

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.

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 AC 23 A utilizations.
- The switch housing is made of fiber glass reinforced polyester, which has excellent mechanical, di-electric and thermal properties.

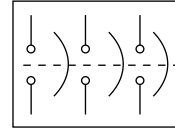
Range :

In current ratings of 63 A-1600 A in 6 frame sizes in 4 Pole execution.

Specification :

IS / IEC: 60947-1 & 3





Euroload By-pass Changeover Switch



Construction



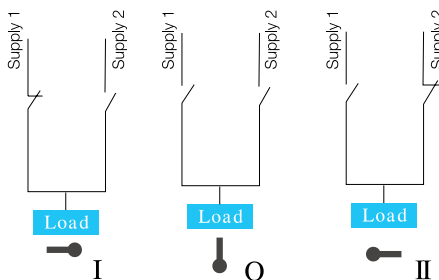
Application

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
- II Loads are connected to the normal supply



Single Line Diagram

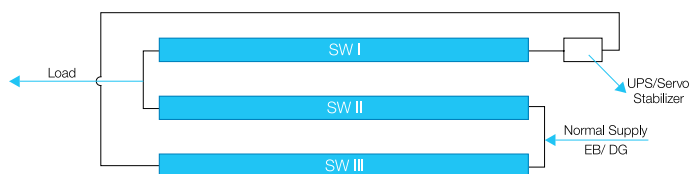
At 'O' position, all the contacts of the three disconnectors are open and thereby provide isolation.

At 'I' position, disconnectors No. I and III are closed and disconnector II is open. Hence stabilized supply is connected to the load.

At 'II' position only disconnector No. II is closed and I & III are open. Hence bypassing the UPS and connecting the load directly to normal supply.

Auxiliary contact :

Auxiliary contacts having I NO. NC or 2 NO. NC configuration can be provided for indication and signaling purposes.



Ordering Information

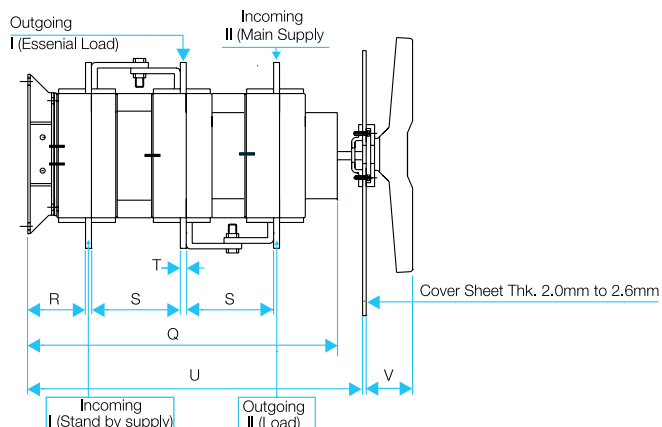
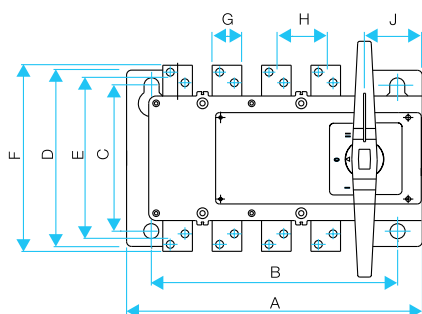
Frame Size	Current Rating (A)	Open Execution Cat. No.
00	63	IHCBFO0063
00	100	IHCBFO0100
0	125	IHCBFO0125
0	160	IHCBFO0160

Frame Size	Current Rating (A)	Open Execution Cat. No.
0	200	IHCBFO0200
1	250	IHCBFO0250
1	320	IHCBFO0320
2	400	IHCBFO0400

Frame Size	Current Rating (A)	Open Execution Cat. No.
2	630	IHCBFO0630
3	800	IHCBFO0800
4	1000	IHCBFO1000
4	1250	IHCBFO1250
4	1600	IHCBFO1600



Dimension in (mm)



Current (A)	A	B	C	D	E	F	G	H	J	Q	R	S	T	U	V
Size 63 A	144	128	95	111	120	136	12	25	29	178	26	51	2.5	210	44
Size 100 A	144	128	95	111	135	150	12	25	29	178	26	51	2.5	210	44
125	220	207	113	132	122	148	20	46	34	250	54	69	3.2	272	62
160	220	207	113	132	122	148	24	46	34	250	54	69	3.2	272	62
200	220	207	113	132	122	148	24	46	34	250	54	69	3.2	272	62
250	315	300	134	156	165	198	28	58	54	331	57	89	4.0	337	62
320	315	300	134	156	165	198	35	63	54	331	57	89	4.0	337	62
400	405	378	184	206	221	251	40	80	76	385	67	110	5.0	405	62
630	405	378	184	206	241	281	55	80	76	385	67	110	5.0	405	62
800	464	430	212	234	280	330	45	80	76	420	71	120	8.0	440	62
1000	575	440	290	315	331	380	70	100	85	514	101	145	10.0	534	62
1250	575	440	290	315	331	380	70	100	85	514	100	143	12.0	534	62
1600	575	440	290	315	331	380	70	100	85	514	98.5	140	15.0	534	62

Technical Information

Frame size	SI Unit	Size 00		Size 0			Size 1		Size 2		Size 3	Size 4		
Rated Operational Current I _e	A	63	100	125	160	200	250	320	400	630	800	1000	1250	1600
Rated Insulation Voltage U _i	Vac	1000												
Conventional free air thermal crrent I _{th}	A	63	100	125	160	200	250	320	400	630	800	1000	1250	1600
Conventional enclosed thermal crrent I _e	A	63	100	125	160	200	250	320	400	630	800	1000	1250	1600
Rated uninterrupted current I _u	A	63	100	125	160	200	250	320	400	630	800	1000	1250	1600
Rate Operational Voltage U _e	Vac	415												
Di-electric Strength 50 Hz	kV	5	5	5	5	5	5	5	8	8	10	10	10	10
Rated impulse withstand voltage (Uimp)	kV	8												
Conditional short circuit current	kA rms	80												
Making Capacity 436 V, AC 23 A PF-0.45 (100 A) / - 0.35 (I _e > 100A)	A	630	1000	1250	1600	2000	2500	3200	4000	6300	8000	10000	12500	16000
Breaking Capacity 436 V, AC 23 A PF-0.45 (100 A) / - 0.35 (I _e > 100 A)	A	504	800	1000	1280	1600	2000	2560	3200	5040	6400	8000	10000	12800
Mechanical Durability		10000		8000			8000	5000	5000		3000	3000		
Electrical Durability		1500		1000			1000		1000		500	500		
Terminal Connection														
Aluminium Cable/Busbar		25	50	70	95	150	185	240	300	40x8x2	50x8x2	50x10x2 63x12x2 50x8x4		
Cross-section mm ²														
Copper Cable / Busbar Cross-section	mm ²	16	35	50	70	95	120	185	240	40x5x2	50x5x2	60x5x2 80x5x2 100x5x2		