



Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

This certificate is issued to:

PRODUCER Siemens AG
GWA
Werner-von-Siemens-Strasse 48
92220 Amberg
Germany

DESCRIPTION Monitoring relays

TYPES

3UG4	511	-1	A	P	20
I	II	III	IV	V	VI

I. Basic Type:
3UG4 - monitoring relays

II. Function:

- 511 - 3-phase sequence monitoring, powered by the line voltage
- 512 - 3-phase sequence monitoring, phase loss, powered by the line voltage
- 513 - analogue setting, 3-phase sequence monitoring, phase loss, undervoltage, powered by the line voltage
- 614 - digital setting, 3-phase sequence monitoring, phase loss, undervoltage, unsymmetry, powered by the line voltage
- 615 - digital setting, 3-phase powered by the line voltage sequence monitoring, phase loss, over/under-voltage,
- 616 - digital setting, 3-phase sequence monitoring, neutral-monitoring, phase loss, over/under-voltage, powered by the line voltage

Certificate No. 06/20021 (E3)

Issue Date 21 November 2016

Expiry Date 31 December 2020

Sheet 1 of 5



Thorsten Wolff
Hamburg Technical Support Office



Lloyd's Register

Lloyd's Register EMEA

LR031.1.2013.12

Thorsten Wolff
Hamburg Technical Support Office
Lloyd's Register EMEA

Lloyd's Register EMEA
71 Fenchurch Street, London EC3M 4BS

Lloyd's Register EMEA
Is a subsidiary of Lloyd's Register Group



TYPES continued

- 617 - digital setting, 3-phase sequence monitoring, phase loss, over/under-voltage, unsymmetry, with output for phase correction, powered by the line voltage
- 618 - digital setting, 3-phase sequence monitoring, neutral-monitoring, phase loss, over/under-voltage, unsymmetry, with output for phase correction, powered by the line voltage

III. Type of terminal:

- 1 - screw terminal
- 2 - spring terminal

IV. Auxiliary contact assembly:

- A - 1 changeover contact
- B - 2 changeover contacts
- C - 1 + 1 changeover contacts

V. Supply of line voltage:

- N - powered by the line voltage; 160-260V ac line voltage
- P - powered by the line voltage; 320-500V ac line voltage
- Q - powered by the line voltage; 420-690V ac line voltage
- R - powered by the line voltage; 160-690V ac line voltage

VI. ac/dc

20 - ac

3UG4	621	-1	A	W	30
I	II	III	IV	V	VI

I. Basic Type:

3UG4 - monitoring relays

II. Function:

621 - digital setting, single-phase current monitoring 3 mA - 500mA, over/under-current

Certificate No. 06/20021 (E3)

Issue Date 21 November 2016

Expiry Date 31 December 2020

Sheet 2 of 5

Thorsten Wolff
Hamburg Technical Support Office

Lloyd's Register EMEA

LR031.1.2013.12

Thorsten Wolff
Hamburg Technical Support Office
Lloyd's Register EMEA

Lloyd's Register EMEA
71 Fenchurch Street, London EC3M 4BS

Lloyd's Register EMEA
Is a subsidiary of Lloyd's Register Group



TYPES continued

- 622 - digital setting, single-phase current monitoring 0.05A - 10A, over/under-current
- 631 - digital setting, single-phase voltage monitoring, 0.1V - 60V, over/under-voltage
- 632 - digital setting, single-phase voltage monitoring, 10V - 600V, over/under-voltage
- 633 - digital setting, single-phase voltage monitoring, powered by the line voltage, 17-275V, over/under-voltage
- 641 - digital setting, single-phase power factor and current monitoring

III. Type of terminal:

- 1 - screw terminal
- 2 - spring terminal

IV. Auxiliary contact assembly:

- A - 1 changeover contact
- C - 1 + 1 changeover contacts

V. Supply of line voltage:

- A - 24V ac/dc supply voltage
- L - powered by the line voltage; 17-275V ac/dc line voltage
- S - powered by the line voltage; 90-690V ac line voltage
- W - 24V - 240V ac/dc supply voltage

VI. ac/dc

- 20 - ac, only for single-phase power factor and current monitoring
- 30 - ac/dc

3UG4	501	-1	A	W	30
I	II	III	IV	V	VI

I. Basic Type:

3UG4 - monitoring relays

Certificate No.

06/20021 (E3)

Issue Date


21 November 2016

Expiry Date


31 December 2020

Sheet

3 of 5



Thorsten Wolff
Hamburg Technical Support Office



Lloyd's Register

Lloyd's Register EMEA

LR031.1.2013.12

Thorsten Wolff
Hamburg Technical Support Office
Lloyd's Register EMEA

Lloyd's Register EMEA

71 Fenchurch Street, London EC3M 4BS

Lloyd's Register EMEA
Is a subsidiary of Lloyd's Register Group



TYPES continued

II. Function:
501 – monitoring levels of conductive liquids
651 – digital setting, speed monitoring (not for safety related rpm detection)

III. Type of terminal:
1 - screw terminal
2 - spring terminal

IV. Auxiliary contact assembly:
A - 1 changeover contact

V. Supply of line voltage:
A - 24V ac/dc supply voltage
W - 24V - 240V ac/dc supply voltage

VI. ac/dc
30 – ac/dc

3UG4	624	-1	C	S	20
I	II	III	IV	V	VI

I. Basic Type:
3UG4 – monitoring relays

II. Function:
624 - fault current monitoring

III. Type of terminal:
1 - screw terminal
2 - spring terminal

IV. Auxiliary contact assembly:
C - 1 + 1 changeover contacts



Certificate No. 06/20021 (E3)

Issue Date 21 November 2016

Expiry Date 31 December 2020

Sheet 4 of 5

Thorsten Wolff
Hamburg Technical Support Office

Lloyd's Register EMEA

LR031.1.2013.12

Thorsten Wolff
Hamburg Technical Support Office
Lloyd's Register EMEA

Lloyd's Register EMEA
71 Fenchurch Street, London EC3M 4BS

Lloyd's Register EMEA
Is a subsidiary of Lloyd's Register Group



TYPES continued

V. Supply of line voltage:
S - powered by the line voltage; 90-690V ac line voltage
W - 24V - 240V ac/dc supply voltage

VI. ac/dc
20 - ac
30 - ac/dc

APPLICATION

Marine, offshore and industrial applications for use in environmental categories ENV1, ENV2 and ENV3 (power distribution zone) as defined in Lloyd's Register's Type Approval System, Test Specification Number 1 - 2002.

STANDARD

IEC 60947-5-1: 07-2009

PLACE OF PRODUCTION

Siemens AG
GWA
Werner-von-Siemens-Strasse 48
92220 Amberg
Germany

Siemens NST
Volanovska 516
541 01 Trutnov
Czech Republic

The Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

If the specified standards are amended during the validity of this certificate, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply.

The Design Appraisal Document No. HTS/ETS xxx and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Certificate No. 06/20021 (E3)
Issue Date 21 November 2016
Expiry Date 31 December 2020
Sheet 5 of 5

Thorsten Wolff
Hamburg Technical Support Office
Lloyd's Register EMEA
LR031.1.2013.12

Thorsten Wolff
Hamburg Technical Support Office
Lloyd's Register EMEA

Lloyd's Register EMEA
71 Fenchurch Street, London EC3M 4BS

Lloyd's Register EMEA
Is a subsidiary of Lloyd's Register Group

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.