5x20mm Glass Medium Time-Delay GMC Fuses

Features

- Compact dimensions, 0.197" x 0.788" (5 mm x 20 mm)
- Glass tube construction with nickel-plated brass end caps
- Medium time-delay, low breaking capacity
- RoHS

Applications

- Supplemental protection for electronic applications

GMC Specifications

Voltage Rating: GMC - See table below
Ampere Rating: 0.5 - 10 Amps

Interrupting Rating: See table below

Agency Approvals

- Designed to UL/CSA 248-14
- UL Listed, Guide JDYX, File E19180, 0.5A - 5A
- UL Recognition, Guide JDYX2, File E19180, 10A
- CSA Certified, Class 1422-01, File 053787, 0.5A - 5A
- RoHS

GMC Series 5x20mm Glass, Medium Time-Delay Fuses

Part Number	AMP Rating	Rated Voltage	AC Interrupting Rating*		Typical Pre-Arc I2t AC**	Voltage Drop mv***	Pcs/Pkg	Package Weight (lb.)	Price
		AC Max	250V	125V					
GMC-5	0.5	250V	35A	10000A	0.41	370	5	0.025	$12.00
GMC1	1				1.8	250			$12.00
GMC2	2		100A		8.9	130			$12.00
GMC3	3				19	130			$12.00
GMC4	4	125V	–		36	120			$12.00
GMC5	5				58	120			$12.00
GMC10	10			200A	300	110			$12.00

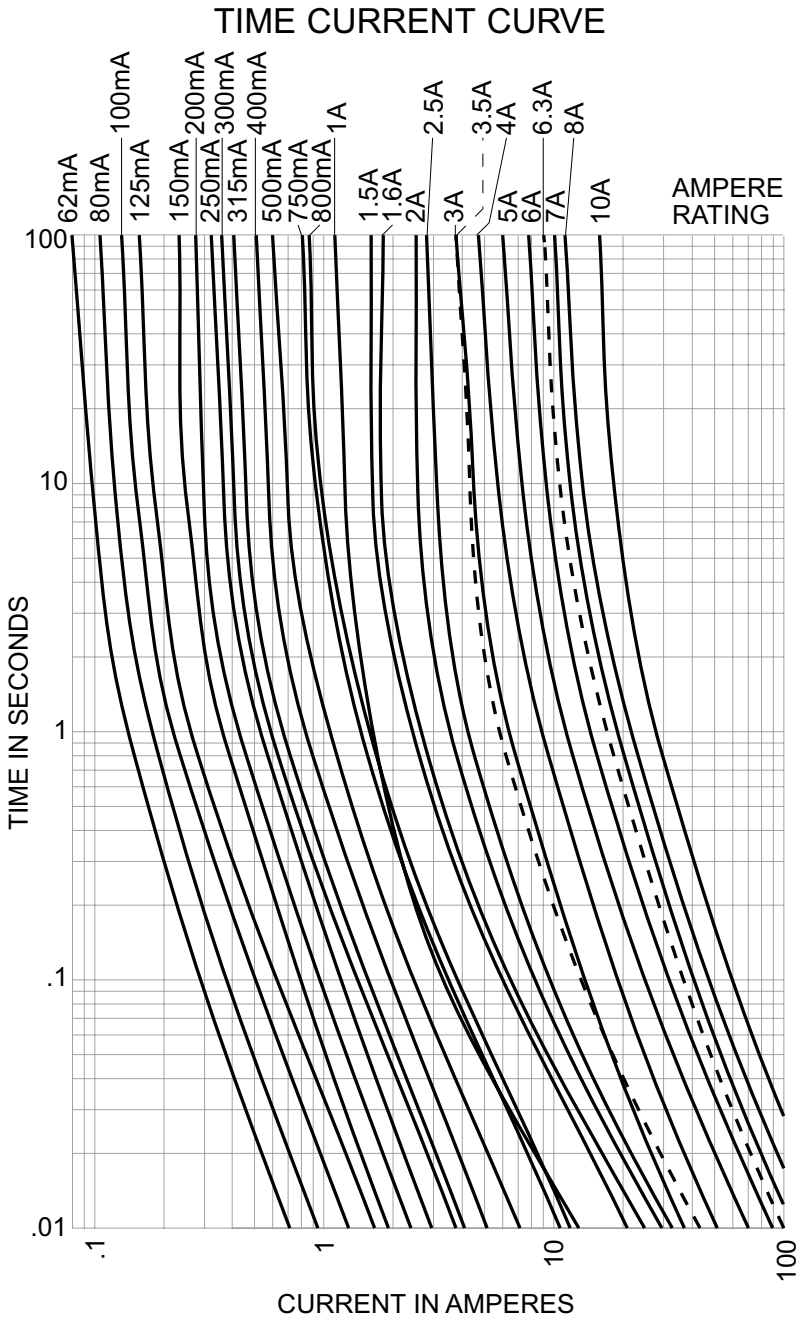
**Note: Interrupting ratings for 63 mA - 6A were measured at 70% - 80% power factor on AC; rnterrupting ratings for 7A - 15 A were measured at 100% power factor on AC.*
*** Typical pre-arcing I2t (A2Sec) - measured at listed interrupting rating and rated voltage.*
**** Typical Voltage Drop - measured at 20°C ambient temperature at rated current.*

For mounting and wiring GMC fuses, see our DN-F10 Series fuse blocks in the Terminal Blocks and Wiring Solutions section.

CROSS REFERENCE

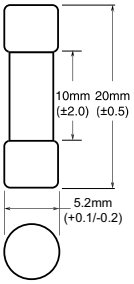
OLD EDISON	BUSSMANN	MERSEN GOULD	LITTELFUSE
none	GMC	GSC	none

5x20mm Glass Medium Time-Delay GMC Fuses



Dimensions

(mm)



GMC Electrical Characteristics		
Rated Current	***% of Amp Rating***	***Opening Time***
0.5A to 10 Amps	100	None
	135	60 minutes maximum
	200	2 minutes maximum

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**

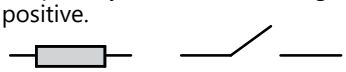
Edison Fuses Selection Guide and General Specifications

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)	

DINnectors®

Fuse Terminal Blocks

Fuse terminal blocks are available for 1 1/4" x 1/4" and 5x20mm-5x25mm fuses and they are 35mm DIN rail mountable. These blocks are available with or without a blown fuse LED. Fuse terminal blocks with blown fuse LED are polarity sensitive. The hinge side is positive.



DN-F6 Series: EURO S 10H/35

DN-F6L Series: EURO S 10H/35

DN-F10 Series: EURO S 4LH/35

DN-F10L Series: EURO S 4LH/35

Ordering Information

	Part Number	Qty	Price	Part Number	Qty	Price	Part Number	Qty	Price	Part Number	Qty	Price
Gray Terminal Block	DN-F6	25	$156.00	–			DN-F10	50	$251.00	–		
	DN-F6MN	7	$34.00				DN-F10MN	10	$39.50			
12-24 VAC/DC*	–			DN-F6L24	10	$89.00	–			DN-F10L24	10	$87.00
110 VAC/DC*				DN-F6L110	10	$89.00				DN-F10L110	10	$87.00
220 VAC/DC*				DN-F6L220	10	$89.00				DN-F10L220	10	$87.00

Technical Specifications

Stripping Length	12mm [0.47 in]			10mm [0.39 in]		
Tightening Torque	0.8 N·m [10 lb·in]			0.6 N·m [5.3 lb·in]		
Density	100/m [30 pcs/ft]			100/m [30 pcs/ft]		
UL Approval**	600V	30A	20-6 AWG	250V per EN60947-7-3	6.3A per EN60947-7-3	24-10 AWG
VDE Approval	750V	8A	–	250V per EN60947-7-3	6.3A per EN60947-7-3	4mm²
Fuse Size (not supplied)	1 1/4" x 1/4"			5x20mm-5x25mm		
Indicator Type	Non-indicating	LED blown fuse indicator		Non-indicating	LED blown fuse indicator	
Operating Temperature	Ambient air temperature: -20 to 85°C [-4 to 185°F] / Relative humidity: 50% max at 40°C [104°F]; 90% max at 20°C [68°F]					
SCCR Rating	10kA per Table SB4.1, 2009, UL 508A, Maximum short circuit current rating for unmarked components					
CE Conformity	CE (EN 60947-1 / 60947-7-3)					
Agency File #	UL E179129 / LR84816					

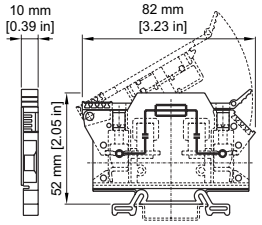
Accessories

End Covers		Included			Included			Included			Included		
35mm DIN Rail	7.5 mm high	DN-R35S1	10	$39.00	DN-R35S1	10	$39.00	DN-R35S1	10	$39.00	DN-R35S1	10	$39.00
		DN-R35S1-2	2	$11.00	DN-R35S1-2	2	$11.00	DN-R35S1-2	2	$11.00	DN-R35S1-2	2	$11.00
	15mm high	DN-R35HS1	10	$68.00	DN-R35HS1	10	$68.00	DN-R35HS1	10	$68.00	DN-R35HS1	10	$68.00
		DN-R35HS1-2	2	$16.50	DN-R35HS1-2	2	$16.50	DN-R35HS1-2	2	$16.50	DN-R35HS1-2	2	$16.50
End Brackets		DN-EB35	50	$67.00	DN-EB35	50	$67.00	DN-EB35	50	$67.00	DN-EB35	50	$67.00
		DN-EB35MN	20	$31.50	DN-EB35MN	20	$31.50	DN-EB35MN	20	$31.50	DN-EB35MN	20	$31.50
		DN-EB35-A	50	$47.50	DN-EB35-A	50	$47.50	DN-EB35-A	50	$47.50	DN-EB35-A	50	$47.50
		DN-EB35-A-10	10	$12.00	DN-EB35-A-10	10	$12.00	DN-EB35-A-10	10	$12.00	DN-EB35-A-10	10	$12.00
		DN-QEB35	50	$42.50	DN-QEB35	50	$42.50	DN-QEB35	50	$42.50	DN-QEB35	50	$42.50
		DN-QEB35-10	10	$11.50	DN-QEB35-10	10	$11.50	DN-QEB35-10	10	$11.50	DN-QEB35-10	10	$11.50
Angled Support Bracket		DN-ASB1	50	$107.00	DN-ASB1	50	$107.00	DN-ASB1	50	$107.00	DN-ASB1	50	$107.00
Marking Tags		DN-L*** or DN-LT****	500/100	various	DN-L*** or DN-LT****	500/100	various	DN-L*** or DN-LT****	500/100	various	DN-L*** or DN-LT****	500/100	various

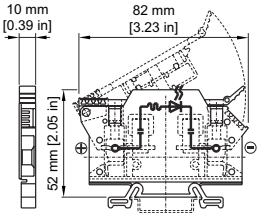
*Working voltage **For copper wire only ***On lever arm ****On terminal body

Note: DN-F6 series fuse holders will accommodate the following AutomationDirect fuses: ABC, AGC, MDA and MDL Series.
DN-F10 series fuse holders will accommodate the following AutomationDirect fuses: GMA, GMC, S500, and S506 Series.
For more information on accessories, see the DIN*nector*s Accessories section of this chapter.

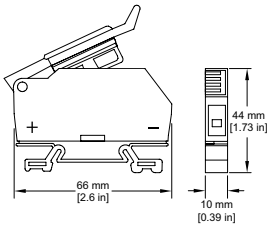
DN-F6 / DN-F6MN



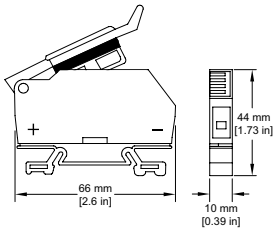
DN-F6L



DN-F10 / DN-F10MN



DN-F10L



Accessories

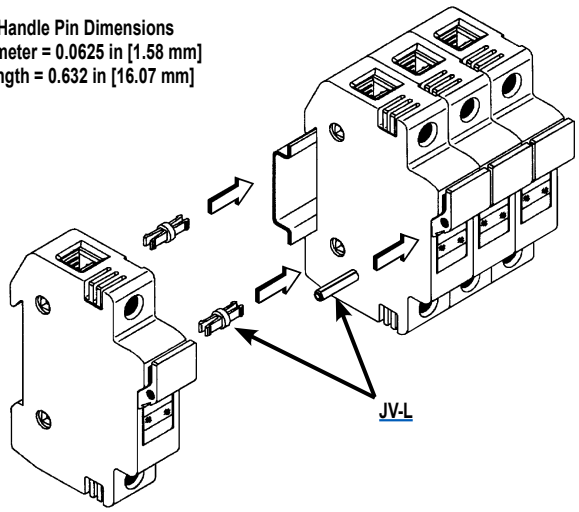
FP-2

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	$40.00
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.		$15.00

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	–	–	–