

**6.35/11(12) kV EQL**
**1. Design guidelines.**

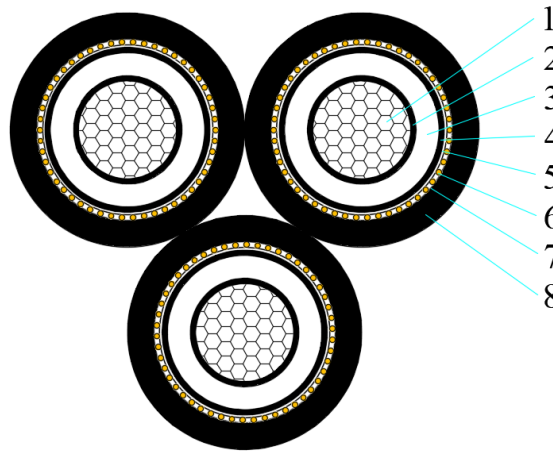
AS/NZS 4026	Electric cables-For underground residential distribution systems
AS/NZS 1429.1	Electric cables-Polymeric insulated Part 1: For working voltages 1.9/3.3(3.6) kV up to and including 19/33(36) kV
AS/NZS 1125	Conductors in insulated electric cables and flexible cords
AS/NZS 3808	Insulating and 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 - 240mm<sup>2</sup> x 3\*1 core Al(WBY)/TR-XLPE/WBT/CWS(3kA)/WBT/HDPE(Triplex) 11kV - HCA20363EQL**



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	Outer sheath	HDPE Black

**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)
HENG TONG CABLE AUSTRALIA "YEAR" ELECTRIC CABLE ENERGEX 403 6.35/11kV 240mm <sup>2</sup> x 3*1 core Al(WBY) TR-XLPE WBT CWS(3kA) WBT HDPE Triplex XXXXm <i>Note: Meter mark indicates the length of each core, not completed cable.</i>

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**5. Construction parameters.**

Description	Unit	Values
<b>Active Conductor</b>		
Material	-	Aluminium
Nominal cross-sectional area	mm <sup>2</sup>	240
Conductor shape	/	Circular Compacted
Approx. diameter of active conductor	mm	18.5
<b>Conductor screen</b>		
Min. thickness at any point	mm	0.3
Approx. diameter of conductor screen	mm	20.4
<b>Active Insulation</b>		
Material	-	TR-XLPE
Nominal thickness/Min. thickness at any point	mm	3.4/2.96
Approx. diameter over insulation	mm	27.2
<b>Insulation screen</b>		
Type	-	Hand-strippable
Min. thickness at any point	mm	0.6
Approx. diameter of insulation screen	mm	29.6
<b>Metallic screen</b>		
No.& Diameter of copper wires per phase	No./mm	35/0.85
Approx. diameter of metallic screen	mm	31.3
<b>Outer sheath</b>		
Material	-	HDPE
Nominal thickness/Min. thickness at any point	mm	2.0/1.40
Approx. diameter of outer sheath	mm	37.1
<b>Laying up</b>		
Direction of lay	-	Right
Diameter of laid up core	mm	80.0
<b>Max. diameter of cable</b>	mm	84.0
<b>Approx. mass of cable</b>	kg/km	4,576
<b>Electrical data</b>		
Max. D.C. resistance of active conductor at 20°C	Ω/km	0.125
Max. A.C. resistance of conductor at 90°C	Ω/km	0.161
Fault current carrying capacity of conductor	kA/1sec	22.7
Fault current carrying of screen	kA/1sec	3.0
<b>Mechanical data</b>		
Maximum pulling tension of conductor	kN	28.1
Min. bending radius during installation (one phase)	mm	930
Min. bending radius after installed (one phase)	mm	550
Min. bending radius during installation (bundled cable)	mm	1260



**TECHNICAL DATA SHEET  
HENG TONG CABLE AUSTRALIA**

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<b>Description</b>	<b>Unit</b>	<b>Values</b>
Min. bending radius after installed (bundled cable)	mm	840