W58 series

Push To Reset Only
Thermal Circuit Breaker

Features

• 0.5 amp to 30 amp ratings.
• Cannot be manually tripped.
• Button extends for visual trip indication.
• Push button to reset breaker.
• Termination is screw or .250″ QC.

Agency Approvals

W58 Series is UL 1077 Recognized as Supplementary Protectors, File E69543, and CSA Certified as Appliance Component Protectors, File LR15734.

Electrical Data @ +25°C

Calibration: Breaker will continuously carry 100% of rated load. It may trip between 101% and 145% of rated load, but must trip at 145% at 25°C.
Dielectric Strength: Over 1,500 volts RMS.
Maximum Operating Voltages: 50VDC; 250VAC.
Interrupt Capacity: 2,000 amps at 50VDC (0.5 - 30 amp models).
1,000 amps at 250VAC (0.5 - 30 amp models).
Note: 30 0amp model not UL or CSA.
Resettable Overload Capacity: Ten times rated current.

Maximum Resistance vs. Current Rating @ +25°C

Current Rating in Amps	Maximum Resistance in Ohms	Current Rating in Amps	Maximum Resistance in Ohms
0.5	5.0	8	0.020
1	1.35	9	0.020
2	0.32	10	0.014
3	0.18	12	0.010
4	0.10	15	0.010
5	0.026	20	0.005
6	0.026	25	0.006
7	0.020	30*	0.004

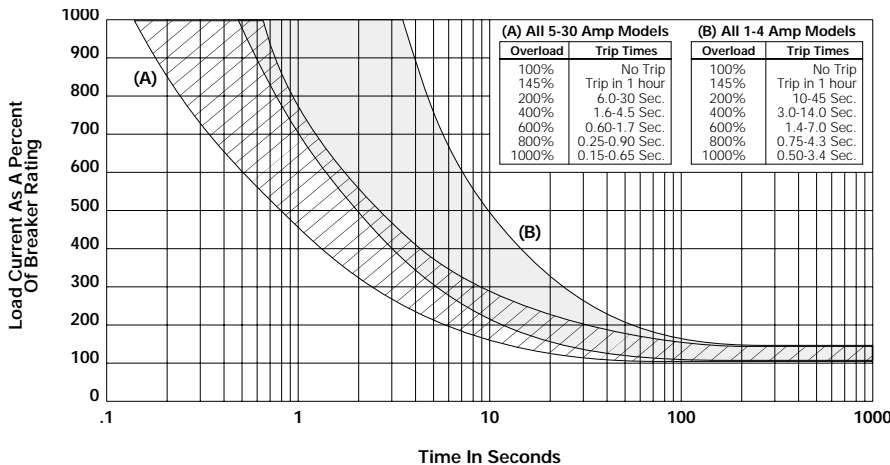*No UL/CSA

Mechanical/Environmental Data

Shock: Withstands to 10g.
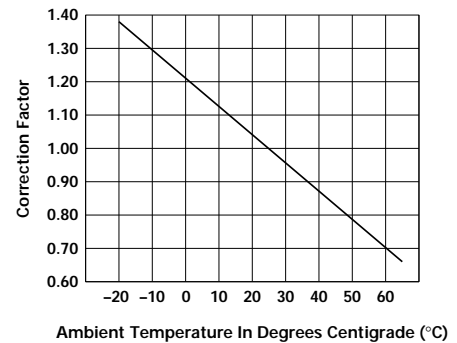**Endurance Cycling:** Over 1,000 cycles at 200% of rated load.
Vibration: Withstands to 10g at 10-55 Hz.
Weight: Less than 1 1/2 oz. (42.5g).

Time vs. Current Trip Curve @ +25°C

(A) All 5-30 Amp Models		(B) All 1-4 Amp Models	
Overload	**Trip Times**	**Overload**	**Trip Times**
100%	No Trip	100%	No Trip
145%	Trip in 1 hour	145%	Trip in 1 hour
200%	6.0-30 Sec.	200%	10-45 Sec.
400%	1.6-4.5 Sec.	400%	3.0-14.0 Sec.
600%	0.60-1.7 Sec.	600%	1.4-7.0 Sec.
800%	0.25-0.90 Sec.	800%	0.75-4.3 Sec.
1000%	0.15-0.65 Sec.	1000%	0.50-3.4 Sec.

Ambient Compensation Chart

To use this chart: Read up from the ambient temperature to the curve, and across to find a correction factor. Multiply the breaker rating by the correction factor to determine the compensated rating. Calculate the overloads in terms of the compensated rating to use the published trip curve.
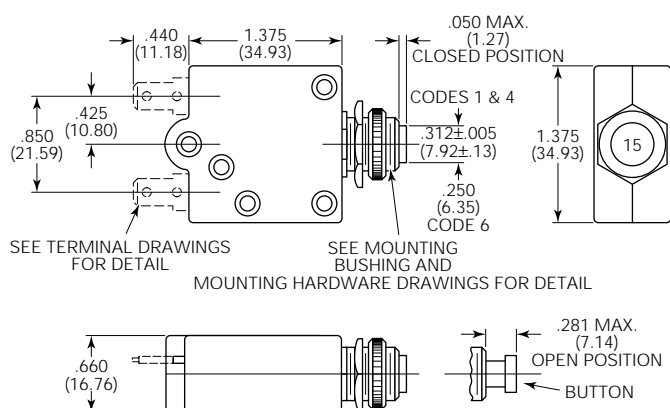
Ordering Information

Typical Part No. ▶	W	58	-X	B	1	A	4	A	-5

1. Designator:
W = Circuit breaker

2. Series Number:
58 = Single Pole, Push-to-Reset

3. Circuit Function:
X = Series Trip

4. Button:
A = White, plain, no rate marking, no trip band   E = White with red rate marking no trip band
B = White with red rate marking, red trip band   F = White with black rate marking, no trip band
C = White with black rate marking, red trip band

5. Mounting Bushing:
1 = 7/16" x .500" (12.70mm) long
4 = 15/32" x .300" (7.62mm) long, black
6 = 3/8" x .465" (11.81mm) long, round

6. Terminals:
A = Quick connect .250" (6.35mm) straight
C = 6/32 screw 90° (screws installed)
D = 6/32 screw 90° (screws bulk packed)

7. Mounting Hardware:
4 = Knurled nut/hex nut   15 = Two hex nuts/lock washer
6 = Knurled nut/hex nut/lock washer   99 = No mtg. hardware supplied (Use C, Step #8)
12 = Knurled nut/lock washer

Note: For other hardware combinations, order separately. See mounting hardware Ordering Information table.

8. Mounting Hardware Packaging:
A = Assembled to bushing
B = Bulk unassembled
C = No mounting hardware

9. Specify Amp Rating:

0.5	3	6	9	15	30*
1	4	7	10	20	
2	5	8	12	25	*Not UL or CSA

Stock Items – We recommend that our authorized distributors stock the following items for immediate delivery.

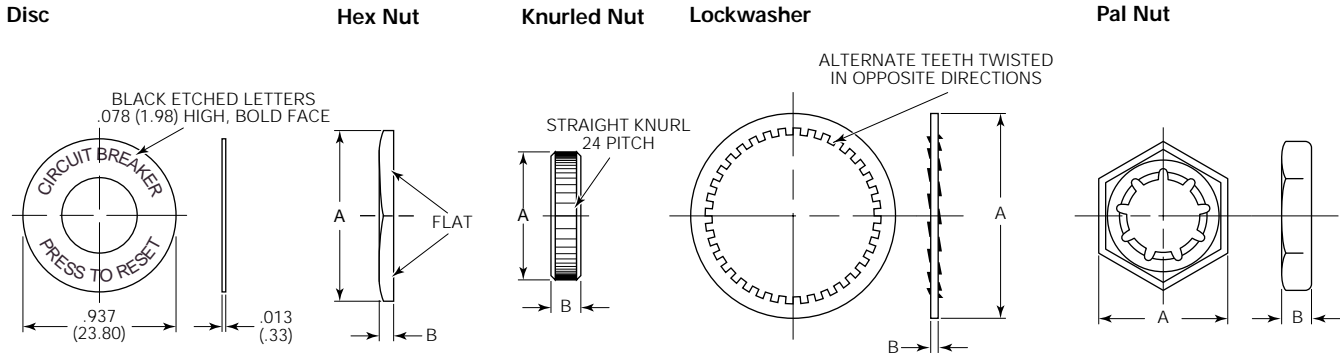|				
W58-XB1A4A-1	W58-XB1A4A-6	W58-XB1A4A-15	W58-XC4C12A-2	W58-XC4C12A-15
W58-XB1A4A-2	W58-XB1A4A-7	W58-XB1A4A-20	W58-XC4C12A-3	W58-XC4C12A-20
W58-XB1A4A-3	W58-XB1A4A-8	W58-XB1A4A-25	W58-XC4C12A-5	W58-XC4C12A-25
W58-XB1A4A-4	W58-XB1A4A-10	W58-XB1A4A-30	W58-XC4C12A-7	W58-XC4C12A-30
W58-XB1A4A-5	W58-XB1A4A-12	W58-XC4C12A-1	W58-XC4C12A-10	

Outline Dimensions

Terminal Options

.440 (11.18)   1.375 (34.93)   .050 MAX. (1.27) CLOSED POSITION

CODES 1 & 4

.425 (10.80)   .850 (21.59)

.312±.005 (7.92±.13)   .250 (6.35) CODE 6   1.375 (34.93)   15

SEE TERMINAL DRAWINGS FOR DETAIL

SEE MOUNTING BUSHING AND MOUNTING HARDWARE DRAWINGS FOR DETAIL

.660 (16.76)

.281 MAX. (7.14) OPEN POSITION   BUTTON

.250 (6.35) x .032 (.81) QUICK CONNECT TERMINALS

.415 (10.54)   1.375 (34.93)   .425 (10.80)   .850 (21.59)   .440 (11.18)

A

.187 (4.75)   .312 TYP. (7.92)   .85 (21.6)

C & D   .156 (3.96)

#6-32 SCREW & LOCK WASHER ASSEMBLY

Mounting Hardware

Disc   **Hex Nut**   **Knurled Nut**   **Lockwasher**   **Pal Nut**

BLACK ETCHED LETTERS
.078 (1.98) HIGH, BOLD FACE

CIRCUIT BREAKER
PRESS TO RESET

.937
(23.80)   .013
                 (.33)

A   FLAT

B

STRAIGHT KNURL
24 PITCH

A

B

ALTERNATE TEETH TWISTED
IN OPPOSITE DIRECTIONS

A

B

A   B

Mounting Bushing

Type 1

Recommended Cutout

7/16-28 THREAD
(SILVER)

.440 - .450 DIA.
(17.3 - 17.7)

Type 4

.300
(7.62)

15/32-32 THREAD
(BLACK)

.470 - .480 DIA.
(18.5 - 18.9)

Type 6

.465
(11.81)

3/8-24 THREAD
(SILVER)

.370 - .380 DIA.
(15.0 - 15.3)
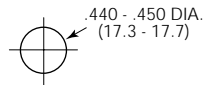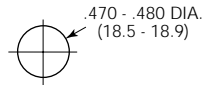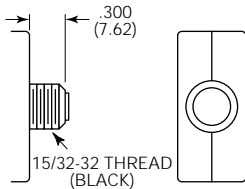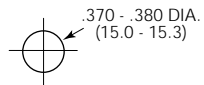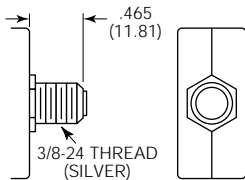
Mounting Hardware Dimensions

	Dim.	Hex.	Knurled	L/W	Pal
A.	3/8″	.556	.562	.562	.562
	7/16″	.625	.625	.540	.625
	15/32″	.556	.625	.600	.625
B.	3/8″	.085	.078	.018	.140
	7/16″	.078	.125	.022	.111
	15/32″	.078	.125	.018	.090

Mounting Hardware Ordering Information

Mounting Bushing Code	Knurl Nut	Hex Nut	Pal Nut	Washer	Push to Reset Disc
1	55-010A	55-011A	16S086B	88-021B	33-012A
4	•	55-001B	16S086C	88-002A	33-012C
6	55-008A	55-001D	16S086A	88-006K	33-012B

• 55-010B (silver) 55-010E (black)

Tyco Electronics Corporation - P&B, Winston-Salem, NC 27102
Technical Support Center: 1-800-522-6752, www.pandbrelays.com

Specifications and availability subject to change without notice.
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