

PA05/06215

Manufacturer:

Issue: 1 Nexan Euromold Valid From: 01/04/2021

**Review Date:** 01/04/2026

Euromold AFN 36 - 6 42kV Single core cable termination

### **Product Description**

Euromold AFN AFN36-6 42kV Single core cable termination for indoor 25kV air insulated switchgear



#### **Scope of Acceptance**

#### **Full Acceptance**

The Euromold AFN36-6 42kV single pole termination is approved for installation on indoor cable terminations for Siemens ASG25, 25kV air insulated switchgear only.

Euromold AFN36-4-H 42kV terminations are no longer available and are superseded by the AFN36-6 type.

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** 

Felix Langley

Network Technical Head Power Distribution HV/LV



Manufacturer: Issue: 1

Nexan Euromold Valid From: 01/04/2021 **Review Date:** 01/04/2026

### **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

#### User

- Follow the manufacturer's installation instructions and training video for this termination. 1)
- 2) Comply with the recommendations given on the COSHH Safety Data Sheets listed in 'Assessed Documents'.
- For use in an indoor environment only.
- 4) Euromold AFN36-4-H 42kV terminations are no longer available and are superseded by the AFN36-6

### **Product Configuration**

**System or Complete Assembly** 

Part No.	Description	Catalogue No.
42kV AFN36-6	42kV Euromold single phase cable termination for use on indoor air insulated switchgear only	054/214930
42kV AFN 36-4-H	42kV Euromold single phase cable termination for use on indoor air insulated switchgear only (SUPERSEDED)	-

#### **Assessed Documentation**

Reference	Title	Doc. Rev.	Date and Applies to Cert. issue No.	
	Euromold technical catalogue		2014	
	Euromold AFN outdoor termination technical			
	catalogue			
	Nexans Cold applied outdoor terminations			
	technical data sheet			
	AFN 42 technical information			
	ISSEP Quality Assurance notification			
	Nexans ISO 14001:2004 certificate		17/05/2013	
	Nexans ISO 9001:2008 certificate		18/06/1992	
	Nexans OHSAS 18001:2007 certificate		16/09/2013	
	Nexans Policy			
	Nexans Test Accreditation Certificate		06/09/2011	
	DelTech Controls L.L.C. Ethylene Propylene Monomer (EPDM) technical data sheet		Nov 2004	



PA05/06215

Manufacturer:

**Issue**: 1 **Valid From**: 01/04/2021 Nexan Euromold **Review Date:** 01/04/2026

Reference Title		Doc. Date and Applies Rev. to Cert. issue No		
	Novagard Solutions G687 lubricant safety data sheet	E-1.0	10/01/2014	
IS94012-ENG - AFN 20-45			05/02/2013	
TE 113 11 04	Elab Type test report on Nexans AIN 36-6 and AFN 36-6 indoor and outdoor terminations		24/04/2012	
	Siemens data sheet on Standards for cable termination testing	3	20/05/2014	
	Reference list for slip on terminations		February 2014	
	Correspondence from Brian Gaffney confirming Euromold type used		24/10/2014	
	Correspondence Brian Gaffney to MCC re confirmation of voltage rating for 27.5kV single phase switchgear		06/11/2014	
	Nexans certificate of Conformity for 27.5kV to EN 50163		05/11/2014	
	Correspondence from Brian Gaffney with statement from Nexans confirming that the AFN36-5 termination is rated for Umax2 at 29kV and Umax3 at 38.75kV for 20 msec			
	Nexans certificate of Conformity for Umax1; 2 &3 to EN 50163		10/11/2014	
	Correspondence from Brian Gaffney requesting product change		26/01/2015	
	Technical data sheet on 42kV AFN 36 – 4- H			
	Correspondence from Brian Gaffney notifying of change to Euromold 42kV AFN36-6			
	Technical data sheet on 42kV AFN 36-6 termination			

### **Manuals and Training Materials**

Reference	Title	Doc. Rev.	Date and Applies to Cert. issue No.	
	Nexans 3_AFNP_36 Training Video for cable termination		T1 / 1 & 2T	

### **Certificate History**

Issue	Date	Issue History
1	01/12/2014	First accepted for use
2T	08/04/2014	Product change to 42kV AFN -4 - H
3T	01/05/2016	Trial extended for trial in Siemens ASG 25 switchgear on LNE
4T	23/08/2018	AFN36-4-H superseded by AFN36-6 – trial extended
1	01/04/2021	Full Acceptance



PA05/06215

Manufacturer:

Issue: 1 Nexan Euromold **Valid From**: 01/04/2021

**Review Date:** 01/04/2026

#### **Contact Details**

#### **Manufacturer**

**Nexans Network Solutions** david.rockall-ext@nexans.com

### **Supplier**

Siemens Mobility Limited mateus.zacharias@siemens.com

#### **Sponsor**

<u>Issue 1 – 3T</u> **External Applicant** 

Alison Collard Senior Project Manager Alison.collard@networkrail.co.uk

John Merriman Project Engineering Manager Derby Midland Main Line Project John.Merriman@networkrail.co.uk

#### **Lead Reviewer**

Martin Cooper Senior Engineer (Distribution) Martin.Cooper3@networkrail.co.uk



PA05/06215

Manufacturer:

Nexan Euromold Valid From: 01/04/2021 **Review Date:** 01/04/2026

Issue: 1

#### **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.



PA05/06215

Manufacturer: Issue: 1

Nexan Euromold **Valid From**: 01/04/2021 **Review Date**: 01/04/2026

#### 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