

1. Design guidelines.

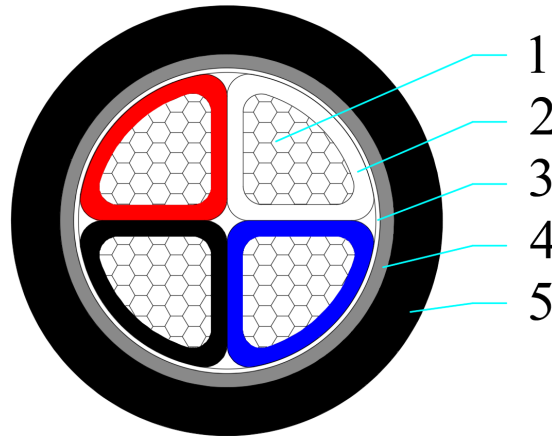
AS/NZS 4026	Electric cables-For underground residential distribution systems
AS/NZS 5000.1	Electric cables-Polymeric insulated Part 1: For working voltages up to and including 0.6/1kV(1.2)kV
AS/NZS 1125	Conductors in insulated electric cables and flexible cords
AS/NZS 3808	Insulating and sheathing materials 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 - 240mm² x 4 core Al(S)/XLPE/NY/PVC(Black) 1kV - HCA2400272EQL



1	Conductor	Class 2, plain annealed sector compacted Aluminium conductor
2	Insulation	X-90
3	Binder tape	Non-hygroscopic material
4	Insect protection	Nylon 12
5	Outer sheath	5V-90 Black

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

Identification of core: Black, Red, White, Blue
Marking on cable: by printing in one line on the surface of outer sheath
HENG TONG CABLE AUSTRALIA "YEAR" ELECTRIC CABLE ERGON 441 0.6/1kV 240mm ² x 4 Core Al(S) XLPE NY PVC XXXXm

	TECHNICAL DATA SHEET	Doc No.: GD/TC/4120001-2022
	HENGTONG CABLE AUSTRALIA	Rev: 02
	0.6/1(1.2) kV EQL	Date: 4/25/2023
		Page: 2 of 2

5. Construction parameters.

Description	Unit	Values
Active Conductor		
Material	-	Copper
Nominal cross-sectional area	mm ²	240
Conductor shape	/	Sector Compacted
Approx. diameter of active conductor	mm	17.4
Active Insulation		
Material	-	X-90
Nominal thickness/Min. thickness at any point	mm	1.7/1.43
Approx. diameter over insulation	mm	21.0
Laying up of cores		
Direction of lay		Right
Diameter of laid up core	mm	52.1
Insect protection		
Material	-	Nylon 12
Min. thickness at any point	mm	0.80
Approx. diameter over Insect protection	mm	54.5
Outer sheath		
Material		5V-90
Nominal thickness/Min. thickness at any point	mm	2.8/2.28
Approx. diameter of outer sheath		64.1
Max. diameter of cable	mm	67.3
Approx. mass of cable	kg/km	4,636
Electrical data		
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
Mechanical data		
Maximum pulling tension of conductor	kN	37.44
Min. bending radius during installation	mm	1750
Min. bending radius after installed	mm	1170