

Manufacturer:
iLeccys Rail Ltd

Issue : 1T
Valid From : 12-12-2013
Monitoring Period : 6 Months from commissioning

Electrical Signalling Enclosures - Junction Boxes

Product Description

Electrical Signalling Enclosures - Junction Boxes
1 Level Crossing Barrier - Power Cable
Size Reduction Junction Box

Product Image



Scope of Acceptance

Trial Acceptance

For Trial use. Where the scope is limited to:

- the design of Junction Boxes defined in this certificate.
- the Junction Boxes defined in this certificate, are only manufactured and installed as part of the project in Paragraph 1 of the Trial Criteria section of this certificate.
- and further controls specified in 'Specific Conditions' & 'Trial Criteria' sections of this certificate (overleaf).

Network Rail Acceptance Panel (NRAP) hereby authorises the product above for use and trial use on railway infrastructure for which Network Rail is the Infrastructure Manager under the ROGS regulations.

Authorised by:

Roger Moore
Senior Engineer (Asset Management and Railway Systems)

Edward C. Rollings MSc, CEng, MIET, FIRSE
Professional Head

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Specific Conditions

The following Conditions are specific to the approved product/s contained within this Certificate. These conditions must be adhered to in addition to the Network Rail General Conditions contained within the "General Terms and Conditions" section.

Failure to adhere to these conditions may result in the withdrawal or suspension of Acceptance of some, or all of the items contained within the accepted configuration.

Manufacturer

- 1) Shall only assemble these Junction Boxes at their premises in Tring, Hertfordshire.
- 2) Shall take note of the General Conditions at rear of document

Signalling Designers, Specifiers, Installers, Testers

- 1) Shall provide copies of any training manuals/briefing notes and an appropriate level of training/briefing to purchasers & users & maintainers of the Junction Boxes.
- 2) Shall provide copies of O&M manuals (covering installation, maintenance, testing and tool list) to purchasers & users & maintainers of the Junction Boxes.
- 3) Shall ensure that the Junction Boxes are installed correctly and tested as part of the system before the signalling system is commissioned.
- 4) Shall ensure that trackside Junction Boxes are secured in place and positioned to avoid tripping, fire and maintenance hazards.
- 5) Shall take note of the General Conditions at rear of document

Installers, testers, operators, maintainers, other users etc.

- 1) Shall be aware that there are no internal spares in the terminal box – any failed boxes shall be replaced with new and returned to iLeccsys, and the Lead Design Reviewer shall be informed (see contact details below).
- 2) Shall ensure that removal and replacement of cabling/wiring is in accordance with NR standard practice.
- 3) Shall take note of the General Conditions at rear of document

Trial Criteria

- 1) Trials to be carried out in the following areas :-
 - a). On the Great Northern/Great Eastern Signalling Renewal project. The length of trial is 6 months post commissioning;
Trials and Critical Review Reports for each project shall be complete 12 months from the commissioning date.
- 2) Only the NR Configuration Items listed in the appropriate Tables (see section on Product Configuration below) against each project shall be used.

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- 3) The Sponsor shall be responsible for the production of a Critical Review Report for review by Network Rail's Technology Introduction Group. A report shall be provided between 6 & 12 months after commissioning. The report shall include contributions from appropriate stakeholders such as the installation contractors, testers, maintainers and the manufacturer. The critical review report shall confirm the success or otherwise of the trial, demonstrating or describing:
 - a. That each product is as described – i.e. confirmation of the product configuration, and including an image of the Certificate of Conformance.
 - b. The interface of the assembly to the ground.
 - c. Any installation, testing & maintenance manuals; other procedures; and the training material & equipment appropriate to each project are acceptable and available to Network Rail, the report shall quote the appropriate references.
 - e. The installability and other ergonomic considerations are acceptable to Network Rail.
 - f. The external cabling is fit for purpose especially in the manner in which it exits the assembly;
 - g. The system can be safely maintained. Any maintenance activity which gives issues and can be overcome by a design change should be stated;
 - h. The signalling system incorporating the product performed its function as intended;
 - i. No Service Affecting Failure has occurred during the Trial period that is attributable to the design or manufacture of any the assembly.
- 4) If during the trial, deficiencies are found in any of the points a) to i) in section 13 above, the Sponsor shall be responsible for remedying these within the 12 months of commissioning.
- 5) Failure to supply an adequate and timely report may delay achievement of full product acceptance and may result in the product under trial having to be removed and the infrastructure returned to an operational condition acceptable to Network Rail.

Product Configuration

Complete Assembly

Table 1.1 Configuration Item.

iLeccsys Part No.	Description	Catalogue No.
ILS 100122-002	Level Crossing Barrier Power Cable Size Reduction Junction Box Assembly complete with Mounting Frame	N/A for trial

Spare Parts

Table 2.1 Configuration Items

iLeccsys Part / Drg No.	Description	Catalogue No.
02-03-071 Rev E	Terminal Box	N/A for trial
M63B-IP68	Cable Gland	N/A for trial
KE-61	Ensto Power Terminal for 2.5mm ² to 50mm ² Cable	N/A for trial
KE-62	Ensto Power Terminal for 16mm ² to 95mm ² Cable	N/A for trial
02-18-153-04 Sht 1 Rev C	Cable Protection Box	N/A for trial

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Assessed Documentation

Table A.1 iLecsyes Configuration Documents for Configuration Items in Tables 1.1 & 2.1 above

Ilecsys Reference	Title	Doc. Rev.	Date and Applies to Cert. issue No.	
02-18-153 Sheet 1/1	LX Power Cable Junction Box Assembly	D	31-05-2013	T1
02-03-071 Sheet 1/1	LX Power Cable Junction Box Assembly Terminal Enclosure	E	31-05-2013	T1
02-18-153-04 Sheet 1/2	LX Power Cable Junction Box Assembly Cable Protection Enclosure	C	31-05-2013	T1
02-18-153-04 Sheet 2/2	LX Power Cable Junction Box Assembly Cable Protection Enclosure (Lid)	C	31-05-2013	T1
02-18-153-01 Sheet 1/1	LX Power Cable Junction Box Assembly LH Support Leg	D	31-05-2013	T1
02-18-153-02 Sheet 1/1	LX Power Cable Junction Box Assembly RH Support Leg	D	31-05-2013	T1
02-18-153-03 Sheet 1/1	LX Power Cable Junction Box Assembly Base	D	31-05-2013	T1
02-04-268 Sheet 1/1	Schematic Diagram LX Power Cable Junction Box (Internal Wiring Diagram)	A	04-12-2013	T1

Certificate History

Issue	Date	Issue History
T1	27-11-2013	First accepted for trial use for GNGE.

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Contact Details

Manufacturer

Adrian Dante
iLeccsys Rail Limited
Unit 4B
Tring Industrial Estate
Upper Icniel Way
Tring, Herts HP23 4JX
pjd@mgbelectrical.co.uk

Lead Design Reviewer

Phil Jones
Senior Signal Engineer
The Quadrant:MK
Elder Gate,
Milton Keynes Central MK9 1EN
philip.jones@networkrail.co.uk

Sponsor

Paul Lee
Peterborough Crescent House
Engineering Manager GNGE
W H Smith Mews off Thorpe Rd
Peterborough
PE3 6AL
paul.lee@networkrail.co.uk

Project Managers

Tony Newman
Peterborough Crescent House
Engineering Manager GNGE
W H Smith Mews off Thorpe Rd
Peterborough PE3 6AL
tony.newman@carillionplc.com

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General Terms & Conditions

1) General

- 1) This certificate can only be amended by Network Rail Technology Introduction Group. Any alterations made by a different person will invalidate the entire certificate.
- 2) Failure to abide by the requirements in this Certificate of Acceptance may invalidate the certificate, thereby restricting the right to operate the product and / or limiting the future supply and deployment of the product on the infrastructure.
- 3) Upon the review date this certificate and the product it relates to is invalid and not accepted for use. Manufacturers are to make an application for a review prior to the review date.

2) Manufacturer

The Manufacturer shall:

- 1) Ensure that all products supplied comply with the standards defined in the Acceptance Requirements or otherwise documented as part of the assessment, including meeting the reliability requirements included in the Acceptance Requirements and in any deed of warranty for the relevant certificate number.
- 2) Notify Network Rail Technology Introduction Group:
 - a. Within 48 hours, of any deficiencies affecting the quality, functionality or safety integrity of the product (including corrective action undertaken or proposed).
 - b. Of any intended change to the accepted product; changes include:
 - i. a change to the product configuration (to the actual product or its application);
 - ii. a variation to or addition of manufacturing locations or processes;
 - iii. a change in the name or ownership of the manufacturing company;
 - iv. any changes to the ability or intention to support with technical services, spares or repairs.
- 3) The Manufacturer shall provide Network Rail Technology Introduction Group at least 12 (twelve) months notice of its intention to discontinue supply or to provide such notice as is reasonable if such discontinuance is outside its control and will offer the opportunity of a Last Time Buy to Network Rail together with date for last order placement and supply of the parts affected. The introduction of proposed alternative products shall be communicated to the Network Rail Technology Introduction Group.
- 4) Provide further copies of operating and maintenance manuals to purchasers / users of the product as necessary (including certificates of conformance, calibration etc).
- 5) Provide further copies of training manuals and an appropriate level of training to purchasers or users of the product as necessary.
- 6) Where applicable, specialist technical support, repairs and servicing of the product shall be carried out by the Original Equipment Manufacturer (OEM) or authorised agent only.
- 7) Network Rail may request information from the manufacturer to prove product compliance with clauses 1 and 2 above and reserve the right to suspend and/or withdraw any application where information is not forthcoming within a reasonable timeframe.
- 8) In accordance with Network Rail's Quality Assurance Policy Statement 2011, where the specification and/or Product Acceptance Certificates specify quality assurance classifications (QA1 to QA5) for the products, the manufacturer shall comply with the specified level of quality assurance for each product and allow Network Rail access to carry out its quality assurance checks.
- 9) The manufacturer shall give Network Rail's representatives access at all reasonable times to its premises and allow them to inspect its quality systems and production methods and, if requested, to inspect, examine and test the products both during and after their manufacture and the materials being used in their manufacture.

3) Conditions of Use

Specifiers, installers, operators, maintainers, etc. using the product shall:

- 1) Comply with the certificate conditions. If a condition is not understood guidance must be sought from Network Rail Technology Introduction Group.
- 2) Check that the application of use complies with the relevant certificate's scope of acceptance.
- 3) Report any defect if it is a design or manufacturing fault likely to affect performance and/or the safe operation of the railway in writing to Network Rail Technology Introduction Group.
- 4) Inform Network Rail Technology Introduction Group in writing of a change to the product configuration (or to the actual product or its application).
- 5) Operate, maintain and service the product in accordance with Network Rail standards and Operation and Maintenance manuals as appropriate.
- 6) Be appropriately trained and authorised for the installation, maintenance and use of the product.
- 7) Only send products for repair or reconditioning to the Original Equipment Manufacturer (OEM) or authorised agent.
- 8) Users are to be aware that Product Acceptance is not a substitute for design approval.

4) Compliance

Railways and Other Guided Systems (ROGS) Regulations

- 1) Where the product is to be used in areas where Network Rail is not the Infrastructure Manager (e.g. leased stations), the sponsor shall additionally obtain formal consent from the Infrastructure Manager for the locality where the equipment is to be installed. This may include a requirement for additional safety verification. The decision of that Infrastructure Manager is binding, and cannot be overridden by Network Rail except by the escalation processes established in the ROGS regulations
- 2) As required in Railway Group Standard GE/RT8270, at each use of this product the project or group responsible for installation and commissioning shall be required to demonstrate compatibility with:
 - a. All rail vehicle types that have access rights over the area affected by the change
 - b. Infrastructure managed by others
 - c. Neighbours.

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Railway Interoperability Regulations

- 3) For interoperable constituents of systems the project or group responsible for installation and commissioning shall be required to demonstrate compliance with the relevant Technical Specifications for Interoperability (TSI) where appropriate.
- 4) An authorisation from the national safety authority (i.e. the Railway Safety Directorate of the Office of Rail Regulation) is required before the equipment is to be used in revenue earning service.

5) Supply Chain Arrangements

- 1) Certificates of acceptance do not imply any particular quantity of supply nor any exclusivity of supply.
- 2) Products may be purchased by Network Rail or its agents, suppliers or contractors.
- 3) Manufacturers should note that it is not necessary to enter into any exclusive supply arrangements with resellers or other suppliers.