

TECHNICAL DATA SHEET HENGTONG CABLE AUSTRALIA

6.35/11(12) kV EQL

	Doc No.:
	GD/TC/431-2023
	Rev:
	Date: 11/10/2023
	Page: 1of 3

1. Design guidelines.

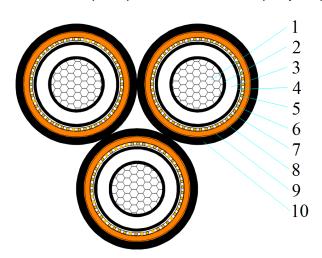
AS/NZS 1429.1	Electric cables-Polymeric insulated Part 1: For working voltages 1.9/3.3(3.6) kV up to and
	including 19/33(36) kV
AS/NZS 1125	Conductors in insulated electric cables and flexible cords
AS/NZS 3808	Insulating and sheathing materials for electric cables

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 - 185mm2 x 3*1 Core Al/TR-XLPE/WBT/CWS(10kA)/WBT/PVC/NY/MDPE(Graphite)(Triplex) 11kV - HCA2429975EQL



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	Inner sheath	5V-90 Orange
9	Insect protection	Nylon 12 Black
10	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 451 6.35/11kV

185mm² x 3*1 core Al TR-XLPE WBT CWS(10kA) WBT PVC NY MDPE Triplex XXXXm

Note: Meter mark indicates the length of each core, not completed cable.



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Doc No.: GD/TC/431-2023 Rev: Date: 11/10/2023

Page: 2of 3

5. Construction parameters.

Description	Unit	Values
Active Conductor		
Material	•	Aluminium
Nominal cross-sectional area	mm ²	185
Conductor shape	1	Circular Compacted
Approx. diameter of active conductor	mm	16.0
Conductor screen		
Min. thickness at any point	mm	0.3
Approx. diameter of conductor screen	mm	17.5
Active Insulation		
Material	-	TR-XLPE
Nominal thickness/Min. thickness at any point	mm	3.4/2.96
Approx. diameter over insulation	mm	24.3
Insulation screen		
Туре	•	Hand-strippable
Min. thickness at any point	mm	0.6
Approx. diameter of insulation screen	mm	25.8
Metallic screen		
No.& Diameter of copper wires per phase	No./mm	48/1.35
Approx. diameter of metallic screen	mm	29.4
Inner sheath		
Material	-	5V-90
Nominal thickness/Min. thickness at any point	mm	1.0/0.60
Approx. diameter of outer sheath	mm	34.8
Insect protection		
Material	-	Nylon 12
Min. thickness at any point	mm	0.8
Approx. diameter over Insect protection	mm	37.8
Outer sheath		
Material	-	MDPE
Nominal thickness/Min. thickness at any point	mm	1.8/1.24
Approx. diameter of outer sheath	mm	41.8
Laying up		
Direction of lay	-	Right
Approx. diameter of laid up core	mm	90.3
Max. diameter of cable	mm	94.8
Approx. mass of cable	kg/km	7,100
Electrical data		
Max. D.C. resistance of active conductor at 20°C	Ω/km	0.164



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Doc No.: GD/TC/431-2023

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Page: 3of 3

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Description	Unit	Values	
Max. A.C. resistance of conductor at 90°C	Ω/km	0.211	
Fault current carrying capacity of conductor	kA/1sec	17.5	
Fault current carrying of screen	kA/1sec	10.0	
Mechanical data			
Maximum pulling tension of conductor	kN	21.6	
Min. bending radius during installation (one phase)	mm	1130	
Min. bending radius after installed (one phase)	mm	750	
Min. bending radius during installation (bundled cable)	mm	1890	
Min. bending radius after installed (bundled cable)	mm	1420	