TYPE APPROVAL CERTIFICATE

Certificate no.:
TAE00000GS
Revision No:
2

This is to certify:

that the Circuit Breaker

with type designation(s)
Masterpact

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:

Products approved by this certificate are accepted for installation on all vessels classed by DNV .

Rated voltage (V)	**690 V**
Rated current (A)	**800 - 6300**

Issued at **Høvik** on **2024-07-18**

This Certificate is valid until **2029-06-30**.
DNV local unit: **France FIS**

Approval Engineer: **Qiang William Guo**

for **DNV**

Digitally Signed By: Kristensen, Steinar
Location: DNV Høvik, Norway

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 300,000 USD.

Name and place of manufacturer

Schneider Electric France – MasterTech
Moirans,
France

Schneider Shanghai Power Appl. Co. Ltd
Shanghai,
China

Schneider Electric India Private Limited
Gagillapur village
Hyderabad, Telangania
India

Product description

Air circuit breaker: Masterpact NW.

	NW 08N1	NW 08H1	NW 08H2	NW 10N1
Rated insulation voltage AC (V)	1000	1000	1000	1000
Rated operational voltage AC (V)	690	690	690	690
Rated Current (A)	800	800	800	1000
Rated Frequency (Hz)	50-60	50-60	50-60	50-60
Rated Short-circuit Service Breaking cap (kA)				
690 /660V	42	65	85	42
500/525V	42	65	85	42
440 /415 /400V	42	65	100	42
240V	42	65	100	42
Rated Ultimate short- circuit Breaking cap(kA)				
690 /660V	42	65	85	42
500 /525 V	42	65	85	42
440 /415 /400V	42	65	85	42
240V	42	65	100	42
Utilization category	B	B	B	B

	NW 10H1	NW 10H2	NW 12N1	NW 12H1
Rated insulation voltage AC (V)	1000	1000	1000	1000
Rated operational voltage AC (V)	690	690	690	690
Rated Current (A)	1000	1000	1250	1250
Rated Frequency (Hz)	50-60	50-60	50-60	50-60
Rated Short-circuit Service Breaking cap (kA)				
690 /660V	65	85	42	65
500/525V	65	85	42	65
440 /415 /400V	65	100	42	65
240V	65	100	42	65
Rated Ultimate short- circuit Breaking cap (kA)				
690 /660V	65	85	42	65
500/525V	65	85	42	65
440 /415 /400V	65	100	42	65
240V	65	100	42	65
Utilization category	B	B	B	B

	NW 12H2	NW 16N1	NW 16H1	NW 16H2
Rated insulation voltage AC (V)	1000	1000	1000	1000
Rated operational voltage AC(V)	690	690	690	690
Rated Current (A)	1250	1600	1600	1600
Rated Frequency (Hz)	50-60	50-60	50-60	50-60
Rated Short-circuit Service Breaking cap (kA)				
690 /660V	85	42	65	85
500/525V	85	42	65	85
440 /415 /400V	100	42	65	100
240V	100	42	65	100
Rated Ultimate short- circuit Breaking cap(kA)				
690 /660V	85	42	65	85
500/525V	85	42	65	85
440 /415 /400V	100	42	65	100
240V	100	42	65	100
Utilization category	B	B	B	B

	NW 20H1	NW 20H2	NW 20H3	NW 25H1
Rated insulation voltage AC (V)	1000	1000	1000	1000
Rated operational voltage AC(V)	690	690	690	690
Rated Current (A)	2000	2000	2000	2500
Rated Frequency (Hz)	50-60	50-60	50-60	50-60
Rated Short-circuit Service Breaking cap (kA)				
690 /660V	65	85	100	65
500/525V	65	85	130	65
440 /415 /400V	65	100	150	65
240V	65	100	150	65
Rated Ultimate short- circuit Breaking cap(kA)				
690 /660V	65	85	100	65
500/525V	65	85	130	65
440 /415 /400V	65	100	150	65
240V	65	100	150	65
Utilization category	B	B	B	B

	NW 25H2	NW 25H3	NW 32 H1	NW 32H2
Rated insulation voltage AC (V)	1000	1000	1000	1000
Rated operational voltage AC(V)	690	690	690	690
Rated Current (A)	2500	2500	3200	3200
Rated Frequency (Hz)	50-60	50-60	50-60	50-60
Rated Short-circuit Service Breaking cap (kA)				
690 /660V	85	100	65	85
500/525V	85	130	65	85
440 /415 /400V	100	150	65	100
240V	100	150	65	100
Rated Ultimate short- circuit Breaking cap(kA)				
690 /660V	85	100	65	85
500/525V	85	130	65	85
440 /415 /400V	100	150	65	100
240V	100	150	65	100
Utilization category	B	B	B	B

	NW 32H3	NW 40H1	NW 40H2	NW 40H3
Rated insulation voltage AC (V)	1000	1000	1000	1000
Rated operational voltage AC(V)	690	690	690	690
Rated Current (A)	3200	4000	4000	4000
Rated Frequency (Hz)	50-60	50-60	50-60	50-60
Rated Short-circuit Service Breaking cap (kA)				
690 /660V	100	65	85	100
500/525V	130	65	85	130
440 /415 /400V	150	65	100	150
240V	150	65	100	150
Rated Ultimate short- circuit Breaking cap(kA)				
690 /660V	100	65	85	100
500/525V	130	65	85	130
440 /415 /400V	150	65	100	150
240V	150	65	100	150
Utilization category	B	B	B	B

	NW 40bH1	NW 40bH2	NW 50H1	NW 50H2
Rated insulation voltage AC (V)	1000	1000	1000	1000
Rated operational voltage AC(V)	690	690	690	690
Rated Current (A)	4000	4000	5000	5000
Rated Frequency (Hz)	50-60	50-60	50-60	50-60
Rated Short-circuit Service Breaking cap (kA)				
690 /660V	100	100	100	100
500/525V	100	130	100	130
440 /415 /400V	100	150	100	150
240V	100	150	100	150
Rated Ultimate short- circuit Breaking cap (kA)				
690 /660V	100	100	100	100
500/525V	100	130	100	130
440 /415 /400V	100	150	100	150
240V	100	150	100	150
Utilization category	B	B	B	B

	NW 63H1	NW 63H2	NW 8L1	NW 10L1
Rated insulation voltage AC (V)	1000	1000	1000	1000
Rated operational voltage AC(V)	690	690	690	690
Rated Current (A)	6300	4000	800	1000
Rated Frequency (Hz)	50-60	50-60	50-60	50-60
Rated Short-circuit Service Breaking cap (kA)				
690 /660V	100	100	100	100
500/525V	100	130	130	130
440 /415 /400V	100	150	150	150
240V	100	150	150	150
Rated Ultimate short- circuit Breaking cap(kA)				
690 /660V	100	100	100	100
500/525V	100	130	130	130
440 /415 /400V	100	150	150	150
240V	100	150	150	150
Utilization category	B	B	B	B

	NW 12L1	NW 16L1	NW 20L1
Rated insulation voltage AC (V)	1000	1000	1000
Rated operational voltage AC(V)	690	690	690
Rated Current (A)	1250	1600	2000
Rated Frequency (Hz)	50-60	50-60	50-60
Rated Short-circuit Service Breaking cap (kA) Ics			
690 /660V	100	100	100
500/525V	130	130	130
440 /415 /400V	150	150	150
240V	150	150	150
Rated Ultimate short- circuit Breaking cap(kA) Icu			
690 /660V	100	100	100
500/525V	130	130	130
440 /415 /400V	150	150	150
240V	150	150	150
Utilization category	B	B	B

Overcurrent releases: Micrologic Control Units 2.0, 5.0, 6.0, 7.0 - A, P, H, E
All test results are given according to IEC 60947-2.

Technical data disconnecting switch (Short circuit data for 690 V only):

	NW08NA	NW10NA	NW12NA	NW16NA
Rated insulation voltage AC (V)	1000	1000	1000	1000
Rated operational voltage AC(V) **	690	690	690	690
Rated Current (A)	800	1000	1250	1600
Rated Frequency (Hz)	50-60	50-60	50-60	50-60
Rated operational current (A) Ie AC23A	800	1000	1250	1600
Ultimate breaking capacity(kA) Icu	N/A	N/A	N/A	N/A
Short time making capacity (kA) Icm	88	88	88	88
Short time withstand current (kA) Icw - 1sec	42	42	42	42

	NW08HA	NW10HA	NW12HA	NW16HA
Rated insulation voltage AC (V)	1000	1000	1000	1000
Rated operational voltage AC(V) **	690	690	690	690
Rated Current (A)	800	1000	1250	1600
Rated Frequency (Hz)	50-60	50-60	50-60	50-60
Rated operational current (A) Ie AC23A	800	1000	1250	1600
Ultimate breaking capacity(kA) Icu	N/A	N/A	N/A	N/A
Short time making capacity (kA) Icm	143	143	143	143
Short time withstand current (kA) Icw- 1sec	65	65	65	65

	NW20HA	NW25HA	NW32HA	NW40HA
Rated insulation voltage AC (V)	1000	1000	1000	1000
Rated operational voltage AC(V) **	690	690	690	690
Rated Current (A)	2000	2500	3200	4000
Rated Frequency (Hz)	50-60	50-60	50-60	50-60
Rated operational current (A) Ie AC23A	2000	2500	3200	4000
Ultimate breaking capacity(kA) Icu	N/A	N/A	N/A	N/A
Short time making capacity (kA) Icm	143	143	143	143
Short time withstand current (kA) Icw-1sec	65	65	65	65

	NW40bHA	NW50HA	NW63HA
Rated insulation voltage AC (V)	1000	1000	1000
Rated operational voltage AC(V) **	690	690	690
Rated Current (A)	4000	5000	6300
Rated Frequency (Hz)	50-60	50-60	50-60
Rated operational current (A) Ie AC23A	4000	5000	6300
Ultimate breaking capacity(kA) Icu	N/A	N/A	N/A
Short time making capacity (kA) Icm	187	187	187
Short time withstand current (kA) Icw-1sec	85	85	85

	NW08HF	NW10HF	NW12HF	NW16HF
Rated insulation voltage AC (V)	1000	1000	1000	1000
Rated operational voltage AC(V) **	690	690	690	690
Rated Current (A)	800	1000	1250	1600
Rated Frequency (Hz)	50-60	50-60	50-60	50-60
Rated operational current (A) Ie AC23A	800	1000	1250	1600
Ultimate breaking capacity(kA) Icu	85	85	85	85
Short time making capacity (kA) Icm	187	187	187	187
Short time withstand current (kA) Icw-1sec	85	85	85	85

	NW20HF	NW25HF	NW32HF	NW40HF
Rated insulation voltage AC (V)	1000	1000	1000	1000
Rated operational voltage AC(V) **	690	690	690	690
Rated Current (A)	2000	2500	3200	4000
Rated Frequency (Hz)	50-60	50-60	50-60	50-60
Rated operational current (A) Ie AC23A	2000	2500	3200	4000
Ultimate breaking capacity(kA) Icu	85	85	85	85
Short time making capacity (kA) Icm	187	187	187	187
Short time withstand current (kA) Icw-1sec	85	85	85	85

All test results are given according to IEC 60947-2 and 60947-3.

Application/Limitation

Shall be installed and tested according to Det Norske Veritas' Rules for Ships and Mobile Offshore Units. The manufacturer's instruction to be observed.

Suitable for use in an IT system with a capacity of 1.2 times the maximum trip current at up to 690 V.

Type Approval documentation

Technical:
Catalogue 2023 "Masterpact NT and NW"

Test reports:
CNAS test reports nos. 20111990022-01 and 20111990022-02 dated 2020-11-16. Nos AT19-0373-1 and AT19-0373-2 dated 2019-05-24
L2E test reports nos 201304204_004 dated 2014-03-10 and 201403676_001 dated 2014-05-22. 23119Y90048 dated 2024-01-08.
DEKRA test reports nos. 2266478.01-INC dated 2022-04-21 and2266490.0502-EMC dated 2022-07-11

.

Tests carried out

Type tests according to: IEC 60947-2, vibration test, cold test, dry heat test, damp heat test, salt mist test and EMC test.

Marking of product

Schneider Electric – Masterpact NW Power Circuit-Breaker and Switch-Disconnector –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