

Square body DIN 43 653 — 1000V (IEC): 50-1400A

1000V (IEC) 50-1400A

Specifications

Description: Square body mount high speed fuses.

Dimensions: See dimensions illustrations.

Ratings:

Volts: — 1000Vac.

Amps: — 50-1400A

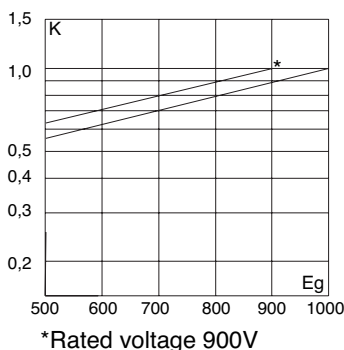
IR: — 150kA RMS Sym.

Agency Information: CE, Designed and tested to IEC 60269: Part 4, UL Recognized.

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)

Type -KN/110

Size	A	B	C	Max D1	E	G	H	I
1*KN/110	80	138	108	61	43	6	22	11
1KN/110	80	138	108	69	51	6	25	11
2KN/110	80	138	108	77	59	6	25	11
3KN/110	81	139	108	92	74	6	30	11

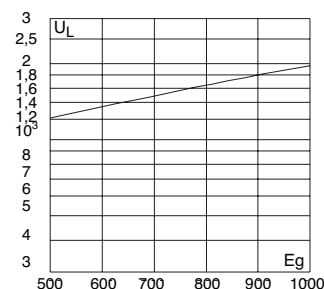
Type -TN/110

Size	A	B	C	Max D2	E	G	H	I
1*TN/110	80	138	108	61	43	6	22	11
1TN/110	80	138	108	69	51	6	25	11
2TN/110	80	138	108	75	59	6	25	11
3TN/110	81	139	108	90	74	6	30	11

1mm = 0.0394" / 1" = 25.4mm

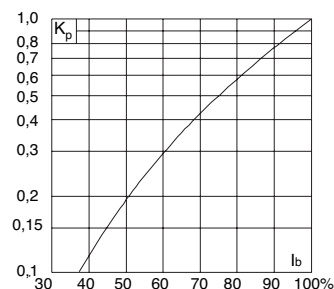
Arc Voltage

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.



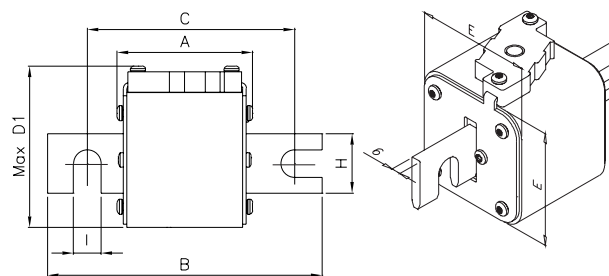
Features and Benefits

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

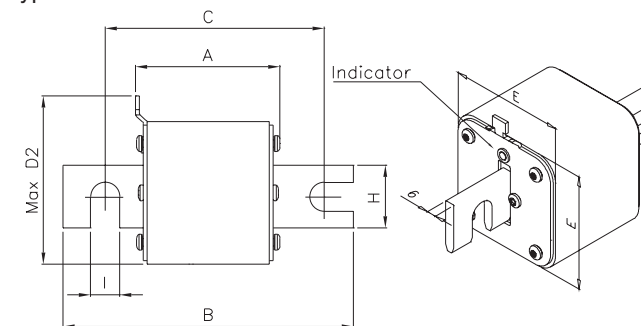
Typical Applications

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

Type-KN/110



Type-TN/110



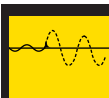
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Catalog Numbers

Catalog Numbers		Electrical Characteristics					
-KN/110 Type K Indicator for Micro	-TN/110 Type T Indicator for Micro	Size	Rated Voltage	Rated Current RMS Amps	I ² t (A ² Sec)		Watts Loss
					Pre-arc	Clearing at Rated Voltage	
170M3965	170M3981	1*	1000	50	135	815	20
170M3966	170M3982		1000	63	215	1300	25
170M3967	170M3983		1000	80	460	2750	30
170M3968	170M3984		1000	100	860	5100	35
170M3969	170M3985		1000	125	1450	8600	40
170M3970	170M3986		1000	160	2850	17500	45
170M3971	170M3987		1000	200	4950	29500	48
170M3972	170M3988		1000	250	9550	57000	50
170M3973	170M3989		1000	315	21500	130000	60
170M3974	170M3990		1000	350	29000	175000	65
170M3975	170M3991		1000	400	42000	250000	70
170M4965	170M4980	1	1000	160	2200	13500	40
170M4966	170M4981		1000	200	4150	24500	45
170M4967	170M4982		1000	250	7750	46000	52
170M4968	170M4983		1000	315	16500	98500	60
170M4969	170M4984		1000	350	21500	130000	65
170M4970	170M4985		1000	400	31000	185000	70
170M4971	170M4986		1000	450	44500	265000	80
170M4972	170M4987		1000	500	63000	375000	85
170M4973	170M4988		1000	550	84500	500000	90
170M4974	170M4989		1000	630	125000	755000	98
170M5966	170M5981	2	1000	250	6750	40000	65
170M5967	170M5982		1000	315	13500	81500	75
170M5968	170M5983		1000	350	16500	99000	80
170M5969	170M5984		1000	400	26000	155000	85
170M5970	170M5985		1000	450	35500	210000	90
170M5971	170M5986		1000	500	49500	295000	95
170M5972	170M5987		1000	550	66000	390000	100
170M5973	170M5988		1000	630	93500	555000	110
170M5974	170M5989		1000	700	130000	770000	115
170M5975	170M5990		1000	800	195000	1200000	125
170M8614	170M8629	3	1000	315	9200	54500	90
170M8615	170M8630		1000	350	13000	77500	95
170M8616	170M8631		1000	400	19000	115000	105
170M8617	170M8632		1000	450	27000	160000	107
170M8618	170M8633		1000	500	37500	225000	110
170M8619	170M8634		1000	550	52000	310000	115
170M8620	170M8635		1000	630	82500	490000	120
170M8621	170M8636		1000	700	115000	700000	125
170M8622	170M8637		1000	800	170000	1050000	135
170M8623	170M8638		1000	900	250000	1500000	145
170M8624	170M8639		1000	1000	340000	2050000	150
170M8625	170M8640		1000	1100	460000	2750000	155
170M8626	170M8641		1000	1250	575000	3400000	175
170M8627	170M8642		900	1400	795000	4200000	185

• Watts loss provided at rated current.

• Microswitch ordered separately. See accessories on page 179-180.



Did You Know?



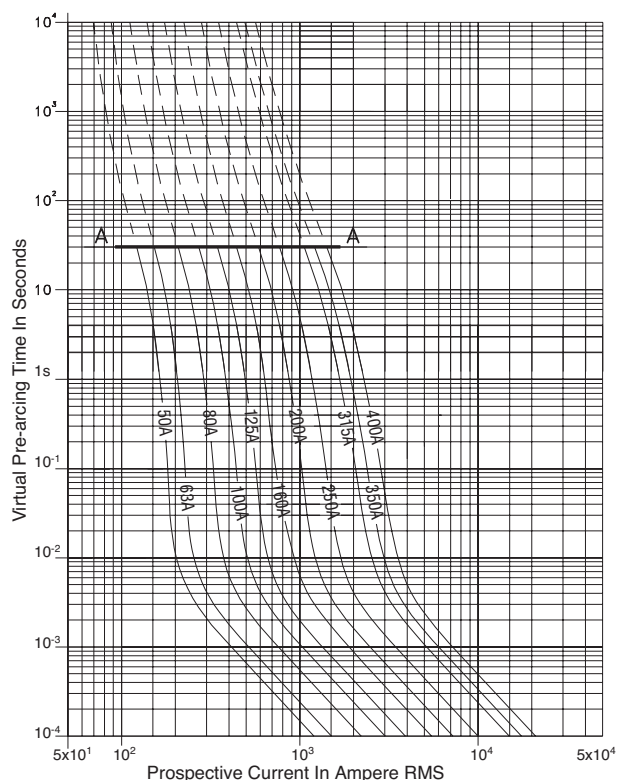
Inverters in the world's strongest icebreaker ships in Finland and in Russia are protected with Cooper

Bussmann® high speed fuses, 12000V, 500A.

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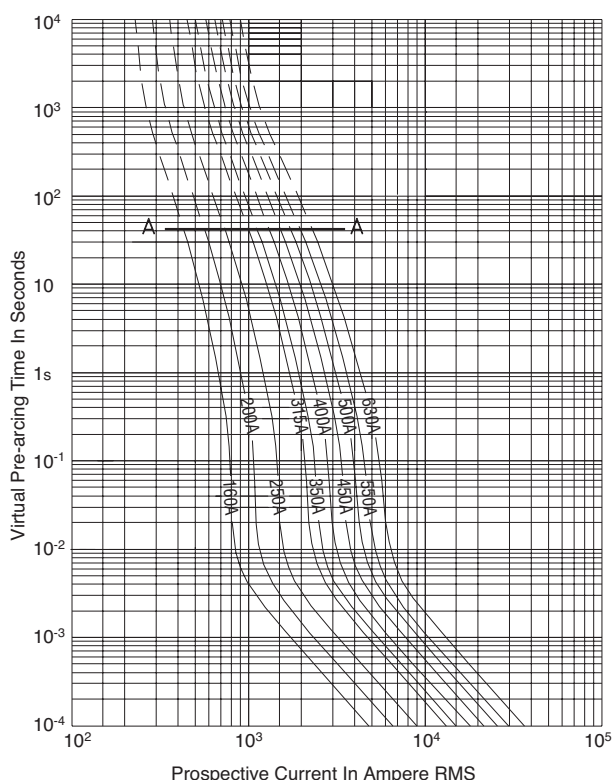
Size 1* — 50-400A: 1000V

Time-Current Curve

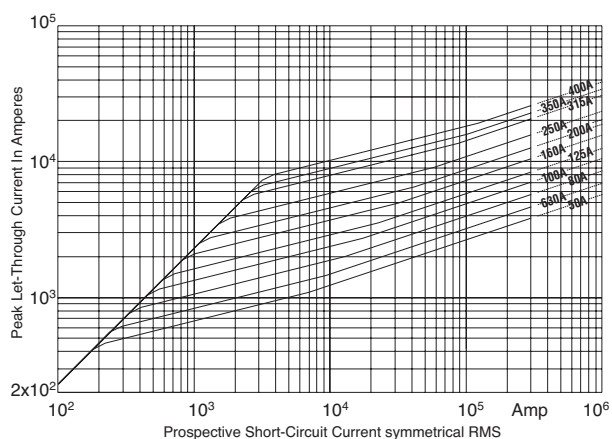


Size 1 — 160-630A: 1000V

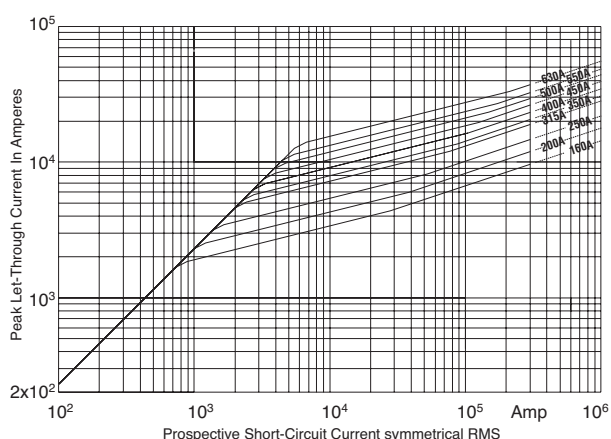
Time-Current Curve



Peak Let-Through Curve



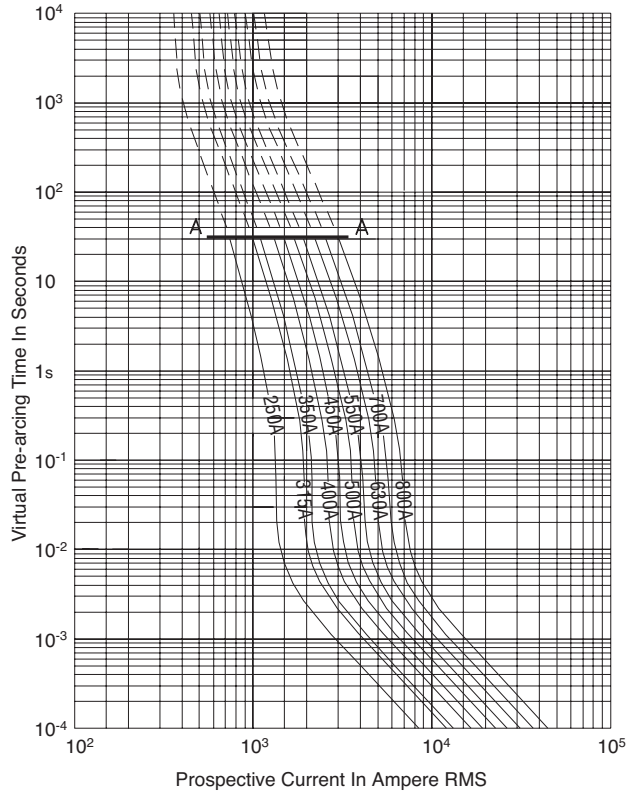
Peak Let-Through Curve



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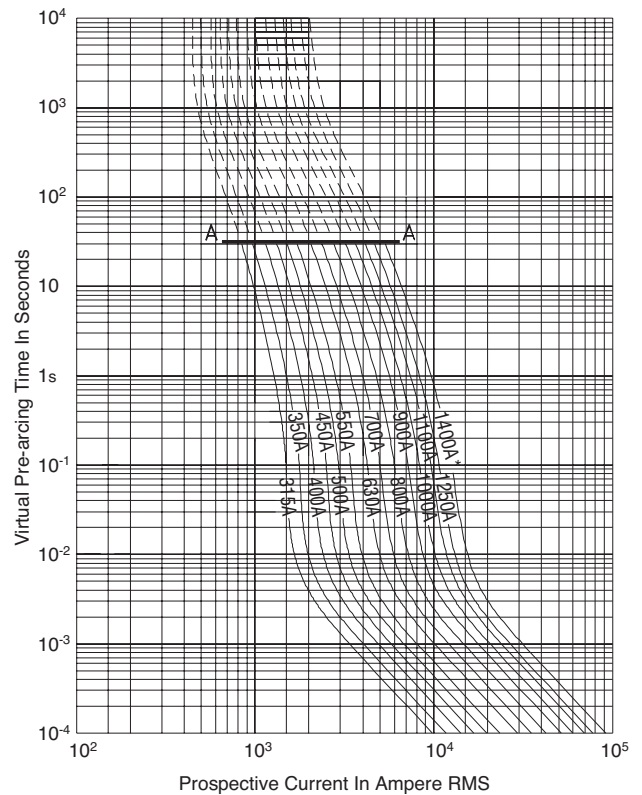
Size 2 — 250-800A: 1000V

Time-Current Curve



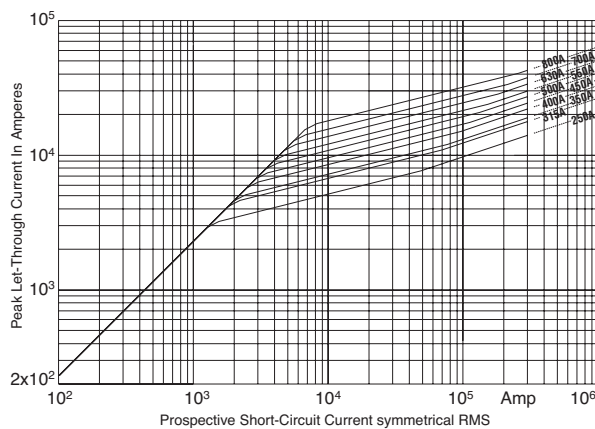
Size 3 — 315-1400A: 1000V

Time-Current Curve

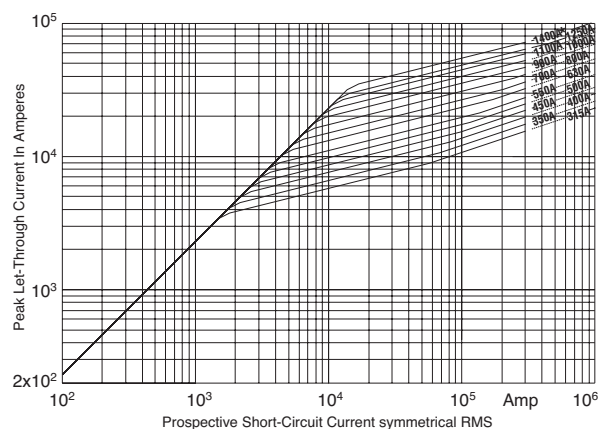


High Speed
Fuses

Peak Let-Through Curve



Peak Let-Through Curve



* 1400A fuses are derated to 900V