

## British BS 88 Fuses



High Speed Fuses

### Introduction

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#### British BS 88 Fuse Ranges

Amps	Vac	Vdc
6-900	240	150
6-710	690	500

### General Information

Designed and tested to:

- BS 88: Part 4
- IEC 269: Part 4
- UL Recognized

Cooper Bussmann offers the industry's widest range of British style semiconductor fuses and accessories.

Cooper Bussmann British style products use innovative arc quenching techniques and high grade materials to provide:

- Minimal energy let-through ( $I^2t$ )
- Excellent DC performance
- Good surge withstand profile

British style fuses are typically found in equipment manufactured in the United Kingdom or British Commonwealth countries. However, North American manufacturers have begun to specify British style fuses — particularly in UPS applications at 240V or less — to take advantage of their size, performance and cost benefits.

### Voltage Rating

All Cooper Bussmann British style fuses are tested to IEC 269: Part 4. This standard requires a test voltage which is 5% higher than the rated voltage. In North America, fuses are required to clear only their rated voltage.

### Accessories

Trip-indicator fuses are available for use in parallel with the main fuse. Indicator fuses can be attached to the associated fuselink, or mounted separately in panel-mounted fuseclips. In addition, a push-on adapter and microswitch attachment are available, to provide remote indication. Fuse blocks are also available for most applications.

## British BS 88 — 240V: 6-900A

### LCT, LET, LMT, LMMT

#### Specifications

**Description:** BS 88 style stud-mount fuses.

**Dimensions:** See dimensions illustrations.

#### Ratings:

Volts: — 240Vac/150Vdc

Amps: — 6-900A

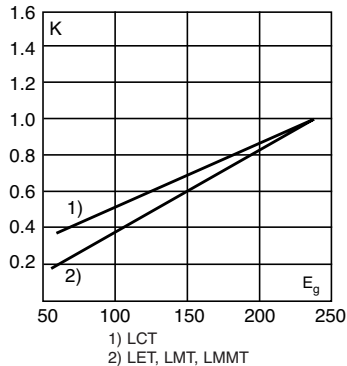
IR: — 200kA RMS Sym.

**Agency Information:** CE, Designed and tested to: BS 88 Part 4, IEC 269 Part 4, UL Recognized. All fuses above have been tested at 318Vac. Consult Cooper Bussmann for specific UL Recognition status.

#### 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).



#### Dimensions (mm)

Fig. 1: LCT

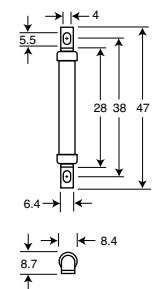


Fig. 2: LET

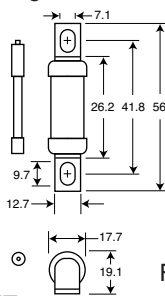


Fig. 3: LMT

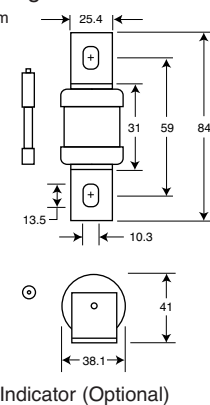
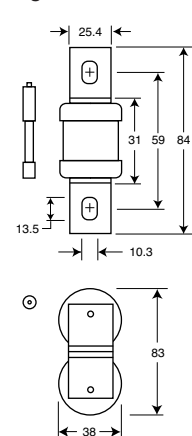
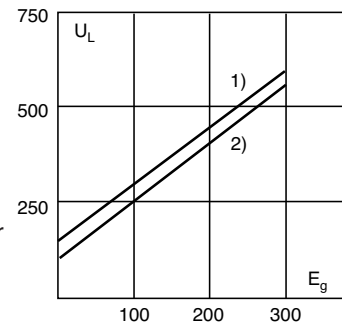


Fig. 4: LMMT



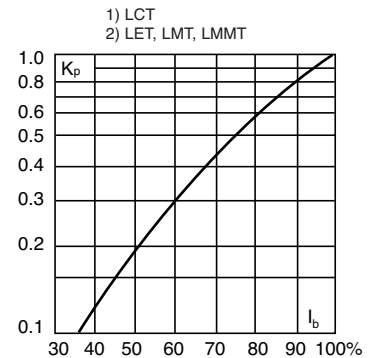
#### Arc Voltage

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.



#### Catalog Numbers

##### Electrical Characteristics

Catalog Numbers	Type	Rated Current RMS-Amps	$I^2t$ (A <sup>2</sup> Sec)			Watts Loss	
			Pre-arc	Clearing at 120V	Clearing at 240V		
6LCT	LCT	6	2	6	9	1.0	
10LCT		3.8	12	22	2.5		
12LCT		7	22	32	2.5		
16LCT		20	50	100	2.5		
20LCT		25	80	160	4.0		
25LET		LET	25	18	120	250	4.0
32LET	32		32	200	450	5.0	
35LET	35		50	320	600	5.0	
50LET	50		100	500	1400	7.0	
63LET	63		180	1100	2200	9.0	
80LET	80		300	1900	3800	10.0	
100LET	100		600	3800	7500	10.0	
125LET	125		600	3800	7500	16.0	
160LET	160		1100	7000	16000	20.0	
180LETa	180		1600	12000	29000	21.0	
160LMT	LMT		160	1100	7000	16000	17.0
200LMT			200	1500	10000	20000	28.0
250LMT		250	3200	20000	40000	28.0	
315LMT		315	6000	35000	75000	35.0	
355LMT		355	8000	50000	100000	35.0	
400LMT		400	14000	70000	160000	40.0	
450LMT	450	18000	100000	220000	42.0		
400LMMT	LMMT	400	6000	35000	80000	60.0	
500LMMT		500	14000	80000	170000	64.0	
630LMMT		630	24000	150000	300000	75.0	
710LMMT		710	32000	200000	460000	77.0	
800LMMT		800	52000	300000	600000	82.0	
900LMMT		900	75000	400000	800000	97.0	

• Watts loss provided at rated current.

• Note: 7LET, 10LET, 12LET and 16LET are available for replacement purposes on existing equipment.

• See accessories on page 195.

#### Features and Benefits

- Excellent cycling capability
- Excellent DC performance
- Low arc voltage and low energy let-through ( $I^2t$ )

#### Typical Applications

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