

Recently, Fuji Electric started to manufacture a V-type disconnecting switch (indoor-type) for 3/6 kv circuits which incorporates a new concept based on the company's excellent technological background. This new type switch possesses many features. It is especially useful since it can be employed in both distribution systems and compartment systems due to the fact that it can be installed in all types of main circuit conductors.

Features

1. Compact, lightweight, easy to handle
As can be seen from Fig. 2, this new switch is much more compact than previous type disconnecting switches. This switch, rated at 7.2 kv, 200 amp, weighs only 1/4 of the old type switch of the same rating. These features insure easy handling.
2. Epoxy resin support insulators used
These epoxyresin support insulators are not only compact and lightweight but also possess excellent electrical and mechanical characteristics.
3. Price is very low
4. Connection on the rear side is easy because the switch is based on the V-type construction
There is no insulating tube used as in the old models so that easy rear connection is possible in very small spaces simply by bending the conductor. (Refer to Fig 3.)
5. Blade will not be sprung due to electromagnetic force

As can be seen from Fig. 3, the safety clutch is omitted in Fuji's unique terminal construction. However, the electromagnetic force applied to the blade is directed downwards which effectively prevents automatic opening during short-circuits.

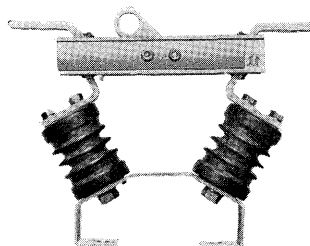


Fig. 1
External view of V-type disconnecting switch (7.2 kv, 600 amp)

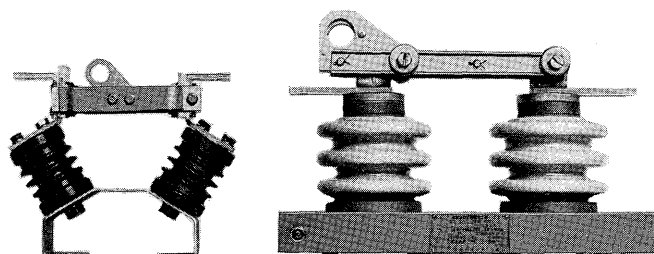


Fig. 2 External views of new-type (left) and old type (right) disconnecting switches (Rating 7.2 kv, 200 amp)

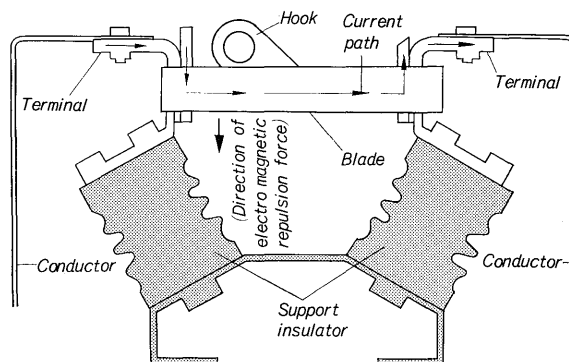


Fig. 3 Rear connection method and direction of electromagnetic force due to short-circuit current

Standard Specifications

Specifications	Type	Indoor or Outdoor Type	Rating			Insulation				Weight (kg)
			Voltage (kv)	Current (amp)	Short-time Current (2 sec) (ka)	Ground		Interpole		
						Usual mains freq. (1 min) (kv)	Impulse wave (1×40 μs wave) (kv)	Usual mains freq. (dry, 1 min) (kv)	Impulse wave (1×40 μs wave) (kv)	
Japanese Specifications (JEC-165) 1964	VD-6/200	Indoor	7.2	200	10	22	60	35	70	3
	VD-6/600			600	27					4
	VD-6/1200			1200	32					5.5
German Specifications (VDE 0670) 1965	VD-6/400	Indoor	6N 6S	400	20	27	60 (6N) 50 (6S)	27	60 (6N) 50 (6S)	4
	VD-6/630			630						
	VD-6/800			800						
	VD-6/1250			1250						
International Specifications (Pub. 129) 1961	VD-6/200	Indoor	7.2 (European series)	200	10	27 (European series)	60 (European series)	35 (European series)	70 (European series)	3
	VD-6/400			400						
	VD-6/630		8.25 (America/Canada series)	630	27	26 (America/Canada series)	75 (America/Canada series)	35 (America/Canada series)	85 (America/Canada series)	4
	VD-6/800			800						
VD-6/1250	1250	32	5.5							
American Specifications (NEMA SG-6) 1966	VD-6/400	Indoor	7.2	400	20 ※	26	75	26	75	4
	VD-6/600			600	40 ※					

※ : Momentary current