Certificate no.:
TAE0000519

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Motor Starter

with type designation(s)
TeSys™ island:TPRST009 to TPRST080 and TPRSS009 to TPRSS080

issued to
Schneider Electric Industries SAS
Eybens, **France**

is found to comply with
DNV rules for classification – Ships, offshore units, and high speed and light craft

Application:

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Rated voltage (V)	**230-690**
Rated current (A)	**0.18-80**
Frequency (Hz)	**50/60**

Issued at **Høvik** on **2025-02-04**

This Certificate is valid until **2030-02-03**.

for **DNV**

DNV local unit: **Netherlands VMC**

Approval Engineer: **Qiang William Guo**

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 USD 300 000.

Manufactured by:

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

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/TPRS S025	TPRST038/ TPRSS038	TPRST065/TPR SS065	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

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

Tests carried out

Electrical tests in accordance with IEC 60947-4-1: 2018.
Environmental tests in accordance with DNV-CG-0339 edition Aug. 2021 (Power supply variation, power supply failure, dielectric, insulation, inclination, vibration, cold, dry heat and damp heat and EMC test).

Environmental location class:
Temperature: D
Humidity: B
Vibration: A
EMC: A
Enclosure: A / IP20

Marking of product

TeSys™ island – Schneider Electric – Type designation

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 periodical assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routines (RT) checked (if not available tests 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 to be performed at 2 and 3.5 year and at renewal.

END OF CERTIFICATE