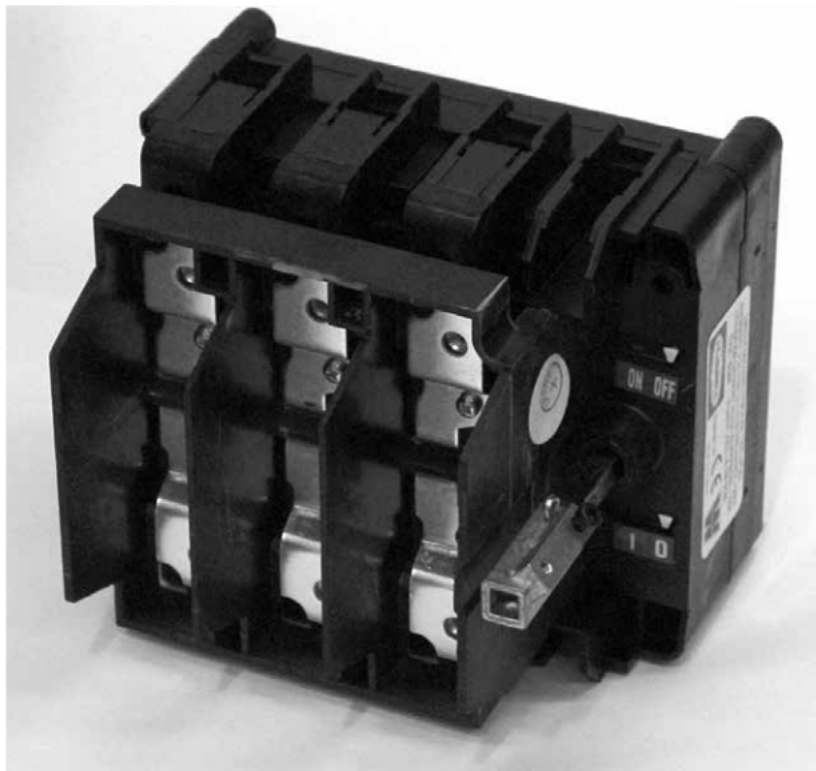


SECTION 1 FUSE SWITCHES

SWITCHES FOR BS FUSES & SOLID LINKS

- Fully comply with BSEN60947-3
- 10 Sizes up to 800 Amps
- 3, 4 and 6 Pole Versions
- Neutral Link Assemblies available
- Option of tinned contacts for sulphur laden atmospheres
- ASTA, KEMA tested

UFS FUSE SWITCHES
HAVE SWITCHED,
PROTECTED AND
ISOLATED FOR OVER
40 YEARS



- Operates safely under normal load, overload and short circuit conditions
- Powerful independent manual operation ensures contacts cannot be closed or opened slowly
- Contacts are knife type and do not 'Blow' apart on short circuit
- Incoming connection can be made to either side of switch. All switches provide isolating distance contact breaks on either side of fuse link

ORDERING GUIDE

Technical Data - Electrical Details

Fuse Size	Rated Insulation Voltage Pollution Degree. Note 1	Dielectric Strength 50Hz 1 Min	Rated Impulse Withstand Voltage	Rated Enclosed Thermal Current (with Fuses). Notes 1&2	With Maximum Fuse Power Dissipation	Rated Enclosed Thermal Current (with Solid Links). Note 2	Operational Current AC22A		Operational Current AC23A		Operational Power AC23A (Based on nominal Full Load Current)		
							380/415V	380/415V	500/550V	600/690V	415V	550V	660V
ELECTRICAL PERFORMANCE													
A1	690	2.5	8.0	32	3.5	50	32	32	32	20	15	11	11
A2	690	2.5	8.0	50	5.0	50	50	32	32	20	15	22	11
A3	690	2.5	8.0	100	8.5	100	100	63	45	45	30	30	37
A3	660	2.5	8.0	100	8.5	100	100	100	63	63	55	45	55
A4	690	2.5	8.0	160	14.5	200	160	160	125	80	75	90	75
B2	690	2.5	8.0	250	19.0	315	250	200	200	200	110	150	160
B3	690	2.5	8.0	355	28.0	400	355	315	315	250	160	220	275
B4	690	2.5	8.0	400	32.0	500	400	400	400	-	220	-	-
C3	690	2.5	8.0	630	50.0	800	630	630	-	-	355	-	-
C3	690	2.5	8.0	800	64.0	800	800	800	-	-	450	-	-
	V	kV	kV	A	W	A	A	A	A	A	kW	kW	kW

NOTE

1. At these ratings the external copper connections must not be less than those specified in IEC947-3.
2. The ratings are for switches in ambient temperatures up to 40°C. Above this temperature, derate the switches with solid links by 5% per 5° and switches with fuses in accordance.
3. The operational current and category correspond to a breaking capacity of AC22A 3xl 0.45pf & AC23A UFS32A1-100 8xl 0.45pf, UFS160up 8xl 0.35pf.

Technical Data - Mechanical Details

FUSE SWITCH UFS NUMBER

UFS 32 A1
UFS 32 A1T

UFS 32
UFS 32T

UFS 63
UFS 63T

UFS 100 A3
UFS 100 A3T

UFS 160
UFS 160T

UFS 200
UFS 200T

UFS 315
UFS 315T

UFS 400
UFS 400T

UFS 630
UFS 630T

UFS 800 C3
UFS 800 C3T

Operating Torque (typical for 3 pole Sw).	Terminal Bolt Size. Note 7	Terminal Tightening Torque. Note 7&8	Fuse Bolt Tightening Torque. Note 7	Creepage distance, Phase-Phase/Phase-Earth	Clearance distance, Phase-Phase/Phase-Earth	Isolation distance between contacts	Weight of basic Switch 3 Pole	Maximum size of connections, Cable C.S.A.	Cable size when using crimp type Spade Terminal ANE-3-U4	1 Connection strip width maximum	Minimum c.s.a of external connections at AC23A rating	Max padlock hasp for shaft padlock
MECHANICAL DETAILS												
3	Cage Clamp	1.35	1.4	10/8	10/8	16	0.54	10	16	8.5	2.5	6
3	Cage Clamp	1.35	2.2	10/8	10/8	16	0.61	10	16	8.5	6	6
5	Cage Clamp	3.5	2.2	25/24	25/20	20	1.5	35	-	7.0	16	6
12	M6	4.5	2.2	24/14	20/14	14	2.4	95	-	20	35	8
16	M6	4.5	11.0	25/14	24/14	14	3.5	95	-	26	70	8
27	M10	19.0	11.0	40/18	20/34	14	6.5	185	-	40	95	8
27	M10	19.0	11.0	40/18	20/34	14	7.25	240	-	40	185	8
27	M12	19.0	11.0	40/18	20/34	14	9.5	-	-	50	240	8
27	1 x M16 4 x M8	62.0 11.0	19.0	40/18	20/34	14	19.25	-	-	75	400	8
27	1 x M16 4 x M8	62.0 11.0	19.0	40/18	20/34	14	19.25	-	-	75	500	8
Nm	-	Nm	Nm	mm	mm	mm	Kg	mm ²	mm ²	mm	mm ²	Ømm

NOTES

- Torque values defined relate to nuts and bolts with clean dry threads.
- On UFS100 upwards, where main connections are of bolted type, care must be taken not to impose a heavy twisting force on the copper switch palms. The twisting load should be taken by a spanner holding the nut at the rear of the palm.

OLD WATFORD UFSB TO NEW UFS FUSE SWITCH

COMPARISON CHART

Hubbell have provided switch solutions for over four decades. The old WATFORD range of fuse switches are common in installations dating back to the 1970's, some are now found to be reaching the end of their practical service life.

Where spare parts are exhausted, and old switches are found to be in need of replacement we offer old to new switch adapter plates. These plates ensure that the operating shaft position is maintained to the handle and therefore disruption to the panel door is minimal. Often the existing handle can be used on the new switch, or can be exchanged to include modern padlock features.

For replacement tinned plated switches refer to switch ratings on Page 5.

FUSE SWITCH UFS NUMBER	REPLACEMENT 3 POLE FUSE SWITCH	CURRENT RATING AC23 415V	KW RATING AC23 415V	ADAPTER PLATE NOTE 2	OBSOLETE FUSE SWITCH	OBSOLETE SWITCH PART NUMBER	OBSOLETE SWITCH RATING NOTE 1
UFS 32 A1	-	-	-	-	-	-	-
UFS 32	62304-1	32A	15	62545-1	UFS3	60696-1	42A
UFS 63	62289-1	63A	30	62546-1	UFS3	60696-1	42A
UFS 100 A3	62489-1	100A	55	62548-1	UFS6	62156-1	63A
	62489-1	100A	55	62577-1	UFS13	62157-1	125A
UFS 160	62189-1	160A	75	62549-1	UFS13	62157-1	125A
UFS 200	62132-1	200A	110	62550-1	UFS25	62158-1	200A
UFS 315	62269-1	315A	160	62551-1	UFS30	62159-1	250A
UFS 400	62344-1	400A	230	62552-1	UFS40	62080-1	400A
	62344-1	400A	230	62553-1	UFS80	62080-1	550A
UFS 630	62350-1	630A	355	62554-1	UFS80	62083-1	550A
UFS 800 C3	-	-	-	-	-	-	-

Please contact the sales office for advice on the following:

- Auxiliary switches and accessories; as the old accessories will not fit the new switch.
- For other old Hubbell / Watford switches not listed above.
- In addition to the standard adapter plates we have developed separate solutions for panel boards manufactured by Laurence Scott & Electromotors of Norwich (LSE).

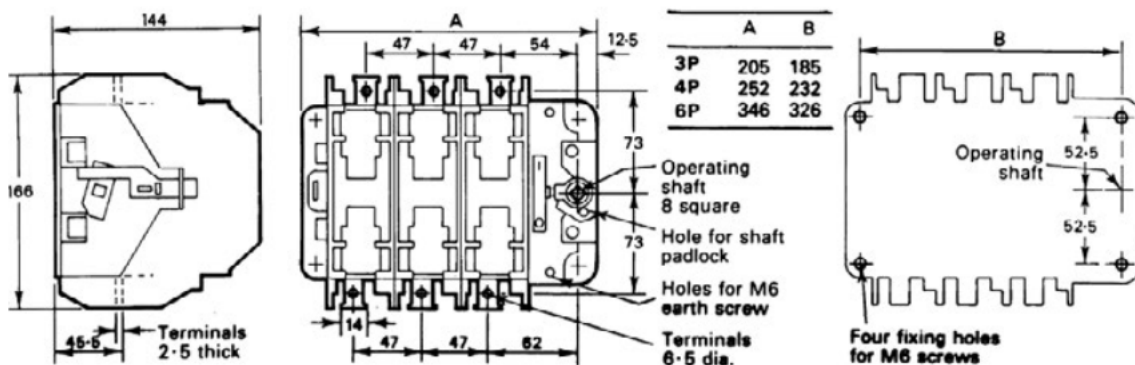
NOTES

1. Ratings shown are maximum when fitted with BS fuse links.
2. If using adapter plates with tinned plated fuse switches please observe the switch ratings.

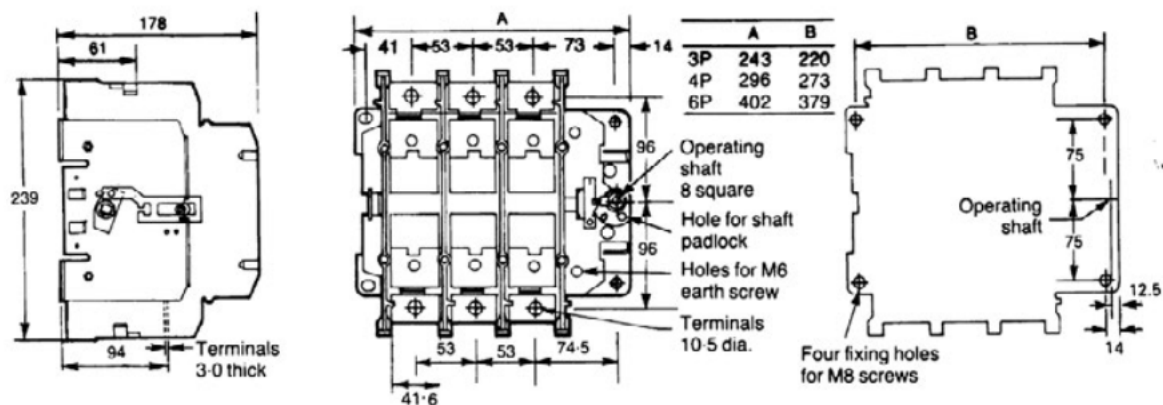
Technical Data - Fuse Switches

Dimensions in millimetres

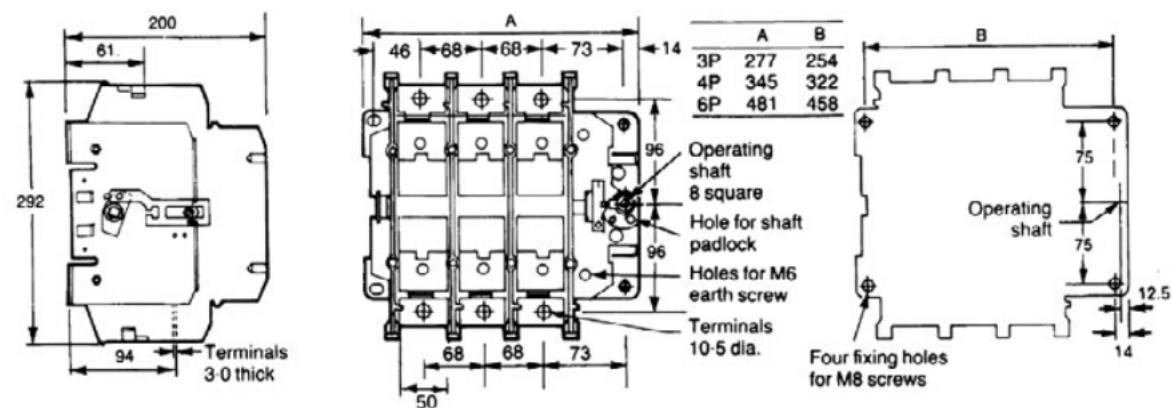
UFS 160



UFS200



UFS315



UFS400

