## CERTIFICATE OF COMPLIANCE

20181128-E69654 **Certificate Number** E69654-20140321 Report Reference 2018-NOVEMBER-28 **Issue Date** 

> WAGO KONTAKTTECHNIK GMBH & CO KG Issued to:

> > HANSASTRASSE 27

32423 MINDEN GERMANY

This certificate confirms that WIRE CONNECTORS AND SOLDERING LUGS representative samples of

Listed Splicing Wire Connectors, Cat. No. 221 followed by

-41, -48, -61, -68 followed by 2, 3 or 5.

Have been investigated by UL in accordance with the

Standard(s) indicated on this Certificate.

UL486C and CSA C22.2 No. 188-13, Splicing Wire Standard(s) for Safety:

Connectors.

Additional Information: See the UL Online Certifications Directory at

https://ig.ulprospector.com for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.

**Director North American Certification Program** 

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any contact a local UL Customer Service Representative at <a href="http://ul.com/aboutul/locations/">http://ul.com/aboutul/locations/</a>



File E69654 Project 4786182629

March 21, 2014

REPORT

on

WIRE CONNECTORS AND SOLDERING LUGS

WAGO KONTAKTTECHNIK GMBH & CO KG MINDEN

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File E69654 Vol. 1 Sec. 6 Page 1 Issued: 2014-03-21 and Report Revised: 2018-11-22

DESCRIPTION

PRODUCT COVERED:

USL, CNL Listed Splicing Wire Connectors, Cat. No. 221 followed by -41, -48, -61, -68 followed by 2, 3 or 5.

GENERAL CHARACTER AND USE:

The devices described in this Report are of the following type.

Type of Wiring Termination -

Spring action

<sup>\*</sup> The insulating housing/body described in this Report are molded from a Recognized Component plastic (QMFZ2), in two pieces (bend and shaped under temperature process so considered one piece) and provided with Operating Leaver.

File E69654 Vol. 1 Sec. 6 Page 2 Issued: 2014-03-21 and Report Revised: 2018-11-22

## RATINGS:

## Wire Range:

Cat. Nos.	Wire Range, [AWG]	Wire Type [Cu]	
201 412 201 412	24-12	SOL/STR	
221-412, 221-413, 221-415, 221-482,	24-18	STR Prebonded	
221-413, 221-482, 221-485	12	STR Tinned	
221 403, 221 403	14	STR Topcoated	
221-612, 221-613,	20-10	SOL/STR	
221-615, 221-682,	20-18	STR Prebonded	
221-683, 221-685	20-12	STR Tinned	
221 003, 221 003	20-14	STR Topcoated	

Insulation Temperature - The insulating bodies are molded of polymeric materials, as specified in the following tabulation. The operating temperature of these devices should not exceed the temperature ratings of the insulating materials. These materials may be used interchangeably at a maximum temperature of  $105^{\circ}\text{C}$ .

Series	Part	Material designation and manufacture	Temperature
221	Housing		105°C
221-41x 221-61x	Lever		105°C
221-48x <b>221-68x</b>	Lever		105°C

(See "Construction Details" for further information)

Flammability - Housing V-2, Lever V-0.

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Wire strip length for Cat. Nos. 221-412, 221-413, 221-415 - 11.0 mm. Wire strip length for Cat. Nos. 221-482, 221-483, 221-485 - 11.0 mm. Wire strip length for Cat. Nos. 221-612, 221-613, 221-615 - 13.0 mm. Wire strip length for Cat. Nos. 221-682, 221-683, 221-685 - 13.0 mm.
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Voltage - 600V maximum, building wire: 1000V maximum, signs and luminaires.

File E69654 Vol. 1 Sec. 6 Page 3 Issued: 2014-03-21 and Report Revised: 2018-11-22

## NOMENCLATURE:

$$\frac{221}{A} \quad \frac{-41}{B} \quad \frac{3}{C}$$

- A. Basic Type Series 221
- B. Model Color/Size -

-41 - Transparent Housing, Orange color lever

-61 - Transparent Housing, Orange color lever

-48 - Transparent Housing, Gray color lever

-68 - Transparent Housing, Gray color lever

C. Number of Poles

2 - Poles

3 - Poles

5 - Poles

File E69654 Vol. 1 Sec. 6 Page 4 Issued: 2014-03-21 and Report Revised: 2018-11-22

TECHNICAL CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE USE):

General -

Products designated USL have been investigated using requirements contained in the Standard for Splicing Wire Connectors UL 486C.

Products designated CNL have been investigated using requirements contained in the Standard for Splicing Wire Connectors CSA C22.2 No. 188.

Corrosion Protection - All metal parts are of corrosion resistant material or are suitably plated or painted.

Tolerances - Unless otherwise specified, all dimensions are nominal.

Insulating materials - The following Recognized Component plastic (QMFZ2) materials are used for the Connector specified below.

Series	Part	Material designation and manufacture	Temperature
221	Housing		105°C
221-41x 221-61x	Lever		105°C
221-48x <b>221-68x</b>	Lever		105°C

Assembly instructions -

Connection - Stripped conductor is inserted into the connector entry and the Operating Leaver is pressed down.

Disconnection - The Operating Leaver is pull up.

Refer to the following photographs and description for further details of construction.

These devices or their single modules may be combined to the strips designated as part number 0221-xxxx followed by optional suffix /yyyy-zzzz where x, y and z are any customer number or digit (including characters), given for a specific end-use purpose.

Item numbers may be denoted with or without leading zeroes e.g. 0221-0612 or 221-612.