

## Square Body DIN 43 653 — 1250V/1300V (IEC/UL): 50-1400A

### 1250V/1300V (IEC/UL) 50-1400A

#### Specifications

**Description:** Square body DIN 43 653 stud-mount high speed fuses.

**Dimensions:** See dimensions illustration.

#### Ratings:

Volts: — 1250Vac (IEC)  
— 1300Vac (UL)

Amps: — 50-1400A

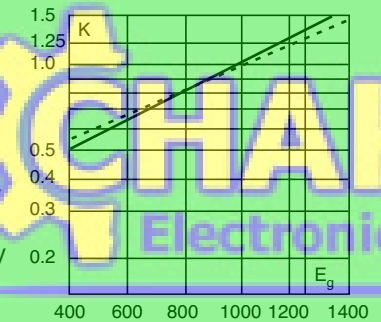
IR: — 100kA RMS Sym.

**Agency Information:** CE, Designed and tested to IEC 60269: Part 4, UL Recognized. Consult Cooper Bussmann for UL Recognition/CSA Component Acceptance status.

#### Electrical Characteristics

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

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



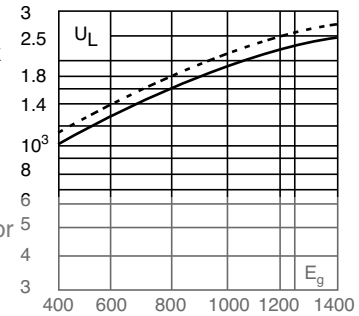
Dashed lines (---) apply to the following amperages:

Size	Amps.
1*	400A
1	500-630A
2	630-1000A
3	800-1400A



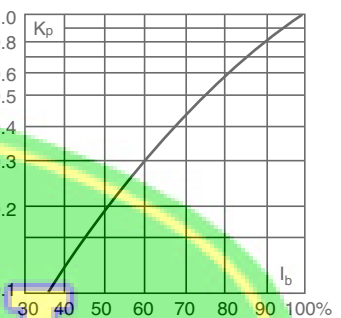
#### Arc Voltage

This curve gives the peak arc voltage, U<sub>L</sub>, which may appear across the fuse during its operation as a function of the applied working voltage, E<sub>g</sub>, (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<sub>p</sub>, is given as a function of the RMS load current, I<sub>b</sub>, in % of the rated current.



#### Features and Benefits

- Excellent DC performance
- Low arc voltage and low energy let-through (I<sup>2</sup>t)
- Low watts loss
- Superior cycling capability

#### Typical Applications

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

#### For Other Voltage Ratings in This Body Style

- See pages 122 (690V/700V) and 146 (1000V)

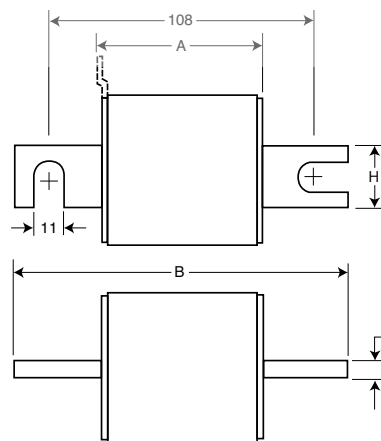
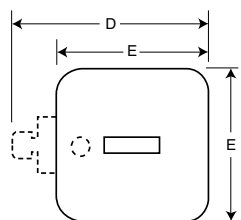
#### Dimensions (mm)

Type -/110, -TN/110

Size	A	B	D**	E	H
1*	80	138	58	45	20
1	80	138	66	53	25
2	80	138	75	61	25
3	81	139	90	76	30

\*\*Microswitch.

1mm = 0.0394" / 1" = 25.4mm

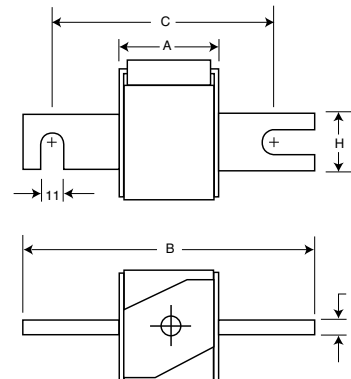


#### Dimensions (mm)

Type -KN/110

Size	A	B	D	E	H
1*	80	138	58	45	20
1	80	138	66	53	25
2	80	138	75	61	25
3	81	139	90	76	30

1mm = 0.0394" / 1" = 25.4mm



## Square Body DIN 43 653 — 1250V/1300V (IEC/UL): 50-1400A

### Catalog Numbers

Catalog Numbers			Size	Electrical Characteristics				Watts Loss
-I110 Visual Indicator	-TN/110 Type T Indicator for Micro	-KN/110 Type K Indicator for Micro		Rated Current RMS-Amps	I <sup>2</sup> t (A <sup>2</sup> Sec)		Clearing at 1250V	
					Pre-arc	Clearing at 1000V		
170M3138	170M3188	170M3238		50	135	815	1100	15
170M3139	170M3189	170M3239		63	215	1300	1750	20
170M3140	170M3190	170M3240		80	420	2500	3350	25
170M3141	170M3191	170M3241		100	750	4450	5950	30
170M3142	170M3192	170M3242		125	1450	9000	11500	35
170M3143	170M3193	170M3243	1*	160	2600	16000	21000	40
170M3144	170M3194	170M3244		200	5150	31000	41000	45
170M3145	170M3195	170M3245		250	9200	54500	73000	55
170M3146	170M3196	170M3246		315	18500	115000	150000	60
170M3147	170M3197	170M3247		350	27000	165000	220000	65
170M3148	170M3198	170M3248		400	53000	265000	335000	70
170M4138	170M4188	170M4238		160	1900	11500	15500	45
170M4139	170M4189	170M4239		200	3800	22500	30000	50
170M4140	170M4190	170M4240		250	7750	46000	61500	60
170M4141	170M4191	170M4241		315	15000	90000	120000	65
170M4142	170M4192	170M4242	1	350	20000	125000	165000	70
170M4143	170M4193	170M4243		400	29500	175000	235000	75
170M4144	170M4194	170M4244		450	42000	250000	335000	80
170M4145	170M4195	170M4245		500	69500	340000	435000	85
170M4146	170M4196	170M4246		550	95000	465000	590000	95
170M4147	170M4197	170M4247		630†	130000	660000		100
170M5138	170M5188	170M5238		250	6500	38500	51500	65
170M5139	170M5189	170M5239		280	9350	55500	74500	70
170M5140	170M5190	170M5240		315	13000	77500	105000	75
170M5141	170M5191	170M5241		350	16500	97500	135000	80
170M5142	170M5192	170M5242		400	23000	140000	180000	85
170M5143	170M5193	170M5243		450	34000	205000	270000	90
170M5144	170M5194	170M5244	2	500	48000	285000	380000	95
170M5145	170M5195	170M5245		550	62000	370000	495000	100
170M5146	170M5196	170M5246		630	115000	575000	730000	110
170M5147	170M5197	170M5247		700	160000	795000	1050000	115
170M5148	170M5198	170M5248		800	245000	1200000	1550000	120
170M5149	170M5199	170M5249		900‡	360000	1750000		125
170M5150	170M5200	170M5250		1000‡	480000	2350000		135
170M6138	170M6188	170M6238		315	9500	58000	77500	85
170M6139	170M6189	170M6239		350	13500	81500	110000	90
170M6140	170M6190	170M6240		400	19500	120000	160000	95
170M6141	170M6191	170M6241		450	31000	185000	245000	100
170M6142	170M6192	170M6242		500	39000	235000	310000	105
170M6143	170M6193	170M6243		550	55000	325000	435000	110
170M6144	170M6194	170M6244	3	630	83500	495000	665000	115
170M6145	170M6195	170M6245		700	115000	705000	940000	120
170M6146	170M6196	170M6246		800‡	205000	995000	1300000	125
170M6147	170M6197	170M6247		900‡	305000	1500000	1900000	130
170M6148	170M6198	170M6248		1000‡	450000	2150000	2750000	135
170M6149	170M6199	170M6249		1100‡	575000	2800000	3600000	140
170M6150	170M6200	170M6250		1250‡	810000	3950000		145
170M6151	170M6201	170M6251		1400‡	1250000	6000000		150

†Rated voltage (IEC) 1100V.

‡Rated voltage (IEC) 1250V.

• Watts loss provided at rated current.

• Microswitch indicator ordered separately. See accessories on pages 185-186.

• For fuse curves see pages 166 and 167.

High Speed Fuses