DNV·GL

Certificate No:
TAE00000ES
File No:
823.10
Job Id:
262.1-000151-5

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Circuit Breaker

with type designation(s)
S800S B, C, D and K Characteristics, Auxilliary Contacts to S800 series Circuit Breakers S800-AUX & AUX/ALT, Current Limiter S803S-SCL, Current Limiter S803x-SCL-SR

Issued to
ABB Switzerland Ltd. Low Voltage Products
SCHAFFHAUSEN, Switzerland

is found to comply with
Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske Veritas' Offshore Standards
Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske Veritas' Offshore Standards

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Type	Rated Voltage (V)	Rated Current (A)	Frequency (Hz)
S800S B, C, D and K Characteristics	**230 - 690**	**10 - 125**	**50 - 60**
Auxilliary Contacts to S800 series Circuit Breakers S800-AUX & AUX/ALT	**400**	**6**	**50 - 60**
Current Limiter S803S-SCL	**440 - 690**	**32 - 125**	**50 - 60**
Current Limiter S803x-SCL-SR	**690**	**32-100**	**50-60**

This Certificate is valid until **2018-12-31**.

Issued at **Høvik** on **2015-09-10**

for **DNV GL**

DNV GL local station: **Augsburg**

Approval Engineer: **Nicolay Horn**

Marit Laumann
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.

© DNV GL 2014. DNV GL and the Horizon Graphic are trademarks of DNV GL AS.

Certificate No: **TAE00000ES**
File No: **823.10**
Job Id: **262.1-000151-5**

Product description

S800 B, C or D characteristics for circuit protection.
S800 K characteristic for motor protection.
Circuit breakers series 800 series and current limiter 803S-SCL and 803x-SCL-SR.

	S800S B*	S800S C*	S800S D*
Rated insulation voltage U_i (V)	690	690	690
Rated impulse withstand voltage U_{imp} (kV)	8	8	8
Rated current (A) at 30^{O}C**	10-125	10-125	10-125
Rated voltage (V)	230-690	230-690	230-690
Rated frequency (Hz)	50-60	50-60	50-60
Breaking current (kA) I_{CU}, 415 V	50 kA	50 kA	50 kA
Breaking current (kA) I_{CU}, 440 V	30kA	30kA	30kA
Breaking current (kA) I_{CU}, 500 V	10-80 A: 15 kA 100-125 A: 10 kA	10-80 A: 15 kA 100-125 A: 10 kA	10-80 A: 15 kA 100-125 A: 10 kA
Breaking current (kA) I_{CU}, 690 V	10-80 A: 6 kA 100-125 A: 4,5kA	10-80A: 6 kA 100-125A: 4,5kA	10-80A: 6 kA 100-125A: 4,5kA
Breaking current (kA) I_{CS}, 415 V	40 kA	40 kA	40 kA
Breaking current (kA) I_{CS}, 440 V	10-80 A: 22,5 kA 100 A: 15 kA 125 A: 5 kA	10-80 A: 22,5 kA 100 A: 15 kA 125 A: 5 kA	10-80 A: 22,5 kA 100 A: 15 kA 125 A: 5 kA
Breaking current (kA) I_{CS}, 500 V	5 kA	5 kA	5 kA
Breaking current (kA) I_{CS}, 690 V	10-80 A: 4 kA 100-125 A: 3 kA	10-80 A: 4 kA 100-125 A: 3 kA	10-80 A: 4 kA 100-125 A: 3 kA
Utilisation category	A	A	A
Thermal release	1.13-1,45 x I_n	1.13-1,45 x I_n	1.13-1,45 x I_n
Electromagnetic release	3-5 x I_n	5-10 x I_n	10-20 x I_n

	S800S K*	S803S-SCL	S803x-SCL-SR
Rated insulation voltage U_i (V)	690	690	690
Rated impulse withstand voltage U_{imp} (kV)	8	8	8
Rated current (A) at 30^{O}C**	10-125	32-125	32-100
Rated voltage (V)	230-690	440-690	440-690
Rated frequency (Hz)	50-60	50-60	50-60
Breaking current (kA) I_{CU}, 415 V	50 kA	100 kA	-
Breaking current (kA) I_{CU}, 440 V	30kA	100kA	-
Breaking current (kA) I_{CU}, 500 V	10-80 A: 15 kA 100-125 A: 10 kA	50 kA	-
Breaking current (kA) I_{CU}, 690 V	10-80 A: 6 kA 100-125 A: 4,5 kA	50 kA	50 kA
Breaking current (kA) I_{CS}, 415 V	40 kA	100 kA	-
Breaking current (kA) I_{CS}, 440 V	10-80 A: 22,5 kA 100 A: 15 kA 125 A: 5 kA	100kA	-
Breaking current (kA) I_{CS}, 500 V	5 kA	50 kA	-
Breaking current (kA) I_{CS}, 690 V	10-80 A: 4 kA 100-125 A: 3 kA	50 kA	50 kA
Utilisation category	A	A	A
Thermal release	1.05-1,2 x I_n	-	-
Electromagnetic release	10-14 x I_n	-	-

* = 1, 2, 3 or 4 for 1-4 poles with B, C, D or K characteristics.
** Rated current: 10, 13, 16, 20, 25, 32, 40, 50, 63, 80, 100 or 125 A given for Ambient temperature of 30ºC. For 45ºC nominal currents are slightly reduced according to Technical Catalogue page. 3/3.

For ship application, thermal release data shall be multiplied with correction factors

- 0,9 for characteristics B,C and D
- 0,96 for characteristic K

IP Class 40.

Certificate No: **TAE00000ES**
File No: **823.10**
Job Id: **262.1-000151-5**

Application/Limitation

Suitable for use in all systems (insulated or directly earthed) up to 690 V AC.

Type Approval documentation

Tests carried out

Type tests according to IEC 60947-2 sequence I, II & III and annex H.

Vibration, humidity, dry heat, cold (+5 °C) and inclination tests.

Marking of product

ABB - type designation - rated voltage - rated insulation voltage - breaking capacity.

Periodical assessment

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

The main elements of the survey are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Production Sample Tests (PST) and Routines (RT) checked (if not available tests according to PST and 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.

Survey to be performed at least every second year.
END OF CERTIFICATE