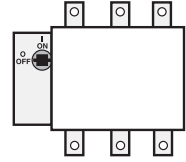




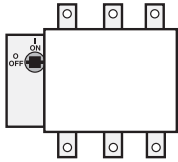
# CSA & UL Technical data for fusible disconnect switches OS30 – OS1200L03



## CSA & UL

Catalog number	3 pole	OS30FAJ12	OS60J12	OS100J12	OS200J03	OS400J03	OS600J03	OS800L03	OS1200L03
Approvals <sup>①</sup>	2 pole	N/A	N/A	CSA C22.2 No.4	CSA C22.2 No.4	CSA C22.2 No.4	CSA C22.2 No.4	CSA C22.2 No.4	CSA C22.2 No.4
	3 pole	CSA C22.2 No.4	CSA C22.2 No.4	CSA C22.2 No.4	CSA C22.2 No.4	CSA C22.2 No.4	CSA C22.2 No.4	CSA C22.2 No.4	CSA C22.2 No.4
	4 pole	CSA C22.2 No.4	CSA C22.2 No.4	CSA C22.2 No.4	CSA C22.2 No.4	CSA C22.2 No.4	CSA C22.2 No.4	CSA C22.2 No.4	CSA C22.2 No.4
<b>Technical ratings</b>	40°C								
General purpose amp rating	<b>A</b>	<b>30</b>	<b>60</b>	<b>100</b>	<b>200</b>	<b>400</b>	<b>600</b>	<b>800</b>	<b>1200</b>
pf = 0.7 – 0.8									
Max operating voltage	V	600	600	600	600	600	600	600	600
Max horsepower rating/ Max motor FLA current pf = 0.4 – 0.5									
Three phase									
208V	HP/A	7.5/24	15/46	25/75	50/150	100/300	150/396	150/396	—
240V	HP/A	7.5/22	15/42	30/80	60/154	125/312	200/480	200/480	—
480V	HP/A	15/21	30/40	60/77	120/156	250/302	400/477	500/590	—
600V	HP/A	20/22	50/52	75/77	150/144	350/336	500/472	500/472	—
Single phase									
120V	HP/A	2/24	—	—	—	—	—	—	—
240V	HP/A	3/17	—	—	—	—	—	—	—
Short circuit rating with fuse	kA	200	200	200	200	200	200	200	200
CSA Fuse size	A	30	60	100	200	400	600	800	1200
CSA Fuse type		J/CC	J	J/T	J/T	J/T	J/T	L	L
<b>Endurances</b>									
Min. Electrical endurance, pf = 0.75 – 0.80 operation cycles		6000	6000	6000	6000	1000	1000	500	500
Mechanical endurance operation		20,000	20,000	20,000	16,000	12,000	4000	3000	3000
<b>Physical characteristics</b>									
Weight	3 pole Kg	0.7	1.3	1.5	2.6	5.7	11.5	11.5	29
	4 pole Kg	0.9	1.6	1.8	3.2	6.9	14	14	36
Dimension 3 pole	H mm	97	100	144	200	230	306	306	287
	W mm	106	145	180	182	255	343	343	429
	D mm	107	128	120	132	176	233	233	294
Shaft size square □	mm	5 x 5	6 x 6	6 x 6	6 x 6	12 x 12	12 x 12	12 x 12	12 x 12
Switch operating torque for rotary 3 pole switches	lb. in.	26	35	70	—	195	248	248	—
<b>Terminal lug kits</b>		Standard	Standard	OZXA-24	OZXA-200	OZXA-400	OZXA-800	OZXA-800	OZXA-1200
Wire range AWG	#18 – #8	#14 – #4	#14 – 2/0	#4 – 300 kcmil	#2 – 600 kcmil	(2) #2 – 600 kcmil	(2) #2 – 600 kcmil	(2) #2 – 600 kcmil	(4) #2 – 600 kcmil
Torque:									
Wire tightening	lb. in.	17	30	120	275	500	500	500	500
Lug mounting	lb. in.	Integral	Integral	50	150	480	480	480	480
<b>Auxiliary contacts</b>		OA_G_	OA_G_	OA_G_	OA_G_	OA_G_	OA_G_	OA_G_	OA_G_
NEMA ratings, AC		A600	A600	A600	A600	A600	A600	A600	A600
AC rated voltage	VAC	600	600	600	600	600	600	600	600
AC thermal rated current	A	10	10	10	10	10	10	10	10
AC maximum volt ampere making	VA	7200	7200	7200	7200	7200	7200	7200	7200
AC maximum volt ampere breaking	VA	720	720	720	720	720	720	720	720
NEMA ratings, DC		R300	R300	R300	P600	P600	P600	P600	P600
DC rated voltage	VDC	300	300	300	600	600	600	600	600
DC thermal rated current	A	1	1	1	1	1	7	7	7
DC maximum make break current	A	28	28	28	28	28	28	28	28
Torque:									
Wire tightening	lb. in.	7	7	7	7	7	7	7	7
Wire range AWG		#18 – #14	#18 – #14	#18 – #14	#18 – #14	#18 – #14	#18 – #14	#18 – #14	#18 – #14

① The following CSA approved switches are also UL Listed.



# IEC Technical data

## Fusible disconnect switches

### OS30 – OS1200L03



### IEC

Catalog number	3 pole	OS30FA_12	OS60J12	OS100J03	OS200J03	OS400J03	OS600J03	OS800L03	OS1200L03
Technical ratings	-40° to 40°C								
Rated insulation voltage	V	1000	1000	1000	1000	1000	1000	1000	1000
Pollution degree 3 ③									
Dielectric strength 50Hz/60Hz, 1 min	kV	10	10	10	10	10	10	10	10
Rated impulse withstand voltage	kV	12	12	12	12	12	12	12	12
Rated thermal current, I <sub>t</sub> /max. fuse power dissipation ①									
AC 20/DC 20 open ②	A/W	32/3.5	63/7.5	160/12	200/17	400/45	630/60	800/65	
40°C enclosed	A/W	32/3.5	63/7.5	160/10, 135/12	200/17	400/34, 360/37	600/45, 570/50	720/55	
Enclosed with solid links	A/W	32	85	175	280	450	700	900	
with minimum cable cross section Cu	mm <sup>2</sup>	6	16	70	95	240	2 x 185	2 x 240	
Rated operational voltage AC 20 and DC 20V		1000	1000	1000	1000	1000	1000	1000	1000
<b>AC Rated operational currents</b>									
AC 21A	≤500V A	32	63	160	200	400	630	800	1250
	≤690V A	32	63	160	200	400	630	800	1250
AC 22A	≤500V A	32	63	160	200	400	630	800	1250
	≤690V A	32	63	160	200	400	630	800	1250
AC 23A	≤500V A	32	63	160	200	400	630	800	1000
	≤690V A	32	63 ⑤	160 ⑤	200	400	630	800	1000
<b>DC Rated operational currents/poles in series</b>									
DC21A	48V A	32/2	63/2	160/2	200/1	400/2			
	110V A	32/2	63/3	160/2	200/1	400/2			
	220V A	32/2	63/3	160/2	200/1	400/2			
	440V A	32/4	63/4	160/3	200/2	400/3			
	750V A	—	—	—	180/4	400/4			
	1000V A	—	—	—	—	—			
DC22A	48V A	32/2	63/2	160/2	200/1	400/2			
	110V A	32/2	63/3	160/2	200/1	400/2			
	220V A	32/2	63/3	160/2	200/1	400/2			
	440V A	32/4	63/4	160/3	200/2	400/3			
	750V A	—	—	—	180/4	400/4			
	1000V A	—	—	—	—	—			
DC23A	48V A	32/2	63/2	160/2	200/1	400/2			
	110V A	32/2	63/3	160/2	200/1	400/2			
	220V A	32/2	63/3	160/2	200/1	400/2			
	440V A	32/4	63/4	125/4	200/2	400/3			
	750V A	—	—	—	180/4	400/4			
	1000V A	—	—	—	—	—			
<b>Rated operational power AC23A</b>									
	230V kW	7.5	18.5	45	60	132	200	250	315
	400V kW	15	30	75	110	220	355	450	560
	415V kW	15	30	75	110	230	355	450	560
	500V kW	18.5	37	90	132	280	450	560	710
	690V kW	22	55	132	200	400	630	710	1000



Figure 1

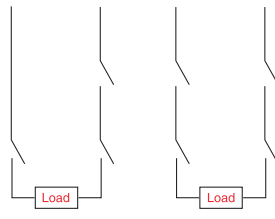


Figure 2

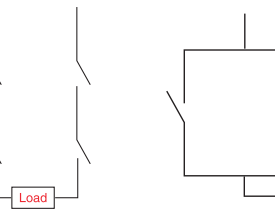
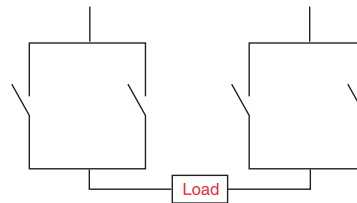


Figure 3



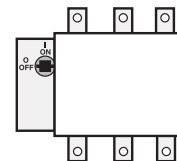
- ① Ambient temperature 60°C: derating 20 percent. Mounting on ceiling: derating 10 percent. Mounting on wall, horizontal fuses: derating 8 percent.
- ② The ambient air temperature does not exceed +40°C and its average over a period of 24h does not exceed +35°C according to IEC 947.
- ③ For 30A switches, use 2 + 2 parallel contacts in series.
- ④ Available on request.
- ⑤ IEC 947-3, utilization category B, infrequent operation.
- ⑥ Pollution degree 3: Conductive pollution occurs, or dry, non-conductive pollution occurs, which becomes conductive due to condensation.



# IEC Technical data

## Fusible disconnect switches

### OS30 – OS1200L03



Catalog number	3 pole	OS30FA_12	OS60J12	OS100J03	OS200J03	OS400J03	OS600J03	OS800L03	OS1200L03
<b>Rated breaking capacity</b>									
in category AC-23A	500V	A	256	504	1280	1600	3200	5760	5760
	690V	A	256	504	1280	1600	3200	5760	5760
<b>Rated breaking capacity/poles in series</b>									
in category DC-23	<220V	A	128/2	—	—	1000/2	1600/2	3200/2	3200/2
	440V	A	128/4	—	—	1000/2	1600/2	3200/2	3200/2
	500 – 750V	A	—	—	—	1000/3	1600/3	3200/3	3200/3
	1000V	A	—	—	—	—	—	3200/4	3200/4
<b>Rated conditional short-circuit current <i>r.m.s.</i> <sup>③</sup></b>									
	80 kA, 415V	kA	9	17	22	35	40	75	75
	100 kA, 500 V	kA	7.5	17	22	37.5	40	75	75
	50 kA, 690 V	kA	6	13	15	35	35	60	60
<b>Rated short time withstand current, 1s.</b>		kA	1	2.5	5	8	10	16	16
<b>Rated capacitor power</b>									
The capacitor rating of the fusible disconnect switch is limited by the fuse link									
	400 V	kVar	15	30	—	—	180	250	310
	415V	kVar	15	32	—	—	200	270	340
	690V	kVar	25	50	—	—	325	450	550
<b>Power loss/pole with rated current, without fuse</b>		W	2	4	9	8	30	46	75
<b>Mechanical endurance</b>	operations		20,000	20,000	20,000	20,000	16,000	4000	3000
<b>Fuse types, IEC 269-2</b>	DIN 43620		—	000, 00	000, 00	0 – 1	0 – 2	3	3
	NFC		10 x 38, 14 x 51	14 x 51, 22 x 58	22 x 58	0 – 1	0 – 2	3	3
	BS 88		A1, A2, F1	A2 – A3	A2 – A4	B1 – B2	B1 – B4	C1 – C2	C1 – C3
<b>size/distance of link bolts</b>			M4/44.5(A1) M5/73(A2)	M5/73	M5/73 M8/94	M6/111	M8/111	M10/133, 184	M10/133, 184
<b>Physical characteristics</b>									
<b>Weight</b>	3 pole	kg	0.7	1.3	1.5	2.6	5.7	13	13
	4 pole	kg	0.9	1.6	1.8	3.2	6.9	17	17
<b>Dimension</b>	3 pole	H mm	93	100	144	200	226	306	306
		W mm	106	143	179	182	286	343	343
		D mm	104	120	129	132	198	233	233
<b>Shaft size</b>	square	mm	5 x 5	6 x 6	6 x 6	6 x 6	12 x 12	12 x 12	12 x 12
<b>Terminals</b>									
<b>Built-in terminal size mm<sup>2</sup></b>			0.5 – 10	2.5 – 25	—	—	—	—	—
<b>Terminal bolt size, metric thread diameter x length mm</b>			—	—	M6 x 20	M8 x 25	M10 x 40	M12 x 40	M12 x 40
<b>Terminal bolt tightening torque</b>		Nm	2	3.5	6 – 9	15 – 22	30 – 44	50 – 75	50 – 75
<b>Fuse-links bolts tightening torque</b>		Nm	2	3.5	3.5 – 5	4	15	40	—
<b>Operating torque</b>		Nm	3	4	8	7	22	28	28
<b>Auxiliary contacts</b>									
			OA4G_	OA1/3G	OA_G_	OA_G_	OA_G_	OA_G_	OA_G_
<b>Ratings according to IEC 947-5-1</b>									
<b>Rated voltage, U<sub>i</sub></b>	VAC		690	690	690	690	690	690	690
<b>Thermal current, I<sub>th</sub></b>	A		10	16	16	16	16	16	16
<b>AC12 / DC12, I<sub>g</sub></b>	U <sub>g</sub> =24V	A	— / 6	—	—	—	—	—	—
	120V	A	— / 6	—	—	—	—	—	—
	125V	A	—	—	—	—	—	—	—
	230V	A	—	6 / —	6 / —	6 / —	6 / —	6 / —	6 / —
	250V	A	3 / 0.1	—	—	—	—	—	—
	400V	A	—	4 / —	4 / —	4 / —	—	—	—
	415V	A	—	—	—	—	—	—	—
	440V	A	2 / —	—	—	—	—	—	—
	480V	A	—	—	—	—	—	—	—
	500V	A	—	—	—	—	—	—	—
	600V	A	—	—	—	—	—	—	—
	690V	A	—	2 / —	2 / —	2 / —	2 / —	2 / —	2 / —