

# UL489 or UL1077?

## What are your Circuit Protection Requirements?

**An understanding of circuit types and circuit protection products is critical to ensure their proper application.**  
See NEC Sections 100, 430 and 409 for definitions.

**The proper sizing of an overcurrent protection device is the responsibility of the customer and should be determined using the application standards of the NEC (National Electric Code), CEC (Canadian Electrical Code) or other applicable standards. Per fine print note of 2008 NEC Section 100 "A current in excess of rating may be accommodated by certain equipment and conductors for a given set of conditions. Therefore, the rules for overcurrent protection are specific for particular situations."**

### UL489 Branch Protection



### UL1077 Supplementary Protection



### What You Need to Know and Look For In Specifications

Certifications – Standards – Acceptance

#### UL489 Branch Protection

- UL489 Listed or Recognized
- CSA C22.2 No. 5
- International ratings available depending on breaker type

#### UL1077 Supplementary Protection

- UL Recognized under UL1077
- CSA 22.2 No. 285
- IEC 60947-2 or IEC 898

#### Function

- Opens automatically on Overload and Short Circuit when properly applied within its ratings
- Protects wire and cable against Overload and Short Circuit
- Opens automatically on Overload and Short Circuit
- Provides additional equipment protection where branch circuit protection is already provided or not required
- Not suitable for the protection of branch circuit conductors

#### Applications

- Branch circuit protection in control panels, panelboards, switchboards and motor control centers
- Motor overload and motor short circuit protection (UL489 Recognized motor circuit protectors) for control panels and motor control centers
- Used within appliances or other electrical equipment such as control circuits, control power transformers, relays, PLC I/O points and lighting circuits
- Ideal replacement for fuses that are applied as supplementary protection

#### Features

- Bolted down or DIN-rail mounted
- External handle mechanisms available
- Field mounted accessories
- Stand alone branch circuit protection
- Various levels of protection (curve type)
- High voltage and interruption levels (up to 100 kAIC @ 480V)
- DIN-Rail mounted
- Field mounted accessories
- Current limiting
- Various levels of protection (curve type)
- 10 kAIC @ 240 VAC
- 6 kAIC @ 277 VAC and 5 kAIC @ 480 VAC
- 10 kAIC @ 65 VDC

kAIC = thousands of Amps interrupt capacity

#### Summary

**A Supplementary Protector can't Be used for Branch Circuit Protection.**  
**Understanding the difference between Branch Circuit Protection and Supplementary Protection helps to ensure their proper use.**

# Edison Fuses – T300 & T600 Fuse Blocks for Class T Fuses

## Description

For use with Class T fuses

T300 series: for use with 300V Class T fuses (TJN)

T600 series: for use with 600V Class T fuses (TJS)

Terminal type

- SR = Screw type; clip with re-inforcing spring
- CR = Box lug type; clip with reinforcing spring
- C = Box lug type; clip with reinforcing spring standard on FB rated 100A; spring not required above 100A for bolt-on fuses

## Specifications

**Construction:** Glass Polyester; Phenolic on 600V

**UL Flammability:** 94V-0

**Ratings:**

T300: 300 VAC; 30–600A

T600: 600 VAC; 30–600A

**Short-circuit Current Rating:**

200,000 RMS Symmetrical Amps

## Agency Approvals

- UL Listed, Guide IZLT, File E14853
- CSA, Class 6225-01, File 47235
- CE
- REACH
- RoHS

## Edison Class T Fuse Blocks



Class T Fuse Blocks									
Part Number	Volts	Amps	Poles	Terminal Type	Wire Range (AWG)	Fig #	Wt. (lb)	Pcs /Pkg	Price
T30030-2SR	300	0.5 to 30	2	screw	10–18 Cu (only)	1	0.3	1	<--->
T30030-3SR			3				0.4		<--->
T30060-2CR			31 to 60				2		2–14 Cu/Al
T30060-3CR		3		0.5	<--->				
T30100-1CR		box lug	61 to 100	1	1/0–8 Cu/Al	4	0.6		<--->
T30100-3CR				3			1.5		<--->
T30200-1C			101 to 200	1	250 kcmil – 6 Cu/Al	5a	1.0		<--->
T30200-3C				3		5b	1.9		<--->
T30400-1C			201 to 400	1	600 kcmil – 2/0 Cu/Al	6	1.3		<--->
T30600-1C			401 to 600	1	(2) 600 kcmil – 4/0 Cu/Al	7	2.4		<--->
T60030-1SR	600		0.5 to 30	1	screw	10–18 Cu (only)	2	0.2	<--->
T60030-2SR				2				0.3	<--->
T60030-3SR		3		0.5				<--->	
T60060-1CR		31 to 60	1	2–14 Cu/Al	3	0.3	<--->		
T60060-2CR			2			0.4	<--->		
T60060-3CR		3	0.6	<--->					
T60100-1C		61 to 100	1	2/0–14 Cu/Al	4	1.0	<--->		
T60100-3C			3			1.5	<--->		
T60200-1C		101 to 200	1	250 kcmil – 6 Cu/Al	5a	1.0	<--->		
T60400-1C		201 to 400	1	600 kcmil – 2/0 Cu/Al	6	1.3	<--->		
T60600-1C		401 to 600	1	(2) 600 kcmil – 4/0 Cu/Al	7	2.6	<--->		

# Edison Fuses – T300 & T600 Fuse Blocks for Class T Fuses

## Fuse Block Terminal Torque Specifications

Terminal Tightening Torque Specs – Class T Fuse Blocks							
Part Number	Amps	Volts	Poles	Terminal Type	Wire Range (AWG)	Wire Torque (lb-in)	Fuse Torque (lb-in)
<b>Tx0030-xSR</b>	30	300, 600	1,2,3	screw	10–18 Cu (only)	20	n/a
<b>Tx0060-xCR</b>	60	300, 600	1,2,3	box lug	2–3	50	n/a
					4–6	45	
					8	40	
					10–14	35	
<b>T30100-xCR</b>	100	300	1,3	box lug	1/0–8 Cu/Al	100	n/a
<b>T60100-xC</b>	100	300	1,3		2/0–3	50	70
					4–6	45	
					8	40	
					10–14	35	
<b>Tx0200-1C</b>	200	300, 600	1		250 kcmil – 6 Cu/Al	375	132
<b>T30200-3C</b>	200	300	3		250 kcmil – 6 Cu/Al	275	132
<b>Tx0400-1C</b>	400	300, 600	1		600 kcmil – 2/0 Cu/Al	500	192
<b>Tx0600-1C</b>	600	300, 600	1		(2) 600 kcmil – 4/0 Cu/Al	450	380

## Fuse Block Dimensions

Fig.1: 300V; 0.5–60A

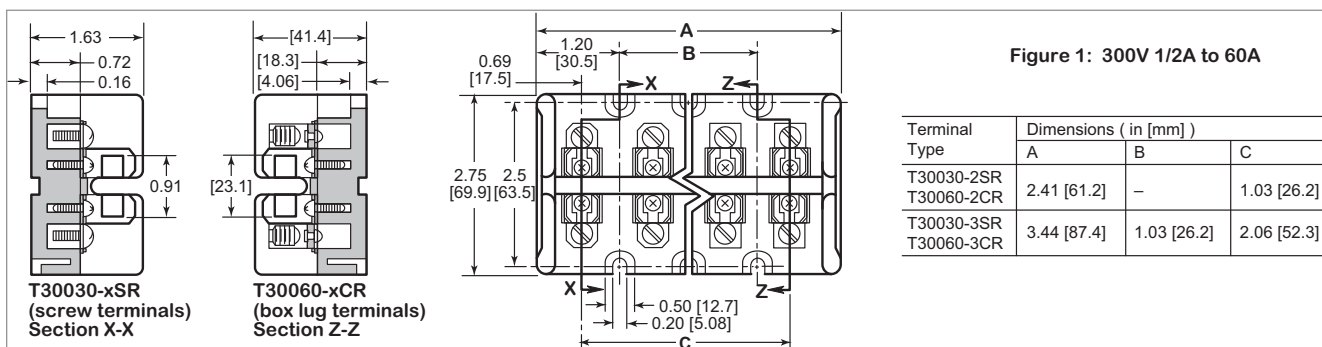


Fig.2: 600V; 0.5–30A

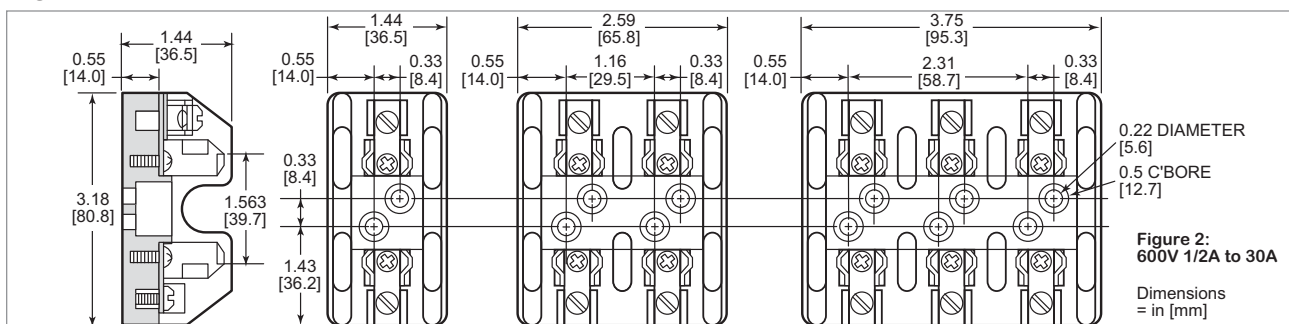
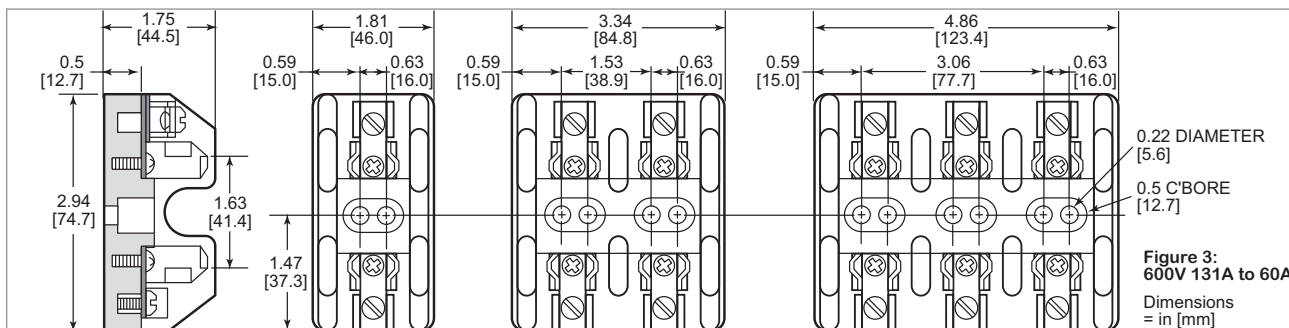


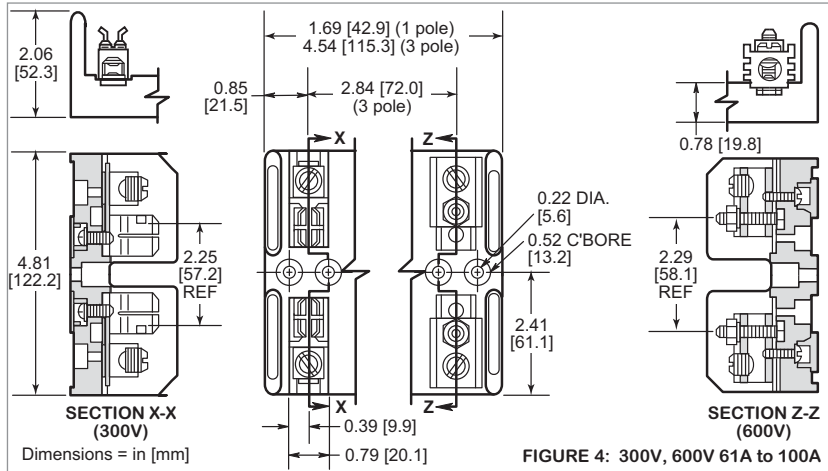
Fig.3: 600V; 31–60A



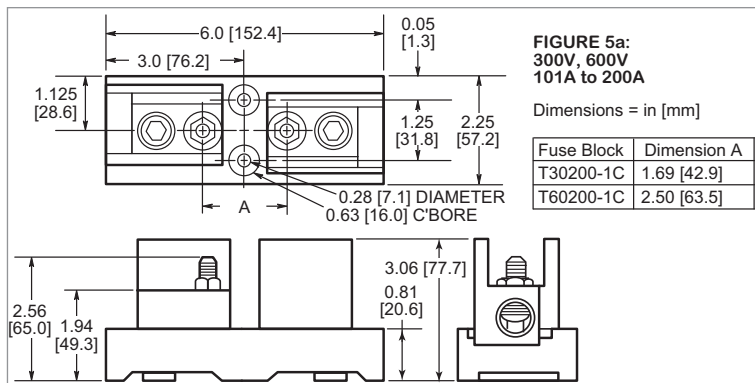
# Edison Fuses – T300 & T600 Fuse Blocks for Class T Fuses

## Fuse Block Dimensions

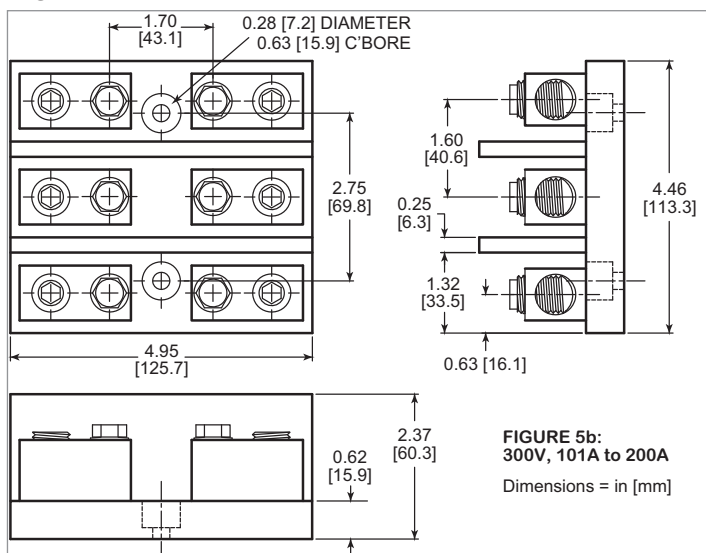
**Fig.4: 300V, 600V; 61–100A**



**Fig.5a: 300V, 600V; 101–200A**



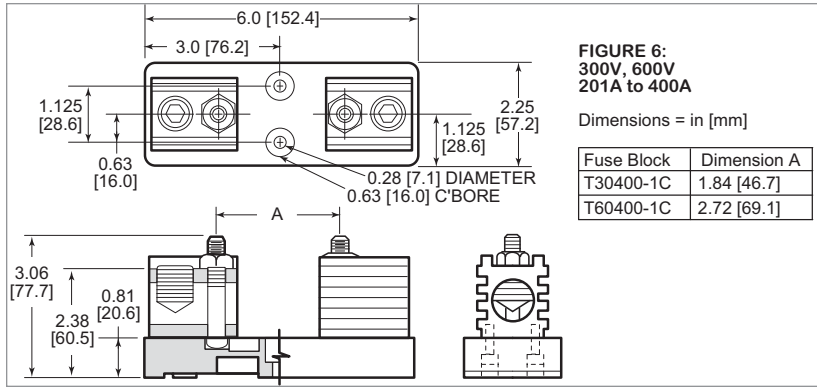
**Fig.5b: 300V; 101–200A**



# Edison Fuses – T300 & T600 Fuse Blocks for Class T Fuses

## Fuse Block Dimensions

**Fig.6: 300V, 600V; 201–400A**



**Fig.7: 300V, 600V; 401–600A**

