



**TYPE APPROVAL CERTIFICATE**  
**N. ELE200211CS/001**

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

<i>Description</i>	<b>Circuit breaker</b>
<i>Type</i>	<b>Tmax T5S / H / L / V/ N 400 T5S / H / L / V/ N 630</b>
<i>Applicant</i>	<b>ABB SACE SpA Via Baioni, 35 24123 Bergamo ITALY</b>
<i>Manufacturer</i>	<b>ABB SACE SpA Via Enrico Fermi, 14 03100 Frosinone ITALY</b>
<i>Testing Standards</i>	<b>IEC 60947-2</b>

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

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

**RINA**

*Valerio Bonanni*

**Genova, June 10, 2011**

**1/4**



## TYPE APPROVAL CERTIFICATE N. ELE200211CS/001

• **Circuit breakers type T5S 400 and T5S 630.**

Circuit breaker type	Units	T5S400	T5S400	T5S630	T5S630
Relay type		See remarks			
Rated voltage (Ue)	V	440	690	440	690
Rated Current (Iu)	A	400	400	630	630
Ambient Temperature	°C	40	40	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		B	B	A	A

• **Circuit breakers type T5H 400 and T5H 630.**

Circuit breaker type	Units	T5H400	T5H400	T5H630	T5H630
Relay type		See remarks			
Rated voltage (Ue)	V	440	690	440	690
Rated Current (Iu)	A	400	400	630	630
Ambient Temperature	°C	45	45	40	45
Rated Frequency	Hz	50-60	50-60	50-60	50-60
Service short-circuit breaking capacity (Ics)	kA	65	40	65	30
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		B	B	A	A

• **Circuit breakers type T5L 400 and T5L 630.**

Circuit breaker type	Units	T5L400	T5L400	T5L630	T5L630
Relay type		See remarks			
Rated voltage (Ue)	V	440	690	440	690
Rated Current (Iu)	A	400	400	630	630
Ambient Temperature	°C	45	40	45	45
Rated Frequency	Hz	50-60	50-60	50-60	50-60
Service short-circuit breaking capacity (Ics)	kA	100	70	100	35
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		B	B	A	A

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## TYPE APPROVAL CERTIFICATE N. ELE200211CS/001

• **Circuit breakers type T5V 400 and T5V 630**

Circuit breaker type	Units	T5V400	T5V400	T5V630	T5V630
Relay type		See remarks			
Rated voltage (Ue)	V	440	690	440	690
Rated Current (Iu)	A	400	400	630	630
Ambient Temperature	°C	45	40	40	45
Rated Frequency	Hz	50-60	50-60	50-60	50-60
Service short-circuit breaking capacity (Ics)	kA	180	80	180	40
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		B	B	A	A

• **Circuit breaker type T5N 400**

Circuit breaker type	Units	T5N 400		
Relay type		See remarks		
Rated voltage (Ue)	V	415	440	690
Rated Current (Iu)	A	400	400	400
Ambient Temperature	°C	45	45	45
Rated Frequency	Hz	50-60	50-60	50-60
Service short-circuit breaking capacity (Ics)	kA	36	30	20
Ultimate short-circuit breaking capacity (Icu)	kA	36	30	20
Short-circuit making capacity (Icm)	kA	75.6	63	40
Power factor		0.25	0.25	0.3
Utilization Category		B	B	B

• **Circuit breaker type T5N 630**

Circuit breaker type	Units	T5N 630		
Relay type		See remarks		
Rated voltage (Ue)	V	415	440	690
Rated Current (Iu)	A	620	620	620
Ambient Temperature	°C	45	45	45
Rated Frequency	Hz	50-60	50-60	50-60
Service short-circuit breaking capacity (Ics)	kA	36	30	20
Ultimate short-circuit breaking capacity (Icu)	kA	36	30	20
Short-circuit making capacity (Icm)	kA	75.6	63	40
Power factor		0.25	0.25	0.3
Utilization Category		A	A	A

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### Remarks

All the circuit breakers can be equipped with:

Thermomagnetic release:

T5. 400 (from R320 to R400) and T5. 630 (from R320 to R630);

Electronic release:

- PR221DS, PR222DS, PR223DF/EF:

T5. 400 (from R320 to R400) and T5. 630 (from R320 to R630);

- PR222MP, PR223DF/EF:

T5.400 (from R320 to R400).

### Test reports / Certificates

#### T5S:

IT 04.014 issued on 24.02.2004

IT 04.012 issued on 24.02.2004

IT 04.120 issued on 05.09.2003

IT 04.013 issued on 24.02.2004

IT 04.019 issued on 04.03.2004

#### T5H:

IT 03.118 issued on 05.09.2003

IT 03.135 issued on 13.10.2003

IT 03.121 issued on 05.09.2003

IT 03.136 issued on 13.10.2003

IT 03.137 issued on 13.10.2003

#### T5L:

IT 03.119 issued on 05.09.2003

IT 03.150 issued on 21.10.2003

IT 03.122 issued on 05.09.2003

IT 03.138 issued on 13.10.2003

IT 03.139 issued on 13.10.2003

#### T5V:

IT 03.151 issued on 21.10.2003

IT 03.124 issued on 05.09.2003

IT 03.134 issued on 13.10.2003

IT 03.140 issued on 21.10.2003

IT 04.027 issued on 10.05.2004

IT 03.123 issued on 05.09.2003

#### T5N

IT 04.017 issued on 10.02.2004

IT 04.018 issued on 24.02.2004

### Test reports for 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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4/4