POWR-*SPEED*® Fuse
PSR SERIES HIGH-SPEED SQUARE BODY

Semiconductor Fuses • Bolted Blade • 40 A—2000 A

Description

Littelfuse PSR series high-speed square body fuses are specially designed for protection of power semiconductor devices such as diodes, triacs, IGBTs, SCRs, MOSFETs, and other solid-state devices that are typically designed into power conversion and power conditioning equipment. Variable frequency drives, inverters, UPS, rectifiers, and soft-starters are examples of typical equipment designed with sensitive power semiconductor devices that cannot withstand any line surge or overcurrent conditions and require high-speed protection.

Littelfuse POWR-*SPEED*® PSR series products offer optimized circuit protection at the extremely fast speed required to protect modern day power conversion devices. Available in bolted blade style termination (typical in North American market) with visual blown fuse indication standard on all fuses and optional micro-switch for external indication.

Features/Benefits

- Best in class dc performance
- Extremely current limiting
- Superior cycling capability
- Global certification cURus, IEC
- Visual and optional microswitch fuse blown indication
- Low watt-loss design
- Compliance with US and Canadian requirements
- Class aR performance according to IEC60269-4

Applications

- Power conversion devices (UPS, inverter, rectifiers, drives)
- Dc systems (dc common bus, dc injection braking)
- Battery protection application (energy storage systems)
- Electric vehicle charging stations
- Heaters and power supplies

Specifications

Voltage Rating	Ac: 550 V–1300 V Dc: 480 V–1000 V
Amperage Rating	40 A - 2000 A
Interrupting Rating	Ac: 100 kA–200 kA Dc: 150 kA
Time Constant	10 ms
Microswitch	Yes
Mounting	Bolted blade style
Material	Body: ceramic Contacts: plated copper
Approvals	UL 248-13 Recognized (File: E71611) cURus (File: E71611) IEC 60269-4 (Class aR)
Environmental	RoHS Compliant, REACH
Operating Temperature	-55 °C to +125 °C
Storage Temperature	Up to +35 °C with relative humidity <65 %
Country of Origin	Mexico

Ordering Part Number

PSR 030 US 0550 Z

Series

Case Size
30, 31, 32, 33, 70, 71, 72, 73

Termination
US = bolted short blade
UL = bolted long blade

Amperage

Packing Quantity
X = (1 pc/box)
Z = (3 pcs/box)

Catalog Number

SERIES	CASE SIZE	TERMINATION	AMPERAGE	CATALOG NUMBER	ORDERING PART NUMBER
PSR	030	US	0550	PSR030US0550	PSR030US0550Z

Recommended Accessories

Microswitch: MS3H1000C (Case Size 30 to 33)
MS7H1500C (Case Size 70 to 73)

Web Resources

Download technical documents: **Littelfuse.com/psr**

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Electrical Characteristics

CASE SIZE	CATALOG NUMBER		AMPERAGE RATING (A)	VOLTAGE RATING (V)			INTERRUPTING RATING		MELTING (PRE-ARC) I^2T (A^2S)	TOTAL CLEARING I^2T (A^2S) AT RATED VOLTAGE		WATT LOSS AT 100 % RATED CURRENT (W)	AGENCY CERTIFICATION
	BOLTED SHORT BLADE (US)	BOLTED LONG BLADE (UL)		AC		DC	AC	DC		AC	DC		cURus
				IEC	UL								
30	PSR030US0040	PSR030UL0040	40	690	700	600	200 kA	150 kA	76	280	260	13	•
	PSR030US0050	PSR030UL0050	50	690	700	600	200 kA	150 kA	110	598	384	16	•
	PSR030US0063	PSR030UL0063	63	690	700	600	200 kA	150 kA	176	1023	640	20	•
	PSR030US0080	PSR030UL0080	80	690	700	600	200 kA	150 kA	304	1728	1252	24	•
	PSR030US0100	PSR030UL0100	100	690	700	600	200 kA	150 kA	437	2835	1575	28	•
	PSR030US0125	PSR030UL0125	125	690	700	600	200 kA	150 kA	707	4684	2783	37	•
	PSR030US0160	PSR030UL0160	160	690	700	600	200 kA	150 kA	1359	9114	5507	40	•
	PSR030US0200	PSR030UL0200	200	690	700	600	200 kA	150 kA	3012	15169	14700	40	•
	PSR030US0250	PSR030UL0250	250	690	700	600	200 kA	150 kA	4668	29952	20833	52	•
	PSR030US0315	PSR030UL0315	315	690	700	600	200 kA	150 kA	7131	61830	31600	64	•
	PSR030US0350	PSR030UL0350	350	690	700	600	200 kA	150 kA	12007	85320	49273	66	•
	PSR030US0400	PSR030UL0400	400	690	700	600	200 kA	150 kA	16209	114750	63367	78	•
	PSR030US0450	PSR030UL0450	450	690	700	600	200 kA	150 kA	23133	160110	93533	80	•
	PSR030US0500	PSR030UL0500	500	690	700	600	200 kA	150 kA	31429	225180	137333	84	•
	PSR030US0550	PSR030UL0550	550	690	700	600	200 kA	150 kA	44323	268920	145400	85	•
31	PSR031US0200	PSR031UL0200	200	690	700	600	200 kA	150 kA	1965	17334	16188	49	•
	PSR031US0250	PSR031UL0250	250	690	700	600	200 kA	150 kA	3789	35343	21080	52	•
	PSR031US0315	PSR031UL0315	315	690	700	600	200 kA	150 kA	6862	59130	30694	63	•
	PSR031US0350	PSR031UL0350	350	690	700	600	200 kA	150 kA	9523	76140	40996	67	•
	PSR031US0400	PSR031UL0400	400	690	700	600	200 kA	150 kA	14770	124335	64359	70	•
	PSR031US0450	PSR031UL0450	450	690	700	600	200 kA	150 kA	22457	178200	97444	70	•
	PSR031US0500	PSR031UL0500	500	690	700	600	200 kA	150 kA	29751	251505	125935	74	•
	PSR031US0550	PSR031UL0550	550	690	700	600	200 kA	150 kA	42056	289170	171845	86	•
	PSR031US0630	PSR031UL0630	630	690	700	600	200 kA	150 kA	73513	507465	276315	87	•
	PSR031US0700	PSR031UL0700	700	690	700	600	200 kA	150 kA	98187	601425	337260	93	•
	PSR031US0800	PSR031UL0800	800	690	700	600	200 kA	150 kA	137208	848880	502815	107	•
32	PSR032US0400	PSR032UL0400	400	690	700	600	200 kA	150 kA	11104	79650	44533	87	•
	PSR032US0450	PSR032UL0450	450	690	700	600	200 kA	150 kA	15535	116100	65463	88	•
	PSR032US0500	PSR032UL0500	500	690	700	600	200 kA	150 kA	21573	161460	88277	94	•
	PSR032US0550	PSR032UL0550	550	690	700	600	200 kA	150 kA	26327	177660	107960	106	•
	PSR032US0630	PSR032UL0630	630	690	700	600	200 kA	150 kA	34790	234900	156963	114	•
	PSR032US0700	PSR032UL0700	700	690	700	600	200 kA	150 kA	51191	291870	209287	127	•
	PSR032US0800	PSR032UL0800	800	690	700	600	200 kA	150 kA	60125	472770	249000	152	•
	PSR032US0900	PSR032UL0900	900	690	700	600	200 kA	150 kA	107785	764100	404000	145	•
	PSR032US1000	PSR032UL1000	1000	690	700	600	200 kA	150 kA	190102	933120	672333	149	•
	PSR032US1100	PSR032UL1100	1100	690	700	600	200 kA	150 kA	225379	1247400	744000	161	•
33	PSR033US0450	PSR033UL0450	450	690	700	600	200 kA	150 kA	13600	106380	58947	107	•
	PSR033US0500	PSR033UL0500	500	690	700	600	200 kA	150 kA	16434	140400	77846	107	•
	PSR033US0550	PSR033UL0550	550	690	700	600	200 kA	150 kA	23314	187650	100461	111	•
	PSR033US0630	PSR033UL0630	630	690	700	600	200 kA	150 kA	38727	285930	142437	120	•
	PSR033US0700	PSR033UL0700	700	690	700	600	200 kA	150 kA	56763	392580	209863	116	•
	PSR033US0800	PSR033UL0800	800	690	700	600	200 kA	150 kA	84691	575505	348500	122	•
	PSR033US0900	PSR033UL0900	900	690	700	600	200 kA	150 kA	122619	740340	451177	138	•
	PSR033US1000	PSR033UL1000	1000	690	700	600	200 kA	150 kA	222350	1170450	787750	138	•
	PSR033US1100	PSR033UL1100	1100	690	700	600	200 kA	150 kA	310824	1568700	821400	138	•
	PSR033US1250	PSR033UL1250	1250	690	700	500	200 kA	150 kA	476902	2403000	1674333	145	•
	PSR033US1400	PSR033UL1400	1400	690	700	500	200 kA	150 kA	583552	2920050	1979750	173	•
	PSR033US1500	PSR033UL1500	1500	600	650	500	200 kA	150 kA	674538	2433200	1996733	182	•
	PSR033US1600	PSR033UL1600	1600	600	650	500	200 kA	150 kA	779948	2942800	2301633	208	•
	PSR033US1800	PSR033UL1800	1800	600	650	500	200 kA	150 kA	952196	3785040	2724180	260	•
	PSR033US2000	PSR033UL2000	2000	550	600	480	200 kA	150 kA	1234315	4131600	3755180	264	•

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