



Our ref: DPM-0671

Your ref:

Date: Tuesday, 14 November 2006

Phoenix Contact Ltd,
Halesfield 13,
Telford,
Shropshire, TF7 4PG

**Metronet Rail
BCV Limited**

**Metronet Rail
SSL Limited**

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WC1V 6NU

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**AUTHORITY TO SUPPLY PRODUCT
LIMITED FIRE HAZARD ELECTRICAL TERMINALS**

I confirm that Phoenix Contacts have provided acceptable evidence to demonstrate their capability to produce electrical terminals, suitable for use by Metronet Rail in areas requiring limited fire hazard products i.e. in below ground areas, often referred to as 'Section 12', within the premises of London Underground Ltd.

This is with the provision that the compound used in the terminal construction, apart from the metal components, is one of the following types:

- PLU 101*
- PLU 102*

* These are generic codes assigned by Phoenix Contacts for two compounds whose specific references have been disclosed, in confidence, to Metronet Rail.

Full acceptance of compliance is granted provided that the loading levels of the non-metallic parts do not exceed the following quantities.

PLU101	
Passenger circulation areas	264 g per 1.25 m ²
Tunnel locations	75 g per 1.25 m ²
PLU102	
Passenger circulation areas	242 g per 1.25 m ²
Tunnel locations	69 g per 1.25 m ²

When materials are non-compliant with respect to the requirements of London Underground Standard 2-01001-002 'Fire Safety Performance of Materials', a concession is sought. Currently, electrical terminals constructed of nylon are in use within the premises of London Underground under concession.

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Metronet Rail BCV Limited
Registered in England and Wales
Company Number 3923496

Metronet Rail SSL Limited
Registered in England and Wales
Company Number 3923484

Registered Office: Templar House
81-87 High Holborn, London WC1V 6NU

Electrical Performance

Phoenix Contact have provided an electrical performance validation statement that a range of feed through terminals, listed in their submission (ref. QP26-2-11) are suitable for use with 1000DC or 1000V AC. For DC use operating conditions are described in Standard IEC 947-7-1.

Scope of Supply

This 'Authority to Supply' is limited to those products using polymer types PLU101 and PLU102, polyamide (nylon) based materials, which are listed as having a V0 flammability class, according to the Underwriter's Laboratory.

This includes the 'Cliquine Complete' family and the 'Combicon' range which comprises of the following types:

UT (Universal Terminal), screw clamp terminals 2.5 – 35 mm²
ST (Spring Terminal), spring clamp terminals 1.5 – 35 mm²
ST Combi Spring Terminals with a plug feature 2.5 and 4 mm²
DT (Direct Terminal), spring clamp terminals 2.5 mm²
QTC (Quickon Terminal), IDC terminals 1.5 and 2.5 mm²

Conditions of Acceptance

This acceptance relates to the fire performance characteristics of the materials listed above together with the electrical performance validation provided by Phoenix Contact. Due to the diverse nature of the product range which is offered, the electrical and mechanical properties of the terminals have not been independently assessed by Metronet Rail.

Acceptance of the product is subject to the following conditions:

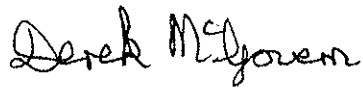
- The materials, design and construction of the products remain unchanged from that evaluated during type testing.
- The performance of the product remains consistent with that demonstrated, regardless of manufacturing tolerances and colours.
- Satisfactory quality assurance and inspection compliance is maintained by the contractor.

Metronet Rail should be advised in writing of any intention to alter the design or range of the product or to cease or suspend production.

Contractor Responsibilities

The contractor is responsible for ensuring that the product being offered is fit for the intended purpose. This product acceptance by Metronet Rail does not relieve the contractor from this responsibility and can only be considered as an indication of potential suitability. Any cause for concern relating to product suitability or fitness for purpose that may become apparent in the future should be drawn to the attention of Metronet Rail in writing.

Yours faithfully

A handwritten signature in black ink that reads "Derek McGovern". The signature is written in a cursive style with a large initial 'D' and 'M'.

Derek McGovern
Technology Services Manager