

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

Select Phase: 1
 Cable I.D.: 1
 Load: KW pf 0.8
 Amps: []
 Ambient Temp: 40 °C
 Cable Material: Copper (Cu) Aluminium (Al)
 Enter the Voltage: 230
 Permitted Volts Drop: %
 Cable Length (Metres): []
 De-Rating Factor: 1
 Method of Installation: Above Earth, Below Ground, Aerial Cables
 Spaced (Trefoil) (Trefoil for Singles)
 Touching
 Conduit
 Partial Insulation

INPUT CABLE I.D.

TO FIND THE MAXIMUM CABLE LENGTH WHEN USING OVERSIZED CONDUCTORS

Calculate... Calculate Earth loop Impedance

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

Select Phase: 1
 Cable I.D.: []
 Load: KW pf 0.8
 Amps: 20
 Ambient Temp: 40 °C
 Cable Material: PVC XLPE Fire-Rated MIMS
 Enter the Voltage: 230
 Permitted Volts Drop: %
 Cable Length (Metres): []
 De-Rating Factor: 1
 Method of Installation: Above Earth, Below Ground, Aerial Cables
 Spaced (Trefoil) (Trefoil for Singles)
 Touching
 Conduit
 Partial Insulation

INPUT LOAD CURRENT

Cable Size Results

No. of Parallel Cores:	Conduit Size (mm):	HD:	LD:
Cable Required:	Rated at:	Voltage Drop:	at
De-Rated to:	Maximum Run:	at	
Fault Level (amps):	Cable Temp:	Fuse/CB Size (Amps):	

Earth Loop Impedance Results

Circuit Protection:	Type:	Trip time:
Fault conductor size:	No. Cores:	

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

Select Phase: 1
 Cable I.D.: []
 Load: KW pf 0.8
 Amps: 20
 Ambient Temp: 40 °C
 Cable Material: PVC (75 deg C) XLPE (90 deg C) Fire-Rated (110 deg C) MIMS (100 deg C)
 Enter the Voltage: 230
 Permitted Volts Drop: 3 %
 Cable Length (Metres): 1
 De-Rating Factor: 1
 Method of Installation: Above Earth, Below Ground, Aerial Cables
 Spaced (Trefoil) (Trefoil for Singles)
 Touching
 Conduit
 Partial Insulation

INPUT VOLTAGE DROP PERMISSIBLE % VALUE

Cable Size Results

No. of Parallel Cores:	Conduit Size (mm):	HD:	LD:
Cable Required:	Rated at:	Voltage Drop:	at
De-Rated to:	Maximum Run:	at	
Fault Level (amps):	Cable Temp:	Fuse/CB Size (Amps):	

Earth Loop Impedance Results

Circuit Protection:	Type:	Trip time:
Fault conductor size:	No. Cores:	

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

Select Phase: 1
 Cable I.D.: []
 Load: KW pf 0.8
 Amps: 20
 Ambient Temp: 40 °C
 Cable Material: PVC (75 deg C) XLPE (90 deg C) Fire-Rated (110 deg C) MIMS (100 deg C)
 Enter the Voltage: 230
 Permitted Volts Drop: 3 %
 Cable Length (Metres): 1
 De-Rating Factor: 1
 Method of Installation: Above Earth, Below Ground, Aerial Cables
 Spaced (Trefoil) (Trefoil for Singles)
 Touching
 Conduit
 Partial Insulation

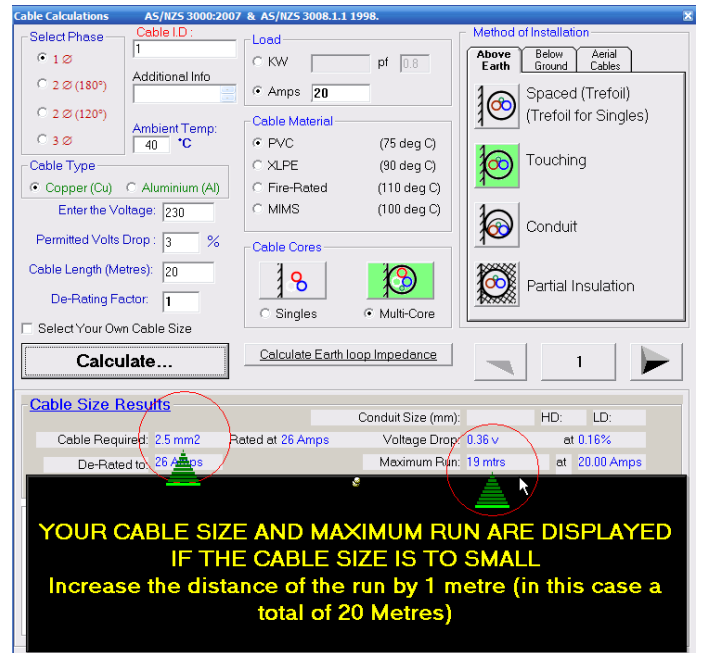
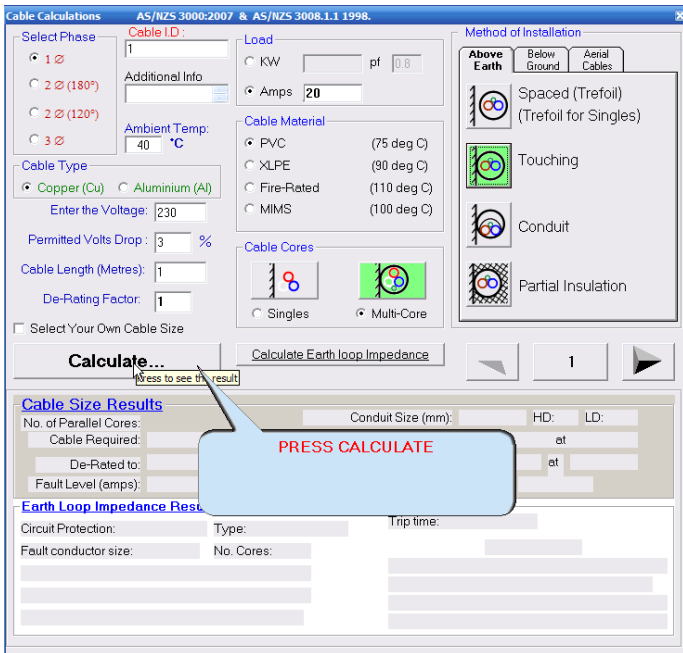
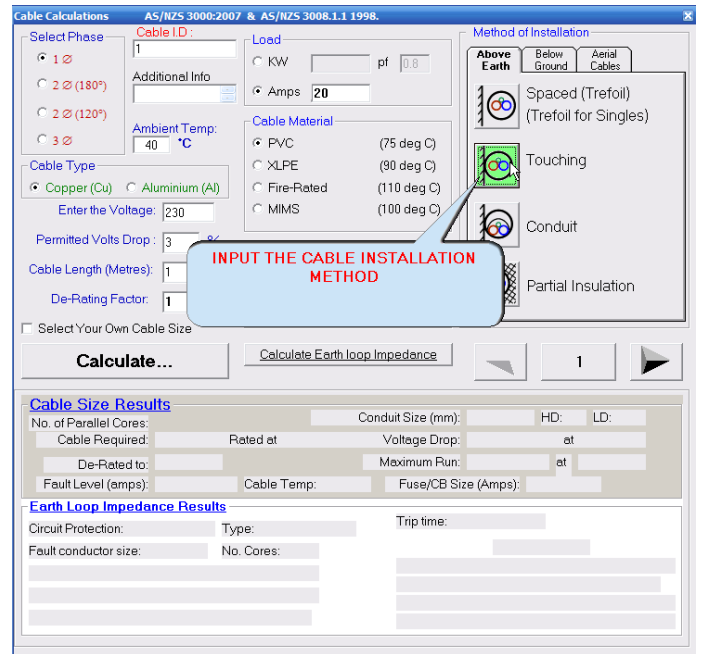
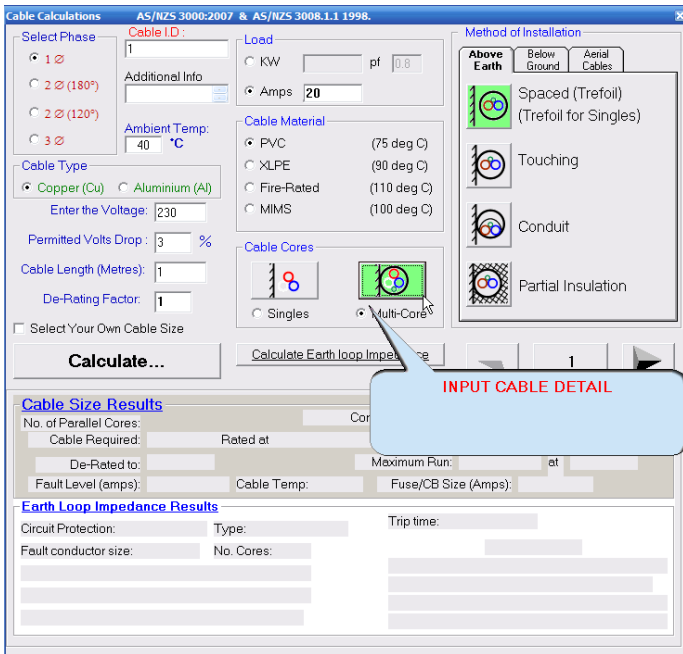
INPUT CABLE LENGTH 1 (ONE)

Cable Size Results

No. of Parallel Cores:	Conduit Size (mm):	HD:	LD:
Cable Required:	Rated at:	Voltage Drop:	at
De-Rated to:	Maximum Run:	at	
Fault Level (amps):	Cable Temp:	Fuse/CB Size (Amps):	

Earth Loop Impedance Results

Circuit Protection:	Type:	Trip time:
Fault conductor size:	No. Cores:	



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

Select Phase: 1
 Cable ID: 1
 Load: KW pf 0.8
 Amps: 20
 Ambient Temp: 40 °C
 Cable Material: PVC (75 deg C), XLPE (90 deg C), Fire-Rated (110 deg C), MIMS (100 deg C)
 Cable Type: Copper (Cu) / Aluminium (Al)
 Enter the Voltage: 230
 Permitted Volts Drop: 3 %
 Cable Length (Metres): 20
 Method of Installation: Above Earth, Below Ground, Aerial Cables
 Installation Options: Spaced (Trefoil) (Trefoil for Singles), Touching, Conduit, Partial Insulation

IF YOU NEED TO UP THE CABLE SIZE CHECK THE MAXIMUM RUN LENGHT AND RAISE IT BY (ONE) 1 METRE

De-Rated to: Maximum Run: **19 METRES**
 Fault Level (amps): Cable Temp: Fuse/CB Size (Amps):

Earth Loop Impedance Results
 Circuit Protection: Type: Trip time:
 Fault conductor size: No. Cores:

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

Select Phase: 1
 Cable ID: 1
 Load: KW pf 0.8
 Amps: 20
 Ambient Temp: 40 °C
 Cable Material: PVC (75 deg C), XLPE (90 deg C), Fire-Rated (110 deg C), MIMS (100 deg C)
 Cable Type: Copper (Cu) / Aluminium (Al)
 Enter the Voltage: 230
 Permitted Volts Drop: 3 %
 Cable Length (Metres): 20
 De-Rating Factor: 1
 Method of Installation: Above Earth, Below Ground, Aerial Cables
 Installation Options: Spaced (Trefoil) (Trefoil for Singles), Touching, Conduit, Partial Insulation

PRESS CALCULATE

Calculate... Calculate Earth loop Impedance

Cable Size Results

Cable Required	Rated at	Voltage Drop	HD:	LD:
4.0 mm ²	34 Amps	4.27 v		at 1.86%
De-Rated to: 34 Amps		Maximum Run: 32 mtrs		at 20.00 Amps

Earth Loop Impedance Results
 Circuit Protection: Type: Trip time:
 Fault conductor size: No. Cores:

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

Select Phase: 1
 Cable ID: 1
 Load: KW pf 0.8
 Amps: 20
 Ambient Temp: 40 °C
 Cable Material: PVC (75 deg C), XLPE (90 deg C), Fire-Rated (110 deg C), MIMS (100 deg C)
 Cable Type: Copper (Cu) / Aluminium (Al)
 Enter the Voltage: 230
 Permitted Volts Drop: 3 %
 Cable Length (Metres): 20
 De-Rating Factor: 1
 Method of Installation: Above Earth, Below Ground, Aerial Cables
 Installation Options: Spaced (Trefoil) (Trefoil for Singles), Touching, Conduit, Partial Insulation

Calculate... Calculate Earth loop Impedance

Cable Size Results

Cable Required	Rated at	Voltage Drop	HD:	LD:
4.0 mm ²	34 Amps	4.27 v		at 1.86%
De-Rated to: 34 Amps		Maximum Run: 32 mtrs		at 20.00 Amps

YOUR MAXIMUM RUN LENGHT FOR THE LOAD CURRENT STATED AND THE % PERMISSIBLE VOLTAGE DROP FOR THE INCREASED SIZED CABLE WILL BE SHOWN