



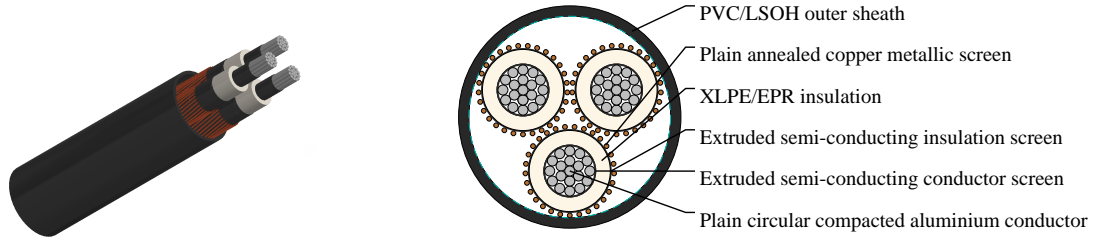
# Caledonian

Industrial Cables (Australian Standard Medium Voltage)

www.caledonian-cables.com

marketing@caledonian-cables.com

## 3.8/6.6kV Three Core Individual Screened & PVC Sheathed (Al Conductor) Heavy Duty 3C50



### APPLICATIONS

These cables are designed to be used for the supply of electrical energy in fixed applications up to the rated voltages at a nominal power frequency between 49Hz and 61Hz., they are suitable for use in distribution installation, electrical power station , they are applied for installation, outdoors, underground where subject to mechanical damage.

### STANDARDS

AS/NZS 1429.1

### VOLTAGE RATING

3.8/6.6kV

### CABLE CONSTRUCTION

CONDUCTOR: Plain circular compacted aluminium to AS/NZS1125

Maximum Continuous Operating Temperature: 90°C

CONDUCTOR SCREEN: Extruded semi-conducting compound, bonded to the insulation and applied in the same operation as the insulation

INSULATION: Cross Linked Polyethylene (XLPE) – standard

Ethylene Propylene Rubber (EPR) – alternative

INSULATION SCREEN: Extruded semi-conducting compound

METALLIC SCREEN: Plain annealed copper wire: 10kA for nominal 1 second(HEAVY DUTY)

SHEATH: Black 5V-90 polyvinyl chloride (PVC) – standard

Orange 5V-90 PVC inner plus black high density polyethylene (HDPE) outer – alternative

Low smoke zero halogen (LSOH) – alternative

### TECHNICAL CHARACTERISTICS

Nom. Cross-Section Area	Max. Conduct DC Resistance @20°C	Cond. AC Resistance @50Hz and 90°C	Inductive reactance @50Hz	Insulation Resistance @20°C	Conductor to screen capacitance	Max. dielectric stress	Current Ratings (Unenclosed In Air)	Current Ratings (Buried Direct)	Current Ratings (Buried In Ducts)
mm <sup>2</sup>	Ohm/km	Ohm/km	Ohm/km	MegOhm.km	µF × km	kV × mm	A	A	A
50	0.641	0.822	0.115	7800	0.309	1.87	95	166	137



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## DIMENSION AND PARAMETERS

Nominal Cross-sectional Area	Conductor Diameter	Nominal Insulation Thickness	Nominal Diameter over Insulation	Screen Area on Each core	No. Diameter of Screened Wires	Nom. Diameter Over Screened Wires	Nom. Overall Diameter	Approx. Weight
mm <sup>2</sup>	mm	mm	mm	mm <sup>2</sup>	no x mm	mm	mm	kg/km
50	8.1	2.5	14.2	10.8	19x0.85	17.5	43.1	170