

# W57 series

# Compact, Push To Reset Only Thermal Circuit Breaker

## c**FL**us

#### Interrupt Capacity: 1,000 amps in accordance with UL standard 1077. Resettable Overload Capacity: Ten times rated current. Reset Time: 60 seconds.

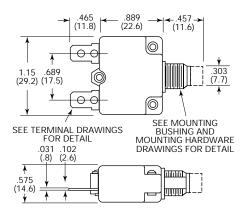
### Typical Resistance vs. Current Rating @ +25°C

Current Rating in Amps	Typical Resistance in Ohms	Current Rating in Amps	Typical Resistance in Ohms		
4.0	0.062	10.0	0.025		
5.0	0.050	12.0	0.021		
6.0	0.042	15.0	0.017		
7.0	0.036	20.0	0.012		
8.0	0.031				

#### **Mechanical/Environmental Data**

**Operating Temperature Range:** 0°C to +60°C. **Termination:** .250" (6.35mm) quick connects. **Mounting:** Various options. See Ordering Information and drawings. **Approximate Weight:** 0.5 oz. (14.3g).

#### **Outline Dimensions**



#### **Optional Protective Boot**

Silicone rubber boot is bonded to integral alumimum nut.

#### 1-1423696-5

Black boot for W57 with 3/8" -24 bushing.

**1-1423696-7** Clear boot for W57 with 3/8" -24 bushing.

#### 1-1423696-4

Black boot for W57 with M11 X 1.0 bushing.

#### 1-1423696-6

Clear boot for W57 with M11 X 1.0 bushing.

#### Features

- · New, compact, design.
- 4 to 20 amp ratings.
- · Cannot be manually tripped.
- Button extends for visual trip indication.
- Push button to reset breaker.
- Numerous mounting and termination options.

## **Agency Approvals**

W57 series is UL 1077 Recognized as Supplementary Protectors, File E69543, for Canada and the United States.

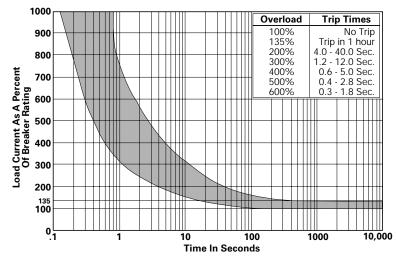
Users should thoroughly review the technical data before selecting a product part number. It is recommended that users also sek out the pertinent approvals files of the agencies/laboratories and review them to ensure the product meets the requirements for a given application.

#### Electrical Data @ 25°C

 Calibration: Will continuously carry 100% of rating. May trip between 101% and 134%, but must trip at 135% of rating within one hour at +25°C.
 Dielectric Strength: 1,500VAC (60 seconds).
 Insulation Resistance: 100 megohms.

Maximum Operating Voltages: 50VDC; 250VAC, 50/60 Hz.

## Time vs. Current Trip Curve @ +25°C

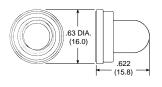


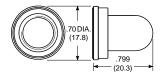
#### **Ambient Compensation Table**

Ambient Temperature	Rating Correction Factor					
in °C	3-6A Models	7-20A Models				
10	.80	.80				
20	.90	.90				
25	1.00	1.00				
30	1.10	1.05				
40	1.25	1.15				
50	1.61	1.25				
60	2.15	1.40				

To use this chart: Divide 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. Do not use these devices outside

Do not use these devices outside their specified operating temperature ranges.





Dimensions are in inches over (millimeters) unless otherwise specified.

tyco				Catalog 1 Issued							P&E
Electronics Ordering Info	ormation										
		Typical Part No	.► W	57 ·	X B	1	A 4	I A	1	0	-4
1. Designator: W = Circuit k	preaker										
2. Series Num 57 = Compa		sh-to-Reset, Therr	nal Model								
3. Circuit Func X = Series Tr											
	lain, no rate marki ith red rate markir		ite with black rat	e marking (ver	tical)						
	<b>ushing:</b> 9.6mm long, plas e side flat) x 10.5r			e side flat) x 10 x 12.6mm long	0.5mm) long, r 1. metal	metal					
6. Terminals:	nnect .250" (6.35										
7. Mounting H		5 = Plastic	knurled nut	12 = Metal I	courled out	99 = Non	ne.				
8. Mounting H	ardware Packagi ed to bushing	ng:	k unassembled		No mounting h						
	perating Voltage		it unussernisieu								
<b>10. Nameplate:</b> 0 = None											
<b>11. Specify Am</b> 4 5	o Rating: 6 7	8 10	) 12	15 20							
Our authoriz	ed distributo	rs are more li	kelv to stock	the follow	ina items f	or immed	iate deliv	verv			
W57-XB1A4A10	-5 W57-XB1	A4A10-15 W57	- -XB1A7A10-5	W57-XB1A	7A10-15	or minicu		iciy.			
W57-XB1A4A10 ORDERING NOT		A4A10-20 W57	'-XB1A7A10-10 e not listed in the	W57-XB1A "Ordering Info		above. Optio	ns denoted	by "Special" o	r "Special	Order" in	their
	descriptions ar	e only offered on a times and significa	special order bas	sis. Additionally	, mounting har	dware can be	ordered sep	parately. These	options a	re subject	to
	price and availa	ability information r	egarding these o	otions.			5				
Mounting Bu	shings and R	ecommended									
► (-1.5)	.441+.008,0 (11.2+.2,0)		59 (8.8	+.008,0 +.2,0)	► <b>(</b> 1.5	· · · · ·	480 +.008,0				
	.386	008,0	.5)	.382 +.008, -	.0 .	.413		<u>↓</u> +.008,0			
→ .378 <b>→</b>	(9.8)			(9.7 +.2,0	.378	(10.5		0 +.2,0)			
(9.6) (9.6)	1 – M11 X 1.0 Th	read Standard (		8″ - 24UNF Tł	(9.6) Iread Standa		– M12 X 1.0	) Thread			
	.441+.008,0	out otunutura	.382 +	008,0		63	0±.005	medu			
► (1.5)	(11.2+.2,0)		59 (9.7 .5) (9.7	+.2,0)			6±.13)	-			
	(9.8) (10.0+	008,0 +.2,0)		.311 +.008, - (7.9 +.2,0			(13.8±.				
<ul> <li>→ .378 (9.6)</li> <li></li> </ul>		▲ .413 (10.5		↑	5		' 🛉				
Special Order –	M11 X 1.0 Thread		Order – 3/8″ - 2	4UNF Thread	Spee	cial Order – S	Snap In Opt	ion			
Termination	Options										
				<b>↓</b>		_¥ (⊕)					
		.120 (*	54 ± .01	.181	.098 ± .01	_  ⊕	 				
Standard	Special	(3.2) (Special	(3.2)	(4.6) Special	Special	(4.6) .071 (1.8	B) DIA.				
.250 QC Straight	.250 QC 45°	.250 QC 90°	.250 QC/PCB 270°	.250 QC 90 °	.250 QC/PC 270 °	CB .250 C	C Straight				
Mounting Ha	ardware Optio	ons			— <u></u>	ptional Na	ameplate	s			
.590 DIA. ≁  (15.0)   <del>&lt;</del>	.551 DIA. ➔  (14.0)  ◀	► .740 DIA. (18.8) ►		0 DIA. 18.8) <del>~</del>	-	.854 DIA. (21.7)	<b>←</b> →	.945 DIA. (24.0)	←		
	A		2 X .059 DIA.			CUITBRE THE		CUIT BRET			
$\mathbf{Q}$					10/	CO PRESS	-	C) RIA			
.102 → (2.6) →	.079 (2.0) <b>≻</b>   ←	(3.2) →	841	56i +  +(	126 3.2)	.016 (.4) THIC	к	.016 (.4) THICK			
Standard Knurled Nut	Standard Hex Nut	Special Integrated Knurled Nut	Integrate	Special ed Knurled Nu Small Holes	t	Special Embossed Aluminum		Special Silver Printing On Black			
Dimensions are show	n for		sions are in inches ov		Specifications	and availability			1000	/w.tycoelecti	ronice corr

Dimensions are shown for reference purposes only.

Dimensions are in inches over (millimeters) unless otherwise specified.

Specifications and availability subject to change.

www.tycoelectronics.com Technical support: Refer to inside back cover.