

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Motor Starter**with type designation(s)
3RA6

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) 0.1 - 32****Frequency (Hz) 50 / 60**Issued at **Hamburg** on **2018-01-26**for **DNV GL**This Certificate is valid until **2023-01-25**.DNV GL local station: **Augsburg**Approval Engineer: **Harald Amberger**

**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

| | | | | | |
|---|-----------------------------|---------------|----------|----------|---------|
| 3RA61... Load feeders, direct-on-line-starters | | | | | |
| 3RA62... Load feeders, reversing starters | | | | | |
| 3RA64... Load feeders, direct-on-line-starters for IO-Link | | | | | |
| 3RA65... Load feeders, reversing starters for IO-Link | | | | | |
| Ratings | | | | | |
| Type | 3RA61... | 3RA62... | 3RA64... | 3RA65... | |
| Size | S0 | | | | |
| Number of poles | 3 | | | | |
| Max. operational voltage U_e | 690V | | | | |
| Insulation voltage U_i | 690V | | | | |
| Impulse withstands voltage U_{imp} | 6kV | | | | |
| Service short-circuit capacity I_{cs} | 53kA at 50/60Hz, 400V AC | | | | |
| Frequency (Hz) | 50/60Hz | | | | |
| Trip class (CLASS) | 10/20 | | | | |
| Control supply voltage | 24V AC/DC, 110...240V AC/DC | | | 24V DC | |
| Setting range | Current I_e AC-43 | Power Ratings | | | |
| | | 230V AC | 400V AC | 500V AC | 690V AC |
| 0,1 - 0,4 A | 0,4 A | 0,06 kW | 0,09 kW | 0,12 kW | 0,18 kW |
| 0,32 - 1,25 | 1,25 A | 0,18 kW | 0,37 kW | 0,55 kW | 0,75 kW |
| 1 - 4 A | 4 A | 0,75 kW | 1,5 kW | 2,2 kW | 3 kW |
| 3 - 12 A | 12 A | 3 kW | 5,5 kW | 5,5 kW | 7,5 kW |
| 8 - 32 A | 32 A | 7,5 kW | 15 kW | 18,5 kW | 30 kW |
| Further ratings according manufacturer documentation | | | | | |

| | |
|---------------------------------|---|
| Accessories; Basic types | |
| 3RA6812-... | Three-phase infeed and expansion modules 25/35mm ² |
| 3RA6813-... | Three-phase infeed and expansion modules 50/75mm ² |
| 3RA6830-5AC | Spring-loaded infeed 25/35 mm ² left or right |
| 3RA6822-... | Two-socket expansion modules |
| 3RA6823-... | Three-socket expansion modules |
| 3RA691.-... | Auxiliary switch blocks for compact starters |
| 3RA6920-... | Main circuits- and control circuits terminals |
| 3RV1915-1... | Three-phase busbars for infeed with 3RA& |
| 3RV1915-6AB | Covers for connection tags of the three-phase busbars |
| 3RV.9.5-5... | Three-phase infeed terminals for three-phase busbars |
| 8US1211-1NS10 | Busbar adapters for 60 mm systems |
| 8US1250-1AA10 | Device holders for lateral mounting along side the busbar adapter for 60 mm systems |
| 3RV2926-0... | Door-coupling rotary operating mechanisms for operating the compact starter with closed control cabinet doors |

Ratings and mounting locations according manufacturer documentation.

Job Id: **262.1-015867-2**
Certificate No: **TAE00002HY**

Application/Limitation

Location Classes:

Temperature: C, 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.

Max. operation voltage 400V AC at 3RA6250-.E... and 3RA6500-.E... reversing starter 32A design.

Type Approval documentation

As per tech.-docs. in NPS 262.1-015867-2

Tests carried out

IEC/EN60947-6-2 and IEC/EN 60947-5-1, cold, dry heat, damp heat, vibration, flame retardancy, inclination, EMC.

Marking of product

Manufacturers label containing data and manufacturers 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.

END OF CERTIFICATE