FLNR/FLSR Class RK5 Fuses

250/600 VAC • Dual-Element, Time-Delay • 1/10 – 600 Amperes



Littelfuse FLNR/FLSR series fuses have been the superior UL Class RK5 dual-element time-delay fuses, and are the most widely used class of fuses. FLNR/FLSR series fuses provide excellent protection for all types of circuits especially those containing motors. However, users and specifiers should consider the significant benefits offered by Indicator fuses. Complete information on these fuses may be found earlier in this section.

Applications

Service entrance switches Switchboard main and feeder switches Motor control center mains and motor branch circuits Individual fused combination motor controllers Distribution panelboards Industrial control panels Protection of fully rated panelboards and loadcenters All general purpose circuits

Safety

- 200,000 A.I.R. Reliable interruption of all overcurrents up to 200,000 amperes.
- Faster acting short-circuit protection than any non-current-limiting mechanical protective device.

Reliability

• Accurate and reliable — Automated, precision manufactured and assembled parts ensure accurate, consistent response to overloads and short-circuits.

Longer Equipment Life

- Reduced damage to equipment caused by heating and magnetic forces of short-circuits.
- Equipment runs cooler with low-resistance dual-element fuses.

Specifications

Voltage Ratings:	AC:	250 Volts (FLNR)	
		600 Volts (FLSR)	
	DC:	125 Volts (FLNR)	
		300 Volts (FLSR)	
Interrupting Ratings:	AC:	200,000 amperes rms symmetrical	
	DC:	20,000 amperes	
Ampere Range:	1/10 -	600 amperes	
Approvals:	Stan	dard 248-12, Class RK5	
	UL Listed (File No: E81895)		
	CSA Certified (File No: LR29862)		
	MSH	A 300 Volt Listing (FLSR)	
	QPL:	Federal Specification WF-1814	

Ampere Ratings

1⁄10	6/10	18/10	4	8	30	80	225
1⁄8	8/10	2	4 ¹ / ₂	9	35	90	250
¹⁵ /100	1	21/4	5	10	40	100	300
² /10	11/8	21/2	56/10	12	45	110	350
1⁄4	11⁄4	28/10	6	15	50	125	400
³ /10 ^{**}	14/10	3	6¼	171⁄2	60	150	450
4/10	11/2	3²/10	7	20	70	175	500
1/2	16/10	31/2	71/2	25	75	200	600

**FLNR only,

Example part number (series & amperage): FLSR100



7809 02

Fuses, Time-Delay, 250Va	c, Class RK5, 0.1 Amp – 30 Amp
Ampere Ratings Dime	ensions = mm
	9.5 $\underbrace{4.0}_{12.7}$ $\underbrace{14.3}_{12.7}$ Example part number (series & amperage): FLNR20
General Specifications FLNR/FLS Voltage Ratings: AC: 250 Volts (F 600 Volts (F DC: 125 Volts (F 300 Volts (F Interrupting Ratings: AC: 200,000 am rms symmet DC: 20,000 amp	FLNR)0.1A - 30AR30A series (Class R) F30A series (Class H+K) RF30A series (Reinforced)FLNR)35A - 60AR60A series (Class R) F60A series (Class R) F60A series (Class H+K) RF60A series (Class H+K) RF60A series (Reinforced)operes70A - 100AR100A series (Class R)
Ampere Range:0.1 – 600 ampereApprovals:Standard 248-12 Class RK5 UL Listed (File No: E81895 CSA Certified (File No: LR2986 MSHA 300 Volt L (FLSR) QPL: Federal Specification WF	110A - 200AR200A series (Class R) F200A series (Class H+K)225A - 400AR400A series (Class R) RF400A series (Class R) RF400A series (Class H+K)5)450A - 600AR600A series (Class R) F600A series (Class R) F600A series (Class H+K)52)5354555657585950515253545556575859505152535455565758595950515253545556575859

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7809 03

Fuses, Time-Delay, 250Vac, Class RK5, 35 Amp – 60 Amp Ampere Ratings Dimensions = mm 35 40 45 50 60 76.2 - 4.8 15.9 20.6 19.1 - 2.4 15.9 Example part number (series & amperage): FLNR60 General Specifications FLNR/FLSR Recommended Fuse Blocks FLNR Voltage Ratings: AC: 250 Volts (FLNR) 0.1A - 30AR30A series (Class R) 600 Volts (FLSR) F30A series (Class H+K) RF30A series (Reinforced) DC: 125 Volts (FLNR) 300 Volts (FLSR) 35A - 60A R60A series (Class R) F60A series (Class H+K) Interrupting Ratings: AC: 200,000 amperes RF60A series (Reinforced) rms symmetrical 70A - 100AR100A series (Class R) DC: 20,000 amperes RF100A series (Class H+K) **Ampere Range:** 0.1 - 600 amperes 110A - 200A R200A series (Class R) **Approvals:** Standard 248-12. F200A series (Class H+K) Class RK5 R400A series (Class R) 225A – 400A UL Listed RF400A series (Class H+K) (File No: E81895) 450A - 600A R600A series (Class R) CSA Certified F600A series (Class H+K) (File No: LR29862) MSHA 300 Volt Listing Refer to Fuse Blocks and Fuse Holders section (FLSR) of this catalog for additional information. QPL: Federal Specification WF-1814

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7809 04

Fuses, Time-D	elay, 250Vac, Cl	ass RK5, 70	Amp – 100 Amp
Ampere Ratings	Dimensions :	= mm	
70 80 90		149.22 ↓ 25.4 -7.1	
		Example part nu (series & amperage)	
General Specificat	tions FLNR/FLSR	Recommende	d Fuse Blocks FLNR
Voltage Ratings:	AC: 250 Volts (FLNR) 600 Volts (FLSR) DC: 125 Volts (FLNR) 300 Volts (FLSR)	0.1A – 30A 35A – 60A	R30A series (Class R) F30A series (Class H+K) RF30A series (Reinforced) R60A series (Class R)
	AC: 200,000 amperes rms symmetrical DC: 20,000 amperes	70A – 100A	F60A series (Class H+K) RF60A series (Reinforced) R100A series (Class R) RF100A series (Class H+K)
Ampere Range: Approvals:	0.1 – 600 amperes Standard 248-12, Class RK5	110A – 200A 225A – 400A	R200A series (Class R) F200A series (Class H+K) R400A series (Class R)
	UL Listed (File No: E81895) CSA Certified (File No: LR29862)	450A – 600A	RF400A series (Class H+K) R600A series (Class R) F600A series (Class H+K)
	MSHA 300 Volt Listing (FLSR) QPL: Federal Specification WF-1814		ocks and Fuse Holders section additional information.

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7809 05

Fuses, Time-D	elay, 250Vac, Cla	ss RK5, 110	Amp – 200 Amp
Ampere Ratings	Dimensions = r	nm	
110 125 150	175 200	38.1	
		Example part nu (series & amperage)	
General Specificat	tions FLNR/FLSR	Recommende	d Fuse Blocks FLNR
Voltage Ratings:	AC: 250 Volts (FLNR) 600 Volts (FLSR) DC: 125 Volts (FLNR)	0.1A – 30A	R30A series (Class R) F30A series (Class H+K) RF30A series (Reinforced)
Interrupting Ratings:	300 Volts (FLSR) AC: 200,000 amperes rms symmetrical	35A – 60A	R60A series (Class R) F60A series (Class H+K) RF60A series (Reinforced)
Ampere Range:	DC: 20,000 amperes 0.1 – 600 amperes	70A – 100A	R100A series (Class R) RF100A series (Class H+K)
Approvals:	Standard 248-12, Class RK5	110A – 200A	R200A series (Class R) F200A series (Class H+K)
	UL Listed (File No: E81895)	225A – 400A	R400A series (Class R) RF400A series (Class H+K)
	(File No: LO 1093) (File No: LR29862)	450A – 600A	R600A series (Class R) F600A series (Class H+K)
	MSHA 300 Volt Listing (FLSR)		ocks and Fuse Holders section additional information.
	QPL: Federal Specification WF-1814		

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Fuses, Time-Delay, 250Vac, Class RK5, 225 Amp – 400 Amp Ampere Ratings Dimensions = mm 225 250 300 400 350 219.1 6.4 23.8◄ 49.2 -53.2 59.5 50.8 15.9 - 10.3 Example part number (series & amperage): FLNR250 General Specifications FLNR/FLSR Recommended Fuse Blocks FLNR Voltage Ratings: AC: 250 Volts (FLNR) 0.1A - 30AR30A series (Class R) 600 Volts (FLSR) F30A series (Class H+K) RF30A series (Reinforced) DC: 125 Volts (FLNR) 300 Volts (FLSR) 35A - 60A R60A series (Class R) F60A series (Class H+K) Interrupting Ratings: AC: 200,000 amperes RF60A series (Reinforced) rms symmetrical 70A - 100AR100A series (Class R) DC: 20,000 amperes RF100A series (Class H+K) **Ampere Range:** 0.1 - 600 amperes 110A - 200A R200A series (Class R) **Approvals:** Standard 248-12. F200A series (Class H+K) Class RK5 R400A series (Class R) 225A – 400A UL Listed RF400A series (Class H+K) (File No: E81895) 450A - 600A R600A series (Class R) CSA Certified F600A series (Class H+K) (File No: LR29862) MSHA 300 Volt Listing Refer to Fuse Blocks and Fuse Holders section (FLSR) of this catalog for additional information. QPL: Federal Specification WF-1814

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Fuses, Time-D	elay, 250Vac, Cla	ss RK5, 450) Amp – 600 Amp
Ampere Ratings	Dimensions = r	nm	
450 500 600		263.56 63.56 63.5 13.5	
		Example part nu (series & amperage)	
General Specificat	tions FLNR/FLSR	Recommende	d Fuse Blocks FLNR
Voltage Ratings:	AC: 250 Volts (FLNR) 600 Volts (FLSR) DC: 125 Volts (FLNR) 300 Volts (FLSR)	0.1A – 30A 35A – 60A	R30A series (Class R) F30A series (Class H+K) RF30A series (Reinforced) R60A series (Class R)
Interrupting Ratings:	AC: 200,000 amperes rms symmetrical		F60A series (Class H+K) RF60A series (Reinforced)
Amporo Bango:	DC: 20,000 amperes 0.1 – 600 amperes	70A – 100A	R100A series (Class R) RF100A series (Class H+K)
Ampere Range: Approvals:	Standard 248-12, Class RK5	110A – 200A	R200A series (Class R) F200A series (Class H+K)
	UL Listed (File No: E81895)	225A – 400A	R400A series (Class R) RF400A series (Class H+K)
	(File No: LR29862)	450A – 600A	R600A series (Class R) F600A series (Class H+K)
	MSHA 300 Volt Listing (FLSR) QPL: Federal Specification WF-1814		ocks and Fuse Holders section ^r additional information.

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Bala Product Information

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Fuses, Time-D	elay, 600Vac, Cla	ss RK5, 0.1 Amp – 30 Amp
Ampere Ratings	Dimensions = r	mm
0.40.50.61.1251.251.41.822.2533.23.5	0.25 0.3 0.8 1 1.5 1.6 2.5 2.8 15.9 4 4.5 6.25 7 10 12 25 30	$\begin{array}{c} & 127.0 \\ \hline & 4.8 \\ \hline & 19.1 \\ \hline & 2.4 \\ \hline & 15.9 \\ \end{array}$ $\begin{array}{c} 20.6 \\ \hline \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ $
General Specificat Voltage Ratings: Interrupting Ratings:	tions FLNR/FLSR AC: 250 Volts (FLNR) 600 Volts (FLSR) DC: 125 Volts (FLNR) 300 Volts (FLSR) AC: 200,000 amperes rms symmetrical	Recommended Fuse Blocks FLSR0.1A – 30A6R30A series (Class R) 6F30A series (Class H+K) R6F30A series (Reinforced)35A – 60A6R60A series (Class R) 6F60A series (Class H+K) R6F60A series (Class H+K) R6F60A series (Reinforced)
Ampere Range: Approvals:	DC: 20,000 amperes 0.1 – 600 amperes Standard 248-12, Class RK5 UL Listed (File No: E81895) CSA Certified (File No: LR29862) MSHA 300 Volt Listing (FLSR) QPL: Federal Specification WF-1814	70A - 100A6R100A series (Class R) R6F100A series (Class H+K)110A - 200A6R200A series (Class R) 6F200A series (Class H+K)225A - 400A6R400A series (Class R) R6F400A series (Class R) R6F400A series (Class R) R6F400A series (Class R) 6F600A series (Class R) 6F600A series (Class H+K)450A - 600A6R600A series (Class R) 6F600A series (Class H+K)Refer to Fuse Blocks and Fuse Holders section of this catalog for additional information.

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7809 09

Fuses, Time-Delay, 600Vac, Class RK5, 35 Amp – 60 Amp

Ampere Ratings		Dimensions = n	nm	
35 40 45	50 60	22.2	► 6.4 139.7 25 ► 2.4 Example part nu (series & amperage)	27.0 15.9 27.0 27.0 27.0 27.0
General Specificat	tions FLNR	P/FLSR	Recommende	ed Fuse Blocks FLSR
Voltage Ratings:	DC: 125 Vo	olts (FLSR)	0.1A – 30A 35A – 60A	6R30A series (Class R) 6F30A series (Class H+K) R6F30A series (Reinforced) 6R60A series (Class R)
Interrupting Ratings:	AC: 200,00	· · · ·		6F60A series (Class H+K) R6F60A series (Reinforced)
Ampere Range:	DC: 20,000 0.1 – 600 ar	•	70A – 100A	6R100A series (Class R) R6F100A series (Class H+K)
Approvals:	Standard 24 Class RK5	-	110A – 200A	6R200A series (Class R) 6F200A series (Class H+K)
	UL Listed (File No: E8	81895)	225A – 400A	6R400A series (Class R) R6F400A series (Class H+K)
	CSA Certifie (File No: LF	ed	450A – 600A	6R600A series (Class R) 6F600A series (Class H+K)
	MSHA 300 \ (FLSR) QPL: Federa Specificatio	al		ocks and Fuse Holders section additional information.

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7809 10

Fuses, Time-D	elay, 600Vac, Cla	ss RK5, 70 /	Amp – 100 Amp
Ampere Ratings	Dimensions = r	nm	
70 75 80	90 100	200.0 <u>2</u> 31.8 7.1	
		Example part nu (series & amperage)	
General Specificat	tions FLNR/FLSR	Recommende	d Fuse Blocks FLSR
Voltage Ratings:	AC: 250 Volts (FLNR) 600 Volts (FLSR) DC: 125 Volts (FLNR)	0.1A – 30A	6R30A series (Class R) 6F30A series (Class H+K) R6F30A series (Reinforced)
Interrupting Ratings:	300 Volts (FLSR) AC: 200,000 amperes rms symmetrical	35A – 60A	6R60A series (Class R) 6F60A series (Class H+K) R6F60A series (Reinforced)
Ampere Range:	DC: 20,000 amperes 0.1 – 600 amperes	70A – 100A	6R100A series (Class R) R6F100A series (Class H+K)
Approvals:	Standard 248-12, Class RK5	110A – 200A	6R200A series (Class R) 6F200A series (Class H+K)
	UL Listed	225A – 400A	6R400A series (Class R) R6F400A series (Class H+K)
	(File No: E81895) CSA Certified (File No: LR29862)	450A – 600A	6R600A series (Class R) 6F600A series (Class H+K)
	MSHA 300 Volt Listing (FLSR) QPL: Federal Specification WF-1814		ocks and Fuse Holders section additional information.

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Fuses, Time-D	elay, 600Vac, Cla	ss RK5, 110	Amp – 200 Amp
Ampere Ratings	Dimensions = r	nm	
110 125 150	175 200	44.5	7.3 + 4.8 + 4.8 + 53.2
		Example part nu (series & amperage)	
General Specificat	tions FLNR/FLSR	Recommende	d Fuse Blocks FLSR
Voltage Ratings:	AC: 250 Volts (FLNR) 600 Volts (FLSR) DC: 125 Volts (FLNR) 300 Volts (FLSR)	0.1A – 30A 35A – 60A	6R30A series (Class R) 6F30A series (Class H+K) R6F30A series (Reinforced) 6R60A series (Class R)
Interrupting Ratings:	AC: 200,000 amperes rms symmetrical		6F60A series (Class H+K) R6F60A series (Reinforced)
Ampere Range:	DC: 20,000 amperes 0.1 – 600 amperes	70A – 100A	6R100A series (Class R) R6F100A series (Class H+K)
Approvals:	Standard 248-12, Class RK5	110A – 200A	6R200A series (Class R) 6F200A series (Class H+K)
	UL Listed (File No: E81895)	225A – 400A	6R400A series (Class R) R6F400A series (Class H+K)
	(File No: LR29862)	450A – 600A	6R600A series (Class R) 6F600A series (Class H+K)
	MSHA 300 Volt Listing (FLSR) QPL: Federal		ocks and Fuse Holders section additional information.
	Specification WF-1814		

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Fuses, Time-D	elay, 600Vac, Cla	ss RK5, 225	5 Amp – 400 Amp
Ampere Ratings	350 400	nm 295.3	6.4 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
		(series & amperage)	: FLSR400
General Specificat	tions FLNR/FLSR	Recommende	d Fuse Blocks FLSR
Voltage Ratings:	AC: 250 Volts (FLNR) 600 Volts (FLSR) DC: 125 Volts (FLNR)	0.1A – 30A	6R30A series (Class R) 6F30A series (Class H+K) R6F30A series (Reinforced)
Interrupting Ratings:	300 Volts (FLSR) AC: 200,000 amperes rms symmetrical	35A – 60A	6R60A series (Class R) 6F60A series (Class H+K) R6F60A series (Reinforced)
Ampere Range:	DC: 20,000 amperes 0.1 – 600 amperes	70A – 100A	6R100A series (Class R) R6F100A series (Class H+K)
Approvals:	Standard 248-12, Class RK5	110A – 200A	6R200A series (Class R) 6F200A series (Class H+K)
	UL Listed (File No: E81895)	225A – 400A	6R400A series (Class R) R6F400A series (Class H+K)
	(File No: LR29862)	450A – 600A	6R600A series (Class R) 6F600A series (Class H+K)
	MSHA 300 Volt Listing (FLSR) QPL: Federal Specification WF-1814		ocks and Fuse Holders section additional information.

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600\/00

7809 13

600 A

Fuses, lime-D	elay, 600Vac, Cla	ass RK5, 450) Amp – 600 Amp
Ampere Ratings	Dimensions =	mm	
450 500 600		339.76 ↓ 76.2 •13.5 Example part nu (series & amperage)	
General Specificat	tions FLNR/FLSR	Recommende	ed Fuse Blocks FLSR
Voltage Ratings:	AC: 250 Volts (FLNR) 600 Volts (FLSR) DC: 125 Volts (FLNR) 300 Volts (FLSR)	0.1A – 30A 35A – 60A	6R30A series (Class R) 6F30A series (Class H+K) R6F30A series (Reinforced) 6R60A series (Class R)
Interrupting Ratings:	AC: 200,000 amperes rms symmetrical		6F60A series (Class H+K) R6F60A series (Reinforced)
Ampere Range:	DC: 20,000 amperes 0.1 – 600 amperes	70A – 100A	6R100A series (Class R) R6F100A series (Class H+K)
Approvals:	Standard 248-12, Class RK5	110A – 200A	6R200A series (Class R) 6F200A series (Class H+K)
	UL Listed (File No: E81895)	225A – 400A	6R400A series (Class R) R6F400A series (Class H+K)
	(File No: L01095) (File No: LR29862)	450A – 600A	6R600A series (Class R) 6F600A series (Class H+K)
	MSHA 300 Volt Listing (FLSR) QPL: Federal Specification WF-1814		ocks and Fuse Holders section r additional information.

Class DKE 150

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