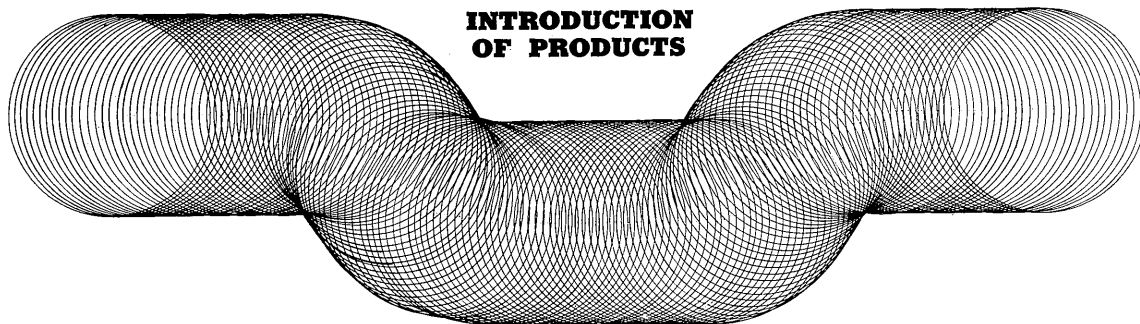


## INTRODUCTION OF PRODUCTS



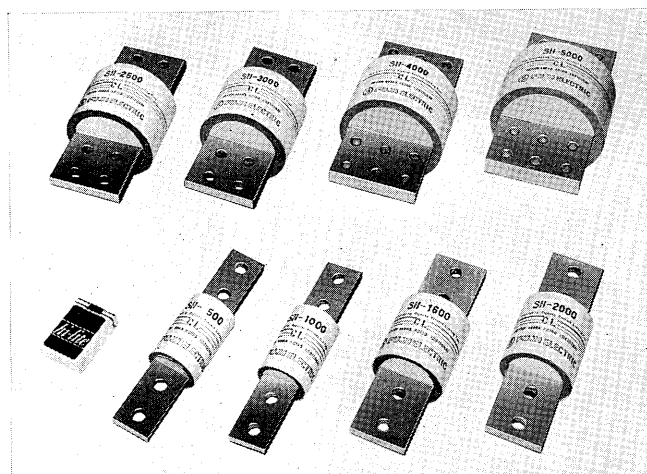
# FUJI HIGH RUPTURING CAPACITY ENCLOSED CURRENT-LIMITING FUSES (SH Fuse)

## General

The demand for electric power has greatly increased in recent years and the power distribution capacities of factories and buildings have been greatly enlarged.

This recent trend has been considered in the development of the Fuji high rated current and large interrupting capacity enclosed current-limiting fuses.

The performance of these fuses is similar to that of the Class L current-limiting fuse of the NEMA standards of the United States. Their performance, despite their compactness, far exceeds Japan's JEM current-limiting fuse standards.



## Merits

1. Large interrupting capacity and high speed current limiting interruption of short-circuit currents.
2. Their superior interrupting performance, due to their small total clearing  $\int i^2 dt$  and current limiting values, drastically reduces the thermal, electrical, and mechanical stresses in series instruments.
3. The unique heatproof FRP employed for the insulating tube completely eliminates the possibility of explosion during interruption.
4. Enclosed construction eliminates spouting of the arc and conductive gas at interruption, permits compact arrangement, and eliminates the need for an arc space.
5. Compactness reduces installation space.
6. Since a blown fuse indicator is provided, fuse condition can be easily distinguished.
7. Stable and uniform performance assured by production under satisfactory quality controls.

## Construction

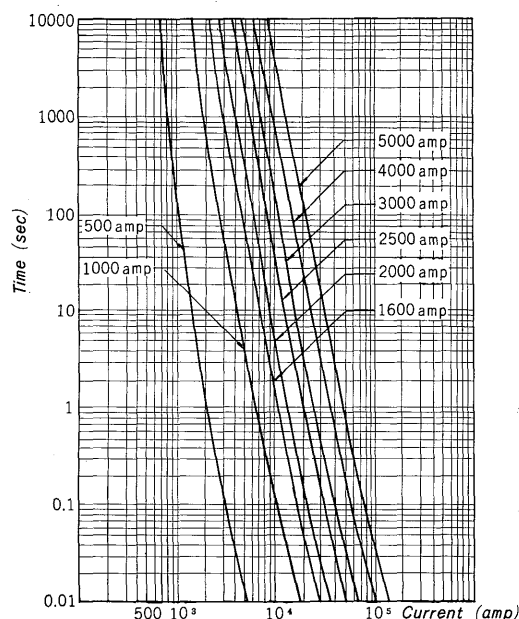
The fusing elements of the enclosed current-limiting fuse are inserted into a heatproof FRP tube having excellent mechanical and thermal strength, and packed with high quality silver-sand for arc quenching. The metal terminals are attached to both ends of the fusing element and tube.

The fuse elements are made of silver plates, of which character does not change permanently, and consist of several narrow parts and wide parts. Then excellent high speed current limiting interrupting capacity is guaranteed as results of the cooling effect of the silver-sand for arc quenching and the diffusion of the conductive gas into the silver-sand during interruption.

The metal terminals at each end of the fuse element are silver plated. The blown fuse indicator is located at one end of the metal terminal. Each blade has ample  $16\phi$  installation holes to assure complete electrical connection to the bus bar.

## Characteristics

Refer to the melting time—current characteristic chart below.



## Ratings

Type	Rated Voltage (v, ac)	Rated Current (amp)	Interrupting Capacity
SH-500	500	500	100 ka min. (Symmetrical root mean square value)
SH-1000		1000	
SH-1600		1600	
SH-2000		2000	
SH-2500		2500	
SH-3000		3000	
SH-4000		4000	
SH-5000		5000	

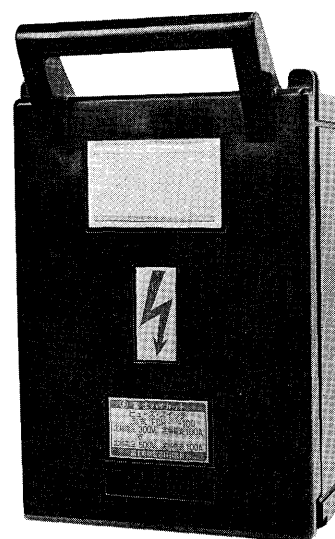
## Applications

These fuses have many applications, such as protector fuses to backup network protectors protecting the transformer and main bus bar on the secondary side of the transformer in spot network systems which are utilized to improve the economy and reliability of the power supply in recent high buildings, as take-off fuses which serve as primary feeder interrupting devices, as protector fuses in regular networks to improve service by no break power supply to the center area of a city having heavy loads, and as backup fuses to backup low voltage branch circuit breakers and air circuit breakers in various power distribution systems.

# FUJI HIGH CUT (LOW VOLTAGE FUSE SWITCH)

The “Fuji High Cut” was developed as an application for the Fuji cartridge fuse.

No-fuse breakers or combinations of a knife switch and a fuse have always been used to protect low voltage circuits. They have disadvantages however: the former is expensive when used with a large breaking capacity and the latter has large external dimensions. The “Fuji High Cut”, combined with the Fuji cartridge fuse with its excellent short tection capacity and switching mechanism, is a compact, lightweight protective switch with high reliability. Since live parts are not exposed, there is no fear of electrical shock. This switch has already been approved by the Japan Housing Corporation and will be used as a low voltage switch in JHC houses. The application range of the switch is very wide for switch boards or distribution boards as a main switch or branch switch in low voltage circuits.



Even when combined with the fuse and switching mechanism, the outer dimensions of the switch are small and it is light in weight.

2) Large breaking capacity

## Features

1) Compact and lightweight