

## **Type Approval Certificate**

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

This certificate supersedes certificate number 15/20013 issued on 29.01.2015 which is hereby cancelled.

This certificate is issued to:

**PRODUCER** ABB AB Control Products

Motorgränd 20 SE-72161 Västerås,

Sweden

**DESCRIPTION** Softstarter Type PSE

**TYPE** PSE 0-2-3-4

according following selection types for type codes

①= Current rating [A]:

18, 25, 30, 37, 45, 60, 72, 85, 105, 142, 170, 210, 250, 300, 370

600: 208 – 500 V 50/60 Hz

③ = Control supply voltage: 70: 110 - 250 V 50/60 Hz

4 = Design code:

PSE frame C (PSE210, PSE250, PSE300, PSE370 types only)

Software versions: PSE 01.03.x

**Certificate No.** 15/20013 (E1)

**Issue Date** 02 November 2018

Expiry Date 01 November 2023

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Register

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APPLICATION Marine, offshore and industrial applications for use in environmental

categories ENV1 and ENV2 as defined in Lloyd's Register Type

Approval System, Test Specification Number 1:2013.

**STANDARD** IEC 60947-4-2: 2011

EN 60947-4-2: 2012

**RATINGS** 

| Power Size | Power Rating<br>Normal<br>[kW] | Utilization Category |  |  |
|------------|--------------------------------|----------------------|--|--|
| 500 V      |                                |                      |  |  |
| PSE18      | 11                             |                      |  |  |
| PSE25      | 15                             |                      |  |  |
| PSE30      | 18.5                           |                      |  |  |
| PSE37      | 22                             |                      |  |  |
| PSE45      | 30                             |                      |  |  |
| PSE60      | 37                             |                      |  |  |
| PSE72      | 45                             |                      |  |  |
| PSE85      | 55                             | AC-53a: 5-2: 50-10   |  |  |
| PSE105     | 75                             |                      |  |  |
| PSE142     | 90                             |                      |  |  |
| PSE170     | 110                            |                      |  |  |
| PSE210     | 132                            |                      |  |  |
| PSE250     | 160                            |                      |  |  |
| PSE300     | 200                            |                      |  |  |
| PSE370     | 250                            |                      |  |  |
| 400 V      |                                |                      |  |  |
| PSE 18     | 7.5                            |                      |  |  |
| PSE25      | 11                             | AC-53a: 5-2: 50-10   |  |  |
| PSE30      | 15                             |                      |  |  |

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## **RATINGS** (continued)

| Power Size  | Power Rating | Utilization Category |  |  |
|-------------|--------------|----------------------|--|--|
|             | Normal       |                      |  |  |
|             | [kW]         |                      |  |  |
|             |              |                      |  |  |
| 400 V       |              |                      |  |  |
| PSE37       | 18.5         |                      |  |  |
| PSE45       | 22           |                      |  |  |
| PSE60       | 30           |                      |  |  |
| PSE72       | 37           |                      |  |  |
| PSE85       | 45           |                      |  |  |
| PSE105      | 55           | AC-53a : 5-2 : 50-10 |  |  |
| PSE142      | 75           | AC-33a: 3-2: 30-10   |  |  |
| PSE170      | 90           |                      |  |  |
| PSE210      | 110          |                      |  |  |
| PSE250      | 132          |                      |  |  |
| PSE300      | 160          |                      |  |  |
| PSE370      | 200          |                      |  |  |
| 220 - 240 V |              |                      |  |  |
| PSE 18      | 4            |                      |  |  |
| PSE25       | 5.5          |                      |  |  |
| PSE30       | 7.5          |                      |  |  |
| PSE37       | 9            |                      |  |  |
| PSE45       | 11           |                      |  |  |
| PSE60       | 15           | AC F2 - F 2 - F0 10  |  |  |
| PSE72       | 18.5         | AC-53a : 5-2 : 50-10 |  |  |
| PSE85       | 22           |                      |  |  |
| PSE105      | 30           |                      |  |  |
| PSE142      | 40           |                      |  |  |
| PSE170      | 45           |                      |  |  |
| PSE210      | 59           |                      |  |  |

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## **RATINGS** (continued)

| Power Size  | Power Rating | Utilization Category |  |  |
|-------------|--------------|----------------------|--|--|
|             | Normal       |                      |  |  |
|             | [kW]         |                      |  |  |
|             |              |                      |  |  |
| 220 - 240 V |              |                      |  |  |
| PSE250      | 75           |                      |  |  |
| PSE300      | 90           | AC-53a: 5-2: 50-10   |  |  |
| PSE370      | 110          |                      |  |  |

**PLACE OF PRODUCTION** ABB AB, Co

ABB AB, Control Products Motorgränd 20, SE-72161 Västerås, Sweden

The Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

If the specified standards are amended during the validity of this certificate, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply.

The Design Appraisal Document No. HTS/ETS 37505-18 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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