

# FUJI ULTRAP-FUSE (ULTRA-HIGH SPEED CURRENT LIMITING FUSE)

The Fuji Ultrap-Fuse has a unique breaking system manufactured solely by Fuji Electric in Japan. It is an ultra-high speed current limiting fuse which has a very high current capacity and excellent current limiting characteristics at the terminals as compared to usual current limiting fuses.

This fuse never requires a separate electric source, the construction is simple, and the features, as described below, are numerous. Therefore, they can be employed in almost the same manner as earlier power fuses. Many of these fuses have proven satisfactory in private power equipment and they are also being utilized in large-capacity marine dc circuits. In the future these fuses will become indispensable in a wide range of applications including large capacity transformers, motor circuits, and system separation in bus circuits.

#### **Features**

## 1) Excellent breaking performance

The current limiting value  $\int i^2 dt$  is lower than in other protecting equipment and superior protection is guaranteed.

In comparing the 1200 a Ultrap-Fuse with a circuit breaker:

mechanical ratio:  $\frac{\text{Ultrap-Fuse}}{\text{Circuit breaker}} = \frac{1}{36.8}$ thermal ratio:  $\frac{\text{Ultrap-Fuse}}{\text{Circuit breaker}} = \frac{1}{834}$ 

2) Compact, lightweight, simple construction

In spite of the large current and breaking capacities, these fuses are compact, light, and have simple construction.

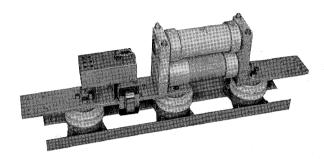
3) No operating noise and high safety

The breaking cylinder is totally enclosed. During operation there is no danger of rupture or shape deformations. Flames or noise never reach the exterior.

4) Operation up to 5000 amp

It is easy to use these fuses for large currents since the normal current flows through the breaking cylinder and has no relation to the fuse.

5) Elimination of operating source



Since a detector is included and operating energy is obtained within the unit, there is absolutely no need for a separate electric source.

Therefore, reliability is equal to that of ordinary fuses and handling is simplified.

### **Specifications**

Item	Ratings			Characteristics		
Model	Volt- age (kv)	Current (amp)	Breaking capacity (Sym- metrical value) (Mva)	Current limiting value (max.) (peak value ka)	Detection value (max.) (peak value ka)	Weight (kg/ phase)
UF11A/3/6		600	400	19.3	7.5	20
UF11A/3/12	3.6	1200	400	19.3	7.5	25
UF11A/3/20		2000	300	30.8	13	40
UF11A/6/6		600	500	16.5	6.5	30
UF11A/6/12	7.2	1200	500	16.5	6.5	35
UF11A/6/20		2000	350	21.4	11	43
	<b>※</b> 1	<b>※</b> 2		<b>※</b> 3	<b>※</b> 4	

#### Note:

- X1) Can also be manufactured for low voltage circuits of 600 v or less.
- ※2) Can be manufactured for currents up to 5000 amp
- 3 These values are for use with the detection values given above.
- ※4) If required, fuses with several detection values can be
  manufactured.

Remarks

- (1) Ultrap-fuses rated at 12 kv to 36 kv can also be manufactured.
- (2) The above ratings are for instantaneous tripping of current above the detection values (minimum operating current value, peak value), but fuses with overload characteristics added can also be manufactured.