



Certificate no.:
TAE000051A

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Overcurrent- and Short-Circuit Relay

with type designation(s)

TeSys™ island:TPRPM009,TPRPM038,TPRPM080

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.

Issued at **Høvik** on **2025-02-05**

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

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 thermal overload relay

Rated insulation voltage U_i : 690 V
Rated impulse withstand voltage U_{imp} : 6 kV
IP protection: IP20

Main electrical parameters

Model and Specifications	Ith (A)	Thermal setting range (A)	Tripping Class	Phase loss sensitive function: Yes or No
TPRPM009	15	0,18 – 9	5 to 30	YES
TPRPM038	40	0,76 - 38	5 to 30	YES
TPRPM080	80	4 – 80	5 to 30	YES

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

Type 2 coordination (IEC)

Reference	Thermal setting range (A)	Ie AC-3 A	Ir (kA)	Iq (kA)	Fuse aM (A max)
TPRPM009	0,18 – 9	9 at 690V	1	80kA	10A
TPRPM038	0,76 - 38	38 at 690V	1 or 3	80kA	40A
TPRPM080	4 - 80	80 at 690V	1 or 3 or 5	80kA	80A

Application/Limitation

With $U_{imp} = 6$ 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 power interface modules 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.

These devices do not trip loads but can be programmed to trip the Digital Input Output module if overload is detected.

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 are 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 Routine tests (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.

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

END OF CERTIFICATE