Class L Fast-Acting Current Limiting Fuses

LCU601

LCU1200

Edison LCU UL Class L fuses are particularly suited for protection of circuit breakers with lower interrupting ratings and non-inductive loads such as lighting and heating circuits. 99% pure silver links provide low watt loss and low operating temperature at normal current levels.

Applications

- Circuit breakers
- Drive protection
- Meets UL, NEC and CSA requirements for branch and feeder protection

Class L Features

- Fast-acting, short circuit protection
- Allows low I2t let-through energy of any branch circuit overcurrent protective device
- High grade silica-sand filler accelerates response of fuse to short circuits by having a quenching effect upon the fuse arc.
- O-ring seals maximize pressure build-up during current limiting actions and ensure filler retention.
- Silver-plated micro-peened terminals provide high electrical conductivity, minimize heat generation, and keep fuses and switches cool.
- Selective coordination (blackout prevention)
- Glass melamine tube
- Silver-plated end bells
- No fuse reducers required.

Specifications

Voltage Rating: 600 VAC (or less)

Ampere Rating: 601-1200 Amps

Interrupting Rating:
200,000 RMS Symmetrical Amps;

Current Limiting: Class L Fuse

Mounting: Bolt mount

Note: Fuse blocks not sold by AutomationDirect.com

Agency Approvals

- UL Listed, Std. 248-10, E162363, JDDZ
- CSA Certified, HRC-L C22.2 No. 248.10, Class 1422-02, File 53787
- RoHS compliant, CE, Reach

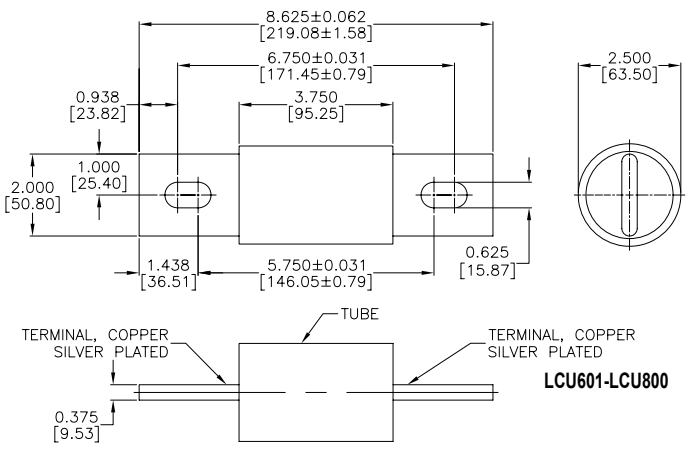
To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.

Cross Reference			
Edison	***Bussmann***	***Mersen***	***Littelfuse***
LCU	KTU	A4BY	LDC

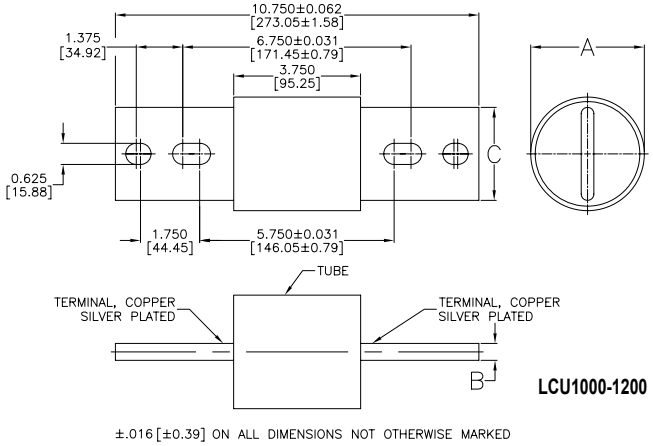
LCU Series Class L Fast-Acting Fuses					
Part Number	***AMP Rating***	***Rated Voltage (max)***	***Pcs/ Pkg***	***Weight lb [kg]***	***Price***
LCU601	601	600VAC	1	3.64 [1.65]	$;00,ux:
LCU650	650				$;00,u#:
LCU700	700				$;;00,u!:
LCU800	800				$;;00,u]:
LCU1000	1000			4.04 [1.82]	$;;00,u[:
LCU1200	1200				$;00,v1:

Dimensions

in [mm]



±.016 [±0.39] ON ALL DIMENSIONS NOT OTHERWISE MARKED

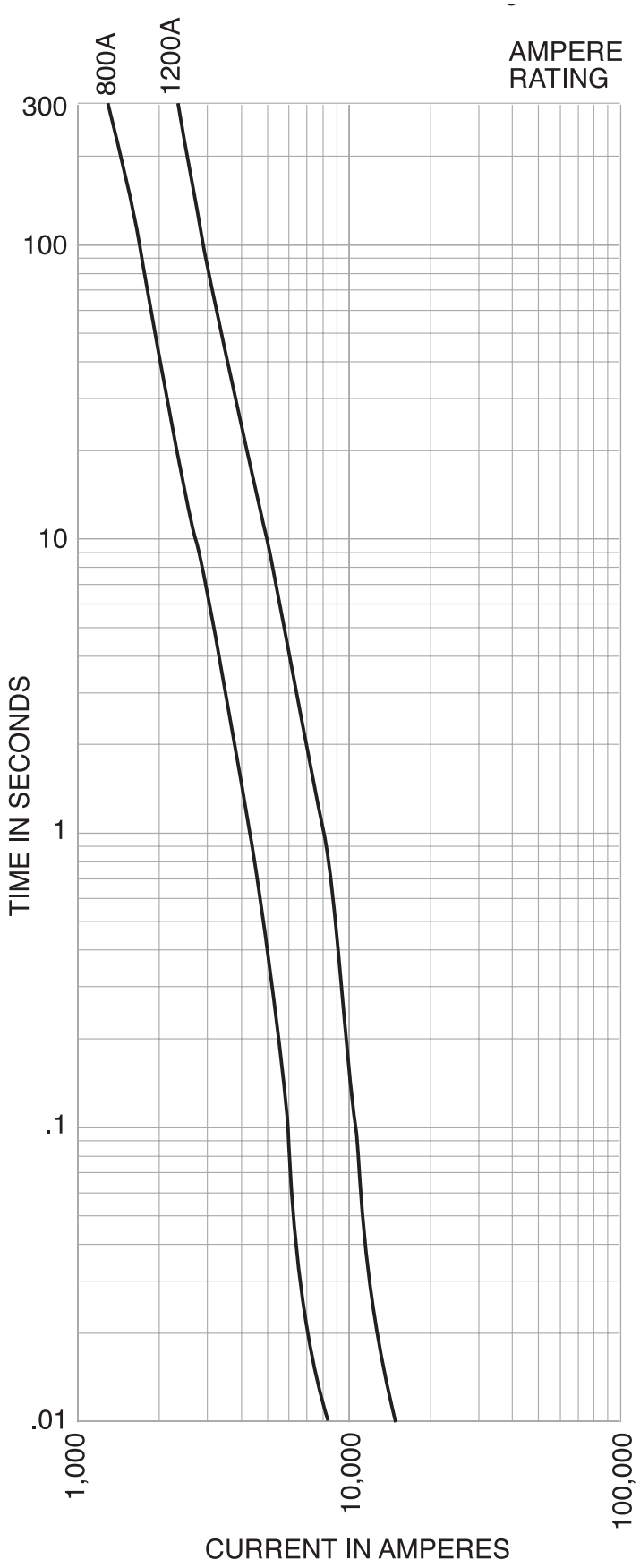


±.016 [±0.39] ON ALL DIMENSIONS NOT OTHERWISE MARKED

Dimensions			
Amp	***A***	***B***	***C***
1000-1200	2-25/64	3/8	2

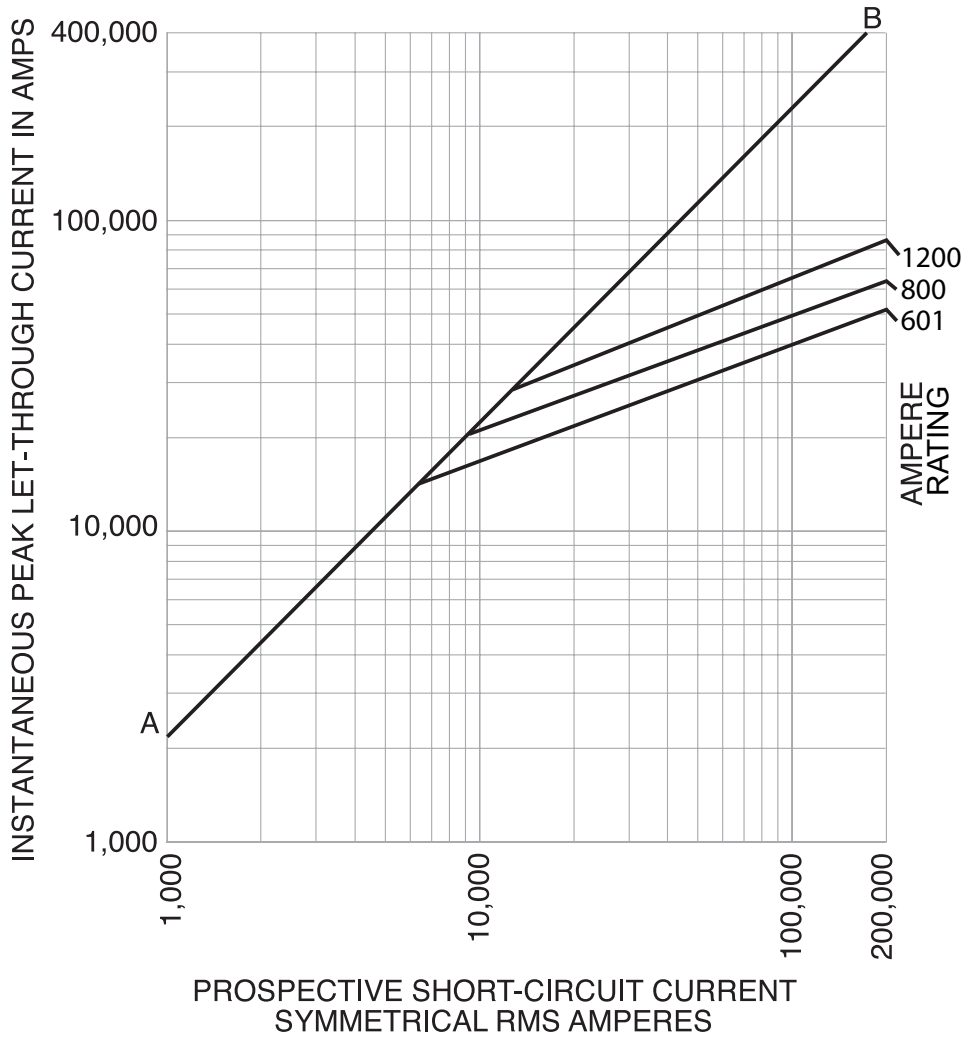
Please see our website www.AutomationDirect.com for complete engineering drawings. Dimensions are approximate. Not for construction purposes.

Class L Fast-Acting Fuses
Time-Current Characteristic Curves



Note: See website for interpolation method document to address the correct method in which to interpolate the fuse curve that does not appear on the chart (601, 650, 700).

Class L Fast-Acting Fuses Current Limitation Curves



How to Use the Let-Through Charts

Using the example given, one can determine the pertinent let-through data for the LCU800 amp fuse. The Let-Through Chart pertaining to the 800A fuse is illustrated.

Determine the PEAK let-through CURRENT.

Step 1. Enter the chart on the Prospective Short-Circuit current scale at 100,000 amps and proceed vertically until the 800A fuse curve is intersected.

Step 2. Follow horizontally until the Instantaneous Peak Let-Through Current scale is intersected.

Step 3. Read the PEAK let-through CURRENT as 50,000A. (If a fuse had not been used, the peak current would have been 200,000A.)

UL Class L bolt-on fuses rated 601 to 1200A: Mounting

To mount UL Class L fuse, use stainless steel bolts of correct number, diameter and length, stainless steel spring washers on each side of the bolt and stainless steel nuts. The nuts shall be tightened to the torque recommended by ASTM Standards for the bolt size used. The bolts shall have the largest diameter that will fit the bolt holes and length to allow full nut thread engagement. Bolts shall be installed in each fuse mounting hole or slot.

Edison Selection Guide

Line Overview

The Edison family 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).

Edison Fuses 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	600VAC 450VDC	600VAC 300VDC*	250VAC 125 VDC* (1-200A) 250VDC* (201-600A)	600VAC 300VDC*	250VAC 125 VDC* (10-60A) 250VDC* (70-600A)	600VAC 300VDC*	300VAC 160 VDC (15-600A)	600VAC	600V	600VAC 300VDC (15-20A)	600VAC	600VAC 300VDC (0.5-2.25A) (20–30A)
Amp Rating	1 - 600		1 - 600	3 - 600	10 - 600	5 - 600	1 - 600		601 - 1200	0.5 - 30	0.25 - 30	0.5 - 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**

Edison Fuses 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) 125VDC: (0.5 to 30A)	250VAC: (0.1 to 10A) 32VAC: (15 to 30A)	250VAC (0.063 - 3A) 125VAC (4 - 15A)	250VAC (0.5 - 3A) 125VAC (4 - 10A)	250VAC 125VDC (20A)	250VAC: (0.0625 to 8A) 32VAC: (10 to 20A)	250VAC	250VAC
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 0.25-20 A): (AGC 1/100-10 A) JDYX and E19180 UL Recognition Guide and File nos. (ABC 20-30A):(AGC 11-30) JDYX2 and E19180 CSA Certification Record No: 053787 C 000 and 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", (6.3mm x 32mm)		0.197" x 0.788" (5mm x 20mm)		1/4" x 1-1/4", (6.3mm x 32mm)		0.197" x 0.788" (5mm x 20mm)	

Cross Reference Guide

CROSS REFERENCE GUIDE By manufacturers type reference or series number. Ampere ratings must be added for ordering purposes.								
FUSE TYPE		**VOLT**	**EDISON**	**BRUSH/ DORMAN**	**BUSSMANN**	**MERSEN / GOULD**	**GEC/CEFCO**	**LITTELFUSE**
UL CLASS CURRENT LIMITING FUSES (CSA CLASS)								
CC (HRCI-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
UL CLASS GENERAL PURPOSE 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	–	–	–

Accessories

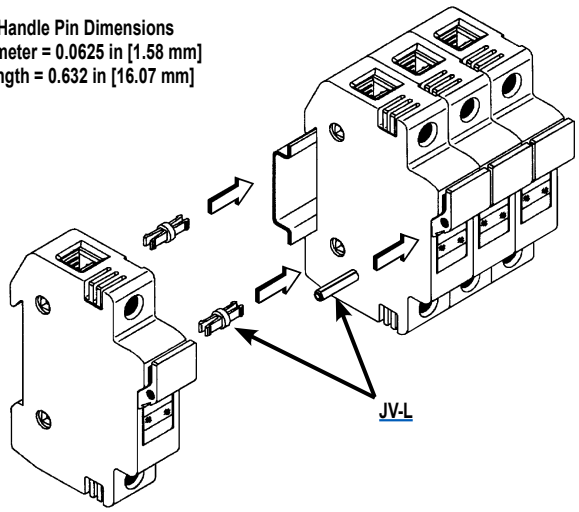
FP-2

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	$0c1s:
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.		$;0c1t:

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 = 0.0625 in [1.58 mm]
Length = 0.632 in [16.07 mm]



Cross Reference Guide

CROSS REFERENCE GUIDE By manufacturers type reference or series number. Ampere ratings must be added for ordering purposes.								
FUSE TYPE		**VOLT**	**EDISON**	**BRUSH/ DORMAN**	**BUSSMANN**	**MERSEN / GOULD**	**GEC/CEFCO**	**LITTELFUSE**
UL CLASS CURRENT LIMITING FUSES (CSA CLASS)								
CC (HRCI-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
UL CLASS GENERAL PURPOSE 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"x 1-1/4" Ceramic	**Fast-Acting**	250/125	ABC	ABC	ABC	GAB	–	314
1/4"x 1-1/4" Glass		250/32	AGC	AGC	AGC	GGC	–	312
1/4"x 1-1/4" Ceramic	**Time-Delay**	250	MDA	MDA	MDA	–	–	326
1/4"x 1-1/4" 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	–	–	–