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Certificate No: **TAE00000W4** Revision No:

TYPE APPROVAL CERTIFICATE

This is to certify:		
That the Pilot Device		
with type designation(s) C		
Issued to ABB Xinhui Low Voltage Swite Jiangmen City, China	chgear Co., Ltd.	
is found to comply with DNV GL rules for classification – Ships, offsho	re units, and high speed and light craft	
Application :		
Product(s) approved by this certificate is/are by DNV GL.	accepted for installation on all vessels classed	
Issued at Hamburg on 2017-07-26		
This Certificate is valid until 2022-07-25 . DNV GL local station: China South NB	for DNV GL	
Approval Engineer: Harald Amberger	Duy Nam Le	
	Head of Section	

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



Form code: TA 251 Revision: 2016-12 www.dnvgl.com Page 1 of 3

Job Id: **262.1-015559-3** Certificate No: **TAE00000W4**

Revision No: 1

Product description

Type: Pilot devices with type name "C".

Various contact combinations and colours enlisted in the manufacturer's catalogues 1SFC151004C0201 of June 2012 and 1SFC151005C0201 of May 2015.

1. Push Button

Type CP*

2. Emergency Stop

```
Type CE3*-*: \varnothing 30 mm (twist-, pull- and key release) Type CE4*-*: \varnothing 40 mm (twist-, pull- and key release)
```

3. Selector Switch

Type C2SS*: Two position selector switch Type C3SS*: Three position selector switch

4. Pilot Light

Type CL*-*

5. Buzzer

Type CB*

6. Enclosure

Type CEP*

Application/Limitation

The Pilot devices may be used together with matched additional equipment enlisted in the catalogue 1SFC151004C0201 of June 2012 and 1SFC151005C0201 of May 2015. The type approval cover only the equipment listed above with applicable accessories as shown in the below listed test reports.

Type Approval documentation

```
Catalogue 1SFC151005C0201 of May 2015 ("Pilot devices - The complete offering")
                                                 Type CP*, Push Button Type CP*, Push Button
CB Test Certificate SE-65085
CB Test Certificate SE-69926
                                                 Type CE**-10R, Emergency Stop
CB Test Certificate SE-57578
                                                 Type C*SS*, Selector Switch
Type CL-2*, Pilot lamp
CB Test Certificate SE-30700M2
CB Test Certificate CN32701-A1
                                                 Type CL-100*, Pilot Light Type CL-5***, Pilot Light
CB Test Certificate SE-41613M1
CB Test Certificate SE-70129
CB Test Certificate SE-67238
                                                 Type CB-*, Buzzer
                                                 Type CP*, Push Button
Test report 1018370-1
Test report 1214868-1
                                                 Type CP6, Push Button
Test report 901457-1
                                                 Type CE**-10R, Emergency Stop
Test report 203516
                                                 Type C*SS*, Selector Switch
                                                 Type C*SS*, Selector Switch
Test report 507903
                                                 Type C*SS*, Selector Switch
Test report 518215-1
```

Form code: TA 251 Revision: 2016-12 www.dnvgl.com Page 2 of 3

Job Id: **262.1-015559-3** Certificate No: **TAE00000W4**

Revision No: 1

```
Test report 00901-CB2014CQC-062495
                                             Type CL-2*, Pilot Light
Test report 507912
                                             Type CL-100*, Pilot Light
Test report 518217-1
                                             Type CL-100*, Pilot Light
Test report 1214441-1
                                             Type CL-5***, Pilot Light
                                             Type CB-*, Buzzer
Test report 1116921-1
                                             Type CEP* Enclosure
Test report 609131
Statement of Test Results (808309-1)
                                             Type CP, Push Button
Statement of Test Results (808309-2)
                                             Type CP, Push Button
Statement of Test Results (711478)
                                             Type CP, Push Button
Statement of Test Results (1223826)
                                             Type CP, Push Button
                                             Type C*SS*, Selector Switch
Statement of Test Results (705609-4)
Statement of Test Results (808309-3)
                                             Type C*SS*, Selector Switch
Statement of Test Results (705609-2)
                                             Type CE3T, Emergency Stop
Statement of Test Results (707040-2)
                                             Type CE3T, Emergency Stop
Statement of Test Results (705609-3)
                                             Type CE3K, Emergency Stop
Statement of Test Results (707040-3)
                                             Type CE3K, Emergency Stop
Statement of Test Results (705609-5)
                                             Type CL, Pilot Light
Statement of Test Results (707040-5)
                                             Type CL, Pilot Light
```

Tests carried out

Type tests in accordance with IEC 60947-5-1 Ed.4, IEC 60947-5-5 Ed.1.2, for emergency stop IP tests in accordance with IEC 60529.

Marking of product

Manufacturers name and Type designation.

Periodical Assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE

Form code: TA 251 Revision: 2016-12 www.dnvgl.com Page 3 of 3