

Gang-operated mechanisms for disconnecting switches

■ Description

The V, RF type 3-pole disconnecting switches and the LB type air load break switches can be provided with remote gang-operated mechanisms. The R290-B mechanism is a manual type and is handle-operated. The R293B type is motor driven. An interlocking system prevents incorrect operation. Versions are also available in which locking action is carried out by energizing or de-energizing a solenoid-coil.

■ Features

Motor-driven operating mechanism

- The R293B motor-driven type is provided with an interlocking switch which prevents the motor from being remotely operated when the crank handle is in position.
- AC and DC common-use motors are available in 110 and 220 Volts ratings.
- The R293X motorized control devices are easy to install and improve the integrity of the electrical system. R293X devices are sold separately.
- These mechanisms are provided with manual crank handle so that the disconnecting switch can be operated even if the drive motor is faulty or an electrical interruption has taken place.
- Units are fitted with SPDT contacts for crank handle operation interlock use — when a switch is being operated manually the drive motor cannot be engaged.

Manual operating mechanism

- The R290-B is a new type manual operating mechanism. The switchgear can be fitted to either side.
- The crank lever can be attached at any angle through 360°, and this can be easily repositioned for operating convenience. A tie-rod links it to the disconnecting switch.
- An interlock solenoid coil is provided. An automatic locking mechanism prevents faulty operation.
- If required a 1NC switch for crank handle operating interlock use can be provided.

Please ask FUJI for the installation, dimensions and piping/wiring diagrams.

■ Ordering information

Specify the following:
1. Type number



• Motor-driven operating mechanism

Type	Ordering code	Motor ratings	Application
R293B-1	HZ1LT-1	100/110V AC, DC 8.8A	<ul style="list-style-type: none"> • V-type, RF240-type Rated current 1200A or less • Rated current 2000A
R293B-2	HZ1LT-2	200/220V AC, DC 4.4A	
R293BH-1	100/110V AC, DC 8.8A		
R293BH-2	200/220V AC, DC 4.4A		

• Control unit for motor-driven operating mechanism

Type	Ordering code	Motor ratings	Application
R293X-1	HZ1LQ-1	100/110V AC	R293B-1, R293BH-1 type
R293X-2	HZ1LQ-2	200/220V AC	R293B-2, R293BH-2 type
R293X-3	HZ1LQ-3	100/110V DC	R293B-1, R293BH-1 type

• Manual operating mechanism

Type	Ordering code	Interlock coil Unlock-coil energized	Lock-coil energized	Contact for crank handle
R290-B	HZ1VG	—	—	—
R290-BDS	HZ1VH	100/110V DC, 0.1A	—	1NC (110V DC, 1.3A)
R290-BAS	HZ1V1	100/110V AC, 0.1A	—	1NC (110V DC, 1.3A)
R290Z-BAS	HZ1VJ	—	100/110V AC, 0.1A	1NC (110V DC, 1.3A)

Note : 24V DC, 48V DC, 200/220V AC are also available.

• Switch stick

Type	Ordering code	Description	Illustration
HI-10	HZ1VA	<ul style="list-style-type: none"> • Applicable voltage: Less than 12kV Full length: 1m 	
HI-30		<ul style="list-style-type: none"> • Applicable voltage: Less than 36kV Full length: 2m 	

■ Type number nomenclature

• Manual operating mechanism

R290-B D S	<ul style="list-style-type: none"> Contact for crank handle Blank: Without contact S: With contact Interlock coil Blank: Without interlock coil A: AC coil D: DC coil With pin for lock Basic type R290: Unlock-coil energized R290Z: Lock-coil energized
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• Motor driven operating mechanism

R293B-2	<ul style="list-style-type: none"> Operating voltage 1: 100/110V AC, DC 2: 200/220V AC, DC Basic type
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• Control equipment

R293X-2	<ul style="list-style-type: none"> Operating voltage 1: 100/110V AC 2: 200/220V AC 3: 100/110V DC Basic type
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