

INCH-POUND

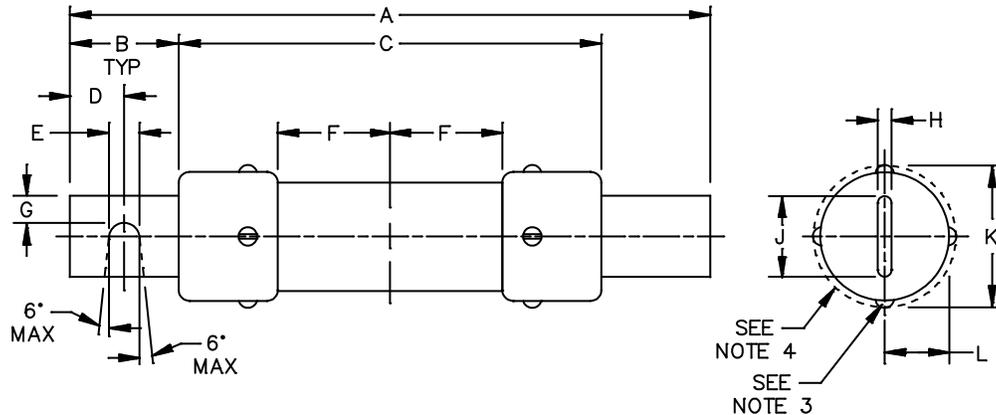
W-F-1814/66D
15 November 2013
SUPERSEDING
W-F-1814/66C
20 November 2009

FEDERAL SPECIFICATION SHEET

FUSE, CARTRIDGE, HIGH INTERRUPTING CAPACITY, CLASSES RK1 AND RK5
(CURRENT-LIMITING) 600 VOLTS, 201-400 AMPERES

The General Services Administration has authorized the use of this federal specification sheet by all federal agencies.

The complete requirements for procuring the fuses described herein shall consist of this document and the latest issue in effect of [W-F-1814](#).



Ltr	Inches		mm		Ltr	Inches		mm	
	Min	Max	Min	Max		Min	Max	Min	Max
A	11.620	11.630	295.15	295.40	G	.620	.630	15.75	16.00
B	1.875	---	47.63	---	H	.245	.255	6.22	6.47
C	7.125	7.813	180.98	198.45	J	1.625 (TYP)		41.28 (TYP)	
D	.933	.943	23.70	23.95	K	---	2.910	---	73.91
E	.401	.411	10.19	10.44	L	1.448	1.458	36.78	37.03
F	2.500	---	63.50	---					

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Use of screw, pin, or rivet is optional.
4. The dashed line represents the limit of the maximum projection of a screw, rivet head, or the like.
5. Unless otherwise specified, tolerances are ± 0.02 (0.51 mm) for two-place decimals and ± 0.005 (0.13 mm) for three-place decimals.

FIGURE 1. Classes RK1 and RK5 fuses, 600 volts, 201-400 amperes.

REQUIREMENTS:

Interface and physical dimensions: See figure 1.

Physical: Nonrenewable.

Terminals: Knife blade type.

Material: Copper, or copper alloy.

Strength: 5 inch-pound torque between body and blades.

Body:

Insulating material: Fiber, ceramic, melamine-impregnated glass fiber, or other suitable material.

Electrical:

Voltage: 600 volts or less.

Frequency: 48 Hz to 60 Hz.

Current: See [table I](#).

Current carrying capacity: 110 percent of rated current indefinitely with temperature rise not to exceed 50°C (90°F) above ambient on the body and 65°C (117°C) on the blades.

Overload interrupt:

Instantaneous: Shall interrupt within 2 hours at 135 percent of rated current and within 6 minutes at 200 percent of rated current.

Time delay - In addition to the above requirement, the fuse shall not interrupt 500 percent of rated current within 10 seconds.

Interrupting capacity rating: 200,000 amperes rms symmetrical at 600 volts, 48 Hz to 60 Hz and a power factor of 20 percent or less. Closing angle shall be essentially at the zero of the voltage wave (maximum offset) or later, to produce start of arcing within 30 electrical degrees prior to system peak voltage.

Threshold ratio: 30 maximum for RK1; 65 maximum for RK5.

Peak let-thru current: See [table II](#).

Maximum clearing I^2T : See [table II](#).

| Applicable fuseholder: Class R for blade type fuses in accordance with [UL 4248-12](#).

Part or Identifying Number (PIN): The Government PIN shall consist of the prefix “WF1814/66-“ followed by the PIN designation shown in [table I](#).

TABLE I. Current rating and PIN designation.

Current in amperes	PIN designation			
	RK5		RK1	
	Instantaneous	Time delay	Instantaneous	Time delay
225	F5225	D5225	F1225	D1225
250	F5250	D5250	F1250	D1250
300	F5300	D5300	F1300	D1300
350	F5350	D5350	F1350	D1350
400	F5400	D5400	F1400	D1400

TABLE II. Peak let-thru and I²T current.

	Between threshold and 50 kA		100 kA		200 kA	
	RK1	RK5	RK1	RK5	RK1	RK5
Maximum acceptable peak let-thru current (I _p x 10 ³)	33	50	35	60	50	75
Maximum clearing I ² T (amperes squared seconds) (I ² T x 10 ³)	1200	5000	1200	5000	1600	5000

Referenced documents. In addition to [W-F-1814](#), this document references the following:

| [UL 4248-12](#)

The margins of this specification sheet are marked with vertical lines to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

MILITARY INTEREST:

| Custodians:

Army - CR
Navy - EC
Air Force - 85
DLA - CC

| Review activities:

Army - AR, AT, CR4
Navy - OS
Air Force - 99
NSA - NS

CIVIL AGENCY COORDINATING ACTIVITIES:

GSA - FAS

Preparing activity:

DLA - CC

(Project 5920-2013-024)

| NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil>.