



Lloyd's
Register

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

This certificate is issued to:

PRODUCER	WAGO Kontakttechnik GmbH & Co. KG Hansastraße 27 32423 Minden Germany
DESCRIPTION	Terminal blocks and connectors
TYPES	221 series (compact splicing connector) 221-4x2, -4x3, -4x5, -6x2, -6x3, -6x5 x = colour code, all colours covered 222 series (compact splicing connector) 222-4x2, -4x3, -4x4, -4x5 x = colour code, all colours covered 224 series (lighting connector) 224-101, -104, -112, -114, -201 243 series (micro push wire connector for junction boxes) 243-144, -204, -208, -304, -308, -504, -508, -804, -808 273 series (push wire connector for junction boxes) 273-100, -101, -102, -103, -104, -105, -108, -112, -153, -155, -158, -252, -253, -254, -255, -258, -403, -453
Certificate No.	04/20013 (E8)
Issue Date	10 April 2019
Expiry Date	15 February 2024
Sheet	1 of 4



for Jochen Körner
Hamburg Technical Support Office
Lloyd's Register EMEA

Lloyd's Register EMEA
71 Fenchurch Street, London EC3M 4BS

Lloyd's Register EMEA
Is a subsidiary of Lloyd's Register Group

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.



TYPES (continued)

2273 series (compact push wire connector for junction boxes)
2273-2x2, -2x3, -2x4, -2x5, -2x8
x = colour code, all colours covered

773 series (push wire connector for junction boxes)
773-102, -104, -106, -108, -112, -114, -116, -118, -202, -204, -206, -208,
-212, -214, -216, -218, -302, -304, -306, -308, -312, -314, -316, -318
-402, -404, -406, -408, -412, -414, -416, -418

APPLICATION

Marine, offshore and industrial applications for use in environmental categories ENV 1, ENV 2 and ENV 3 as defined in Lloyd's Register's Type Approval System, Test Specification Number 1- 2002

STANDARDS

IEC 60998-1:2002 ; EN 60998-1:2004
IEC 60998-2-2:2002 ; EN 60998-2-2:2004

RATINGS

Series	Nominal voltage (V)	Nominal current (A)	Max. conductor size (mm ²) ⁽¹⁾
221-4x2, -4x3, 4x5	450	24 / 32	2.5 / 4
221-6x2, -6x3, -6x5	450	24 / 32 / 41	2,5 / 4 / 6
222-4x2, -4x3, -4x4, -4x5	400	24 / 32	2.5 / 4
224-101, -104, -112, -114, -201	400	24	2.5
243-144, -204, -208, -304, -308, -504, -508, -804, -808	100	6	0.75
273-100, -101, -108, -153, -155, -158	400	18	1.5

⁽¹⁾ Conductors of nominal cross-section area 2.5 mm² and less need not be stranded.

Certificate No.

04/20013 (E8)

Issue Date

10 April 2019

Expiry Date

15 February 2024

Sheet

2 of 4



L0031.1.2016.06

for Jochen Körner
Hamburg Technical Support Office
Lloyd's Register EMEA

Lloyd's Register EMEA
71 Fenchurch Street, London EC3M 4BS

Lloyd's Register EMEA
Is a subsidiary of Lloyd's Register Group



RATINGS (CONTINUED)

Series	Nominal voltage (V)	Nominal current (A)	Max. conductor size (mm ²)
273-102, -103, -104, -105, -112, -252, -253, -254, -255, -258	400	24	2.5
273-403, -453	400	24	2.5
2273-2x2, -2x3, -2x4, -2x5, -2x8	450	24	2.5
773-102, -104, -106, -108, -112, -114, -116, -118, -202, -204, -206, -208, -212, -214, -216, -218, -302, -304, -306, -308, -312, -314, -316, -318, -402, -404, -406, -408, -412, -414, -416, -418	400	24	2.5

PLACES OF PRODUCTION WAGO Kontakttechnik GmbH & Co. KG
Hansastraße 27
32423 Minden/Westfalen
Germany

WAGO Kontakttechnik GmbH & Co. KG
Waldstraße 1
99706 Sondershausen
Germany

WAGO Contact S.A.
Route de l'Industrie 19
1564 Domdidier
Switzerland

Certificate No. 04/20013 (E8)
Issue Date 10 April 2019
Expiry Date 15 February 2024
Sheet 3 of 4



for Jochen Körner
Hamburg Technical Support Office
Lloyd's Register EMEA

Lloyd's Register EMEA
71 Fenchurch Street, London EC3M 4BS

Lloyd's Register EMEA
Is a subsidiary of Lloyd's Register Group

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.



Lloyd's
Register

**PLACES OF PRODUCTION
(continued)**

WAGO Elwac sp. z o. o.
UL Piekna 58 a
50-506 Wroclaw
Poland

WAGO Private Limited
C-27, Sector-58, Phase-III
Noida 201 301
Gautam Budh Nagar (U.P.)
India

WAGO Electronic (Tianjin) Co., Ltd.
No. 5, Quan Hui Road
Wuqing Development Area
301700 Tianjin
China

The Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

If the specified standards are amended during the validity of this certificate, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply.

The Design Appraisal Document No. HTS/ETS 38082-19 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Certificate No. 04/20013 (E8)
Issue Date 10 April 2019
Expiry Date 15 February 2024
Sheet 4 of 4

*Lloyd's Register EMEA
71 Fenchurch Street, London EC3M 4BS*



for Jochen Körner
Hamburg Technical Support Office
Lloyd's Register EMEA

Lloyd's Register EMEA
Is a subsidiary of Lloyd's Register Group

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.



Design Appraisal Document

Lloyd's Register EMEA
Hamburg Technical Support Office
Überseeallee 10
20457 Hamburg
Telephone +49 (0)40 34 97 00 10-100
E-mail: hamburg-type-approval@lr.org

Date
10 April 2019

Please quote this reference number on all future communications
HPC 1562186/38082-19/MK/JK/AC

**THE LLOYD'S REGISTER'S TYPE APPROVAL SYSTEM, 2017
ISSUED TO: WAGO KONTAKTECHNIK GMBH & CO. KG
FOR: TERMINAL BLOCKS AND CONNECTORS, SERIES 221, 222, 224, 243, 273, 2273 AND 773
TYPE APPROVAL CERTIFICATE NO. 04/20013 (E8)**

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register's Type Approval System Procedure TA14 and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

ETS 52037	Application Checklist – Appendix to Form 2502TA	12.11.2018
ETS 52239	Request of Marine Services – Type Approval	03.01.2019
ETS 36899-18	Marine Design Appraisal Document of former certificate no. 04/20013 (E8)	15.05.2018
NL-49194	IEC CB Test Certificate regarding IEC 60988-1:2002; 60988-2-2:2002 for Series 221	05.02.2018
HPC1762159	PQA Report of WAGO Domdidier / Switzerland	17.04.2018
HPC1762159	PQA Report of WAGO Sondershausen / Germany	31.01.2018
Unnumbered	PQA Report of WAGO Private Ltd. / India	06.03.2018
WO4999381	PQA Report of WAGO Wroclaw / Poland	29.03.2018
WO4999378	PQA Report of WAGO Electronic Tianjin / China	28.12.2017
HPC1662044	PQA Report of WAGO Minden / Germany	17.05.2017

FINAL ACCEPTANCE OF ACTUAL ITEM(S) DEPEND(S) ON SATISFACTORY SURVEY AND TESTING

Lloyd's Register EMEA
Is a member of Lloyd's Register group

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

Lloyd's Register EMEA
Hamburg Technical Support Office
Überseeallee 10
20457 Hamburg
Telephone +49 (0)40 34 97 00 10-100
E-mail: hamburg-type-approval@lr.org

Date
10 April 2019

Please quote this reference number on all future communications
HPC 1562186/38082-19/MK/JK/AC



Matthias Karg
Specialist
Electrotechnical Systems
Hamburg Technical Support Office
Lloyd's Register EMEA
T +49 (0)40 328107-138
E matthias.karg@lr.org



for Jochen Körner
Senior Specialist
Electrotechnical Systems
Hamburg Technical Support Office
Lloyd's Register EMEA
T +49 (0)40 328107-443
E jochen.koerner@lr.org

Supplementary Type Approval Terms and Conditions

Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.

Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the LR Type Approval System Procedure.

FINAL ACCEPTANCE OF ACTUAL ITEM(S) DEPEND(S) ON SATISFACTORY SURVEY AND TESTING

Lloyd's Register EMEA
Is a member of Lloyd's Register group

Part 2

Terminals/ Insulators

Producer/ Licence No.	Type	Standard	Rating				Category/ Additional Tests	Remarks	Cert. No.
			Voltage	Continuous Current Amperes	Maximum Conductor Size				
					mm ²	AWG			
WAGO Kontakttechnik GmbH & Co. KG Hansastrasse 27 32423 Minden Germany	Terminal blocks and connectors	IEC 60998-1:2002 IEC 60998-2-2:2002, EN 60998-1:2004 EN 60998-2-2:2004					ENV1, ENV2, ENV3 (2002)	Expires: 15 February 2024	04/20013 (E8)
	<u>221 series</u> 221-4x2, -4x3, -4x5		450 V	24 A	2.5	14		Solid, strand, flexible wires	
			450 V	32 A	4	12		Strand, flexible wires	
	221-6x2, -6x3, 6x5		450 V	24 A	2.5	14		Solid, strand, flexible wires	
	x = colour code, all colours covered		450 V	32 A	4	12		Strand, flexible wires	
			450 V	41 A	6	10		Strand, flexible wires	
	<u>222 Series</u> 222-4x2, -4x3, -4x4, -4x5		400 V	24 A	2.5	14		Solid, strand, flexible wires	
	x = colour code, all colours covered		400 V	32 A	4	12		Strand, flexible wires	
	<u>224 Series</u> 224-101, -104, -112, -114, -201		400 V	24 A	2.5	14		Solid wires	
	<u>243 Series</u> 243-144, -204, -208, -304 -308, -504, -508, -804, -808		100 V	6 A	0.75	20		Solid wires	
	<u>273 Series</u> 273-100, -101, -108, -153, -155, -158		400 V	18 A	1.5	16		Solid wires	
	273-102, -103, -104, -105, -112, -252, -253, -254, -255, -258, -403, -453		400 V	24 A	2.5	14		Solid wires	
	<u>2273 series</u> 2273-2x2, -2x3, -2x4, -2x5, -2x8 x = colour code, all colours covered		450 V	24 A	2.5	14		Solid wires	

M. K. J.

Part 2

Terminals/ Insulators

Producer/ Licence No.	Type	Standard	Rating				Category/ Additional Tests	Remarks	Cert. No.
			Voltage	Continuous Current Amperes	Maximum Conductor Size				
					mm ²	AWG			
	<u>773 Series</u> 773-102, -104, -106, -108, -112, -114, -116, -118, -202, -204, -206, -208, -212, -214, -216, -218, -302, 304, -306, -308, -312, -314, -316, -318 -402, -404, -406, -408, -412, -414, -416, -418		400 V	24 A	2.5	14		Solid wires, strand wires	

h.k.f.