

Dual Element Time-Delay Class RK1 Fuses



LENRK20 **LENRK100** **LESRK5** **LESRK100**

LENRK/LESRK Features

- True dual - element spring - trigger construction allows sizing of 125% FLA for motor backup protection
- Superior overload and cycling capabilities
- Extremely current limiting; provides superior short circuit component protection

Applications

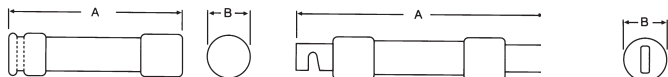
- Recommended for AC power distribution system mains, feeders, and branch circuits
- Protection of motors and motor branch circuits
- Type 2 protection for IEC components
- All general-purpose applications including lighting, heating and other non-inductive loads

LENRK/LESRK Dimensions

Dimensions inches (mm)			
Catalog Number	Amps	Overall Length	Max Diameter
		A	B
LENRK series 250V	10-30	2 (50.8)	0.56 (14.2)
	35-60	3 (76.2)	0.81 (20.6)
	70-100	5.88 (149.4)	1.10 (27.9)
	110-200	7.13 (181.1)	1.61 (40.9)
	225-400	8.63 (219.2)	2.36 (59.9)
LESRK series 600V	450-600	10.38 (263.7)	2.88 (73.2)
	5-30	5 (127)	0.81 (20.6)
	35-60	5.5 (139.7)	1.06 (26.9)
	70-100	7.88 (200.2)	1.11 (28.2)
	110-200	9.63 (244.6)	1.61 (40.9)
	225-400	11.63 (295.4)	2.36 (59.9)
	450-600	13.38 (339.9)	2.88 (73.2)

Ferrule Design – 5 through 60 Amperes

Knife Blade – 70 through 600 Amperes



CROSS REFERENCE				
VOLTS	EDISON	BUSSMANN	MERSEN GOULD	LITTELFUSE
250	LENRK	LPN-RK-SP	A2DR	LLNRK
600	LESRK	LPS-RK-SP	A6DR*	LLSRK

*Not dual element 110–600 Amp

LENRK/LESRK series fuses have up to 40% more current limitation and up to 350% more Amps-Squared-Second (I²t) limitation under fault conditions than ECNR/ECSR series fuses, reducing the potential for damage. They also offer a better selection for electrical power system designers and superior short circuit protection for breakers having inadequate interrupting ratings. ECNR/ECSR and LENRK/LESRK fuse lines are physically interchangeable (and electrically interchangeable per U.L. equipment listing conditions). We recommend them as a practical, economical way to upgrade systems in many situations.

Specifications

Voltage Rating:

- LENRK: 250 VAC
- LESRK: 600 VAC

Ampere Rating:

- LENRK: 10–600A
- LESRK: 5–600A

Interrupting Rating:

- 200,000 RMS Symmetrical Amps

Self-Certified Interrupting Rating:

- 300,000 RMS Symmetrical Amps

Self-Certified DC Ratings:

- Voltage Rating:
LENRK (10–60A) 125 VDC
LENRK (70–600A) 250 VDC
LESRK 300 VDC
Interrupting Rating: LENRK/LESRK 20,000 Amperes DC

Current Limiting: RK1 Fuse

Agency Approvals:

- UL Listed, Class RK1, Guide JDDZ, File E162363
- CSA Certified HRCI-R per C22.2, No. 248.12

LENRK Series Dual-element Time-delay Fuses					
Part Number	AMP Rating	Rated Voltage AC Max	Pcs/Pkg	Package Weight	Price
LENRK10	10	250V	10	0.50 lb	\$145.00
LENRK15	15				\$98.00
LENRK20	20			1.24 lb	\$98.00
LENRK30	30				\$98.00
LENRK60	60		5	1.90 lb	\$195.00
LENRK100	100			2.00 lb	\$202.00
LENRK200	200		1	0.90 lb	\$98.00
LENRK300	300			2.00 lb	\$138.00
LENRK400	400				\$136.00
LENRK500	500			3.00 lb	\$233.00
LENRK600	600				\$220.00

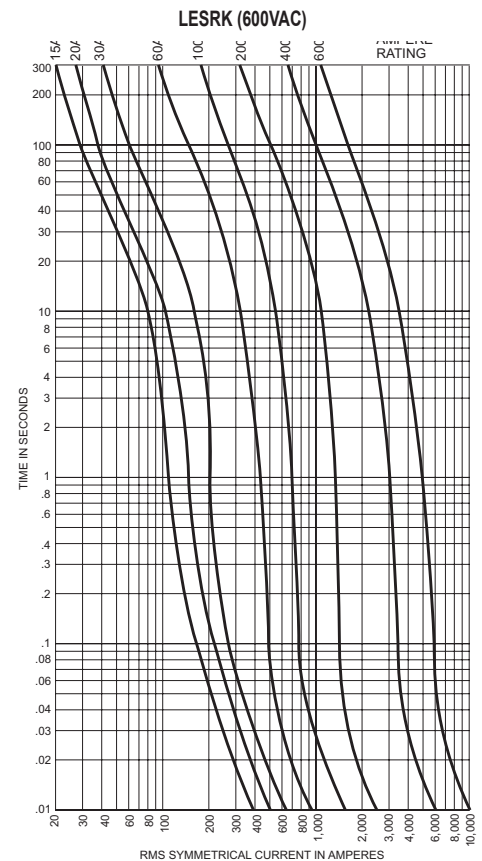
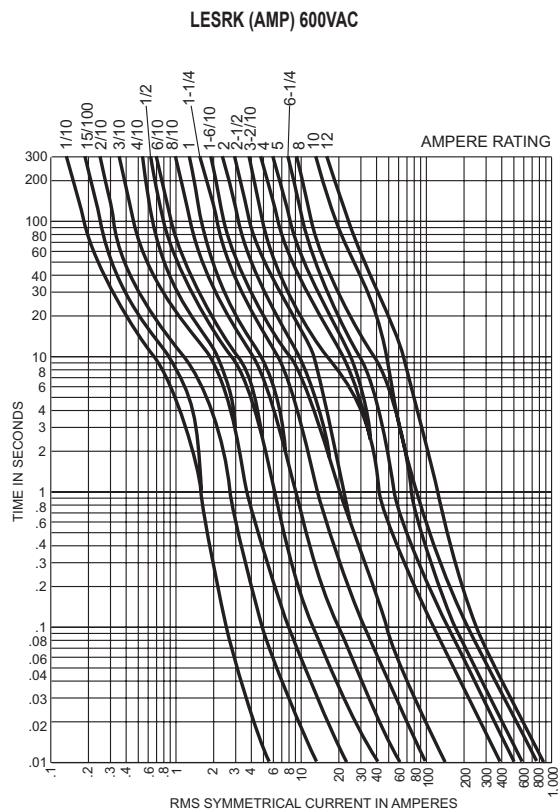
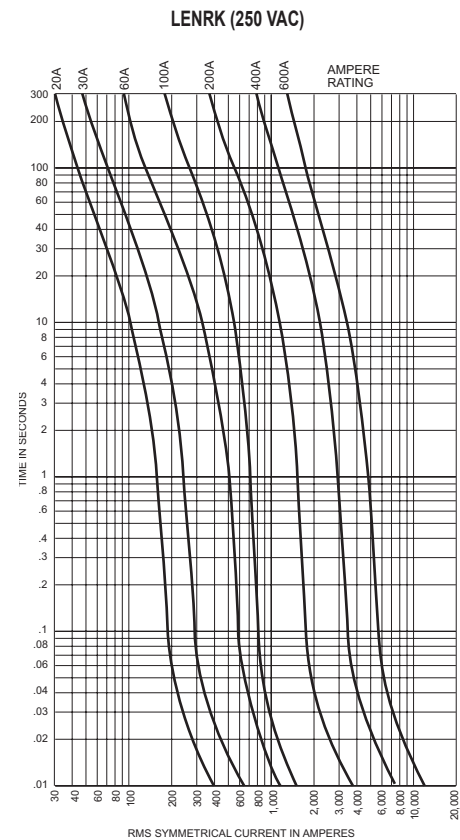
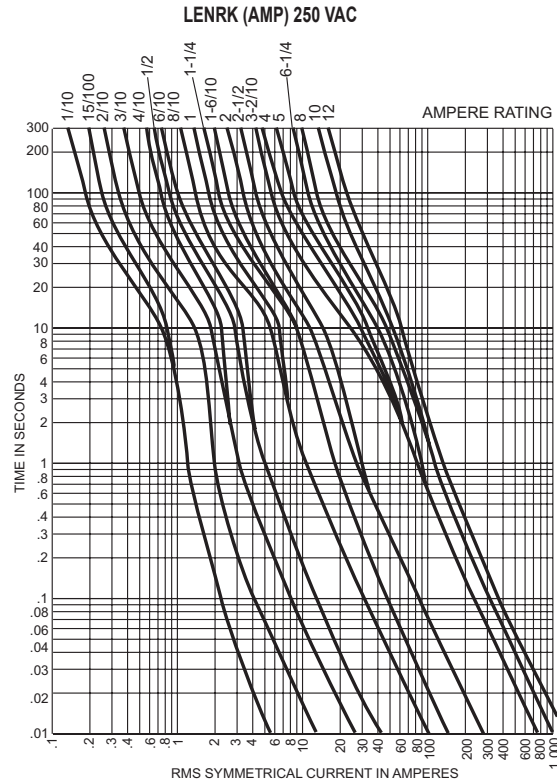
LESRK Series Dual-element Time-delay Fuses					
Part Number	AMP Rating	Rated Voltage AC Max	Pcs/Pkg	Package Weight	Price
LESRK5	5	600V	10	1.60 lb	\$261.00
LESRK10	10				\$261.00
LESRK15	15				\$246.00
LESRK20	20				\$246.00
LESRK25	25				\$246.00
LESRK30	30			3.05 lb	\$246.00
LESRK40	40				\$355.00
LESRK50	50			3.10 lb	\$355.00
LESRK60	60				\$355.00
LESRK100	100		5	1.50 lb	\$382.00
LESRK200	200		1	1.10 lb	\$174.00
LESRK300	300			2.40 lb	\$267.00
LESRK400	400				\$267.00
LESRK500	500			3.40 lb	\$386.00
LESRK600	600				\$381.00

Dual Element Time-Delay Class RK1 Fuses



LENRK/LESRK

Average Time/
Current Curves

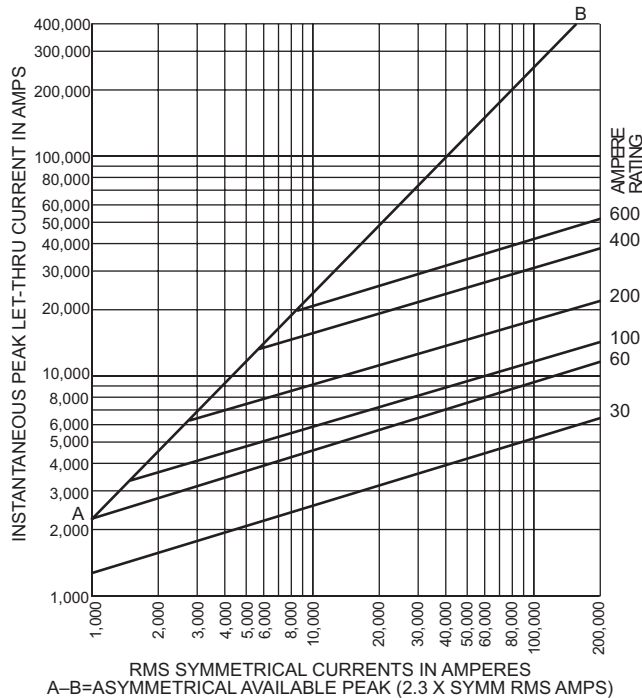


Dual Element Time-Delay Class RK1 Fuses

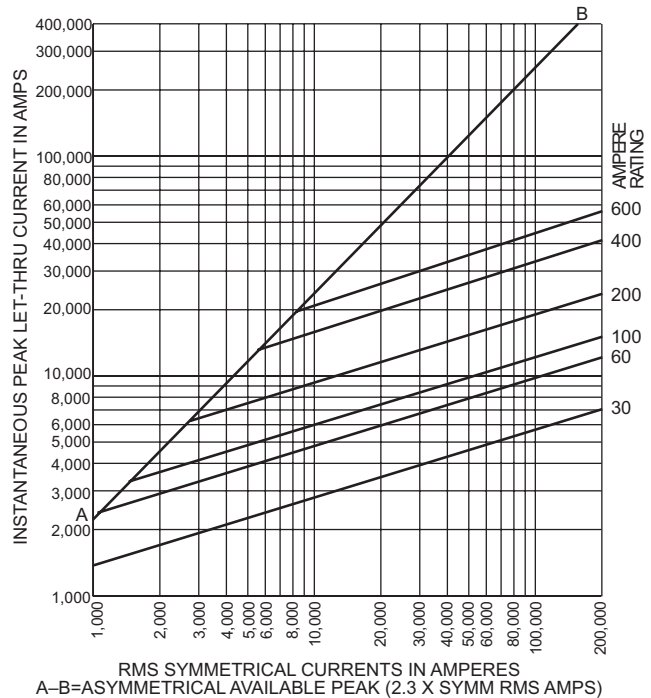


PEAK LET-THROUGH CURRENT CURVES*

LENRK (250V)



LESRK (600V)



*Curves test data obtained at 15% short-circuit power factor when possible.

CURRENT LIMITATION TABLES

LENRK (250V)* RMS & Peak Let-Thru Currents (kA)

Available Fault current	Apparent Effective Let-Thru Amperes (kA)											
	30		60		100		200		400		600	
RMS Amperes	I _{RMS}	I _p	I _{RMS}	I _p	I _{RMS}	I _p	I _{RMS}	I _p	I _{RMS}	I _p	I _{RMS}	I _p
1,000	1	1	1	2	1	2	1	2	1	2	1	2
2,000	1	2	1	3	2	4	2	5	2	5	2	5
3,000	1	2	1	3	2	4	3	6	3	7	3	7
5,000	1	2	2	4	2	5	3	7	5	12	5	12
10,000	1	3	2	4	2	6	4	9	7	15	9	21
15,000	1	3	2	5	3	6	4	10	7	17	10	23
20,000	1	3	2	6	3	7	5	11	8	19	11	25
25,000	1	3	3	6	3	7	5	12	9	20	12	27
30,000	2	3	3	6	3	8	5	12	9	21	13	29
35,000	2	4	3	7	4	8	6	13	10	22	13	30
40,000	2	4	3	7	4	9	6	13	10	23	13	31
50,000	2	4	3	7	4	9	6	14	10	24	14	33
60,000	2	4	3	8	4	10	7	15	11	26	15	35
70,000	2	4	3	8	4	10	7	16	12	27	16	36
80,000	2	5	4	8	5	11	7	16	12	28	17	38
90,000	2	5	4	9	5	11	7	17	13	29	17	39
100,000	2	5	4	9	5	11	8	18	13	30	17	40
150,000	2	6	4	10	5	13	8	19	16	36	20	46
200,000	3	6	5	11	6	14	9	21	18	42	22	50

LESRK (600V)* RMS & Peak Let-Thru Currents (kA)

Available Fault current	Apparent Effective Let-Thru Amperes (kA)											
	30		60		100		200		400		600	
RMS Amperes	I _{RMS}	I _p	I _{RMS}	I _p	I _{RMS}	I _p	I _{RMS}	I _p	I _{RMS}	I _p	I _{RMS}	I _p
1,000	1	1	1	2	1	2	1	2	1	2	1	2
2,000	1	2	1	3	2	4	2	4	2	4	2	4
3,000	1	2	1	3	2	4	3	6	3	7	3	7
5,000	1	2	2	4	2	5	3	7	5	12	5	12
10,000	1	3	2	5	3	6	4	9	7	16	9	21
15,000	1	3	2	5	3	7	5	11	8	18	10	24
20,000	1	3	3	6	3	7	5	12	8	19	11	26
25,000	2	4	3	6	3	8	5	12	9	21	12	28
30,000	2	4	3	6	4	8	6	13	10	22	13	30
35,000	2	4	3	7	4	9	6	14	10	23	13	31
40,000	2	4	3	7	4	9	6	14	10	24	14	32
50,000	2	5	3	8	4	10	7	15	11	26	15	35
60,000	2	5	3	8	4	10	7	16	12	28	16	37
70,000	2	5	4	8	5	11	7	17	13	29	17	39
80,000	2	5	4	9	5	11	8	18	13	30	17	40
90,000	2	5	4	9	5	12	8	18	13	31	18	42
100,000	2	6	4	9	5	12	8	19	14	32	19	44
150,000	3	6	5	11	6	14	9	21	16	36	22	50
200,000	3	7	5	12	7	15	10	23	17	40	23	54

**"Apparent Let-Thru Amperes" values are read from "Peak Let-Through Current Curves" and the peak current value divided by 2.3 Asymmetry Factor.



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)	

Modular Ferrule Fuse Blocks for Class R Fuses



Description

RM Series for use with Class R fuses LENRK, LESRK, ECNR & ECSR

Mounting

35mm DIN rail or panel mount

Specifications

Materials:

Base – Thermoplastic

Terminals – Tin-plated copper brass

Covers – Thermoplastic

Screws – Zinc-plated steel

SCCR: 200kA

Flammability rating:

Blocks – UL 94V0, self-extinguishing

Covers – UL 94HB, self-extinguishing

Operating and storage temp range:

Blocks – -40° to 120°C [-40° to 248°F]

Covers – indicating -20° to 90°C [-4° to 194°F]

non-indicating -40° to 120°C [-40° to 248°F]

Wire:

Cu – 75°/90°C [167°/194°F]

Al – 75°C [167°F]

Ring or Fork terminal to fit a #10-32 screw

Agency Approvals

Fuse Blocks

- UL® Listed E14853 - IZLT
- CSA® Certified 47235-6225-01
- CE
- RoHS Compliant
- Conflict mineral free
- REACH Compliant

Covers

- Covers are included in the overall UL Listing/Recognition and CSA Certification
- IP20 finger-safe
- RoHS compliant
- REACH Compliant

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

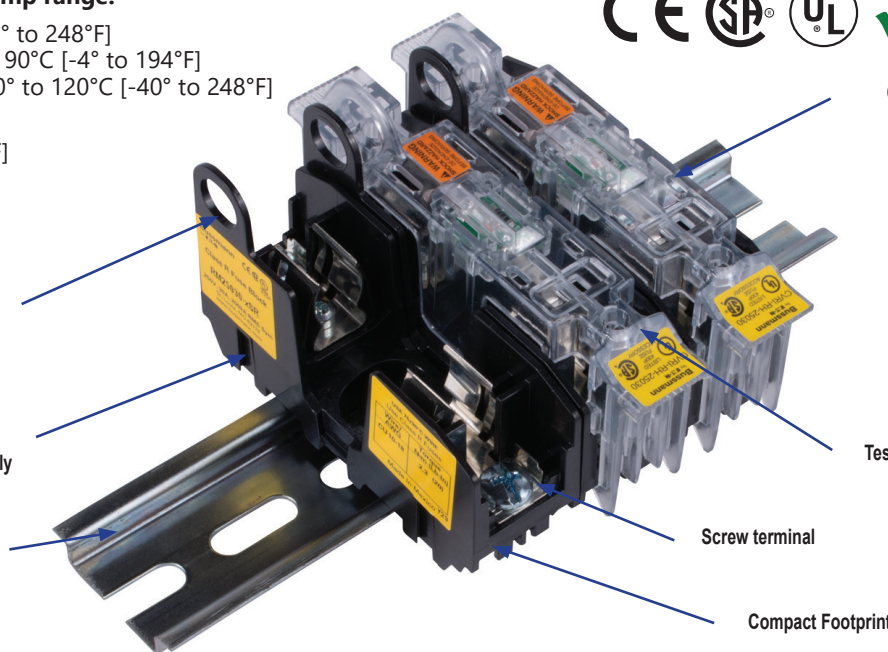


Clear IP20 finger-safe cover (sold separately)

Patented lockout / tagout

Modular dove-tail design for tool-less snap together assembly

DIN Rail or panel mount



Test probe holes

Screw terminal

Compact Footprint

Modular Ferrule Fuse Blocks for Class R Fuses

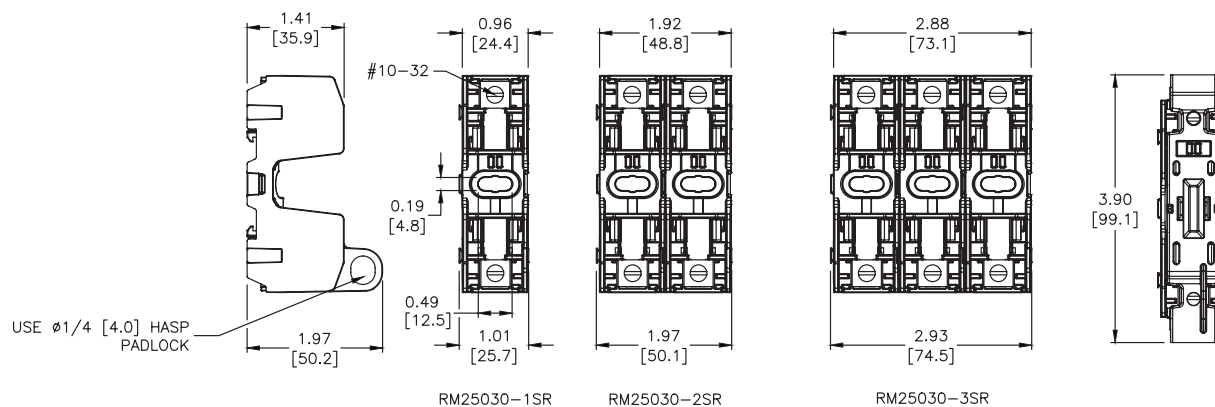
Type	Part Number	Pc/ pkg	Price	Volts	Amps	Poles	Wire Range		Torque lb-in [N·m]	Wt. lb [kg]	Covers (sold separately)		
							solid and stranded	fine stranded (Cu)			w/o Indication	w/ Indication ¹	Pc/ pkg
Screw	RM25030-1SR	1	\$15.00	250V AC/DC	30	1	18-10 AWG (Cu)	18-10 AWG	20 [2.3]	0.10 [0.04]	CVR-RH-25030 \$9.75	CVRI-RH-25030 \$12.50	1
	RM25030-2SR	1	\$24.00			2				0.15 [0.07]			
	RM25030-3SR	1	\$36.50			3				0.25 [0.12]			
Box Lug	RM25060-1CR	1	\$29.00		60	1	14-2 AWG (Cu) 8-2 AWG (Al)	3-2 AWG 6-4 AWG 8 AWG 14-10 AWG	50 [5.6] 45 [5.1] 40 [4.5] 35 [4.0]	0.15 [0.07]	CVR-RH-25060 \$11.50	CVRI-RH-25060 \$13.00	1
	RM25060-2CR	1	\$51.00			2				0.30 [0.14]			
	RM25060-3CR	1	\$68.00			3				0.45 [0.22]			
Screw	RM60030-1SR	1	\$32.00	600V AC/DC	30	1	18-10 AWG (Cu)	18-10 AWG	20 [2.3]	0.15 [0.07]	CVR-RH-60030 \$10.00	CVRI-RH-60030 \$12.50	1
	RM60030-2SR	1	\$49.00			2				0.30 [0.14]			
	RM60030-3SR	1	\$60.00			3				0.45 [0.22]			
Box Lug	RM60060-1CR	1	\$40.00		60	1	14-2 AWG (Cu) 8-2 AWG (Al)	3-2 AWG 6-4 AWG 8 AWG 14-10 AWG	50 [5.6] 45 [5.1] 40 [4.5] 35 [4.0]	0.25 [0.12]	CVR-RH-60060 \$11.50	CVRI-RH-60060 \$13.00	1
	RM60060-2CR	1	\$67.00			2				0.45 [0.22]			
	RM60060-3CR	1	\$85.00			3				0.70 [0.30]			

¹ Open fuse indication requires 90V minimum and closed circuit to operate.

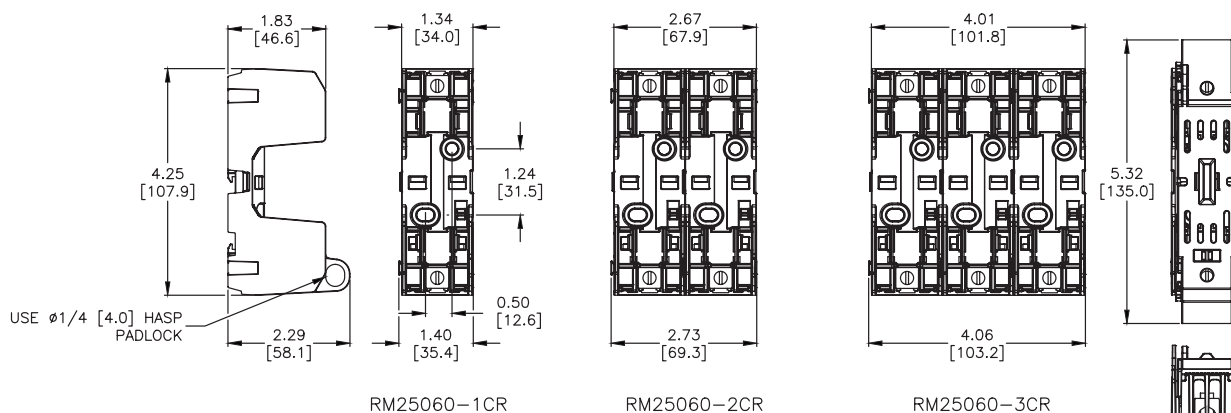
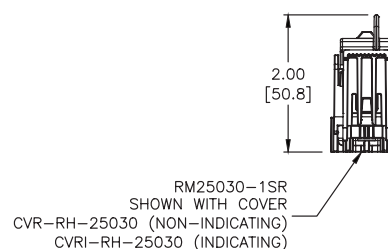
Modular Ferrule Fuse Blocks for Class R Fuses Dimensions



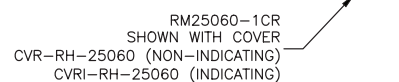
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RM25030



RM25060

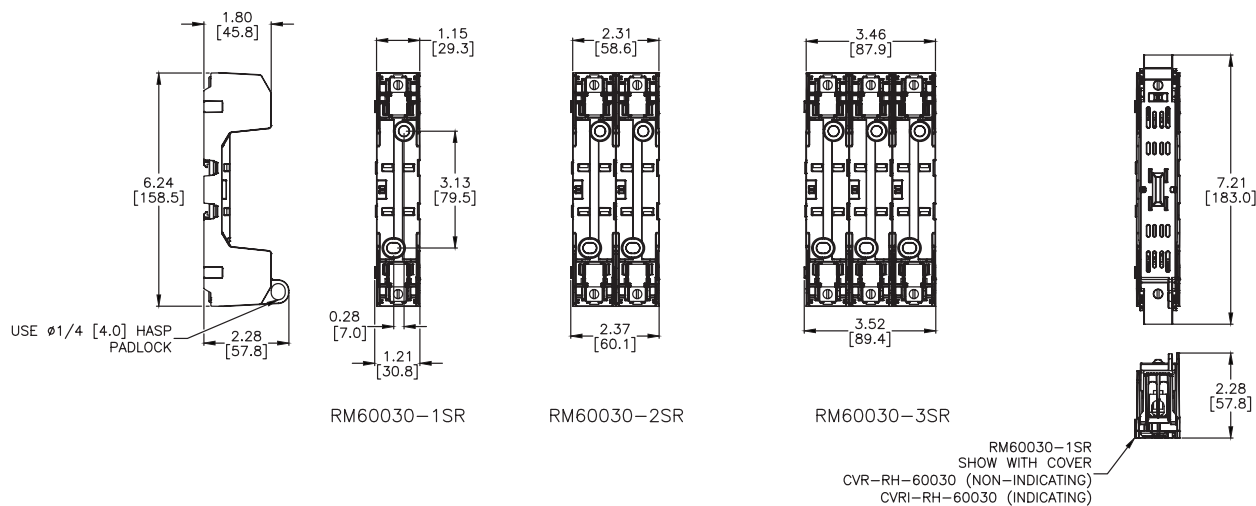


Please see our website www.AutomationDirect.com for complete engineering drawings. Dimensions are approximate. Not for construction purposes.

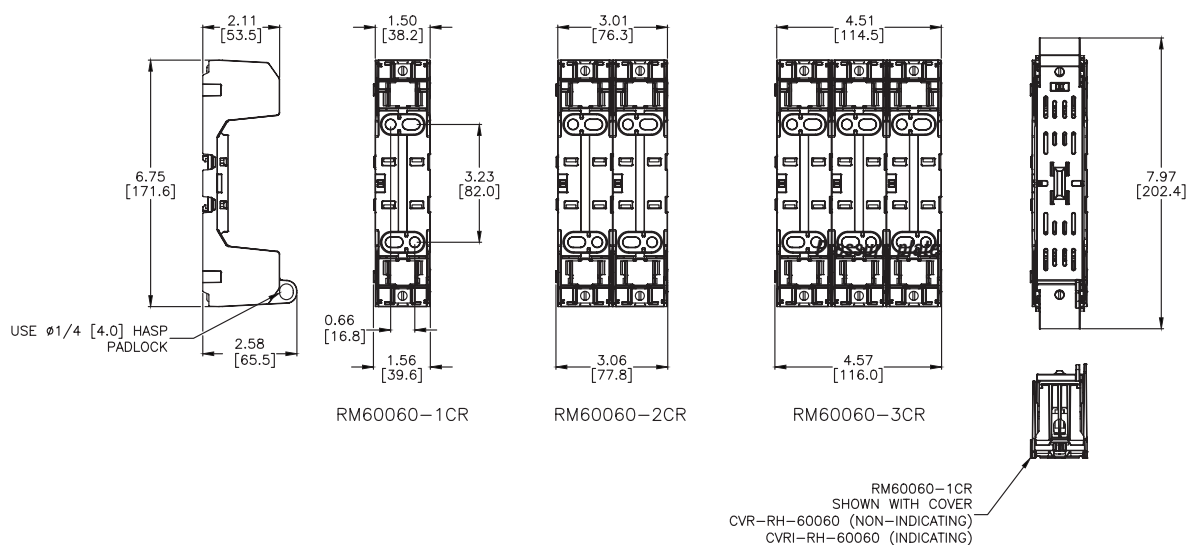
Modular Ferrule Fuse Blocks for Class R Fuses

Dimensions

in [mm]



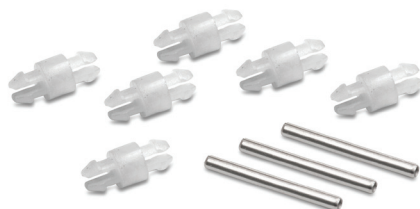
RM60030



RM60060

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

Accessories

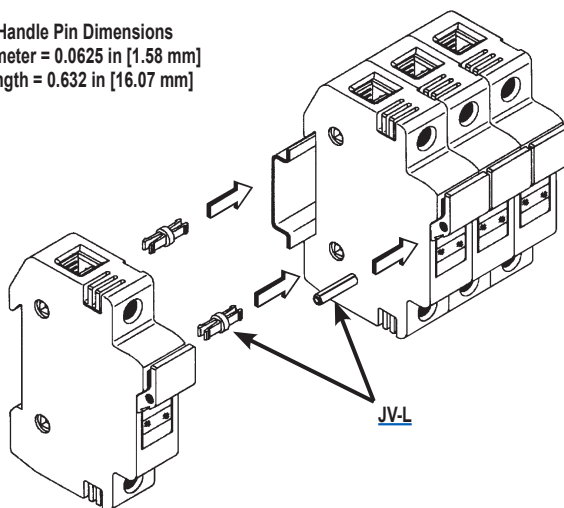
**FP-2****JV-L**

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	\$33.00
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.		\$12.50

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 = 0.0625 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	–	–	–