

Certificate of Acceptance

PA05/07022

Manufacturer:
ATL Transformers Ltd

Issue : 5
Valid From : 13/09/2023
Review Date : 30/04/2026

ATL Indoor PSP/ASP Power Transformers

Product Description

Range of high efficiency, Aluminium wound, Class I signalling power transformers.

For use in signalling power, PSP/ASP applications.

Transformer range comprises:

5 to 80kVA single phase (BI-Phase) including voltage variants:

- 400/650V AC
- 230/650V AC
- 650/650V AC
- 400/230V AC
- 650/230V AC

5 to 120kVA three phase, 400/650V AC variants with the following vector groups:

- Delta/Star
- Delta/Delta
- Star/Delta

Product Image



Scope of Acceptance

Full Acceptance

Range of Class I, IP32 indoor rated signalling power transformers. The range includes both single phase (BI-Phase) and three phase variants manufactured in accordance with IEC 60076 enhanced with relevant clauses from BR924A and NR/L2/SIGELP/30007.

Designed for operation in ambient environments -20°C to +60°C for use in buildings (indoors) only.

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:

Reviewed by:

Aamir Malik
Product Acceptance Coordinator

Felix Langley
Network Technical Head of Power Distribution HV/LV

Please contact prodacc@networkrail.co.uk

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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)	As per the scope of acceptance of this certificate.
2)	O&M Manuals to be provided with each installation.
3)	Manufactured in accordance with IEC 60076 and enhanced with clauses BR924A and NR/L2/SIGELP/30007.
4)	Transformer assemblies detailed on this certificate shall be tested in accordance with Factory Test Specification Doc Ref: QF51.
5)	Test records will be retained for auditing purposes.
6)	The manufacturer will retain Certificates of Conformity to EN AW-1370(AA1370 equivalent) of all aluminium winding wire used in the construction of transformer detailed within this certificate.

User

1)	As per the scope of acceptance of this certificate.
2)	The equipment shall be installed and operated in accordance with the manufacturer's documentation.
3)	No spare parts shall be offered for any product detailed within this certificate.
4)	Only for use within buildings, equipment operating environment -20°C to +60°C.

Product Configuration

System or Complete Assembly

Part No.	Description	Catalogue No.
T2987	5kVA single phase 400/650V Signalling Power Transformer	0054/215008
T2909	10kVA single phase 400/650V Signalling Power Transformer	0054/215009
T3077	15kVA single phase 400/650V Signalling Power Transformer	0054/215010
T2910	20kVA single phase 400/650V Signalling Power Transformer	0054/215011
T3078	25kVA single phase 400/650V Signalling Power Transformer	0054/215012
T2911	30kVA single phase 400/650V Signalling Power Transformer	0054/215013
T3079	35kVA single phase 400/650V Signalling Power Transformer	0054/215014
T2912	40kVA single phase 400/650V Signalling Power Transformer	0054/215015
T3103	50kVA single phase 400/650V Signalling Power Transformer	0054/215016
T2913	60kVA single phase 400/650V Signalling Power Transformer	0054/215017
T3320	80kVA single phase 400/650V Signalling Power Transformer	0054/215018
T2987-1	5kVA single phase 230/650V Signalling Power Transformer	0054/215019
T2909-1	10kVA single phase 230/650V Signalling Power Transformer	0054/215020
T3077-1	15kVA single phase 230/650V Signalling Power Transformer	0054/215021
T2910-1	20kVA single phase 230/650V Signalling Power Transformer	0054/215022
T3078-1	25kVA single phase 230/650V Signalling Power Transformer	0054/215023
T2911-1	30kVA single phase 230/650V Signalling Power Transformer	0054/215024
T3079-1	35kVA single phase 230/650V Signalling Power Transformer	0054/215025
T2912-1	40kVA single phase 230/650V Signalling Power Transformer	0054/215026
T3103-1	50kVA Single phase 230/650V Signalling Power Transformer	0054/215027

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Part No.	Description	Catalogue No.
T2913-1	60kVA Single phase 230/650V Signalling Power Transformer	0054/215028
T3320-1	80kVA Single phase 230/650V Signalling Power Transformer	0054/215029
T2987-2	5kVA Single phase 650/650V Signalling Power Transformer	0054/215030
T2909-2	10kVA Single phase 650/650V Signalling Power Transformer	0054/215031
T3077-2	15kVA Single phase 650/650V Signalling Power Transformer	0054/215032
T2910-2	20kVA Single phase 650/650V Signalling Power Transformer	0054/215033
T3078-2	25kVA Single phase 650/650V Signalling Power Transformer	0054/215034
T2911-2	30kVA Single phase 650/650V Signalling Power Transformer	0054/215035
T3079-2	35kVA Single phase 650/650V Signalling Power Transformer	0054/215036
T2912-2	40kVA Single phase 650/650V Signalling Power Transformer	0054/215037
T3103-2	50kVA Single phase 650/650V Signalling Power Transformer	0054/215038
T2913-2	60kVA Single phase 650/650V Signalling Power Transformer	0054/215039
T3320-2	80kVA Single phase 650/650V Signalling Power Transformer	0054/215040
T2987-3	5kVA Single phase 400/230V Signalling Power Transformer	0054/215041
T2909-3	10kVA Single phase 400/230V Signalling Power Transformer	0054/215042
T3077-3	15kVA Single phase 400/230V Signalling Power Transformer	0054/215043
T2910-3	20kVA Single phase 400/230V Signalling Power Transformer	0054/215044
T3078-3	25kVA Single phase 400/230V Signalling Power Transformer	0054/215045
T2911-3	30kVA Single phase 400/230V Signalling Power Transformer	0054/215046
T3079-3	35kVA Single phase 400/230V Signalling Power Transformer	0054/215047
T2912-3	40kVA Single phase 400/230V Signalling Power Transformer	0054/215048
T3103-3	50kVA Single phase 400/230V Signalling Power Transformer	0054/215049
T2913-3	60kVA Single phase 400/230V Signalling Power Transformer	0054/215050
T3320-3	80kVA Single phase 400/230V Signalling Power Transformer	0054/215051
T2987-4	5kVA Single phase 230/230V Signalling Power Transformer	0054/215052
T2909-4	10kVA Single phase 230/230V Signalling Power Transformer	0054/215053
T3077-4	15kVA Single phase 230/230V Signalling Power Transformer	0054/215054
T2910-4	20kVA Single phase 230/230V Signalling Power Transformer	0054/215055
T3078-4	25kVA Single phase 230/230V Signalling Power Transformer	0054/215056
T2911-4	30kVA Single phase 230/230V Signalling Power Transformer	0054/215057
T3079-4	35kVA Single phase 230/230V Signalling Power Transformer	0054/215058
T2912-4	40kVA Single phase 230/230V Signalling Power Transformer	0054/215059
T3103-4	50kVA Single phase 230/230V Signalling Power Transformer	0054/215060
T2913-4	60kVA Single phase 230/230V Signalling Power Transformer	0054/215061
T3320-4	80kVA Single phase 230/230V Signalling Power Transformer	0054/215062
T2987-5	5kVA Single phase 650/230V Signalling Power Transformer	0054/215063
T2909-5	10kVA Single phase 650/230V Signalling Power Transformer	0054/215064
T3077-5	15kVA Single phase 650/230V Signalling Power Transformer	0054/215065
T2910-5	20kVA Single phase 650/230V Signalling Power Transformer	0054/215066
T3078-5	25kVA Single phase 650/230V Signalling Power Transformer	0054/215067
T2911-5	30kVA Single phase 650/230V Signalling Power Transformer	0054/215068
T3079-5	35kVA Single phase 650/230V Signalling Power Transformer	0054/215069
T2912-5	40kVA Single phase 650/230V Signalling Power Transformer	0054/215070
T3103-5	50kVA Single phase 650/230V Signalling Power Transformer	0054/215071
T2913-5	60kVA Single phase 650/230V Signalling Power Transformer	0054/215072
T3320-5	80kVA Single phase 650/230V Signalling Power Transformer	0054/215073
T2914	10kVA three phase 400/650V Delta/Star Power Transformer	0054/215074
T2961	20kVA three phase 400/650V Delta/Star Power Transformer	0054/215075
T3116	25kVA three phase 400/650V Delta/Star Power Transformer	0054/215076
T2915	30kVA three phase 400/650V Delta/Star Power Transformer	0054/215077

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Part No.	Description	Catalogue No.
T3334	35kVA three phase 400/650V Delta/Star Power Transformer	0054/215078
T2962	40kVA three phase 400/650V Delta/Star Power Transformer	0054/215079
T3058	50kVA three phase 400/650V Delta/Star Power Transformer	0054/215080
T2963	60kVA three phase 400/650V Delta/Star Power Transformer	0054/215081
T3027	80kVA three phase 400/650V Delta/Star Power Transformer	0054/215082
T3143	120kVA three phase 400/650V Delta/Star Power Transformer	0054/215083
T3699	10kVA three phase 400/650V Delta/Delta Power Transformer	0054/215084
T3700	20kVA three phase 400/650V Delta/Delta Power Transformer	0054/215085
T3701	25kVA three phase 400/650V Delta/Delta Power Transformer	0054/215086
T3702	30kVA three phase 400/650V Delta/Delta Power Transformer	0054/215087
T3719	35kVA three phase 400/650V Delta/Delta Power Transformer	0054/215088
T3703	40kVA three phase 400/650V Delta/Delta Power Transformer	0054/215089
T3704	50kVA three phase 400/650V Delta/Delta Power Transformer	0054/215090
T3705	60kVA three phase 400/650V Delta/Delta Power Transformer	0054/215091
T3706	80kVA three phase 400/650V Delta/Delta Power Transformer	0054/215092
T3707	120kVA three phase 400/650V Delta/Delta Power Transformer	0054/215093
T3709	10kVA three phase 400/650V Star/Delta Power Transformer	0054/215094
T3710	20kVA three phase 400/650V Star/Delta Power Transformer	0054/215095
T3711	25kVA three phase 400/650V Star/Delta Power Transformer	0054/215096
T3712	30kVA three phase 400/650V Star/Delta Power Transformer	0054/215097
T3720	35kVA three phase 400/650V Star/Delta Power Transformer	0054/215098
T3713	40kVA three phase 400/650V Star/Delta Power Transformer	0054/215099
T3714	50kVA three phase 400/650V Star/Delta Power Transformer	0054/215100
T3715	60kVA three phase 400/650V Star/Delta Power Transformer	0054/215101
T3716	80kVA three phase 400/650V Star/Delta Power Transformer	0054/215102
T3717	120kVA three phase 400/650V Star/Delta Power Transformer	0054/215103
T3758	100KVA three phase 400/650V Delta/Star power transformer	0054/215108
T3722	100KVA three phase 400/650V Delta/Delta power transformer	0054/215109
T3650	100KVA three phase 400/650V Star/Delta power transformer	0054/215110

Assessed Documentation

Reference	Title	Doc. Rev.	Date and Applies to Cert. issue No.	
D1532-5-PSP-ASP-Datasheet	Drawing No D1532	5	02/12/16	T1
PA05/07022	Product Acceptance Review Guidance Document	---	10/08/2018	T1
---	Transformers used in other Rail Projects	---	---	T1
T3143	Transformer Type Test Certificate	1	02/08/2017	T1
T3143	Technical Data Sheet	---	16/08/2018	T1
---	Product Copyright Notice	---	2018	T1
FS 571915	Certificate of Registration, Quality Management System – ISO9001:2005	---	15/06/2017	T1
---	Declaration of Conformity	---	16/08/2018	T1
---	COSHH Assessment	---	28/10/2016	T1

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Reference	Title	Doc. Rev.	Date and Applies to Cert. issue No.	
TECH140	ATL Test Report: 120KVA Aluminium Wound Class I PSP Isolation Transformer for Network Rail	0	16/08/18	T1
---	Email correspondence Brian Baker/Jason Maggs	---	August 2018	T1
---	Email correspondence Brian Baker/Naomi Campbell	---	January 2020	T2
---	Email correspondence Brian Baker/Nick Chandler	---	Jan 2020	T2
---	Telephone conversation Brian Baker/Nick Chandler	---	07/02/2020	T2
---	Email correspondence Brian Baker/Nick Chandler	---	2020-21	3
---	Electrification & Power Generic Acceptance Requirements v2.4	---	---	4
---	List of Principal Supply Point transformers for certificate	---	---	4
---	Locations in service	---	---	4
---	Compliance commentary PA05-07022	---	---	4
TECH140	ATL Test Report: T3143_120KVA Aluminium Wound Class I PSP Transformer for Network Rail	2	11/08/2022	4
T3346	3 Phase Transformer Type Test Certificate	1	17/08/2020	4
---	CoSHH Assessment	---	28/10/2016	4
---	Declaration of conformity	---	15/08/2022	4
---	EC Declaration of conformity	---	16/08/2018	4
---	RISQS certificate	---	---	4
---	ISO9001 certificate	---	10/07/2020	4
TECH148	O&M Manual Class I PSP/ASP Transformer 3ph 400/650V Lightweight Aluminium Range	2	2022	4
TECH149	O&M Manual Class I PSP/ASP Transformer 1ph Lightweight Aluminium Range	3	2022	4
T3143	Technical Data Sheet	---	16/08/2018	4
---	8.5.1 Manufacturing process flow charts	---	---	4
---	8.1.7 RAM plan	---	---	4
---	8.3.1 Block diagram	---	---	4
---	8.3.2 Parameter diagram	---	---	4
---	8.3.3 Design FMEA	---	---	4
---	8.4.2 Installation FMEA	---	---	4
---	PA05-07022 PA-DfR cover sheet	---	---	4
---	Product Copyright Notice	---	---	4
---	Email correspondence July 2022-October 2022	---	---	4
---	Email correspondence May 2023-July 2023	---	---	5

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Manuals and Training Materials

Reference	Title	Doc. Rev.	Date and Applies to Cert. issue No.	
TECH148	O&M Manual Class I PSP/ASP Transformer 3ph 400/650V Lightweight Aluminium Range	2	2022	4
TECH149	O&M Manual Class I PSP/ASP Transformer 1ph Lightweight Aluminium Range	3	2022	4

Certificate History

Issue	Date	Issue History
T1	07/09/2018	Initial issue for trial purposes.
T2	12/02/2020	Extension to trial to allow for trial criteria to be met.
3	30/04/2021	Site Specific acceptance.
4	03/02/2023	Re-issued with full acceptance and updated rating selection for single and three phase units.
5	13/09/2023	Re-issued to include 100kVA rated transformers.

Contact Details

Manufacturer

ATL Transformers Ltd
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Applicant

Dave King
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Lead Reviewing Engineer

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General Terms & Conditions

1) General

- 1) This certificate can only be amended by Network Rail Product Acceptance, the relevant Network Technical 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 via the NR sponsoring applicant.

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 Network Rail Design for Reliability Standard (DFR) NR-L2-RSE-0005 and in any deed of warranty for the relevant certificate number.
- 2) Notify Network Rail Product Acceptance in writing (email prodacc@networkrail.co.uk):
 - 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, where the specification and/or Product Acceptance Certificates specify quality assurance classifications 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.

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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 sponsoring applicant 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 RIS-8270-RST, 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 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.