

TYPE APPROVAL CERTIFICATE

This is to certify:

That the High Voltage Switchgear and Control Gear Assemblies

with type designation(s)
PIX

Issued to

Schneider Electric (Xiamen) Switchgear Equipment Co. Ltd.
Xiamen, China

is found to comply with
DNV GL rules for classification – Ships and offshore units

Application :

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

Rated voltage (V) 12000
Rated current (A) up to 4000
Rated frequency (Hz) 50/60
Degree of protection IP42

Issued at **Hamburg** on **2020-08-18**

This Certificate is valid until **2025-08-17**.

DNV GL local station: **China South NB**

for **DNV GL**

Approval Engineer: **Harald Amberger**

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Arne Schaarmann
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.



Product description

Air insulated medium voltage switchboard of partitioned type with 3 separate compartments for high voltage (busbar, switching compartment & outgoing circuit) and 1 separate compartment for control/auxiliary devices. Equipped with pressure relief duct.

Ratings:		
Rated voltage U_r	kV	12
Rated frequency f_r	Hz	50/60
Rated lightning impulse withstands voltage U_p	kV	75
Rated power frequency withstands voltage U_d	kV	42
Rated max. nominal current I_r	A	4000*
Rated max. short-time withstand current I_k	kA	50
Rated duration of short circuit t_k	s	4
Arc fault current I_A	kA	50
Arc fault duration t_A	s	1
Loss of service continuity category		LSC 2B
Partition class		PM
Internal arc qualification		IAC A FLR 50kA 1s
Verification of the protection		IP42
*4000A only with forced ventilation		
Further ratings and dimensions acc. manufacturer documentation		

Application/Limitation

Minimum room height with access floor and pressure relief duct 2780mm.

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 by the end manufacturer.

Related fans for forced ventilation are to be monitored.

Operating instruction of the manufacturer to be observed

Type Approval documentation

Tests carried out

Type Testing according to IEC 62271-1 and IEC 62271-200: Temperature rise test, internal arc test, dielectric test, short time withstand test, short circuit test, mechanical operation test, environmental test and IP 4X testing.

Marking of product

Acc. IEC 62271-200 subclause 5.10

Job Id: **262.1-032612-1**
Certificate No: **TAE00003WZ**

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 and 3.5 year and at renewal.

END OF CERTIFICATE