

High Speed Fuses

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

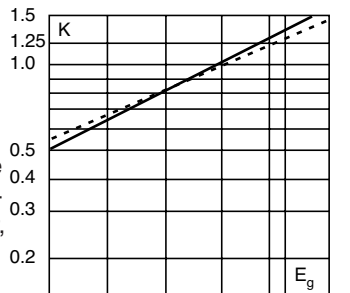
IR: — 100kA RMS Sym.

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^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).



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

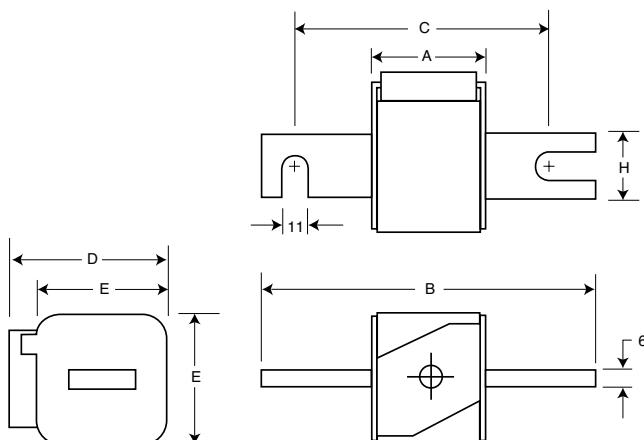
Size	Amps.
1*	400A
1	500-630A
2	630-1000A
3	800-1400A

Dimensions (mm)

Type -KN/110.

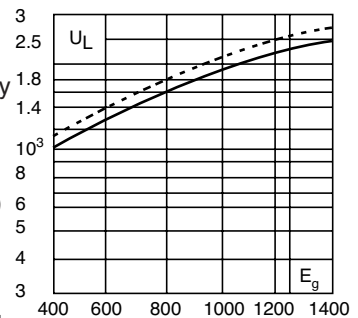
Size	A	B	D	E	H
1*	80	138	58	45	20
1	80	138	66	53	25
2	80	138	75	61	25
3	81	139	90	76	30

1mm = 0.0394" / 1" = 25.4mm



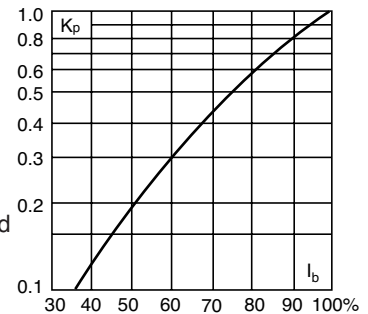
Arc Voltage

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.



Features and Benefits

- Excellent dc performance
- Low arc voltage and low energy let-through (I^2t)
- Low watts loss
- Superior cycling capability

Typical Applications

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

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Catalog Numbers

Catalog Numbers -KN/110 Type K Visual Indicator for Micro	Size	Electrical Characteristics				
		Rated Current RMS-Amps	I ² t (A ² Sec)			Watts Loss
			Pre-arc	Clearing at 1000V	Clearing at 1250V	
170M3238	1*	50	135	815	1100	15
170M3239		63	215	1300	1750	20
170M3240		80	420	2500	3350	25
170M3241		100	750	4450	5950	30
170M3242		125	1450	9000	11500	35
170M3243		160	2600	16000	21000	40
170M3244		200	5150	31000	41000	45
170M3245		250	9200	54500	73000	55
170M3246		315	18500	115000	150000	60
170M3247		350	27000	165000	220000	65
170M3248	400	53000	265000	335000	70	
170M4238	1	160	1900	11500	15500	45
170M4239		200	3800	22500	30000	50
170M4240		250	7750	46000	61500	60
170M4241		315	15000	90000	120000	65
170M4242		350	20000	125000	165000	70
170M4243		400	29500	175000	235000	75
170M4244		450	42000	250000	335000	80
170M4245		500	69500	340000	435000	85
170M4246		550	95000	465000	590000	95
170M4247		†630	130000	660000		100
170M5238	2	250	6500	38500	51500	65
170M5239		280	9350	55500	74500	70
170M5240		315	13000	77500	105000	75
170M5241		350	16500	97500	135000	80
170M5242		400	23000	140000	180000	85
170M5243		450	34000	205000	270000	90
170M5244		500	48000	285000	380000	95
170M5245		550	62000	370000	495000	100
170M5246		630	115000	575000	730000	110
170M5247		700	160000	795000	1050000	115
170M5248		800	245000	1200000	1550000	120
170M5249		†900	360000	1750000		125
170M5250		†1000	480000	2350000		135
170M6238	3	315	9500	58000	77500	85
170M6239		350	13500	81500	110000	90
170M6240		400	19500	120000	160000	95
170M6241		450	31000	185000	245000	100
170M6242		500	39000	235000	310000	105
170M6243		550	55000	325000	435000	110
170M6244		630	83500	495000	665000	115
170M6245		700	115000	705000	940000	120
170M6246		†800	205000	995000	1300000	125
170M6247		†900	305000	1500000	1900000	130
170M6248		†1000	450000	2150000	2750000	135
170M6249		†1100	575000	2800000	3600000	140
170M6250		†1250	810000	3950000		145
170M6251		†1400	1250000	6000000		150

†Rated voltage (IEC) 1100V.

‡Rated voltage (IEC) 1250V.

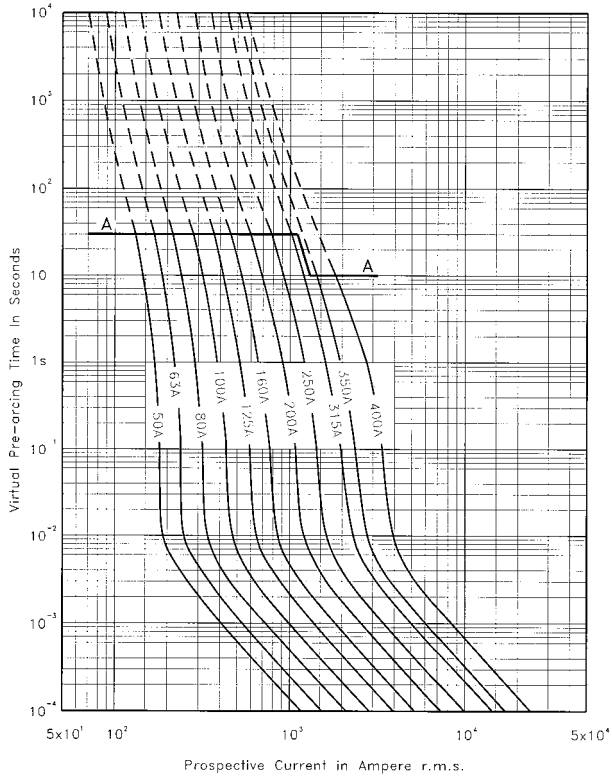
• Watts loss provided at rated current.

• Microswitch indicator ordered separately. See accessories on pages 179-180.

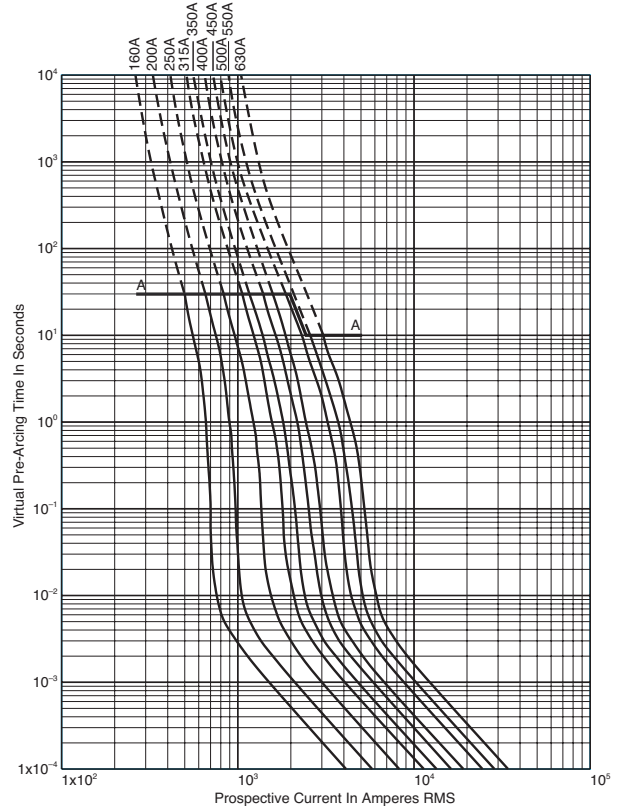
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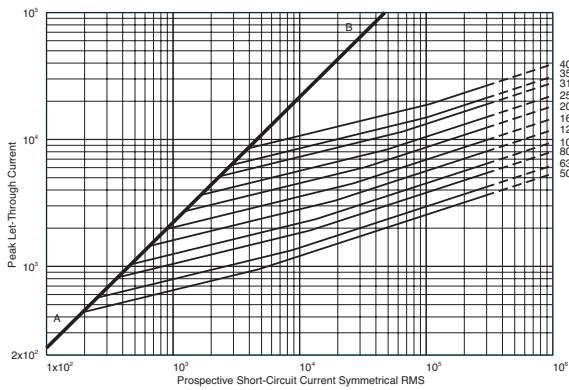
Size 1* — 50-400A:1250V
Time-Current Curve



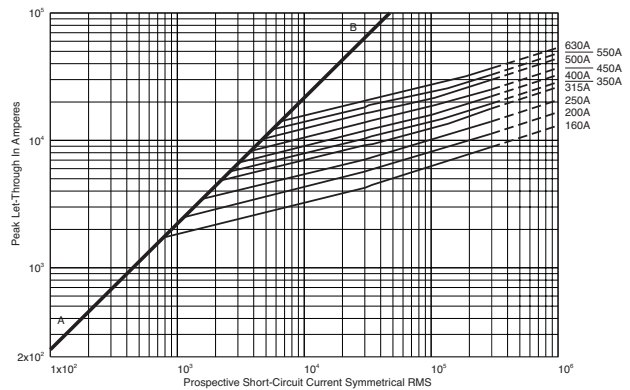
Size 1 — 160-630A: 1250V
Time-Current Curve



Peak Let-Through Curve



Peak Let-Through Curve

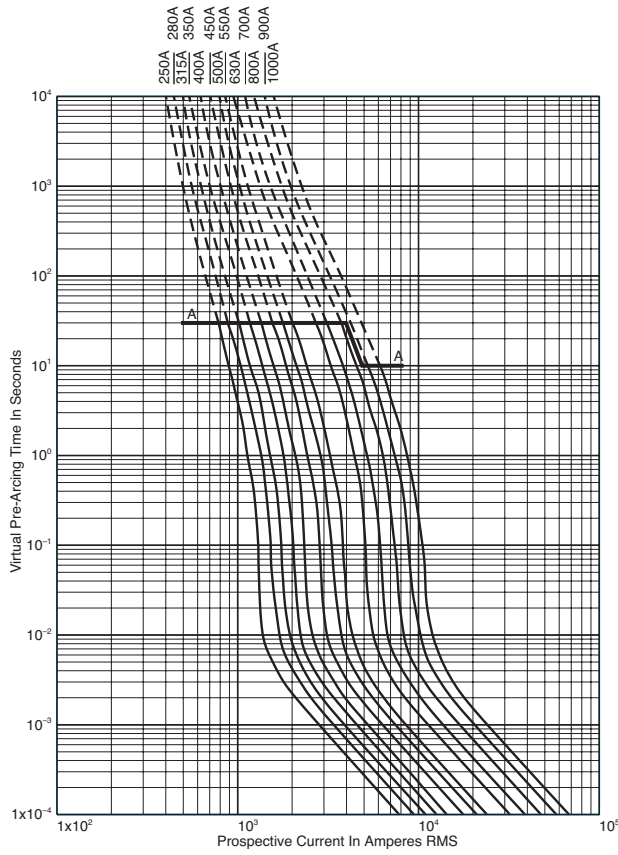


630A fuse is derated to 1100V (IEC).

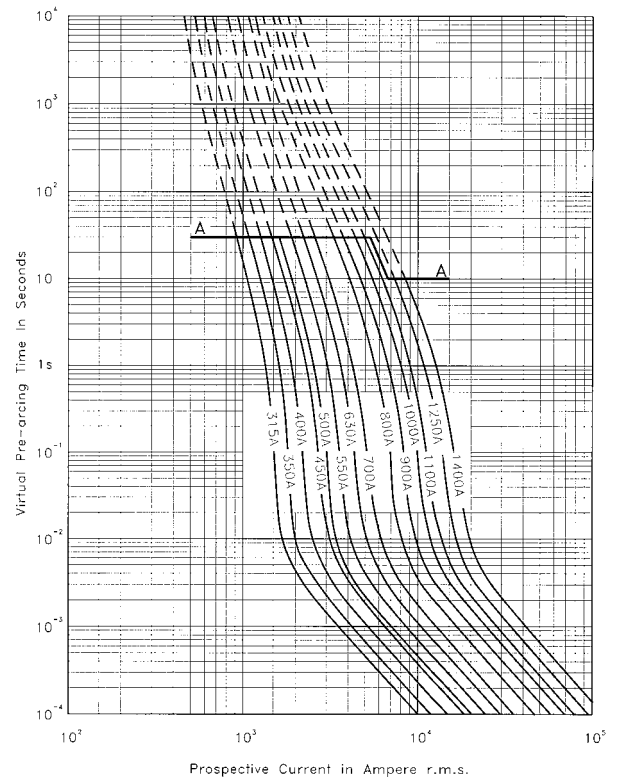
High Speed Fuses

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

Size 2 — 250-1000A: 1250V
Time-Current Curve

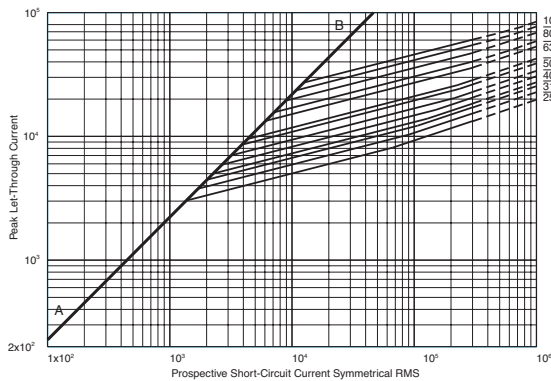


Size 3 — 315-1400A: 1250V
Time-Current Curve



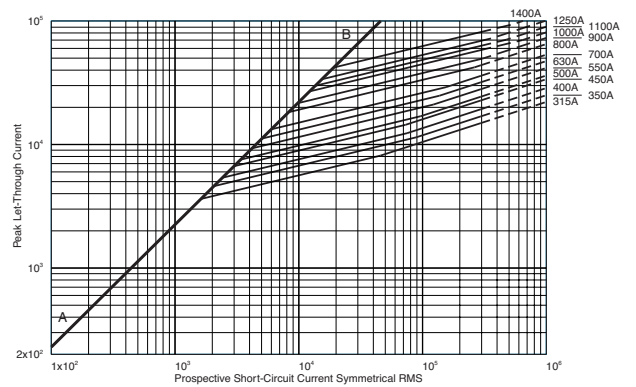
High Speed
Fuses

Peak Let-Through Curve



900-1000A fuses are derated to 1100V (IEC).

Peak Let-Through Curve



1250-1400A fuses are derated to 1100V (IEC).

Data Sheet: 17056634

Data Sheet: 17056636

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Eaton:

<u>170M3238</u>	<u>170M3239</u>	<u>170M3240</u>	<u>170M3241</u>	<u>170M3242</u>	<u>170M3243</u>	<u>170M3244</u>	<u>170M3245</u>	<u>170M3246</u>	<u>170M3247</u>
<u>170M3248</u>	<u>170M4238</u>	<u>170M4239</u>	<u>170M4240</u>	<u>170M4241</u>	<u>170M4242</u>	<u>170M4243</u>	<u>170M4244</u>	<u>170M4245</u>	<u>170M4246</u>
<u>170M4247</u>	<u>170M5238</u>	<u>170M5239</u>	<u>170M5240</u>	<u>170M5241</u>	<u>170M5242</u>	<u>170M5243</u>	<u>170M5244</u>	<u>170M5245</u>	<u>170M5246</u>
<u>170M5247</u>	<u>170M5248</u>	<u>170M5249</u>	<u>170M5250</u>	<u>170M6238</u>	<u>170M6239</u>	<u>170M6240</u>	<u>170M6241</u>	<u>170M6242</u>	<u>170M6243</u>
<u>170M6244</u>	<u>170M6245</u>	<u>170M6246</u>	<u>170M6247</u>	<u>170M6248</u>	<u>170M6249</u>	<u>170M6250</u>	<u>170M6251</u>		