CROATIAN REGISTER OF SHIPPING

Certificate No. **03-002148***/031861*

TYPE APPROVAL CERTIFICATE

This is to certify that this product complies with the Rules for the classification of ships, Part 1 - General requirements, Chapter 3 - Type approval of products.

TYPE AND DESCRIPTION OF PRODUCT:

SENTRON electrical circuit breakers

3VA

MANUFACTURER:

Siemens AG
Siemensstraße 10
93055 Regensburg
GERMANY

THE PRODUCT MEETS FOLLOWING RULES/REGULATIONS:

CRS Rules for the classification of ships, Part 12. – Electrical equipment

FURTHER DETAILS OF THE PRODUCT AND CONDITIONS FOR CERTIFICATION ARE GIVEN OVERLEAF.

APPROVAL IS VALID UNTIL: **2029-09-01**

Place and date: Split, 2025-09-01 **Seal**

Marinko Popović, dipl.ing.

NOTE: This certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify Croatian Register of Shipping of any modification or changes to the product in order to obtain a valid certificate.

DETAILED PRODUCT DESCRIPTION:

			3VA10			3VA11			3VA11			3VA11			
Electrical characteristics according to IEC 60947-2															
Number of poles			3/4-pole			1-pole			2-pole			3/4-pole			
Size		A	100			160			160			160			
Rated current I_n at 50 °C ambient temperature		A	16 … 100			16 … 160			16 … 160			16 … 160			
Rated operational voltage U_e 50/60 Hz AC		V	690			415			415			690			
Rated insulation voltage U_i		V	800			500			500			800			
Rated impulse withstand voltage U_{imp}		kV	8			8			8			8			
Frequency		Hz	0 … 400			0 … 400			0 … 400			0 … 400			
Breaking capacity (line protection)			**B**	**N**	**S**	**N**	**S**	**M**	**N**	**S**	**M**	**N**	**S**	**M**	**H**
Rated ultimate short-circuit breaking capacity I_{cu}															
50/60 Hz AC	220 … 240 V	kA	25	36	55	25	36	55	36	55	85	36	55	85	100
	380 … 415 V	kA	16	25	36	5	6	6	25	36	55	25	36	55	70
	440 V	kA	8	16	25	-	-	-	-	-	-	16	25	36	55[2]
	500 V	kA	5	5	7	-	-	-	-	-	-	7	7	10	10
	690 V	kA	5	5	7	-	-	-	-	-	-	7	7	10	10
DC	125 V	kA	16	25	30	16	25	30	16	25	30	16	25	30	30
	250 V	kA	25	36	55	-	-	-	36	55	85	36	55	85	100
	500 V	kA	25	36	55	-	-	-	-	-	-	36	55	85	100
	600 V	kA	8	16	25	-	-	-	-	-	-	16	25	36	55
	750 V	kA	-	-	-	-	-	-	-	-	-	-	-	-	-
	1000 V[1]	kA	-	-	-	-	-	-	-	-	-	-	-	-	-
Rated service short-circuit breaking capacity I_{cs}															
50/60 Hz AC	220 … 240 V	kA	25	36	55	25	35	55	36	55	85	36	55	85	100
	380 … 415 V	kA	16	25	36	5	6	6	25	36	55	25	36	55	70
	440 V	kA	8	16	25	-	-	-	-	-	-	16	25	36	40[2]
	500 V	kA	5	5	5	-	-	-	-	-	-	5	5	5	5
	690 V	kA	5	5	5	-	-	-	-	-	-	5	5	5	5
DC	125 V	kA	16	25	30	16	25	30	16	25	30	16	25	30	30
	250 V	kA	25	36	55	-	-	-	36	55	85	36	55	85	100
	500 V	kA	25	36	55	-	-	-	-	-	-	36	55	85	100
	600 V	kA	8	16	25	-	-	-	-	-	-	16	25	36	55
	750 V	kA	-	-	-	-	-	-	-	-	-	-	-	-	-
	1000 V[1]	kA	-	-	-	-	-	-	-	-	-	-	-	-	-

[1] For I_n = 630 A/800 A

[2] I_n 125 A, 160 A: I_{cu}/I_{cs} = 36 kA/36 kA

			3VA12			3VA13				3VA14				3VA15		
Electrical characteristics according to IEC 60947-2																
Number of poles			3/4-pole			3/4-pole				3/4-pole				3/4-pole		
Size		A	250			400				630				1000		
Rated current I_n at 50 °C ambient temperature		A	16 … 250			320 … 400				500 … 630				630 … 1000		
Rated operational voltage U_e 50/60 Hz AC		V	690			690				690				690		
Rated insulation voltage U_i		V	800			800				800				800		
Rated impulse withstand voltage U_{imp}		kV	8			8				8				8		
Frequency		Hz	0 … 400			0 … 400				0 … 400				0 … 400		
Breaking capacity (line protection)			**S**	**M**	**H**	**S**	**M**	**H**	**C**	**S**	**M**	**H**	**C**	**M**	**H**	**C**
Rated ultimate short-circuit breaking capacity I_{cu}																
50/60 Hz AC	220 … 240 V	kA	55	85	100	55	85	100	200	55	85	100	200	85	110	200
	380 … 415 V	kA	36	55	70	36	55	70	110	36	55	70	110	55	70	110
	440 V	kA	25	36	36	36	55	70	110	36	55	70	110	55	70	110
	500 V	kA	10	15	15	25	36	55	70	25	36	55	70	36	55	70
	690 V	kA	7	10	10	7	7	10	10	7	7	10	10	25	35	35
DC	125 V	kA	55	85	100	8	16	25	25	8	16	25	25	-	-	-
	250 V	kA	55	85	100	8	16	25	25	8	16	25	25	35	50	100
	500 V	kA	55	85	100	8	16	25	25	8	16	25	25	35	50	100
	600 V	kA	25	36	55	8	16	25	25	8	16	25	25	-	-	-
	750 V	kA	-	-	-	-	-	-	-	-	-	-	-	35	50	100
	1000 V[1)]	kA	-	-	-	-	-	-	-	-	-	-	-	25	35	50
Rated service short-circuit breaking capacity I_{cs}																
50/60 Hz AC	220 … 240 V	kA	55	85	100	55	85	100	200	55	85	100	200	85	100	150
	380 … 415 V	kA	36	55	70	36	55	70	110	36	55	70	110	55	70	85
	440 V	kA	25	36	36	36	55	70	110	36	55	70	110	55	70	70
	500 V	kA	10	10	10	25	36	55	70	25	36	55	70	36	55	65
	690 V	kA	5	5	5	5	5	6	6	5	5	6	6	19	19	19
DC	125 V	kA	55	85	100	8	16	25	25	8	16	25	25	-	-	-
	250 V	kA	55	85	100	8	16	25	25	8	16	25	25	35	50	100
	500 V	kA	55	85	100	8	16	25	25	8	16	25	25	35	50	100
	600 V	kA	25	36	55	8	16	25	25	8	16	25	25	-	-	-
	750 V	kA	-	-	-	-	-	-	-	-	-	-	-	35	50	100
	1000 V[1)]	kA	-	-	-	-	-	-	-	-	-	-	-	25	35	50

[1)] For I_n = 630 A/800 A

			3VA20				3VA21					3VA22				
Electrical characteristics according to IEC 60947-2																
Number of poles			3/4-pole				3/4-pole					3/4-pole				
Size		A	100				160					250				
Rated current I_n		A	25 … 100				25 … 160					160 … 250				
Rated operational voltage U_e 50/60 Hz AC		V	690				690					690				
Rated insulation voltage U_i		V	800				800					800				
Rated impulse withstand voltage U_{imp}		kV	8				8					8				
Frequency		Hz	50 / 60				50 / 60					50/60				
Breaking capacity (line protection)			**M**	**H**	**C**	**L**	**M**	**H**	**C**	**L**	**E**	**M**	**H**	**C**	**L**	**E**
Rated ultimate short-circuit breaking capacity I_{cu}																
50/60 Hz	220 … 240 V	kA	85	110	150	200	85	110	150	200	-	85	110	150	200	-
AC	380 … 415 V	kA	55	85	110	150	55	85	110	150	200	55	85	110	150	200
	440 V	kA	55	85	110	150	55	85	110	150	-	55	85	110	150	-
	500 V	kA	36	55	85	100	36	55	85	100	-	36	55	85	100	-
	690 V	kA	2	2	2	25	2.5	2.5	2.5	25	85	3	3	3	25	85
Rated service short-circuit breaking capacity I_{cs}																
50/60 Hz	220 … 240 V	kA	85	110	150	200	85	110	150	200	-	85	110	150	200	-
AC	380 … 415 V	kA	55	85	110	150	55	85	110	150	200	55	85	110	150	200
	440 V	kA	55	85	110	150	55	85	110	150	-	55	85	110	150	-
	500 V	kA	36	55	85	100	36	55	85	100	-	36	55	85	100	-
	690 V	kA	2	2	2	18	2.5	2.5	2.5	18	65	3	3	3	18	65

			3VA23					3VA24					3VA25		
Electrical characteristics according to IEC 60947-2															
Number of poles			3/4-pole					3/4-pole					3/4-pole		
Size		A	400					630					1000		
Rated current I_n		A	250 … 400					400 … 630					630 … 1000		
Rated operational voltage U_e 50/60 Hz AC		V	690					690					690		
Rated insulation voltage U_i		V	800					800					800		
Rated impulse withstand voltage U_{imp}		kV	8					8					8		
Frequency		Hz	50 / 60					50 / 60					50 / 60		
Breaking capacity (line protection)			**M**	**H**	**C**	**L**	**E**	**M**	**H**	**C**	**L**	**E**	**M**	**H**	**C**
Rated ultimate short-circuit breaking capacity I_{cu}															
50/60 Hz	220 … 240 V	kA	85	110	150	200	-	85	110	150	200	-	85	110	200
AC	380 … 415 V	kA	55	85	110	150	200	55	85	110	150	200	55	85	110
	440 V	kA	55	85	110	-	-	55	85	110	-	-	55	85	110
	500 V	kA	36	55	85	-	-	36	55	85	-	-	36	55	85
	690 V	kA	5	5	5	25	85	6	6	6	25	85	25	35	35
Rated service short-circuit breaking capacity I_{cs}															
50/60 Hz	220 … 240 V	kA	85	110	150	200	-	85	110	150	200	-	85	110	150
AC	380 … 415 V	kA	55	85	110	150	200	55	85	110	150	200	55	85	85
	440 V	kA	55	85	110	-	-	55	85	110	-	-	55	70	70
	500 V	kA	36	55	65	-	-	36	55	85[1)]	-	-	36	55	65
	690 V	kA	5	5	5	18	65	6	6	6	18	65	19	19	19

[1)] Valid for I_n = 400 A, 500 A; for I_n = 630 A, I_{cs} = 65 kA applies

APPLICATION / LIMITATIONS:

The product is to be installed inside switchboards or other enclosures.

TYPE APPROVAL DOCUMENTATION:

- Siemens Catalog LV10 – 10/2023
- Datasheets: 3VA1110-3EF32, 3VA1225-4EF32, 3VA1340-4EF32, 3VA2110-5HL32, 3VA2340-5HL32, 3VA2510-5HL32
- Declaration of conformity Siemens EU0013-01, EU0014-01
- Equipment manual Siemens – SENTRON 3VA Molded Case Circuit Breakers, 03/2019
- Type test certificate Siemens TC0024-02 – 3VA10/3VA11 – IEC 60947-2, IEC 60947-5-1
- Type test certificate Siemens 15084A15v01 – 3VA12 – IEC 60947-1, IEC 60947-2, IEC 60947-5-1
- Type test certificate Siemens 19181A15v03 – 3VA13/3VA14 – IEC 60947-1, IEC 60947-2, IEC 60947-5-1
- Type test certificate Siemens TC0010-02 – 3VA15/3VA25/3VA26 – IEC 60947-2, IEC 60947-4-1, IEC 60947-5-1
- Type test certificate Siemens TC0057-00 – 3VA20/3VA21/3VA22 – IEC 60947-2, IEC 60947-4-1, IEC 60947-5-1
- Type test certificate Siemens TC0068-00 – 3VA23/3VA24 – IEC 60947-2, IEC 60947-4-1, IEC 60947-5-1

MARKING OF PRODUCT:

In accordance with IEC60947 – Marking (manufacturer's name or trademark, type designation or serial number, number of the relevant product standard, rated operational voltage, utilization category and rated operational currents, …).

CONDITIONS FOR CERTIFICATION:

No.