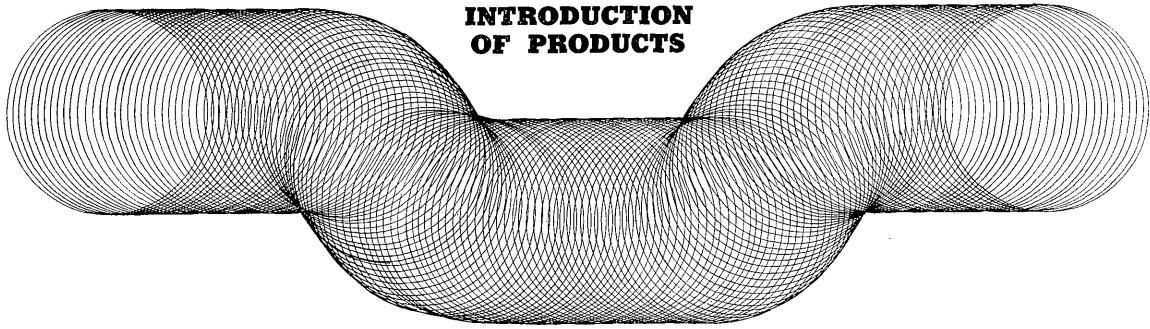
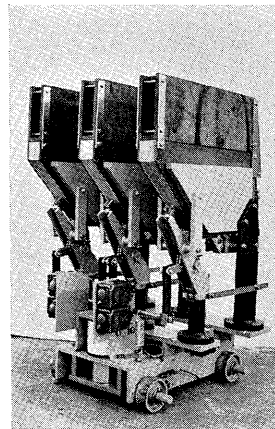


## INTRODUCTION OF PRODUCTS

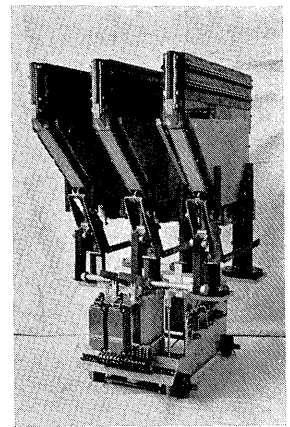


## 6 KV HIGH-VOLTAGE AC AIR BREAK MAGNETIC CON- TACTOR

In the past, oil filled isolators have been used as the principal component in most 6 kv electric motor control systems. Such contactors, however, are not suitable for applications in which there is a high incident of starting or stopping or frequent changes in forward/reverse operations. Therefore, a new type of contactor (6 KV HIGH-VOLTAGE AIR BREAK MAGNETIC CONTACTOR) has been developed which facilitates frequent switching and provides extended mechanical and electrical service life.



Model RHC 26-1  
(25 Mva 100 amp)



Model RHC 56-2  
(50 Mva 200 amp)

**Ratings and Standard Specifications for 6.6-kv High-Voltage Ac Air Break Magnetic Contactors**

| Model                                |            | RHC 26-1   | RHC 26 L-1   | RHC 06-1                           | RHC 56-2                                      | RHC 56 L-2   | RHC 06-2                           |
|--------------------------------------|------------|--|--|------------------------------------|---|--|------------------------------------|
| Rated Voltage                        |            | 6.6 kv (50/60 cps)   |  |                                    |   |  |                                    |
| Rated Current                        |            | 100 amp  | 100 amp  | 100 amp                            | 200 amp                                       | 200 amp  | 200 amp                            |
| Rated Breaking Capacity              |            | 25 Mva<br>(O-2min-CO)  | 25 Mva<br>(O-2min-CO)  | —                                  | 50 Mva<br>(O-2min-CO)                         | 50 Mva<br>(O-2min-CO)  | —                                  |
| Service Life                         | Mechanical | 2,500,000 times  | 100,000 times  | 2,500,000 times                    | 2,500,000 times                               | 100,000 times  | 2,500,000 times                    |
|                                      | Electrical | 250,000 times  | 100,000 times  | 250,000 times                      | 250,000 times                                 | 100,000 times  | 250,000 times                      |
| Overcurrent Capacity                 |            | 2200 amp<br>0.5 sec  | 2200 amp<br>0.5 sec  | 2200 amp<br>0.5 sec                | 4400 amp<br>0.5 sec                           | 4400 amp<br>0.5 sec  | 4400 amp<br>0.5 sec                |
| Switching Capacity                   |            | 1000 amp<br>(CO: 5 times<br>30 sec intervals)                                  | 1000 amp<br>(CO: 5 times<br>30 sec intervals)  | 1000 amp<br>(100 times close only) | 2000 amp<br>(CO: 5 times<br>30 sec intervals) | 2000 amp<br>(CO: 5 times<br>30 sec intervals)  | 2000 amp<br>(100 times close only) |
| Switching Frequency                  |            | 300 times/hr   | 300 times/hr   | 300 times/hr                       | 120 times/hr                                  | 120 times/hr   | 120 times/hr                       |
| Closed Period                        |            | 0.1 sec  | 0.1 sec  | 0.1 sec                            | 0.16 sec                                      | 0.16 sec   | 0.16 sec                           |
| Open Period                          |            | 0.04 sec   | 0.06 sec   | 0.04 sec                           | 0.1 sec                                       | 0.12 sec   | 0.1 sec                            |
| Operating Voltage                    |            | Ac 200/220 v, 50/60 cps, dc 200/220 v<br>Ac 100/110 v, 50/60 cps, dc 100/110 v |  |                                    |   |  |                                    |
| Trip Circuit Voltage                 |            | —  | Ac 100/110 v<br>50/60 cps<br>Ac 200/220 v<br>50/60 cps<br>Dc 100/110 v<br>Dc 200/220 v | —                                  | —   | Ac 100/110 v<br>50/60 cps<br>Ac 200/220 v<br>50/60 cps<br>Dc 100/110 v<br>Dc 200/220 v | —                                  |
| Maximum Applied Motor Capacity       |            | 750 kw   | 750 kw   | 750 kw                             | 1500 kw                                       | 1500 kw  | 1500 kw                            |
| Maximum Applied Transformer Capacity |            | 1000 kva   | 1000 kva   | —                                  | 2000 kva                                      | 2000 kva   | —                                  |

In keeping with the trend toward the use of this type of contactor, Fuji Electric is now introducing a new series of compact 6 KV HIGH-VOLTAGE AC AIR BREAK MAGNETIC CONTACTORS, as a sequel to the 3 kv series. This new contactor series, which has far superior construction, offers an isolation system that has greatly improved reliability and extremely effective insulation characteristics.

### Features

- 1) Insulation materials employed are made primarily of epoxy resin. Because of effective design and physical construction, as well as high quality, these contactors have extremely high insulation reliability.
- 2) A small-gap series arc-suppression system and an arc-suppressing chamber made of special arc-suppressing resin are employed to insure extremely stable switching operation over a wide range from low to extremely high current with no danger of absorption of humidity.
- 3) Since the arc flash that occurs during shorting is isolated and deflected only in an upward direction in the arc-suppressing chamber, and the space in which arcing occurs is small, installation can be readily made with no danger of nearby instruments

being damaged by the arc flash.

- 4) Since the contactor has sufficient contact pressure and is provided with a wiper, there is no danger of contact points becoming fused.
- 5) A powerful dc electromagnet is used to eliminate humming (flutter). Since the rectifier is self-contained, the equipment can also be operated on ac power.

### Construction and Operation

This contactor consists of a main switching section, which directly controls the high-voltage circuit; an indirect control system, to control the switching of the main switch; an arc-suppressor; and an auxiliary switch. A power input terminal, blow-out coil, fixed and moving contacts, bearing block, and output terminal are provided in the main high-voltage circuit. The high-voltage charging section is insulated from the mounting which is grounded through an insulated pole. The solenoid type electromagnetic switch is operated by dc current. When electromagnetic force is applied, an insulated rod is forced upward turning the crank clockwise on its axis and closing the moving contacts. When electromagnetic force is removed, the moving contacts are opened due to the spring force of the contact and isolator springs.