

Euroload Changeover Switches find a wide application scope wherever the reliability of electrical supply from the utilities is low and are used in lighting/motor circuits wherever continuity of supply is necessary, for switching to an alternative source from main supply and vice versa. They are switch disconnectors with independent manual operation capable of making, carrying and breaking currents under normal circuit conditions which may include operating overload conditions and also carrying currents under specified abnormal circuit conditions such as those of short circuit for a specified time. These switches are modular in construction, compact in size and suitable for stringent utilization category AC-23A/B.

**Range:**

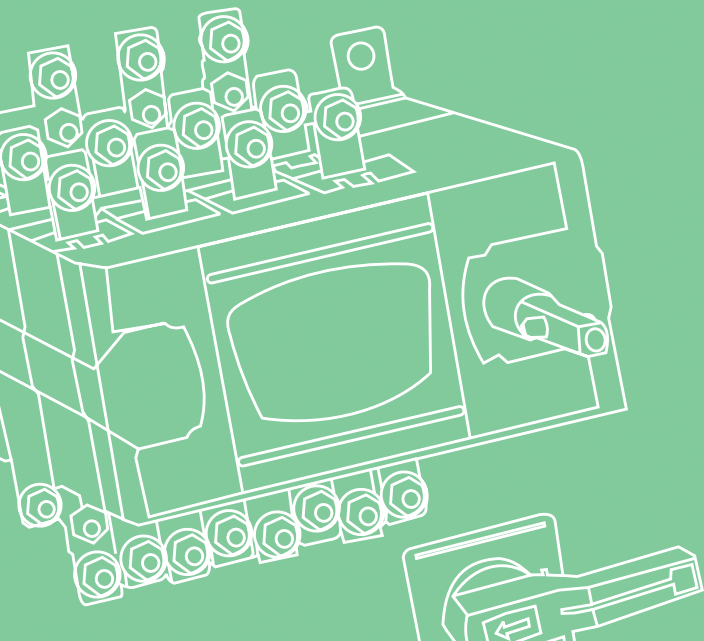
40A to 3150A in 7 frame sizes in 4 Pole

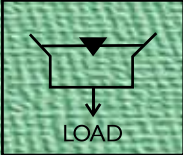
**Specifications :**

IS13947-1 & 3 / IEC 60947-1 & 3.

**Features :**

- Compact size, Quick make & Quick Break mechanism.
- High electrical & mechanical endurance.
- Enclosed housing to avoid dust ingress.
- Double break contacts per pole.
- Load and Line reversibility.
- Provision of Phase separators, add-on auxiliary switch
- Door interlock and padlock facility, telescopic operating shaft.
- Extended outgoing terminals.





Euroload Changeover switch has unique modular construction. The module comprises of two load switch disconnectors coupled together and mechanically interlocked with a common outgoing and operable by a single handle having I-O-II position.

The switching mechanism is quick make, quick break type

independent of the speed of the operation. There are four breaks per pole thereby resulting into faster quenching of arc. The load and line can be connected on either side by virtue of isolation on both the sides. The entire switching mechanism alongwith the fixed and moving contact assembly are housed in a nylon 66 FR grade, moulded frame/cover, having high dielectric strength & thermal withstand capacity.

### Contact Mechanism

The contact mechanism is knife blade type with self cleaning action during operation. The fixed contact terminals in each phase have separate main and arcing contacts. The moving contact assembly has four sets of contacts on moving carrier and the entire assembly rests on three guides on moving carrier itself, which assists in its true movement during making and breaking.

The moving contact mates with the fixed contact by slide movement of the moving contact assembly. The contact is first made with the arcing contact and thereafter with the main contact. During breaking, the arc formation is across the arcing contacts thereby protecting the main contacts which results into enhanced life of the switch. The arc is effectively quenched & confined in arc barrier in each phase.

The switches can be mounted inside a panel either in horizontal or vertical mode without any effect on the performance.

### Operating Mechanism

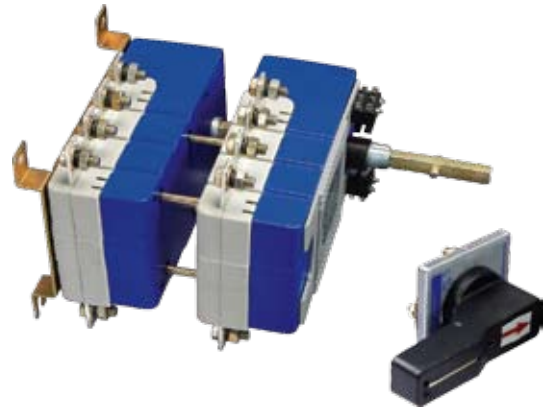
The operating mechanism consists of single side front operated handle which drives the spring assisted toggle mechanism, inturn operating the switch. Position indication provided on front of switch, i.e. on the operating shaft.

In position 'I', supply I (Main) is connected to the load, supply II is off.

In position 'O', supply I & II are both disconnected from the load.

In position 'II', supply II (Standby) is connected to the load, supply I is off.

Hence in none of the cases, supply I & II are connected simultaneously.





Technical Information



Frame Size			Size 00			
Catalogue No.			IHCNFO0040	IHCNFO0063	IHCNFO0080	IHCNFO0100
Rated operated Current at 40°C	$I_e$	A	40	63	80	100
Nos. of Poles			4	4	4	4
Rated Operational Voltage	$U^e$	V	415	415	415	415
Rated Insulation Voltage	$U_i$	V	1000	1000	1000	1000
Rated Impulse Voltage	$U_{imp.}$	kV	8	8	8	8
Rated Frequency		Hz	50	50	50	50
Pollution Degree			3	3	3	3
Design temp./ Ambient Temp. Deg. C			40	40	40	40
Rated Thermal Current		A	40	63	80	100
Rated Enclosed Thermal Current		A	40	63	80	100
Rated Current	415V ac					
AC21A/ B		A	40 / 40	63 / 63	80 / 80	100 / 100
AC22A/ B		A	40 / 40	63 / 63	80 / 80	100 / 100
AC23A/ B		A	40 / 40	63 / 63	80 / 80	100 / 100
Rated Motor Power	415V ac	KW	15	20	22.5	25
Making Capacity AC23A	415V	A	400	630	800	1000
Breaking Capacity AC23A	415V	A	320	504	640	800
Conditional Short ckt current	415V ac	$KA_{rms}$	80	80	80	80
Fuse Ratings gG		A	40	63	80	100
Rated Short Time Withstand Current for 1 Sec. rms value		$KA_{rms}$	5	5	5	5
Mechanical Endurance	opers.		10000	10000	10000	10000
Electrical Endurance	opers.		1500	1500	1500	1500
Min. Cu cablesection	Sq.mm		10	16	25	35
Min. Al. cablesection	Sq.mm		16	25	35	50
Terminal Bolt Size			M6 X 16			
Metric thread diameter x length		mm	M6 X 16			
Overall Dimensions H X W X D		mm	136.5 X 144 X 158			
Weight	Open Execution	kg.	1.5	1.5	1.6	1.6
	In Enclosure	kg.	4.5	4.5	4.6	4.6

Exploded View of Euroload Changeover

HANDLE ASSLY.

MAIN LABEL

AUX. SWITCH PLATE

MOUNTING SCREW

BASE ASSLY

SHORT LINK

MOUNTING BRACKET

AUX. SWITCH (1CO / 2CO)  
(Optional)

PLAIN SHAFT

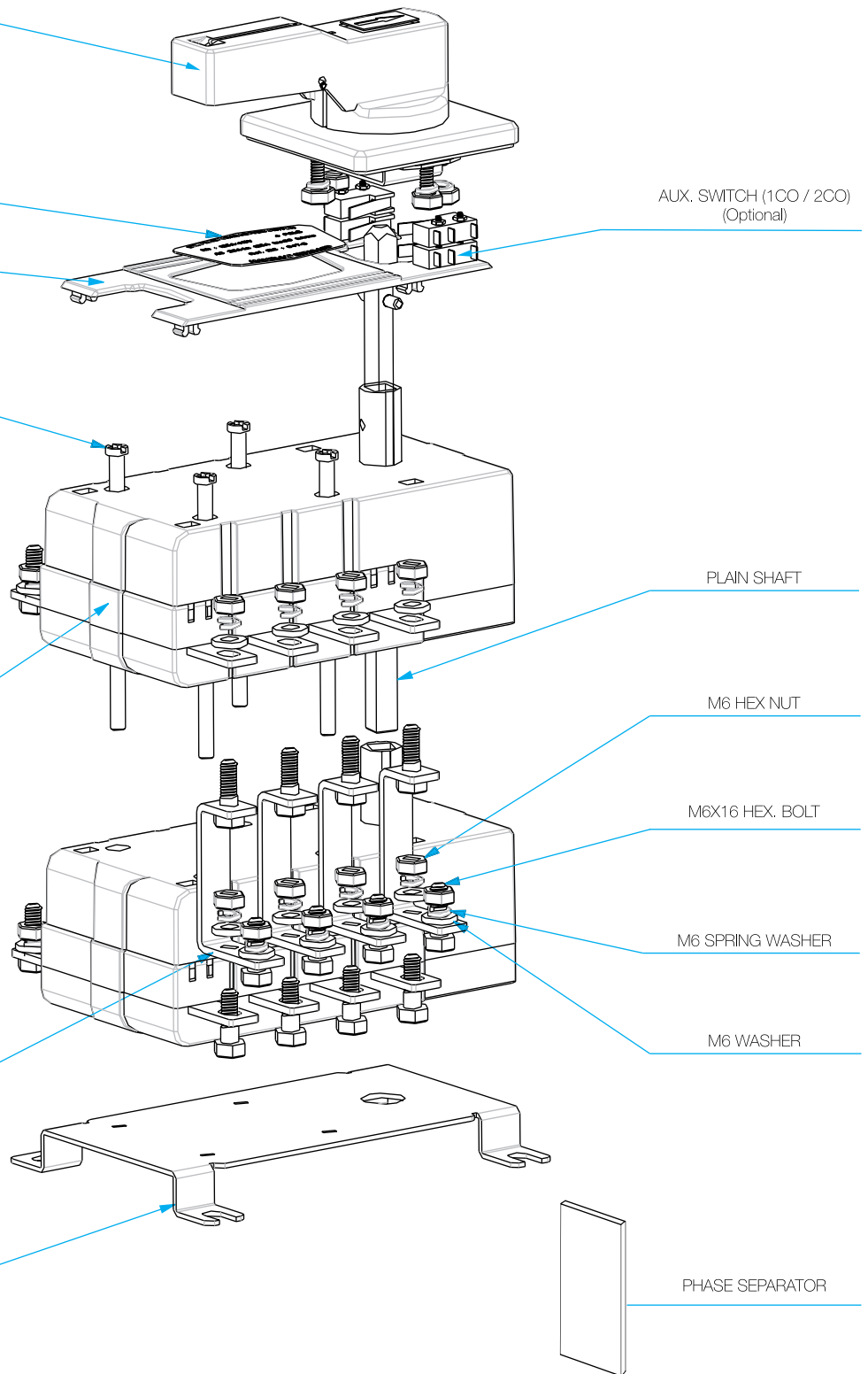
M6 HEX NUT

M6X16 HEX. BOLT

M6 SPRING WASHER

M6 WASHER

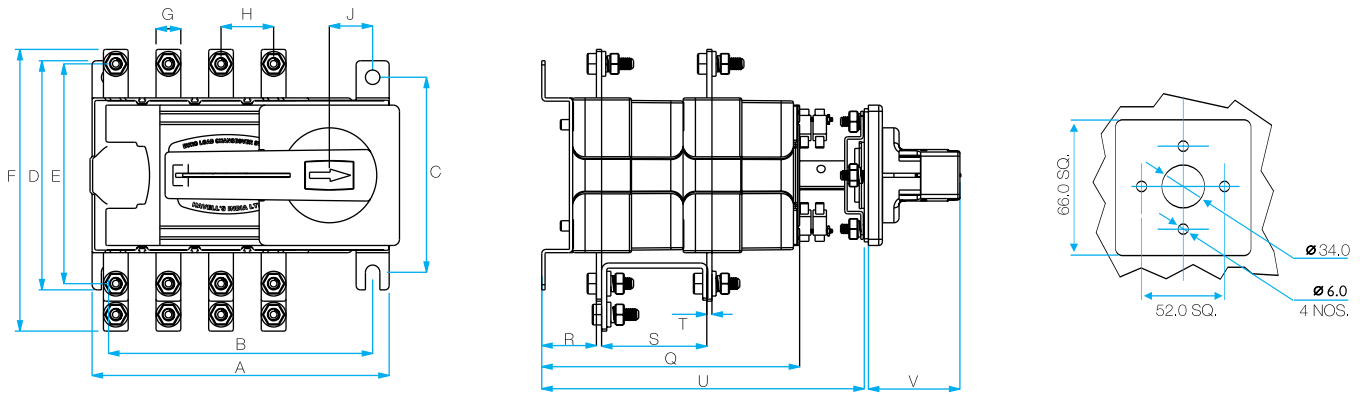
PHASE SEPARATOR



Size 00

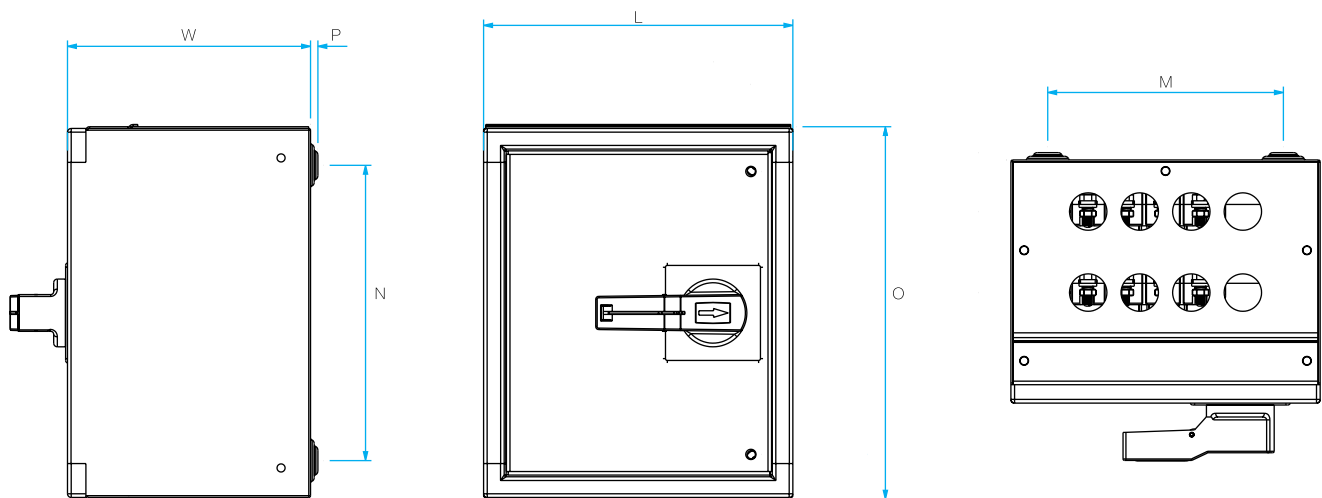
Current Rating (A)	Open Execution Cat. No.	In Enclosure Cat. No.
040	IHCNFO0040	IHCNFE0040
063	IHCNFO0063	IHCNFE0063
080	IHCNFO0080	IHCNFE0080
100	IHCNFO0100	IHCNFE0100

Dimensions (in mm) - Open Execution



Current (A)	A	B	C	D	E	F	G	H	J	Q	R	S	T	U	V
040A	144	128	94.5	111.0	96.5	126.5	12.0	25.5	21.0	125.0	26.5	51.0	2.5	156.0	44.0
063A	144	128	94.5	111.0	96.5	126.5	12.0	25.5	21.0	125.0	26.5	51.0	2.5	156.0	44.0
080A	144	128	94.5	111.0	106.5	136.5	12.0	25.5	21.0	125.0	26.5	51.0	2.5	156.0	44.0
100A	144	128	94.5	111.0	106.5	136.5	12.0	25.5	21.0	125.0	26.5	51.0	2.5	156.0	44.0

Dimensions (in mm) - in Enclosure



Current (A)	Cat No.	L	M	N	O	P	W
040A	IHCNFE0040	210	160	200	256	5	165
063A	IHCNFE0063	210	160	200	256	5	165
080A	IHCNFE0080	210	160	200	256	5	165
100A	IHCNFE0100	210	160	200	256	5	165