

HINGED DOOR ENCLOSED SWITCHGEAR

Supplied in 'hinged door' Light Grey (RAL 7035) powder coated sheet steel enclosures, this range of switchgear is suitable for most industrial applications.

Available as 'Switch-Disconnectors', 'Fuse Combination Units' and 'Changeover Switch-Disconnectors' all items are supplied in generously sized IP65 enclosures which helps to avoid the need for extension boxes. All units have a padlockable handle which allows for the insertion of up to three padlocks in the 'Off' position thus preventing the isolator being switched to the 'On' position. (Locking in 'On' position on request). The door interlock handle can be defeated to enable emergency opening or for testing purposes (100A and above)

Both red (RAL 3020) painted Sheet Steel and Stainless Steel (Grade 304 & 316) enclosures are available on request for the more severe environments. Contact us on +44 (0) 1543 375 541 for more information.



Sheet Steel Hinged Door Switch-Disconnectors

A range of 'hinged door' Light Grey (RAL 7035) powder coated sheet steel isolation equipment. Supplied in IP65 generously sized boxes which helps to avoid the need for extension boxes. All enclosures have the switches mounted on a removable galvanised chassis plate. All units are provided with removable top & bottom gland plates.

The range has a padlockable handle which allows for the insertion of up to three padlocks in the 'Off' position thus preventing the isolator being switched to the 'On' position. The door interlock handle can be defeated to enable emergency opening or for testing purposes (100A and above).

Both red (RAL 3020) painted Sheet Steel and Stainless Steel (Grade 304 & 316) enclosures are available on request for the more severe environments. Contact our sales team on 01543 375 541 for further information. Compliant to IEC / BS EN 60947-3.

'N' = switched neutral | 'NL' = Unswitched neutral (100% rated 32A-200A, 50% rated 250A-1000A) | 'EB' = Early break auxiliary contacts

Switch-Disconnectors (O-I)							
Image	Rating	Format	Cat. No.	IP Rating	Encl. Size	Encl. Material	Encl. Colour
	32A	3P+N	EDG00323N	IP65	1	Sheet Steel	Light Grey RAL 7035
		3P+NL	EDG00323NL				
	63A	3P+N	EDG00633N				
		3P+NL	EDG00633NL				
		6P	EDG00636				
		6P+2EB Aux	EDG00636EB				
	80A	3P+N	EDG00803N				
		3P+NL	EDG00803NL				
		6P	EDG00806				
	100A	3P+N	EDG01003N				
		3P+NL	EDG01003NL				
		6P	EDG01006				
	125A	3P+N	EDG01253N				
		3P+NL	EDG01253NL				
		6P	EDG01256				
	160A	3P+N	EDG01603N				
		3P+NL	EDG01603NL				
		6P	EDG01606				
	200A	3P+N	EDG02003N				
		3P+NL	EDG02003NL				
250A	3P+N	EDG02503N					
	3P+NL	EDG02503NL					
400A	3P+N	EDG04003N					
	3P+NL	EDG04003NL					
630A	3P+N	EDG06303N					
	3P+NL	EDG06303NL					
800A	3P+N	EDG08003N					
	3P+NL	EDG08003NL					
1000A	3P+N	EDG10003N					
	3P+NL	EDG10003NL					
Changeover Switch-Disconnectors (I-O-II)							
	63A	4P	ECODG00634	IP65	4	Sheet Steel	Light Grey RAL 7035
	100A	4P	ECODG01004				
	125A	4P	ECODG01254				
	160A	4P	ECODG01604				
	200A	4P	ECODG02004				
	250A	4P	ECODG02504				
	400A	4P	ECODG04004				
	630A	4P	ECODG06304				
Fuse Combination Units (O-I)							
	32A	3P+NL	EDFG00323NL	IP65	2	Sheet Steel	Light Grey RAL 7035
	63A	3P+NL	EDFG00633NL				
	100A	3P+NL	EDFG01003NL				
	125A	3P+NL	EDFG01253NL				
	160A	3P+NL	EDFG01603NL				
	200A	3P+NL	EDFG02003NL				
	250A	3P+NL	EDFG02503NL				
	315A	3P+NL	EDFG03153NL				
	400A	3P+NL	EDFG04003NL				
	630A	3P+NL	EDFG06303NL				

Technical Specification - Hinged Door

Data supplied against tests to IEC/BS EN 60947-3. * All AC21, AC22 & AC23 tests carried out at 415V

Switch-Disconnectors (O-I)																
Application	Sym	Unit	Category	32	63		80	100	125	160	200	250	400	630	800	1000
				3P	3P	6P	3P	3P	3P	3P	3P	3P	3P	3P	3P	3P
Rated thermal current	I _{the}	A		32	63	63	80	100	125	160	200	250	400	630	720	1000
Rated insulation voltage	U _i	V		690	690	690	690	1000	1000	1000	1000	1000	1000	1000	1000	1000
Rated impulse voltage	U _{imp}	kV		6	6	6	6	8	8	8	8	12	12	12	12	8
Rated operational current (AC)	I _e	A	400V- AC21A	32	63	63	80	100	125	160	200	250*	400*	630*	800*	1000*
			690V- AC21A	32	63	63	80	100	125	160	200	250	400	630	800	1000
			400V- AC22A	-	-	-	-	100	125	160	200	250*	400*	630*	800*	1000*
			690V- AC22A	-	-	-	-	100	125	160	160	250	400	630	800	-
			400V- AC23A	29	48	48	56	100	112	128	128	250*	400*	630*	720*	1000
			690V- AC23A	17	33	33	33	-	-	-	-	250	350	350	350	-
Rated operational current (DC) (/ poles in series)	I _e	A	Up to 48V- DC21A	32/1	63/1	63/1	80/1	-	-	-	-	250/2	400/2	630/1	800/1	1000/1
			220V- DC21A	32/3	63/4	1/1	80/4	-	-	-	-	250/2	400/2	630/2	800/2	1000/3
			Up to 48V- DC22A	-	-	-	-	-	-	-	-	250/2	400/1	630/1	800/1	-
			220V- DC22A	-	-	-	-	-	-	-	-	250/2	400/2	630/2	800/2	-
			Up to 48V- DC23A	-	-	-	-	-	-	-	-	250/2	400/1	630/1	800/1	-
			220V- DC23A	-	-	-	-	-	-	-	-	250/2	400/2	630/2	630/2	-
Rated operational power	P _e	kW	400/415V- AC23A	15	25	25	30	59	63	75	75	132	200	315	355	400
			690V- AC23A	15	30	30	30	51	55	55	55	200	315	355	355	-
Short circuit making capacity	I _{cm}	kA	Peak value	1.4	2.9	2.9	3.0	3.7	4.0	5.0	5.0	35	65	80	80	105
Short circuit withstand (1sec)	I _{cw}	kA	rms value	0.6	1.3	1.3	1.4	2.6	2.8	3.0	3.0	8	17	17	17	50
Min. mechanical endurance		-	Operations (10 ³)	250	250	500	250	50	50	50	50	16	10	10	10	6
Min. electrical endurance		-	415V- at 0.65 pf	-	-	-	-	-	-	-	-	1,000	1,000	500	500	500
Connecting capacity		-	Terminal type													
		mm ²	Min/Max	2.5 / 10	2.5 / 25	2.5 / 25	2.5 / 25	-/70	-/70	-/70	-/95	120	2 x 150	2 x 185	2 x 240	60 x 5
		mm	Stud/Cu palm width	-	-	-	-	-	-	-	8 x 25	10 x 30	10 x 30	12 x 40	12 x 40	12 x 60
		Nm	Tightening torque	1.2	1.2	1.2	1.2	5	5	5	6	35	35	50	50	50
Fuse Combination Units (O-I) (* Two poles in series)																
Application			Sym	Unit	Category	32	63	100	125	160	200	250	315	400	630	
Rated thermal current			I _{the}	A		32	63	100	125	160	200	250	315	400	630	
Rated insulation voltage			U _i	V		750	750	750	750	750	750	750	750	750	750	
Rated impulse voltage			U _{imp}	kV		12	12	12	12	12	12	12	12	12	12	
Rated operational current (AC)			I _e	A	415V- AC23A	32	63	100	125	160	200	250	315	400	630	
Rated operational current (DC)*					220V- DC23A	-	-	100	125	160	200	250	315	400	630	
Rated making capacity (AC23A)				A	415V, 0.35 pf	320	630	1,000	1,250	1,600	2,000	2,500	3,150	4,000	6,300	
Rated breaking capacity (AC23A)				A	415V, 0.35 pf	256	504	800	1,000	1,280	1,600	2,000	2,520	3,200	5,040	
Rated Conditional (Fused) short circuit				kA	S/C current rms	80	80	80	80	80	80	80	80	80	80	
				A	back-up fuse	32	63	100	125	160	200	250	315	400	630	
Min. mechanical endurance				-	Operations	25,000	25,000	15,000	15,000	15,000	10,000	10,000	10,000	10,000	6,000	

Technical Specification - Hinged Door

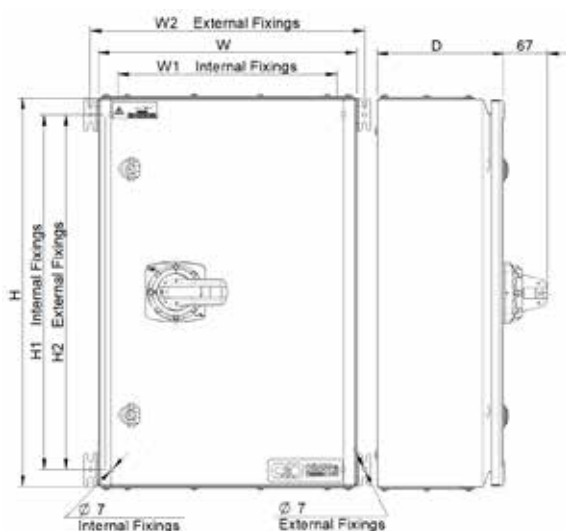
Data supplied against tests to IEC/BS EN 60947-3

Fuse Combination Units (O-I)													
Application	Sym	Unit	Category	32	63	100	125	160	200	250	315	400	630
Min. electrical endurance		-	415V- at 0.65 pf	1,500	1,500	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
BS fuse format				A2	A2	A4	A4	B1, B2	B1, B2	B1, B2	B1, B4	B1, B4	C1, C3
Connecting capacity		-	Terminal type										
		mm²	Min/Max	16	25	95	95	120	150	185	240	300	400
		mm	Stud/Cu palm width	-	-	8x20	8x20	8x20	10x25	10x25	10x25	10x25	12x50
		Nm	Tightening torque	2.5	2.5	9	12	16	35	35	35	35	50
Changeover Switch-Disconnectors (I-O-II)													
Application	Sym	Unit	Category	63	100	125	160	200	250	400	630		
Rated thermal current	I _{the}	A		63	100	125	160	200	250	400	630		
Rated insulation voltage	U _i	V		750	750	1000	1000	1000	1000	1000	1000		
Rated impulse voltage	U _{imp}	kV		6	6	6	6	6	12	12	12		
Rated operational current	I _e	A	415V- AC22A	63	100	125	160	200	250	400	630		
Rated making capacity (AC23A)		A	415V, 0.35 pf	630	630	1,250	1,600	2,000	2,500	4,000	6,300		
Rated breaking capacity (AC23A)		A	415V, 0.35 pf	504	504	1,000	1,280	1,600	2,000	3,200	5,040		
Short circuit current		kA	rms (with fuses)	80	80	80	80	80	100	100	80		
Rated S/C making capacity		kA	Peak	15	15	20	20	20	30	40	50		
Min. mechanical endurance		-	Operations	20,000	20,000	10,000	10,000	10,000	10,000	10,000	10,000		
Min. electrical endurance		-	415V- at 0.65 pf	2,500	1,500	1,000	1,000	1,000	1,000	1,000	500		
Connecting capacity		-	Terminal type										
		mm²	Max	35	35	95	95	95	240	300	400		
		mm	Stud/Cu palm width	6/12	6/12	8/22	8/22	8/22	10/25	10/25	12/50		
		Nm	Tightening torque	3	3	10	10	10	30	45	50		
Flagged Switch-Disconnectors (O-I)													
Application	Sym	Unit	Category	32	63	100	125	200	250	400			
Rated thermal current	I _{th}	A		32	63	115	125	200	270	500			
Rated insulation voltage	U _i	V		750	750	750	750	1000	1000	1000			
Rated impulse voltage	U _{imp}	kV		12	12	8	8	12	12	12			
Rated operational current	I _e	A	400V- AC23A	32	63	100*	125*	200*	250*	400*			
			220V- DC23A	-	-	100/3	125/3	200/2	250/2	400/2			
Rated operational power	P _e	kW	400/415V- AC23A	15	30	37	45	110	132	200			
Short circuit making capacity	I _{cm}	kA	Peak value	-	-	7	7	35	35	65			
Short circuit withstand (1sec)	I _{cw}	kA	rms value	-	-	5	5	8	8	17			
Min. mechanical endurance		-	Operations	25,000	25,000	20 x 10³	20 x 10³	16 x 10³	16 x 10³	10 x 10³			
Min. electrical endurance		-	415V- at 0.65 pf	1,500	1,500	5,000	5,000	1,000	1,000	1,000			
Connecting capacity		-	Terminal type										
		mm²	Min/Max	16	25	-	-	-	-	-			
		mm	Stud/Cu palm width	-	-	8x25	8x25	8x25	10x30	10x40			
		Nm	Tightening torque	3.5	3.5	6	8	20	25	25			
Flagged Fuse Combination Units (O-I)													
Application	Sym	Unit	Category	32	63	100	125	160	200	250	315	400	
Rated thermal current	I _{the}	A		32	63	100	125	160	200	250	315	400	
Rated insulation voltage	U _i	V		750	750	750	750	750	750	750	750	750	
Rated impulse voltage	U _{imp}	kV		12	12	12	12	12	12	12	12	12	

*All AC21, AC22 & AC23 tests carried out at 415V.

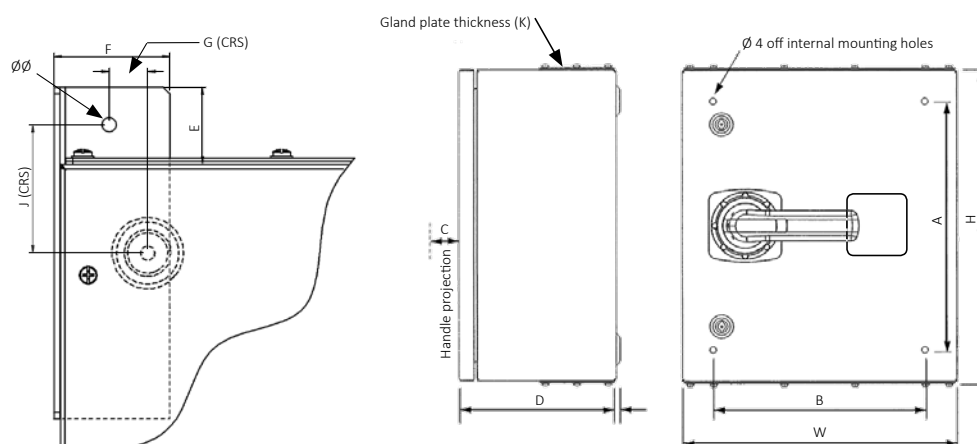
Flagged Fuse Combination Units (O-I)												
Application	Sym	Unit	Category	32	63	100	125	160	200	250	315	400
Rated operational current	I _e	A	415V- AC23A	32	63	100	125	160	200	250	315	400
			220V- DC23A	-	-	100	125	160	200	250	315	400
Rated making capacity (AC23A)		A	415V, 0.35 pf	320	630	1,000	1,250	1,600	2,000	2,500	3,150	4,000
Rated breaking capacity (AC23A)		A	415V, 0.35 pf	256	504	800	1,000	1,280	1,600	2,000	2,520	3,200
Rated Conditional (Fused) short circuit		kA	S/C current rms	80	80	80	80	80	80	80	80	80
		A	back-up fuse	32	63	100	125	160	200	250	315	400
Min. mechanical endurance		-	Operations	25,000	25,000	15,000	15,000	15,000	10,000	10,000	10,000	10,000
Min. electrical endurance		-	415V- at 0.65 pf	1,500	1,500	1,000	1,000	1,000	1,000	1,000	1,000	1,000
BS fuse format				A2	A2	A4	A4	B1, B2	B1, B2	B1, B2	B1, B4	B1, B4
Connecting capacity		-	Terminal type									
		mm ²	Min/Max	16	25	95	95	120	240	240	300	300
		mm	Stud/Cu palm width	-	-	8x20	8x20	8x20	10x25	10x25	10x25	10x25
		Nm	Tightening torque	2.5	2.5	9	12	16	25	30	35	45

Sheet Steel Hinged Door Switch-Disconnectors



Encl. Size	H	W	D	H1	H2	W1	W2
1	300	300	150	248	248	258	324
2	300	300	200	248	248	258	324
3	400	300	150	348	348	258	324
4	400	300	200	348	348	258	324
5	400	400	200	348	348	358	424
6	500	400	200	448	448	358	424
7	600	400	200	548	548	358	424
8	600	400	300	548	548	358	424
9	600	500	200	548	548	458	524
10	700	500	300	648	648	458	524
11	800	600	200	748	748	558	624
12	800	600	300	748	748	558	624
13	1000	600	300	948	948	558	624
14	1000	800	300	948	948	758	824

Sheet Steel Flagged Switchgear



Encl. Size	H	W	D	A	B	C	K	Ø	E	F	G	J	Ø Ø
1F	250	350	163	170	270	67	1.5	6.5	35	53	18	58	6.5
2F	400	350	163	320	270	67	1.5	6.5	35	58	18	58	6.5
3F	500	400	163	420	320	67	1.5	6.5	35	58	13	58	8.5
4F	600	450	220	520	370	67	2	6.5	35	58	13	58	8.5
5F	750	450	220	670	370	67	2	6.5					