

TYPE APPROVAL CERTIFICATE

This is to certify:**That the High Voltage Switchgear and Control Gear Assemblies**

with type designation(s)

Premset - Marine Version

Issued to

**Schneider Electric Industries SAS
GRENOBLE, France**

is found to comply with

DNV GL rules for classification – Ships, offshore units, and high speed and light craft**Application :****Products approved by this certificate are accepted for installation on all vessels classed by DNV GL.****Rated voltage (V) 12 & 17.5 kV****Rated current (A) 630 - 1250****Rated frequency (Hz) 50 / 60****Degree of protection IP32**Issued at **Høvik** on **2019-02-12**This Certificate is valid until **2024-02-11**.for **DNV GL**DNV GL local station: **Marseille**Approval Engineer: **Nicolay Horn****Marta Alonso Pontes
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.



Name and place of manufacturer

Schneider Electric Industries SAS
Grenoble,
France

Schneider Medium & Low Voltage Co., Ltd
Beijing,
China

Product description

Compact modular switchgear with 2 separate compartments for high voltage (busbar/switching compartment & outgoing circuit) and 1 separate compartment for control/ auxiliary devices.

The type approval covers:

- Disconnecting circuit breaker D01, D02 – MV/LV transformer protection
- Disconnecting circuit breaker D06H – Heavy duty line protection
- Disconnecting circuit breaker D12H – Heavy duty line protection
- Bus riser G06 and G12
- Metering VTM – Voltage transformer

Technical data for Premset

Rated insulation voltage [kV]			17.5	
Rated Insulation level [kV]	Lighting impulse	Common value	95	
		Across the isolating distance	110	
	Power frequency	Common value	38	
		Across the isolating distance	45	
Rated current [A]			Up to 1250	
Rated short-time withstand current 3 s. [kA]			Up to 25	
Rated peak withstand current [kA]			Up to 65	
Arc test 1 s. [kA]			Up to 25	
IP rating:			32	
Disconnecting circuit breaker D01, D02	Rated current [A]		100	200
	Rated short-time withstand current 3 s. [kA]		25	25
	Rated short-time withstand current 4 s. [kA]		20	20
	Rated Peak short circuit capacity [kA]		65	65
Disconnecting circuit breaker D06H, D12H	Rated current [A]		630	1250
	Rated short-time withstand current 3 s. [kA]		25	25
	Rated short-time withstand current 4 s. [kA]		20	20
	Rated Peak short circuit capacity [kA]		65	65

Cubicle dimensions (*)

Height:	1350 to 2230 mm
Depth:	910 to 1384 mm
Width:	375 mm for 630 A, 750 mm for 1250 A

(*) with pressure relief lid(s) and low voltage box

Application/Limitation

Medium voltage switchboard systems of partly partitioned type for use onboard ships and mobile offshore units.

Final design and selection of equipment and components to be made in accordance with the applicable Rules for the actual case.

The type approval covers system design principle in accordance with IEC 62271-100 / 200.

For location in an environment with ambient temperature above 40 °C, the rated current must be derated 1% of each degree above 40 °C.

This type approval certificate does not replace the requirement for a DNV GL product certificate. Documents and drawings for the actual application as stated in the DNV GL Rules Pt.4, Ch.8, Sec. 1, Table 2 except E150 & E160, shall be submitted for approval in each case.

Type Approval documentation

Tests carried out

Type Testing according to 60271-1, IEC 62271-100 / IEC 62271-200: Temperature rise test, internal arc test, dielectric test, short time withstand test, short circuit test. Vibration test, EMC tests and IP testing.

Marking of product

Makers name plate with type and key data in accordance with the DNV rules Pt.4, Ch.8, Sec.4 A 107.

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 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, 3.5 year and at renewal.

END OF CERTIFICATE