A100P

SEMICONDUCTOR PROTECTION FUSES

A100P Amp-trap® Form 101 Semiconductor Protection fuses are rated 1000V, extending the range of protection for UPS systems, AC and DC drives, reduced voltage motor starters and similar applications where lower I^2t and superior reliability are needed. With ratings from 15 through 1000 amperes, a wide range of high voltage applications can be served.

Features/Benefits

- **Low I^2t** minimizes damage to protected components on short circuit
- **Controlled arc voltage** reduces stress to circuit components during fuse clearing
- **Wide range of ampere ratings**

Ratings

- **AC:** 15-30A1000VAC, 100kA I.R.
  35-1000A
  1000VAC, 100kA I.R.
- **DC:** 15-1000A
  750VDC, 100kA I.R.

Approvals

- UL Recognized Component
- AC: UL Guide No. JFHR2 (60-800A)
- DC: Ferraz Shawmut Certified

HIGHLIGHTS:

- Fast Acting
- Current Limiting
- Low I^2t
- Optional Trigger Indicator

APPLICATIONS:

- Protection of UPS systems AC/DC drives, reduced voltage motor starters and other 1000V or less semiconductor devices

Catalog Numbering System

A	100	P	80 - 4	TI

- **Amp-trap® Fuse** — A
- **Rated Volts - 1000** — 100
- **Style** — P
- **Amperes*** — 80
- **Mounting Types***
  Ferrule
  Blades, bolt-in — 1, 4
- **Integral Blown-Fuse Indicator**
  Trigger Indicator — TI

* For ampere ratings and types not listed, consult the factory.

Single Pole Fuse Blocks for A100P Fuses

FUSE AMPERE RATING	FUSE BLOCK CATALOG NUMBER
35-100	P266G
125-400	P266L

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Standard Fuse Ampere Ratings, Catalog Numbers

AMPERE RATING	CATALOG NUMBER	OUTLINE FIG.	AMPERE RATING	CATALOG NUMBER	OUTLINE FIG.	AMPERE RATING	CATALOG NUMBER	OUTLINE FIG.
15	A100P15-1	1	100	A100P100-4	2	350	A100P350-4TI	2
20	A100P20-1	1	100	A100P100-4TI	2	400	A100P400-4	2
25	A100P25-1	1	125	A100P125-4	2	400	A100P400-4TI	2
30	A100P30-1	1	125	A100P125-4TI	2	500	A100P500-4	3
35	A100P35-4	2	150	A100P150-4	2	500	A100P500-4TI	3
40	A100P40-4	2	150	A100P150-4TI	2	600	A100P600-4	3
50	A100P50-4	2	200	A100P200-4	2	600	A100P600-4TI	3
50	A100P50-4TI	2	200	A100P200-4TI	2	650	A100P650-4	4
60	A100P60-4	2	225	A100P225-4	2	700	A100P700-4	4
60	A100P60-4TI	2	250	A100P250-4	2	800	A100P800-4	4
70	A100P70-4TI	2	300	A100P300-4	2	800	A100P800-4TI	4
80	A100P80-4	2	300	A100P300-4TI	2	1000	A100P1000-4	5
80	A100P80-4TI	2	350	A100P350-4	2			

For ampere ratings and styles not listed, call Technical Services.

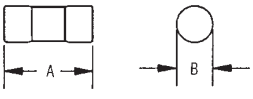

Figure 1

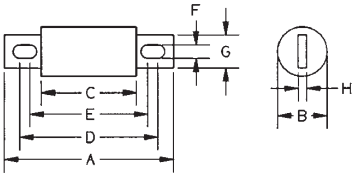

Figure 2

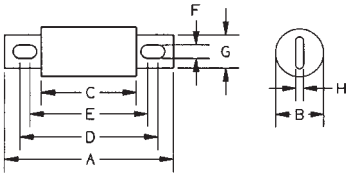

Figure 3

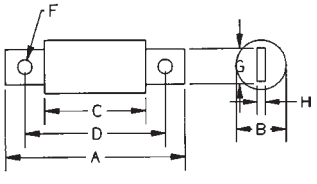

Figure 4

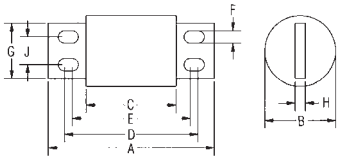

Figure 5

Dimensions

OUTLINE REF.	MOUNTING TYPE	FIG.	DIMENSIONS - INCHES (mm)								
			A	B	C	D	E	F	G	H	J
A100P15 to 30	1	1	2.63 (66.8)	0.56 (14.2)	- -	- -	- -	- -	- -	- -	- -
A100P35 to 60	4, 4TI	2	5.00 (127)	1.00 (25.4)	3.50 (173)	4.31 (109)	4.19 (106)	0.31 (7.9)	0.75 (19.1)	0.13 (3.3)	-
A100P65 to 100	4, 4TI	2	5.00 (127)	1.22 (31.0)	3.50 (173)	4.31 (109)	4.19 (106)	0.31 (7.9)	1.00 (25.4)	0.19 (4.8)	-
A100P125 to 200	4, 4TI	2	5.72 (145)	2.00 (38.1)	3.47 (88.1)	4.78 (121)	4.16 (106)	0.41 (10.4)	1.00 (25.4)	0.25 (6.4)	-
A100P225 to 400	4, 4TI	2	5.72 (145)	2.00 (50.8)	3.47 (88.1)	4.78 (121)	4.16 (106)	0.41 (10.4)	1.50 (25.4)	0.25 (6.4)	-
A100P500 to 600	4, 4TI	3	7.72 (196)	2.50 (63.5)	3.47 (88.1)	5.88 (149)	5.56 (141)	0.53 (13.5)	2.00 (50.8)	0.38 (9.7)	-
A100P650 to 800	4, 4TI	4	7.44 (189)	2.88 (73.2)	3.94 (100)	5.94 (151)	- -	0.63 (16.0)	2.00 (50.8)	0.38 (9.7)	- -
A100P1000	4	5	8.22 (209)	3.50 (88.9)	4.47 (114)	6.59 (167)	5.84 (148)	0.63 (16.0)	2.75 (69.9)	0.50 (12.7)	1.38 (35.1)

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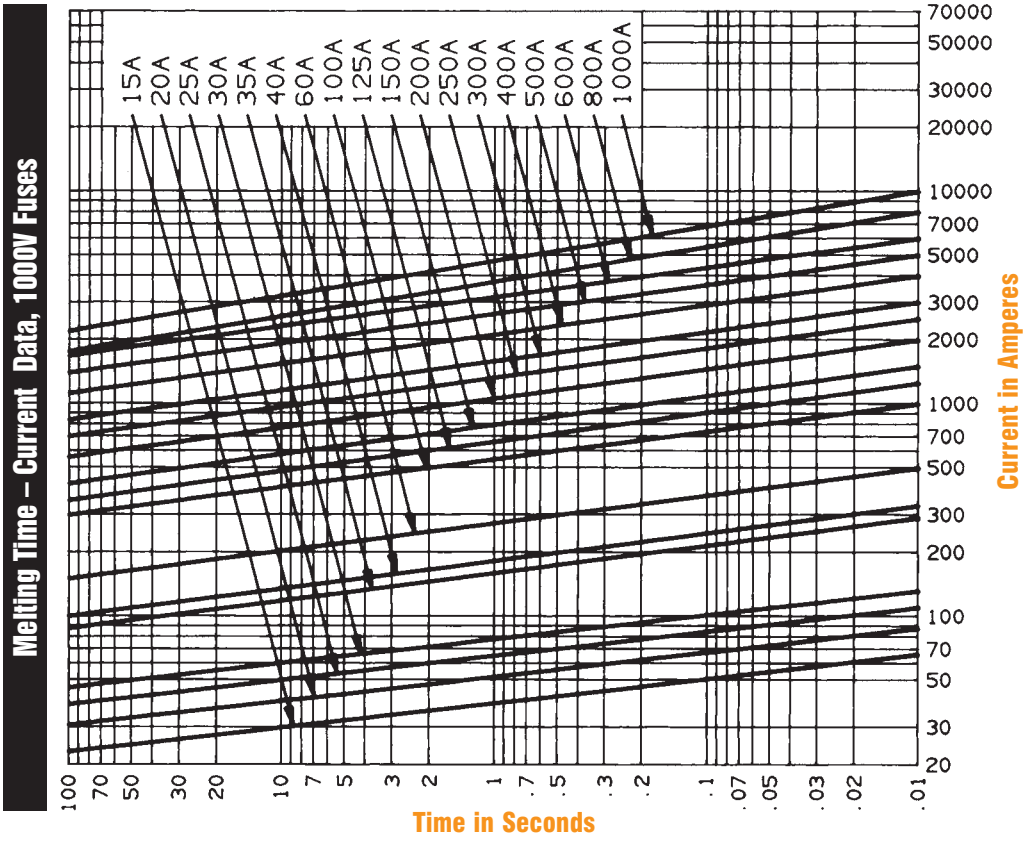
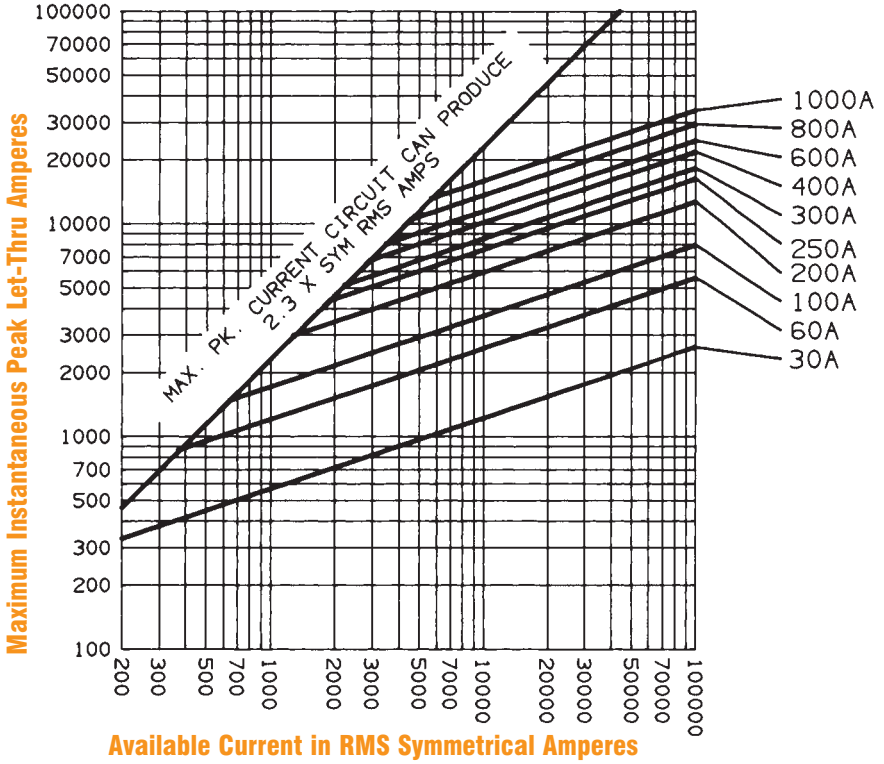
A100P15 to 1000



Peak Let-Thru Current Data – A100P30 to 1000, 1000 Volts AC



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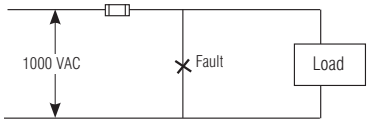
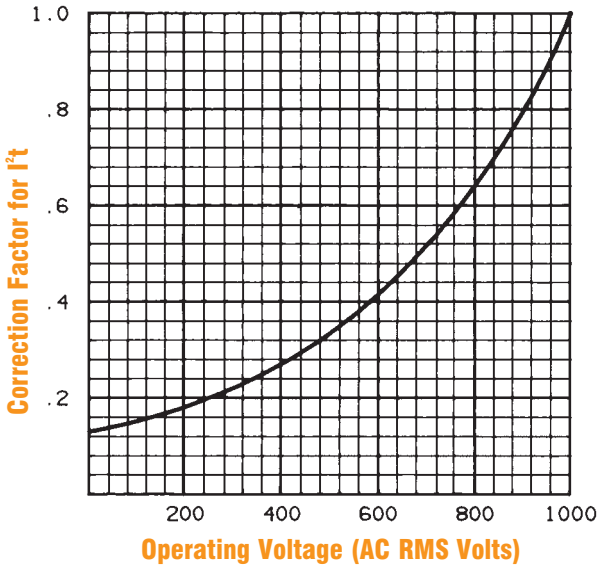


Fig. A

I²t Data – 1000 Volts AC, 100kA

FUSE AMPERE RATING	I²t DATA	
	MELTING (A²s x 10³)	CLEARING @ 1000VAC FIG. A (A²s x 10³)
15	.023	.6
20	.03	.8
25	.047	1.3
30	.057	1.5
35	.29	2.2
40	.38	2.9
50	.60	4.5
60	.86	6.5
65	1.0	7.6
70	1.2	8.8
80	1.5	12
100	2.4	18
125	3.8	28
150	5.4	41
200	9.6	72
225	12	91
250	15	110
300	22	160
350	29	220
400	38	290
500	60	450
600	86	650
650	100	760
700	120	880
800	150	1,200
1,000	240	1,900

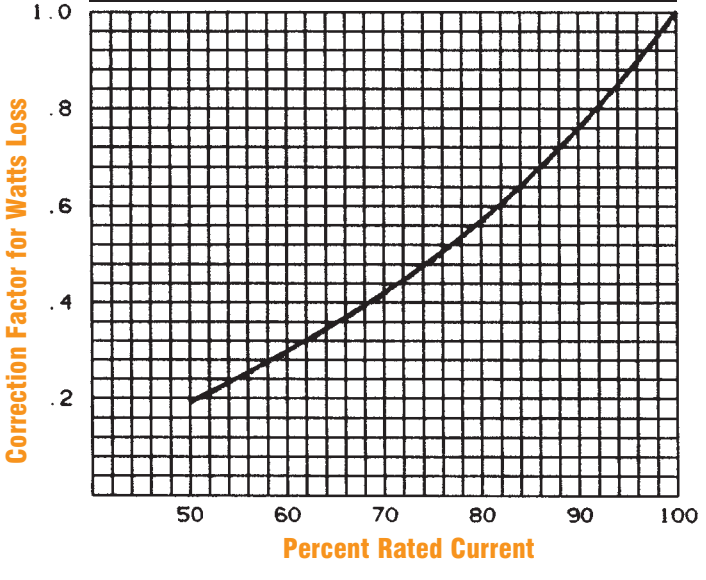
Clearing I²t vs. AC Operating Voltage



Watts Loss at Rated Current

AMPERE RATING	WATTS LOSS	AMPERE RATING	WATTS LOSS
15	3.4	225	40
20	5.9	250	45
25	9	300	55
30	12.8	350	65
35	7.3	400	70
40	8.3	500	90
50	11	600	110
60	13	650	120
70	13	700	125
80	14	800	140
100	18	1000	190
125	23		
150	28		
200	36		

Watts Loss vs. % Rated Current



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