

# TYPE APPROVAL CERTIFICATE

Certificate No: **TAE00000ES**Revision No: **3** 

This is to certify:				
That the Circuit Breaker				
with type designation(s) \$800S, \$800P, \$803-SCL-SR, \$803S-SCL, \$800-AUX, \$800P	-AUX/ALT			
ABB Switzerland Ltd. Low Voltage Proc Schaffhausen, SH, Switzerland	ducts			
is found to comply with DNV rules for classification – Ships, offshore units, and high	gh speed and light craft			
Application:				
Product(s) approved by this certificate is/are accepted for in	stallation on all vessels classed by DNV.			
Issued at Hamburg on 2023-10-24				
This Certificate is valid until <b>2028-12-31</b> .  DNV local unit: <b>Augsburg</b>				
Approval Engineer: Harald Amberger	Oddvar Deinboll			
	Head of Section			

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



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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.



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# **Product description**

S800S... / S800P... / S804U-UCZ Miniature circuit breaker
S803S-SCL Short circuit current limiter
S803S-SCL-SR Self-resetting short circuit limiter

		S800S	S800P	S804U-UCZ	S803S-SCL	S800-SCL-SR
Ratings acc. IEC 60947-2				•	•	-
Insulation voltage U <sub>i</sub>	V	AC 690	AC 690	DC 1500	AC 690	
Impulse withstand voltage U <sub>imp</sub>	kV	8	6	8		
Current I <sub>e</sub> (30°C)*	Α	10 - 125	63 – 125	10 - 80	32, 63, 125	32, 63, 100
Tripping characteristics		B, C, D, K	B, C, D, K	Z		
Number of poles		1 - 4	1 – 4	4 (in series)	3	1, 2, 3
Operational voltage U <sub>e</sub>	V	AC 400/690	AC 240/415	DC 600	AC 400/690	
Frequency f	Hz	50/60	50/60	DC	50/60	
Ultimate short-circuit cap. Icu						
AC 240/415 V	kA	50	50	10 (DC600V)	100 (AC400V)	
AC 254/440 V	kA	30			100 (AC440V)	
AC 400/690 V (up to 80 A)	kA	6			50 (AC690V)	
AC 400/690 V (100 - 125 A)	kA	4,5			50 (AC690V)	
Service short-circuit cap. Ics					100 % Icu	
AC 240/415 V	kA	40	40	10 (DC600V)		
AC 254/440 V (up to 80 A)	kA	22,5				
AC 254/440 V (100 - 125 A)	kA	15				
AC 400/690 V (up to 80 A)	kA	4				
AC 400/690 V (100 - 125 A)	kA	3				
+ (4000) = 1 1 1 1 1 1 1 1						

<sup>\* (40°</sup>C) Tripping characteristics K

Further ratings and correction factors for 45°C acc. manufacturer documentation.

S800-AUX Auxiliary contact

S800-AUX/ALT Combined auxiliary and signal contact

		S800-AUX	S800-AUX/ALT		
Ratings acc. IEC 60947-5-1					
Insulation voltage U <sub>i</sub>	V	AC 690			
Impulse withstand voltage U <sub>imp</sub>	kV	6			
Utilisation Categories		AC15 400V/2 A, AC15 240V/6 A			
		DC13 250/0.55 A, DC13 125 V/1.1 A			
		DC13 60 V/2 A, DC13 24 V/4 A			
Number of contacts		2xAUX	1xAUX, 1xAUX/ALT		
Contact function		Changeover			
Further ratings and mounting location acc. manufacturer documentation.					

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### Application/Limitation

Operating instruction of the manufacturer to be observed

#### Type Approval documentation

Test reports:

Test report 06-IK-0094.01 from Swiss Testing, acc. to IEC 60947-2:2003 dated 27.09.2006.

ABB test reports nos. P1639E dated 05.03.2007, P1640E dated 06.03.2007, P1641E dated 07.03.2007

P1642E dated 12.03.2007, P1643E dated 14.03.2007, P6239 dated 05.05.2023

CB Test Certificate CH-2848 from Electrosuisse, for Circuit Breaker, dated 2005-06-24.

CB Test Certificate CH-2988 from Electrosuisse, for Auxiliary/Signal contacts to circuit breakers series S800, dated 2005-11-29.

CB Test Certificate BE-11090 from SGS Belgium N.V. for Circuit Breaker, dated 2023-04-28.

Test report 04-IK-0300.01 from Swiss Testing, acc. to IEC 60947-2:2003 dated 07.06.2005.

Test report 04-IK-0301.10 from Swiss Testing, acc. to IEC 60947-5-1:2003 and 2004, dated 07.06.2005.

Vibration Test from ABB acc. to IEC 60068-2-6 dated 20.06.2006

Damp Heat Test from ABB acc. to IEC 60068-2-30 dated 20.06.2006

Dry Heat Test from ABB acc. to IEC 60068-2-2 dated 20.06.2006

Test report P1524 from ABB acc. to IEC 60947-2 dated 11.07.2006 Test report P2649E from ABB acc. to IEC 60947-2 dated 03.08.2011

Test report P2997E from ABB acc. to IEC 60947-4-1 and IEC 60947-2 dated 08.06.2011

Test report 63152401-00 from SGS acc. to IEC 60947-2 dated 12.09.2020

#### **Tests carried out**

IEC 60947-2 sequence I, II & III and annex H, IEC 60947-5-1 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 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** 

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