



NIPPON KAIJI KYOKAI

TYPE APPROVAL CERTIFICATE FOR AUTOMATIC DEVICES AND EQUIPMENT

Certificate No. TA21170M

This is to certify that the undernoted product(s) has/have been approved in accordance with the requirements specified in Chapter 1, Part 7 of “Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use” and the relevant Society's Rules.

This certificate is issued to

Manufacturer 1:	ABB Electrification Sweden AB, Motor Starting & Safety
Place of Manufacturing 1:	MOTORGRÄND 20, 72161 Västerås, SWEDEN
Manufacturer 2:	ABB Xinhui Low Voltage Switchgear Company Ltd
Place of Manufacturing 2:	Jinguzhou Industrial Development Zone, Xinhui District 529100, Jiangmen, Guangdong, CHINA
Product description:	Softstarter
Model:	PSTX-family, PSE-family
Approval No.:	16A005
Valid until:	21 February 2026

This certificate is subject to the conditions specified in the attached sheet(s).

Issued at Tokyo on 22 February 2021.

T. Shimada
General Manager
Machinery Department

Note: 1. The manufacturer, if desired, is requested to apply to the Society for renewal prior to the expiration date.

Specification & documents:

1. Particulars: Power supply: Main circuit 208-600V AC (PSE), 208-690V AC (PSTX)
Control circuit 100-250V AC/DC 50/60Hz, Auxiliary circuits: 250V AC / 24V DC

2. Components and reference drawings:

Type PSE

Soft starter type PSE	Rated insulation voltage (Ui)	Rated frequency	Rated thermal current (Ith)	Rated operational current
PSE18-600-70	600	50/60	18	18
PSE25-600-70			25	25
PSE30-600-70			30	30
PSE37-600-70			37	37
PSE45-600-70			45	45
PSE60-600-70			60	60
PSE72-600-70			72	72
PSE85-600-70			85	85
PSE105-600-70			106	106
PSE142-600-70			143	143
PSE170-600-70			171	171
PSE210-600-70-1			210	210
PSE250-600-70-1			250	250
PSE300-600-70-1			300	300
PSE370-600-70-1			370	370

- To be continued -

2. Components and reference drawings:

Type PSTX

Soft starter type PSTX	Rated insulation voltage (Ui)	Rated frequency	Rated thermal current (Ith)	Rated operational current
PSTX30-600 or 690-70	600/690	50/60	30	30
PSTX37-600 or 690-70			37	37
PSTX45-600 or 690-70			45	45
PSTX60-600 or 690-70			60	60
PSTX72-600 or 690-70			72	72
PSTX85-600 or 690-70			85	85
PSTX105-600 or 690-70			106	106
PSTX142-600 or 690-70			143	143
PSTX170-600 or 690-70			171	171
PSTX210-600 or 690-70			210	210
PSTX250-600 or 690-70			250	250
PSTX300-600 or 690-70			300	300
PSTX370-600 or 690-70			370	370
PSTX470-600 or 690-70			470	470
PSTX570-600 or 690-70			570	570
PSTX720-600 or 690-70			720	720
PSTX840-600 or 690-70			840	840
PSTX1050-600 or 690-70			1050	1050
PSTX1250-600 or 690-70			1250	1250

- To be continued -

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Attached sheet -3/4 to the Certificate No. TA21170M

3. Documentation and Test Reports:

Documentation:

1SFB536247G1001(REV C), 1SFB536247G1002(REV C), 1SFB536247G1004(REV C),
1SFB536247G1005(REV C), 1SFB536247G1006(REV C), 1SFB536247G1007(REV C),
1SFB536247G1008(REV C), 1SFB536247G1011(REV C), 1SFB536247G1012(REV C),
1SFB536247G1013(REV C)

Test Reports:

Test report No. 1316240-1, Ed. 1

Report No. 1407161VAS-003

Test report No. 1316240-2, Ed. 1

Report No. 1407161VAS-002

Test Report No. 1316240-3, Ed. 1

Report No. 1407161VAS-001

Test report No. 1012981-1

Report No. 1009638-1

Report no 1401996STO-001

Report no 1401990STO-001

Test report No. 1401990, Ed.1

2CMT001197D0120 PSTX-PSE Production Test Specification

Document No 1SFB536014G1004

Test report No. 1009638-2

Test report No. 1009638-3

Report No. 1012981-2

Report no 1415279STO-001

Report no 1512822STO-001

Report no 1512822STO-002

Report no 4786980553

Report no 15160310STO-001

Report no 15160310STO-002

Test report No. 1710867STO-001, Ed. 1

Report No. 1721558STO-001

Report No. 1808986VAS-001

Report No. 621-20081-10-R0 for compliance with IACS E10 Rev.7 requirement

- To be continued -

Test items & approval conditions:

1. Test items:

(Applied testing items are marked with X.)

ENVIRONMENTAL TESTS (IACS E10 Rev.7 basis)		Mark
External examination		X
Operation test and performance test		X
Electric power supply failure test		X
Power supply fluctuation test	Electric	X
	Pneumatic and Hydraulic	--
Insulation resistance test		X
High voltage test		X
Pressure test (Pneumatic and Hydraulic)		--
Dry heat test (Temperature 70°C × 16 hours)		X
Damp heat test		X
Vibration test (Acceleration ±0.7g)		X
Inclination test		X
Cold test (Temperature 5°C × 16 hours)		X
Salt mist test		--
Electrostatic discharge immunity test		X
Radiated radio frequency immunity test		X
Conducted low frequency immunity test		X
Conducted high frequency immunity test		X
Burst / Fast transient immunity test		X
Surge immunity test		X
Radiated emission test		X
Conducted emission test		X
Flame retardant test		--

2. Approval condition:

The product is not allowed to be installed in the bridge and on open decks

- The End -