



TYPE APPROVAL CERTIFICATE
N. ELE200211CS/003

This is to certify that the product below is found to be in compliance with the applicable requirements of the RINA type approval system.

Description	Circuit breaker
Type	Tmax T4S / H / L / V / N 250 T4S / H / L / V / N 320
Applicant	ABB SACE SpA Via Baioni, 35 24123 Bergamo ITALY
Manufacturer	ABB SACE SpA Via Enrico Fermi, 14 03100 Frosinone ITALY
Testing Standards	IEC 60947-2

Issued in **Genova** on **June 10, 2011**.

This certificate is valid until **June 10, 2016**

RINA

Valerio Bonanni

Genova, June 10, 2011

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• **Circuit breakers type T4S 250 and T4S 320**

Circuit breaker type	Units	T4S250	T4S250	T4S320	T4S320
Relay type	See remarks				
Rated Voltage (Ue)	V	440	690	440	690
Rated Current (Iu)	A	250	250	320	320
Ambient Temperature	°C	45	45	40	40
Rated Frequency	Hz	50-60	50-60	50-60	50-60
Service short-circuit breaking capacity (Ics)	kA	40	25	40	25
Ultimate short-circuit breaking capacity (Icu)	kA	40	25	40	25
Short-circuit making capacity (Icm)	kA	84	52.5	84	52.5
Power Factor		0.25	0.25	0.25	0.25
Utilization Category		A	A	A	A

• **Circuit breakers type T4H 250 and T4H 320**

Circuit breaker type	Units	T4H250	T4H250	T4H320	T4H320
Relay type	See remarks				
Rated Voltage (Ue)	V	440	690	440	690
Rated Current (Iu)	A	250	250	320	320
Ambient Temperature	°C	45	45	40	40
Rated Frequency	Hz	50-60	50-60	50-60	50-60
Service short-circuit breaking capacity (Ics)	kA	65	40	65	40
Ultimate short-circuit breaking capacity (Icu)	kA	65	40	65	40
Short-circuit making capacity (Icm)	kA	143	84	143	84
Power Factor		0.2	0.25	0.2	0.25
Utilization Category		A	A	A	A

• **Circuit breakers type T4L 250 and T4L 320**

Circuit breaker type	Units	T4L250	T4L250	T4L320	T4L320
Relay type	See remarks				
Rated Voltage (Ue)	V	440	690	440	690
Rated Current (Iu)	A	250	250	320	320
Ambient Temperature	°C	45	40	45	40
Rated Frequency	Hz	50-60	50-60	50-60	50-60
Service short-circuit breaking capacity (Ics)	kA	100	70	100	70
Ultimate short-circuit breaking capacity (Icu)	kA	100	70	100	70
Short-circuit making capacity (Icm)	kA	220	154	220	154
Power Factor		0.2	0.2	0.2	0.2
Utilization Category		A	A	A	A

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• **Circuit breakers type T4V 250 and T4V 320**

Circuit breaker type	Units	T4V250	T4V250	T4V320	T4V320
Relay type	See remarks				
Rated Voltage (Ue)	V	440	690	440	690
Rated Current (Iu)	A	250	250	320	320
Ambient Temperature	°C	45	45	40	40
Rated Frequency	Hz	50-60	50-60	50-60	50-60
Service short-circuit breaking capacity (Ics)	kA	180	80	180	80
Ultimate short-circuit breaking capacity (Icu)	kA	180	80	180	80
Short-circuit making capacity (Icm)	kA	396	176	396	176
Power Factor		0.2	0.2	0.2	0.2
Utilization Category		A	A	A	A

• **Circuit breaker type T4N 250**

Circuit breaker type	Units	T4N250	T4N250	T4N250	T4N250
Relay type	See remarks				
Rated Voltage (Ue)	V	415	440	500	690
Rated Current (Iu)	A	250	250	250	250
Ambient Temperature	°C	45	45	45	45
Rated Frequency	Hz	50-60	50-60	50-60	50-60
Service short-circuit breaking capacity (Ics)	kA	36	30	25	20
Ultimate short-circuit breaking capacity (Icu)	kA	36	30	25	20
Short-circuit making capacity (Icm)	kA	75.6	63	52.5	40
Power Factor		0.25	0.25	0.25	0.3
Utilization Category		A	A	A	A

• **Circuit breaker type T4N 320**

Circuit breaker type	Units	T4N320	T4N320	T4N320	T4N320
Relay type	See remarks				
Rated Voltage (Ue)	V	415	440	500	690
Rated Current (Iu)	A	313.78	313.78	313.78	313.78
Ambient Temperature	°C	45	45	45	45
Rated Frequency	Hz	50-60	50-60	50-60	50-60
Service short-circuit breaking capacity (Ics)	kA	36	30	25	20
Ultimate short-circuit breaking capacity (Icu)	kA	36	30	25	20
Short-circuit making capacity (Icm)	kA	75.6	63	52.5	40
Power Factor		0.25	0.25	0.25	0.3
Utilization Category		A	A	A	A

Remarks

All the circuit breakers can be equipped with:

- thermomagnetic release: T4. 250 (from R20 to R250) and T4. 320 (from R20 to R320);
- magnetic only release: from R10 to R200;
- electronic release:
 - PR221DS, PR222DS, PR223DS/EF: T4. 250 (from R100 to R250) and T4. 320 (from R100 to R320);
 - PR222MP, PR223DS/EF: T4.250 (from R100 to R200).

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Test reports / certificates:

T4S

n° IT 03.087 issued on 04.04.2003
n° IT 03.046 issued on 20.02.2003
n° IT 03.088 issued on 04.04.2003
n° IT 03.048 issued on 20.02.2003
n° IT 03.144 issued on 21.10.2003

T4L

n° IT 03.096 issued on 18.04.2003
n° IT 03.090 issued on 30.04.2003
n° IT 03.097 issued on 18.04.2003
n° IT 03.093 issued on 30.04.2003
n° IT 03.147 issued on 21.10.2003

T4N

n° IT 07.018 issued on 26.03.2007.
n° IT 07.019 issued on 26.03.2007.
n° IT 07.020 issued on 26.03.2007.
n° IT 07.021 issued on 26.03.2007.
Declaration ABB SACE n° LB-DT/GF/GM 034-07D
(04.06.2007)

T4H

n° IT 03.094 issued on 18.04.2003
n° IT 03.091 issued on 30.04.2003
n° IT 03.095 issued on 18.04.2003
n° IT 03.092 issued on 30.04.2003
n° IT 03.145 issued on 21.10.2003

T4V

n° IT 03.081 issued on 04.04.2003
n° IT 03.116 issued on 01.09.2003
n° IT 03.086 issued on 04.04.2003
n° IT 03.117 issued on 01.09.2003
n° IT 03.146 issued on 25.11.2003

ELECTRONIC RELEASE PR223DS/EF

ABB SACE LBRP 6702/00.
ABB PT n° 21369.
ABB PT n° 21364.
IMQ n° 80SE00622/1.
IMQ n° 80SE00622/2.

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