

Certificate of Acceptance

PA05/06351

Manufacturer:
Pfisterer

Issue : 1
Valid From : 04/02/2021

Pfisterer KP-Test 5HL Capacitive Live Line Tester

Product Description

Capacitive Live Line Indicator for 25kV AC systems.

To be used with an approved live line pole (as a separate device) from ground level, or with manufacture supplied short poles (as a complete device) from high level.

Product Image



Scope of Acceptance

Full Acceptance for use on For use on Network Rail controlled 25kV a.c. infrastructure as a separate device with approved live line poles.

Trial Acceptance for LNE Route for the short pole version only – For test before touch at high level only.

Additional sites may be used under the agreement of the Network Technical Head of Contact Systems and the Network Technical Head of Power Distribution.

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:

Samantha Flint
Product Acceptance Coordinator

Linda Penfold
Network Technical Head of Contact Systems

Felix Langley
Network Technical Head Of Power Distribution HV/LV

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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) Each device shall be tested and labelled in accordance with BS EN 61243-1.
- 2) The Manufacturer shall supply such devices with valid calibration certificates.

User - Generic

- 1) The user shall be trained in the correct use of the device in accordance with Network Rail working instructions.
- 2) The devices shall be purchased, stored, transported, operated and maintained in accordance with working instructions for use.
- 3) When applying the live line indicator the user shall attach to approved live line poles and maintain a clearance in accordance with the use of the live line poles.
- 4) The user shall always ensure that the lowest conductor is tested first.
- 5) The user shall avoid using the device close to sources of parallel interference such as overlaps and crossovers.
- 6) The user shall remove the device from the conductor between tests.

User – Short Pole (Complete Device)

- 1) When applying the live line indicator for test before touch the user shall maintain a clearance of 600mm from any part of their body to the equipment being tested.
- 2) The relevant Regional E&P Engineering Lead is accountable for ensuring that this device is not used outside of its specified constraints and limits.
- 3) The relevant Regional E&P Engineering Lead is accountable for ensuring all users are briefed and a briefing record shall be maintained.

Trial Criteria

- 1) The sponsor shall provide a critical review report to Network Rail Technology Introduction Group 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.
 - b. Evidence of satisfactory reliability, availability and maintainability (e.g. MTBF, MTBSAF and MTTR).
 - c. Details of the Hazard Log or other safety management system.
 - d. Confirmation that any outstanding competency requirements have been met.
- 2) Where necessary the Independent Safety Assessor (ISA) shall review the report and make recommendations. The resulting ISA report (following the guidance in the Network Rail Engineering Safety Management publication) shall accompany the trial report.

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- 3) 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

System or Complete Assembly

Part No.	Description	Catalogue No.
930 200-002 Var. 0053	KP-Test 5HL Capacitive Type Voltage Detector for contact wire (Class L) With UK specific insulating rod of greater than 600mm length	0040/090157
930 200-002	KP-Test 5HL Capacitive Type Voltage Detector for contact wire (Class L) Unit as a separate device without an integrated insulated pole.	0040/090158

Spares

Part No.	Description	Catalogue No.
021 970-009	Sealing Ring	0040/090159
973 005-001	Ring Nut	0040/090160
619 435-004	Lithium Battery AA 1.5V	N/A

Assessed Documentation

Reference	Title	Doc. Rev.	Date and Applies to Cert. issue No.	
-	Routine Test Protocol for Voltage Detector	08/10/2014	31/01/2016	1T
-	Briefing Note: Pfisterer Voltage Detector		31/01/2016	1T
-	Various trial supporting emails – On File	-	-	1
No. U-05-080-185	Type test of capacitive voltage detector KP-Test 5L, 30-50 kV acc. to IEC 61243:2003-10	-	28/01/2008	1
No. U-05-070-198	Mechanical tests of High-voltage Tester KP-Test 5L, 150 - 220 kV according to DIN EN 61243-1:2005	-	13/12/2007	1
No. U-05-130-101	EMC test of Voltage Detector KP-Test 5 according to EN 61000-6-2:2005	-	28/05/2013	1

Manuals and Training Materials

Reference	Title	Doc. Rev.	Date and Applies to Cert. issue No.	
-	KP-Test 5HL for Contact Wire Instructions for Use	16/04/15	31/01/2016	1T

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Certificate History

Issue	Date	Issue History
T1	31/01/2016	First accepted for use
T2	08/06/2018	Trial extended for use by Bedford OLE Delivery Unit
T3	21/11/2018	Trial extended to gather further user data.
T4	13/08/2020	Trial extended to different areas to gather further user data.
T5	14/08/2020	Additional clarification of two variants.
1	04/02/2021	Full Acceptance for separate unit

Contact Details

Manufacturer

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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.

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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.

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.