

Manufacturer:

ATL Transformers Ltd.

Issue : 5

Valid From : 15/05/2020

Review Date: 14/05/2025

Aluminium Wound Class II Hybrid FSP Isolating Transformers

Product Description

Range of Aluminium wound Class II Hybrid Isolating transformers in accordance with NR/L2/SIGELP/30007 – Product Specification for Power Transformers for Signalling Systems.

For use in Signalling Power Distribution Systems.

Transformer range comprises:

Aluminium wound transformers 1000VA, 1500VA, 2000VA, 3000VA, 5000VA and 10000VA with one secondary winding;

Aluminium wound transformer 1000VA with two secondary windings;

Aluminium wound transformers 1400VA and 2000VA with four secondary windings.

Product Image



Scope of Acceptance

Full Acceptance

For use in new and updated Signalling Power Distribution Systems.

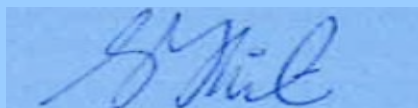
Suitable for replacement of 924A transformers in accordance with NR/L2/SIGELP/27410 Issue 2 – Specification for Class II based Signalling Power Distribution Systems.

Refer to Manufacturers and Users Conditions for further information and constraints of use.

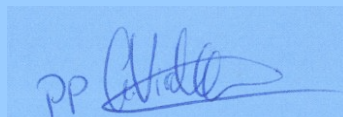
Network Rail Acceptance Panel (NRAP) hereby authorises the product above for use and trial use on railway infrastructure for which Network Rail is the Infrastructure Manager.

Reviewed by:

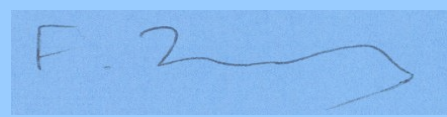
Authorised by:



Samantha Flint
Product Acceptance Coordinator



Jerry Morling
Head of Signalling



Felix Langley
Professional Head of Power Distribution HV/LV

Manufacturer:

ATL Transformers Ltd.

Issue : 5**Valid From :** 15/05/2020**Review Date:** 14/05/2025

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) Assemblies detailed on this certificate shall be constructed in accordance with Manufacturing Manual for Class II Hybrid FSP Transformers for Network Rail, Doc Ref: 076, Issue 5.
- 2) Transformer assemblies detailed on this certificate shall be tested in accordance with Factory Test Specification for Transformers, Doc Ref: 055, Issue 4. All test results to be recorded as per Appendix A of Doc Ref: 055.
- 3) Re-working of Aluminium to Copper joints is **not permissible** under any circumstances in accordance with ATL Ltd. Manufacturing Manual for Class II Hybrid FSP eco-rail Transformers for Network Rail, Doc Ref: 076, Issue 5.
- 4) Test records shall be maintained for tractability.
- 5) A batch sampling plan in accordance with BS6001 shall be prepared and updated. An appropriate number of samples shall be drawn from each batch to demonstrate compliance with NR/L2/SIGELP/30007 Issue 3 – Product Specification for Power Transformers for Signalling Systems.
- 6) No spare parts shall be offered for any product detailed on this certificate.
- 7) Manufacturer shall retain Certificates of Conformity to EN AW-1370 (AA1370 equivalent) of all Aluminium winding wire used in the construction of transformers detailed on this certificate and reference this on the supplied product Certificate of Conformity.

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User

- 1) The Class II Hybrid, isolating transformer assemblies detailed on this certificate are suitable for use in installations where compatibility for space, environmental conditions, voltage and load are satisfied.
- 2) The requirements for a Class II installation are satisfied if the Class II Hybrid, isolating transformer is installed in conjunction with other system components accordance with NR/L2/SIGELP/27410 Issue 2 – Specification for Class II Based Signalling Power Distribution Systems.
- 3) The Class II Hybrid, isolating transformer assemblies detailed on this certificate are suitable for applications in Coastal areas.
- 4) Products detailed on this certificate are **NOT** to be used in sub-surface environments in accordance with section 12 stations and locations.
- 5) Primary protection of the Class II Hybrid, isolating transformer assemblies detailed on this certificate shall be either BS88-2 Type gG or IEC 60269 10x38mm gG fuses in accordance with manufacturers recommendations. Protective devices such as Miniature Circuit Breakers (MCB's) shall **NOT** be used.
- 6) Products detailed on this certificate are line replaceable items. No in service repairs or modifications to Class II Hybrid, isolating transformer assemblies are permitted. Defective units shall be returned to manufacturer for repair.
- 7) Class II Hybrid, isolating transformer assemblies detailed on this certificate weighing in excess of 40kgs shall **NOT** be directly mounted into a standard apparatus housing. Appropriate mounting arrangements shall be provided subject to a site specific design review.
- 8) Dual wound transformer, PADS Number 091/049123, is only permitted for use in the following load configurations:
 - Secondary windings connected in parallel to a 1000VA maximum load.
 - Each secondary winding connected to a 500VA maximum load.
 - One secondary winding connected to a 500VA maximum load with the other secondary winding open circuit.
- 9) Multi wound transformer, PADS Number 091/049154, is only permitted for use in the following load configurations:
 - Each secondary winding connected to an individual 350VA maximum load or remaining open circuit.
 - All secondary windings connected in parallel to a 1400VA maximum load.
 - Two secondary windings connected in parallel to a 700VA maximum load and the other two secondary windings connected in parallel to a second 700VA maximum load.
 - Three secondary windings connected in parallel to a 1050VA maximum load with the remaining secondary winding connected to a 350VA maximum load.
 - Three secondary windings connected in parallel to a 1050VA maximum load with the remaining secondary winding open circuit.
 - Two secondary windings connected in parallel to a 700VA maximum load and the other two secondary windings open circuit.
- 10) Multi wound transformer, PADS Number 091/049116, is only permitted for use in the following load configurations:
 - Each secondary winding connected to an individual 500VA maximum load or remaining open circuit.
 - All Secondary windings connected in parallel to a 2000VA maximum load.
 - Two secondary windings connected in parallel to a 1000VA maximum load and the other two secondary windings connected in parallel to a second 1000VA maximum load.
 - Three secondary windings connected in parallel to a 1500VA maximum load with the remaining secondary winding connected to a 500VA maximum load.
 - Three secondary windings connected in parallel to a 1500VA maximum load with the remaining secondary winding open circuit.
 - Two secondary windings connected in parallel to a 1000VA maximum load and the other two secondary windings open circuit.

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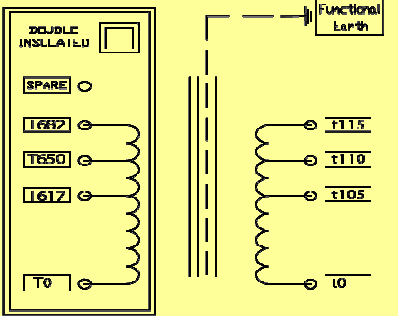
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11) Where Aluminium cabling is used for the 10kVA primary cabling, only 16mm² cable should be used.

Product Configuration

System or Complete Assembly

Aluminium Wound Transformers 650/110V Class II Hybrid Transformer

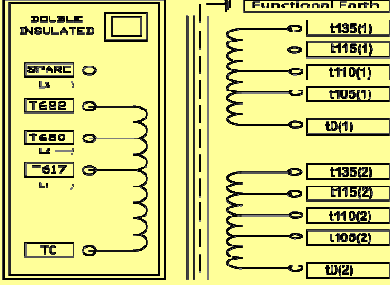
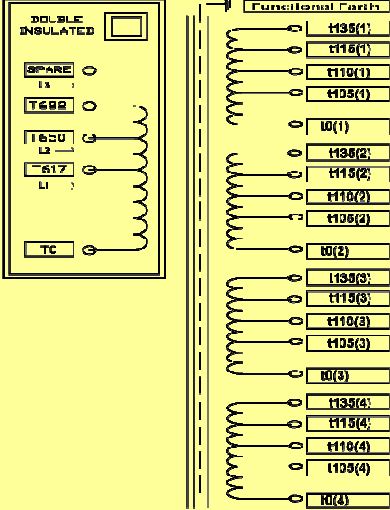
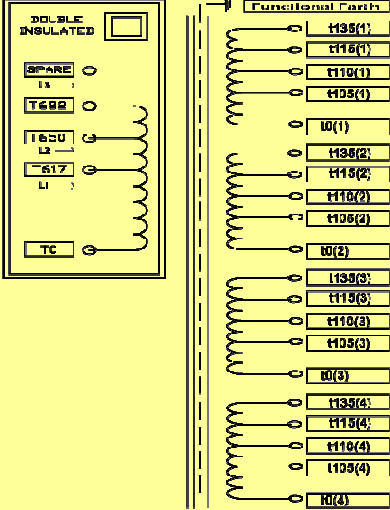
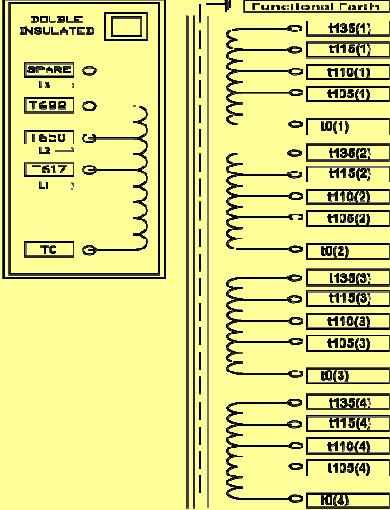
Part No.	Description	Catalogue No.	Wiring Diagram
T3040	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 650V to 0-105-110-115V 1000VA	091/049118	
T3065	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 650V to 0-105-110-115V 1500VA	091/049119	
T2967	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 650V to 0-105-110-115V 2000VA	091/049120	
T2968	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 650V to 0-105-110-115V 3000VA	091/049121	
T2969	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 650V to 0-105-110-115V 5000VA	091/049122	
T3149	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 650V to 0-105-110-115V 10,000VA	091/000067	

Certificate of Acceptance

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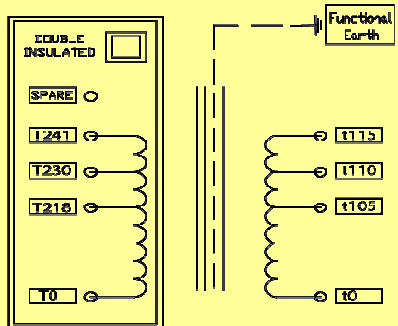
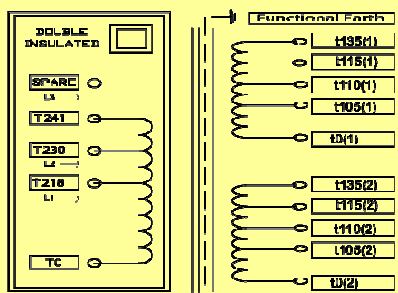
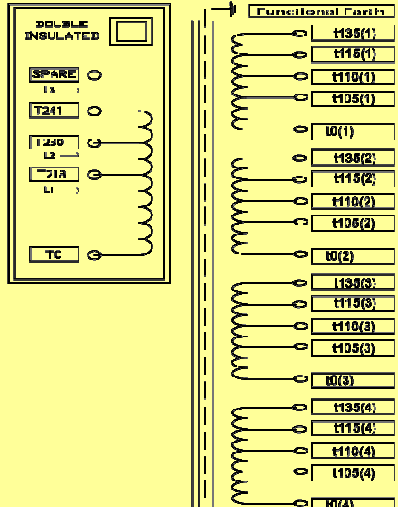
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T3073	Aluminium Wound Class II Hybrid Isolating Transformer Assembly x2 (DUAL) 650V to 0-105-110-115V 1000VA	091/049123	
T3074	Aluminium Wound Class II Hybrid Isolating Transformer Assembly x4 (QUAD) 650V to 0-105-110-115-135V 1400VA	091/049154	
T3075	Aluminium Wound Class II Hybrid Isolating Transformer Assembly x4 (QUAD) 650V to 0-105-110-115V 2000VA	0091/049124	
T3074-2	Aluminium Wound Class II Hybrid Isolating Transformer Assembly x4 (QUAD) 650V to 0-105-110-115-140V 1400VA	0091/045795	

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Aluminium Wound Transformers 230/110V Class II Hybrid Transformer

Part No.	Description	Catalogue No.	Wiring Diagram
T3359	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 230V to 0-105-110-115V 1000VA	0091/044321	
T3363	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 230V to 0-105-110-115V 1500VA	0091/044322	
T3367	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 230V to 0-105-110-115V 2000VA	0091/044323	
T3371	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 650V to 0-105-110-115V 3000VA	0091/044324	
T3379	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 230V to 0-105-110-115V 5000VA	0091/044325	
T3383	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 230V to 0-105-110-115V 10,000VA	0091/044326	
T3387	Aluminium Wound Class II Hybrid Isolating Transformer Assembly x2 (DUAL) 230V to 0-105-110-115V 1000VA	0091/044327	
T3391	Aluminium Wound Class II Hybrid Isolating Transformer Assembly x4 (QUAD) 230V to 0-105-110-115-135V 1400VA	0091/044328	
T3395	Aluminium Wound Class II Hybrid Isolating Transformer Assembly x4 (QUAD) 230V to 0-105-110-115-140V 1400VA	0091/044329	
T3399	Aluminium Wound Class II Hybrid Isolating Transformer Assembly x4 (QUAD) 230V to 0-105-110-115V 2000VA	0091/044330	
T3399	Aluminium Wound Class II Hybrid Isolating Transformer Assembly x4 (QUAD) 230V to 0-105-110-115V 2000VA	0091/044330	

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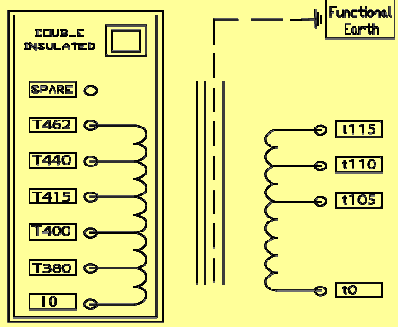
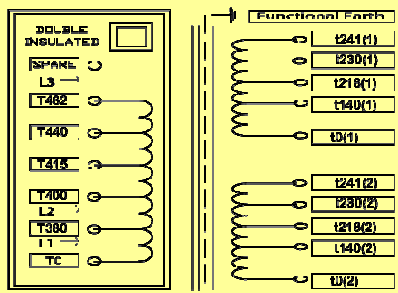
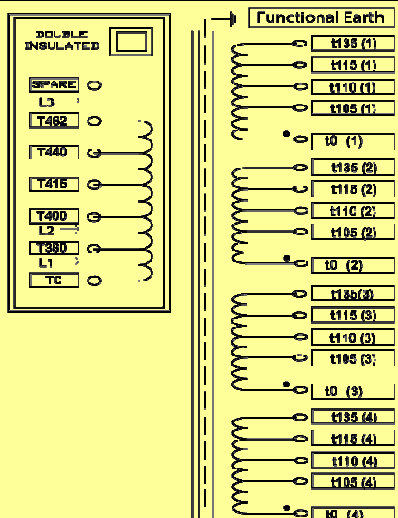
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Aluminium Wound Transformers 400-415-440V /110V Class II Hybrid Transformer

T3360	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 400-415-440V to 0-105-110-115V 1000VA	0091/044331	
T3364	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 400-415-440V to 0-105-110-115V 1500VA	0091/044332	
T3368	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 400-415-440V to 0-105-110-115V 2000VA	0091/044333	
T3372	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 400-415-440V to 0-105-110-115V 3000VA	0091/044334	
T3380	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 400-415-440V to 0-105-110-115V 5000VA	0091/044335	
T3384	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 400-415-440V to 0-105-110-115V 10,000VA	0091/044336	
T3388	Aluminium Wound Class II Hybrid Isolating Transformer Assembly x2 (DUAL) 400-415-440V to 0-105-110-115V 1000VA	0091/044337	
T3392	Aluminium Wound Class II Hybrid Isolating Transformer Assembly x4 (QUAD) 400-415-440V to 0-105-110-115-135V 1400VA	0091/044338	
T3396	Aluminium Wound Class II Hybrid Isolating Transformer Assembly x4 (QUAD) 400-415-440V to 0-105-110-115-140V 1400VA	0091/044339	
T3400	Aluminium Wound Class II Hybrid Isolating Transformer Assembly x4 (QUAD) 400-415-440V to 0-105-110-115V 2000VA	0091/044340	

Manufacturer:

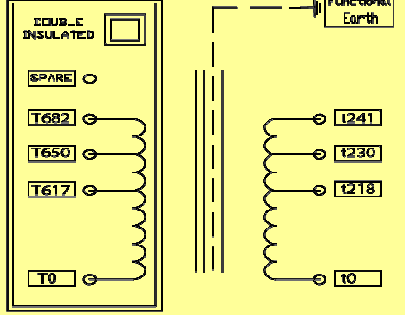
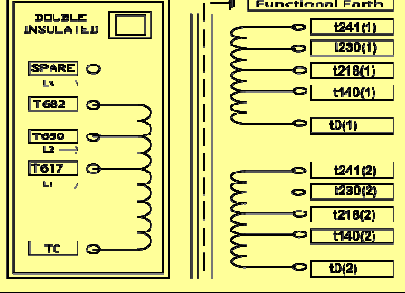
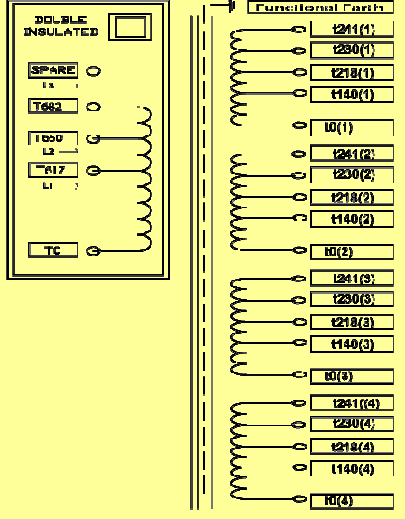
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Aluminium Wound Transformers 650/110V Class II Hybrid Isolating Transformer

T3361	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 650V to 0-218-230-241V 1000VA	0091/044341	
T3365	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 650V to 0-218-230-241V 1500VA	0091/044342	
T3369	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 650V to 0-218-230-241V 2000VA	0091/044343	
T3373	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 650V to 0-218-230-241V 3000VA	0091/044344	
T3381	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 650V to 0-218-230-241V 5000VA	0091/044345	
T3385	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 650V to 0-218-230-241V 10,000VA	0091/044346	
T3389	Aluminium Wound Class II Hybrid Isolating Transformer Assembly x2 (DUAL) 650V to 0-218-230-241V 1000VA	0091/044347	
T3393	Aluminium Wound Class II Hybrid Isolating Transformer Assembly x4 (QUAD) 650V to 0-218-230-241V 1400VA	0091/044348	
T3397	Aluminium Wound Class II Hybrid Isolating Transformer Assembly x4 (QUAD) 650V to 0-218-230-241V 1400VA	0091/044349	
T3401	Aluminium Wound Class II Hybrid Isolating Transformer Assembly x4 (QUAD) 650V to 0-218-230-241V 2000VA	0091/044350	

Certificate of Acceptance

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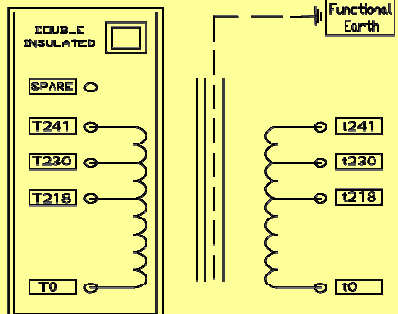
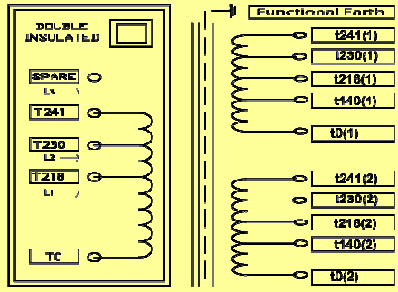
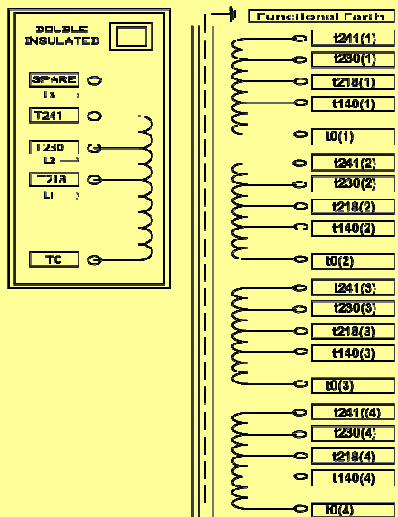
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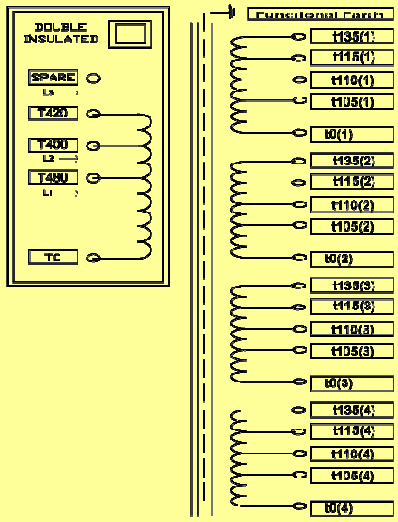
Review Date: 14/05/2025

T3362	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 230V to 0-218-230-241V 1000VA	0091/044351	
T3366	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 230V to 0-218-230-241V 1500VA	0091/044352	
T3370	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 230V to 0-218-230-241V 2000VA	0091/044353	
T3374	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 230V to 0-218-230-241V 3000VA	0091/044354	
T3382	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 230V to 0-218-230-241V 5000VA	0091/044355	
T3386	Aluminium Wound Class II Hybrid Isolating Transformer Assembly 230V to 0-218-230-241V 10,000VA	0091/044356	
T3390	Aluminium Wound Class II Hybrid Isolating Transformer Assembly x2 (DUAL) 230V to 0-218-230-241V 1000VA	0091/044357	
T3394	Aluminium Wound Class II Hybrid Isolating Transformer Assembly x4 (QUAD) 230V to 0-218-230-241V 1400VA	0091/044358	
T3398	Aluminium Wound Class II Hybrid Isolating Transformer Assembly x4 (QUAD) 230V to 0-218-230-241V 1400VA	0091/044359	
T3402	Aluminium Wound Class II Hybrid Isolating Transformer Assembly x4 (QUAD) 230V to 0-218-230-241V 2000VA	0091/044360	


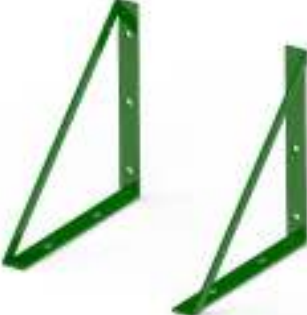
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Aluminium Wound Transformers 400/110V Class II Hybrid Transformer

T3074-1	Aluminium Wound Class II Hybrid Isolating Transformer Assembly x4 (QUAD) 400V to 0-105-110-115-140V 1400VA	0091/045794	 <p>The diagram shows a transformer assembly with a 'DOUBLE INSULATED' section and a 'Functional Parts' section. The 'DOUBLE INSULATED' section includes terminals for SPARE, TAP2 (L3), TAP1 (L2), TAP3 (L1), and TC. The 'Functional Parts' section shows four sets of windings, each with terminals labeled H35(1), H15(1), H25(1), W(1), H35(2), H15(2), H25(2), W(2), H35(3), H15(3), H25(3), W(3), H35(4), H15(4), H25(4), and W(4).</p>
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Hardware

Part No.	Description	Image	Catalogue No.
D1496-2	Backboard/Backplate Mounting Bracket (Pair) Suitable for 1000VA, 1500VA and 1000VA DUAL transformer assemblies.		054/214898
D1496-3	Backboard/Backplate Mounting Bracket (Pair) Suitable for 2000VA, 3000VA, 1400VA QUAD and 2000VA QUAD transformer assemblies.		054/214899

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Assessed Documentation

Reference	Title	Doc. Rev.	Date and Applies to Cert. issue No.	
AR Matrix Doc Ref 141	PA05/06391 Acceptance Requirement Response Matrix.	0	29/05/2015	2
ATL Test Report Doc Ref 135	ATL Test Report: New Copper & Aluminium Wound Family of Class II Hybrid FSP Transformers for Network Rail.	4	11/06/2015	2
Bill of Materials Doc Ref 140 Issue 2	Bill of Materials (BOM)	2	10/06/2015	2
ERA Report Doc Ref 2015-0254	Input Voltage Withstand Tests on Aluminium Wound Class II transformers	Final	April 2015	2
ERA Report Doc Ref 2015-0217 Issue 3	Heat Cycling Test on a Copper to Aluminium Cable Joint.	Final	May 2015	2
ERA Report Doc Ref 79	Assessment of ATL Class II Hybrid Transformer.	Final Issue 1	July 2013	2
Factory Test Specification Doc Ref 055	Factory Test Specification for Transformers.	4	28/04/2015	2
Product Acceptance Compliance V2 AN	Product Acceptance Compliance Matrix	V2	11/06/2015	2
Temperature rise test Report Doc Ref 138	Temperature Rise Test Result	1	08/06/2015	2
162	10kVA Transformer Datasheet	1	06/06/2016	3
PCM	Product Compliance Matrix for 10kVA Transformer	1	06/06/2016	3
T 3149	Type Test Certificate	1	06/06/2016	3
160	ATL Test Report	3	06/06/2016	3
York EMC Report 11298WR1	Witness Testing of Class II Hybrid Transformers for ATL Transformers Ltd.	1	21/01/2014	2
ATL Test Report Doc Ref 172 Issue 1	ATL Test Report: 1.4kVA Aluminium Wound Family of Class II Hybrid Transformers	1	24/03/17	4
Type Test Certificate	Type Test Certificate Elec spec No T 3074-1/2	1	24/03/17	4
E-mail (received 15/03/17)	RE PA6391-3	1	24/03/17	4
6000229	SQA report	7	20/04/2015	2
T3074-2	Eco -rail technical data sheet- 650V, 1400VA Class II quad output transformer	1	08/06/2015	3
T3074-1	Eco -rail technical data sheet- 650V, 1400VA Class II quad output transformer	1	08/06/2015	3
T3074-1	Bill of Materials (BOM)	2	26/06/2016	3
076	Manufacturing Manual for Class II Hybrid FSP eco-rail® Transformers for Network Rail	5	10/06/2015	3
	Product Copyright Notice			3
12028TR1	TEST REPORT Surge testing of Class II Hybrid Transformer		21/04/2016	3
T3149	Technical data sheet - 10KVA CLASS II HYBRID ISOLATION TRANSFORMER	1	30/03/2016	3

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Reference	Title	Doc. Rev.	Date and Applies to Cert. issue No.	
T 3149	Type Test Certificate 650/110V, 10KVA transformer		29/03/2016	3
	Correspondence from Neville Haide to Martin Cooper regarding addition of 230 & 400V variants to the product range.		12/12/2019 To 05/05/2020	5

Manuals and Training Materials

Reference	Title	Doc. Rev.	Date and Applies to Cert. issue No.	
OM Manual Doc Ref 124 iss. 3	Operation & Maintenance Manual	3	10/06/2015	2
OM Manual Doc Ref 161 iss. 2	Operation & Maintenance Manual	2	10/06/2015	3
Manufacturing Manual Doc Ref 076	Manufacturing Manual for Class II Hybrid FSP transformers for Network Rail	5	10/06/2015	2

Certificate History

Issue	Date	Issue History
1	15/06/2015	First accepted for use
2	23/07/2015	Copper Wound transformer assemblies 091/049116 and 091/049117 removed and added to PA05/05761. Certificate title and details amended to reflect this change. Constraints of use for multi wound transformers clarified. Mounting bracket D1496-1 removed.
3	06/06/2016	Addition of 10kVA Transformer to range following prototype production, test and inspection
4	31/08/2017	Addition of two products (T3074-1 and T3074-2) which have secondary voltages of 140 V for SSI equipment.
5	15/05/2020	Addition of 230V range and 400V range extended.

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PA05/06391

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ATL Transformers Ltd.

Issue : 5**Valid From :** 15/05/2020**Review Date:** 14/05/2025**Contact Details****Manufacturer**

Neville D. Haide (Company Director)
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Applicant

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Alison.Heazell@networkrail.co.uk

Lead Reviewer

Martin Cooper
Senior Engineer
Martin.Cooper3@networkrail.co.uk

Manufacturer:

ATL Transformers Ltd.

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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.

Manufacturer:

ATL Transformers Ltd.

Issue : 5**Valid From :** 15/05/2020**Review Date:** 14/05/2025**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