

**1. Design guidelines.**

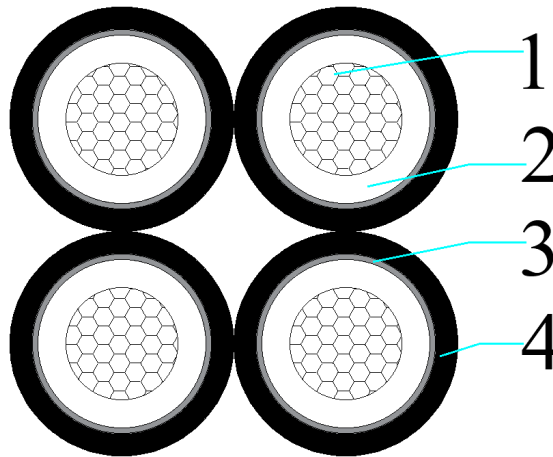
AS/NZS 5000.1	Electric cables-Polymeric insulated Part 1: For working voltages up to and including 0.6/1kV(1.2)kV
AS/NZS 1125	Conductors in insulated electric cables and flexible cords
AS/NZS 3808	Insulating and sheathing materials for electric cables

**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 4\*1 core Al(WBY)/XLPE/NY/MDPE(Quadraplex) – HCA504979PWC**



1	Conductor	Class 2, circular compacted Aluminium conductor (non-conductive water-blocking yarn) A layer of binder tape maybe applied over the conductor
2	Insulation	X-90
3	Insect protection	Nylon 12 Blue
4	Outer sheath	MDPE Black

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

Identification of core: Red, White, Blue, Black (color tape)
Marking on cable: by printing in one line on the surface of outer sheath(one phase)
HENGTONG CABLE AUSTRALIA "YEAR" ELECTRIC CABLE 0.6/1kV CHINA 240mm <sup>2</sup> x 4 x 1 core Al(WBY) XLPE NY MDPE Quadraplex XXXXm

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

**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	18.4
<b>Active Insulation</b>		
Material	-	X-90
Nominal thickness/Min. thickness at any point	mm	1.7/1.43
Approx. diameter over insulation	mm	22.0
<b>Insect protection</b>		
Material	-	Nylon 12
Min. thickness at any point	mm	0.50
Approx. diameter over Insect protection	mm	23.6
<b>Outer sheath</b>		
Material	-	MDPE
Nominal thickness/Min. thickness at any point	mm	1.7/1.35
Approx. diameter of outer sheath	mm	27.0
<b>Laying up</b>		
Direction of lay	-	Right
Approx. diameter of laid up core	mm	65.3
<b>Max. diameter of cable</b>	mm	67.3
<b>Approx. mass of cable</b>	kg/km	3,990
<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	0.162
Fault current carrying capacity of conductor	kA/1sec	22.68
<b>Mechanical data</b>		
Maximum pulling tension of conductor	kN	37.4
Min. bending radius during installation	mm	1350
Min. bending radius after installed	mm	1010