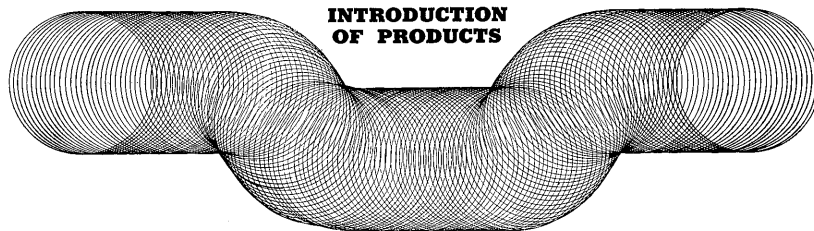


## INTRODUCTION OF PRODUCTS



# FUJI THYRISTOR TYPE AC CONTACTLESS SWITCH

On the basis of the development in semiconductor technology, the great strides are making in minimizing moving parts in devices and equipment employed in the power and industrial fields to increase their reliability.

Contactless switches are becoming more and more essential in applications in the field of ac power control where environmental conditions are bad, operation is frequent, switching sparks due to mechanical switches must be avoided, and where high reliability is required.

The Fuji thyristor type ac contactless switches introduced here are a static type switch developed especially for use mainly in unfavorable conditions such as the applications listed above.

### Features

- 1) Since Fuji Electric's high power thyristors are used in main circuits, overcurrent capacity is high and reliability excellent.
- 2) Since surge voltage suppressors are provided, stable operation is possible.
- 3) Because it is a static type switch, no-spark switching and frequent operation are possible, and the service life is long.
- 4) Handling is easy because of the stack construction used in the switch parts.
- 5) The surrounding conditions do not affect switch operation.
- 6) Handling and maintenance are easy.

### Applications

These switches series can be employed in any fields of ac load switching for which magnetic contactor are used. These applications are as follows: on-off control of magnetic valve, on-off and reversible control of ac motor, temperature control of electric heaters, dimmer, power sources for welding equipment, power sources for pole raising and lowering in electric furnaces, breakers for rectifier protection, etc.

### Specifications

- 1) Rated voltage  
Single or 3-phase 110 v and 220 v
- 2) Rated current  
10, 20, 30 and 50 amp<sub>RMS</sub>

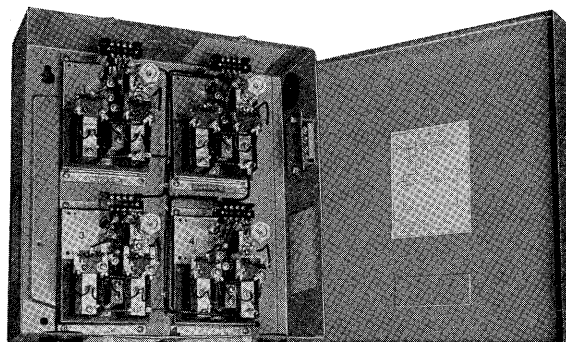


Fig. A Thyristor type contactless switch for 3-phase reversible load control (with case)

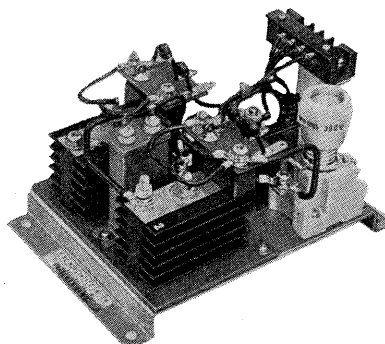


Fig. B Thyristor type contactless switch for single-phase load of stack construction (without case)

- 3) Rated frequency  
50 or 60 Hz within  $\pm 5$  Hz
- 4) Permissible rate of rise of load current  
20 amp/ $\mu$ s
- 5) Permissible rate of rise of voltage  
20 v/ $\mu$ s
- 6) Control signal  
Normally open contact
- 7) Power source transformer capacity to which connection is possible  
110 v line: 50 kva or less  
220 v line: 300 kva or less
- 8) Permissible ambient temperature  
 $-20^{\circ}\text{C} \sim +65^{\circ}\text{C}$
- 9) Insulation voltage  
Ac 2200 v 50 Hz for 1 minute
- 10) Color of coating  
When with case, Mansel 7.5 BG 6/1.5