



EUROPEAN UNION RECOGNISED ORGANISATION (EU RO) MUTUAL RECOGNITION TYPE APPROVAL CERTIFICATE

Certificate No:
MRE000001H

In accordance with Article 10.1 of EU Regulation 391/2009

This Certificate is issued to

Schneider Electric Industries SAS
Eybens, France

for

Electric motor starters other than soft starters

with type designation(s)

TeSys™ island:TPRST009 to TPRST080 and TPRSS009 to TPRSS080,

The product is found to comply with

EU RO Mutual Recognition Technical Requirements for Electric motor starters other than soft starters

Intended service

Electric motor Starters for installation in enclosures onboard ship and offshore units

Type	Rated Voltage (V)	Rated Current (A)	Frequency (Hz)
TeSys™ island:TPRST009 to TPRST080 and TPRSS009 to TPRSS080	230-690	0.18-80	50/60

This is to certify:

that the Product referred to herein has been inspected for the Manufacturer, pursuant to the relevant requirements of the European Union Recognised Organisation Mutual Recognition procedure, required by Article 10.1 of EU Regulation 391/2009, and has been found in accordance with those requirements.

This Certificate is valid until **2030-02-02**.

Issued at **Høvik** on **2025-02-03**

DNV local unit: **Netherlands VMC**

for **DNV**

Approval Engineer: **Qiang William Guo**

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Frederik Tore Elter
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.

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.

Product description

TeSys island is a modular, multifunctional system providing integrated functions inside an automation architecture, primarily for the direct control and management of low-voltage loads.

The physical TeSys island consists of a set of devices installed on a single DIN rail and connected with flat cables providing the internal communication between modules.

TeSys Starters:

Utilization Category: AC-1, AC-3, AC-4

Rated impulse withstand voltage Uimp: 6 kV

Rated insulation voltage Ui: 690 V

IP protection : IP20

Main electrical parameters

Model and Specifications	Ith (A)	Thermal setting range (A)	Tripping Class	Phase loss sensitive function: Yes or Not
TPRST009/TPRSS009	15A	0,18 – 9	5 to 30	YES but unable
TPRST025/TPRSS025	30A	0,5 - 25	5 to 30	
TPRST038/TPRSS038	40A	0,76 – 38	5 to 30	
TPRST065/TPRSS065	80A	3,25 - 65	5 to 30	
TPRST080/TPRSS080	80A	4 - 80	5 to 30	

Note: Ith currents are limited to max of thermal setting when thermal overload function is enabled

Model and Specifications		TPRST009/TPRSS009	TPRST025/TPRSS025	TPRST038/TPRSS038	TPRST065/TPRSS065	TPRST080/TPRSS080
Ie (A)		A	A	A	A	A
Utilization category	Ue (V)					
AC-1	690V	15	30	40	80	80
AC-3	230V	8,5	20	31,7	61	80
	400V	8,5	22	35	55	80
	440V	9	25	38	65	65
	500V	9,2	23	28	53	53
	690V	6,7	17	21	39	39
AC-4	230V	7,1	16,7	26,42	61	61
	400V	7,1	18,34	29,2	55	55
	440V	7,5	20,84	20,84	50	50
	500V	7,7	19,2	19,2	33	33
	690V	5,6	14,2	14,2	21	21

Type 2 coordination (IEC)

Reference	Thermal setting range (A)	Ie AC-3 A	Ir (kA)	Iq (kA)	Fuse aM (A max)
TPRST009/TPRSS009	0,18 – 9	9 at 440V 6,7 at 690V	1 1	80kA	10A 8A
TPRST025/TPRSS025	0,5 - 25	25 at 440V 17 at 690V	3 3	80kA	25A 20A
TPRST038/TPRSS038	0,76 - 38	32 at 440V 21 at 690V	3 3	80kA	40A 25A
TPRST065/TPRSS065	3,25 - 65	65 at 440V 39 at 690V	5 3	80kA	63A 63A
TPRST080/TPRSS080	4 - 80	80 at 400V 39 at 690V	5 3	80kA	80A 63A

Manufactured by

Schneider Electric France
2 Rue du Pont Vert, 27100 Le Vaudreuil, France

Application/Limitation

With Uimp = 6 kV the max. rated voltage is 600 V when used in a IT (ship) net. Applicable for use in applications with

directly earthed systems with rated voltage of 400/690 V.

The Starters shall always be used with a Bus coupler (TPRBCxxx) and are not standalone products as they are powered and controlled by the bus couplers.

The control circuit and communication circuit of the power interface modules is originated from the bus coupler. Which was determined to be a Limited Voltage Limited Current Circuit less than 30Vdc and less than 8A.

Type Approval documentation

Marking of product

TeSys™ island – Schneider Electric – Type designation

Other Conditions

Electrical tests in accordance with EU RO MR Technical Requirements – Electrical motor starters (Type tests according to IEC 60947-4-1: 2018.

Environmental tests in accordance with IACS E10 rev.8 2021 (Power supply variation, power supply failure, dielectric, insulation, inclination, vibration, cold, dry heat and damp heat test).

Environmental test parameters:

Temperature: -25 °C and 70 °C

Vibration: ± 1mm / 0.7g

EMC: General power zone

Enclosure: IP20

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed annually and at renewal of this certificate.

Generic Statement for EU RO MR Type Approval Certificate

When a product is presented with this EU RO MR Type Approval Certificate for given application, its acceptability with regards to the limitations stated in the certificate conditions defined in 1b, 1c and 1d of the applied Technical Requirement will be evaluated by the EU RO in charge of classing the ship or being in charge of the unit/system certification.

In accordance with Article 10 of Regulation (EC) No 391/2009 of the European Parliament and of the Council of 23 April 2009 "on common rules and standards for ship inspection and survey organizations", the following organizations, recognized by the EU on this date, have agreed on the technical and procedural conditions under which they will mutually recognize this certificate:

- American Bureau of Shipping (ABS);
- Bureau Veritas (BV);
- China Classification Society (CCS);
- Croatian Register of Shipping (CRS);
- DNV;
- Indian Register of Shipping (IRS);
- Korean Register (KR);
- Lloyd's Register Group Ltd. (LR);
- Nippon Kaiji Kyokai General Incorporated Foundation (ClassNK);
- Polish Register of Shipping (PRS);
- RINA Services S.p.A. (RINA);
- Russian Maritime Register of Shipping (RS).



Job Id: **262.4-000327-1**
Certificate No: **MRE000001H**

The scheme for the mutual recognition of class certificates for materials, equipment and components laid down by Article 10(1) of Regulation (EC) No 391/2009 is only enforceable within the Union in respect of ships flying the flag of a Member State. As far as foreign vessels are concerned, the acceptance of relevant certificates remains at the discretion of relevant non-EU flag States in the exercise of their exclusive jurisdiction, notably under the United Nations Convention on the Law of the Sea (UNCLOS). (In accordance with COMMISSION IMPLEMENTING REGULATION (EU) No 1355/2014 amending Regulation (EC) No 391/2009 - recital (25)).