



TYPE APPROVAL CERTIFICATE
No. ELE095318PU/003

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

<i>Description</i>	Circuit breaker - Moulded Case Circuit Breaker
<i>Type</i>	E400-NJ; S400-CJ; S400-NF; S400-NJ; S400-GF; S400-GJ
<i>Applicant</i>	TERASAKI ELECTRIC CO., LTD. 6-13-47 KAMIHIGASHI, HIRANO-KU 547-0002 OSAKA, JAPAN
<i>Manufacturer</i>	TERASAKI ELECTRIC CO., LTD.
<i>Place of manufacture</i>	6-13-47 KAMIHIGASHI, HIRANO-KU 547-0002 OSAKA, JAPAN
<i>Reference standards</i>	IEC 600947-2

Issued in **BUSAN** on **December 27, 2018**. This Certificate is valid until **December 27, 2023**



RINA Services S.p.A.
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This certificate consists of this page and 1 enclosure

E400-NJ; S400-CJ; S400-NF; S400-NJ; S400-GF; S400-GJ
Product Description

- Moulded case circuit breakers applicable to the marine environment (closed area) with following rating:

Type	Rated Freq. [Hz]	Rated Current at 45°C In[A]	Rated Operational Voltage Ue[V]	Service Short-circuit Break'g Capa. Ics[kA]	Ultimate Short-circuit Break'g Capa. Icu[kA]	Rated Short-circuit Making Capa. Icm[kA]	Util. Category
E400-NJ	50/60	160~400	AC 440/450 AC 240 DC 250	22 35 19	22 35 25	46.2 73.5 25	A
S400-CJ	50/60	160~400	AC 690 AC 440/450 AC 240 DC 250	15 30 50 40	15 30 50 40	30 63 105 40	A
S400-NF	50/60	125~400	AC 690 AC 440/450 AC 240 DC 250	15 45 85 40	20 45 85 40	40 94.5 187 40	A
S400-NJ	50/60	160~400	AC 690 AC 440/450 AC 240 DC 250	15 45 85 40	20 45 85 40	40 94.5 187 40	A
S400-GF	50/60	125~400	AC 690 AC 440/450 AC 240 DC 250	15 49 75 40	20 65 100 40	40 143 220 40	A
S400-GJ	50/60	160~400	AC 690 AC 440/450 AC 240 DC 250	15 49 75 40	20 65 100 40	40 143 220 40	A

*Note : overload release – thermal type, short-circuit release – magnetic type (INST)

Reference Documents

- Performance Test : Manufacturer's Test Report No. KRH-5992C dated 30/01/2007, KRH-5990D dated 30/01/2007
- Performance Test (as per IEC60947-2:2016) : Manufacturer's Test Report No. KRH-5992Z dated 20/06/2017
- Environmental Test (incl. Vibration & Inclination) : Manufacturer's Test Report No. KRH-6010 dated 17/07/2007, KRH-6011 dated 17/07/2007
- Asbestos-free Declaration (SOLAS II-1/reg.3-5): Manufacturer's letter ref. No. G18-018 dated 18/07/2018





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Note/Remark

- The product is always subject to the compliance with RINA Rules and other Standards mentioned on certificate
- Type Approval certifies that a representative sample of the product has been found to meet the applicable design criteria
- Any modification or change shall not be valid until approval is granted by RINA as a result of due assessment
- Circuit Breakers with nominal current greater than 100A are subject to Final Inspection/Final Test of the Society

Renewal/Revision

- 28/11/2008: Certificate issued with No. ELE364007CS/004
- 27/12/2013: Renewed without design change. New certificate No. ELE320713PU/004 revokes previous certificate
- 27/12/2018: Renewed without design change. Address changed. New certificate No. ELE095318PU/003 revokes previous certificate

BUSAN December 27, 2018



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