Extremely Fast-Acting Class T Fuses

Edison

EDISON TJN and TJS Class T fuses are extremely fast-acting fuses in a compact, space-saving size. These fuses are ideal as the main fuse protection for panel boards, load centers, meter stacks, and AC drives.

TJN/S Features

- Extremely current limiting
- No intentional time delay; opens quickly on overload
- Silver link construction provides superior component protection against fault currents
- Space saving dimensions

Applications

- Recommended for protection of non-inductive loads such as lighting and resistance-heating circuits
- Use to protect lower interrupting-rated circuit breakers when series rated with Class T fuses
- For motor protection, size at 300% FLC; provides short-circuit protection only
- Use for short-circuit protection of AC drives

Specifications

Voltage Rating:

TJN: 300 VAC
TJS: 600 VAC

Ampere Ratings:

1–600 Amps

Interrupting Rating:

200,000 RMS Symmetrical Amps

Self-Certified Voltage Ratings (DC)

(15–600): 160 VDC
TJS (15–400): 300 VDC

Self-Certified Interrupting Ratings (DC):

TJN (15–600): 20,000 Amps DC
TJS (15–400): 10,000 Amps DC

Current Limiting: Class T Fuse

Agency Approvals

- UL Listed, Class T, Guide JDDZ, File E162363
- CSA Certified HRCI-T per C22.2, No. 248.12

T Series 300 VAC Extremely Fast-Acting Fuses

Part Number	AMP Rating	Rated Voltage	Pcs/ Pkg	Package Weight	Price
TJN1	1	300 VAC	10	0.12 lb	$257.00
TJN1-1			1	0.02 lb	$33.00
TJN3	3		10	0.12 lb	$257.00
TJN3-1			1	0.02 lb	$33.00
TJN6	6		10	0.12 lb	$257.00
TJN6-1			1	0.02 lb	$33.00
TJN10	10		10	0.12 lb	$314.00
TJN10-1			1	0.02 lb	$38.50
TJN15	15		10	0.12 lb	$341.00
TJN15-1			1	0.02 lb	$42.50
TJN20	20		10	0.12 lb	$341.00
TJN20-1			1	0.02 lb	$42.00
TJN25	25		10	0.12 lb	$326.00
TJN25-1			1	0.02 lb	$42.00
TJN30	30		10	0.12 lb	$341.00
TJN30-1			1	0.02 lb	$42.50
TJN35	35		10	0.23 lb	$354.00
TJN35-1			1	0.03 lb	$42.50
TJN40	40		10	0.23 lb	$357.00
TJN40-1			1	0.03 lb	$42.50
TJN45	45		10	0.23 lb	$354.00
TJN45-1			1	0.03 lb	$42.50
TJN50	50		10	0.23 lb	$354.00
TJN50-1			1	0.03 lb	$42.50
TJN60	60		10	0.23 lb	$340.00
TJN60-1			1	0.03 lb	$42.50
TJN70	70		5	0.36 lb	$200.00
TJN70-1			1	0.11 lb	$47.00
TJN80	80		5	0.36 lb	$212.00
TJN80-1			1	0.11 lb	$52.00
TJN90	90		5	0.36 lb	$212.00
TJN90-1			1	0.11 lb	$52.00
TJN100	100		5	0.36 lb	$199.00
TJN100-1			1	0.11 lb	$47.00
TJN110	110		1	0.14 lb	$60.00
TJN125	125		1		$60.00
TJN150	150		1		$66.00
TJN175	175		1		$66.00
TJN200	200		1		$66.00
TJN225	225		1	0.25 lb	$152.00
TJN250	250		1		$152.00
TJN300	300		1		$152.00
TJN350	350		1		$132.00
TJN400	400		1		$120.00
TJN450	450		1	0.44 lb	$175.00
TJN500	500		1		$194.00
TJN600	600		1		$194.00

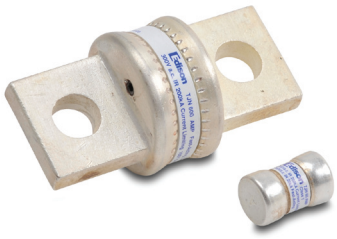
T Series 600 VAC Extremely Fast-Acting Fuses

Part Number	AMP Rating	Rated Voltage	Pcs /Pkg	Package Weight	Price
TJS1	1	600 VAC	10	0.33 lb	$248.00
TJS1-1			1	0.02 lb	$26.00
TJS3	3		10	0.33 lb	$248.00
TJS3-1			1	0.02 lb	$26.00
TJS6	6		10	0.33 lb	$248.00
TJS6-1			1	0.02 lb	$26.00
TJS10	10		10	0.33 lb	$281.00
TJS10-1			1	0.02 lb	$32.50
TJS15	15		10	0.33 lb	$283.00
TJS15-1			1	0.02 lb	$32.50
TJS20	20		10	0.33 lb	$282.00
TJS20-1			1	0.02 lb	$33.00
TJS25	25		10	0.33 lb	$283.00
TJS25-1			1	0.02 lb	$32.50
TJS30	30		10	0.33 lb	$265.00
TJS30-1			1	0.02 lb	$30.50
TJS35	35		10	0.82 lb	$394.00
TJS35-1			1	0.03 lb	$42.00
TJS40	40		10	0.82 lb	$433.00
TJS40-1			1	0.03 lb	$47.00
TJS45	45		10	0.82 lb	$455.00
TJS45-1			1	0.03 lb	$51.00
TJS50	50		10	0.82 lb	$400.00
TJS50-1			1	0.03 lb	$43.00
TJS60	60		10	0.82 lb	$395.00
TJS60-1			1	0.03 lb	$41.50
TJS70	70		5	0.51 lb	$289.00
TJS70-1			1	0.11 lb	$64.00
TJS80	80		5	0.51 lb	$325.00
TJS80-1			1	0.11 lb	$73.00
TJS90	90		5	0.51 lb	$365.00
TJS90-1			1	0.11 lb	$77.00
TJS100	100		5	0.51 lb	$325.00
TJS100-1			1	0.11 lb	$73.00
TJS110	110		1	0.19 lb	$76.00
TJS125	125		1		$76.00
TJS150	150		1		$76.00
TJS175	175		1		$79.00
TJS200	200		1		$79.00
TJS225	225		1	0.46 lb	$193.00
TJS250	250		1		$193.00
TJS300	300		1		$217.00
TJS350	350		1		$225.00
TJS400	400		1		$230.00
TJS450	450		1	0.85 lb	$454.00
TJS500	500		1		$467.00
TJS600	600		1		$507.00

Extremely Fast-Acting Class T Fuses

Edison

CROSS REFERENCE				
VOLTS	EDISON	BUSSMANN	MERSEN GOULD	LITTELFUSE
300	TJN	JJN	A3T	JLLN
600	TJS	JJS	A6T	JLLS

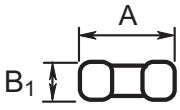


300V TJN Fuses

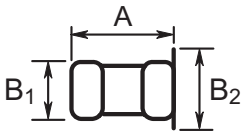


600V TJS Fuses

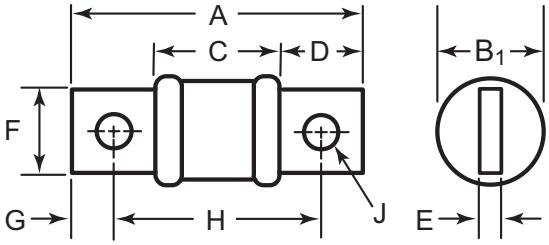
TJN & TJS Fuse Dimensions



1A to 60A TJN
1A to 30A TJS



35A to 60A TJS



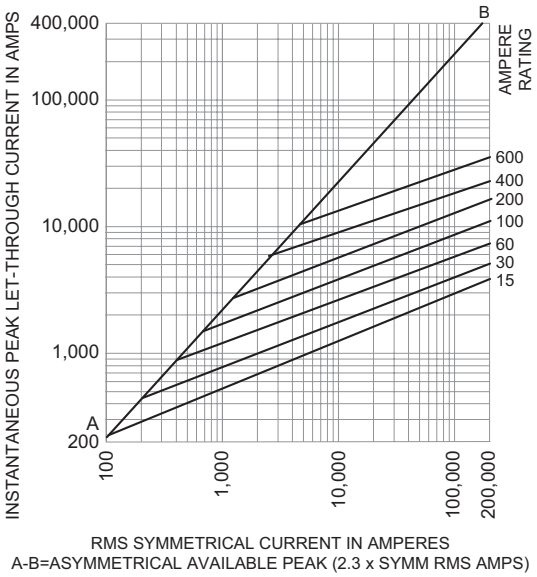
70A to 600A

Fuse Type	Current Rating	Overall Length	Maximum Diameter		Barrel Length	Blade Length	Blade Thickness	Blade Width	Mounting Hole Spacing		
	Range	A	B1	B2	C	D	E	F	G	H	J
	(A)	(in [mm])									
TJN (300 VAC)	1-30	0.88 [22.4]	0.41 [10.4]	n/a	n/a (no blades)						
	35-60		0.56 [14.2]								
	70–100	2.16 [54.9]	0.82 [20.8]		0.84 [21.3]	0.66 [16.8]	0.125 [3.18]	0.75 [19.1]	0.27 [6.86]	1.56 [39.6]	0.284 [7.21]
	110–200	2.44 [62.0]	1.06 [26.9]			0.80 [20.3]	0.19 [4.83]	0.88 [22.4]	0.34 [8.64]	1.69 [42.9]	0.344 [8.74]
	225-400	2.75 [69.9]	1.33 [33.8]		0.86 [21.8]	0.95 [24.1]	0.25 [6.35]	1.00 [25.4]	0.42 [10.7]	1.84 [46.7]	0.406 [10.3]
	450–600	3.06 [77.7]	1.60 [40.6]		0.88 [22.4]	1.08 [27.4]	0.31 [7.87]	1.25 [31.8]	0.48 [12.2]	2.03 [51.6]	0.484 [12.3]
TJS (600 VAC)	1-30	1.50 [38.1]	0.56 [14.2]		n/a (no blades)						
	35-60	1.56 [39.6]	0.81 [20.6]	1.00 [25.4]							
	70–100	2.95 [74.9]	0.82 [20.8]	n/a	1.64 [41.7]	0.66 [16.8]	0.125 [3.18]	0.75 [19.1]	0.27 [6.86]	2.36 [59.9]	0.281 [7.14]
	110–200	3.25 [82.6]	1.07 [27.2]		1.66 [42.2]	0.80 [20.3]	0.19 [4.83]	0.88 [22.4]	0.34 [8.64]	2.50 [63.5]	0.344 [8.74]
	225-400	3.63 [92.2]	1.60 [40.6]		1.73 [43.9]	0.95 [24.1]	0.25 [6.35]	1.00 [25.4]	0.42 [10.7]	2.72 [69.1]	0.406 [10.3]
	450–600	3.98 [101]	2.08 [52.8]		1.78 [45.2]	1.08 [27.4]	0.31 [7.87]	1.25 [31.8]	0.48 [12.2]	2.95 [74.9]	0.484 [12.3]

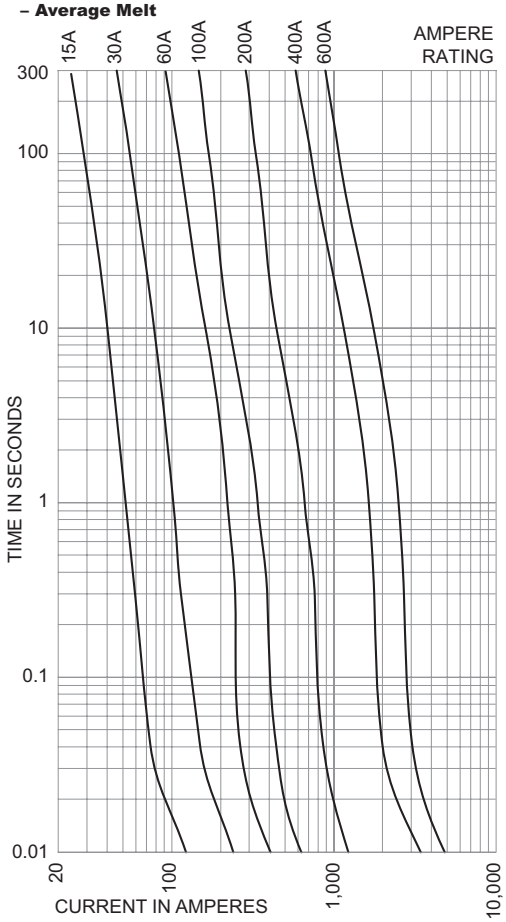
Extremely Fast-Acting Class T Fuses

TJN (300 VAC)Trip Curves

Current Limitation Curves

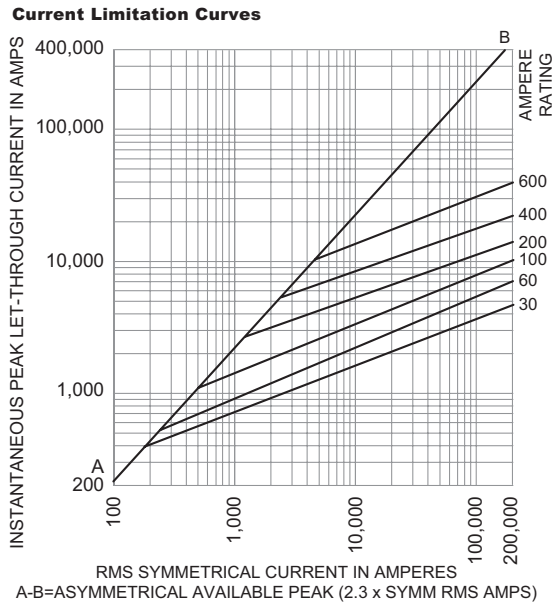


TJS Time-Current Characteristic Curves – Average Melt

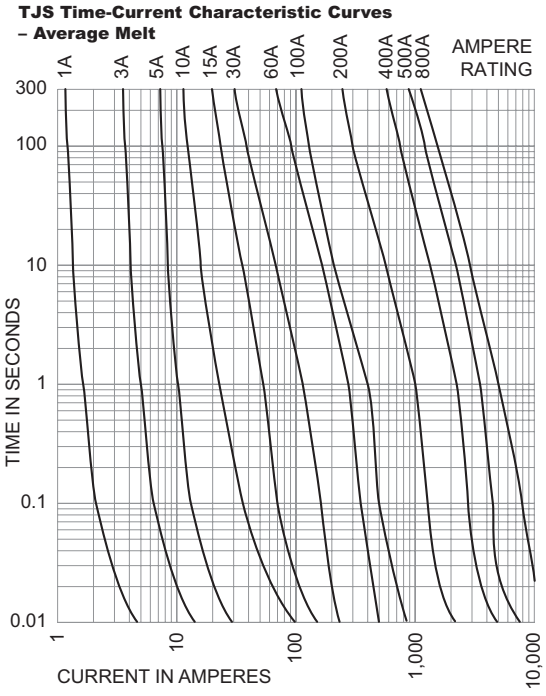


TJS (600 VAC)Trip Curves

Current Limitation Curves



TJS Time-Current Characteristic Curves – Average Melt



Selection Guide

EATON BUSSMANN SERIES

Edison

Line Overview

The Bussmann and Edison series of fuses, fuse blocks and fuse holders is divided into two classes:

1. Current Limiting: Class CC, Class J, Class L, Class RK, Class T
2. General Purpose: Class M Midget and Small Dimension

The fuse selection guide below is a general summary of the specifications included for each fuse type. This selection guide does not include the many variables that can exist for specific situations such as local codes, unusual temperature, or other operating conditions. When selecting fuses, be sure to comply with any applicable PUBLIC SAFETY standards that apply to Overcurrent Protection Devices (OPD).

Fuse Selection Guide and General Specifications

Description	Current Limiting											
	Class J		Class RK5		Class RK1		Class T		Class L	Class CC		
Fuse Type	Fast-Acting	Time-Delay	Time-Delay				Extremely Fast-Acting		Fast-Acting	Fast-Acting	Time-Delay	
Part Number	JHL	JDL	ECNR	ECSR	LENRK	LESRK	TJN	TJS	LCU	HCLR	HCTR	EDCC
Voltage Rating	600 VAC 450 VDC	600 VAC 300 VDC*	250 VAC 125 VDC* (1-200A) 250 VDC* (201-600A)	600 VAC 300 VDC*	250 VAC 125 VDC* (10–60A) 250 VDC* (70–600A)	600 VAC 300 VDC*	300 VAC 160 VDC (15–600A)	600 VAC	600V	600 VAC 300 VDC (15-20A)	600 VAC	600 VAC 300 VDC (0.5-2.25A) (20–30A)
Amp Rating	1 to 600		1 to 600	3 to 600	10 to 600	5 to 600	1 to 600		601 to 1200	0.5 to 30	0.25 to 30	0.5 to 30
Interrupting Rating	200,000 RMS Symmetrical Amps											
Current Limiting	Class J		Class RK5		Class RK1		Class T		Class L	Class CC		
Agency Approvals	UL Listed Class J Guide JDDZ File E162363 CSA Certified HRCI-J per C22.2, No. 248.8 File 700489 RoHS compliant	UL Listed Class J Guide JDDZ File E162363 CSA Certified HRCI-J per C22.2, No. 248.8 File 700489	UL Listed, Class RK, Guide JDDZ, File E162363 CSA Certified HRCI-R per C22.2, No. 248.12, File 700489 (LENRK CSA File 053787)				UL Listed, Class T, Guide JDDZ, File E162363 CSA Certified HRCI-T per C22.2, No. 248.12, File 53787, Class 1422-02 & 1422-82		UL Listed, Std. 248-10 CSA Certified, HRC-L C22.2 No. 248.10, Class 1422-02, File 53787	UL Listed to 248.4, Class CC, Guide JDDZ, File E162363, CSA certified HRCI-MISC per C22.2 No. 248.4, File 700489		
Dimensions	See product specification pages.									ferrule (in): 13/32, length (in): 1-1/2		

*** Self-certified DC ratings**

Fuse Selection Guide and General Specifications

Description	General Purpose – Midget				General Purpose – Small Dimension Electronic							
Fuse Type	Fast-Acting		Time-Delay		Fast-Acting Ceramic	Fast-Acting Glass		Medium Time-Delay Glass	Time-Delay Ceramic	Time-Delay Glass	Fast-Acting Glass	Time-Delay Glass
Part Number	MCL	MOL	MEQ	MEN	ABC	AGC	GMA	GMC	MDA	MDL	S500	S506
Voltage Rating	600 VAC	250 VAC	500 VAC	250 VAC	250 VAC (0.5 to 30A) 125 VDC: (0.5 to 30A)	250 VAC: (0.1 to 10A) 32VAC: (15 to 30A)	250 VAC (0.063 - 3A) 125 VAC (4 - 15A)	250 VAC (0.5 - 3A) 125 VAC (4 - 10A)	250 VAC 125 VDC (20A)	250 VAC: (0.0625 to 8A) 32VAC: (10 to 20A)	250 VAC	250 VAC
Amp Rating	0.5 to 50	0.5 to 30	0.25 to 30	0.5 to 30	0.5 to 30	0.10 to 30	0.063 to 15	0.5 to 10	0.5 to 20	0.0625 to 20	0.032 to 10	0.25 to 6.3
Interrupting Rating	100,000 RMS Amps	10,000 RMS Amps			See specifications table on product pages							
Current Limiting	N/A				N/A							
Agency Approvals	UL Listed to 248.14, File E162443 CSA Cert. C22.2 Part 59.2, LR 700489				UL Listed standard 248-14 UL Listed Guide and File nos. (ABC 0.25-20A): (AGC 1/100–10A) JDYX and E19180 UL Recognition Guide and File nos. (ABC 20–30A):(AGC 11-30) JDYX2 and E19180 CSA Certification Record No: 053787 C 000And Class No: 1422 01 and 1422 30		Designed to UL/CSA 248-14 UL Listed, Guide JDYX, File E19180 63mA-6A UL Recognition, Guide JDYX2, File E19180, 7A-15A CSA Certified, File 053787_C_000, 63mA-6A Class 1422-01		UL Listed standard 248-14 UL Listed Card: MDA 2/10–20A , MDL 1/16-8A (Guide JDYX, File E19180 UL Recognized Card: MDA 25-30A MDL 9-30A (Guide JDYX2, File E19180) CSA Certification Card: MDA 2/10–15A (Class No. 1422-01)		UL Recognized Guide JDYX2, File E19180 Semko Approval VDE Approval BSI Approval IMQ Approval RoHS compliant
					RoHS							
Dimensions	ferrule (in): 13/32 length (in): 1-1/2				1/4" x 1-1/4", (6.3 x 32mm)		0.197" x 0.788" (5 x 20mm)		1/4" x 1-1/4", (6.3 x 32mm)		0.197" x 0.788" (5 x 20mm)	

T300 & T600 Fuse Blocks for Class T Fuses

EATON BUSSMANN SERIES

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-O

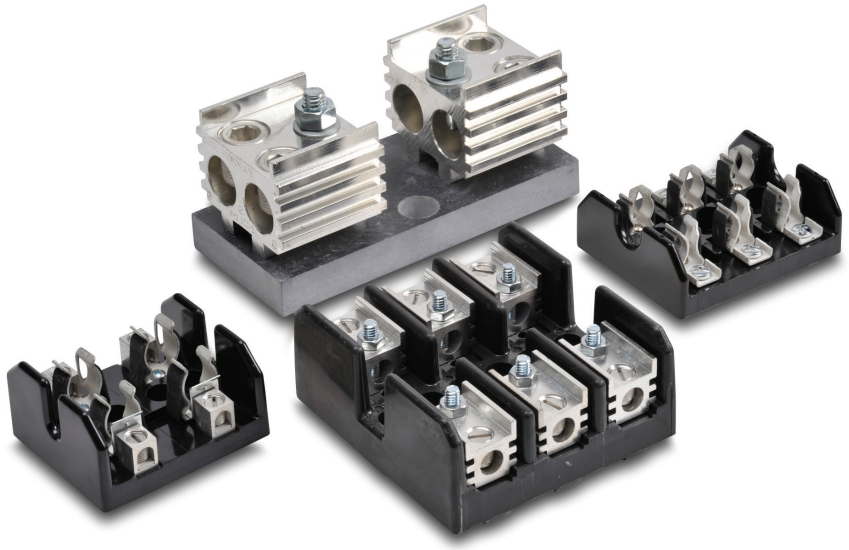
Ratings:
T300: 300 VAC; 30–600A
T600: 600 VAC; 30–600A

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

Bussmann Series 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	$50.00
T30030-3SR			3				0.4		$49.50
T30060-2CR		31 to 60	2	box lug	2–14 Cu/Al		0.4		$64.00
T30060-3CR			3				0.5		$96.00
T30100-1CR		61 to 100	1		1/0–8 Cu/Al	4	0.6		Retired
T30100-3CR			3				1.5		Retired
T30200-1C		101 to 200	1		250 kcmil – 6 Cu/Al	5a	1.0		Retired
T30600-1C		401 to 600	1		(2) 600 kcmil – 4/0 Cu/Al	7	2.4		Retired
T60030-1SR	600	0.5 to 30	1	screw	10–18 Cu (only)	2	0.2		$36.50
T60030-2SR			2				0.3		$66.00
T60030-3SR			3				0.5		$58.00
T60060-1CR		31 to 60	1	box lug	2–14 Cu/Al	3	0.3		$36.00
T60060-2CR			2				0.4		$74.00
T60060-3CR			3				0.6		$108.00
T60100-1C		61 to 100	1		2/0–14 Cu/Al	4	1.0		Retired
T60100-3C			3				1.5		Retired
T60400-1C		201 to 400	1		600 kcmil – 2/0 Cu/Al	6	1.3		Retired
T60600-1C		401 to 600	1		(2) 600 kcmil – 4/0 Cu/Al	7	2.6		Retired

T300 & T600 Fuse Blocks for Class T Fuses

EATON BUSSMANN SERIES

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)
Tx0030–xSR	30	300, 600	1,2,3	screw	10–18 Cu (only)	20	n/a
Tx0060–xCR	60	300, 600	1,2,3	box lug	2–3	50	n/a
					4–6	45	
					8	40	
					10–14	35	
T30100–xCR	100	300	1,3		1/0–8 Cu/Al	100	n/a
T60100–xC	100	600	1,3		2/0–3	50	70
					4–6	45	
					8	40	
					10–14	35	
Tx0200–1C	200	300, 600	1		250 kcmil – 6 Cu/Al	375	132
Tx0400–1C	400	300, 600	1		600 kcmil – 2/0 Cu/Al	500	192
Tx0600–1C	600	300, 600	1		(2) 600 kcmil – 4/0 Cu/Al	450	380

Fuse Block Dimensions

Fig.1: 300V; 0.5–60A

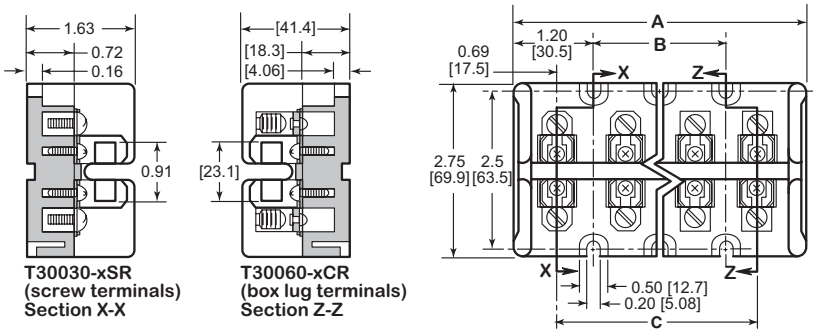


Figure 1: 300V 1/2A to 60A

Terminal Type	Dimensions (in [mm])		
	A	B	C
T30030-2SR T30060-2CR	2.41 [61.2]	–	1.03 [26.2]
T30030-3SR T30060-3CR	3.44 [87.4]	1.03 [26.2]	2.06 [52.3]

Fig.2: 600V; 0.5–30A

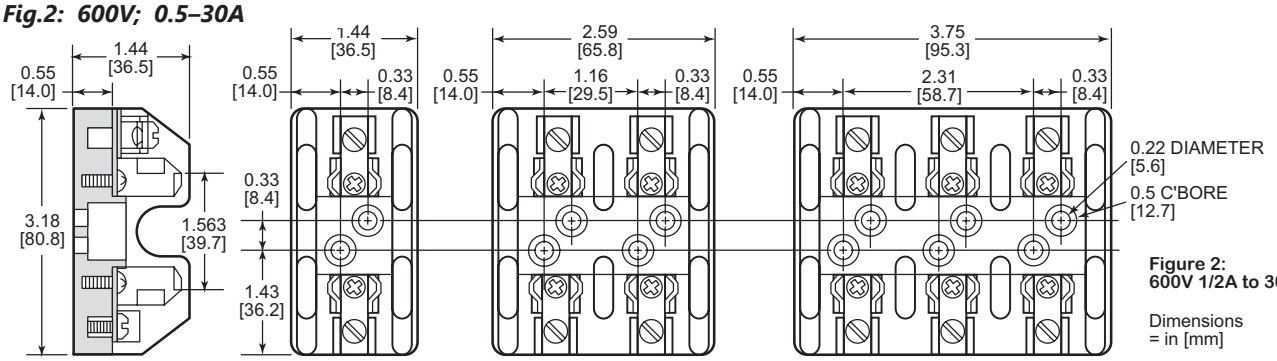


Figure 2:
600V 1/2A to 30A

Dimensions
= in [mm]

Fig.3: 600V; 31–60A

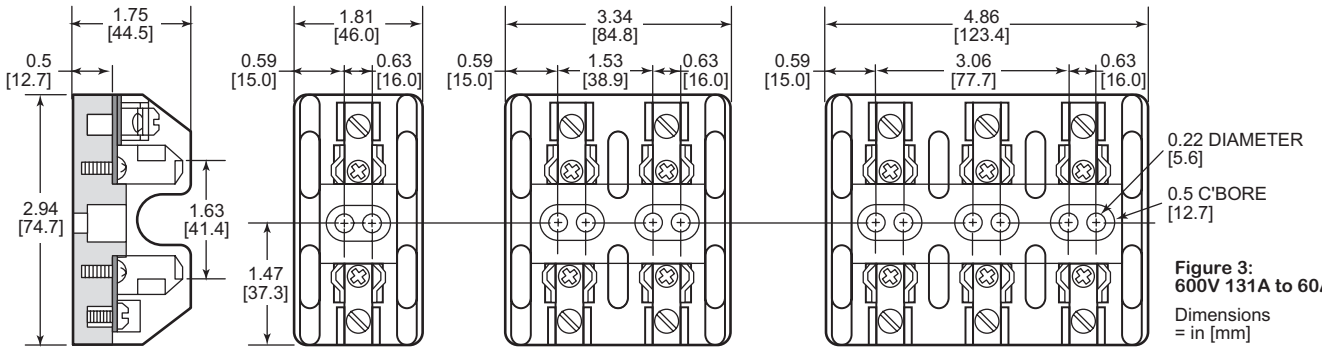


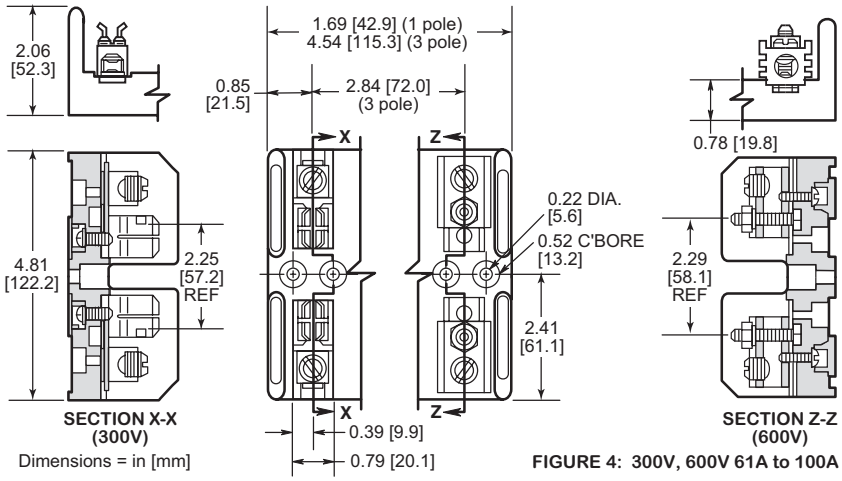
Figure 3:
600V 131A to 60A

Dimensions
= in [mm]

T300 & T600 Fuse Blocks for Class T Fuses

Fuse Block Dimensions

Fig.4: 300V, 600V; 61–100A



Dimensions = in [mm]

FIGURE 4: 300V, 600V 61A to 100A

Fig.5a: 300V, 600V; 101–200A

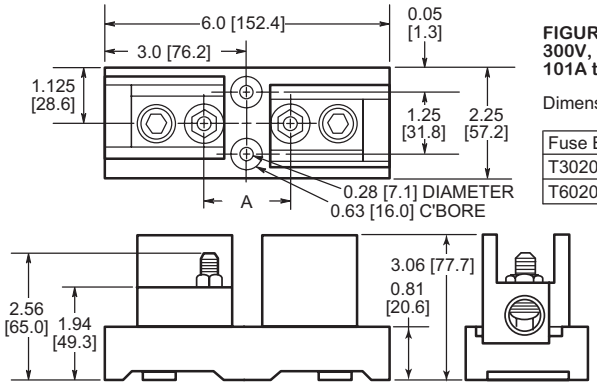


FIGURE 5a:
300V, 600V
101A to 200A

Dimensions = in [mm]

Fuse Block	Dimension A
T30200-1C	1.69 [42.9]
T60200-1C	2.50 [63.5]

Fig.5b: 300V; 101–200A

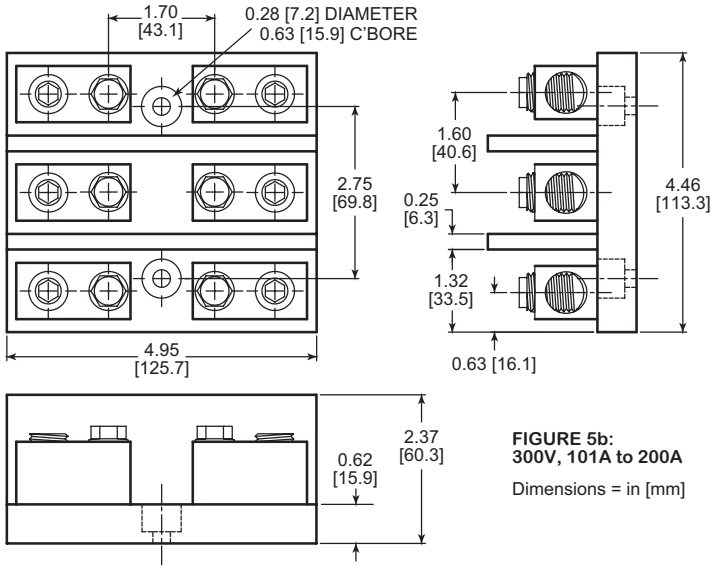


FIGURE 5b:
300V, 101A to 200A

Dimensions = in [mm]

T300 & T600 Fuse Blocks for Class T Fuses

Fuse Block Dimensions

Fig.6: 300V, 600V; 201–400A

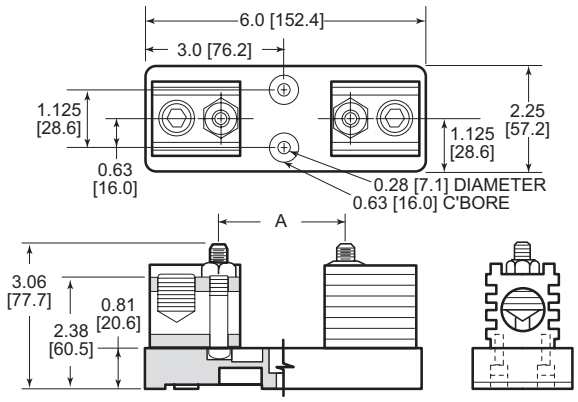
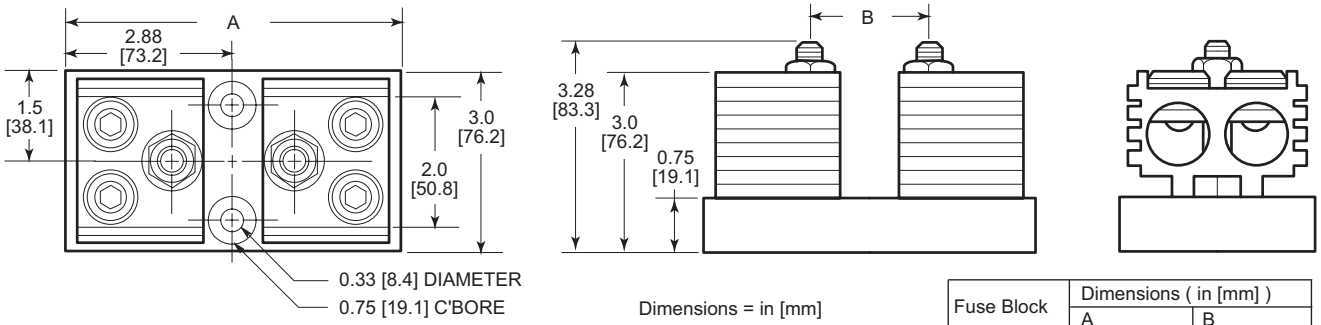


FIGURE 6:
300V, 600V
201A to 400A

Dimensions = in [mm]

Fuse Block	Dimension A
T30400-1C	1.84 [46.7]
T60400-1C	2.72 [69.1]

Fig.7: 300V, 600V; 401–600A



Dimensions = in [mm]

FIGURE 7: 300V, 600V 401A to 600A

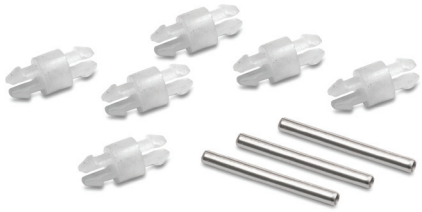
Fuse Block	Dimensions (in [mm])	
	A	B
T30600-1C	5.75 [146]	2.03 [51.6]
T60600-1C	6.75 [171.4]	2.95 [74.9]

Accessories

Edison



FP-2

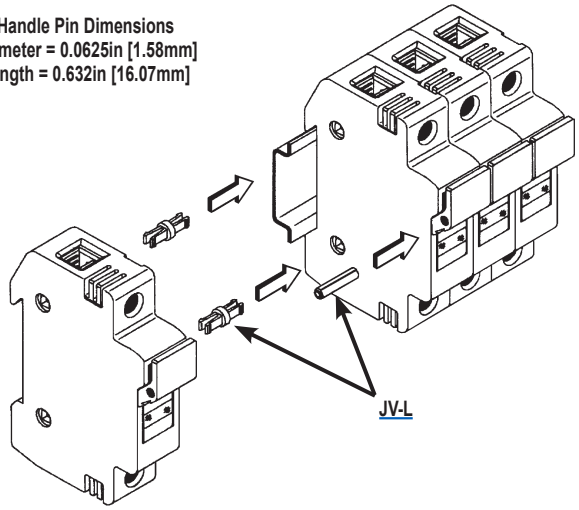


JV-L

Accessories			
Part Number	***Description***	***Pcs/Pkg***	***Price***
FP-2	Fuse puller for fuse dia. 13/32" - 13/16". Fuse type: 0–60A, 250V; 0–30A, 600V	1	$48.00
JV-L* (Not Field Installable)	Multi-pole connection kit to connect new design multiple Class CC and Midget Class fuse holders together. Kit consists of 6 connectors and 3 handle pins to connect up to 4 fuse holders.		$18.50

Note: Will not work with retired design fuse holders shipped before November 1, 2009.
****Roll pin punch or installation tool is required to install handle pins (Tool not sold by Automationdirect.com).***

Handle Pin Dimensions
Diameter = 0.0625in [1.58mm]
Length = 0.632in [16.07mm]



Cross-Reference Guide

EATON BUSSMANN SERIES

Edison

CROSS-REFERENCE GUIDE by manufacturers type reference or series number Ampere ratings must be added for ordering purposes								
FUSE TYPE		**Voltage**	**EDISON**	**BRUSH/ DORMAN**	**BUSSMANN**	**MERSEN / GOULD**	**GEC/CEFCO**	**LITTELFUSE**
Current Limiting Branch Circuit Fuses								
CC	***Time-Delay***	600	EDCC	–	LP-CC	ATDR	–	CCMR
	Time-Delay	600	HCTR	–	FNQ-R	ATQR	–	KLDR
	Fast-Acting	600	HCLR	HCLR	KTK-R	ATMR	CTK-R	KLKR
RK1	***Time-Delay Dual Element***	250	LENRK	–	LPN-RK-SP	A2DR	–	LLNRK
		600	LESRK	–	LPS-RK-SP	A6DR	–	LLSRK
RK5	***Time-Delay Dual Element***	250	ECNR	–	FRN-R	TR	–	FLNR
		600	ECSR	–	FRS-R	TRS	–	FLSR
J	***Time-Delay Dual Element***	600	JDL	–	LPJ	AJT	–	JTD
	High-Speed AC Drive	600	JHL	–	DFJ	HSJ	–	–
T	***Extremely Fast-Acting***	300	TJN	–	JJN	A3T	–	JLLN
		600	TJS	–	JJS	A6T	–	JLLS
L	***Fast-Acting***	600	LCU	LCU	KTU	A4BY	CL, CLU	LDC
Supplemental Fuses								
Midget	***Fast-Acting***	600	MCL	MCL	KTK	ATM	CTK	KLK
		250	MOL	MOL	BAF/BAN	OTM	–	BLF
	Time-Delay	500	MEQ	MEQ	FNQ	ATQ	–	FLQ
		250	MEN	MEN	FNM	TRM	–	FLM
1/4"x1/4" Ceramic	***Fast-Acting***	250/125	ABC	ABC	ABC	GAB	–	314
1/4"x1/4"Glass		250/32	AGC	AGC	AGC	GGC	–	312
1/4"x1/4" Ceramic	***Time-Delay***	250	MDA	MDA	MDA	–	–	326
1/4"x1/4"Glass		250/32	MDL	MDL	MDL	GDL	–	313
5x20 mm Glass	***Fast-Acting***	250/125	GMA	GMA	GMA	GGM	–	235
	Medium Time-Delay	250/125	GMC	GMC	GMC	GSC	–	–
5x20 mm Glass	***Fast-Acting***	250	S500	BDB	GDB	GSB	–	217
	Time-Delay	250	S506	BDC	GDC	GDG	–	218
Fuse Puller								
Fuse Puller FP-2		–	old - 38072 new - FP-2	–	FP-2	–	–	–