



# 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:

<b>PRODUCER</b>	ABB STOTZ-KONTAKT GmbH Eppelheimerstr. 82 69123 Heidelberg Germany	
<b>DESCRIPTION</b>	Interface Relays and Optocouplers R600 range	
<b>TYPES</b>	Relay modules:	RB 121, G, P, PG, R RB 122 G RB 111, R RB 101 R RBR 121, G, P, PG, 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 OBROA 1000, 2000

**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.

**Certificate No.** 16/20068

**Issue Date** 01 July 2016

**Expiry Date** 27 May 2021

**Sheet** 1 of 2

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Hamburg Technical Support Office

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**SPECIFIED STANDARDS** EN 60947-5-1: 2004+A1: 2009+AC: 2005  
Manufacturer's specification

**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.

**PLACE OF PRODUCTION** EOLANE MAROC  
Lot 11 - Zone Industrielle  
Route De Marrakech  
Berrechid  
Morocco

*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 33852-16, Issue 0, dated 01.07.2016 and its supplementary Type Approval Terms and Conditions form part of this Certificate.*

**Certificate No.** 16/20068  
**Issue Date** 01 July 2016  
**Expiry Date** 27 May 2021  
**Sheet** 2 of 2

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This certificate is issued to:

<b>PRODUCER</b>	ABB STOTZ-KONTAKT GmbH Eppelheimerstr. 82 69123 Heidelberg Germany
<b>DESCRIPTION</b>	Interface Relays and Optocouplers R600 range
<b>TYPES</b>	Relay modules: RB 121, A, AR RB 122 A RB 111 A, AR RB 101 AR RBR 121, A, AR RBR 122 A RBR 111 A, AR RBR 101 AR  Optocoupler modules: OBIC 0100 OBOC 1000, 1500, 5000 OBOA 1000, 2000 OBRIC 0100 OBROC 1000, 1500, 5000 OBROA 1000, 2000

<b>APPLICATION</b>	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.
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<b>Certificate No.</b>	06/20042 (E1)
<b>Issue Date</b>	02 June 2016
<b>Expiry Date</b>	27 May 2021
<b>Sheet</b>	1 of 2

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**SPECIFIED STANDARDS** EN 60947-5-1: 2004+A1: 2009+AC: 2005  
Manufacturer's specification

**OTHER CONDITIONS** The outputs of OBOC 1500 and OBROC 1500 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.

**PLACE OF PRODUCTION** EOLANE MAROC  
Lot 11 - Zone Industrielle  
Route De Marrakech  
Berrechid  
Morocco

*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 33674-16, Issue 0, dated 02.06.2016 and its supplementary Type Approval Terms and Conditions form part of this Certificate.*

**Certificate No.** 06/20042 (E1)  
**Issue Date** 02 June 2016  
**Expiry Date** 27 May 2021  
**Sheet** 2 of 2

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