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

Semiconductor Fuses • DIN 43653 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 DIN43653 blade style termination 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, CCC, 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	DIN 43653 blade style
Material	Body: ceramic Contacts: plated copper
Approvals	UL 248-13 Recognized (File: E71611) C-UR-US (File: E71611) IEC 60269-4 (Class aR) CCC
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 DS 0550 Z

- **Series**
- **Case Size**: 30, 31, 32, 33, 70, 71, 72, 73
- **Termination**: DS = DIN 80 mm fixing; DL = DIN 110 mm fixing
- **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	DS	0550	PSR030DS0550	PSR030DS0550Z

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	
	DIN 80 MM FIXING (DS)	DIN 110 MM FIXING (DL)		AC		DC	AC	DC		AC	DC		cURus	CCC
				IEC	UL									
30	PSR030DS0040	PSR030DL0040	40	690	700	600	200 kA	150 kA	76	280	260	13	•	•
	PSR030DS0050	PSR030DL0050	50	690	700	600	200 kA	150 kA	110	598	384	16	•	•
	PSR030DS0063	PSR030DL0063	63	690	700	600	200 kA	150 kA	176	1023	640	20	•	•
	PSR030DS0080	PSR030DL0080	80	690	700	600	200 kA	150 kA	304	1728	1252	24	•	•
	PSR030DS0100	PSR030DL0100	100	690	700	600	200 kA	150 kA	437	2835	1575	28	•	•
	PSR030DS0125	PSR030DL0125	125	690	700	600	200 kA	150 kA	707	4684	2783	37	•	•
	PSR030DS0160	PSR030DL0160	160	690	700	600	200 kA	150 kA	1359	9114	5507	40	•	•
	PSR030DS0200	PSR030DL0200	200	690	700	600	200 kA	150 kA	3012	15169	14700	40	•	•
	PSR030DS0250	PSR030DL0250	250	690	700	600	200 kA	150 kA	4668	29952	20833	52	•	•
	PSR030DS0315	PSR030DL0315	315	690	700	600	200 kA	150 kA	7131	61830	31600	64	•	•
	PSR030DS0350	PSR030DL0350	350	690	700	600	200 kA	150 kA	12007	85320	49273	66	•	•
	PSR030DS0400	PSR030DL0400	400	690	700	600	200 kA	150 kA	16209	114750	63367	78	•	•
	PSR030DS0450	PSR030DL0450	450	690	700	600	200 kA	150 kA	23133	160110	93533	80	•	•
	PSR030DS0500	PSR030DL0500	500	690	700	600	200 kA	150 kA	31429	225180	137333	84	•	•
	PSR030DS0550	PSR030DL0550	550	690	700	600	200 kA	150 kA	44323	268920	145400	85	•	•
31	PSR031DS0200	PSR031DL0200	200	690	700	600	200 kA	150 kA	1965	17334	16188	49	•	•
	PSR031DS0250	PSR031DL0250	250	690	700	600	200 kA	150 kA	3789	35343	21080	52	•	•
	PSR031DS0315	PSR031DL0315	315	690	700	600	200 kA	150 kA	6862	59130	30694	63	•	•
	PSR031DS0350	PSR031DL0350	350	690	700	600	200 kA	150 kA	9523	76140	40996	67	•	•
	PSR031DS0400	PSR031DL0400	400	690	700	600	200 kA	150 kA	14770	124335	64359	70	•	•
	PSR031DS0450	PSR031DL0450	450	690	700	600	200 kA	150 kA	22457	178200	97444	70	•	•
	PSR031DS0500	PSR031DL0500	500	690	700	600	200 kA	150 kA	29751	251505	125935	74	•	•
	PSR031DS0550	PSR031DL0550	550	690	700	600	200 kA	150 kA	42056	289170	171845	86	•	•
	PSR031DS0630	PSR031DL0630	630	690	700	600	200 kA	150 kA	73513	507465	276315	87	•	•
	PSR031DS0700	PSR031DL0700	700	690	700	600	200 kA	150 kA	98187	601425	337260	93	•	•
	PSR031DS0800	PSR031DL0800	800	690	700	600	200 kA	150 kA	137208	848880	502815	107	•	•
32	PSR032DS0400	PSR032DL0400	400	690	700	600	200 kA	150 kA	11104	79650	44533	87	•	•
	PSR032DS0450	PSR032DL0450	450	690	700	600	200 kA	150 kA	15535	116100	65463	88	•	•
	PSR032DS0500	PSR032DL0500	500	690	700	600	200 kA	150 kA	21573	161460	88277	94	•	•
	PSR032DS0550	PSR032DL0550	550	690	700	600	200 kA	150 kA	26327	177660	107960	106	•	•
	PSR032DS0630	PSR032DL0630	630	690	700	600	200 kA	150 kA	34790	234900	156963	114	•	•
	PSR032DS0700	PSR032DL0700	700	690	700	600	200 kA	150 kA	51191	291870	209287	127	•	•
	PSR032DS0800	PSR032DL0800	800	690	700	600	200 kA	150 kA	60125	472770	249000	152	•	•
	PSR032DS0900	PSR032DL0900	900	690	700	600	200 kA	150 kA	107785	764100	404000	145	•	•
	PSR032DS1000	PSR032DL1000	1000	690	700	600	200 kA	150 kA	190102	933120	672333	149	•	•
	PSR032DS1100	PSR032DL1100	1100	690	700	600	200 kA	150 kA	225379	1247400	744000	161	•	•
33	PSR033DS0450	PSR033DL0450	450	690	700	600	200 kA	150 kA	13600	106380	58947	107	•	•
	PSR033DS0500	PSR033DL0500	500	690	700	600	200 kA	150 kA	16434	140400	77846	107	•	•
	PSR033DS0550	PSR033DL0550	550	690	700	600	200 kA	150 kA	23314	187650	100461	111	•	•
	PSR033DS0630	PSR033DL0630	630	690	700	600	200 kA	150 kA	38727	285930	142437	120	•	•
	PSR033DS0700	PSR033DL0700	700	690	700	600	200 kA	150 kA	56763	392580	209863	116	•	•
	PSR033DS0800	PSR033DL0800	800	690	700	600	200 kA	150 kA	84691	575505	348500	122	•	•
	PSR033DS0900	PSR033DL0900	900	690	700	600	200 kA	150 kA	122619	740340	451177	138	•	•
	PSR033DS1000	PSR033DL1000	1000	690	700	600	200 kA	150 kA	222350	1170450	787750	138	•	•
	PSR033DS1100	PSR033DL1100	1100	690	700	600	200 kA	150 kA	310824	1568700	821400	138	•	•
	PSR033DS1250	PSR033DL1250	1250	690	700	500	200 kA	150 kA	476902	2403000	1674333	145	•	•
	PSR033DS1400	PSR033DL1400	1400	690	700	500	200 kA	150 kA	583552	2920050	1979750	173	•	•
	PSR033DS1500	PSR033DL1500	1500	600	650	500	200 kA	150 kA	674538	2433200	1996733	182	•	•
	PSR033DS1600	PSR033DL1600	1600	600	650	500	200 kA	150 kA	779948	2942800	2301633	208	•	•
	PSR033DS1800	PSR033DL1800	1800	600	650	500	200 kA	150 kA	952196	3785040	2724180	260	•	•
	PSR033DS2000	PSR033DL2000	2000	550	600	480	200 kA	150 kA	1234315	4131600	3755180	264	•	•

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