

FWH — North American

500 Vac/dc (UL), 35 to 1600 A

North American style bolted tags high speed fuses, for the protection of DC common bus, power converters/rectifiers and reduced rated voltage starters.

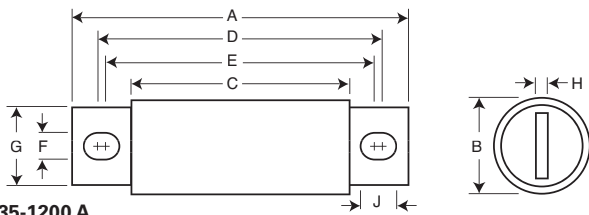
Ratings

- Volts
 - 500 Vac (UL)
 - 500 Vdc (35-800 A only)
- Amps 35-1600 A
- IR
 - 200 kA RMS Sym.
 - 50 kA at 500 Vdc

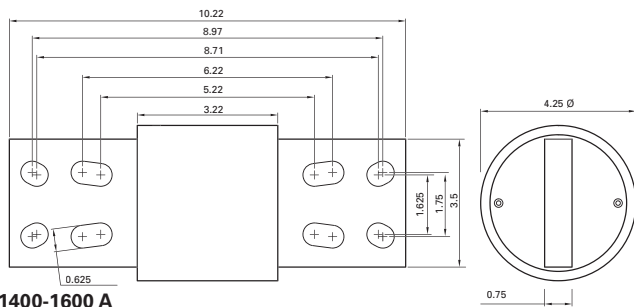
Agency information

- UL Recognized, JFHR2, E91958, FWH-_B (35-200 A) and FWH-_A (1000 and 1200 A), JFHR2, E56412 FWH-_A (225-800 A)
- CSA Class 1422-30, File 53787 (35-1600 A)
- CE

Dimensions — in



35-1200 A



1400-1600 A

Amp range	A	B	C	D	E	F	G	H	J
35-60	3.19	0.81	1.59	2.54	2.19	0.34	0.72	0.13	0.52
70-100	3.62	0.95	1.74	2.85	2.81	0.35	0.75	0.13	0.38
125-200	3.62	1.16	1.84	2.89	2.77	0.34	1.00	0.19	0.41
225-400	4.34	1.50	2.09	3.44	2.75	0.41	1.00	0.25	0.75
450-600	4.34	2.00	2.09	3.53	2.78	0.41	1.50	0.25	0.78
700-800	6.34	2.50	2.09	4.97	3.44	0.53	2.00	0.38	1.30
1000-1200	6.97	3.00	3.22	5.47	4.48	0.62	2.38	0.44	1.12
1400-1600	Refer to drawing								

1" = 25.4mm



Rated voltage	Rated current (amps)	I ² t (A ² s)		Watts loss (W)*	Catalog no.	
		Pre-arcing	Clearing at 250 Vac			
500 Vac/dc (UL)	35	34	150	8.0	FWH-35B	
	40	76	320	7.5	FWH-40B	
	45	105	450	7.5	FWH-45B	
	50	135	670	7.5	FWH-50B	
	60	210	900	9.9	FWH-60B	
	70	210	900	10.6	FWH-70B	
	80	305	1400	12.7	FWH-80B	
	90	360	1600	15.0	FWH-90B	
	100	475	2000	17.0	FWH-100B	
	125	800	3500	25.0	FWH-125B	
	150	1100	4600	30.0	FWH-150B	
	175	1450	6200	35.0	FWH-175B	
	200	1900	8500	40.0	FWH-200B	
	500 Vac/dc (UL)	225	4600	23,300	39.0	FWH-225A
		250	6300	32,200	41.0	FWH-250A
275		7900	40,300	46.0	FWH-275A	
300		9800	49,800	51.0	FWH-300A	
325		13,700	63,800	53.0	FWH-325A	
350		14,500	72,900	58.0	FWH-350A	
400		19,200	96,700	65.0	FWH-400A	
450		24,700	127,000	74.0	FWH-450A	
500		29,200	149,000	84.0	FWH-500A	
600		41,300	206,000	108.0	FWH-600A	
500 Vac (UL)	700	55,000	298,000	120.0	FWH-700A	
	800	76,200	409,000	129.0	FWH-800A	
	1000	92,000	450,000	145.0	FWH-1000A	
	1200	122,000	600,000	180.0	FWH-1200A	
	1400	200,000	1,000,000	210.0	FWH-1400A	
	1600	290,000	1,400,000	230.0	FWH-1600A	

* Watts loss at rated current.

For details on electrical characteristics, contact Application Engineering and ask for data sheets: 720007, 360 (225-800 A), 5785304 (35-200 A, 1000-1600 A)



FWH 500V 35-1600A

Type	Electrical Characteristics				Ordering Information			Dimensions	Curves	
	Rated Current RMS-Amps	I ² t (A ² Sec)		Watts Loss	Part Number	Carton Qty.	Carton Weight (lbs)	Figure Number	BIF #	
		Pre-arc	Clearing at 500V							
FWH 500V	35	34	150	8	FWH-35B	5	0.71	Fig. 1	35785304	
	40	76	320	7.5	FWH-40B					
	45	105	450	7.5	FWH-45B					
	50	135	670	7.5	FWH-50B					
	60	210	900	9.9	FWH-60B					
	70	210	900	10.6	FWH-70B	1	0.21			360
	80	305	1400	12.7	FWH-80B					
	90	360	1600	15	FWH-90B					
	100	475	2000	17	FWH-100B					
	125	800	3500	25	FWH-125B					
	150	1100	4600	30	FWH-150B		0.33			
	175	1450	6200	35	FWH-175B					
	200	1900	8500	40	FWH-200B					
	225	4600	23300	39	FWH-225A					
	250	6300	32200	41	FWH-250A					
	275	7900	40300	46	FWH-275A		0.57			
	300	9800	49800	51	FWH-300A					
	325	13700	63800	53	FWH-325A					
	350	14500	72900	58	FWH-350A					
	400	19200	96700	65	FWH-400A					
450	24700	127000	74	FWH-450A	1.00					
500	29200	149000	84	FWH-500A						
600	41300	206000	108	FWH-600A						
700	55000	298000	120	FWH-700A						
800	76200	409000	129	FWH-800A						
1000	92000	450000	145	FWH-1000A	2.14					
1200	122000	600000	180	FWH-1200A						
1400	200000	1000000	210	FWH-1400A		4.62				
1600	290000	1400000	230	FWH-1600A						
						11.66	Fig. 2	35785304		

†U.L. Recognition on 35 through 1200 amperes only.
 CSA Component Acceptance: 35 - 1600A.

1 kg = 2.2 lbs 1 lb = 0.45 kg

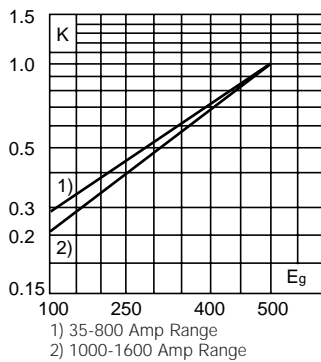
- Interrupting rating 200kA RMS Symmetrical.
- Watts loss provided at rated current.
- (500 Vdc/Interrupting rating 50kA) U.L. Recognition on 35 through 800 amperes only.

FWH 500V 35-1600A

Electrical Characteristics

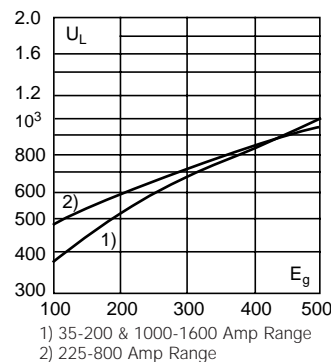
Total Clearing I²t

The total clearing I²t at rated voltage and at power factor of 15% are given in the electrical characteristics. For other voltages, the clearing I²t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_g, (RMS).



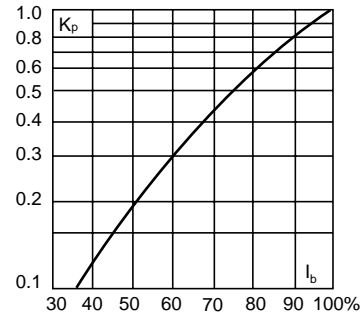
Arc Voltage

This curve gives the peak arc voltage, U_L, which may appear across the fuse during its operation as a function of the applied working voltage, E_g, (RMS) at a power factor of 15%.



Power Losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the power losses at load currents lower than the rated current. The correction factor, K_p, is given as a function of the RMS load current, I_b, in % of the rated current.



Dimensions

Fig. 1: 35-1200 Amp Range

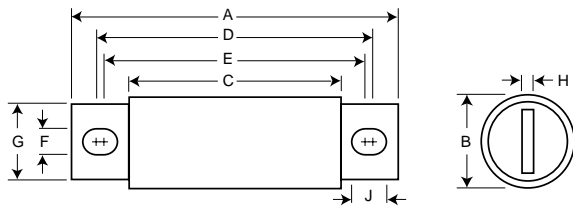
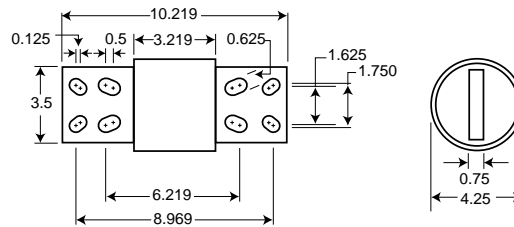


Fig. 2: 1400-1600 Amp Range



Order #	Fig.	A	B	C	D	E	F	G	H	J
FWH-35B-60B	1	3.188	0.813	1.593	2.541	2.193	0.344	0.719	0.125	0.518
FWH-70B-100B	1	3.625	0.947	1.736	2.853	2.807	0.352	0.750	0.125	0.375
FWH-125B-200B	1	3.625	1.156	1.836	2.892	2.768	0.344	1.000	0.188	0.406
FWH-225A-400A	1	4.340	1.500	2.090	3.440	2.750	0.410	1.000	0.250	0.750
FWH-450A-600A	1	4.340	2.000	2.090	3.530	2.780	0.410	1.500	0.250	0.780
FWH-700A-800A	1	6.340	2.500	2.090	4.970	3.440	0.530	2.000	0.380	1.300
FWH-1000A-1200A	1	6.969	3.000	3.219	5.465	4.475	0.625	2.375	0.438	1.120
FWH-1400A-1600A	2	See Drawing								

Dimension in inches.
1mm = 0.0394" 1" = 25.4mm

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