

# Ferrule — FWA 150V: 5-60A

## FWA 5-30A (10 x 38mm) 35-60A (21 X 51mm)

Specifications Description: Ferrule style high speed fuses. Dimensions: See dimensions illustration.

Ratings:

Volts: - 150Vac/dc

Amps: - 5-60A

IR: - 100kA Sym.

Agency Information: CE, UL Recognition

**Electrical Characteristics** 

### Total Clearing I<sup>2</sup>t

The total clearing  $l^2t$  at rated voltage and at power 1.0 factor of 15% are given in the electrical characteristics. For other 0.5 voltages, the clearing  $l^2t$  is found by multiplying by 0.3 correction factor, K, given 0.2 as a function of applied working voltage, E<sub>g</sub>, (rms). 0.15



Dimensions - in (mm)								
Amp	Dimensions	Dimensions						
Range	A	В	С					
5-30	1.5 (38.1)	0.375 (9.5)	0.406 (10.3)					
35-60	2.0 (50.8)	0.625 (15.9)	0.811 (20.6)					



#### 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 200 applied working voltage,  $E_g$ , (rms) at a power factor 100 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.





#### Catalog Numbers

	Electrical Characteristics				
		I <sup>2</sup> t (A <sup>2</sup> Sec)			
	Current		Clearing	Watts	
Size	RMS-Amps	Pre-arc	at 150V	Loss	
	5	1.6	8	1	
	10	3.6	16	2.7	
10 x 38mm	15	14	55	3.3	
<sup>13</sup> ‰" x 1½")	20	33	130	3.8	
	25	58	220	4.9	
	30	100	400	4.9	
21 x 51mm ( <sup>1</sup> ‰" x 2")	35	75	800	4.5	
	40	100	1000	5.1	
	45	130	1300	6	
	50	170	1600	7.3	
	60	250	2400	8.0	
	0 x 38mm <sup>1</sup> ‰" x 1½") 1 x 51mm <sup>1</sup> ‰" x 2")	5           10           0 x 38mm           15           20           25           30           35           11 x 51mm           40           1%" x 2")           50	Rated Current RMS-Amps         Pre-arc           5         1.6           10         3.6           0 x 38mm         15           15         14           ½2" x 1½")         20           33         25           30         100           35         75           40         100           ½6" x 2")         50           50         170           60         250	Rated Current RMS-Amps         Clearing Pre-arc           5         1.6         8           0 x 38mm         15         14         55           1%2" x 1½")         20         33         130           25         58         220         30         100         400           11 x 51mm         40         100         1000         400           11 x 51mm         45         130         1300         1300           1%e" x 2")         50         170         1600         60         250         2400	

Watts loss provided at rated current.
See accessories on page 216.

Features and Benefits

- · Excellent cycling capability and DC performance
- Low arc voltage and low energy let-through (I<sup>2</sup>t)
- · Low watts loss in a compact size
- · Used with finger-safe holders/blocks

**Typical Applications** 

- DC common bus
- DC drives
- Power converters/rectifiers
- · Reduced voltage starters