



S&C ELECTRIC COMPANY

GENERAL OFFICES • CHICAGO

Specialists in High-Voltage Switching and Protection

6601 NORTH RIDGE BOULEVARD
CHICAGO, ILLINOIS 60626-3997, USA
TELEPHONE: (773) 338-1000
FAX: (773) 338-3657

Reference Number: CERT-94
Original Issue Date: September 13, 1996
Revision Date: July 12, 2002

CERTIFIED TEST ABSTRACT

Temperature-Rise

TYPE OF EQUIPMENT

**S&C Fuse Cutout — Type XS — Outdoor Distribution — Extra-Heavy-Duty
Overhead Pole-Top Style, Catalog No. 89071R11 and 89071R11-P**

| | | |
|-----------------------|------|----|
| Nominal Voltage..... | 14.4 | kV |
| Maximum Voltage | 15 | kV |
| BIL | 110 | kV |
| Amperes Maximum | 200 | A |

APPLICABLE TEST SPECIFICATIONS

Test procedure in accordance with ANSI/IEEE C37.41-2000, *IEEE Standard Design Tests for High-Voltage Fuses, Distribution Enclosed Single-Pole Air Switches, Fuse Disconnecting Switches, and Accessories*, ANSI C37.42-1996, *Distribution Cutouts and Fuse Links — Specifications* and IEC 60282-2-1997, *High Voltage Fuses — Part 2: Expulsion Fuses*.

TEST RESULTS

S&C Test Reference Number: 9712

The device tested was Type XS Fuse Cutout, Catalog No. 89071R11. All of the devices listed under Type of Equipment utilize the same fuse tube and live parts, therefore, the temperature rise will be identical.

Refer to the following table, "Summary of Temperature-Rise Tests."

Summary of Temperature-Rise Tests

| THERMOCOUPLE LOCATION | TEMPERATURE-RISE (°C) | | |
|---|------------------------|------------------|-----|
| | MAXIMUM DURING TEST | MAX. PERMISSIBLE | |
| | | IEEE | IEC |
| Upper parallel groove connector | 18 | 40 | 65 |
| Conducting strip at connector | 17 | 40 | 65 |
| Conducting strip at contact loop | 18 | 40 | 65 |
| Contact loop at center | 20 | 40 | 65 |
| Contact cup | 23 | 40 | 65 |
| Fuse tube cap contact | 25 | 40 | 65 |
| Fuse tube upper ferrule top | 23 | 40 | 65 |
| Fuse tube upper ferrule body | 22 | 40 | 65 |
| Right trunnion contact | 27 | 40 | 65 |
| Left trunnion contact | 27 | 40 | 65 |
| Right hinge - contact | 25 | 40 | 65 |
| Left hinge - contact | 25 | 40 | 65 |
| Right hinge at auxiliary contact spring | 21 | 40 | 65 |
| Left hinge at auxiliary contact spring | 21 | 40 | 65 |
| Right hinge at reduced section | 20 | 40 | 65 |
| Left hinge at reduced section | 21 | 40 | 65 |
| Conducting strip at hinge connector | 20 | 40 | 65 |
| Hinge parallel groove connector | 19 | 40 | 65 |

Average ambient temperature: 24°C

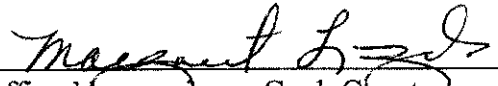
Reference Number: CERT-94
Original Issue Date: September 13, 1996
Revision Date: July 12, 2002

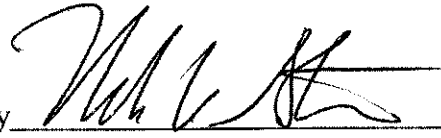
STATE OF ILLINOIS)
)ss
COUNTY OF COOK)

Mark W. Stavnes, being sworn, states that: He is Manager — Fuse Product Engineering — Fuse Products Division of S&C Electric Company and is authorized to execute this certificate on its behalf; and said tests were conducted in the manner above set forth, and the results are accurately reported above.

Subscribed and sworn to before me
this 12 day of July 2002.

S&C ELECTRIC COMPANY


Affixed hereon is my Cook County,
Illinois Notary Public Seal

by 
Mark W. Stavnes
Manager — Fuse Product Engineering
Fuse Products Division

