



# FWH 500V 35-1600A

| Electrical Characteristics |                           |              |                  |            | Ordering Information |             |                     | Dimensions    | Curves   |          |
|----------------------------|---------------------------|--------------|------------------|------------|----------------------|-------------|---------------------|---------------|----------|----------|
| Type                       | Rated Current<br>RMS-Amps | I²t (A² 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                |               |          |          |
|                            | 80                        | 305          | 1400             | 12.7       | FWH-80B              |             |                     |               |          |          |
|                            | 90                        | 360          | 1600             | 15         | FWH-90B              |             |                     |               |          |          |
|                            | 100                       | 475          | 2000             | 17         | FWH-100B             |             |                     |               |          | 0.33     |
|                            | 125                       | 800          | 3500             | 25         | FWH-125B             |             |                     |               |          |          |
|                            | 150                       | 1100         | 4600             | 30         | FWH-150B             |             |                     |               |          |          |
|                            | 175                       | 1450         | 6200             | 35         | FWH-175B             |             |                     |               |          |          |
|                            | 200                       | 1900         | 8500             | 40         | FWH-200B             |             | 0.57                |               |          |          |
|                            | 225                       | 4600         | 23300            | 39         | FWH-225A             |             |                     |               |          |          |
|                            | 250                       | 6300         | 32200            | 41         | FWH-250A             |             |                     |               |          |          |
|                            | 275                       | 7900         | 40300            | 46         | FWH-275A             |             |                     |               |          |          |
|                            | 300                       | 9800         | 49800            | 51         | FWH-300A             |             |                     |               |          |          |
|                            | 325                       | 13700        | 63800            | 53         | FWH-325A             |             |                     |               |          |          |
|                            | 350                       | 14500        | 72900            | 58         | FWH-350A             |             |                     |               | 1.00     |          |
|                            | 400                       | 19200        | 96700            | 65         | FWH-400A             |             |                     |               |          |          |
|                            | 450                       | 24700        | 127000           | 74         | FWH-450A             |             |                     |               |          |          |
|                            | 500                       | 29200        | 149000           | 84         | FWH-500A             |             |                     |               |          |          |
|                            | 600                       | 41300        | 206000           | 108        | FWH-600A             |             |                     |               |          |          |
|                            | 700                       | 55000        | 298000           | 120        | FWH-700A             |             |                     |               |          | 2.14     |
|                            | 800                       | 76200        | 409000           | 129        | FWH-800A             |             |                     |               |          |          |
|                            | 1000                      | 92000        | 450000           | 145        | FWH-1000A            |             | 4.62                |               |          |          |
|                            | 1200                      | 122000       | 600000           | 180        | FWH-1200A            |             |                     |               |          |          |
|                            | 1400                      | 200000       | 1000000          | 210        | FWH-1400A            |             |                     | 11.66         | Fig. 2   | 35785304 |
|                            | 1600                      | 290000       | 1400000          | 230        | FWH-1600A            |             |                     |               |          |          |

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

1 kg = 2.2 lbs 1 lb = 0.45 kg

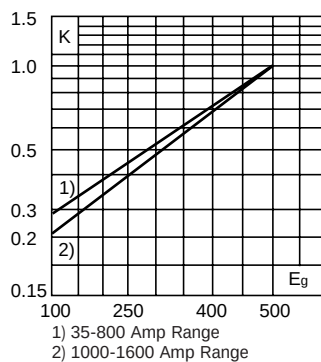
- Interrupting rating 200kA RMS Symmetrical.
- Watts loss provided at rated current.
- (500 Vdc/Interrupting rating 50kA) U.L. Recognition on 35 through 800 amperes only.

# FWH 500V 35-1600A

## Electrical Characteristics

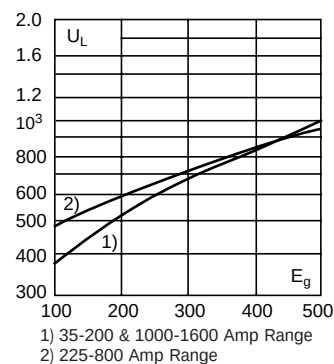
### Total Clearing $I^2t$

The total clearing  $I^2t$  at rated voltage and at power factor of 15% are given in the electrical characteristics. For other voltages, the clearing  $I^2t$  is found by multiplying by correction factor,  $K$ , given as a function of applied working voltage,  $E_g$ , (RMS).



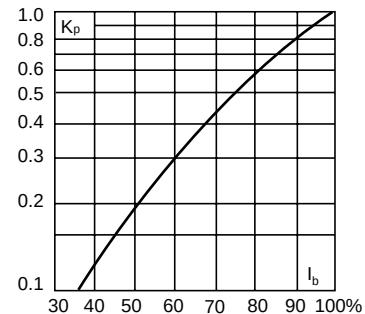
### Arc Voltage

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

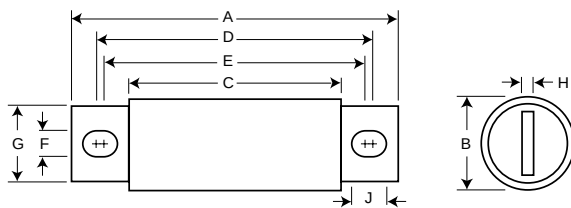
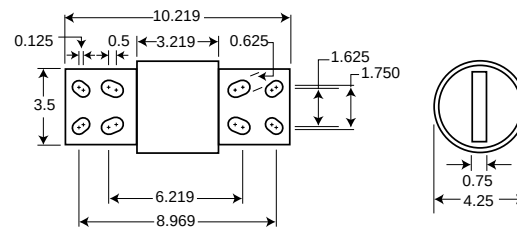


Fig. 2: 1400-1600 Amp Range



| 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

The only controlled copy of this BIF document is the electronic read-only version located on the Bussmann Network Drive. All other copies of this document are by definition uncontrolled. This bulletin is intended to clearly present comprehensive product data and provide technical information that will help the end user with design applications. Bussmann reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Bussmann also reserves the right to change or update, without notice, any technical information contained in this bulletin. Once a product has been selected, it should be tested by the user in all possible applications.