

IEC Fusible Disconnect Switches

IEC Fusible Disconnect Switches

Mersen's fusible disconnect switches bear the CE mark as conformance to IEC 60947-3. They are "service entrance" devices capable of fully rated load-break and load-make. While long-term safety, reliability, and functionality are always paramount in the design of our products, these switches are also engineered to have the smallest footprint. The modular design allows placement of the handle anywhere amongst the poles. The fuse doors cannot open when the switch is in the "ON" position, and all switches are double-break, which isolates both fuse clips from voltage during fuse replacement. The switches' "Test" position allows actuation of the auxiliary contacts without main power. Power taps enable energizing a CPT or surge device without the need for a separate terminal block.

A wide range of ergonomic handles are available, as are all manner of accessories.

Highlights:

- Multiple Configurations
- Power taps
- Adjustable shaft depth
- Fuse monitoring
- Interlocked fuse doors

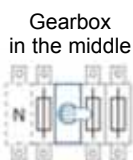
Applications:

- Main disconnects
- Short circuit protection
- Electrical isolation
- Overcurrent protection
- Safety switch

Configurations



Gearbox
on the side



Gearbox
in the middle

Side operated



Catalog Number Designation

		M	30	D	3	0	—	S
Switch	M = Mersen AC Switch							
Ampacity	25 to 1250A							
Type	J = J fused F = NFC fused							
	D = DIN fused B = BS-88 fused							
Number of Poles/Left side of Handle	AC: 0, 1, 2, 3, 3N, 4, etc. (N = neutral)							
Number of Poles/Right side of Handle	AC: Blank = < 200A non-fused, 0, 1, 2, 3, 3N, 4, etc. (N = neutral)							
Revision	Blank = 0							
Special Configurations	S = side-operated N = Non-fused switched Neutral							



Ratings IEC:

Volts : 690VAC
Amps : 25, 50, 63, 125, 160,
 200, 250, 400, 630,
 800, and 1250A

Approvals:

- IEC 60947-3



IEC Fusible Disconnect Switches

Front and Side Operated



M25F12S
25A, NFC fused, 1 pole left of handle,
2 poles to the right, side operated



M63D03
63A, D fused, with
3 poles on right side of handle

Switch Body

Ampere Rating	25	50	125	63	160	200	250
Base Part #	M25	M50	M125	M63	M160	M200	M250
Fuse Type	F	F	F	D	D	D	D
3-pole Configuration	12, 30S	03, 30S	03, 30S	03, 30S	03, 30S	03, 30S	03, 30S
Fuse Size	10x38	14x51	22x58	000	00	0	0-1

Switch Body Ampere Rating	25	50	125	63	160	200	250
Fourth Pole							
Fusible Fourth Pole						4PD200	4PD250

Direct Front Operation							
	HDF30	HDF200	HDF200	HDF200	HDF200	HDF250T	HDF250T

External Front Operation - Pistol Style							
NEMA Type 1, 3R, 12, IP65	HB45/65	HB45/65	HB65	HB65	HB65	HB65	HB65
NEMA Type 4, 4X	HB45X	HB45X	HB65X	HB65X	HB65X	HB65X	HB65X

B=Black. Substitute 'R' for 'B' if a red handle is desired. Ex. HR45

External Right-Side Operation - Pistol Style							
NEMA 1, 3R, IP65	HB65S	HB65S	HB65S	HB65S	HB65S	HB65S	HB65S

Shafts							
	SPA__	SPA__	SPA__	SPA__	SPA__	SPA__	SPA__

Lengths: 130, 210, 290, 360, 430 Ex. SPA210

Terminal Shrouds							
3-pole			TSF160-13		TSF160-13	TSF200-13	TSF250-13
4-pole			TSF160-14		TSF160-14	TSF200-14	TSF250-14

Auxiliary Contacts							
NO, use with OSZ4	OA1G10	OA1G10	OA1G10	OA1G10	OA1G10	OA1G10	OA1G10
NC, use with OSZ4	OA3G01	OA3G01	OA3G01	OA3G01	OA3G01	OA3G01	OA3G01
NO, between poles	OA4B1C						
Mounting plate OA1G10/OA3G01	OSZ4	Not needed	Not needed	Not needed	Not needed	Not needed	Not needed
Module for 8 aux. contacts	OEA28	OEA28	OEA28	OEA28	OEA28	OEA28	OEA28

Blown fuse indicators (DPMM), Striker type fuse needed							
Kit 3 poles 1 contact	BFM25FP3						
Kit 3poles 3 contacts		BFM50FP3	BFM125FP3				
Kit 3poles 3NO+NC							BFM800DP3

Handles



HB65



HR45



HDF200

Shafts



Accessories

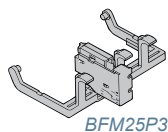


TSF250-14

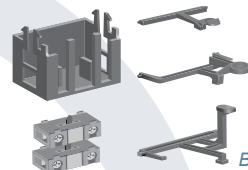
OEA28



TSF400-14



BFM25P3



BFM800DP3

For the most current product performance data visit ep.mersen.com and use catalog search.

IEC Fusible Disconnect Switches

Front and Side Operated



M400D30S
400A, DIN fused, 3 poles on left side of handle



M800D03
800A, DIN fused, with 3 poles on right side of handle



M1250D03
1250A, DIN fused, with 3 poles on the right side of handle

Switch Body

Ampere Rating	400	630	800	1250
Base Part #	M400	M630	M800	M1250
Fuse Type	D	D	D	D
3-pole Configuration	03, 30S	03, 30S	03, 30S	03
Fuse Size	0-2	3	3	4

Fourth Pole				
Fusible Fourth Pole	4PD400	4PD800	4PD800	4PD1250

Direct Front Operation				
	HDF400T	HDF800T	HDF800T	HDF1250T

External Front Operation - Pistol Style				
NEMA Type 1, 3R, 12, IP65	HB95	HB145	HB274	HB274
NEMA Type 4, 4X	HB95X	HB145X	HB274X	HB274X
B = Black. Substitute "R" for "B" if a red handle is desire. Ex. HR95.				

External Right-Side Operation - Pistol Style				
NEMA Type 1, 3R, 12, IP65	HB145S	HB145S	HB145S	HB145S

Shafts				
Shaft	SFB__	SFB__	SFB__	SFB__
Lengths: 185, 280, 325, 395 535mm Ex. SFB280				

Terminal Shrouds				
3-pole	TSF400-13	TSF800-13	TSF800-13	TSF1250-13
4-pole	TSF400-14	TSF800-14	TSF800-14	TSF1250-14

Auxiliary Contacts				
Normally open	OA1G10	OA1G10	OA1G10	OA1G10
Normally closed	OA3G01	OA3G01	OA3G01	OA3G01
Module for 8 aux. contacts	OEA28	OEA28	OEA28	OEA28

Blown fuse indicators (DPMM), Striker type fuse needed				
Kit 3poles 3NO+NC	BFM800DP3	BFM800DP3	BFM800DP3	

Handles



HB125

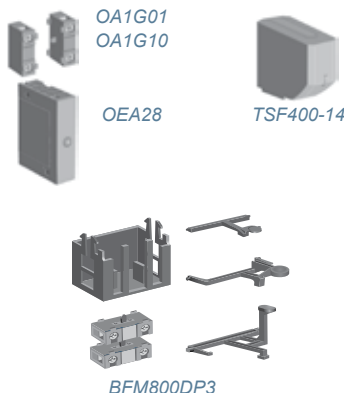
HDF400T

Shafts



SFB135

Accessories



OA1G01
OA1G10

OEA28

TSF400-14

BFM800DP3

IEC Fusible Disconnect Switches

Technical Data

Technical data according to IEC 60947-3								
General purpose amp rating			A	25	50	125	63	160
Rated insulation voltage	Pollution degree 3		V	1 000	1 000	1 000	1 000	1 000
Dielectric strength		50 Hz 1min.	kV	10	10	10	10	10
Rated impulse withstand voltage			kV	12	12	8	12	8
Rated thermal current in ambient 35 °C / and temporarily 40 °C ⁵⁾	In open air		A/W	25/3.5	50/7.5	125/12	63/7.5	160/12
max. fuse power dissipation ¹⁾	In enclosure ²⁾		A/W	25/3.5	50/7.5	125/12	63/7.5	160/12
...with minimum cable cross section	In enclosure with solid links		A/W	32				
Rated operational voltage AC-20 and DC-20		Cu	mm ²	4	10	50	16	70
Rated operational voltage AC-20 and DC-20			V	1 000	1 000	1 000	1 000	1 000
Rated operational current, AC-21A		up to 500 V	A	25	50	125	63	160
		690 V	A	25	50	125	63	160
Rated operational current, AC-22A		up to 500 V	A	25	50	125	63	160
		690 V	A	25	50	125	63	160
Rated operational current, AC-23A		up to 500 V	A	25	50	125	63	160
		690 V	A	25	50	125	63	160
Rated operational current / poles in series DC-21A		48 V	A	25/2	50/2	125/2	63/2	160/2
		110-120 V	A	25/2*	50/2*	125/2*	63/2*	160/2*
		440 V	A	25/4*	50/4*	125/4*	63/4*	160/4*
Rated operational current / poles in series DC-22A		48 V	A	25/2	50/2	125/2	63/2	160/2
		110-120 V	A	25/2	50/2	125/2	63/2	160/2
		440 V	A					
Rated operational current / poles in series DC-23A		48 V	A	25/2	50/2	125/2	63/2	160/2
		110-120 V	A	25/2	50/2	125/2	63/2	160/2
		440 V	A					
Rated operational power, AC-23 ⁴⁾	The kW-ratings are accurate for three-phase 1500 R.P.M. standard asynchronous motors.	230 V	kW	5.5	11	37	18.5	45
		400 V	kW	11	22	55	30	75
		415 V	kW	11	22	55	30	75
		500 V	kW	15	30	75	37	90
		690 V	kW	22	37	110	55	132
Rated breaking capacity in category AC-23		690 V	A	256	504	1280	504	1280
Rated breaking capacity/poles in series		up to 220 V	A	128/2	252/2	640/2	252/2	640/2
In category DC23		440 V	A	128/2				
Rated conditional short-circuit current I _p (r.m.s.) and corresponding max. allowed cut-off current I _c	at prospective SC-current	80 kA, 415 V	kA	9	13.5	23.5	13.5	23.5
	Max. fuse rating gG / aM		A		80/63	160/160	80/63	160/160
	at prospective SC-current	100 kA, 500 V	kA	8	12.5	25.5	12.5	25.5
	Max. fuse rating gG / aM		A		63/50	160/160	63/50	160/160
	at prospective SC-current	50 kA, 690 V	kA	7	9.5	17.5	9.5	17.5
	Max. fuse rating gG / aM		A		63/50	125/160	63/50	125/160
The cut-off current I _c refers to values listed by fuse manufacturers (single phase test acc. to IEC60269)	at prospective SC-current	80 kA, 690 V	kA	7.5	11.5	20.5	11.5	20.5
	Max. fuse rating gG / aM		A		50/50	125/160	50/50	125/160
Rated short-time withstand current, 1 s	r.m.s. -value		kA	1	2.5	5	2.5	5
Rated capacitor power when no initial charge on the capacitor	The capacitor rating of the switch-fuse is limited by the fuse link.	400 V	kVAr	12.5	20	50	25	60
		415 V	kVAr	12	25	55	32	65
		690 V	kVAr	20	42	90	50	100
Power loss / pole	With rated current, without fuse		W	1.3	2.5	5	4	9
Mechanical endurance	Divide by two for operation cycles		Oper.	20 000	20 000	20 000	20 000	20 000
Fuse types, IEC 60269-2-1	DIN 43620, Neozed DIN49522					000, 00	000	000, 00
	NFC 63210, 63211			10x38	14x51	22x58		
	BS 88-2, -6 -size /					A2-A4 ³⁾	A2-A3 ⁶⁾	A2-A4 ³⁾
	distance of fuse-link bolts		mm			M5/73, M8/94	M5/73	M5/73, M8/94
Weight without accessories	3-pole switch fuses		kg	0.7	1.1	1.5	1.1	1.5
	4-pole switch fuses		kg	0.9	1.3	1.8	1.3	1.8
Built-in terminal size		Cu	mm ²	0.75...10	2.5...25		2.5...25	
Terminal bolt size (included)	Metric thread diameter x length		mm			M8x25		M8x25
Terminal tightening torque	Counter torque required		Nm	2	3/4 ⁷⁾	15-22	3/4 ⁷⁾	15-22
Fuse-links bolts tightening torque			Nm			M5:3.5 M8:5	3.5	M5:3.5 M8:5
			Nm					
Operating torque	Typical for 3-pole switch fuses		Nm	3	5	7	5	7

^{*)} = Utilization category B

1) Ambient temperature 60°C: derating 20%. Mounting on ceiling: derating 10%

2) M160: Mounting on wall, horizontal fuses: derating 5%.

3) Max. fuse body diam. 32 mm

4) Some fuse links limit these figures further. Starting current characteristics must be considered separately

5) Acc. to IEC 60947-1, § 6.1.1. Minimum ambient temperature -5°C. Category B: -5°C...-35°C

6) Max. fuse body diam. 22 mm

7) 3 Nm with cable sizes 2.5...6 mm², 4 Nm with cable sizes 10...25 mm²

For the most current product performance data visit ep.mersen.com and use catalog search.

IEC Fusible Disconnect Switches

Technical Data

Technical data according to IEC 60947-3						
General purpose amp rating			A	200	250	400
Rated insulation voltage and rated operational voltage AC-20 and DC-20	Pollution degree 3		V	1 000	1 000	1 000
Dielectric strength		50 Hz 1min.	kV	10	10	10
Rated impulse withstand voltage			kV	12	12	12
Rated thermal current						
in ambient 35 °C and temporarily 40 °C ⁵⁾	In open air		A/W	200/17	250/23	400/45
max. fuse power dissipation ¹⁾	In enclosure		A/W	200/15	250/20	400/30
...with minimum cable cross section		Cu	mm ²	95	120	240
Rated thermal current of detachable neutral	In open air / Cu cable or bar cross section	In "N3" types	A/mm ²	290/120	290/120	450/240
Derating, mounting on wall horizontal fuses	In open air or ventilated enclosure		%	0	0	4
	Totally enclosed		%	5	5	8
Derating, mounting on ceiling			%	10	10	10
Derating at 60 °C	In open air / in enclosure		%	20/20	20/20	20/20
Rated operational current, AC-21A		≤ 500 V	A	200	250	400
		690 V	A	200	250	400
Rated operational current, AC-22A		≤ 415 V	A	200	250	400
		500 V	A	200	250	400
		690 V	A	200	250	400
Rated operational current, AC-23A		≤ 415 V	A	200	250	400
		500 V	A	200	250	400
		690 V	A	200	250	400
Rated operational current / DC-21A, DC-22A and DC-23A		≤ 220 V	A	200/1	250/1	400/2
		440 V	A	200/2	250/2	400/3 ⁴⁾
		660 V	A	200/3	250/3	400/4 ⁴⁾
		750 V	A	180/4	230/4	400/4 ⁴⁾
		880 V	A	180/4	230/4	
Rated operational power, AC-23 ¹⁾	The kW-ratings are accurate for three-phase 1500 R.P.M. standard asynchronous motors.	230 V	kW	60	75	132
		400 V	kW	110	140	220
		415 V	kW	110	145	230
		500 V	kW	132	170	280
		690 V	kW	200	250	400
Rated breaking capacity in category AC-23		≤ 690 V	A	1600	2000	3200
Rated conditional short-circuit current I _p (r.m.s.) and corresponding max. allowed cut-off current I _c The cut-off current I _c refers to values listed by fuse manufacturers (single phase test acc. to IEC60269)	at prospective SC-current	80 kA, 415 V	kA	35	40.5	59
	Max. fuse rating gG / aM		A	250/200	355/315	500/500
	at prospective SC-current	100 kA, 500 V	kA	37.5	37.5	63.5
	Max. fuse rating gG / aM		A	250/200	250/250	500/500
	at prospective SC-current	80 kA, 690 V	kA	25	32.5	46
	Max. fuse rating gG / aM			160/	200/250	315/400
	at prospective SC-current	50 kA, 415 V		28	28	44
	Max. BS fuse size gG / aM		A	200/200M315	250/200M315	400/400M500
Rated short-time withstand current, 1 s	at prospective SC-current	80 kA, 690 V	kA	8	28	48
	Max. BS fuse size gG / aM		A	200/200M250	250/200M250	400/400M450
	r.m.s. -value		kA	8	8	14
	Max. distance from switch frame to nearest busbar/cable support		mm	150	150	150
Rated capacitor power when no initial charge on the capacitor	The capacitor rating of the switch-fuse is limited by the fuse link.	400 V	kVAr	90	105	180
		415 V	kVAr	100	115	200
		500 V	kVAr	120	135	215
		690 V	kVAr	160	190	325
Power loss / pole	With rated current, without fuse		W	8	13	30
Mechanical endurance	Divide by two for operation cycles		Oper.	20 000	20 000	16 000
Fuse types, IEC 60269-2-1	Sec. I, DIN 43620			0	0-1	0-2
	Sec. IA, NFC 0-3 Ref.A, 4a Ref.B			1		3
	Sec. II, BS 88			B1-B2	B1-B3 ²⁾	B1-B4 ³⁾
	Size / distance of fuse-link bolts		mm	M6/111	M8/111	M8/111
Weight without accessories	3-pole switch fuses		kg	2.6	3.1	5.7
Terminal bolt size (included)	Metric thread diameter x length		mm	M8x25	M10x30	M10x30
Terminal tightening torque	Counter torque required		Nm	15-22	30-44	30-44
Fuse-links bolts tightening torque			Nm	4	5	20
Operating torque	Typical for 3-pole switch fuses		Nm	7	7	19

1) These values are given for guidance and may vary acc. to the motor manufacturer

2) Max fuse body dia 52 mm

3) Max fuse body dia 62 mm

4) Category B

5) Acc. to IEC 60957-2, IEC 60947-1, § 6.1.1. Minimum ambient temperature -5°C. Category B: -5°C...-35°C

IEC Fusible Disconnect Switches

Technical Data

Technical data according to IEC 60947-3						
General purpose amp rating			A	630	800	1250
Rated insulation voltage and rated operational voltage AC-20 and DC-20	Pollution degree 3		V	1 000	1 000	1 000
Dielectric strength		50 Hz 1min.	kV	10	10	10
Rated impulse withstand voltage			kV	12	12	12
Rated thermal current						
in ambient 35 °C and temporarily 40 °C ⁵⁾	In open air		A/W	630/60	800/65	1250/110
max. fuse power dissipation ¹⁾	In enclosure		A/W	570/50	720/55	1000/85
...with minimum cable cross section		Cu	mm ²	2 x 185	2 x 240	2 x 400
Rated thermal current of detachable neutral	In open air / Cu cable or bar cross section	In "N3" types	A/mm ²	900/2 X 240	900/2 X 240	1250/2 x 400
Derating, mounting on wall horizontal fuses	In open air or ventilated enclosure		%	0	4	4
	Totally enclosed		%	5	8	8
Derating, mounting on ceiling			%	10	10	10
Derating at 60 °C	In open air / in enclosure		%	20/20	20/20	20/20
Rated operational current, AC-21A		≤ 500 V	A	630	800	1250 ⁴⁾
		690 V	A	630	800	1250 ⁴⁾
Rated operational current, AC-22A		≤ 415 V	A	630	800	1250
		500 V	A	630	800	1250 ⁴⁾
		690 V	A	630	800	1250 ⁴⁾
Rated operational current, AC-23A		≤ 415 V	A	630	800	1000
		500 V	A	630	800	1000 ⁴⁾
		690 V	A	630	800	1000 ⁴⁾
Rated operational current / DC-21A, DC-22A and DC-23A		≤ 220 V	A	630/1 ⁴⁾	800/1 ⁴⁾	
		440 V	A	630/2 ⁴⁾	800/2 ⁴⁾	
		660 V	A	630/3 ⁴⁾	720/3 ⁴⁾	
		750 V	A	630/4 ⁴⁾	720/4 ⁴⁾	
		880 V	A	630/4 ⁴⁾	720/4 ⁴⁾	
Rated operational power, AC-23 ¹⁾	The kW-ratings are accurate for three-phase 1500 R.P.M. standard asynchronous motors.	230 V	kW	200	250	315
		400 V	kW	355	450	560
		415 V	kW	355	450	560
		500 V	kW	450	560	710
		690 V	kW	630	710	1000
Rated breaking capacity in category AC-23		≤ 690 V	A	6400	6400	8000
Rated conditional short-circuit current I _p (r.m.s.) and corresponding max. allowed cut-off current I _c	at prospective SC-current	80 kA, 415 V	kA	77	77	89
	Max. fuse rating gG / aM		A	800/800	800/800	1250/1250
	at prospective SC-current	100 kA, 500 V	kA	83	83	105
	Max. fuse rating gG / aM		A	800/800	800/800	1250/-
	at prospective SC-current	80 kA, 690 V	kA	55	55	88
	Max. fuse rating gG / aM			500/630	500/630	1000/1000
	at prospective SC-current	50 kA, 415 V		67	28	90
	Max. BS fuse size gG / aM		A			
	at prospective SC-current	80 kA, 690 V	kA	55	55	109
	Max. BS fuse size gG / aM		A			1250/-
Rated short-time withstand current, 1 s	r.m.s. -value		kA	18	18	40
	Max. distance from switch frame to nearest busbar/cable support		mm	150	150	
Rated capacitor power when no initial charge on the capacitor	The capacitor rating of the switch-fuse is limited by the fuse link.	400 V	kVAr	250	310	440
		415 V	kVAr	270	340	460
		500 V	kVAr	300	375	550
		690 V	kVAr	450	550	750
Power loss / pole	With rated current, without fuse		W	46	75	75
Mechanical endurance	Divide by two for operation cycles		Oper.	10 000	10 000	6000
	Sec. I, DIN 43620			3	3	4, 4 a
Fuse types, IEC 60269-2-1	Sec. IA, NFC 0-3 Ref.A, 4a Ref.B			3	4 a	
	Sec. II, BS 88			C1-C2	C1-C3	D1
	Size / distance of fuse-link bolts		mm	M10/133, 184	M10/133, 184	2xM12/149
Weight without accessories	3-pole switch fuses		kg	11.5	11.5	29
Terminal bolt size (included)	Metric thread diameter x length		mm	M12x40	M12x40	M12x50
Terminal tightening torque	Counter torque required		Nm	50-75	50-75	50-75
Fuse-links bolts tightening torque			Nm	M10:30 M12:40	M10:30 M12:40	M12:40
Operating torque	Typical for 3-pole switch fuses		Nm	38	38	65

1) These values are given for guidance and may vary acc. to the motor manufacturer

2) Max fuse body dia 52 mm

3) Max fuse body dia 62 mm

4) Category B

5) Acc. to IEC 60957-2, IEC 60947-1, § 6.1.1. Minimum ambient temperature -5°C. Category B: -5°C...-35°C

For the most current product performance data visit ep.mersen.com and use catalog search.

IEC Fusible Disconnect Switches

IEC Fused Switches - Front Operated

Part #	Description	Ref #	Net Wt. (kgs)	Pkg
M25F12	Switch.fus 25A FR10 1+2 pos.	H1043264	0.70	1
M50F03	Switch.fus 50A FR14 0+3 pos.	K1043266	1.3	1
M63D03	Switch.fus 63A 000 0+3 pos.	M1043268	1.3	1
M125F03	Switch.fus 125A FR22 0+3 pos.	P1043270	1.5	1
M160D03	Switch.fus 160A 00 0+3 pos.	R1043272	1.52	1
M200D03	Switch.fus 200A 0 0+3 pos.	T1043274	3.3	1
M250D03	Switch.fus 250A 0-1 0+3 pos.	W1043276	3.93	1
M400D03	Switch.fus 400A 0-2 0+3 pos.	Y1043278	7.1	1
M630D03	Switch.fus 630A 3 0+3 pos.	A1043280	13	1
M800D03	Switch.fus 800A 3 0+3 pos.	C1043282	13	1
M1250D03	Switch.fus 1250A 4 0+3 pos.	E1043284	45	1

IEC Fused Switches - Side Operated

Part #	Description	Ref #	Net Wt. (kgs)	Pkg
M25F30S	Switch.fus 25A FR10 R side op.	J1043265	0.70	1
M50F30S	Switch.fus 50A FR14 R side op.	L1043267	1.2	1
M63D30S	Switch.fus 63A 000 R side op.	N1043269	1.2	1
M125F30S	Switch.fus 125A FR22 R side op.	Q1043271	1.6	1
M160D30S	Switch.fus 160A 00 R side op.	S1043273	1.6	1
M200D30S	Switch.fus 200A 0 R side op.	V1043275	3.3	1
M250D30S	Switch.fus 250A 0-1 R side op.	X1043277	4.15	1
M400D30S	Switch.fus 400A 0-2 R side op.	Z1043279	7.18	1
M630D30S	Switch.fus 630A 3 R side op.	B1043281	13.9	1
M800D30S	Switch.fus 800A 3 R side op.	D1043283	13.9	1

IEC Fourth Poles

Part #	Description	Ref #	Weight	Pkg
4PD200	Fourth Fusible pole for M200D	J1045473		1
4PD250	Fourth Fusible pole for M250D	K1045474		1
4PD400	Fourth Fusible pole for M400D	L1045475		1
4PD800	Fourth Fusible pole for M800D	M1045476		1
4PD1250	Fourth Fusible pole for M1250D	N1045477		1

Handles

Part #	Description	Ref #	Net Wt. (kgs)	Pkg
HDF30	Handle direct SF 40A max	P1043408	0.05	1
HDF200	Handle direct SF 200A	P1043385	0.14	1
HDF400	Handle direct SF 400A	Q1043386	0.33	1
HDF800T	Handle dir. SF 800A butterfly	R1043387	1.1	1
HDF1250T	Handle dir. SF 1250A butterfly	S1043388	1.5	1
HDF250T	Handle dir. SF 250A butterfly	T1043389	0.16	1
HDF400T	Handle dir. SF 400A butterfly	V1043390	0.34	1
HB45	Handle black 45mm IP65 NEMA 3R	L1043911	0.10	1
HB45X	Handle black 45mm IP65 NEMA 4X	M1043912	0.10	1
HB65	Handle black 65mm IP65 NEMA 3R	W1043368	0.12	1
HB65S	Handle black 65mm Right Side	A1044361	0.10	1
HB65X	Handle black 65mm IP65 NEMA 4X	X1043369	0.12	1
HB80	Handle black 80mm IP65 NEMA 3R	Y1043370	0.12	1
HB80X	Handle black 80mm IP65 NEMA 4X	Z1043371	0.12	1
HB95	Handle black 95mm IP65 NEMA 3R	N1043913	0.01	1
HB95X	Handle black 95mm IP65 NEMA 4X	P1043914	0.01	1
HB125	Handle black 125mm IP65 NEMA 3R	A1043372	0.16	1
HB125X	Handle black 125mm IP65 NEMA 4X	B1043373	0.12	1
HB145	Handle black 145mm IP65 NEMA 3R	C1043374	0.17	1
HB145S	Handle black 145mm Right Side	B1044362	0.15	1
HB145X	Handle black 145mm IP65 NEMA 4X	D1043375	0.17	1
HB274	Handle black 274mm IP65 NEMA 3R	D1043398	0.515	1
HB274X	Handle black 274mm IP65 NEMA 4X	E1043376	0.515	1
HB330	Handle black 330mm IP65 NEMA 3R	E1043399	0.55	1
HB330X	Handle black 330mm IP65 NEMA 4X	F1043377	0.55	1
HR45	Handle red 45mm IP65 NEMA 3R	Q1043915	0.10	1
HR45X	Handle red 45mm IP65 NEMA 4X	R1043916	0.10	1
HR65	Handle red 65mm IP65 NEMA 3R	G1043378	0.120	1
HR65X	Handle red 65mm IP65 NEMA 4X	H1043379	0.12	1
HR80	Handle red 80mm IP65 NEMA 3R	F1043400	0.12	1
HR80X	Handle red 80mm IP65 NEMA 4X	J1043380	0.12	1
HR95	Handle red 95mm IP65 NEMA 3R	S1043917	0.16	1
HR95X	Handle red 95mm IP65 NEMA 4X	T1043918	0.16	1
HR125	Handle red 125mm IP65 NEMA 3R	K1043381	0.17	1
HR125X	Handle red 125mm IP65 NEMA 4X	L1043382	0.17	1
HR145	Handle red 145mm IP65 NEMA 3R	M1043383	0.2	1
HR145X	Handle red 145mm IP65 NEMA 4X	N1043384	0.17	1
HR274	Handle red 274mm IP65 NEMA 3R	G1043401	0.515	1
HR330	Handle red 330mm IP65 NEMA 3R	H1043402	0.55	1

IEC Fusible Disconnect Switches

Shafts

Part #	Description	Ref #	Net Wt. (kgs)	Pkg
SFB280	Shaft SwitchFuse 12x12x280mm	F1043423	0.31	1
SFB325	Shaft SwitchFuse 12x12x325mm	G1043424	0.41	1
SFB395	Shaft SwitchFuse 12x12x395mm	H1043425	0.45	1
SPA210	Shaft pistol handle 6x6x210mm	P1043431	0.11	1
SPA290	Shaft pistol handle 6x6x290mm	Q1043432	0.14	1
SPA360	Shaft pistol handle 6x6x360mm	W1043920		1
SPA430	Shaft pistol handle 6x6x430mm	X1043921		1

Other Accessories

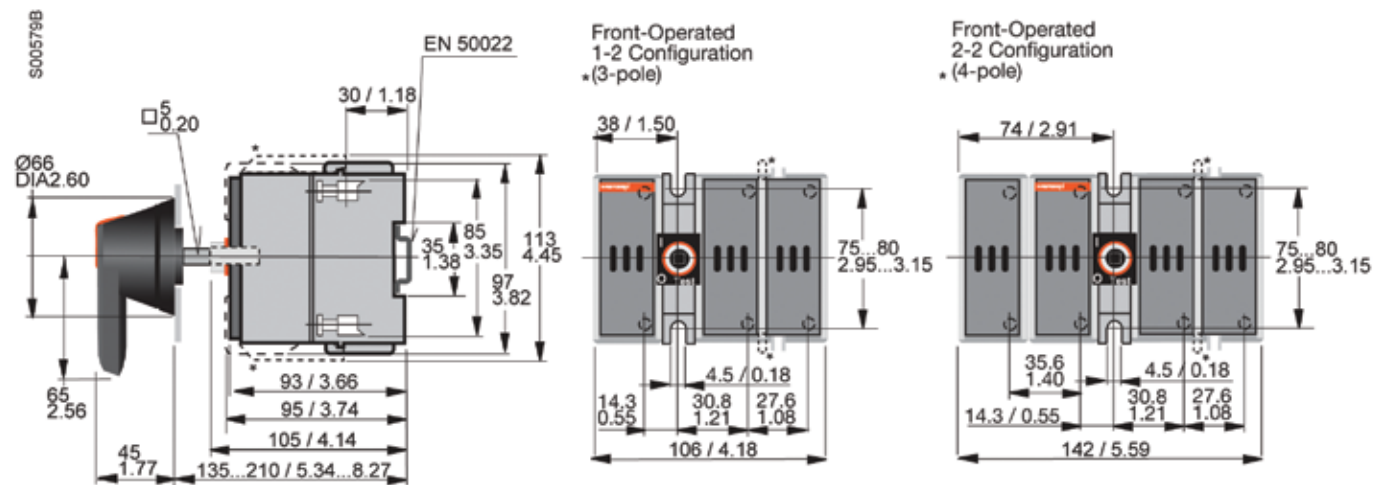
Part #	Description	Ref #	Net Wt. (kgs)	Pkg
OA1G10	Auxiliary Contact NO	P1043477	0.03	1
OA3G01	Aux.Contact NC Switch160-2500A	R1043479	0.03	1
OA4B1C	Aux.Contact 1+1 SF 40A	K1043473	0.03	1
OSZ4	Mounting plate OA1G10/OA3G01	L1043474	0.06	1
OEA28	Module for SF aux. contacts	M1043475	0.04	1
BFM25FP3	Kit DPMM 3p 1 contact M25F	E1048896		1
BFM50FP3	Kit DPMM 3P 3Cont. M50F	P1045478		1
BFM125FP3	Kit DPMM 3P 3Cont. M125F	Q1045479		1
BFM800DP3	Kit DPMM 3P 3NO+3NC M250-800D	R1045480		1

Terminal Shrouds

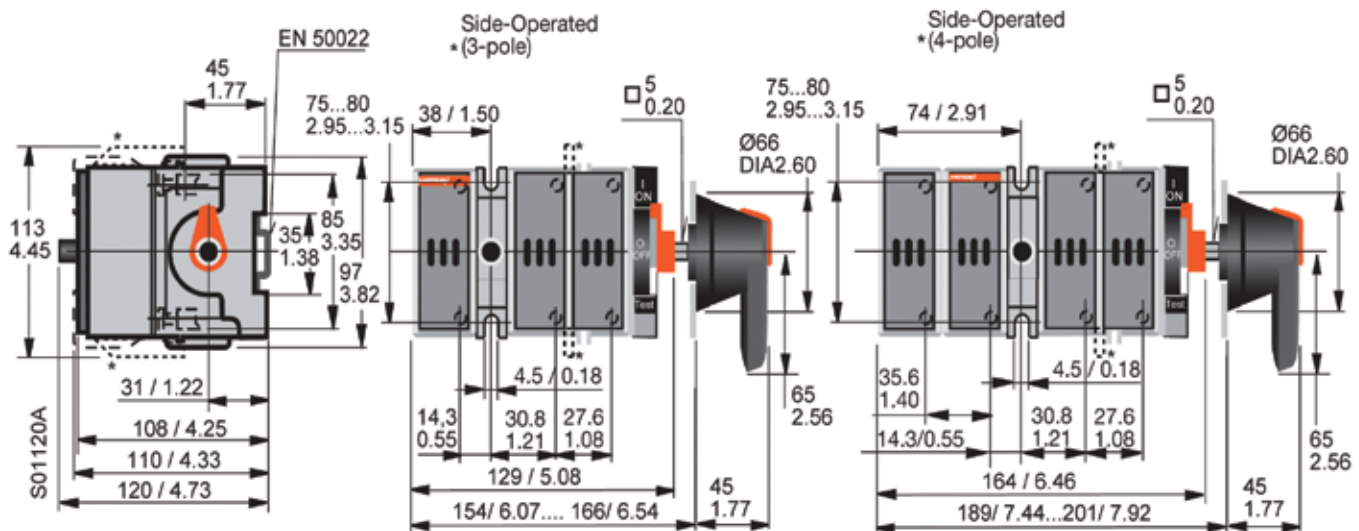
Part #	Description	Ref #	Net Wt. (kgs)	Pkg
TSF160-13	Term.shrd 160A Swch.fus1pL /3	V1043436	0.04	1
TSF160-14	Term.shrd 160A Swch.fus1pL /4	W1043437	0.04	1
TSF200-13	Term.shrd 200A Swch.fus1pL /3	J1043449	0.008	3
TSF200-14	Term.shrd 200A Swch.fus1pL /4	V1043459	0.012	4
TSF800-13	Term.shrd 800A Swch.fus1pL /3	K1043450	0.01	3
TSF800-14	Term.shrd 800A Swch.fus1pL /4	W1043460	0.01	4
TSF1250-13	Ter.shrd 1250A Swch.fus1pL /3	L1043451	0.01	3
TSF1250-14	Ter.shrd 1250A Swch.fus1pL /4	X1043461	0.00	4
TSF250-13	Term.shrd 250A Swch.fus1pL /3	M1043452	0.008	3
TSF250-14	Term.shrd 250A Swch.fus1pL /4	Y1043462	0.012	4
TSF400-13	Term.shrd 400A Swch.fus1pL /3	N1043453	0.008	3
TSF400-14	Term.shrd 400A Swch.fus1pL /4	Z1043463	0.001	4

IEC Fusible Disconnect Switches

M25F Front operated

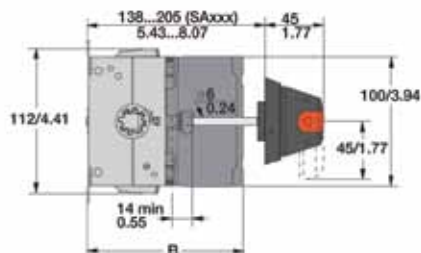
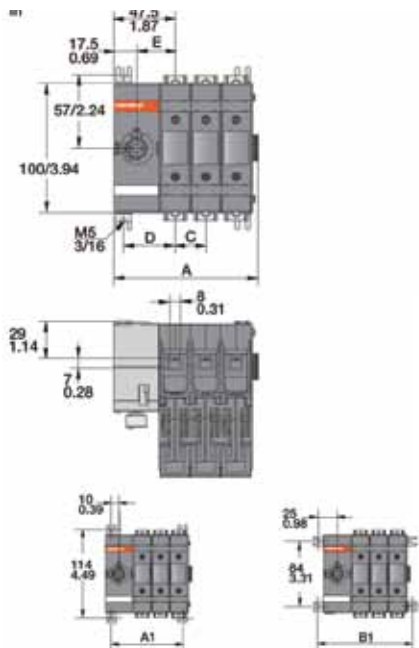


M25F Side operated



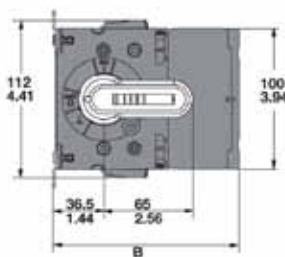
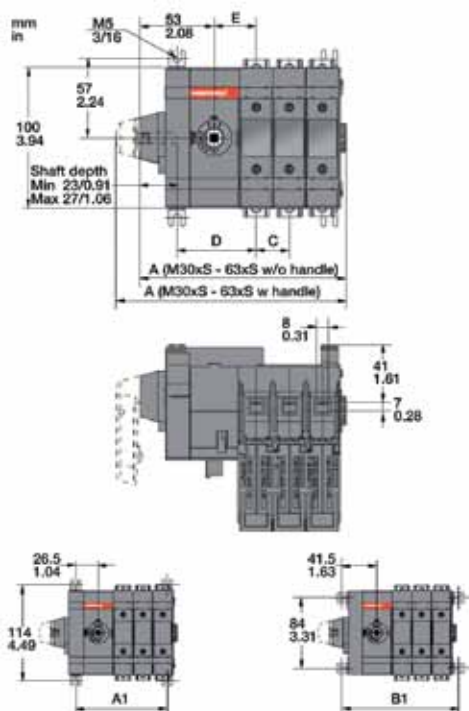
IEC Fusible Disconnect Switches

M50F, M63D, Front operated



	M30x - 63x DIN mm				M30x - 63x BS/NFC mm				M60Jx Class J mm/in			
	D11	D12	D13	D22	B/F11	B/F12	B/F13	B/F22	J11	J112	J12	J22
A	91	114.5	138	138	91	114.5	138	138	754/2.93	148/5.82	183.5/7.20	179.5/8.58
B	120.5	120.5	120.5	120.5	108.5	108.5	108.5	108.5	118/4.65	118/4.65	118/4.65	118/4.65
C	-	23.5	23.5	23.5	-	23.5	23.5	23.5	-	35/1.38	35/1.38	35/1.38
D	60	60	60	60	60	60	60	60	71.5/2.81	71.5/2.81	71.5/2.81	71.5/2.81
E	30	30	30	30	30	30	30	30	36/1.41	36/1.41	36/1.41	36/1.41
F	44	44	44	67.5	44	44	44	67.5	55.5/2.19	55.5/2.19	55.5/2.19	90.5/3.56
G	74	74	74	97.5	74	74	74	97.5	91.5/3.6	91.5/3.6	91.5/3.6	126.5/4.98
A1	70	93.5	117	117	70	93.5	117	117	81.5/3.21	81.5/3.21	81.5/3.21	151.5/5.96
A2	35	35	35	58.5	35	35	35	58.5	40.5/1.59	40.5/1.59	40.5/1.59	75.5/2.97
B1	75	123.5	147	147	75	123.5	147	147	111.5/4.39	111.5/4.39	111.5/4.39	181.5/7.15
B2	50	50	50	73.5	50	50	50	73.5	70.5/2.78	70.5/2.78	70.5/2.78	105.5/4.15

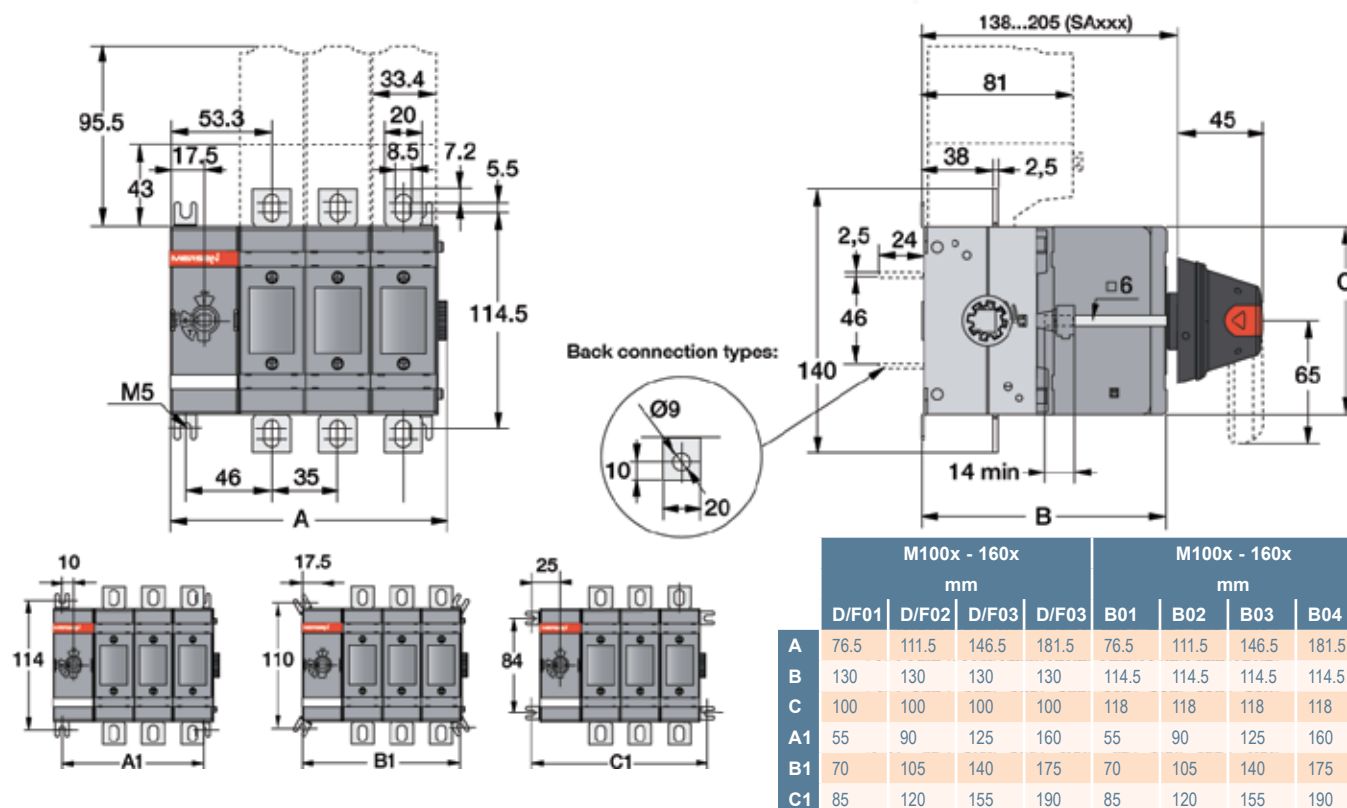
M50F, M63D, Side operated



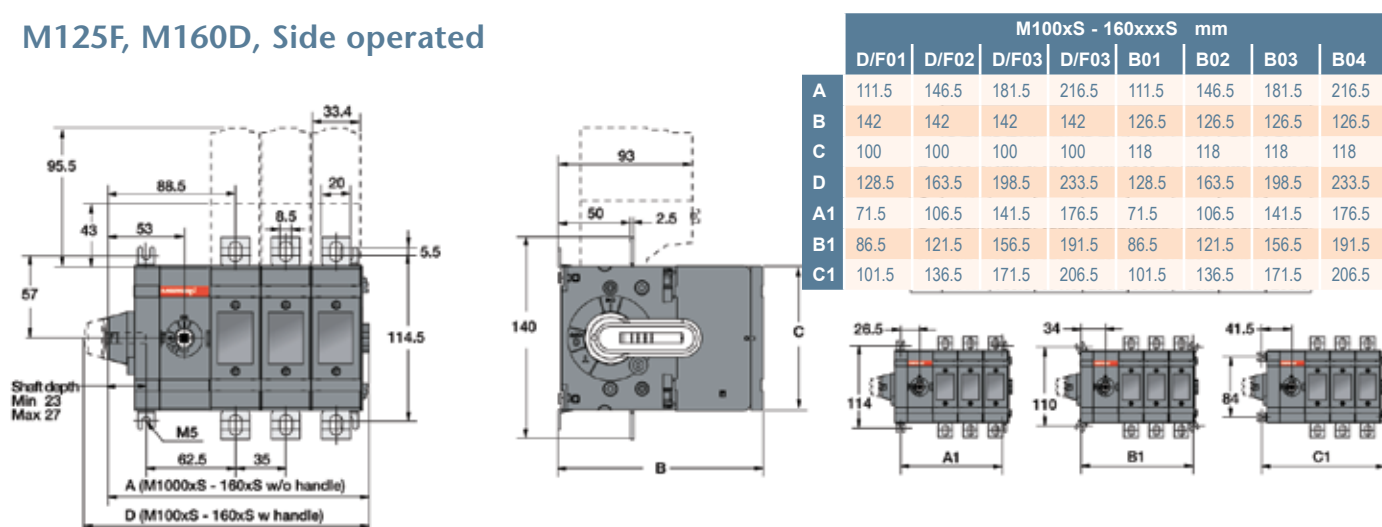
	M30xxxS - 63xxxS mm								M60JxxS mm/in			
	DS01	DS02	DS03	DS04	B/FS01	B/FS02	B/FS03	B/FS04	JS01	JS02	JS03	JS04
A	99.5	123	146.5	170	99.5	123	146.5	170	109.5/4.31	144.5/5.69	179.5/7.07	214.5/8.44
B	132.5	132.5	132.5	132.5	120.5	120.5	120.5	120.5	130/5.12	130/5.12	130/5.12	130/5.12
C	-	23.5	23.5	23.5	-	23.5	23.5	23.5	-	35/1.38	35/1.38	35/1.38
D	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	62/2.44	62/2.44	62/2.44	62/2.44
E	30	30	30	30	30	30	30	30	36/1.41	36/1.41	36/1.41	36/1.41
F	116.5	140	163.5	187	116.5	140	163.5	187	126.5/4.98	161.5/6.36	196.5/7.74	231.5/9.11
A1	61.5	85	108.5	132	61.5	85	108.5	132	67.5/2.56	81.5/3.21	137.5/5.41	172.5/6.79
B1	91.5	115	138.5	162.5	91.5	115	138.5	162.5	37.5/1.48	72.5/2.85	107.5/4.23	142.5/5.61

IEC Fusible Disconnect Switches

M125F, M160D, Front operated

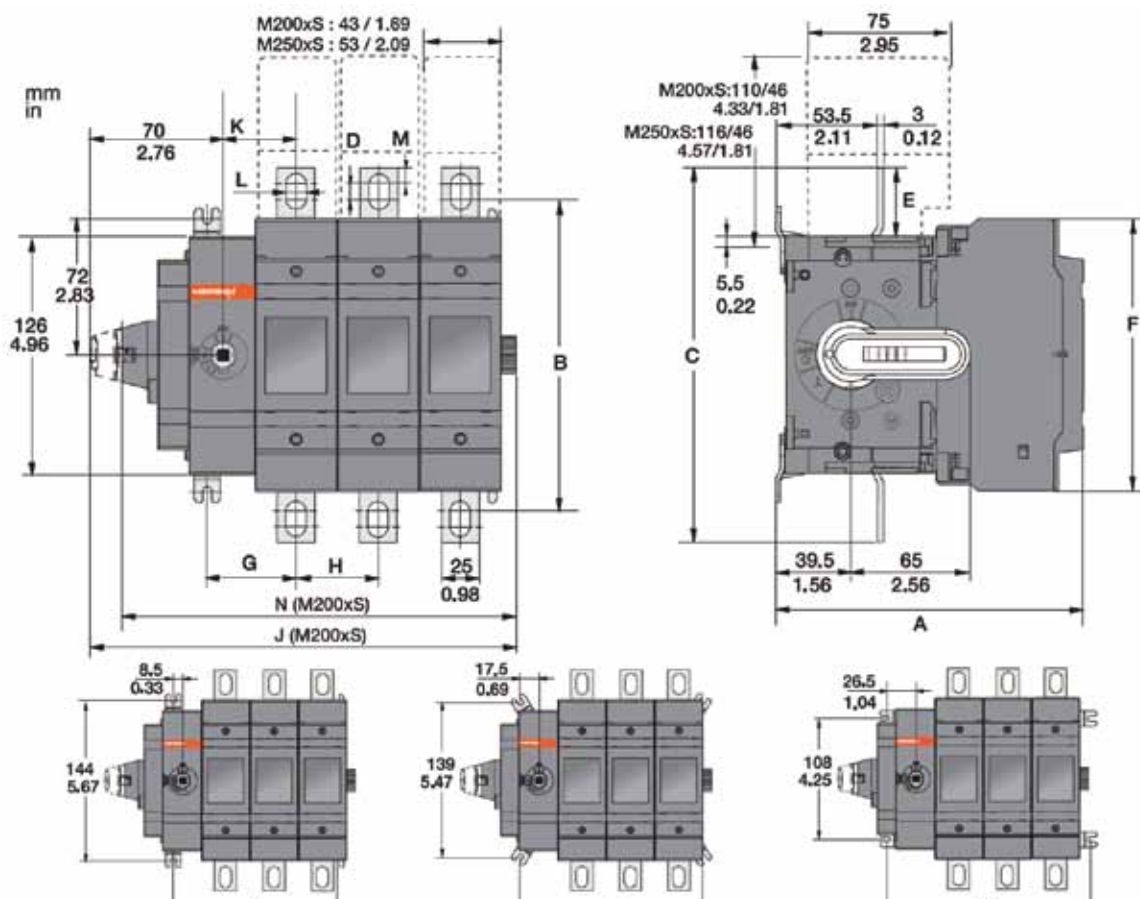


M125F, M160D, Side operated



IEC Fusible Disconnect Switches

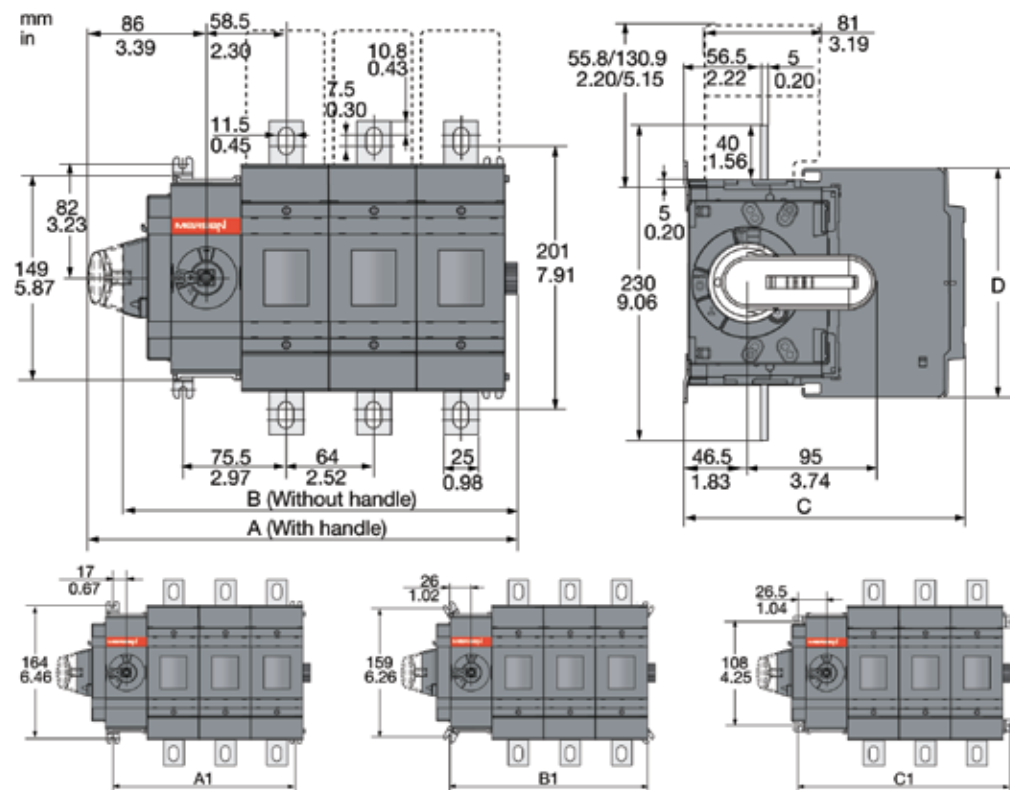
M200-250D, Side operated



	M200xS								M250xS							
	DS01	BS01	DS02	BS02	DS03	BS03	DS04	BS04	DS01	DS02	DS03	DS04	DS01	DS02	DS03	DS04
A	149.0	5.87	130.0	5.12	149.0	5.87	130.0	5.12	149.0	5.87	130.0	5.12	154.0	6.06	154.0	6.06
B	164.5	6.48	164.5	6.48	164.5	6.48	164.5	6.48	164.5	6.48	164.5	6.48	162.0	6.38	162.0	6.38
C	198.5	7.81	198.5	7.81	198.5	7.81	198.5	7.81	198.5	7.81	198.5	7.81	193.0	7.60	193.0	7.60
D	8.5	0.33	8.5	0.33	8.5	0.33	8.5	0.33	8.5	0.33	8.5	0.33	4.0	0.16	4.0	0.16
E	36.5	1.44	36.5	1.44	36.5	1.44	36.5	1.44	36.5	1.44	36.5	1.44	33.5	1.32	33.5	1.32
F	144.5	5.69	144.5	5.69	144.5	5.69	144.5	5.69	144.5	5.69	144.5	5.69	148.5	5.85	148.5	5.85
G	48.5	1.91	48.5	1.91	48.5	1.91	48.5	1.91	48.5	1.91	48.5	1.91	53.5	2.11	53.5	2.11
H	-	-	-	-	43.5	1.71	43.5	1.71	43.5	1.71	43.5	1.71	-	-	54.0	2.13
I	20.0	0.79	20.0	0.79	20.0	0.79	20.0	0.79	20.0	0.79	20.0	0.79	25.0	0.98	25.0	0.98
J	138.5	5.45	138.5	5.45	182.0	7.17	138.5	5.45	225.5	8.88	225.5	8.88	269.0	10.59	269.0	10.59
K	40.0	1.57	40.0	1.57	40.0	1.57	40.0	1.57	40.0	1.57	40.0	1.57	45.0	1.77	45.0	1.77
L	10.0	0.39	10.0	0.39	10.0	0.39	10.0	0.39	10.0	0.39	10.0	0.39	11.0	0.43	11.0	0.43
M	8.5	0.33	8.5	0.33	8.5	0.33	8.5	0.33	8.5	0.33	8.5	0.33	11.5	0.45	11.5	0.45
N	121.5	4.78	121.5	4.78	165.0	6.50	165.0	6.50	208.5	8.21	208.5	8.21	252.0	9.92	252.0	9.92
A1	60.5	2.38	60.5	2.38	104.0	4.09	104.0	4.09	147.5	5.81	147.5	5.81	191.0	7.52	191.0	7.52
B1	79.5	3.13	79.5	3.13	123.0	4.84	123.0	4.84	166.5	6.56	166.5	6.56	210.0	8.27	210.0	8.27
C1	96.5	3.80	96.5	3.80	140.0	5.51	140.0	5.51	183.5	7.22	183.5	7.22	227.0	8.94	227.0	8.94

IEC Fusible Disconnect Switches

M400D, M400J, Side operated

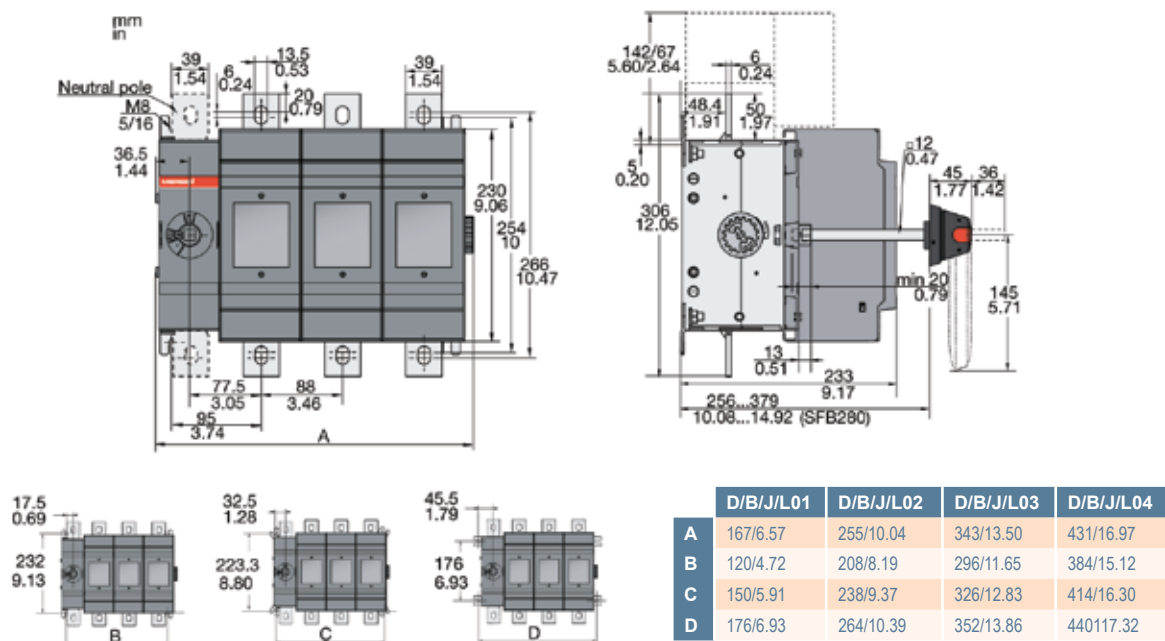


M315xS-M400xS																
	BS01/JS01		BS02/JS02		BS03/JS03		BS04/JS04		DS01		DS02		DS03		DS04	
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
A	185.0	7.28	249.0	9.80	313.0	12.32	377.0	14.84	185.0	7.28	249.0	9.80	313.0	12.32	377.0	14.84
B	160.0	6.30	224.0	8.82	288.0	11.34	352.0	13.86	160.0	6.30	224.0	8.82	288.0	11.34	352.0	13.86
C	176.0	6.93	176.0	6.93	176.0	6.93	176.0	6.93	193.0	7.60	193.0	7.60	193.0	7.60	193.0	7.60
D	194.0	7.64	194.0	7.64	194.0	7.64	194.0	7.64	166.0	6.54	166.0	6.54	166.0	6.54	166.0	6.54
A1	98.5	3.88	162.5	6.40	226.5	8.92	290.5	11.44	98.5	3.88	162.5	6.40	226.5	8.92	290.5	11.44
B1	116.5	4.59	180.5	7.11	244.5	9.63	308.5	12.15	116.5	4.59	180.5	7.11	244.5	9.63	308.5	12.15
C1	134.5	5.30	198.5	7.81	262.5	10.33	326.5	12.85	134.5	5.30	198.5	7.81	262.5	10.33	326.5	12.85

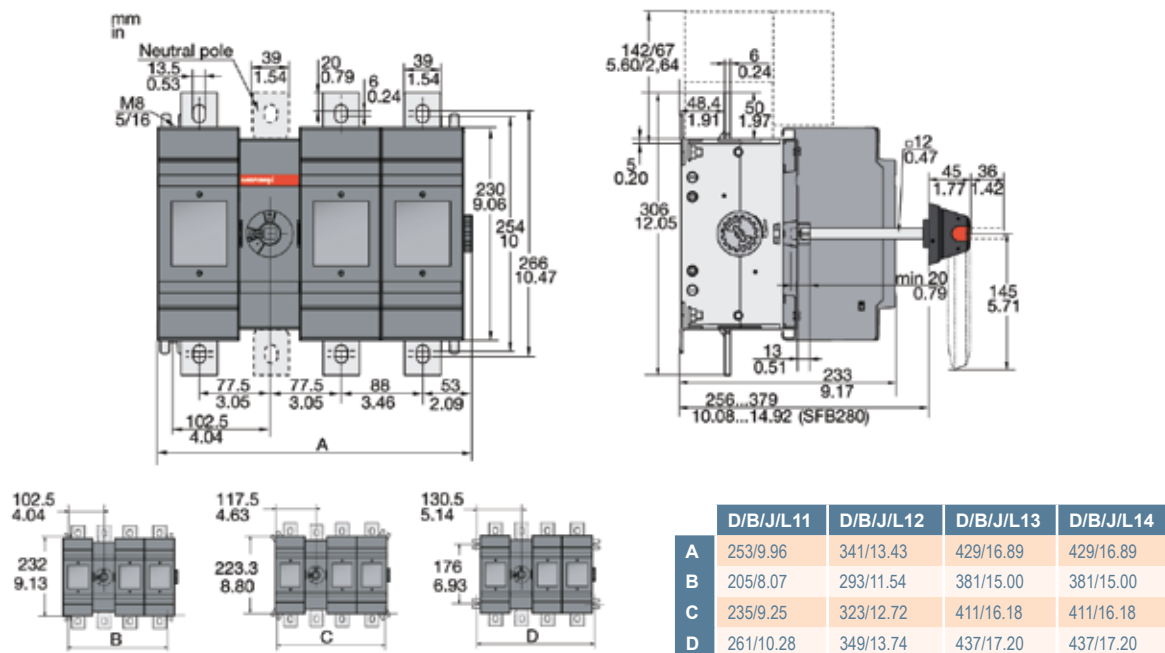
IEC Fusible Disconnect Switches

M630-800D, M600J-800L, Front operated

For DIN, BS, J and L Fuse types with gearbox on the side

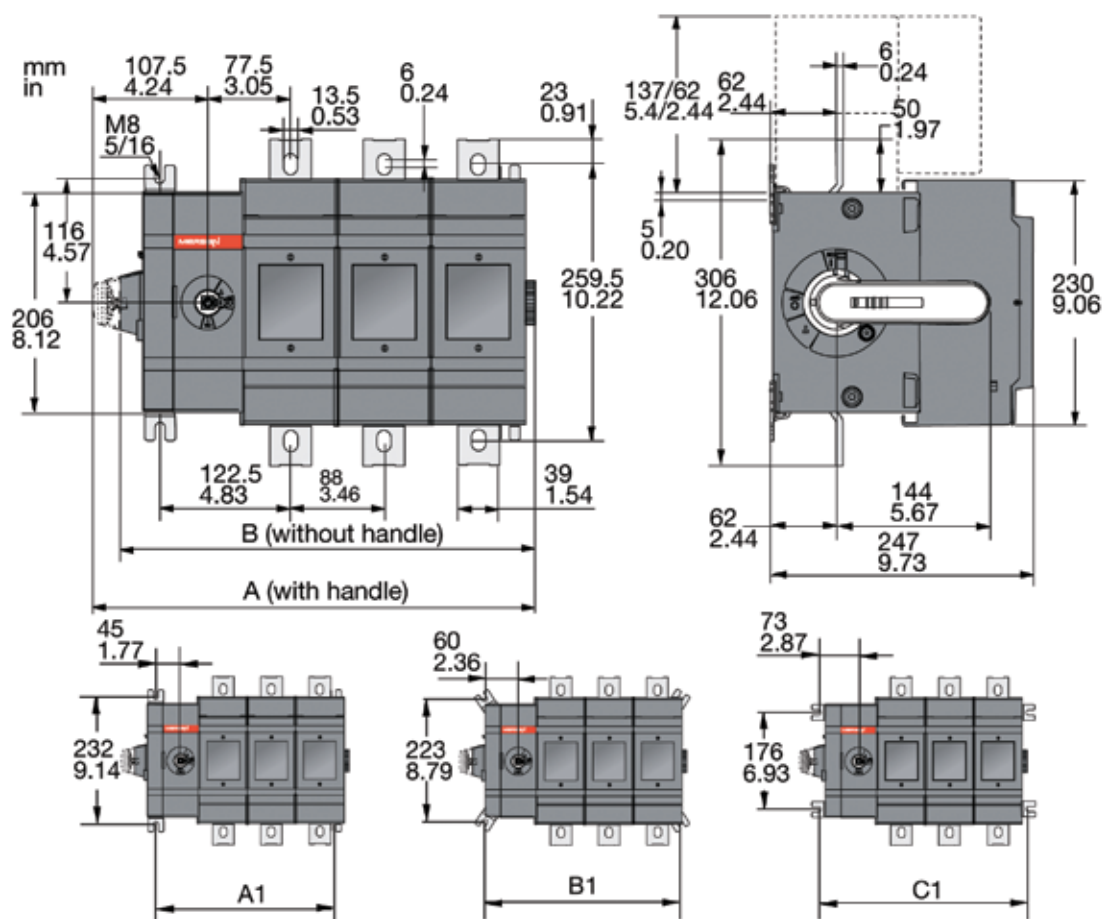


For DIN, BS, J and L Fuse Types with gearbox in the middle



IEC Fusible Disconnect Switches

M630-800D, M600J-800L, Side operated

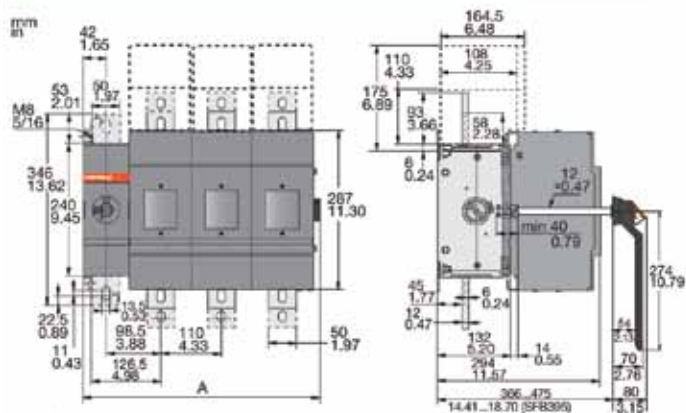


M600xS-M800xS				
	DS/BS/JS/LS01 mm/in	DS/BS/JS/LS02 mm/in	DS/BS/JS/LS03 mm/in	DS/BS/JS/LS04 mm/in
A	238/9.38	326/12.84	414/16.31	502/19.78
B	213/8.39	301/11.86	389/15.32	477/18.79
A1	147.5/5.81	235.5/9.28	323.5/12.75	411.5/16.21
B1	177.5/6.99	265.5/10.46	353.5/13.93	441.5/17.39
C1	203.5/8.02	291.5/11.48	379.5/14.95	467.5/18.42

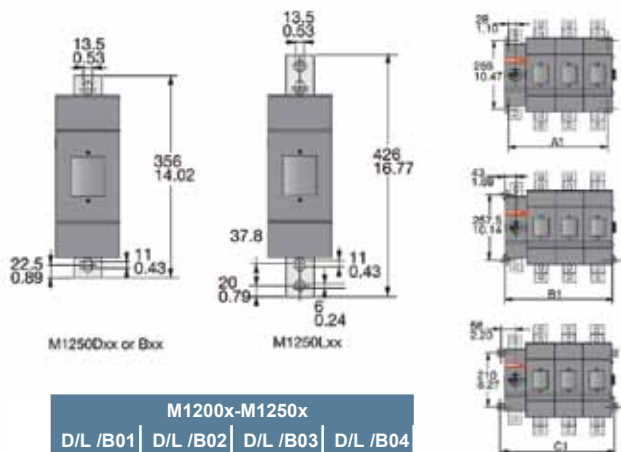
IEC Fusible Disconnect Switches

M1200L, M1250D, Front operated

For DIN, BS and L Fuse Types with gearbox on the side



*) Neutral pole

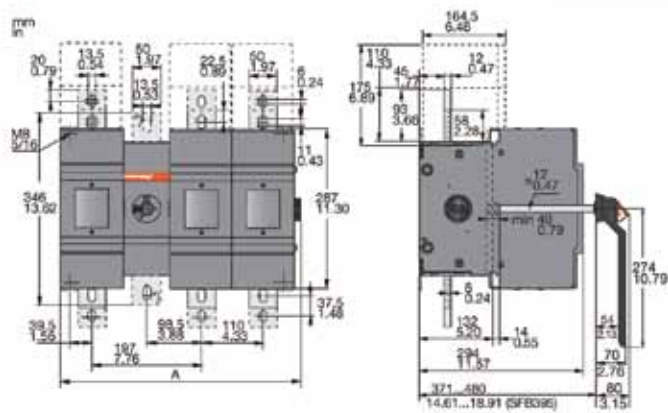


M1250D or Box

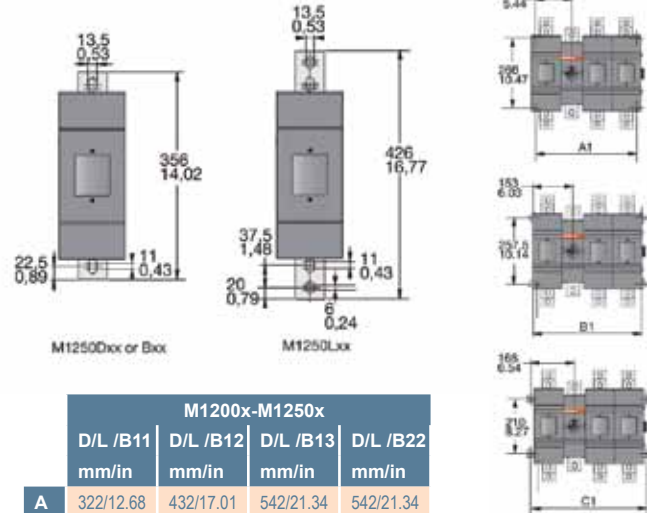
M1250L or

	M1200x-M1250x			
	D/L /B01 mm/in	D/L /B02 mm/in	D/L /B03 mm/in	D/L /B04 mm/in
A	209/8.23	319/12.56	429/16.89	539/21.22
A1	166/6.54	276/10.87	386/15.20	496/19.53
B1	196/7.72	306/12.05	416/16.38	526/20.71
C1	222/8.74	332/13.07	442/17.40	552/21.73

For DIN, BS and L Fuse Types with gearbox in the middle



*) Neutral pole



M1250D or Box

M1250L or

	M1200x-M1250x			
	D/L /B11 mm/in	D/L /B12 mm/in	D/L /B13 mm/in	D/L /B22 mm/in
A	322/12.68	432/17.01	542/21.34	542/21.34
A1	276/10.87	386/15.20	496/19.53	496/19.53
B1	306/12.05	416/16.38	526/20.71	526/20.71
C1	322/13.07	442/17.40	552/21.73	552/21.73