

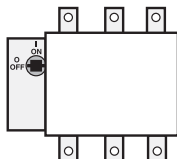
CSA & UL Technical data for Non-fusible disconnect switches OT16F3 – OT160F3



CSA & UL

Catalog number	3 pole	OT16F3	OT25F3	OT40F3	OT63F3	OT80F3	OT30F3	OT60F3	OT100F3	OT160E3
*Approvals ^①	2 pole 3 pole 4 pole	N/A CSA C22.2 No.14 CSA C22.2 No.14	N/A CSA C22.2 No.14 CSA C22.2 No.14	N/A CSA C22.2 No.14 CSA C22.2 No.14	N/A CSA C22.2 No.14 CSA C22.2 No.14	N/A CSA C22.2 No.14 CSA C22.2 No.14	N/A CSA C22.2 No.4 CSA C22.2 No.4	N/A CSA C22.2 No.4 CSA C22.2 No.4	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
General purpose amp rating -40°C to 40°C pf = 0.7 – 0.8	A	16	25	40	60	80	30	60	100	125
Max. operating voltage	V	600	600	600	600	600	600VAC/250VDC	600VAC/250VDC	600VAC/250VDC	600VAC/250VDC
Max. horsepower rating/motor FLA current, pf = 0.4 – 0.5										
Three phase										
208V	HP/A	3/10.6	7.5/24.2	10/31	15/46	20/60	10/31	20/60	25/75	30/88
240V	HP/A	5/15.2	7.5/22	10/28	15/42	20/54	10/28	20/54	30/80	40/104
480V	HP/A	10/14	15/21	20/27	30/40	40/52	20/27	40/52	50/65	75/96
600V	HP/A	15/11	20/22	25/27	30/32	40/41	30/32	40/41	50/52	100/99
Single phase										
120V	HP/A	1/16	1.5/20	2/24	2/24	2/24	2/24	3/34	5/56	7.5/80
240V	HP/A	2/13	3/19	5/31	7.5/40	10/58	5/31	7.5/40	15/68	20/88
Short circuit rating with fuse										
Fuse type CC	kA	10 —	10 —	10 —	— —	— —	—	—	—	—
Fuse type J	kA	10 10	10 10	10 10	100 —	100 —	50	50	50	100
Fuse type T	kA	10 10	10 10	10 10	100 —	100 —	50	50	50	—
Fuse type RK1	kA	10 —	10 —	10 —	— —	— —	—	—	—	—
Fuse type RK5	kA	5 5	5 5	5 5	10 5	10 5	—	—	—	—
Fuse type L	kA	— —	— —	— —	— —	— —	—	—	—	—
Fuse type H	kA	— —	— —	— —	— 5	— 5	—	—	—	—
Fuse size	A	30 60 ^②	30 60 ^②	30 60 ^②	100 150	100 150	60	150	150	200
Short circuit rating with MCCB	kA	—	—	—	—	—	—	—	—	25
Endurances										
Min. Electrical endurance, pf = 0.75 – 0.80 operation cycles		6000	6000	6000	6000	6000	6000	6000	6000	6000
Min. Electrical endurance, pf = 0.40 – 0.50 operation cycles		1000	1000	1000	1000	1000	1000	②	②	③
Mechanical endurance operations		20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	16,000
Physical characteristics										
Weight, switches 3 pole	Kg	0.11	0.11	0.11	0.27	0.27	0.36	0.36	0.36	1.1
4 pole	Kg	0.15	0.15	0.15	0.35	0.35	0.5	0.5	0.5	1.3
Dimension, switches 3 pole	H mm	68	68	68	91	91	100	100	100	127
	W mm	35	35	35	53	53	70	70	70	126
	D mm	56	56	56	72	72	75	75	75	74
Shaft size — square □	mm	6 x 6	6 x 6	6 x 6	6 x 6	6 x 6	6 x 6	6 x 6	6 x 6	6 x 6
Switch operating torque for rotary 3 pole switches	lb. in.	8.8	8.8	8.8	10.5	10.5	17.5	17.5	17.5	52.5
Terminal lug kits										
Wire range	AWG	Not required #18 – #8	Not required #18 – #8	Not required #18 – #8	Not required #14 – #1	Not required #14 – #1	Not required #14 – #4	Not required #14 – #4	Not required #8 – 1/0	Not required #8 – 1/0
Torque:										
Wire tightening	lb. in.	7	7	7	18	18	55	55	55	70
Lug mounting	lb. in.	Integral	Integral	Integral	Integral	Integral	Integral	Integral	Integral	Integral
Auxiliary contacts		OA1G_ _	OA1G_ _	OA1G_ _	OA1G_ _	OA1G_ _	OA1G_ _	OA1G_ _	OA1G_ _	OBEA_ _
NEMA ratings, AC		A600	A600	A600	A600	A600	A600	A600	A600	A600
AC rated voltage	VAC	600	600	600	600	600	600	600	600	600
AC thermal rated current	A	10	10	10	10	10	10	10	10	10
AC maximum volt-ampere making	VA	7200	7200	7200	7200	7200	7200	7200	7200	7200
AC maximum volt-ampere breaking	VA	720	720	720	720	720	720	720	720	720
NEMA ratings, DC		R300	R300	R300	R300	R300	R300	R300	R300	P600
DC rated voltage	VDC	300	300	300	300	300	300	300	300	600
DC thermal rated current	A	1	1	1	1	1	1	1	1	5
DC maximum make-break	VA	28	28	28	28	28	28	28	25	138
Torque:										
Wire tightening	lb. in.	7	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	#18 – #14

① CSA Approved switches are also UL Listed.
② UL98 overload test, 50 operations, pf 0.40 – 0.50 at 2x FLA.
③ Fuse size 70A for RK5



IEC Technical data for Non-fusible disconnect switches OT16F3 – OT160F3



IEC

Catalog number	3 pole	OT16F3	OT25F3	OT40F3	OT63F3	OT80F3	OT100F3	OT160E3
Rated insulation and operational voltage, AC20 and DC20	40°C							
	V	750	750	750	750	750	750	750
Rated impulse withstand voltage	kV	8	8	8	8	8	8	12
Rated thermal current, I_{th}								
AC 20/DC 20	open	A	25	32	40	63	80	115
	40°C enclosed	A	25	32	40	63	80	115
	60°C enclosed	A	25	32	40	63	80	115
Rated operational currents								
AC-22A	Up to 415 V	A	16	25	40	63	80	100
	440 - 500 V	A	16	25	40	63	80	100
	690 V	A	16	25	40	63	80	100
AC-23A	Up to 415 V	A	16	20	23	45	75	80
	440 - 500 V	A	16	20	23	45	58	60
	690 V	A	10	11	12	20	20	40
Rated operational currents/poles in series								
DC21A	48V	A	16/1	25/1	32/1	45/1	63/1	100/1
	110V	A	16/2	25/2	32/2	45/2	63/2	100/2
	220V	A	16/3	25/3	32/3	45/4	63/4	100/4
	440V	A	16/4	25/6	32/6	—	—	—
	750V	A	16/8	25/8	32/8	—	—	—
DC22A	48V	A	16/1	25/1	32/1	45/1	63/1	100/1
	110V	A	16/2	25/2	32/2	45/2	63/2	100/2
	220V	A	16/3	25/3	32/4	45/4	63/4	100/4
	440V	A	16/6	25/6	—	—	—	—
	750V	A	16/8	25/8	—	—	—	—
DC23A	48V	A	16/1	25/1	32/1	45/1	63/1	100/1
	110V	A	16/2	25/2	32/2	45/2	63/2	100/2
	220V	A	16/4	25/4	32/4	45/4	63/4	100/4
	440V	A	10/4	10/4	10/4	10/4	10/4	—
	750V	A	16/8	—	16/8	16/8	—	—
Rated operational power								
AC23A	230V	kW	3	4	5.5	11	22	22
	400/415V	kW	7.5	9	11	22	37	37
	500V	kW	7.5	9	11	22	37	37
	690V	kW	7.5	9	11	15	18.5	37
Short-circuit current	kA	50	50	50	50	50	50	100
with back-up fuses of size	A	25	32	40	63	80	100	200
Rated short-circuit making capacity, prospective peak value, I_{cm} 690V	kA	0.7	0.7	0.7	1.4	2.1	3.6	12
Rated short time withstand current,								
RMS I_{cw}	0.2s	kA	—	—	—	—	—	7
RMS I_{cw}	1.0s	kA	0.5	0.5	0.5	1	1.5	2.5
AC breaking capacity								
pf = 0.35	≤415V	A	128	160	184	240	304	640
	≤500V	A	128	160	184	240	256	480
	≤690V	A	80	88	96	160	160	320
DC breaking capacity/poles in series								
L/R = 15ms	≤48V	A	64/1	100/1	128/1	180/1	252/1	400/1
	≤110V	A	64/2	100/2	128/2	180/2	180/2	400/2
	≤220V	A	64/3	100/4	128/4	180/4	180/4	252/4
	≤440V	A	40/4	40/4	40/4	40/4	40/4	—
	≤750V	A	64/8	64/8	64/8	—	—	—