

**Manufacturer:**  
Rainford Solutions

**Issue :** T3  
**Valid From :** 29-07-2020  
**Monitoring Period :** 6 months

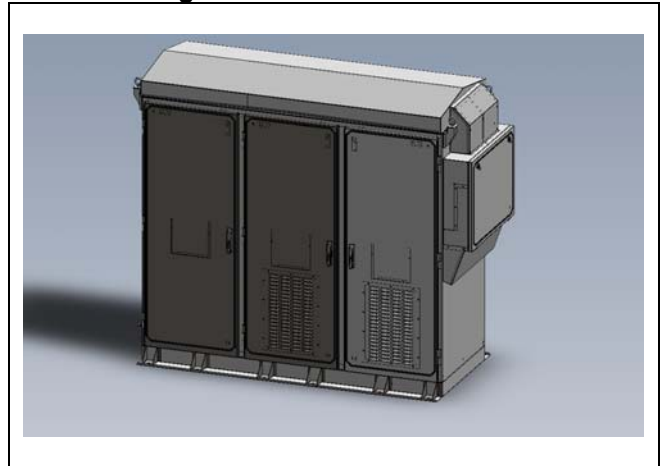
## Temperature Controlled Location Case TCL

### Product Description

The temperature controlled location case (TCL) uses a forced air, active cooling system above 22°C to maintain a suitable internal working environment for signalling and telecommunications equipment. The TCL can house both BRS SM440/867 frame work and standard 19 inch racking, allowing the installation of new and legacy equipment.

The TCL can remove the need for REBs and associated services in locations where an REB cannot be justified.

### Product Image



### Scope of Acceptance

#### Trial Acceptance

The scope of this certificate includes the TCL used in conjunction with signalling and telecommunications equipment at the following locations within the Ferriby to Gilberdyke Resignalling project:

#### ELR: HUL1

21/26: 21 miles 26 chains  
20/27: 20 miles 27 chains  
18/31: 18 miles 31 chains  
17/63: 17 miles 63 chains  
17/24: 17 miles 24 chains  
16/67: 16 miles 67 chains  
15/15: 15 miles 15 chains  
12/60: 12 miles 60 chains  
11/74: 11 miles 74 chains  
11/06: 11 miles 6 chains

06/27: 6 miles 27 chains  
05/45: 5 miles 45 chains  
Loc 30: 5 miles

#### ELR: TJG2

00/17: 0 miles 17 chains  
00/41: 0 miles 41 chains  
02/07: 2 miles 7 chains  
02/39: 2 miles 39 chains

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.

Reviewed by:

Authorised by:

Steven Rennolds  
Product Acceptance Specialist



Jerry Morling BEng MSc CEng MIET, MIRSE  
Professional Head Signalling

**Manufacturer:**  
Rainford Solutions

**Issue :** T3  
**Valid From :** 29-07-2020  
**Monitoring Period :** 6 months

## 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) Assessed documentation is noted not to address the following general areas, which will need to be closed out prior to entering operational service. Specific areas not addressed include:
  - Ferriby to Gilberdyke –TCL Requirements Specification (F2G-ARP-SIG\_SPE-90005)
  - PA05/06865 Product Acceptance Requirements

### User

- 1) The user (Project Manager) shall satisfy themselves that the visibility of Train drivers and Road users is not obscured
- 2) During the trial data logging equipment shall be used to determine if the internal operating temperature and humidity remain within acceptable limits
- 3) Site specific issues covering access and local staff briefing are outside of the scope of this acceptance.
- 4) The project manager will ensure the TCL has been installed in accordance with the manufacturer's instructions
- 5) The user shall not install any part of the TCL or any attached structure within 3m of the nearest rail (this includes cast bases, upbank or downbank units or any other solid body mechanically coupled to the TCL and capable of transmitting un-attenuated vibration).
- 6) This certificate allows energisation of the TCL and equipment installed within for the purpose of pre commissioning testing.

## Trial Criteria

- 1) The applicant shall provide a critical review report to the nominated Network Rail Lead Reviewing Engineer or Product Acceptance Team for review by the date specified in this certificate. The report shall include contributions from appropriate stakeholders such as the installation contractors, maintainers and the manufacturer. The critical review report shall include:
  - a. Documentary evidence to demonstrate that;
    - i. The product is as described – confirmation of the product configuration.
    - ii. The system incorporating the product performed its function as intended, verified by feedback from the operator and maintainer.
    - iii. The internal operating conditions are within acceptable limits
  - b. Evidence of satisfactory reliability, availability and maintainability (e.g. MTBF, MTBSAF and MTTR) as applicable.
- 2) 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.

**Manufacturer:**  
Rainford Solutions

**Issue :** T3  
**Valid From :** 29-07-2020  
**Monitoring Period :** 6 months

### Product Configuration

#### System or Complete Assembly

| Part No. | Description           | Catalogue No. |
|----------|-----------------------|---------------|
| MA003219 | 34U 3 bay TCL Cabinet | N/A for Trial |

### Assessed Documentation

| Reference                 | Title  | Doc. Rev. | Date and Applies to Cert. issue No. |   |
|---------------------------|--|-----------|-------------------------------------|---|
| PA05-06865 T1 PA evidence | PA05-06865 T1 PA evidence ZIP  | 1.0       | 19/10/2017                          | 1 |
| PP001621                  | Hinge statement  | 1         | 25/10/2017                          | 1 |
| 0849V-L-17/24-C01         | FRBGILD CBI TCL 17/24 Profile  | AA2       | 27/07/2017                          | 1 |
| F2G-ARP-CIV-F03-00031     | Certificate of Design and Check (Form 003): Equipment Base – Pack 8                    | 2.1       | 02/06/2017                          | 1 |
| MA003219                  | 34U 3 bay TCL cabinet Ansaldo  | B         | 30/06/2017                          | 1 |
| MS01-17                   | Guide to slinging/hoisting of the TCL  | 3         | 25/10/2017                          | 1 |
|                           | TCL enclosure lift and wind load test  | 1         | 18/10/2017                          | 1 |
|                           | F2G TCL wind load  | P01       | 25/05/2017                          | 1 |
| TCL Power-up confirmation | Justification for Power-up of Ferriby to Gilberdyke Signalling System to start Testing | 1         | 23/10/2017                          | 1 |

### Manuals and Training Materials

| Reference | Title                                 | Doc. Rev. | Date and Applies to Cert. issue No. |   |
|-----------|---------------------------------------|-----------|-------------------------------------|---|
| MS01-17_3 | Guide to slinging/hoisting of the TCL | 3         | 19/10/2017                          | 1 |

### Certificate History

| Issue | Date     | Issue History  |
|-------|----------|--|
| T1    | 20/10/17 | First accepted for use   |
| T2    | 14/08/18 | Second issue of the Trial certificate in order to time extend the trial period as there have needed to be mods during the trial. The review date will still be 6 months after commissioning. |
| T3    | 29/07/20 | Trial extend whilst modifications are carried out to the installed units.  |

### Contact Details

**Manufacturer**  
Rainford Solutions  
07144 889 886  
[webenquiries@rainfordsolutions.com](mailto:webenquiries@rainfordsolutions.com)

**Applicant**  
Mike Aitchison  
[Mike.Aitchison@networkrail.co.uk](mailto:Mike.Aitchison@networkrail.co.uk)

**Lead Reviewing Engineer**  
Lee Huggins  
[Lee.huggins@networkrail.co.uk](mailto:Lee.huggins@networkrail.co.uk)

**Manufacturer:**  
Rainford Solutions

**Issue :** T3  
**Valid From :** 29-07-2020  
**Monitoring Period :** 6 months

## General Terms & Conditions

### 1) General

- 1) This certificate can only be amended by Network Rail Product Acceptance, the Professional Head or nominated delegate. Any alterations made by a other persons 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 Product Acceptance:
  - 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 Product Acceptance or National Supply Chain (NSC) 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 Network Rail Product Acceptance.
- 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 Product Acceptance.
- 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 Product Acceptance.
- 4) Inform Network Rail Product Acceptance 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.

**Manufacturer:**  
Rainford Solutions

**Issue :** T3  
**Valid From :** 29-07-2020  
**Monitoring Period :** 6 months

#### 4) Compliance

Railways and other Guided Transport Systems (Safety) Regulations 2006 as amended

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.

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 Railways (Interoperability) Regulations and 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 and Road) 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.