



®

NFC & NH Fuse Switch Selection

Fuse Switches to IEC 947-3

MOTOR CONTROL AC23A RATINGS 415 VOLT 3 PHASE				FUSE SWITCH UFS NUMBER	ELECTRICAL DISTRIBUTION AC22A RATINGS 415 VOLT 3 PHASE	
ie amps	kw	Fuse Size			le amps	
		NFC	NH			
20	7.5	10 x 38		UFS 25 NFC		25
32	15	14 x 51		UFS 32 NFC		50
63	30	22 x 58		UFS 63 NFC		63
63	30		C00	UFS 63 NH		80
100	55		C00	UFS 100 NH		100
160	75		00	UFS 160 NH		160
250	132		1	UFS 250 NH		250
400	230		2	UFS 400 NH		400
630	350		3	UFS 630 NH		630

Ordering Guide - NFC & NH Fuse Switch

Fuse Switch catalogue numbers include basic switch, terminal hardware and standard operating shaft.
For extra long shafts see page 6



Fuse Switch UFS Number	3 Pole	3 Pole + Switched Neutral	6 Pole	Switch Mounted Neutral Link	Free Standing Neutral Link	Terminal Cover	Fuse Cover
UFS 25 NFC	62331-1	62295-1	Use two 3 pole switches plus a parallel drive kit (page)	-	60015-4	62305-1	62332-1
UFS 32 NFC	62319-1	62320-1		-			62333-1
UFS 63 NFC	62317-1	62318-1		-	62248-2	62285-1	
UFS 63 NH	62315-1	62296-1	-	-		62322-1	
UFS 100 NH	62422-1	62423-1	-	62463-1 Fully rated	60006-2	62401-1 3 pole 62401-2 4 pole	62394-1UK 3 pole 62394-2 4 pole
UFS 160 NH	62301-1	62298-1	-	62463-1 Fully rated		62135-1 3/4 pole	62324-1 3 pole 62324-2 4 pole
UFS 250 NH	62302-1	62299-1	-	62464-1 Fully rated		62275-1 3 pole 62276-1 4 pole	62273-1 3 pole 62274-1 4 pole
UFS 400 NH	62365-1	62366-1	-	62464-1 Fully rated	60707-1	62348-1 3 pole 62349-1 4 pole	62346-1 3 pole 62347-1 4 pole
UFS 630 NH	62482-1	62483-1	-	62464-1 Half rated		62484-1 3 pole 62484-2 4 pole	62357-1 3 pole 62357-2 4 pole



Ordering Guide - Standard Moulded Handles For NFC & NH Fuse Switches

For handle style and functions see page 4

	TYPE A	TYPE C	TYPE D	TYPE E	TYPE H	TYPE I
UFS25NFC	HS2000 (IP65) Note 1:		HS2000 (IP65) Note 1:	HS2000 (IP65) Note 1:		
UFS32NFC	Black 62339-1 Red/Yellow 62339-1RY		Black 62339-3	Black 62339-4 Red/Yellow 62339-4RY		62146-1
UFS63NFC	HS (IP54)	HS (IP54)	HS (IP54)			
UFS63NH	Grey 61935-1	Grey 61935-3	Grey 61935-4			
UFS100NH	HK (IP41) Grey 61554-1 Black 61554-1BK Red/Yellow 61554-1RY Padlock Kit Grey	HK (IP41) Grey 61554-3 Black 61554-3BK Red/Yellow 61554-3RY Padlock Kit Grey	HK (IP41) Grey 61554-10 Black 61554-10BK Red/Yellow 61554-10RY Padlock Kit included		61979-3 (up to UFS400NH)	61915-1
UFS160NH	Single 61866-1 Multi 61866-2 Black 61866-1BK Yellow 61886-1Y	Single 61866-1 Multi 61866-2 Black 61866-2BK Yellow 61886-2Y				
UFS250NH						
UFS400NH	Double Arm (IP65) Grey 62337-1 Padlock Kit included	Double Arm (IP65) Grey 62337-3 Padlock Kit included	Double Arm (IP65) Grey 62337-10 Padlock Kit included			62108-1
UFS630NH	Black 62337-1BK	Black 62337-3BK	Black 62337-10BK		62528-1	
	OPTIONAL Ingress Protection Kit for IP65	OPTIONAL Ingress Protection Kit for IP65	OPTIONAL Ingress Protection Kit for IP65			
	HS 61940-1	HS 61940-1	HS 61940-1			
	HK 61557-1	HK 61557-1 Cylinderlock 5200305	HK 61557-1			

Note 1: HS2000 handles can be modified to padlock in the ON position

FOR ALL OTHER ACCESSORIES FOR THE NFC & NH FUSE SWITCHES REFER TO PAGES 6 TO 11

Technical Data - Type NFC & NH Switch Fuses IEC947-3



SWITCH TYPE		UFS25NFC	UFS32NFC	UFS63NFC	UFS63NH	UFS100NH	UFS160NH	UFS250NH	UFS400NH	UFS630NH
ELECTRICAL PERFORMANCE										
Thermal enclosed Current with Fuse links ①	Amps	25	50	63	80	100	160	250	400	630
Operating Current AC22A 380/415V	Amps	25	50	63	80	100	160	250	250	630
Operational Current AC23A 380/415V 660V	Amps	20	32	63	63	100	160	250	400	630
	Amps	20	20	45	45	63	80	250	-	-
Operational Power AC23A 380/415V 660V	kW	7.5	15	30	30	55	75	132	230	355
	kW	11	11	37	37	55	75	200	-	-
Rated Insulation Voltage	V	690	690	690	690	690	690	690	690	690
Rated Conditional Short Circuit Current ②	kA	80	80	80	80	80	80	80	80	80
Maximum Size NFC Fuse	kA	10 x 38	14 x 51	22 x 58	C00	C00	00	1	2	3
Fuse Cut Off Current	kA	4.5	7.6	14	13	15	20	30	41	61

MECHANICAL DETAILS

Max. No. of Auxiliary Circuits		8	8	8	8	24	24	24	24	24
Creepage : phase-phase / phase-earth	mm	10/8	10/8	25/24	25/24	24/14	25/14	40/18	40/18	40/18
Clearance Phase-phase/phase-earth	mm	10/8	10/8	25/20	25/20	20/14	24/14	20/34	20/34	20/34
Isolation distance between contacts	mm	16	16	20	20	14	14	14	14	14
Min.c.s.a. of external connections at rated AC23A current	mm ²	2.5	6	16	16	35	70	120	240	400
Operational Performance - No. of Operations		10,000	10,000	10,000	10,000	10,000	8,000	8,000	5,000	5,000
Weight of base Switch	Kg	0.54	0.61	1.5	1.5	2.4	3.5	6.5	9.5	19.25
Max. size of connections: Cable c.s.a. Strip width	mm ²	10	10	25	25	95	95	185	-	-
	mm	8.5	8.5	7.0	7.0	20	26	40	50	75

GENERAL

- (a) The operational current and category correspond to a breaking capacity of - AC22A 3xIe 0.65pf -AC23A UFS63NH & 100NH 8xIe 0.45pf UFS160NH up 8xIe 0.35pf
 (b) The ratings are for switches in ambient temperatures up to 50°C. Above this temperature, de-rate the switches with solid links by 5% per 5 degree C, and switches with fuses in accordance with the fuse manufacturer's recommendations.

NOTES

- ① At these ratings the external copper connections must not be less than those specified in IEC947-3.
 ② The rated fused short-circuit currents quoted were used for proving tests. Provided that the cut-off current does not exceed the values given, these fuse switches may be used on any prospective current.



Ordering Guide - Fuse Switches for Accommodating Semi-Conductor protection fuse links

The proliferation of solid state drives and similar devices has led to a growing need for fuse switch combination units which can accommodate semi-conductor fuse links.

These fuses comply with the requirements of IEC269-4. DIN style semi-conductor protection fuse links are available in size 000 upwards and these fuses can physically be

accommodated in the Hubbell NFC and NH ranges of fuse switches.

It should be noted that semi-conductor fuses in general have a significantly higher watts loss than the equivalently rated general purpose fuse. Typically this loss can be twice (or more) that of a standard fuse.

Accordingly, when using this type of fuse mounted in a fuse switch some

de-rating may be required to prevent overheating and premature degradation of the fuse link.

The following table lists Hubbell type NFC and type NH fuse switches and the Bussman semi-conductor fuses they will accommodate together with the maximum running current of the combination.

Similar information to the above can

be provided for fuses manufactured by any other manufacturer. Enquiries should be faxed to Hubbell Limited Engineering Department, Fax No. 01234 848578

To use this ordering guide, first establish the Hubbell fuse switch reference e.g. UFS25 NFC then read off the NFC/NH fuse switch and accessory catalogue numbers.

HUBBELL SWITCH REFERENCE	F/S AMPS ITH	FUSE SIZE	BUSSMANN FUSE REFERENCE	FUSE RMS Amps	FUSE LOSS Watts	FUSE PRE-ARCING FT	FUSE CLEARANCE FT	FUSE/SWITCH MAX LOAD Amps
UFS25NFC	25	10 x 38	FWC6A1OF	6	1.50	4	30	6
UFS25NFC	25	10 x 38	FWC8A1OF	8	2.00	6	50	8
UFS25NFC	25	10 x 38	FWC10A1OF	10	2.50	9	70	10
UFS25NFC	25	10 x 38	FWC12A1OF	12	3.00	15	120	12
UFS25NFC	25	10 x 38	FWC16A1OF	16	3.50	25	150	14
UFS25NFC	25	10 x 38	FWC20A1OF	20	4.80	34	260	15
UFS25NFC	25	10 x 38	FWC25A1OF	25	6.00	60	390	17
UFS25NFC	25	10 x 38	FWC32A1OF	32	7.50	95	600	20
UFS32NFC	50	14 x 51	FWH5A14F	5	1.50	1.6	2.5	5
UFS32NFC	50	14 x 51	FWH10A14F	10	4.00	3.6	6	10
UFS32NFC	50	14 x 51	FWH15A14F	15	5.50	10	16	15
UFS32NFC	50	14 x 51	FWH20A14F	20	6.00	26	40	19
UFS32NFC	50	14 x 51	FWH25A14F	25	7.00	49	75	22
UFS32NFC	50	14 x 51	FWH30A14F	30	9.00	58	90	23
UFS32NFC	50	14 x 51	FWP5A14F	5	1.50	1.6	4	5
UFS32NFC	50	14 x 51	FWP10A14F	10	4.00	3.6	10	10
UFS32NFC	50	14 x 51	FWP15A14F	15	5.50	10	22	15
UFS32NFC	50	14 x 51	FWP20A14F	20	6.00	26	60	19
UFS32NFC	50	14 x 51	FWP25A14F	25	7.00	44	130	22
UFS32NFC	50	14 x 51	FWP30A14F	30	9.00	58	150	23
UFS32NFC	50	14 x 51	FWP32A14F	32	7.60	95	800	27
UFS32NFC	50	14 x 51	FWP40A14F	40	8.00	110	980	33
UFS32NFC	50	14 x 51	FWP50A14F	50	9.00	220	1800	39
UFS32NFC	50	14 x 51	170N1005	10	2.50	9	100	10
UFS32NFC	50	14 x 51	170N1006	12	2.90	15	170	12
UFS32NFC	50	14 x 51	170N1007	16	3.60	29	250	16
UFS32NFC	50	14 x 51	170N1008	20	4.80	34	370	20
UFS32NFC	50	14 x 51	170N1009	25	6.00	60	560	23
UFS32NFC	50	14 x 51	170N1011	32	7.60	95	850	27
UFS32NFC	50	14 x 51	170N1013	40	7.00	105	760	35
UFS32NFC	50	14 x 51	170N1014	50	9.00	215	1400	39
UFS63NFC	63	22 x 58	FWP20A22F	20	4.60	34	370	20
UFS63NFC	63	22 x 58	FWP25A22F	25	5.60	60	560	25
UFS63NFC	63	22 x 58	FWP32A22F	32	7.00	95	850	30
UFS63NFC	63	22 x 58	FWP40A22F	40	8.50	185	1350	34
UFS63NFC	63	22 x 58	FWP50A22F	50	9.50	155	1120	40
UFS63NFC	63	22 x 58	FWP63A22F	63	11.00	310	2700	47
UFS63NFC	63	22 x 58	FWP80A22F	80	13.50	620	5100	54
UFS63NFC	63	22 x 58	FWP100A22F	100	16.00	1250	10000	63
UFS63NFC	63	22 x 58	170N2008	20	4.60	34	370	20
UFS63NFC	63	22 x 58	170N2009	25	5.60	60	560	25
UFS63NFC	63	22 x 58	170N2011	32	7.00	95	850	30
UFS63NFC	63	22 x 58	170N2013	40	8.50	185	1350	34
UFS63NFC	63	22 x 58	170L2214	50	9.50	155	1120	40
UFS63NFC	63	22 x 58	170L2216	63	11.00	310	2150	47
UFS63NFC	63	22 x 58	170L2217	80	13.50	620	4050	54
UFS63NFC	63	22 x 58	170L2218	100	16.00	1250	8050	63
UFS63NH	100	000	170M1558	10	3.00	3.8	25.5	10
UFS63NH	100	000	170M1559	16	5.50	7.2	48	16
UFS63NH	100	000	170M1560	20	7.00	11.5	78	20
UFS63NH	100	000	170M1561	25	9.00	19	130	22

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Fuse Switch catalogue numbers include basic switch, terminal hardware and standard operating shaft. For extra long shafts see page 6



HUBBELL SWITCH REFERENCE	F/S AMPS ITH	FUSE SIZE	BUSSMANN FUSE REFERENCE	FUSE RMS Amps	FUSE LOSS Watts	FUSE PRE-ARCING FT	FUSE CLEARANCE FT	FUSE/SWITCH MAX LOAD Amps
UFS63NH	100	000	170M1562	32	10.00	40	270	27
UFS63NH	100	000	170M1563	40	12.00	69	460	30
UFS63NH	100	000	170M1564	50	15.00	115	770	34
UFS63NH	100	000	170M1565	63	16.00	215	1450	42
UFS63NH	100	000	170M1566	80	19.00	380	2550	49
UFS63NH	100	000	170M1567	100	24.00	695	4650	54
UFS63NH	100	000	170M1568	125	28.00	1200	8500	63
UFS63NH	100	000	170M1569	160	32.00	2300	16000	76
UFS63NH	100	000	170M1570	200	37.00	4200	28000	87
UFS63NH	100	000	170M1571	250	42.00	7750	51500	100
UFS63NH	100	000	170M1572	315	52.00	12000	80500	100
UFS100NH	100	000	170M1558	10	3.00	3.8	25.5	10
UFS100NH	100	000	170M1559	16	5.50	7.2	48	16
UFS100NH	100	000	170M1560	20	7.00	11.5	78	20
UFS100NH	100	000	170M1561	25	9.00	19	130	22
UFS100NH	100	000	170M1562	32	10.00	40	270	27
UFS100NH	100	000	170M1563	40	12.00	69	460	31
UFS100NH	100	000	170M1564	50	15.00	115	770	35
UFS100NH	100	000	170M1565	63	16.00	215	1450	43
UFS100NH	100	000	170M1566	80	19.00	380	2550	49
UFS100NH	100	000	170M1567	100	24.00	695	4650	55
UFS100NH	100	000	170M1568	125	28.00	1200	8500	64
UFS100NH	100	000	170M1569	160	32.00	2300	16000	76
UFS100NH	100	000	170M1570	200	37.00	4200	28000	89
UFS100NH	100	000	170M1571	250	42.00	7750	51500	100
UFS100NH	100	000	170M1572	315	52.00	12000	80500	100
UFS160NH	160	000	170M1558	10	3.00	3.8	25.5	10
UFS160NH	160	000	170M1559	16	5.50	7.2	48	16
UFS160NH	160	000	170M1560	20	7.00	11.5	78	20
UFS160NH	160	000	170M1561	25	9.00	19	130	25
UFS160NH	160	000	170M1562	32	10.00	40	270	32
UFS160NH	160	000	170M1563	40	12.00	69	460	40
UFS160NH	160	000	170M1564	50	15.00	115	770	50
UFS160NH	160	000	170M1565	63	16.00	215	1450	61
UFS160NH	160	000	170M1566	80	19.00	380	2550	71
UFS160NH	160	000	170M1567	100	24.00	695	4650	79
UFS160NH	160	000	170M1568	125	28.00	1200	8500	91
UFS160NH	160	000	170M1569	160	32.00	2300	16000	109
UFS160NH	160	000	170M1570	200	37.00	4200	28000	128
UFS160NH	160	000	170M1571	250	42.00	7750	51500	150
UFS160NH	160	000	170M1572	315	52.00	12000	80500	160
UFS250NH	250	1	170M3808	40	9.00	40	270	40
UFS250NH	250	1	170M3809	50	11.00	77	515	50
UFS250NH	250	1	170M3810	63	14.00	115	770	63
UFS250NH	250	1	170M3811	80	18.00	185	1250	80
UFS250NH	250	1	170M3812	100	21.00	360	2450	100
UFS250NH	250	1	170M3813	125	26.00	550	3700	117
UFS250NH	250	1	170M3814	160	30.00	1100	7500	140
UFS250NH	250	1	170M3815	200	35.00	2200	15000	162
UFS250NH	250	1	170M3816	250	40.00	4200	28500	190
UFS250NH	250	1	170M3817	315	50.00	7000	46500	213
UFS250NH	250	1	170M3818	350	55.00	10000	68500	226
UFS250NH	250	1	170M3819	400	60.00	15000	105000	246
UFS400NH	400	2	170M5808	400	65.00	11000	74000	285
UFS400NH	400	2	170M5809	450	70.00	15500	105000	308
UFS400NH	400	2	170M5810	500	75.00	21500	145000	331
UFS400NH	400	2	170M5811	550	80.00	28000	190000	352
UFS400NH	400	2	170M5812	630	90.00	41000	275000	383
UFS400NH	400	2	170M5813	700	95.00	60500	405000	400
UFS630NH	630	3	170M6808	500	95.00	14000	95000	335
UFS630NH	630	3	170M6809	550	100.0	19500	135000	360
UFS630NH	630	3	170M6810	630	105.0	31000	210000	398
UFS630NH	630	3	170M6811	700	110.0	44500	300000	437
UFS630NH	630	3	170M6812	800	115.0	69500	465000	486
UFS630NH	630	3	170M6813	900	120.0	100000	670000	532
UFS630NH	630	3	170M6814	1000	125.0	140000	945000	583

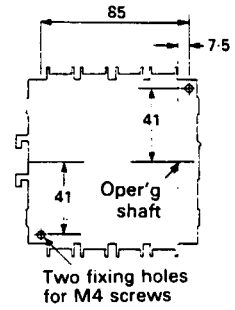
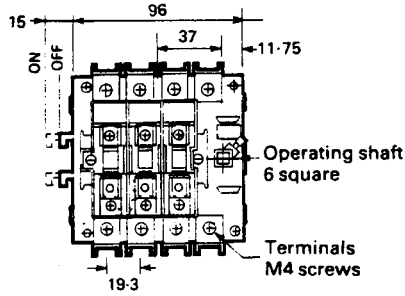
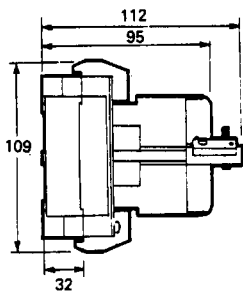


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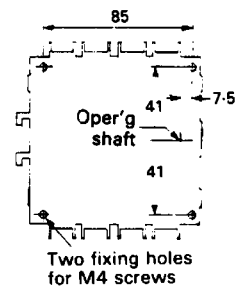
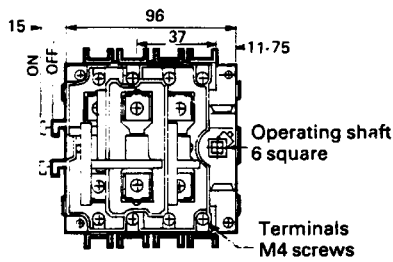
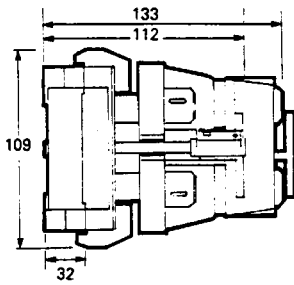
Dimensions in millimetres

FUSE SWITCHES

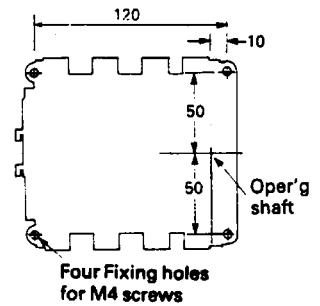
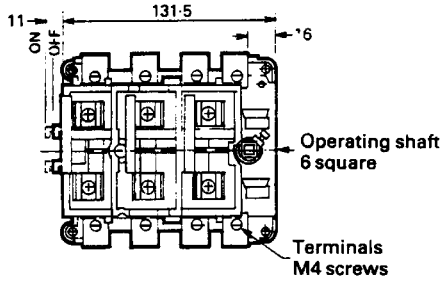
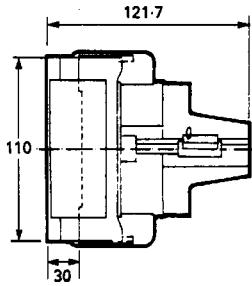
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NFC**



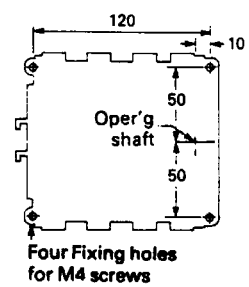
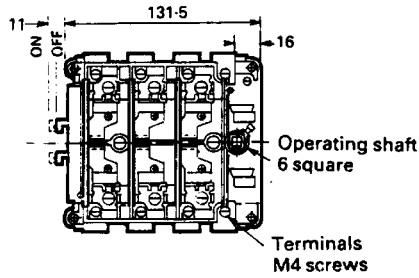
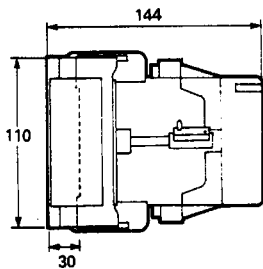
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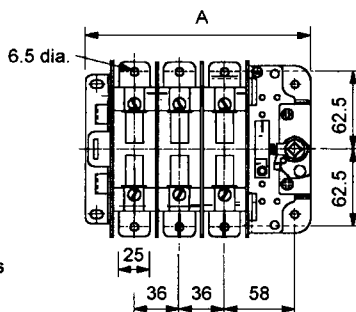
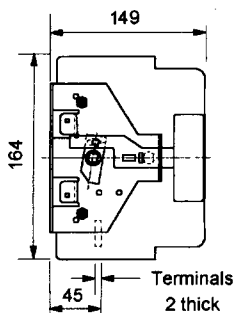
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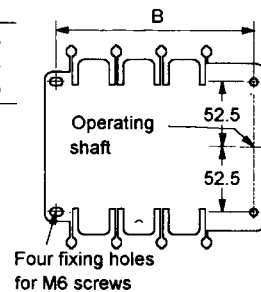
**UFS 63
NH**



**UFS 100
NH**



	A	B
3P	180	158
4P	216	194
6P	288	266



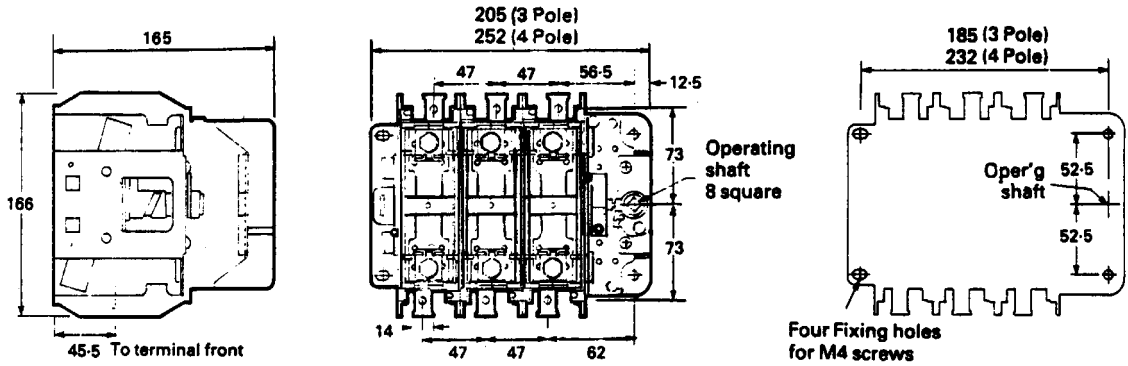
Technical Data

Dimensions in millimetres

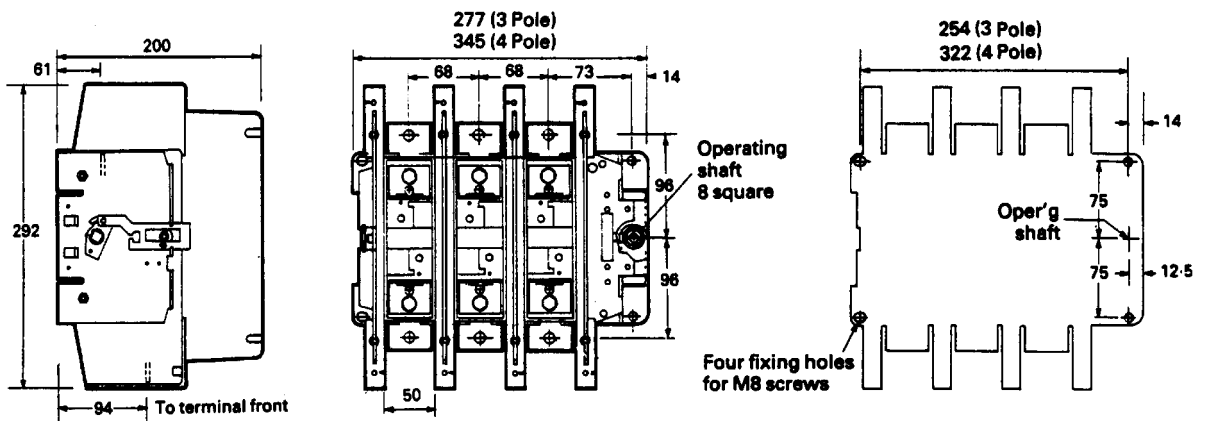


FUSE SWITCHES

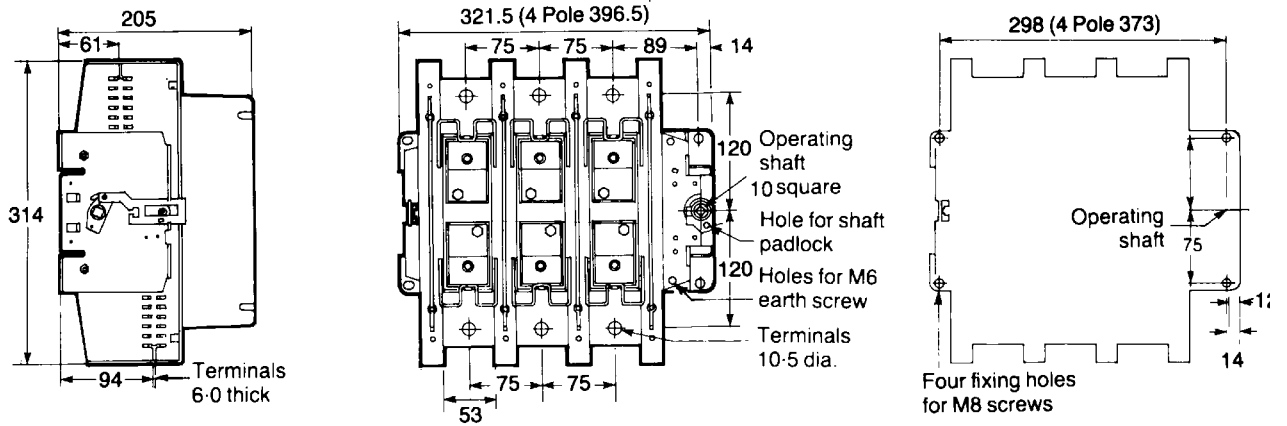
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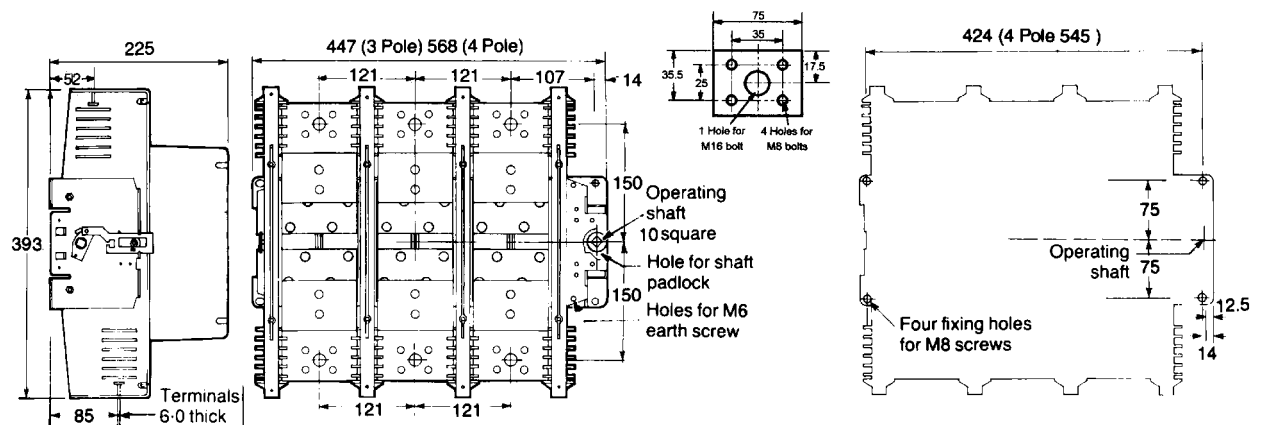
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UFS 400 NH



UFS 630 NH



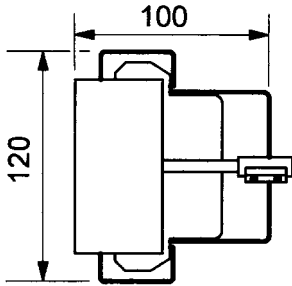


Technical Data

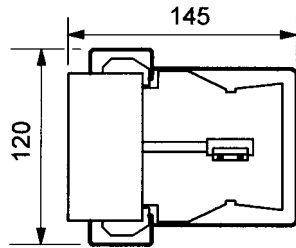
Dimensions in millimetres

SAFETY COVERS

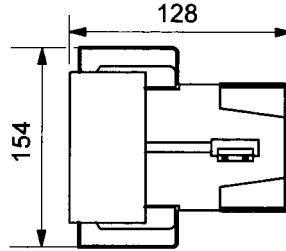
UFS 25 NFC



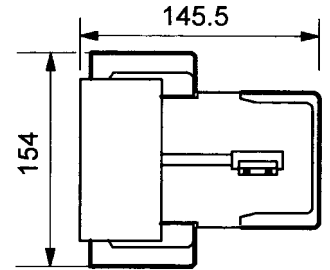
UFS 32NFC



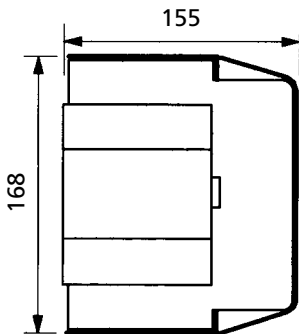
UFS 63NFC



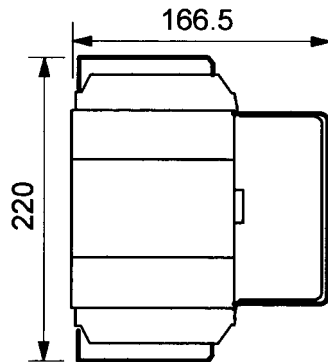
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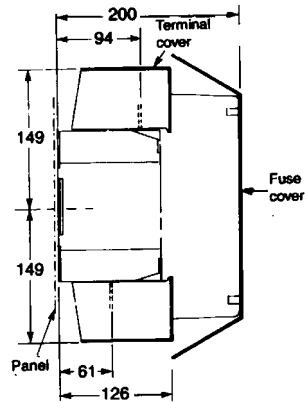
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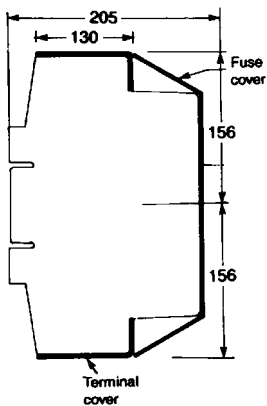
UFS 160NH



UFS 250NH



UFS 400NH



UFS 630 NH

