



Cable Calculations AS/NZS 3000:2007 & AS/NZS 3008.1.1 1998

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General

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Page Range

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1 1 2 2 3 3

Print Cancel

Method of Installation

Above Earth Below Ground Aerial Cables

Spaced (Trefoil for Singles)

Touching

Partial Insulated

Conduit Size (mm): _____ HD: _____ LD: _____

Cable Required: 1.5 mm² Rated at 17 Amps Voltage Drop: 3.30 v at 0.83%

De-Rated to: 17 Amps Maximum Run: 33 mtrs at 11.00 Amps

Fault Level (amps): 166.5 Cable Temp: 54.7 °C Fuse/CB Size (Amps): 16

Earth Loop Impedance Results

Circuit Protection: Fuse Type: _____ Trip time: 0.4 seconds

Fault conductor size: 1.5 mm² No. Cores: 1 Touch Potential: 115.00 Volts

Max. Length of run: 69.67 mtrs (Z_e): 2.25 Ohms Minimum Trip Current: 85 Amps

Max. Earth Loop Impedance (Z_s): 2.81 Ohms Fault Condition Voltage drop: 12.6 %

Actual Impedance for this Circuit: 0.36 Ohms Maximum let through current: 538.34 Amps

Max. Current: 518 Amps

SELECTION IS THE DEFAULT PRINTER

"PRINT THE DOCUMENT"

Cable Calculations AS/NZS 3000:2007 & AS/NZS 3008.1.1 1998

PRINTS TO THE DEFAULT PRINTER NO PROBLEMS

Method of Installation

Above Earth Below Ground Aerial Cables

Spaced (Trefoil for Singles)

Touching

Conduit

Partial Insulated

Cable Type

Copper (Cu) Aluminium (Al)

Enter the Voltage: 400

Permitted Volts Drop: 2.5 %

Cable Length (Metres): 22

De-Rating Factor: 1

Select Your Own Cable Size

Calculate... **Calculate Earth loop Impedance**

Conduit Size (mm): _____ HD: _____ LD: _____

Cable Required: 1.5 mm² Rated at 17 Amps Voltage Drop: 3.30 v at 0.83%

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00:2007 & AS/NZS 3008.1.1 1998.

SELECT PRINTER ICON

Method of Installation: Above Earth, Below Ground, Aerial Cables

Spaced (Trefoil for Singles), Touching, Conduit, Partial Insulated

Load: KW, pf 0.8, Amps 22

Cable Material: PVC (75 deg C), XLPE (90 deg C), Fire-Rated (110 deg C), MIMS (100 deg C)

Cable Cores: Singles, Multi-Core

Cable Type: Copper (Cu), Aluminium (Al)

Enter the Voltage: 400

Permitted Volts Drop: 2.5 %

Cable Length (Metres): 22

De-Rating Factor: 1

Calculate...

Calculate Earth loop Impedance

2

Cable Size Results

Cable Required:	Rated at:	Voltage Drop:	HD:	LD:
2.5 mm ²	25 Amps	7.55 v		at 1.89%
De-Rated to:	25 Amps	Maximum Run:		at 22.00 Amps
Fault Level (amps): 277.5	Cable Temp: 67.1 °C	Fuse/CB Size (Amps): 25		

Earth Loop Impedance Results

Circuit Protection: Fuse	Type:	Trip time: 0.4 seconds
Fault conductor size: 2.5 mm ²	No. Cores: 1	Touch Potential: 115.00 Volts
Max. Length of run: 61.68 mts (Z _e): 1.20 Ohms		Minimum Trip Current: 160 Amps
Max. Earth Loop Impedance (Z _s): 1.50 Ohms		Fault Condition Voltage drop: 28.5 %
Actual Impedance for this Circuit: 0.43 Ohms		Maximum let through current: 448.62 Amps
		Max. Current: 431 Amps

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Select Phase: 1 Ø, 2 Ø (180°), 2 Ø (120°), 3 Ø

Cable I.D.: 2

Additional Info

Ambient Temp: 40 °C

Method of Installation: Above Earth, Below Ground, Aerial Cables

Spaced (Trefoil for Singles), Touching, Conduit, Partial Insulated

Load: KW, pf 0.8, Amps 22

Cable Material: PVC (75 deg C), XLPE, Fire-Rated, MIMS

Cable Type: Copper (Cu), Aluminium (Al)

Enter the Voltage: 400

Permitted Volts Drop: 2.5 %

Cable Length (Metres): 22

De-Rating Factor: 1

Calculate...

SELECT TO PRINT ANOTHER DOUMENT

Table, Cable Detail

Project Description: PRINTER TEST

Preview, Print, Cancel

2

Cable Size Results

Cable Required:	Rated at:	Voltage Drop:	HD:	LD:
2.5 mm ²	25 Amps			at 1.89%
De-Rated to:	25 Amps	Maximum Run:		at 22.00 Amps
Fault Level (amps): 277.5	Cable Temp: 67.1 °C	Fuse/CB Size (Amps): 25		

Earth Loop Impedance Results

Circuit Protection: Fuse	Type:	Trip time: 0.4 seconds
Fault conductor size: 2.5 mm ²	No. Cores: 1	Touch Potential: 115.00 Volts
Max. Length of run: 61.68 mts (Z _e): 1.20 Ohms		Minimum Trip Current: 160 Amps
Max. Earth Loop Impedance (Z _s): 1.50 Ohms		Fault Condition Voltage drop: 28.5 %
Actual Impedance for this Circuit: 0.43 Ohms		Maximum let through current: 448.62 Amps
		Max. Current: 431 Amps

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