

Circuit Breakers

Mini-Mag Hydraulic-Magnetic Circuit Breakers

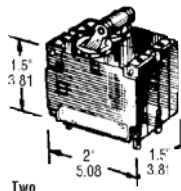
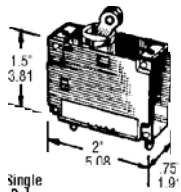
Rugged construction protects to 30 amps, to 277 volts, 60 Hz AC. Accurately calibrated to carry 100% of rated load and to trip at between 101% and 125% of load. Trip time at 200% of rated load is from 2.2 to 20 seconds. On heavy overloads, a spring-loaded iron piston moves instantly for immediate circuit interruption. Operation unaffected by ambient conditions. Terminals are 0.250" Quick Disconnect type. **Humidity Resistance:** per MIL-STD-202. **Dielectric Strength:** 1500 VAC 60 Hz. **Reset Time:** Instantaneous. **Voltage Drop:** less than 1.5 V at 1 A or more. **Shock and Vibration:** tested per MIL-STD-202. **Operating Temperature:** -40°C to +85°C. **Insulation Resistance:** 100 megs at 500 VDC. Fungus resistant. **Interruption Capacity:** 5-20 A — 5,000 amps; 30 A — 2,500 amps. **Shipping Weight:** 2.5 oz. per pole. UL recognized and CSA certified.

Single-Pole

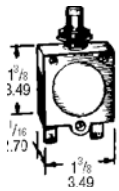
Stock No.	Mfr.'s Type	Amps	EACH		
			1-24	25-49	50-99
886-2061	W67-X2Q12-5	5	23.22	21.12	19.16
886-2062	W67-X2Q12-10	10	21.60	20.53	16.42
886-2063	W67-X2Q12-15	15	23.00	20.90	19.16
886-2064	W67-X2Q12-20	20	20.38	18.68	17.25
886-2084	W67-X2Q12-30	30	19.33	18.21	16.90

Two-Pole

886-2065	W68-X2Q12-5	5	51.44	45.54	39.04
886-2066	W68-X2Q12-10	10	55.18	50.16	45.98
886-2067	W68-X2Q12-15	15	44.65	42.04	39.04
886-2072	W68-X2Q12-20	20	55.18	50.16	45.98
886-2073	W68-X2Q12-30	30	55.18	50.16	45.98



Model W58X Push-To-Reset Type Thermal Circuit Breakers



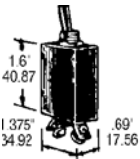
Here's an economical way to get low current protection. Button extends to indicate overload. **Max. Operating Voltage:** 250 VAC and 50 VDC. Carries 100% of rated load with ultimate trip at 145%. **Tripping Time:** for 1 to 4 amps is 10-45 sec. at 200%; 5 amps and up is 6-30 sec. at 200%. **Dielectric Strength:** over 1500 volts RMS. **Voltage Drop:** less than 1 1/2 volts. **Interrupt Capacity:** 2000 A at 500 VDC, 1000 A at 250 VAC. UL recognized, CSA certified.

Stock No.	Mfr.'s Type	Amps	EACH		
			1-24	25-49	50-99
886-2053	W58-XB1A4A-1	1	8.43	7.59	6.88
886-2054	W58-XB1A4A-2	2	8.51	7.65	6.95
886-2055	W58-XB1A4A-3	3	8.68	7.81	7.08
886-2056	W58-XB1A4A-5	5	4.90	4.33	3.93
886-2057	W58-XB1A4A-7	7	5.66	5.00	4.54
886-2058	W58-XB1A4A-10	10	4.75	4.20	3.81
886-2059	W58-XB1A4A-15	15	4.90	4.33	3.93
886-2060	W58-XB1A4A-20	20	4.90	4.33	3.93

Model W31 Toggle Actuated Circuit Breakers

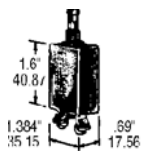
Single pole with toggle trip lever; trip-free mechanism. Wipe-on make contacts lessen voltage drop. Meets MIL-STD 202, method 106 — humidity; 202, method 101, test condition B — salt spray. **Endurance Cycling:** 6000+ at 100% of rating. 10,000 mechanical cycles. **Maximum Operating Voltages:** 50 VDC; 250 VAC (to 400 Hz). **Weight:** less than 2 oz. UL recognized, CSA certified.

Stock No.	Mfr.'s Type	Amps	Trip Time @ 200% Rating	EACH		
				1-24	25-49	50-99
886-2040	W31-X2M1G-5	5	6-22 seconds	23.37	21.26	19.48
886-2041	W31-X2M1G-10	10	6-22 seconds	23.37	21.26	19.48
886-2042	W31-X2M1G-15	15	6-22 seconds	23.61	21.48	19.48
886-2043	W31-X2M1G-20	20	6-22 seconds	24.86	22.71	20.64
886-2044	W31-X2M1G-25	25	6-22 seconds	21.46	19.68	17.98
886-2045	W31-X2M1G-30	30	6-22 seconds	23.81	21.83	20.16
886-2086	W31-X2M1G-35	35	6-22 seconds	21.25	19.48	17.99



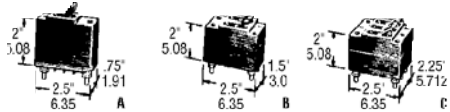
Model W23 Pushbutton Circuit Breakers

Single-pole with trip-free mechanism. Overload condition extends button, exposing white band for visible trip indication. **Meets MIL-STD:** 202, method 106 — humidity; 202, method 101, test condition B — salt spray. **Endurance Cycling:** 6000+ at 100% rating. 10,000 mechanical cycles. **Max. Operating Voltages:** 50 VDC; 250 VAC (to 400 Hz). **Weight:** less than 2 oz. UL recognized, CSA certified.



Stock No.	Mfr.'s Type	Amps	Trip Time @ 200% Rating	EACH		
				1-24	25-49	50-99
886-2032	W23-X1A1G-5	5	6-22 seconds	19.97	18.14	16.48
886-2034	W23-X1A1G-10	10	6-22 seconds	19.97	18.14	16.48
886-2035	W23-X1A1G-15	15	6-22 seconds	19.97	18.15	16.48
886-2036	W23-X1A1G-20	20	6-22 seconds	19.58	17.79	16.16
886-2037	W23-X1A1G-25	25	6-22 seconds	19.97	18.15	16.48
886-2038	W23-X1A1G-30	30	6-22 seconds	19.97	18.15	16.48
886-2039	W23-X1A1G-50	50	6-22 seconds	16.51	14.60	12.88

Magnetic Type Circuit Breakers



For 60 Hz AC, up to 277 V. Will carry 100% of rated load indefinitely, with ultimate trip at 125%. **Trip Time:** 2-20 seconds at 200%. **Interruption Capacity:** 5000 amps at 277 VAC. UL recognized.

Single-Pole AC Type — Fig. A

Stock No.	Mfr.'s Type	Amps	EACH		
			1-24	25-49	50-99
886-2046	W91-X112-10	10	31.27	28.43	26.06
886-2047	W91-X112-15	15	25.97	24.68	23.38
886-2048	W91-X112-20	20	20.21	18.37	16.68

Two-Pole AC Type — Fig. B

886-2090	W92-X112-10	10	56.52	49.97	48.39
886-2049	W92-X112-15	15	66.16	60.14	55.13
886-2050	W92-X112-20	20	48.43	44.03	40.37
886-2051	W92-X112-30	30	64.86	58.96	54.05
886-2087	W92-X112-50	50	66.16	60.14	55.13

Three-Pole AC Type — Fig. C

886-2068	W93-X112-5	5	81.98	76.13	64.15
886-2069	W93-X112-10	10	81.98	75.96	67.09
886-2092	W93-X112-15	15	101.62	92.38	84.68
886-2070	W93-X112-20	20	95.64	88.62	78.27
886-2071	W93-X112-25	25	81.98	75.96	67.09
886-2052	W93-X112-30	30	101.62	92.38	84.68
886-2093	W93-X112-40	40	106.53	91.94	85.37
886-2091	W93-X112-50	50	90.95	85.37	79.68



Model W28 Fuseholder-Type Thermal Circuit Breaker

Single pole breakers occupy about the same space as fuseholders. Dielectric strength over 1,500 volts RMS. **Max. Operating Voltages:** 32 VDC, 250 VAC. **Approx. Weight:** 0.35 oz. (10 g). UL recognized, CSA certified.

Stock No.	Mfr.'s Type	Amps	Trip Time @ 200% of Load	EACH		
				1-24	25-49	50-99
886-2033	W28-XQ1A-0.50	0.50	4.5-28 seconds @ +25°C	4.95	4.13	3.31
886-2074	W28-XQ1A-1	1.00	4.5-28 seconds @ +25°C	4.88	4.31	3.93
886-2075	W28-XQ1A-2	2.00	4.5-28 seconds @ +25°C	5.38	4.77	4.32
886-2076	W28-XQ1A-3	3.00	2.2-15 seconds @ +25°C	2.54	2.24	2.04
886-2077	W28-XQ1A-4	4.00	2.2-15 seconds @ +25°C	2.53	2.29	1.83
886-2078	W28-XQ1A-5	5.00	2.2-15 seconds @ +25°C	2.78	2.45	2.23
886-2079	W28-XQ1A-6	6.00	2.2-15 seconds @ +25°C	4.49	4.04	3.66
886-2080	W28-XQ1A-7	7.00	2.2-15 seconds @ +25°C	2.77	2.45	2.23
886-2081	W28-XQ1A-8	8.00	2.2-15 seconds @ +25°C	2.53	2.30	1.83
886-2082	W28-XQ1A-10	10.00	2.2-15 seconds @ +25°C	2.53	2.24	2.04
886-2083	W28-XQ1A-12	12.00	2.2-15 seconds @ +25°C	4.88	4.37	3.97
886-2085	W28-XQ1A-15	15.00	2.2-15 seconds @ +25°C	2.78	2.45	2.23
886-2088	W28-XQ1A-20	20.00	2.2-15 seconds @ +25°C	1.97	1.83	1.76

Prices Subject To Change — We Always Ship At The Lowest Price In Effect