DNV·GL

Certificate No:
TAE00002CS

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Motor Starter

with type designation(s)
3RW44

Issued to
Siemens AG GWA
Amberg, Germany

is found to comply with
DNV GL 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 GL.

Rated voltage (V)	**up to 690**
Rated current (A)	**29 - 1076**
Frequency (Hz)	**50 / 60**

Issued at **Hamburg** on **2018-01-23**
This Certificate is valid until **2023-01-22**.
DNV GL local station: **Augsburg**

Approval Engineer: **Harald Amberger**

for **DNV GL**

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.

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Job Id: **262.1-003026-4**
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Product description

AC Semiconductor Motor Starter, type 3RW442, 3RW443, 3RW444, 3RW445 and 3RW446 including accessories 3RT19, 3RW49 & 3UF793 according to size and power as listed below	
Ratings	
Operational voltage U_e	200 - 460 V, 400 - 600 V or 400 - 690 V
Impuls withstand voltage U_{imp}	6kV
Insulation voltage U_i	690V
Operational current I_e 40°C	29 up to 1214 A / standard circuit

Type		Normal starting (CLASS 10) in inline circuit							
3RW44…		Rated power of three-phase-motors [kW]						Rated operational current I_e AC53a [A]	
		400V		500V		690V			
		40°C	50°C	40°C	50°C	40°C	50°C	40°C	50°C
3RW442.-…	up to	15	11	18.5	15	30	22	29	26
3RW443.-…	up to	18.5	15	22	18.5	37	30	36	32.2
3RW444.-…	up to	22	22	30	22	45	37	47	42
3RW445.-…	up to	30	22	37	30	55	45	57	51
3RW446.-…	up to	37	37	45	45	75	55	77	68

Application/Limitation

Location Classes:
Temperature: D, Humidity: B, Vibration: A, Enclosure: IP20, EMC: A

For installation inside switchboards/ enclosures onboard ships and offshore units.
With Uimp=6kV; Overvoltage category II applies for applications in IT systems > 600 V.

The device maybe also used Inside-the-Delta-Circuit. For ratings refer to the manufactures documentation.

Type Approval documentation

Tests carried out

IEC/EN60947, dry heat, damp heat, salt mist, vibration, high voltage, EMC, inclination, flame retardancy.

Marking of product

Manucfacturers label containing data and manufacturer's type number.

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.

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.