

TECHNICAL INSTRUCTION

TI 110
Issue 1
August 2008
Expires: See below
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NETWORK RAIL - SIGNAL ENGINEERING

WAGO Terminals

Relevant Standard: NR/GN/SIG/11210 (Appendix 1D15 & 1H05), NR/GN/SIG/11600.
NR/SMS/EL21 & NR/SMS/EL31

Background

WAGO terminals were first accepted for use as an alternative to 2BA terminals in January 2002. They provide a significant space saving and have been installed by many re-signalling schemes in recent years.

Purpose

The use of WAGO style terminations is not included in the current Signalling Installation Handbook and the techniques for connection, testing and maintenance are not currently documented – this was an omission when the product was approved. This TI has been produced to address this documentation deficiency and to detail best practice in the use of WAGO terminals.

Scope

This TI applies to WAGO terminals only.

Abbreviations & Definitions

SMTH – Signal Maintenance Testing Handbook

SWTH – Signal Works Testing Handbook

Compliance Requirements

This TI shall be implemented on publication.

Action Required

This TI gives clarification information for existing processes. No new actions are necessary.

Staff to be Briefed

- Signal Installers
- Signal Maintainers
- Signal Testers
- Signal Designers

Expiry Date

This TI will be withdrawn when the information contained in this document is incorporated into the relevant standards

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List of accepted parts & accessories

The acceptance of WAGO terminals is covered under certificate PA05/00271. A full list of accepted parts and accessories is provided below:

Part No.	Description	Catalogue No.
Disconnectable Terminal & Parts		
280-675	Disconnectable Terminal block (0.5mm ² to 2.5mm ²)	086/042121
280-325	Grey 5.0mm end and intermediate plate	086/042124
280-333	Orange 5.0mm end and intermediate plate	086/042125
280-495	Disconnect Jumper Link with tab	086/042122
280-492	Disconnect Jumper Link without tab	086/042134
280-498	Insulation stop – for disconnect jumper point (red dome nut equivalent)	086/042123
Non-Disconnectable Terminal & Parts		
280-866	Non-disconnectable Terminal block (0.5mm ² to 2.5mm ²)	086/042129
280-835/056-000	5.0mm end and intermediate plate for non-disconnectable terminal	086/042132
Universal Accessories		
249-117	Screwless end stop for TS35 DIN Rail	086/042126
231-126/011-000	Test Probe	086/042127
51002152	20 way bunch strap tester for use with WAGO terminals	086/042135
51002165	24 way bunch strap tester for use with WAGO terminals	086/042136
210-258	Angled flat blade screwdriver (3.5mm x 0.5mm)*	086/042133
209-566	Marker card (white) numbered 1-50	086/042131

*Note: a standard 3.5mm x 0.5mm flat blade screwdriver can be used to operate the cage clamp mechanism if an angled screwdriver is not available.

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WAGO Terminal Overview

The photographs below show the main components of the WAGO terminal system.

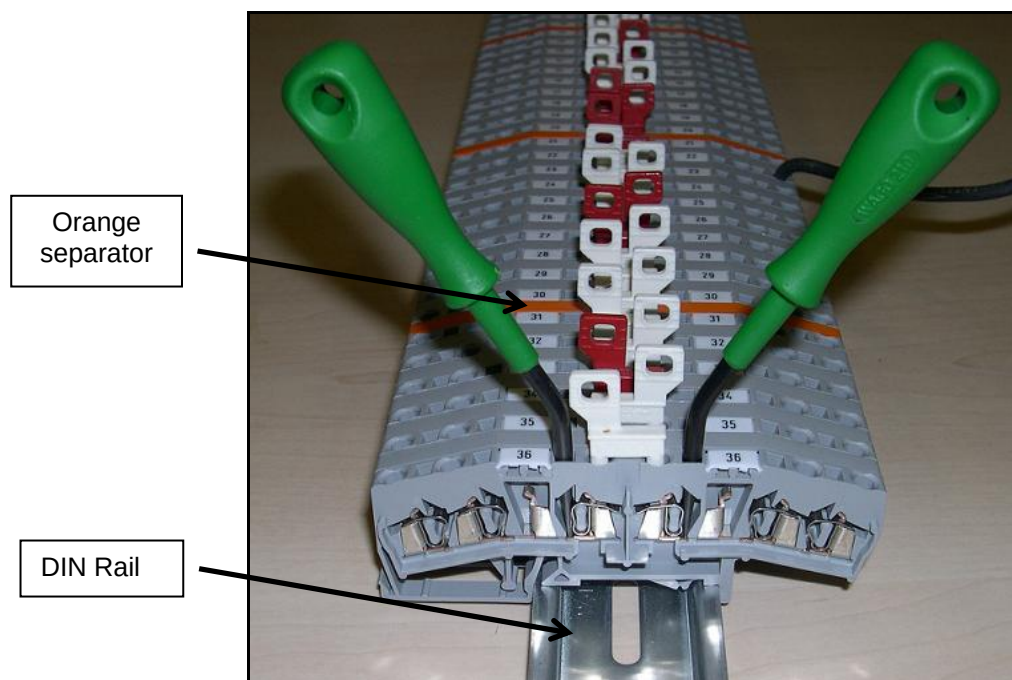


Figure 1

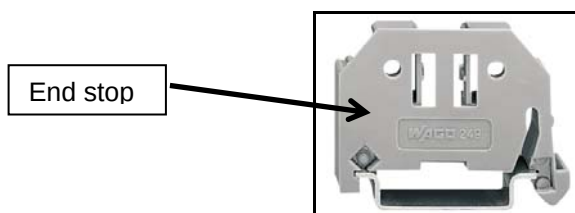


Figure 2

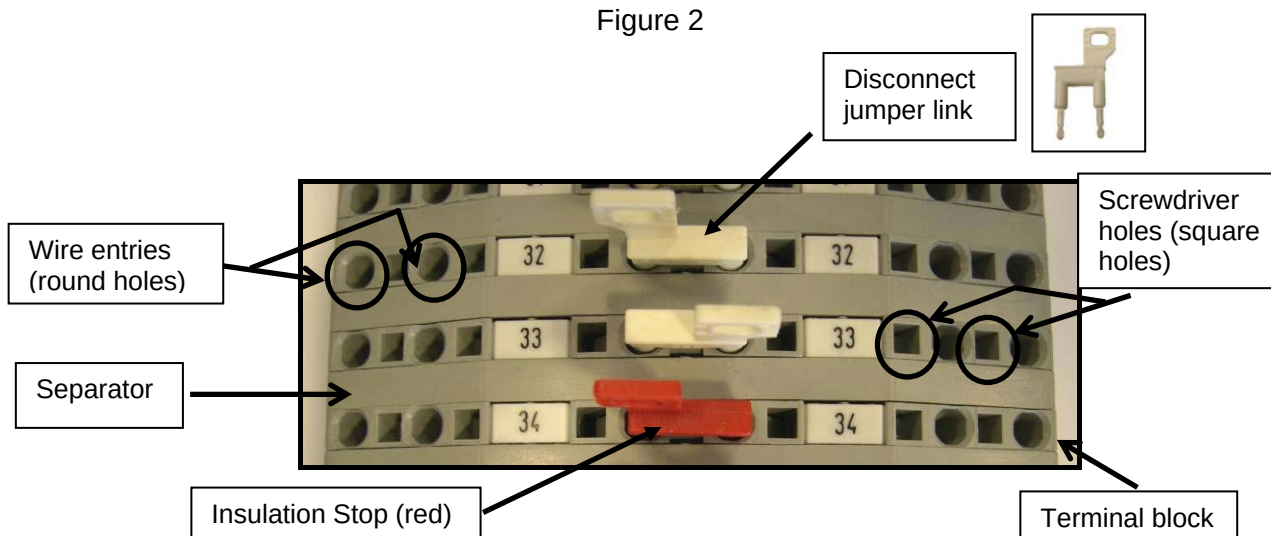


Figure 3