

# UL 98 Non-Fusible Disconnect Switches

## Technical Data UL 98 Products

Technical data according to UL/cULus							
General purpose amp rating	pf= 0.7...0.8	-40° to 40 °C	A	M400U 400	M600U 600	M800U 800	M1200U 1200
Max. operating voltage			V	600	600	600	600
Max. horsepower rating / motor FLA current	pf= 0.4...0.5 Three phase	240 V	HP/A	125/312.0	200/480.0	200/602	200/602
		480 V	HP/A	250/302.0	450/515.0	500/590	500/590
		600 V	HP/A	350/338.0	500/472.0	500/472	500/472
	Single phase	120 V	HP/A				
		240 V	HP/A				
Short circuit rating with fuse	Maximum fuse size		A	600	600 800	800	1200
	Fuse type	CC	kA				
	Fuse type	J	kA	100	100		
	Fuse type	T	kA		100		
	Fuse type	RK1	kA				
	Fuse type	RK5	kA			100	
	Fuse type	L	kA			100	100
	Fuse type	H	kA				100
Maximum General Use, DC ratings							
Current rating		at 250 VDC	A	400	600		
		at 600 VDC	A	200	200		
DC horsepower rating for 4-pole switch		at 600 VDC	HP	50	-		
DC horsepower rating for 2-pole switch	In open air	at 125 VDC	HP	40	-		
	In enclosure <sup>2)</sup>	at 250 VDC	HP	50	50		
DC short circuit rating for 4-pole switch		with circuit breaker	kA	10	10		
		with circuit breaker at 250 VDC	kA	14	18		
DC short circuit rating for 2-pole switch		with circuit breaker at 600 VDC	kA	10	10		
		with class J fuse at 250 VDC	kA	100	100		
		... with fuse size	A	400	500		
Endurances							
Min. electrical endurance, pf. 0.75...0.8			oper. cycles	1 000	1 000	500	500
Mechanical endurance			operations	16 000	10 000	6000	6000
Terminal lug kits				LUG400	LUG800	LUG800	LUG1200
Wire range			AWG	2 - 600MCM	2 x 2 - 600MCM	2 x 2 - 600MCM	4 x 2 - 600MCM
Torque		Wire tightening	lb. in	375	55	500	500
		Lug mounting		240	480	480	450-670
Technical data according to IEC 60947-3							
Rated insulation voltage and rated operational voltage AC20/DC20	Pollution degree 3		V	1000	1000	1000	1000
Dielectric strength		50 Hz 1min.	kV	10	10	10	10
Rated impulse withstand voltage			kV	12	12	12	12
Rated operational current, AC-22A		up to 415 V	A	400	800	1600	1600
		440...500 V	A	400	800	1600	1600
		690 V	A	400	800	1600	1600
Rated operational current, AC-23A		up to 415 V	A	400	800	1250	1250
		440 V	A	400	800	1250	1250
		500 V	A	400	800	1250	1250
		690 V	A	400	800	1250	1250
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	$I_p$ (r.m.s.)	50 kA	kA				
	Max. OFA_fuse size gG/aM	415 V	A				
	$I_p$ (r.m.s.)	50 kA	kA				
	Max. OFA_fuse size gG/aM	690 V	A				
(single phase test acc. to IEC60269)	$I_p$ (r.m.s.)	50 kA	kA	50.5	71.5		
	Max. OFA_fuse size gG/aM	690 V	A	500/500	800/1 000		
	at prospective SC-current	80 kA	kA	59	83.5		
	Max. OFA_fuse size gG/aM	690 V	A	500/500	800/1 000		
Rated short-time withstand current	r.m.s. -value $I_{cw}$	690 V, 1 s	kA	15	20	50	50
Rated short circuit making capacity	Peak value $I_{sm}$	690 V/500 V	A	65	80	110	110
Power loss / pole		At rated operational current	W	10	40	29	48
Mechanical endurance		Divide by two for operation cycles	Oper.	26 000	10 000		
Weight without accessories		3-pole	kg	2.2	5.2	15.2	15.2
		4-pole	kg	2.8	6.4		

1) UL Listed switches are also CSA Approved.

2) Fuse size 70A for RK5.