DNV·GL

TYPE APPROVAL CERTIFICATE

Certificate No:
TAE00002CS
Revision No:
1

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 **2019-01-25**

This Certificate is valid until **2023-01-22**.
DNV GL local station: **Augsburg**

Approval Engineer: **Harald Amberger**

for **DNV GL**
Digitally Signed By: Schaarmann, Arne
Location: DNV GL SE Hamburg, Germany
Signing Date: 2019-02-04

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

AC Semiconductor Motor Starter, type 3RW442, 3RW443, 3RW444, 3RW445 and 3RW446 including accessories 3RT19, 3RW49 & 3UF793 according to size and power as listed below.

Max. Voltage = 690 V (Directly earthed). Rated Insulation Voltage 600 V (IT-net). See “Application limitation”.

Ambient temperature 40°C:

Sirius 3RW442	Current Ie AC 53a	Ratings 3 phase, AC 53a In-Line-Circuit			
		230 V	400 V	500 V	690 V
3RW4422	29 A	5.5 kW	15 kW	18.5 kW	30 kW
3RW4423	36 A	7.5 kW	18.5 kW	22 kW	37 kW
3RW4424	47 A	11 kW	22 kW	30 kW	45 kW
3RW4425	57 A	15 kW	30 kW	37 kW	55 kW
3RW4426	77 A	18.5 kW	37 kW	45 kW	75 kW
3RW4427	93 A	22 kW	45 kW	55 kW	90 kW

Ambient temperature 50°C:

Sirius 3RW442	Current Ie AC 53a	Ratings 3 phase, AC 53a In-Line-Circuit			
		230 V	400 V	500 V	690 V
3RW4422	26 A	5.5 kW	11 kW	15 kW	22 kW
3RW4423	32.2 A	7.5 kW	15 kW	18.5 kW	30 kW
3RW4424	42 A	11 kW	22 kW	22 kW	37 kW
3RW4425	51 A	15 kW	22 kW	30 kW	45 kW
3RW4426	68 A	18.5 kW	37 kW	45 kW	55 kW
3RW4427	82 A	22 kW	45 kW	55 kW	75 kW

Ambient temperature 40°C:

Sirius 3RW443	Current Ie AC 53a	Ratings 3 phase, AC 53a In-Line-Circuit			
		230 V	400 V	500 V	690 V
3RW4434	113 A	30 kW	55 kW	75 kW	110 kW
3RW4435	134 A	37 kW	75 kW	90 kW	132 kW
3RW4436	162 A	45 kW	90 kW	110 kW	160 kW

Ambient temperature 50°C:

Sirius 3RW443	Current Ie AC 53a	Ratings 3 phase, AC 53a In-Line-Circuit			
		230 V	400 V	500 V	690 V
3RW4434	100 A	30 kW	55 kW	55 kW	90 kW
3RW4435	117 A	37 kW	55 kW	75 kW	110 kW
3RW4436	145 A	45 kW	75 kW	90 kW	132 kW

Ambient temperature 40°C:

Sirius 3RW444	Current Ie AC 53a	Ratings 3 phase, AC 53a In-Line-Circuit			
		230 V	400 V	500 V	690 V
3RW4443	203 A	55 kW	110 kW	132 kW	200 kW
3RW4444	250 A	75 kW	132 kW	160 kW	250 kW
3RW4445	313 A	90 kW	160 kW	200 kW	315 kW
3RW4446	356 A	110 kW	200 kW	250 kW	355 kW
3RW4447	432 A	132 kW	250 kW	315 kW	400 kW

Ambient temperature 50°C:

Sirius 3RW444	Current Ie AC 53a	Ratings 3 phase, AC 53a In-Line-Circuit			
		230 V	400 V	500 V	690 V
3RW4443	180 A	55 kW	90 kW	110 kW	160 kW
3RW4444	215 A	55 kW	110 kW	132 kW	200 kW
3RW4445	280 A	90 kW	160 kW	200 kW	250 kW
3RW4446	315 A	90 kW	160 kW	200 kW	315 kW
3RW4447	385 A	110 kW	200 kW	250 kW	355 kW

Ambient temperature 40°C:

Sirius 3RW445	Current Ie AC 53a	Ratings 3 phase, AC 53a In-Line-Circuit			
		230 V	400 V	500 V	690 V
3RW4453	551 A	160 kW	315 kW	355 kW	560 kW
3RW4454	615 A	200 kW	355 kW	400 kW	630 kW
3RW4455	693 A	200 kW	400 kW	500 kW	710 kW
3RW4456	780 A	250 kW	450 kW	560 kW	800 kW
3RW4457	880 A	250 kW	500 kW	630 kW	900 kW
3RW4458	970 A	315 kW	560 kW	710 kW	1000 kW

Ambient temperature 50°C:

Sirius 3RW445	Current Ie AC 53a	Ratings 3 phase, AC 53a In-Line-Circuit			
		230 V	400 V	500 V	690 V
3RW4453	494 A	160 kW	250 kW	355 kW	500 kW
3RW4454	551 A	160 kW	315 kW	355 kW	560 kW
3RW4455	615 A	200 kW	355 kW	400 kW	630 kW
3RW4456	693 A	200 kW	400 kW	500 kW	710 kW
3RW4457	780 A	250 kW	450 kW	560 kW	800 kW
3RW4458	850 A	250 kW	500 kW	630 kW	800 kW

Ambient temperature 40°C:

Sirius 3RW446	Current Ie AC 53a	Ratings 3 phase, AC 53a In-Line-Circuit			
		230 V	400 V	500 V	690 V
3RW4465	1076 A	355 kW	630 kW	710 kW	1000 kW
3RW4466	1214 A	400 kW	710 kW	800 kW	1200 kW

Ambient temperature 50°C:

Sirius 3RW446	Current Ie AC 53a	Ratings 3 phase, AC 53a In-Line-Circuit			
		230 V	400 V	500 V	690 V
3RW4465	970 A	315 kW	560 kW	710 kW	900 kW
3RW4466	1076 A	355 kW	630 kW	800 kW	1000 kW

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

As per tech.-docs. in NPS 262.1-003026-4

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.