Havells On-Load By-Pass Switch connects normal supply to the loads in case stabilized source fails. In fact, it By-passes the UPS/Servo Stabilizer in case of their failure and provides a means of connecting alternate supply to the load. The switch also ensures isolation of the up-stream and down-stream circuit.

## Range :

In current ratings of 63A-100A, in Four Pole execution.

## Specification:

IEC:60947-183 / IS:13947-183.

## Features :

- Robust and reliable mechanism provides total disconnection.
- Quick make and break operation, independent of the operating speed enables the switches to open and close under stringent conditions, namely AC23A utilizations.
- The switch housing is made of Nylon 66 FR Grade, which has excellent mechanical, di-electric and thermal properties.



## ©ய|r|oad

By-Pass Changeover Switch

## Construction

## Application

The By-pass switches are designed to meet customer specific needs particularly in IT related industries where UPS and Servo stabilizers provide main source of supply. In the event of an emergency, normal supply can be made available to the services without interrupting any installation and at the same time providing time for maintenance of UPS systems without causing break down of services.

## Operation

The By-pass Switch is operated manually with handle. It provides 3 stable positions namely :

0 Loads are open circuited
I Loads are connected to stabilized supply \| Loads are connected to the normal supply


## Single Line Diagram

At 'O' position, all the contacts of the three disconnectors are open and thereby provide isolation. At 'l' position, disconnectors No.I and III are closed and disconnector II is open. Hence stablized supply is connected to the load. At 'Il' position only disconnector No. II is closed and I \& III are open. Hence bypassing the UPS and connecting the load directly to normal supply.

Auxilliary contact :
Auxilliary contacts having I NO.NC or 2 NO.NC configuration can ben provided for indication and signaling purposes.


| Rated Current at 40OC Ith | A | 63 | 100 |
| :--- | :---: | :---: | :---: |
| Rated Insulation Voltage Ui | V | 1000 | 1000 |
| Rate Operational Voltage Ue | V | 415 | 415 |
| Rated impulse withstand voltage (Uimp) | kV | 8 | 8 |
| Rated Short Circuit Current with fuse | kA RMS | 80 | 80 |
| Making Capacity 415V, AC 23A PF=0.30 | A | 630 | 1000 |
| Braking Capacity 415V, AC 23A PF=0.30 | A | 504 | 800 |
| Mechanical Durability (No. of Operations) |  | 10000 | 10000 |
| Electrical Durability (No. of Operations) |  | 1500 | 1500 |
| Terminal Connection |  |  |  |
| Aluminium Cable / Busbar Cross-section | mm 2 | 25 | 50 |
| Copper Cable / Busbar Cross-section | mm 2 | 16 | 35 |



Ordering Information

| Frame Size | Current Rating $(\mathrm{A})$ | Open Execution |
| :--- | :---: | :---: |
| Size 00 | 063 | \|HCBFO0063 |
| Size 00 | 100 | \|HCBFO0100 |



| Current (A) | A | B | C | D | E | F | G | H | J | Q | R | S | T | U | V |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Size 63A | 144 | 128 | 94.5 | 111 | 120.5 | 136.5 | 12 | 25.5 | 29 | 178.5 | 26.5 | 51 | 2.5 | 210 | 44 |
| Size 100A | 144 | 128 | 94.5 | 111 | 134.5 | 150.5 | 12 | 25.5 | 29 | 178.5 | 26.5 | 51 | 2.5 | 210 | 44 |

