

# **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 supersedes certificate number 15/20006 (E2) issued on 07.06.2016 which is hereby cancelled.

This certificate is issued to:

PRODUCER Siemens AG

Low Voltage Siemensstr. 10 93055 Regensburg

Germany

**DESCRIPTION** Moulded case circuit breaker SENTRON 3VA

**TYPES** 3VA1①②-③④⑤⑥

① Model type/frame size: 0 = 100A, 1 = 160A

② Rated current: 96, 20, 25, 32, 40, 50, 63, 80, 10, 12\*, 16\*, 02\*, 04\*, 08\*, 92\*

(\*only 160A version)

③ AIC-level: 2 (only 100A version), 3, 4, 5, 6 (only 160A version)

4 Trip unit: ED, EE, EF, FD, FE, FF, GD, GE, GF, MG\*, MH\*

(\*only 160A version)

S Number of poles: 1,2, 3, 4

Connection technology: 2, 6

3VA502-3456

① Model type/frame size:1 = 125A

② Rated current: 95, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 10, 11, 12

③ AIC-level: 4, 5, 6

1 Trip unit: ED, EE, EF, FD, FE, FF, GD, GE, GF, MH, BB

S Number of poles: 1,2, 3, 4, 5, 6Connection technology: 1, 6

**Certificate No.** 15/20006 (E3)

**Issue Date** 22 October 2018

Expiry Date 11 February 2020

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Thorsten Wolff
Hamburg Technical Support Office

Lloyd's Register EMEA

R031.1.2013.12

Thorsten Wolff

Hamburg Technical Support Office Lloyd's Register EMEA

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

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#### **TYPES** continued

#### 3VM102-3456

- ① Model type/frame size: 0 = 100A, 1 = 160A
- ② Rated current: 08\*, 92\*, 96, 20, 25, 32, 40, 50, 63, 80, 10, 12\*, 16\* (\*only 160A version)
- ③ AIC-level: 2 (only 100A version), 3, 4, 5 (only 160A version)
- Trip unit: ED, EE, GD, GE, MG\*, MH\* (\*only 160A version)
- ⑤ Number of poles: 1,2, 3, 4
- © Connection technology: 2, 6

#### 3VA102-3456

- ① Model type/frame size: 2 = 250A
- ② Rated current: 16, 20, 25
- 3 AIC-level: 4 (S class), 5 (M class), 6 (H class)
- <sup>(4)</sup> Trip unit: EE, EF, FF, GE, GF, MH
- ⑤ Number of poles: 3, 4
- © Connection technology: 2, 6

## 3VM102-3456

- ① Model type/frame size: 2 = 250A
- ② Rated current: 16, 20, 25
- 3 AIC-level: 4 (S class), 5 (M class)
- **Trip unit: ED, EE, GD, GE, MH**
- © Number of poles: 3, 4
- © Connection technology: 2, 6

#### 3VA502-3456

- ① Model type/frame size: 2 = 250A
- ② Rated current: 95, 30, 35, 40, 45, 50, 60, 70, 80, 90, 10, 11, 12, 15, 17, 20, 22, 25
- 3 AIC-level: 5 (M class), 6 (H class), 7 (C class)
- 4 Trip unit: EF, FF, GF, BB
- ⑤ Number of poles: 3, 4, 6
- © Connection technology: 1

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#### **TYPES** continued

#### 3VA102-3456

- ① Model type/frame size: 3 = 400A, 4 = 630A
- ② Rated current: 25\*, 32\* (\*only 400A version), 40, 50\*\*, 63\*\* (\*\*only 630A version)
- ③ AIC-level: 4 (S class), 5 (M class), 6 (H class), 7 (C class)
- <sup>(4)</sup> Trip unit: EE, EF, FF, GE, GF, MH
- © Number of poles: 3, 4
- © Connection technology: 2

#### 3VM102-3456

- ① Model type/frame size: 3 = 400A, 4 = 630A
- ② Rated current: 25\*, 32\* (\*only 400A version), 40, 50\*\*, 63\*\* (\*\*only 630A version)
- 3 AIC-level: 4 (S class), 5 (M class)
- **4** Trip unit: EE, EF, GE, GF, MH
- © Number of poles: 3, 4
- © Connection technology: 2

### 3VA5①2-3456

- ① Model type/frame size: 3 = 400A, 4 = 600A
- ② Rated current: 20\*, 22\*, 25\*, 30\*, 35\* (\*only 400A version), 40, 45\*\*, 50\*\*, 60\*\* (\*\*only 600A version)
- 3 AIC-level: 5 (M class), 6 (H class), 7 (C class)
- <sup>(4)</sup> Trip unit: EE, EF, FF, GE, GF, MH, BB
- © Number of poles: 3, 4
- © Connection technology: 2

## 3VA102-3456

- ① Model type/frame size: 5 = 1000A
- ② Rated current: 63, 80, 10
- 3 AIC-level: 5 (M class), 6 (H class), 7 (C class)
- @ Trip unit: EE, EF, FF, GE, GF, MH, BB
- ⑤ Number of poles: 3, 4
- © Connection technology: 2

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#### **TYPES** continued

3VA202-3456

- ① Model type/frame size: 0 = 100A, 1 = 160A, 2 = 250A
- ② Rated current: 25\*, 40\*, 63\*, 10\*, 16\*\*, 20\*\*\*, 25\*\*\*
  (\*only 100A/160A version, \*\*only 160A/250A version, \*\*\*only 250A version)
- 3 AIC-level: 0, 1, 5, 6, 7, 8
- Trip unit: HK, HL, HM, HN, JP, JQ, KP, KQ, MN, MP, MQ, MS
- ⑤ Number of poles: 3, 4
- © Connection technology: 2, 6

#### 3VA602-3456

- ① Model type/frame size: 1 = 150A, 2 = 250A
- ② Rated current: 25\*, 30\*, 40\*, 50\*, 70\*, 80\*, 90\*, 10, 11\*\*, 12\*\*, 15\*\*, 20\*\*, 25\*\* (\*only 150A version, \*\*only 250A version)
- ③ AIC-level: 1, 5, 6, 7, 8
- 4 Trip unit: HL, HM, HN, JP, JQ, KL, KM, KP, KQ, KT, MS
- © Number of poles: 3, 4
- © Connection technology: 1

#### 3VA202-3456

- ① Model type/frame size: 3 = 400A, 4 = 630A
- ② Rated current:25\*, 40, 50\*\*, 63\*\* (\*only 400A version, \*\*only 630A version)
- 3 AIC-level: 5, 6, 7
- Trip unit: HL, HM, HK, HN, JP, JQ, KP, KQ, MN, MP, MQ, MS
- ⑤ Number of poles: 3, 4
- © Connection technology: 2

## 3VA602-3456

- ① Model type/frame size: 3 = 400A, 4 = 600A
- ② Rated current: 20, 25\*, 40, 50\*\*, 60\*\* (\*only 400A version, \*\*only 600A version)
- 3 AIC-level: 1, 5, 6, 7, 8
- 4 Trip unit: HM, HN, JP, JQ, KL, KM, KP, KQ, KT, MS, BB
- © Number of poles: 3, 4
- © Connection technology: 1

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TYPES continued 3VA2①②-③④⑤⑥

① Model type/frame size: 5 = 1000A

② Rated current: 63, 80, 10

3 AIC-level: 5, 6, 7

<sup>(4)</sup> Trip unit: HL, HM, HK, HN, JP, KQ, MN, MP, MQ, MS

S Number of poles: 3, 4Connection technology: 2

Accessories: 3VA9, 3VM9, 3VW9, 8UD display unit DSP800

**APPLICATION** Marine applications for use in environmental categories ENV1, ENV2 and

ENV3 as defined in Lloyd's Register's Type Approval System, Test

Specification Number 1 – 2013.

ADDITIONAL TEST Low temperature (-25°C/16hrs)

**SPECIFIED STANDARDS** IEC 60947-1 Ed.5.1: 2011

IEC 60947-2 Ed.4.2: 2013 IEC 60947-4-1 Ed.4.2: 2013 IEC 60947-5-1 Ed.3.1: 2009

OTHER CONDITIONS Correction factor for ambient air temperature above 50°C is to be

obtained from manufacturer.

PLACES OF OEZ s.r.o.
PRODUCTION Sedivská 339

561 51 Letohrad Czech Republic

Siemens Electrical Apparatus Ltd. Suzhou

No.455, Zhu Jiang Road,

New District, Suzhou, Jiangsu province,

P.R. China

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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 37454-18 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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