

Certificate of Acceptance

Certificate No: PA05/01802

Issue: 6

Valid from: 27/07/2011

Page 1 of 6

Product	230/400:110V Points Heating Isolation Transformers
Manufacturer	Blakley Electrics Ltd, 1 Thomas Road, Optima Park, Crayford, Kent. DA1 4GA

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

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.

This certificate can only be amended by Network Rail Engineering directorate. Any alterations made by a different person will invalidate the entire certificate.


Scope of Acceptance

Accepted for use as Isolating Transformers for a.c. and d.c. supplies to points heating strips.

Specific conditions

Refer to the pages which follow for the product configuration and detailed conditions of use.

Authorised by

 N. D. SNEU
Richard Stainton
Professional Head, Electrical Power

Certificate of Acceptance

Certificate No: PA05/01802

Issue: 6

Valid from: 27/07/2011

Page 2 of 6

SPECIFIC CONDITIONS

1) Manufacturer

The Manufacturer shall:

- 1) Ensure that all products supplied under this certificate 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 this 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.

2) 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 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.

Certificate of Acceptance

Certificate No: PA05/01802
 Valid from: 27/07/2011

Issue: 6
 Page 3 of 6

3) 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.

4) Supply Chain Arrangements

- 1) This certificate of acceptance does not imply any particular quantity of supply nor any exclusivity of supply.
- 2) The product 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.

5) Product Configuration

Item No.	Part No. / Type	Description	PADS No.
S170887	PHT/5/SH/PJ/DUAL/99VDC/ IP23/230VPRI	5 kVA 230V single phase primary transformer rectifier for DC points heating. Code: S170887	055/121364
S170888	PHT/10/SH/PJ/DUAL/99VDC/ IP23/230VPRI	10 kVA 230V single phase primary transformer rectifier for DC points heating. Code: S170888	055/121363
S170889	PHT/5/SH/PJ/DUAL/99VDC/ IP23/400VPRI	5 kVA 400V single phase primary transformer rectifier for DC points heating. Code: S170889	055/121365
S170890	PHT/10/SH/PJ/DUAL/110VDC/ IP23/3PH/400VPRI	10 kVA 400V three phase primary transformer rectifier for DC points	055/121366

Certificate of Acceptance

Certificate No: PA05/01802

Issue: 6

Valid from: 27/07/2011

Page 4 of 6

		heating. Code: S170890	
S170892	PHT/10/SH/PJ/DUAL/99VDC/ IP23/400VPRI	10 kVA 400V single phase primary transformer rectifier for DC points heating. Code: S170892	055/162060
S170893	PHT/5/SH/PJ/DUAL/99VDC/ IP23/230V/GALV	5 kVA 230V single phase primary transformer rectifier for DC points heating (galvanised). Code: S170893	055/162063
S170894	PHT/10/SH/PJ/DUAL/99VDC/ IP23/230V/GALV	10 kVA 230V single phase primary transformer rectifier for DC points heating (galvanised). Code: S170894	055/162064
S170895	PHT/5/SH/PJ/DUAL/99VDC/ IP23/400V/GALV	5 kVA 400V single phase primary transformer rectifier for DC points heating (galvanised). Code: S170895	055/162065
S170896	PHT/10/SH/PJ/DUAL/110VDC/ IP23/3PH/400V/GALV	10 kVA 400V three phase primary transformer rectifier for DC points heating (galvanised). Code: S170896	055/162066
S170897	PHT/10/SH/PJ/DUAL/99VDC/ IP23/400V/GALV	10 kVA 400V single phase primary transformer rectifier for DC points heating (galvanised). Code: S170897	055/162067
S170835	PHT/5/SH/PJ/DUAL/IP23/110VAC/ 1PH/230VPRI/GALV	5 kVA 230V single phase primary transformer for AC points heating (galvanised).	055/162061
S170836	PHT/10/SH/PJ/DUAL/IP23/110VAC/ 1PH/230VPRI/GALV	10 kVA 230V single phase primary transformer for AC points heating (galvanised).	055/162062
S170930	PHT/5/SH/PJ/DUAL/IP23/110VAC/ 1PH/400VPRI/GALV	5 kVA 400V single phase primary transformer for AC points heating (galvanised). Code:	055/162068
S170931	PHT/10/SH/PJ/DUAL/IP23/110VAC/ 1PH/400VPRI/GALV	10kVA 400V single phase primary transformer for AC points heating (galvanised). Code:	055/162069
S170933	PHT/5/SH/PJ/DUAL/IP23/110VAC/ 3PH/400VPRI/GALV	5 kVA 400V three phase primary transformer for AC points heating (galvanised). Code:	055/162071
S170934	PHT/10/SH/PJ/DUAL/IP23/110VAC/ 3PH/400VPRI/GALV	10 kVA 400V three phase primary transformer for AC points heating (galvanised). Code:	055/162072

Note: For complex products and systems, sponsors and manufacturers may be requested to submit a more detailed configuration report to be appended to this certificate.

Certificate of Acceptance

Certificate No: PA05/01802

Issue: 6

Valid from: 27/07/2011

Page 5 of 6

6) Assessed Documentation

Reference	Title	Date and Applies to Cert. issue No.	
Technical Data sheet TDJML034	5kVA 230V SP PRI TX/REC Item No. S170887 Type PHT/5/SH/PJ/DUAL/99VDC/IP23/230VPRI	8 May 2009	4
Technical Data sheet TDJML035	10kVA 230V SP PRI TX/REC Item No. S170888 Type PHT/10/SH/PJ/DUAL/99VDC/IP23/230VPRI	6 Aug 2009	4
Technical Data sheet TDJML037	5kVA 400V SP PRI TX/REC Item No. S170889 Type PHT/5/SH/PJ/DUAL/99VDC/IP23/400VPRI	16 June 2009	4
Technical Data sheet TDJML038	10kVA 400V 3P PRI TX/REC Item No. S170890 Type PHT/10/SH/PJ/DUAL/110VDC/IP23/3PH/400VPRI	6 Aug 2009	4
Technical Data sheet TDJML039	10kVA 400V SP PRI TX/REC Item No. S170892 Type PHT/10/SH/PJ/DUAL/99VDC/IP23/400VPRI	6 Aug 2009	4
Drawing No. B12593 Revision C	General Assembly PHT/5/SH/PJ/DUAL/99VDC/IP23 230 / 400V PRI.	13 July 2009	4
Drawing No. B15495 Revision C	General Assembly PHT/10/SH/PJ/DUAL/99VDC/IP23 230 / 400V PRI.	13 July 2009	4
Drawing No. B12594 Revision C	General Assembly PHT/10/SH/PJ/DUAL/110VDC/IP23/3PH /400VPRI	13 July 2009	4
Drawing No. WD1290 Revision A	Wiring diagram: Schematic DC PHTs Single Phase 5-10kVA 230 / 400V PRI.	17 July 2009	4
Drawing No. WD1291 Revision B	Wiring diagram: Schematic DC PHTs Three Phase 5-10kVA 400V PRI.	13 July 2009	4
Drawing No. WD1028 Revision B	Wiring Diagram PHT/5-10/SH 200-400	25/07/2011	6

7) Certificate History

Issue Number	Date	Issue History
1	28/07/2003	First accepted for use
2	15/06/2005	Additional transformer added to certificate
3	02/09/2005	Additional transformer (10KA) added to certificate
4	01/09/2009	Specification for all transformers/rectifiers revised
5	14/09/2009	Re-issued to add items to the product configuration
6	27/07/2011	Re-issued to add items to the product configuration

Certificate of Acceptance

Certificate No: PA05/01802

Issue: 6

Valid from: 27/07/2011

Page 6 of 6

8) DISTRIBUTION

Manufacturer

Blakley Electrics Ltd,
1 Thomas Road,
Optima Park,
Crayford,
Kent.
DA1 4GA
sales@blakley.co.uk

Sponsor

Graham Thompson
Senior Project Engineer
Network Rail
Graham.thompson3@networkrail.co.uk

Project Manager

Jeremy Jackson
Project Engineering Manager [Asset]
Network Rail
Infrastructure Investment
jeremy.jackson@networkrail.co.uk

Simon Pears
Project Engineering Manager [Asset]
Network Rail
Infrastructure Investment
simon.pears@networkrail.co.uk

Orry King
Project Engineering Manager [Asset]
Network Rail
Infrastructure Investment
Orry.king@networkrail.co.uk

Barry Lumley
Project Engineering Manager [E&P]
Network Rail
Infrastructure Investment LNW &
Scotland
Barry.lumley@networkrail.co.uk

For PADS records

URL
acceptancecert@unipartrail.com

DHL Ltd,
Blackpole Trading Estate
Blackpole
Worcester
WR3 8SG
transport.inventory@dhl.com

Mark Coley
Nigel Draper
Serco Raildata Ltd,
Mark.Coley@serco.com
nigel.draper@serco.com

For Information/briefing

Nigel Beecroft
(Programme Manager (Telecoms))
Network Rail
nigel.beecroft@networkrail.co.uk

Mick Turner
Senior Signalling Design Engineer
Signalling System Design
Mick.turner2@networkrail.co.uk