

TYPE APPROVAL CERTIFICATE**This is to certify:****That the Circuit Breaker**with type designation(s)
3VA..., 3VM..., DSP 800 Display unit

Issued to

**Siemens AG Low Voltage
REGENSBURG, Germany**is found to comply with
DNV GL rules for classification – Ships and offshore units**Application :****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.****Rated voltage (V) 690****Rated current (A) 100 - 1000**Issued at **Hamburg** on **2019-05-22**for **DNV GL**This Certificate is valid until **2024-05-21**.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.



Job Id: 262.1-017828-4
 Certificate No: TAE00000N7
 Revision No: 3

Product description

Moulded case circuit breaker: 3VA...

	3VA10	3VA11		3VA12	3VA13	3VA14	3VA15
Number of poles	3, 4	1	2, 3, 4	3,4	3,4	3,4	3,4
Imp. withs. voltage (kV)	8	8	8	8	8	8	8
Insulation voltage AC (V)	800	500	800 ¹	800	800	800	800
Operational voltage AC(V)	690	415	690 ¹	690	690	690	690
Rated Current (A)	100	160	160	250	400	630	1000
Rated Frequency Hz	0-400	0-400	0-400	0-400	0-400	0-400	0-400
Extremely Low Breaking cap (kA) Icu / Ics (class B)							
220 - 240 V, 50/60 Hz	25 / 25	--	--	--	--	--	--
380 - 415 V, 50/60 Hz	16 / 16	--	--	--	--	--	--
440 V, 50/60 Hz	8 / 8	--	--	--	--	--	--
500 V, 50/60 Hz	5 / 5	--	--	--	--	--	--
690 V, 50/60 Hz	5 / 5	--	--	--	--	--	--
Low Breaking cap (kA) Icu / Ics (class N)							
220 - 240 V, 50/60 Hz	36 / 36	25 / 25	36 / 36	--	--	--	--
380 - 415 V, 50/60 Hz	25 / 25	5 / 5	25 / 25	--	--	--	--
440 V, 50/60 Hz	16 / 16	--	16 / 16	--	--	--	--
500 V, 50/60 Hz	5 / 5	--	7 / 5	--	--	--	--
690 V, 50/60 Hz	5 / 5	--	7 / 5	--	--	--	--
Standard Breaking cap (kA) Icu / Ics (class S)							
220 - 240 V, 50/60 Hz	55 / 55	36 / 36	55 / 55	55 / 55	55 / 55	55 / 55	--
380 - 415 V, 50/60 Hz	36 / 36	6 / 6	36 / 36 ²	36 / 36	36 / 36	36 / 36	--
440 V, 50/60 Hz	25 / 25	--	25 / 25	25 / 25	25 / 25	25 / 25	--
500 V, 50/60 Hz	7 / 5	--	7 / 5	10 / 10	25 / 25	25 / 25	--
690 V, 50/60 Hz	7 / 5	--	7 / 5	7 / 5	7 / 5	7 / 5	--
Medium Breaking cap (kA) Icu / Ics (class M)							
220 - 240 V, 50/60 Hz	--	--	85 / 85	85 / 85	85 / 85	85 / 85	85 / 85
380 - 415 V, 50/60 Hz	--	--	55 / 55	55 / 55	55 / 55	55 / 55	55 / 55
440 V, 50/60 Hz	--	--	36 / 36	36 / 36	36 / 36	36 / 36	36 / 36
500 V, 50/60 Hz	--	--	10 / 5	15 / 10	36 / 36	36 / 36	36 / 36
690 V, 50/60 Hz	--	--	10 / 5	10 / 5	7 / 5	7 / 5	25 / 19
High Breaking cap (kA) Icu / Ics (class H)							
220 - 240 V, 50/60 Hz	--	--	100 / 100	100 / 100	100 / 100	100 / 100	100 / 100
380 - 415 V, 50/60 Hz	--	--	70 / 70	70 / 70	70 / 70	70 / 70	70 / 70
440 V, 50/60 Hz	--	--	55 / 40 ³	36 / 36	55 / 55	55 / 55	55 / 55
500 V, 50/60 Hz	--	--	10 / 5	15 / 10	55 / 55	55 / 55	55 / 55
690 V, 50/60 Hz	--	--	10 / 5	10 / 5	10 / 6	10 / 6	35 / 19
Very High Breaking cap (kA) Icu / Ics (class C)							
220 - 240 V, 50/60 Hz	--	--	--	--	200 / 200	200 / 200	200 / 150
380 - 415 V, 50/60 Hz	--	--	--	--	110 / 110	110 / 110	110 / 85
440 V, 50/60 Hz	--	--	--	--	70 / 70	70 / 70	70 / 65
500 V, 50/60 Hz	--	--	--	--	70 / 70	70 / 70	70 / 65
690 V, 50/60 Hz	--	--	--	--	10 / 6	10 / 6	35 / 19

¹) Ui=500V / Ue=415V for 2 pol. version

²) 25 / 25 for In 100 A, 125 A, 160 A for 2 pol version

³) 36 / 36 for In 125 A, 160 A

Job Id: **262.1-017828-4**
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 Revision No: **3**

	3VA20	3VA21	3VA22	3VA23	3VA24	3VA25
Number of poles	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4
Rated imp. withs. voltage (kV)	8	8	8	8	8	8
Rated insulation voltage AC (V)	800	800	800	800	800	800
Rated operational voltage AC(V)	690	690	690	690	690	690
Rated Current (A)	100	160	250	400	630	1000
Rated Frequency Hz	50-60	50-60	50-60	50-60	50-60	50-60
Standard Breaking cap (kA) Icu / Ics (class S)						
220 - 240 V	55 / 55	55 / 55	55 / 55	55 / 55	55 / 55	--
380 - 415 V	36 / 36	36 / 36	36 / 36	36 / 36	36 / 36	--
440 V	36 / 36	36 / 36	36 / 36	36 / 36	36 / 36	--
500 V	25 / 25	25 / 25	25 / 25	25 / 25	25 / 25	--
690 V	2 / 2	2.5 / 2.5	3 / 3	5 / 5	5 / 5	--
Medium Breaking cap (kA) Icu / Ics (class M)						
220 - 240 V	85 / 85	85 / 85	85 / 85	85 / 85	85 / 85	85 / 85
380 - 415 V	55 / 55	55 / 55	55 / 55	55 / 55	55 / 55	55 / 55
440 V	55 / 55	55 / 55	55 / 55	55 / 55	55 / 55	55 / 55
500 V	36 / 36	36 / 36	36 / 36	36 / 36	36 / 36	36 / 36
690 V	2 / 2	2.5 / 2.5	3 / 3	5 / 5	6 / 6	25 / 19
High Breaking cap (kA) Icu / Ics (class H)						
220 - 240 V	110 / 110	110 / 110	110 / 110	110 / 110	110 / 110	110 / 110
380 - 415 V	85 / 85	85 / 85	85 / 85	85 / 85	85 / 85	85 / 85
440 V	85 / 85	85 / 85	85 / 85	85 / 85	85 / 85	85 / 85
500 V	55 / 55	55 / 55	55 / 55	55 / 55	55 / 55	55 / 55
690 V	2 / 2	2.5 / 2.5	3 / 3	5 / 5	6 / 6	35 / 19
Very High Breaking cap (kA) Icu / Ics (class C)						
220 - 240 V	150 / 150	150 / 150	150 / 150	150 / 150	150 / 150	200 / 150
380 - 415 V	110 / 110	110 / 110	110 / 110	110 / 110	110 / 110	110 / 110
440 V,	110 / 110	110 / 110	110 / 110	110 / 110	110 / 110	85 / 65
500 V,	85 / 85	85 / 85	85 / 85	85 / 85	85 / 85	85 / 65
690 V	2 / 2	2.5 / 2.5	3 / 3	5 / 5	6 / 6	35 / 19
Extremely High Breaking cap (kA) Icu / Ics (class L)						
220 - 240 V	200 / 200	200 / 200	200 / 200	--	--	--
380 - 415 V	150 / 150	150 / 150	150 / 150	--	--	--
440 V	150 / 150	150 / 150	150 / 150	--	--	--
500 V	100 / 100	100 / 100	100 / 100	--	--	--
690 V	25 / 18	25 / 18	25 / 18	--	--	--

Technical data disconnecting switch (to IEC 60947-3):

	3VA11	3VA12	3VA13	3VA14
Number of poles	3, 4	3, 4	3, 4	3, 4
Rated operation voltage AC (V)	690	690	500	500
Rated operational voltage DC(V)	600	600	--	--
Rated operational current (A) In	63 - 160	250	400	630
Rated Frequency Hz	50/60	50/60	50/60	50/60
Rated conditional short circuit current (kA) Iq1	70 at 415V	--	--	--
Rated making capacity(kA) Icm	3	4	6	6
Rated permissible short-time current Icw (1s kA)	2	3	9	9

1) With upstream circuit breaker or fuse

Job Id: **262.1-017828-4**
 Certificate No: **TAE00000N7**
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	3VA51		3VA52	3VA53	3VA54
Number of poles	1	2, 3, 4	3, 4	3, 4	3, 4
Rated imp. withs. voltage (kV)	8	8	8	8	8
Rated insulation voltage AC (V)	500	800 ¹	800	800	800
Rated operational voltage AC(V)	415	690 ¹	690	690	690
Rated Current (A)	100	160	150	250	400
Rated Frequency Hz	50-60	50-60	50-60	50-60	50-60
Standard Breaking cap (kA) Icu / Ics (class S)					
240 V	25 / 25	55 / 55	--	--	--
415 V	5 / 5	36 / 36	--	--	--
690 V	-	5 / 5	--	--	--
Medium Breaking cap (kA) Icu / Ics (class M)					
240 V	36 / 36	85 / 85	85 / 85	85 / 85	85 / 85
415 V	5 / 5	55 / 55	55 / 55	55 / 55	55 / 55
690 V	-	7 / 5	7 / 7	7 / 5	7 / 6
High Breaking cap (kA) Icu / Ics (class H)					
240 V	55 / 55	150 / 150	100 / 100	100 / 100	100 / 100
415 V	5 / 5	70 / 70	70 / 70	70 / 70	70 / 70
690 V	--	10 / 5	10 / 10	10 / 6	10 / 6
Very High Breaking cap (kA) Icu / Ics (class C)					
240 V	--	--	200 / 200	200 / 200	200 / 200
415 V	--	--	110 / 110 ²	110 / 110	110 / 110
690 V	--	--	10 / 10	10 / 6	10 / 6

1) $U_i=600V / U_e=415V$ for 2 pol. version

2) 4 pol. version 85/85kA

	3VA61	3VA62	3VA63	3VA64
Number of poles	3, 4	3, 4	3, 4	3, 4
Rated imp. withs. voltage (kV)	8	8	8	8
Rated insulation voltage AC (V)	800	800	800	800
Rated operational voltage AC(V)	690	690	690	690
Rated Current (A)	150	250	400	600
Rated Frequency Hz	50-60	50-60	50-60	50-60
Medium Breaking cap (kA) Icu / Ics (class M)				
240 V	85 / 85	85 / 85	85 / 85	85 / 85
415 V	55 / 55	55 / 55	55 / 55	55 / 55
690 V	2,5 / 2,5	3 / 3	2,5 / 2,5	3 / 3
High Breaking cap (kA) Icu / Ics (class H)				
240 V	110 / 110	110 / 110	110 / 110	110 / 110
415 V	85 / 85	85 / 85	85 / 85	85 / 85
690 V	2,5 / 2,5	3 / 3	2,5 / 2,5	3 / 3
Very High Breaking cap (kA) Icu / Ics (class C)				
240 V	150 / 150	150 / 150	150 / 150	150 / 150
415 V	110 / 110	110 / 110	110 / 110	110 / 110
690 V	2,5 / 2,5	3 / 3	2,5 / 2,5	3 / 3
Extremely High Breaking cap (kA) Icu / Ics (class L)				
240 V	200 / 200	200 / 200	200 / 200	200 / 200
415 V	150 / 150	150 / 150	150 / 150	150 / 150
690 V	2,5 / 2,5	3 / 3	2,5 / 2,5	3 / 3

Job Id: 262.1-017828-4
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Moulded case circuit breaker: 3VM...

	3VM10	3VM11		3VM12
Number of poles	3, 4	1	2, 3, 4	3,4
Imp. withs. voltage (kV)	8	8	8	8
Insulation voltage AC (V)	690	500	690 ¹	690
Operational voltage AC(V)	500	415	500 ¹	500
Rated Current (A)	100	160	160	250
Rated Frequency Hz	50/60	50/60	50/60	50/60
Extremely Low Breaking cap (kA) Icu / Ics (class B)				
220 - 240 V	25 / 12	--	--	--
380 - 415 V	16 / 8	--	--	--
440 V	8 / 4	--	--	--
500 V	5 / 2,5	--	--	--
Low Breaking cap (kA) Icu / Ics (class N)				
220 - 240 V	36 / 18	25 / 18	36 / 27	--
380 - 415 V	25 / 12	5 / 3	25 / 18	--
440 V	16 / 8	--	16 / 12	--
500 V	5 / 2,5	--	7 / 5	--
Standard Breaking cap (kA) Icu / Ics (class S)				
220 - 240 V	55 / 18	36 / 27	55 / 41	55 / 41
380 - 415 V	36 / 12	6 / 4	36 / 27 ²	36 / 27
440 V	20 / 8	--	25 / 18	25 / 18
500 V	7 / 2,5	--	7 / 5	10 / 7
Medium Breaking cap (kA) Icu / Ics (class M)				
220 - 240 V	--	--	85 / 63	85 / 63
380 - 415 V	--	--	55 / 41	55 / 41
440 V	--	--	36 / 27	36 / 27
500 V	--	--	10 / 5	15 / 10

¹) Ui=500V / Ue=415V for 2 pol. version

²) 25 / 25 for In 100 A, 125 A, 160 A for 2 pol version

Technical data disconnecting switch (to IEC 60947-3):

	3VM11	3VM12	3VM13/14
Number of poles	3, 4	3, 4	3, 4
Rated operation voltage AC (V)	500	500	500
Rated operational voltage DC(V)	500	500	--
Rated operational current (A) In	63 - 160	250	400/630
Rated Frequency Hz	50/60	50/60	50/60
Rated making capacity(kA) Icm	3	4	6
Rated permissible short-time current Icw (1s kA)	2	3	9

Type of release:

Thermo-magnetic for line protection: TM210, TM220, TM240

Thermo-magnetic for motor protection: TM120M

Electronic for line protection: ETU320, ETU330, ETU340, ETU550, ETU560, ETU850, ETU860,

Electronic for motor protection: ETU310M, ETU350M, ETU550M, ETU860M

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DSP 800 Display unit

For displaying the status , measured values and parameters of up to 8 3VA2... 3VA6... molded case circuit breakers.

Rated voltage : 24 VDC
Rated power input : 2,2 W
Protection class : II
Overvoltage category : 1
Supported Protokoll at the Ethernet interface : Modbus TCP
Transfer rate for Ethernet : 10/100 Mbit/s
Product function at the Ethernet interface : auto-MDI(X) and serial gateway

Installation in fixed switchboard inside enclosed rooms¹
to be used in conjunction with breaker data server COM100 / COM800

Application/Limitation

Location Classes:
Temperature: B, Humidity: B, Vibration: A, EMC: A

Type 3VA... suitable for use in an IT system with a capacity of 1.2 times the maximum trip current at up to 690 V, 3VA15 up to 500V. Type 3VM... not able for use in an IT system.

Communication port in release unit for monitoring purpose only.

¹) Installation requirements acc. manufacture documentation is to be observed

Type Approval documentation

As per tech.-docs. in NPS 262.1-017828-1/2/3/4

Tests carried out

Type tests according to: IEC 60947-2, IEC 60947-3, IEC 60947-4-1, vibration test, cold test dry heat test, damp heat test, and EMC test

Marking of product

3VA..., 3VM... Moulded Case Circuit-Breaker and Switch-Disconnecter, Siemens – Type designation.
DSP 800, Siemens - Type designation - Main data.

Place of production

QEZ s.r.o.
Šedivská 339
561 51 Letohrad
Česká republika

Siemens Electrical Apparatus Ltd.
455 Zhujiang Road, Suzhou
Jiangsu Province 215129
P. R. China

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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