DNV·GL

Certificate No:
TAE00002CT

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Contactor

with type designation(s)
3RT1, RH1

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)	**690/1000**
Rated current (A)	**7-500 (AC3/400V)**
Frequency (Hz)	**50/60**

Issued at **Hamburg** on **2018-01-23**

This Certificate is valid until **2023-01-22**.

DNV GL local station: **Augsburg**

Approval Engineer: **Harald Amberger**

for **DNV GL**

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.

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Product description

Contactor 3RT1… Ratings				
Operational voltage U_e		up to 1000V		
Insulation voltage U_i		690V / 1000V[1]		
Impulse withstands voltage U_{imp}		6kV / 8kV[1]		
Frequency (Hz)		50/60Hz /dc		
		Rated operational current I_e AC (40°) DC (60°)		
Motor contactor 3 NO main contacts		400V AC-3 (A)	500V AC-3 (A)	690V AC-3 (A)
Size S00	3RT1015-..	7	5	4
	3RT1016-..	9	6,5	5,2
	3RT1017-..	12	9	6,3
Size S0	3RT1024-..	12	12	9
	3RT1025-..	17	17	13
	3RT1026-..	25	18	13
Size S2	3RT1034-..	32	32	20
	3RT1035-..	40	40	24
	3RT1036-..	50	50	24
Size S3	3RT1044-..	65	65	47
	3RT1045-..	80	80	58
	3RT1046-..	95	95	58
Size S6	3RT1054-..	115	130	130
	3RT1055-..	150	185	170
	3RT1056-..	185	185	170
Size S10	3RT1064-..	225	225	225
	3RT1065-..	265	265	265
	3RT1066-..	300	300	280
Size S12	3RT1075-..	400	400	400
	3RT1076-..	500	500	450

Vacuum contactor 3 NO main contacts		400V AC-3 (A)	500V AC-3 (A)	690V AC-3 (A)
Size S10	3RT1264-..	225	225	225
	3RT1265-..	265	265	265
	3RT1266-..	300	300	280
Size S12	3RT1275-..	400	400	400
	3RT1276-..	500	500	450

4-pole contactor 4 NO main contacts		690V AC-1 (A)	110V DC-1 (A)[2]	220V DC-1 (A)[2]
Size S00	3RT1316-..	18	12	1,6
	3RT1317-..	22	12	1,6
Size S0	3RT1325-..	35	35	5
	3RT1326-..	40	35	5
Size S2	3RT1336-..	60	45	5
Size S3	3RT1344-..	110	70	5
	3RT1346-..	140	80	10

3-pole contactor for switching resistive load (AC-1)		690V AC-1 (A)	110V DC-1 (A)[2]	220V DC-1 (A)[2]
Size S3	3RT1446-..	140	130	13
Size S6	3RT1456-..	275	315	20
Size S10	3RT1466-..	400	380	380
Size S12	3RT1476-..	690	500	500

4-pole contactor 2 NO + 2 NC main contacts		690V AC-1 (A)	110V DC-1 (A)[2]	220V DC-1 (A)[2]
Size S00	3RT1516-..	18	12	1,6
	3RT1517-..	22	12	1,6
Size S0	3RT1526-..	40	35	5
Size S2	3RT1535-..	55	45	5

3-pole contactor for switching capacitor (AC-6b)		Rated operational reactive power kvar (40°) 400V	500V	690V
Size S00	3RT1617-..	12,5	15	21
Size S0	3RT1627-..	25	30	42
Size S3	3RT1647-..	50	63	84

[1] 6kV, 690V Size 00-2; 6kV, 1000V Size 3; 8kV, 1000V Size 6-12
[2] 2 conducting paths connected in series.
Further ratings according manufacturer documentation

Contactor relay 3RH1..-.. Ratings				
Operational voltage U_e	690V			
Insulation voltage U_i	690V			
Impulse withstands voltage U_{imp}	6kV			
Frequency (Hz)	50/60Hz /dc			
Types	Rated operational current I_e (40°)			
3RH11.. 4 contacts 3RH12.. 8 contacts 3RH13.. aux. block removeable 3RH14.. latched contactor relay	AC-12	230V / 10A	DC13	24V / 6A
	AC-15	230V / 6A		60V / 6A
		400V / 6A		125V / 0,9A
		500V / 2A		250V / 0,3A
		690V / 1A		600V / 0,1A
Rated control supply voltage and auxiliary contactor arrangement acc. manufacturer documentation.				

Accessories; Basic types	
3RH19..	Auxiliary switches; ratings acc. Contactor relay 3RH1..-..
3RT19..	Solid state time-delay blocks Surge suppressors without/with LED
	Terminal modules/adapters, covers.

Ratings and mounting locations according manufacturer documentation.

Application/Limitation

Location Classes:
Temperature: D, 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.

Type Approval documentation

Tests carried out

IEC 60947-4-1, IEC 60947-5-1, IEC 61812-1, cold, dry heat, damp heat, vibration, flame retardancy, EMC

Marking of product

Manucfacturers label containing data and manufacturers type number.

Name and place of manufacturer

Siemens AG, GWA
Werner-von-Siemens-Str. 48
92220 Amberg
Germany

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type examination 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 examination documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Examination 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