

Caledonian

Industrial Cables (Australian Standard Medium Voltage) www.caledonian-cables.com marketing@caledonian-cables.com

6.35/11kV Single Core Screened & PVC Sheathed (Al Conductor) Light Duty 1C35



PVC/LSOH outer sheath Plain annealed copper metallic screen XLPE/EPR insulation Extruded semi-conducting insulation screen Extruded semi-conducting conductor screen Plain circular compacted aluminium conductor

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

6.35/11kV

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: 3kA for nominal 1 second(LIGHT 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

| NonMa | x.Conduc | Cond. | Cond. | Inductive | Inductive | Inductive | nsulatio | Conducto | Max. | Current | Current | Current |
|----------|-----------------------|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|---------|---------|
| Cross- | DC | AC | AC I | eactance | eactance | eactand | Resistanc | to o | liaelectri | Ratings | Ratings | Ratings |
| SectiorR | lesistan B | lesistan b | Resistanc | @50Hz | @50Hz | @50Hz | @20°C | screen | stress(L | Inenclose | (Buried | (Buried |
| Area | @20°C | @50Hz | @50Hz | and | and | and | Ca | apacitanc | | In Air) | Direct) | In |
| | | and | and | 90°C | 90°C | 90°C | | | | | | Ducts) |
| | | 90°C | 90°C | (Trefoil | (flat | (flat | | | | | | |
| | | (Trefoil | (flat | touching) | touching) | spaced) | | | | | | |
| | | | spaced) | | | | | | | | | |



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| | | or Flat touching) | | | | | | | | | | |
|-----|------------|----------------------|------------|------------|------------|-------------|---------|------------|------------|-----|-----|-----|
| mm² | Ohm/ km | Ohm/ km | Ohm/ km | Ohm/ km | Ohm/ km | Ohm/M km | egOhm.k | μF × km | kV × mm | A | A | A |
| 35 | 0.868 | 1.11 | 1.11 | 0.144 | 0.159 | 0.205 | 11000 | 0.22 | 2.54 | 153 | 142 | 119 |

DIMENSION AND PARAMETERS

| Nominal Cross- sectional Area | Conductor Diameter | Nominal Insulation Thickness | Nominal Diameter over Insulation | Screen Area on Each core | No. Diamter of Screened Wires | Nom. Diameter Over Screened Wires | Nom. Overall Diameter | Approx. Weight |
|--|-----------------------|------------------------------------|---|--------------------------------|--|---|-----------------------------|-------------------|
| mm² | mm | mm | mm | mm² | no x mm | mm | mm | kg/km |
| 35 | 6.9 | 3.4 | 14.9 | 20 | 36x0.85 | 16.3 | 22.5 | 62 |