

Edison Fuses – Dual Element Time-Delay Class RK5



ECNR40



ECNR70



ECNR150



ECSR5



ECSR100



ECSR200

These fuses are recommended for AC power distribution system mains, feeders and branch circuits having inductive loads (motors, transformers) or non-inductive loads (lighting, heating) where the available short-circuit current does not exceed 200,000 RMS symmetrical amperes. These dual element, time-delay fuses have minimum industry standard time-delay of 10 seconds at 5 times the fuse rating (8 sec. minimum for 250V, 30A and less). The time-delay characteristics of these fuses typically allows them to be sized closer to the running ampacity of inductive loads to reduce cost and provide improved overcurrent protection. These fuses will override normal equipment current surges to reduce unnecessary fuse openings. They are the most popular fuses used in the industry and the most economical for most applications, especially motors and transformers. They have moderate current limitation.

ECNR/ECSR

Features:

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

Applications:

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

ECNR/ECSR

Specifications:

Voltage Rating:

- ECNR - 250 VAC,
- ECSR - 600 VAC

Ampere Rating:

- ECNR: 1 - 600 Amps
- ECSR: 3 - 600 Amps

Interrupting Rating: 200,000 RMS Symmetrical Amps

Self-Certified DC Ratings:

- Voltage Rating: ECNR (1-600) 125 VDC
- ECSR (3-600) 300 VDC
- Self-Certified Interrupting Rating: ECNR/ECSR 20,000 Amperes DC

Current Limiting: RK5 Fuse

Agency Approvals

- UL Listed, Class RK5, Guide JDDZ, File E162363
- CSA Certified HRCI-R per C22.2, No. 248.12

CROSS REFERENCE				
VOLTS	EDISON	BUSSMANN	FERRAZ GOULD	LITTELFUSE
250	ECNR	FRN-R	TR	FLNR
600	ECSR	FRS-R	TRS	FLSR

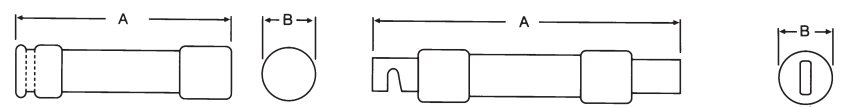
Edison Fuses – Dual Element Time-Delay Class RK5

ECNR Series 250V Dual-element Time-delay Fuses					
Part Number	AMP Rating	Rated Voltage AC Max	Pcs/Pkg	Package Weight	Price
ECNR1	1	250V	10	0.30 lb	<-->
ECNR2	2				<-->
ECNR3	3				<-->
ECNR5	5				<-->
ECNR8	8				<-->
ECNR10	10				<-->
ECNR15	15				<-->
ECNR20	20				<-->
ECNR25	25				<-->
ECNR30	30				<-->
ECNR35	35		<-->		
ECNR40	40		<-->		
ECNR45	45		<-->		
ECNR50	50		<-->		
ECNR60	60		<-->		
ECNR70	70		5	1.50 lb	<-->
ECNR80	80				<-->
ECNR90	90				<-->
ECNR100	100				<-->
ECNR150	150				<-->
ECNR200	200	<-->			
ECNR225	225	<-->			
ECNR250	250	<-->			
ECNR300	300	<-->			
ECNR350	350	<-->			
ECNR400	400	<-->			
ECNR450	450	<-->			
ECNR500	500	<-->			
ECNR600	600	<-->			

ECSR Series 600V Dual-element Time-delay Fuses						
Part Number	AMP Rating	Rated Voltage AC Max	Pcs/Pkg	Package Weight	Price	
ECSR3	3	600V	10	1.7 lb	<-->	
ECSR4	4				<-->	
ECSR5	5				<-->	
ECSR6	6				<-->	
ECSR6-25	6.25				<-->	
ECSR7	7				<-->	
ECSR8	8				<-->	
ECSR10	10				<-->	
ECSR12	12				<-->	
ECSR15	15				<-->	
ECSR17-5	17.5				<-->	
ECSR20	20				<-->	
ECSR25	25				<-->	
ECSR30	30				<-->	
ECSR35	35				3.00 lb	<-->
ECSR40	40		<-->			
ECSR45	45		<-->			
ECSR50	50		<-->			
ECSR60	60		<-->			
ECSR70	70		<-->			
ECSR80	80		0.54 lb	<-->		
ECSR90	90			<-->		
ECSR100	100			<-->		
ECSR125	125			<-->		
ECSR150	150			<-->		
ECSR200	200			<-->		
ECSR225	225			<-->		
ECSR250	250			<-->		
ECSR300	300			3.00 lb		<-->
ECSR350	350				<-->	
ECSR400	400	<-->				
ECSR450	450	<-->				
ECSR500	500	<-->				
ECSR600	600	<-->				
ECSR300	300	1	1.22 lb		<-->	
ECSR350	350				<-->	
ECSR400	400				<-->	
ECSR450	450				<-->	
ECSR500	500			<-->		
ECSR600	600			<-->		
ECSR300	300			1	3.00 lb	<-->
ECSR350	350					<-->
ECSR400	400					<-->
ECSR450	450					<-->
ECSR500	500	<-->				
ECSR600	600	<-->				
ECSR300	300	1	5.00 lb			<-->
ECSR350	350					<-->
ECSR400	400					<-->
ECSR450	450					<-->
ECSR500	500			<-->		
ECSR600	600			<-->		

Ferrule Design – 1 through 60 Amperes

Knife Blade – 70 through 600 Amperes



ECNR/ECSR Dimensions

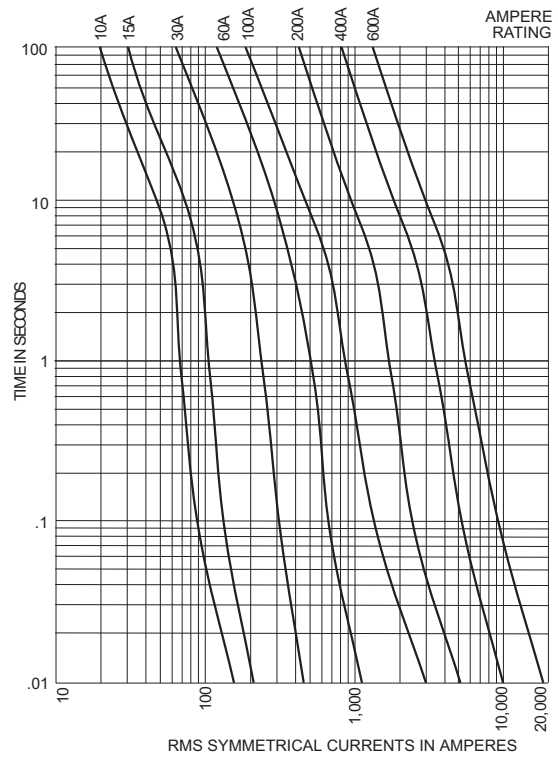
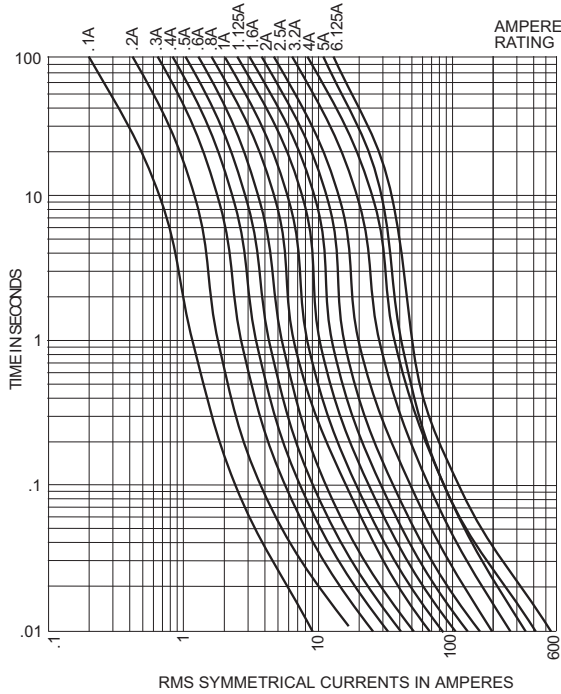
Dimensions (inches)								
Catalog Number	Amps	Overall Length		Max Diameter	Catalog Number	Amps	Overall Length	
		A	B				A	B
ECNR 250V	1-30	2in (50.8mm)	0.56in (14.2mm)	ECSR 600V	3-30	5in (127mm)	0.81in (20.6mm)	
	35-60	3in (76.2mm)	0.81in (20.6mm)		35-60	5.5in (139.7mm)	1.06in (26.9mm)	
	70-100	5.88in (149.4mm)	1.06in (26.9mm)		70-100	7.88in (200.2mm)	1.11in (28.2mm)	
	110-200	7.13in (181.1mm)	1.56in (39.6mm)		110-200	9.63in (244.6mm)	1.61in (40.9mm)	
	225-400	8.63in (219.2mm)	2.06in (52.3mm)		225-400	11.63in (295.4mm)	2.34in (59.4mm)	
	450-600	10.38in (263.7mm)	2.59in (65.8mm)		450-600	13.38in (339.9mm)	2.88in (73.2mm)	

- PLC Overview
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- C-more HMIs
- Other HMI
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- Motors
- Steppers/Servos
- Motor Controls
- Proximity Sensors
- Photo Sensors
- Limit Switches
- Encoders
- Current Sensors
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- Relays/Timers
- Comm.
- TB's & Wiring
- Power
- Circuit Protection
- Enclosures
- Appendix
- Part Index

Edison Fuses – Dual Element Time-Delay Class RK5

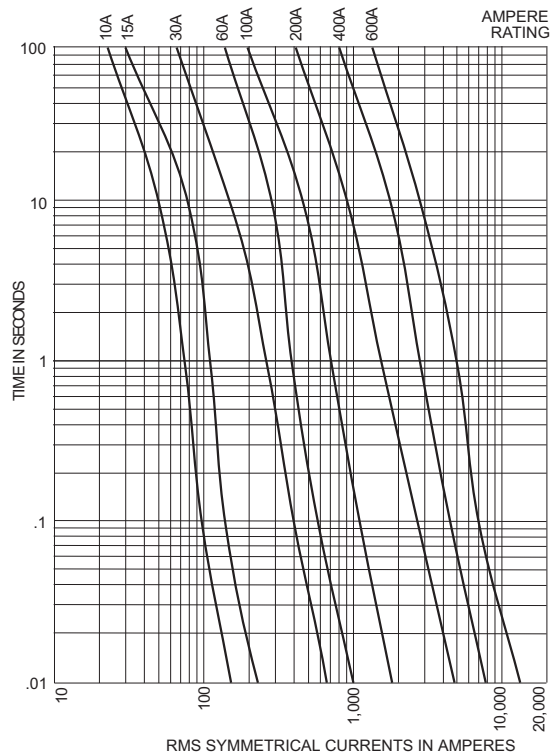
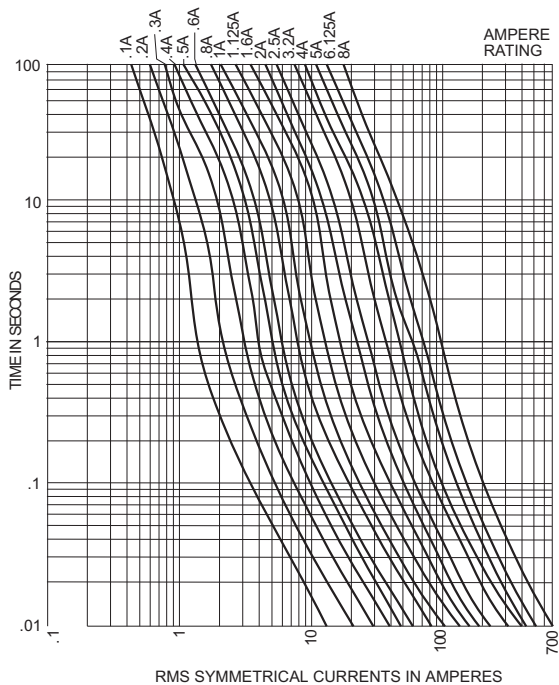
ECNR Curves

AVERAGE TIME/CURRENT CURVES
Cat No. ECNR (AMP) 250 VAC



ECSR Curves

AVERAGE TIME/CURRENT CURVES
Cat No. ECSR (AMP) 600 VAC

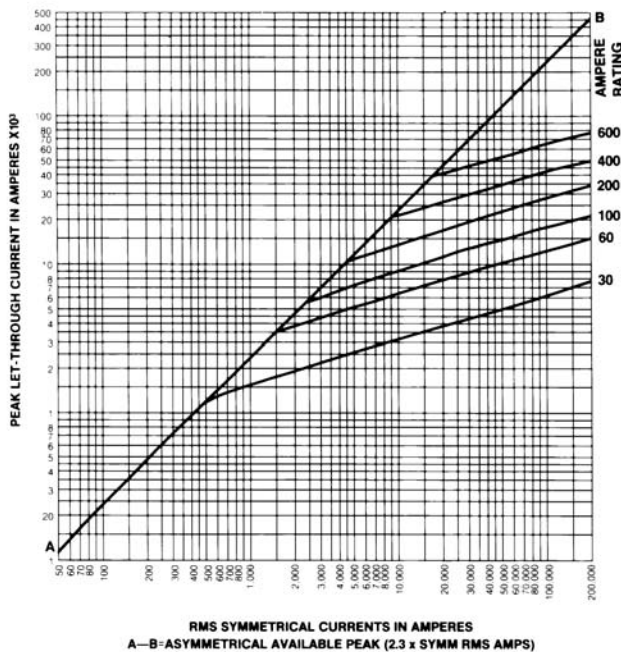


Edison Fuses – Dual Element Time-Delay Class RK5

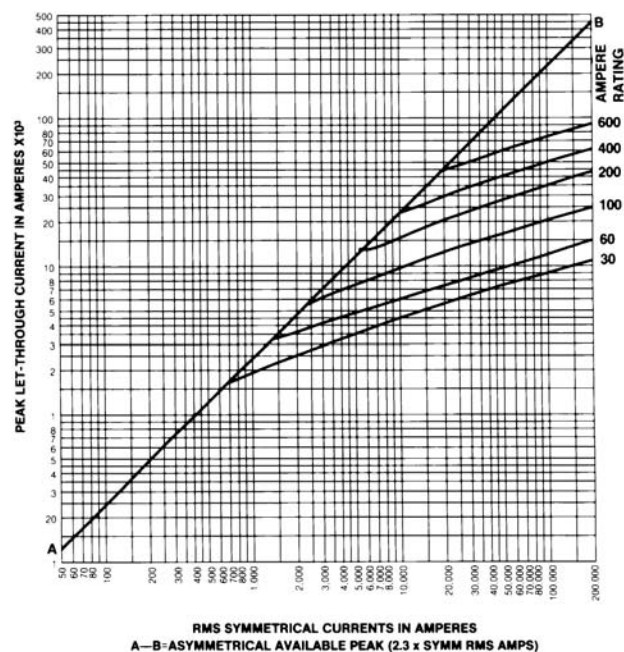
ECNR/ECSR Curves

PEAK LET-THROUGH CURRENT CURVES*

ECNR (250V)



ECSR (600V)



CURRENT LIMITATION TABLES

ECNR (250V)*

Available Fault Current RMS Amps	Apparent Effective Let-Thru Amperes Fuse Ampere Ratings					
	30A	60A	100A	200A	400A	600A
5,000	1,050	2,070	2,820	4,300	5,000	5,000
10,000	1,310	2,570	3,630	5,400	8,700	10,000
15,000	1,490	2,920	4,140	6,200	9,900	15,000
20,000	1,630	3,200	4,500	6,800	10,700	16,100
25,000	1,720	3,420	4,800	7,200	11,400	17,200
30,000	1,840	3,630	5,100	7,700	12,100	18,300
35,000	1,920	3,810	5,400	8,100	12,600	19,200
40,000	2,000	3,980	5,600	8,500	13,100	19,900
50,000	2,140	4,200	6,000	9,100	14,000	21,400
60,000	2,260	4,500	6,400	9,600	14,900	22,600
80,000	2,450	4,900	7,000	10,600	16,000	24,600
100,000	2,620	5,200	7,500	11,400	17,100	26,200
150,000	2,920	5,800	8,300	13,000	19,200	29,200
200,000	3,140	6,200	8,900	14,300	20,800	31,700

ECSR (600V)*

Available Fault Current RMS Amps	Apparent Effective Let-Thru Amperes Fuse Ampere Ratings					
	30A	60A	100A	200A	400A	600A
5,000	1,290	2,070	2,980	5,000	5,000	5,000
10,000	1,640	2,590	3,810	6,500	8,800	10,000
15,000	1,890	2,940	4,400	7,500	10,200	15,000
20,000	2,110	3,250	4,800	8,300	11,400	18,200
25,000	2,260	3,470	5,200	8,900	12,400	19,600
30,000	2,420	3,660	5,500	9,600	13,200	21,100
35,000	2,570	3,850	5,800	10,100	14,100	22,400
40,000	2,670	4,030	6,000	10,500	14,700	23,400
50,000	2,890	4,300	6,500	11,400	16,000	25,300
60,000	3,060	4,500	6,900	12,100	17,200	27,000
80,000	3,360	4,900	7,600	13,400	19,100	29,500
100,000	3,630	5,200	8,200	14,400	20,700	31,700
150,000	4,100	5,800	9,300	16,500	23,900	36,300
200,000	4,400	6,100	10,400	18,300	26,700	39,500

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

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- Software
- C-more HMIs
- Other HMI
- AC Drives
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- Motor Controls
- Proximity Sensors
- Photo Sensors
- Limit Switches
- Encoders
- Current Sensors
- Pushbuttons/Lights
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- Relays/Timers
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- TB's & Wiring
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- Enclosures
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- Part Index

Edison Fuses – Fuse Blocks for Class RK Fuses



R25030-1SR



R60030-1SR

Description

For use with Edison LENRK and ECNR, R250; Edison LESRK and ECSR, R600, Class R fuses

Terminal type

- SR = Screw type, clip with re-inforced spring.
- CR = Box lug type, clip with reinforced spring

Agency Approvals

- UL Listed, UL 512, Guide IZLT, File E14853
- CSA, Certified, C22.2 No.39 Class 6225-01, File 47235

Specifications

Construction: Thermoplastic

UL Flammability: 94V-0

Voltage Ratings:

R250: 250 Volts AC; R600: 600 Volts AC

Ampere Ratings: 0.10 - 600 Amps

Short-circuit current Rating: 200,000 RMS

Symmetrical Amps

R250 Series Fuseblocks (250V)							
Part Number	Amps	Poles	Maximum Wire Size	Fig #	Pcs/Pkg	Wt. (lbs.)	Price
R25030-1SR	0.1 to 30	1	#10-18 Cu	1	1	0.10	<-->
R25030-2SR		2		2		0.25	<-->
R25030-3SR		3		3		0.30	<-->
R25060-1CR	31 to 60	1	#2-14 Cu #2-8 Al	4		0.23	<-->
R25060-2CR		2		5		0.44	<-->
R25060-3CR		3		6		0.45	<-->
R25100-1CR	61 to 100	1	1/0-8 Cu-Al	7		0.60	<-->
R25100-2CR		2		8		1.00	<-->
R25100-3CR		3		9		1.50	<-->
R25200-1CR	101 to 200	1	250MCM-6 Cu-Al	See Table 1 below then refer to Figure #	2.20	<-->	
R25200-3CR		3			5.30	<-->	
R25400-1CR	201 to 400	1	500MCM-4 Cu-Al	See Table 1 below then refer to Figure #	2.90	<-->	
R25400-3CR*		3			1070	<-->	
R25600-1CR	401 to 600	1	(2) 500MCM-4/0 Cu-Al	See Table 1 below then refer to Figure #	5.80	<-->	
R25600-3CR*		3			20.70	<-->	

* Not UL, Please use (3) J60600-1CR to assemble a 3 pole UL Fuseblock

R600 Series Fuseblocks (600V)							
Part Number	Amps	Poles	Maximum Wire Size	Fig #	Pcs/Pkg	Wt. (lbs.)	Price
R60030-1SR	0.1 to 30	1	#10-18 Cu only	13	1	0.24	<-->
R60030-2SR		2		14		0.44	<-->
R60030-3SR		3		15		0.40	<-->
R60060-1CR	31 to 60	1	#2-14 Cu #2-8 Al	16		0.30	<-->
R60060-2CR		2		17		0.60	<-->
R60060-3CR		3		18		0.85	<-->
R60100-1CR	61 to 100	1	1/0-8 Cu-Al	19		1.00	<-->
R60100-2CR		2		20		1.50	<-->
R60100-3CR		3		21		2.30	<-->
R60200-1CR	101 to 200	1	250MCM-6 Cu-Al	See Table 2 below then refer to Figure #	0.50	<-->	
R60200-3CR		3			4.95	<-->	
R60400-1CR	201 to 400	1	500MCM-4 Cu-Al	See Table 2 below then refer to Figure #	4.10	<-->	
R60400-3CR*		3			9.85	<-->	
R60600-1CR	401 to 600	1	(2) 500MCM-4/0 Cu-Al	See Table 2 below then refer to Figure #	7.50	<-->	
R60600-3CR*		3			17.30	<-->	

* Not UL, Please use (3) J60600-1CR to assemble a 3 pole UL Fuseblock

Edison Fuses – R250 Fuse Blocks for Class RK Fuses

Dimensions

inches (mm)

250V, 61 Amp to 100 Amp

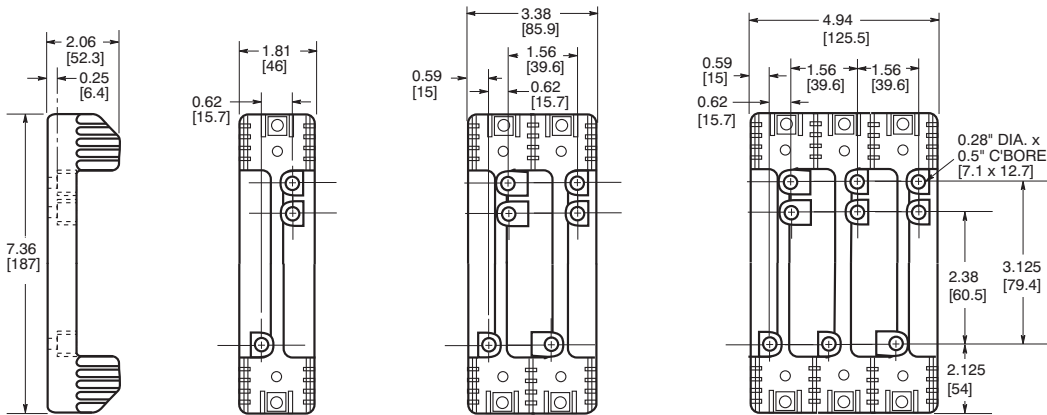


Figure 7

Figure 8

Figure 9

250V, 0.1 Amp to 30 Amp

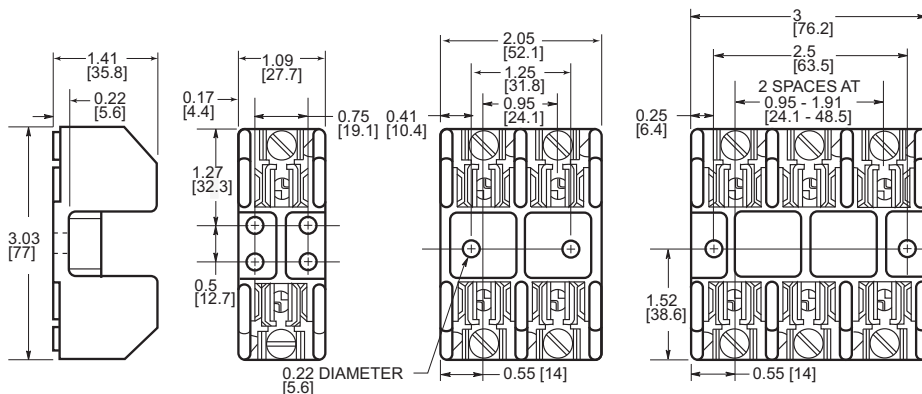


Figure 1

Figure 2

Figure 3

250V, 31 Amp to 60 Amp

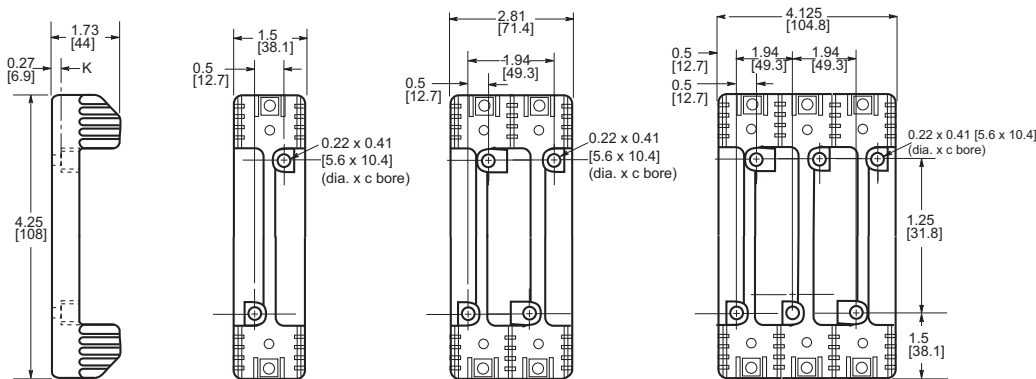


Figure 4

Figure 5

Figure 6

Note: All dimensions shown in inches [mm]

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- Software
- C-more HMIs
- Other HMI
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- Motors
- Steppers/Servos
- Motor Controls
- Proximity Sensors
- Photo Sensors
- Limit Switches
- Encoders
- Current Sensors
- Pushbuttons/Lights
- Process
- Relays/Timers
- Comm.
- TB's & Wiring
- Power
- Circuit Protection
- Enclosures
- Appendix
- Part Index

Edison Fuses – R250 Fuse Blocks for Class RK Fuses

Table 1 (250V)										
	Fig #	A	B	C	D	E	F	G	H	K
R25200-1CR	10	7.15in (181.6mm)	3.15in (80mm)	3.0in (76.2mm)	2.06in (52.3mm)	0.5in (12.7mm)	2.0in (50.8mm)	3.0in (76.2mm)	0.75in (19.05mm)	0.31in (7.9mm)
R25200-3CR	11	Dimensions on Figure								
R25400-1CR	10	9.06in (230.1mm)	4.0in (101.6mm)	3.0in (76.2mm)	3.02in (76.7mm)	0.91in (23.1mm)	1.75in (44.5mm)	3.0in (76.2mm)	1.0in (25.4mm)	0.31in (7.9mm)
R25400-3CR	12	9.06in (230.1mm)	4.0in (101.6mm)	4.0in (101.6mm)	2.5in (63.5mm)	0.82in (20.8mm)	9.25in (235mm)	10.88in (276.4mm)	1.0in (25.4mm)	0.56in (14.2mm)
R25600-1CR	10	11.0in (279.4mm)	4.97in (126.2mm)	3.0in (76.2mm)	4.0in (101.6mm)	1.125in (28.6mm)	1.75in (44.5mm)	4.0in (101.6mm)	1.0in (25.4mm)	0.56in (14.2mm)
R25600-3CR	12	11.0in (279.4mm)	4.97in (126.2mm)	5.0in (127mm)	3.0in (76.2mm)	1.87in (47.5mm)	11.0in (279.4mm)	14.74in (374.4mm)	1.0in (25.4mm)	0.56in (14.2mm)

250V, 101 Amp to 200 Amp

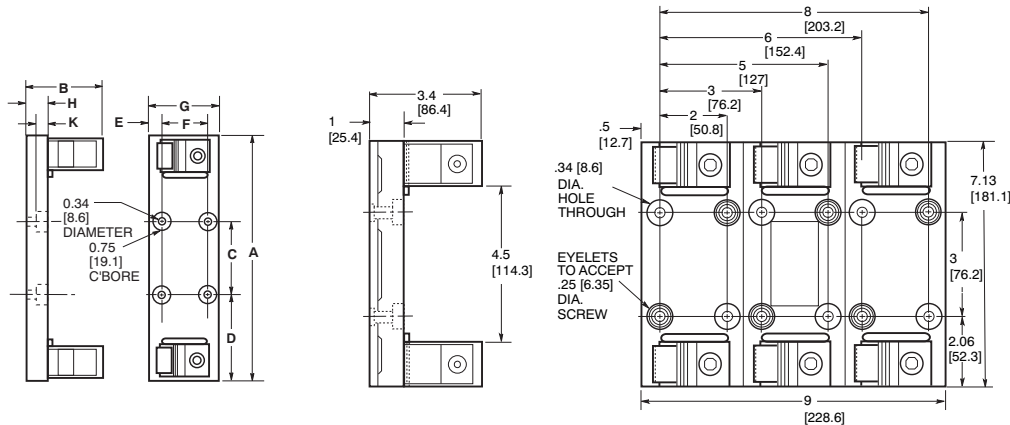


Figure 10

Figure 11

250V, 201 Amp to 600 Amp

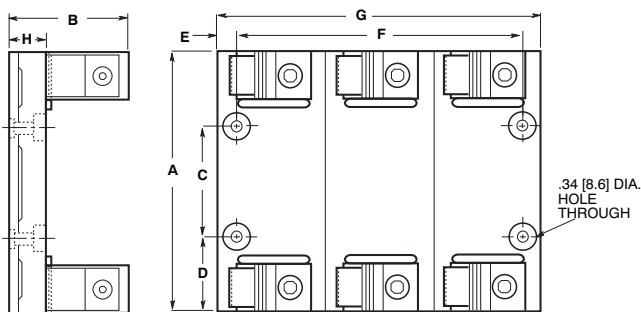


Figure 12

Note: All dimensions shown in inches [mm]

Edison Fuses – R600 Fuse Blocks for Class RK Fuses

Dimensions

inches (mm)

600V, 61 Amp to 100 Amp

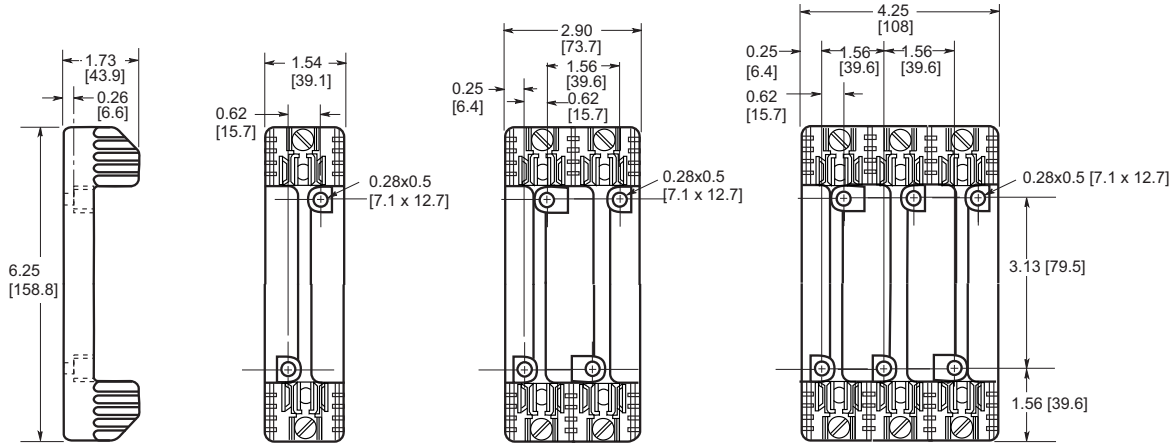


Figure 19

Figure 20

Figure 21

600V, 0.1 Amp to 30 Amp

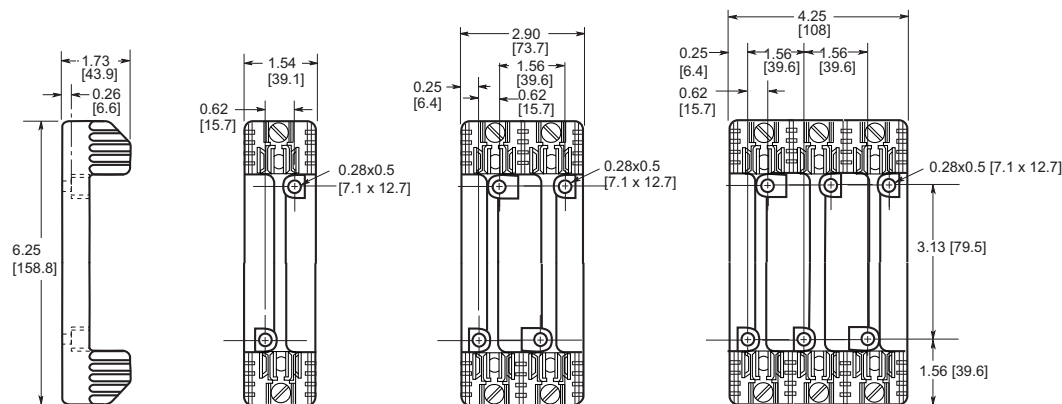


Figure 13

Figure 14

Figure 15

600V, 31 Amp to 60 Amp

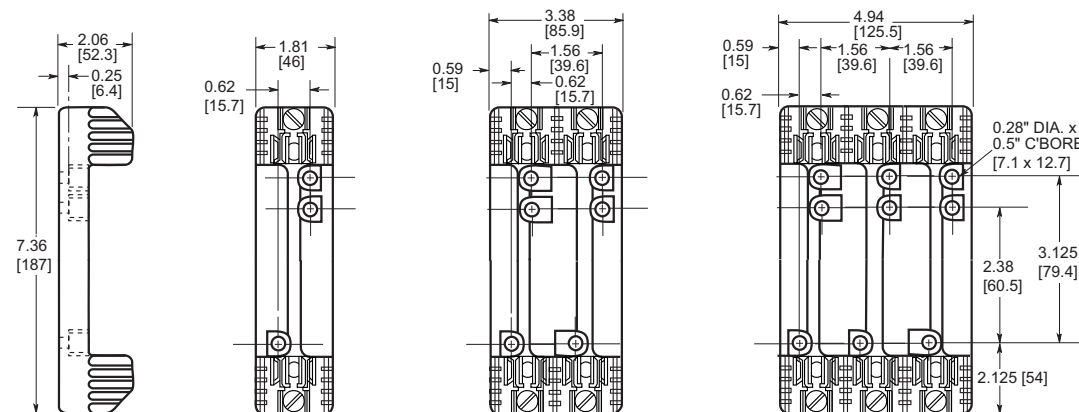


Figure 16

Figure 17

Figure 18

Note: All dimensions shown in inches [mm]

Edison Fuses – R600 Fuse Blocks for Class RK Fuses

Table 2 (600V)										
	Fig #	A	B	C	D	E	F	G	H	K
R60200-1CR	22	9.63in (244.6mm)	3.09in (78.5mm)	3.0in (76.2mm)	3.31in (84.1mm)	0.5in (12.7mm)	2.0in (50.8mm)	3.0in (76.2mm)	0.75in (19.1mm)	0.31in (7.9mm)
R60200-3CR	23	Dimensions on Figure								
R60400-1CR	22	12.0in (305mm)	4.0in (102mm)	3.0in (76.2mm)	4.5in (114.3mm)	0.63in (16mm)	1.75in (44.5mm)	3.0in (76.2mm)	1.0in (25.4mm)	0.56in (14.2mm)
R60400-3CR	24	Dimensions on Figure								
R60600-1CR	22	14.0in (356mm)	4.97in (126.2mm)	3.0in (76.2mm)	5.5in (140mm)	1.125in (28.6mm)	1.75in (44.5mm)	4.0in (102mm)	1.0in (25.4mm)	0.56in (14.2mm)
R60600-3CR	25	Dimensions on Figure								

600V, 101 Amp to 600 Amp

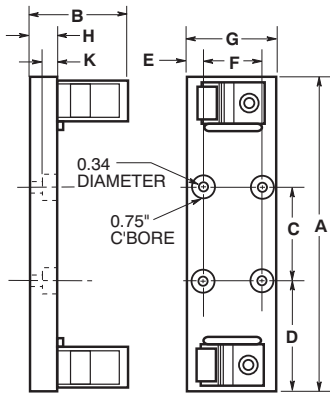


Figure 22

600V, 101 Amp to 200 Amp

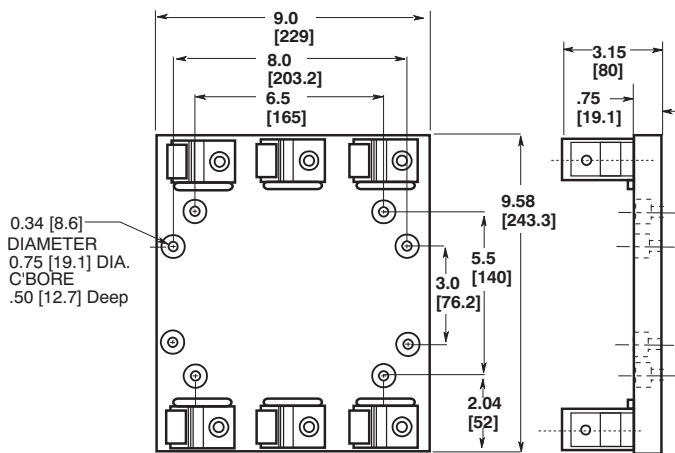


Figure 23

600V, 201 Amp to 400 Amp

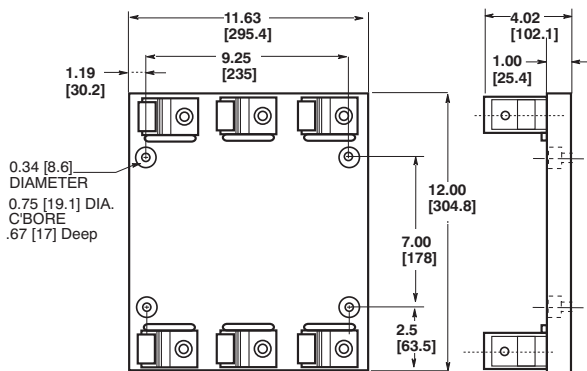


Figure 24

600V, 401 Amp to 600 Amp

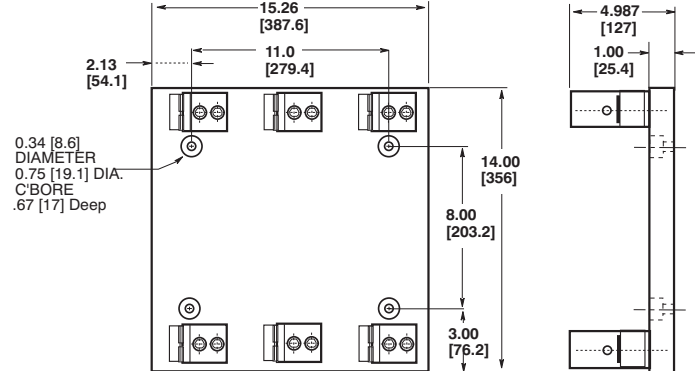


Figure 25

Note: All dimensions shown in inches [mm]

Edison Fuses – Accessories



FP-2

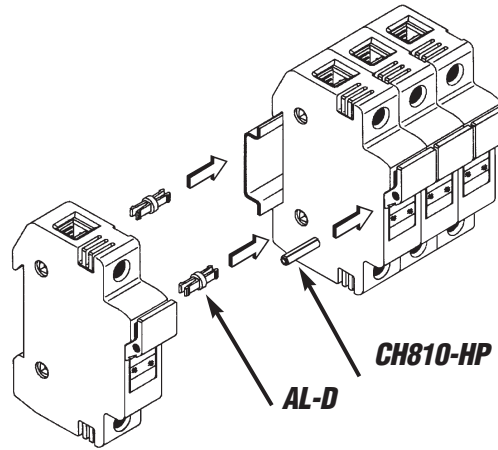


AL-D



CH810-HP

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	<--->
AL-D	Plastic connection link for connecting 2 poles of CHM or CHCC holders. 2 links required per connection.	12	<--->
CH810-HP	Metal handle pins for connecting 2 poles of CHM or CHCC holders. 1 pin required per connection.	12	<--->



Edison Cross Reference Guide

CROSS REFERENCE GUIDE By manufacturers type reference or series number. Ampere ratings must be added for ordering purposes.								
		VOLT	EDISON	BRUSH/ DORMAN	BUSSMANN	FERRAZ GOULD	GEC/CEFCO	LITTELFUSE
UL CLASS CURRENT LIMITING FUSES (CSA CLASS)								
CC (HRCL-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
	Time-Delay RK1 Dual Element	250	LENRK		LPN-RK-SP	A2DR		LLNRK
		600	LENSK		LPS-RK-SP	A6DR		LLSRK
	Time-Delay RK5 Dual Element	250	ECNR		FRN-R	TR		FLNR
		600	ECSR		FRS-R	TRS		FLSR
Time-Delay J Dual Element	600	JDL		LPJ	AJT		JTD	
UL CLASS GENERAL PURPOSE FUSES								
Midget	Fast-Acting	600	EBS	EBS	BBS	SBS		BLS
		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	none		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		none
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			

- PLC Overview
- DL05/06 PLC
- DL105 PLC
- DL205 PLC
- DL305 PLC
- DL405 PLC
- Field I/O
- Software
- C-more HMIs
- Other HMI
- AC Drives
- Motors
- Steppers/Servos
- Motor Controls
- Proximity Sensors
- Photo Sensors
- Limit Switches
- Encoders
- Current Sensors
- Pushbuttons/Lights
- Process
- Relays/Timers
- Comm.
- TB's & Wiring
- Power
- Circuit Protection
- Enclosures
- Appendix
- Part Index

CROSS REFERENCE GUIDE By manufacturers type reference or series number. Ampere ratings must be added for ordering purposes.									
		VOLT	EDISON	BRUSH/ DORMAN	BUSSMANN	FERRAZ	GEC/CEFCO	GOULD	LITTELFUSE
UL CLASS CURRENT LIMITING FUSES (CSA CLASS)									
CC (HRCI-CC)	Time-Delay	600	EDCC	—	LP-CC	ATDR	—	ATDR	CCMR
	Time-Delay	600	HCTR	—	FNQ-R	ATQR	—	ATQR	KLDR
	Fast-Acting	600	HCLR	HCLR	KTK-R	ATMR	CTK-R	ATMR	KLKR
UL CLASS GENERAL PURPOSE FUSES									
Midget	Fast-Acting	600	EBS	EBS	BBS	SBS	—	SBS	BLS
		600	MCL	MCL	KTK	ATM	CTK	ATM	KLK
		250	MOL	MOL	BAF/BAN	OTM	—	OTM	BLF
Midget	Time-Delay	500	MEQ	MEQ	FNQ	ATQ	—	ATQ	FLQ
		250	MEN	MEN	FNM	TRM	—	TRM	FLM
Fuse Puller									
Fuse Puller FP-2			old - 38072 new - FP-2		FP-2				

Specification	781 Series	782 Series	783 Series	784 Series
Coil Voltages	110/120VAC, 220VAC, 24VAC, 24VDC	110/120VAC, 220VAC, 24VAC, 24VDC	110/120VAC, 220VAC, 24VAC, 24VDC	110/120VAC, 220VAC, 24VAC, 24VDC
Configuration	1PDT	2PDT	3PDT	4PDT
Contact Rating	15A	15A	15A	15A
Base Socket	5 pin spade terminal	8 pin spade terminal	11 pin spade terminal	14 pin spade terminal
Agency Approvals	UL Recognized (E43641), CE Approval pending, CSA 97899	UL Recognized (E43641), CE Approval pending, CSA Approval pending	UL Recognized (E70550), CE Approval IEC Std 947-4-1 and 947-5-1, CSA 40787	UL Recognized (E43641), CE Approval pending, CSA Approval pending
Prices starting at	<4>	<5>	<5>	<6>