

Certificate No: TAE0000342

TYPE APPROVAL CERTIFICATE

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That the Motor Starter

with type designation(s)

PSE

Issued to

ABB AB

Västerås, Västmanlands Län, Sweden

is found to comply with

DNV GL rules for classification - Ships, offshore units, and high speed and light craft

Application:

Products approved by this certificate are accepted for installation on all vessels classed by DNV GL.

Rated voltage (V) 600 AC Rated current (A) 18 - 370 Frequency (Hz) 50 - 60

Issued at Høvik on 2018-09-29

for **DNV GL**

This Certificate is valid until 2023-09-28.

DNV GL local station: Stockholm

Approval Engineer: Nicolay Horn

Marta Alonso Pontes 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.



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Product description

Туре	Rated operation		Rated operation	Rated power at	Rated
	voltage Ue (V)	insulation	current le (A)	400 V Pe (W)	conditionals
		voltage			short-circuit
		Ui(kV)			current Iq (kA)
PSE 18			5.4 - 18	7.5	
PSE 25			7.5 - 25	11	
PSE 30			9 - 30	15	
PSE 37			11.1 -37	18.5	
PSE 45			13.5 - 45	22	
PSE 60			18 - 60	30	
PSE 72			21.6 - 72	37	
PSE 85			25.5 - 85	45	
PSE 105			31.8 -106	55	
PSE 142			42.9 -143	75	
PSE 170	220 - 600	600	53.3 -171	90	85* / 75**
PSE 210			63 - 210	110	•
PSE 250			75 - 250	132	
PSE 300			96 - 300	160	
PSE 370			111 - 370	200	
PSE 210-600-70-1			63 - 210	110	
PSE 250-600-70-1			75 - 250	132	
PSE 300-600-70-1			96 - 300	160	
PSE 370-600-70-1			111 - 370	200	

^{*} With fuse

Intertek Test Report no. 1401990 Ed 1 issued 2014-09-16.

Type Approval documentation

Technical info:

ABB Product Brochure "PSE Softstarter The Efficient Range" doc no. 1SFC132011B0201. ABB catalogue "Softstarters Type PSR, and PSTX" doc. no. 1SFC132012C0201 rev. E.

Test Reports:

Intertek Test Report no. 1808986VAS-001 issued 2018-06-05.

Intertek Test Report no. 1721558STO-001 issued 2018-03-12.

Intertek Test Report no. 171086STO-001, Ed 1 issued 2017-11-20.

Intertek Test Report nos. 1009638-1, 1009638-2 & 1009638-3 issued 2010-10-20.

Intertek Test Report nos 1012981-1 & 2 issued 2010-07-02.

Intertek Test Report no. 1401990STO-001 issued 2014-09-29.

Tests carried out

Type tests in accordance with IEC 60947-4-2. EMC Tests, Inclination test, Vibration test, Insulation resistance test, Damp heat test, Dry heat test, Low temperature test and high voltage test.

Marking of product

ABB - Type designation - Rated voltage - Rated current - Breaking capacity.

Periodical assessment

The scope of the 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)

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^{**} With circuit breaker

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- Results from Routines (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.

Survey to be performed at 2, 3.5 year and at renewal.

END OF CERTIFICATE

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