BN Thermic Ltd

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Installation instructions for

CRJ-T1

Termination kit

All terminations and connections must be completed by a qualified electrician and carried out in accordance with current regulations.

This CRJ-T1 termination kit is intended to be used with all BN Thermic CRJ and CRJM Self Regulating Cable. This kit includes all the parts required to terminate both ends of a single piece of cable. If you wish to join two lengths of cable or T join another piece of cable you will also require a CRJ-S Splice / T Joint Kit for each join or T joint you wish to make. Please make sure you do not exceed the maximum length for each type of cable as shown in the cable instruction leaflet.

Termination Kit

CRJ T1 kit contains:

- 1 Black cable gland 20mm
- 1 Red 40mm x 3.2mm dia heat shrink
- 1 Blue 40mm x 3.2mm dia heat shrink
- 1 Green / yellow 65mm x 3.2mm dia heat shrink
- 1 Black 70mm x 16.4mm dia heat shrink
- 1 Black 50mm x 16.4mm dia heat shrink
- 1 Black 35mm x 16.4mm dia heat shrink
- 2 Insulated barrel connectors
- 1 Warning label

Tools required

Sharp knife

Side cutters

Long nose pliers

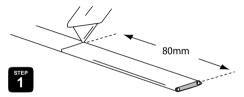
Small screwdriver

Heat gun

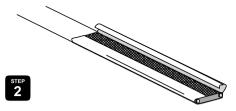
Crimp tool

Spanner

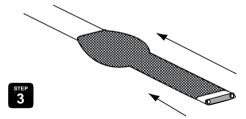
Preparation for termination



First slide the cable gland and then the 70mm heat shrink onto the cable. Cut around the outer cable sheath 80mm from the end the gently bend the cable to break the sheath free.



Carefully cut along the centre of the outer sheath as shown. Discard the 80mm length of the outer sheath.



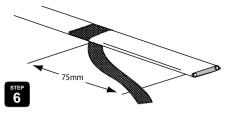
Push back the earth braid to create a bulge .



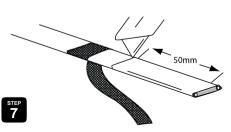
Then using a small screwdriver make an opening at the bulge.



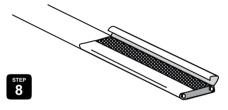
Gently bend the cable and feed the inner core through the braid opening.



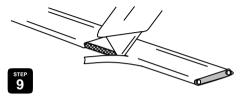
Pull the braid tight to form a 'pig tail'



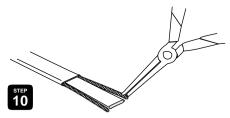
Carefully score around the inner sheath 50mm from the end. Gently bend the cable to break this section of the sheath free.



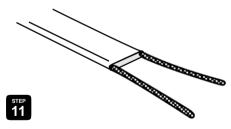
Carefully cut along the centre of the inner jacket as shown gently bend the inner jacket, remove and discard.



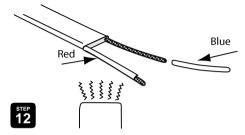
Taking care not to cut into the two conductors, working from the outside, expose the conductors (Buss wires).



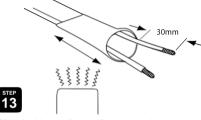
Starting from the ends pull each Buss wire away from the inner core material.



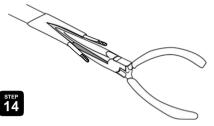
Remove and discard the inner core material leaving the two bare Buss wires exposed.



Slide the red 40mm long x 3mm diameter heat shrink over either of the exposed Buss wires and using a suitably rated heat shrink gun shrink into place. Repeat using the blue sleeve on the other exposed wire. Slide the green/yellow sleeve over the earth wire.



Slide the black adhesive lined 50mm long x 16mm diameter heat shrink over the cable leaving 10mm over the exposed red and blue insulated Buss wires. Have on hand the long nose pliers. Using the heat gun shrink this sleeve



As the heat shrink reduces down immediately squeeze the overhung portion with the pliers for 20 seconds to form a fork like arrangement. (The heat shrink has an inner glue like material to ensure good adhesion.)



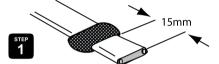
Crimp, using a suitable tool, the two insulated barrel connectors to the conductors to facilitate connection to the power feed cable.



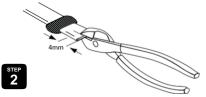
Slide the 70mm length back over the terminated section including the green/yellow covered earth wire to the base of the forked conductors and shrink into place. Finally slide the gland over the assembly in preparation for connection into a suitable junction box. Tighten the cable gland.



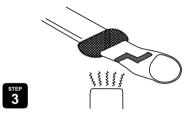
Remote End Preparation



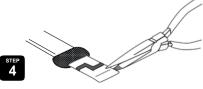
Using the same method to expose and separate the earth braid as shown in the termination detail, strip the outer, inner and earth braid back 15mm from the cable end. Fold the earth wire around the sheath. DO NOT EXPOSE THE BUSS WIRES.



Using a pair of side cutters cut down the centre of the 15mm length of inner core and then remove 4mm of one of the Buss wires so as to form a notch. This ensures that there is no way in which the Buss wires can come into contact with each other.



Slide the 35mm length of black heat shrink over the cable end so that there is 15mm overhanging the cable end



Apply heat to the shrink tubing and when the overhanging portion is fully shrunk squeeze the ends together to enable the inner glue to adhere to itself. A bead of the clear colour glue should be visible at the end



