



Certificate no.:
TAE000051B

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Electrical Equipment

with type designation(s)

TeSys™ island:TPRSM001 SIL Interface Module

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.

Temperature	D
Humidity	B
Vibration	A
EMC	A
Enclosure	A / IP20

Issued at **Høvik** on **2025-02-05**

This Certificate is valid until **2030-02-04**.

for **DNV**

DNV local unit: **France CMC**

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:

PT Schneider Electric Manufacturing Batam
Jl. Beringin Lot4 BIP, Mukakuning, Kabil, Sei Beduk,
Batam, Indonesia

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 Safety interface Module

TPRSM001 SIL Interface Module is a kind of relays(auxiliary contacts) that is to be used with the SIL starters TPRSSxxx.

Rated insulation voltage U_i : 50V

Rated impulse withstand voltage U_{imp} : 2 kV

IP protection: IP20

Main electrical parameters

Ratings	Ith(A)	Number of inputs	Number of outputs	Coil voltage
AC-15(0.5A/24VDC)	0.5	2 – Digital input (Type 1 – 24VDC) 2 different inputs	1 output	24VDC
DC-13(0.5A/24VDC)	0.5			

Application/Limitation

The safety interface modules shall always be used with a SIL starters TPRSSxxx 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 60947-5-1:2016

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).

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 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.

Assessment to be performed at 2 and 3.5 year and at renewal.

END OF CERTIFICATE