

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.

Manufacturer	ABB Stotz-Kontakt GmbH
Address	Eppelheimer Str. 82, Heidelberg, 69123, Germany
Place of Production	EOLANE TEMARA Lot 14 Zone Industrielle Massira 1, Temara, 12020, Morocco
Type	Relays - Electronic Monitors
Description	Interface Relays and Optocouplers R600 range TYPES Relay modules: RB 121, G, P, PG, R RB 122 G RB 111, R RB 101 R RBR 121, G, P, R RBR 122 G RBR 111, R RBR 101 R Optocoupler modules: OBIC 0100 OBOC 2000, 5000 OBOA 1000, 2000 OBRIC 0100 OBROC 2000, 5000

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

Thorsten Wolff

Senior Specialist to Lloyd's Register EMEA
A member of the 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.

Type Approval Certificate

OBROA 1000, 2000

Trade Name	RB, RBR, OBIC, OBOC, OBRIC, OBROC and OBROA
Application	Marine, offshore and industrial applications for use in environmental categories ENV1, ENV2 and ENV3 as defined in Lloyd's Register's Type Approval System, Test Specification Number 1 – 2002.
Specified Standard	EN 60947-5-1:2017 + AC:2020-05 Manufacturer's specification
Ratings	Relay Modules: Input Voltage: 5 to 230 V AC/DC potential free output contacts: 5 to 230 V AC/DC 1 mA to 12 A Optocoupler Modules Types: Input Voltage: 5 to 230 V AC/DC potential free static outputs: 5 to 58 V DC 1 mA to 5 A 24 V to 400 V AC (OBOA 1000, OBROA 1000) 1 mA to 5 A
Other Conditions	The outputs of OBOC 2000 and OBROC 2000 are not to be directly connected to circuits containing switched inductive loads. Cables exceeding 10 m in length to be shielded when connected to outputs of OBIC 0100 and OBRIC 0100 or overvoltage protection to be provided to limit the voltage to 1 kV common mode and 0,5 kV differential mode.

Type Approval Certificate

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: 16/20068 (E1)

The Design Appraisal Document HTS/ETS 42359-22/TW and its supplementary Type Approval Terms and Conditions form part of this Certificate.