



Bypass Switch

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Introduction – Bypass Switches

Compact On-Load By Pass Switch

Salient Features

- Range 63A – 1800A, 4 Pole suitable for AC23A utilization category
- Comply with the latest requirement of IEC 60947-1&3/IS/13947-1&3
- By-pass Switch is designed to customers specific need in IT industries and sites where UPS and Servo stabilizer provides main source of supply
- All other features are as indicated in On Load Changeover Switches

Operation

CS Compact On-Load By-pass switch is operated manually with single handle comfortably. It provides three stable positions:

Position	Operation
O	Loads are open circuited
I	Loads are connected to the stabilized supply
II	Loads are connected to the normal supply

Auxiliary Contacts

Auxiliary contact (early break type) 1 NO +1NC or 2 NO +2NC is available

Single Line Diagram

When By-pass switch is selected at position 'O' all the contacts of three isolator are open circuited and provide total isolation. At position 'I' both isolator I & III are closed and stabilized supply is connected to the load. At position II only isolator II is closed & isolators I & III are open thus bypassing UPS & connecting normal supply directly to load

Switch Construction

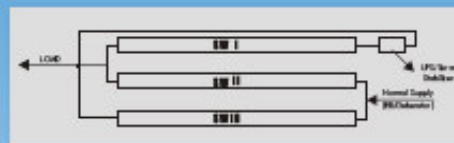
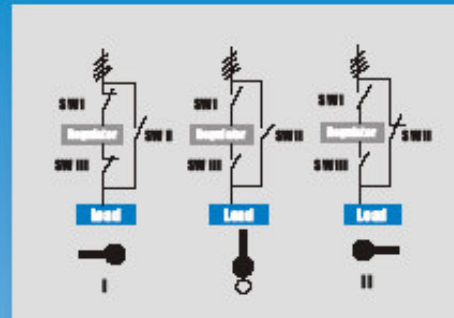
Safety Built-in

C & S design introduced the concept of protection in case of welded contacts by positive break forced opening of contacts. In the event of high current and fuse failing to operate, leading to welding of contacts, the handle will not turn beyond 45° from the ON position, clearly indicating that the contacts are welded.

Convenience of contacts visibility, permits contact position inspection, without removing the switch from installation, thus enhancing reliability and saving time.

Self extinguishing fibre glass re-inforced insulating body of poles has very high tracking index. Large gap between fixed and moving contacts in OFF position, make them suitable for isolation function.

Door interlocking prevents opening in the ON position, guarding the operator against an accidental mishap. As a standard upto 3 padlocks are provided in the OFF position to prevent closing the circuit during maintenance work. They can also be provided for the ON position. Using a suitable gasket along with handle enhances ingress protection level to IP54.





Bypass Switch

On Load Changeover Switches (With & without Fuses)

Salient Features

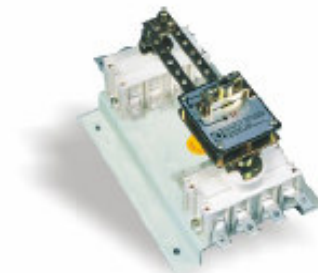
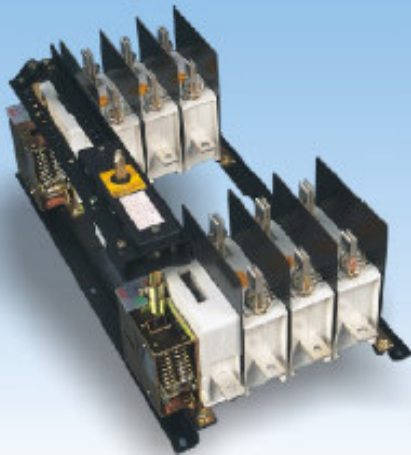
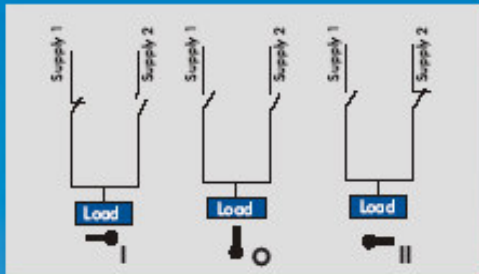
- Modular design in 3 & 4 pole (63A ~3150A), suitable for utilization category AC-23A
- Easy maintenance as, single pole can be replaced easily because of modular construction, in other design entire Switch has to be replaced in case of single pole burnt or damaged
- Available in open execution & in sheet steel enclosure.
- Comply with the latest requirements of IEC-60947-1&3 / 13947-1&3 standards.
- Unique self cleaning contact construction with special knife contacts (200A ~1800A), double break contacts (63 ~160A & 1000~1800A) & single break (200A~800A) with positive opening operation, with quick make - break and effective arc splitting plates guarantee reliability and long electrical life of the Switch.
- Excellent track resistance of isolation material in switch frame prevents flashover between phases in the most difficult circumstances.
- Adjustable telescopic shaft
- Compact construction
- Window for visual contact inspection
- Suitable for capacitor switching and as a main switch
- Handle with in-built padlockable facility in-off position
- Provision for defeating door interlock
- Individual phase barrier installable without tools between two terminals and fully protected frame for safe operation in case of (200A~800A)

Function

- These changeover switches are used to control & disconnect all kind of circuit- disconnection feeders & motor load
- By means of manual operation, changeover performs circuit switching & are mainly used as a switching device of two independent circuit -I & II

Accessories

- Auxillary contact (early break type) 1NO + 1NC or 2NO + 2NC is available
- Key & Castle lock facility





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Common Characteristics

Conformity to Standards	-	IEC 60947 Pt.3 & IS 13947 Pt.3
Rated Operational Voltage (Ue)	V	415
Rated Operational Frequency	Hz	50 / 60
Suitability for Isolation (— —)	-	YES
Pollution Degree as per IEC / IS	-	3
Ambient / Cubicle Service Temp.	°C	45
IP Level after mounting	-	IP 54

