation		
Material	-	TR-XLPE
Nominal thickness/Min. thickness at any point	mm	3.4/2.96
Approx. diameter over insulation	mm	32.3
Insulation screen		
Type	-	Hand-strippable
Min. thickness at any point	mm	0.6
Approx. diameter of insulation screen	mm	33.8
Metallic screen		
No.& Diameter of copper wires per phase	No./mm	40/1.70
Approx. diameter of metallic screen	mm	38.1
Outer sheath		
Material	-	MDPE
Nominal thickness/Min. thickness at any point	mm	2.2/1.56
Approx. diameter of outer sheath	mm	44.3
Laying up		
Direction of lay	-	Right
Approx. diameter of laid up core	mm	95.6
Max. diameter of laid up core	mm	100.4
Approx. mass of cable	kg/km	8,409
Electrical data		
Max. D.C. resistance of active conductor at 20°C	Ω/km	0.0778
Max. A.C. resistance of conductor at 90°C	Ω/km	0.102
Fault current carrying capacity of conductor	kA/1sec	37.8
Fault current carrying of screen	kA/1sec	13.1
Mechanical data		
Maximum pulling tension of conductor	kN	46.8
Min. bending radius during installation (one phase)	mm	1100
Min. bending radius after installed (one phase)	mm	660
Min. bending radius during installation (bundled cable)	mm	1500



**TECHNICAL DATA SHEET
HENG TONG CABLE AUSTRALIA**

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6.35/11(12) kV EQL

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Description	Unit	Values
Min. bending radius after installed (bundled cable)	mm	1000