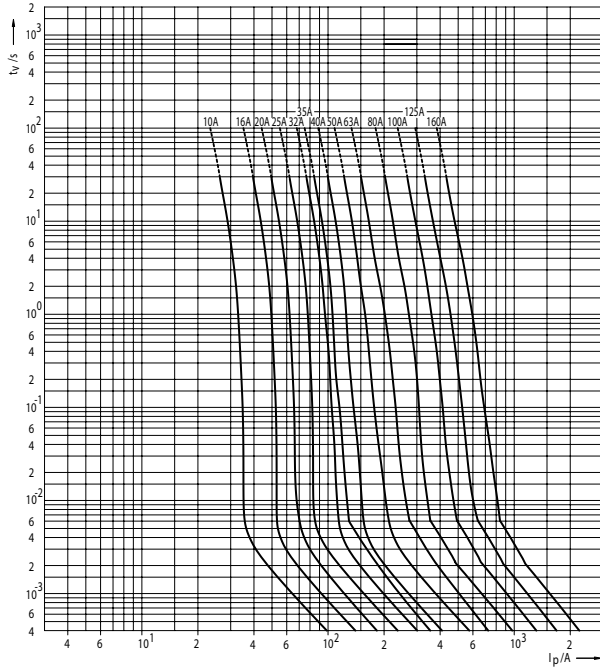


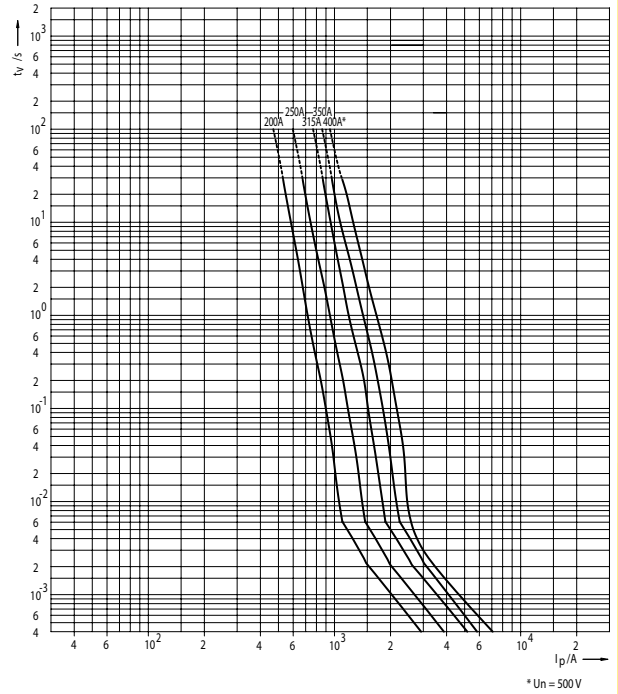
RATED VOLTAGE
~690V

aR

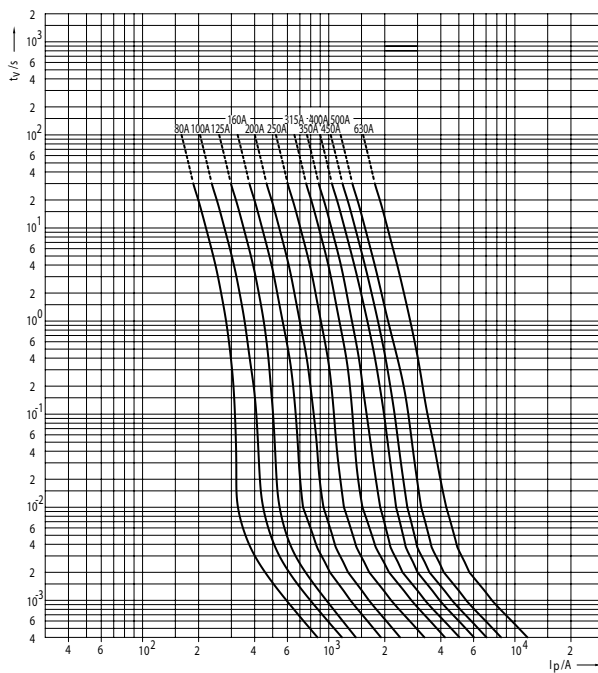
Time/current characteristics of fuse-links Ultra Quick M, S - size 00C and 00, 10-160A



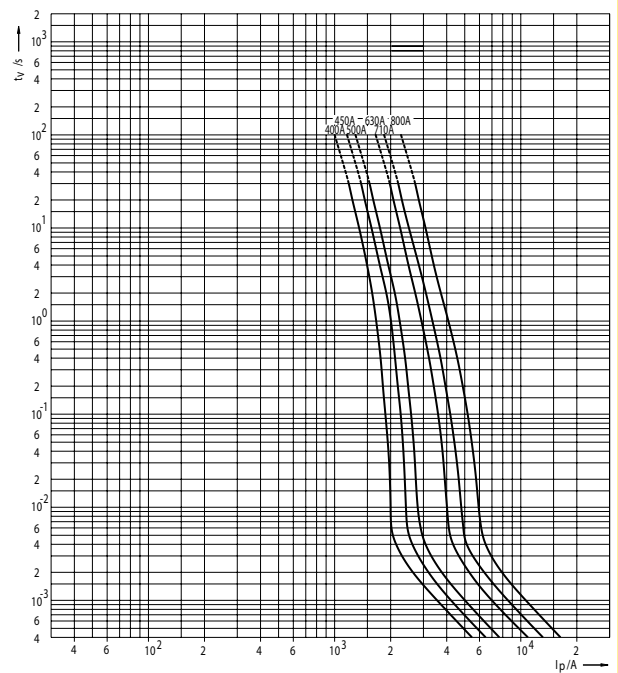
Time/current characteristics of fuse-links Ultra Quick S - size 00C and 00, 200-400A



Time/current characteristics of fuse-links Ultra Quick S, G - size 1



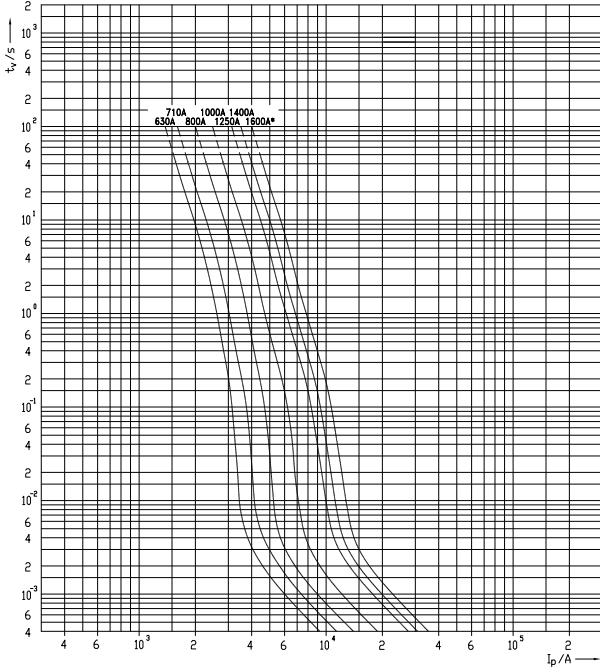
Time/current characteristics of fuse-links Ultra Quick S, G - size 2



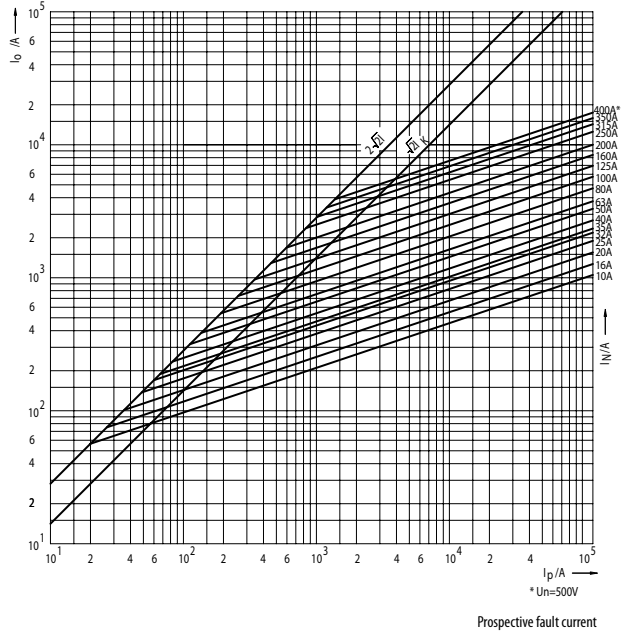
aR

RATED VOLTAGE
~690V

Time/current characteristics of fuse-links Ultra Quick S, G - size 3

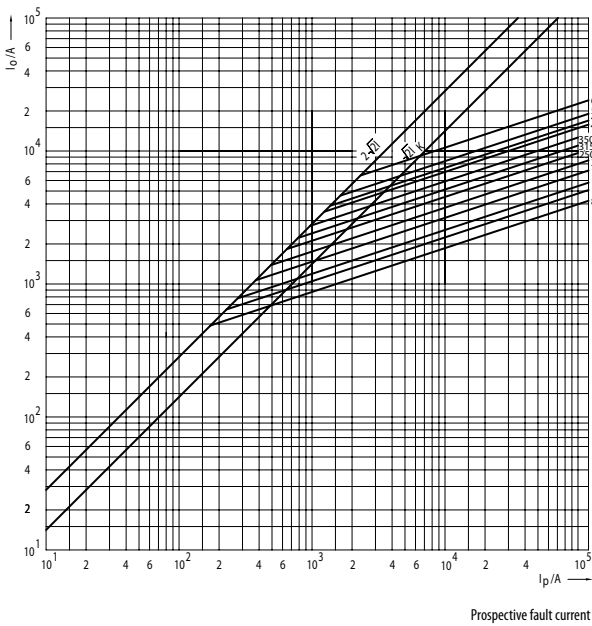


Cut-off characteristics of fuse-links Ultra Quick M and S - size 00C and 00

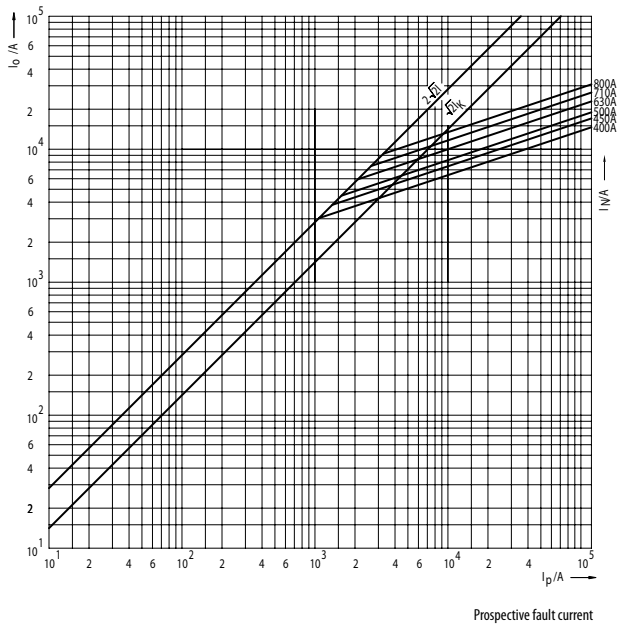


ULTRA QUICK

Cut-off characteristics of fuse-links Ultra Quick S, G - size 1



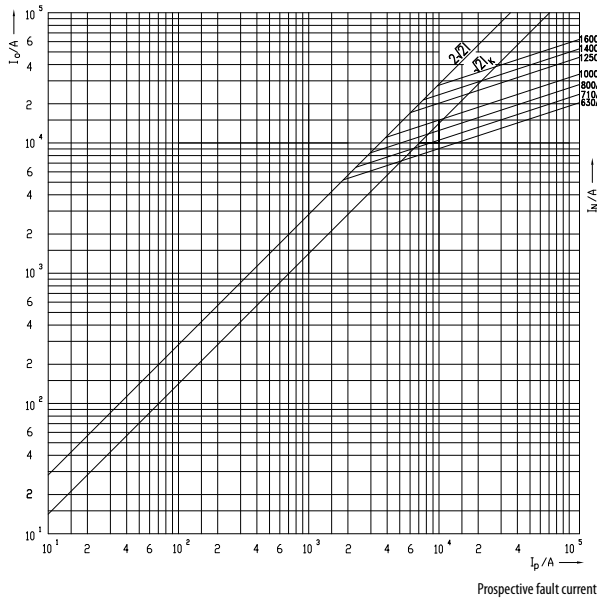
Cut-off characteristics of fuse-links Ultra Quick S, G - size 2



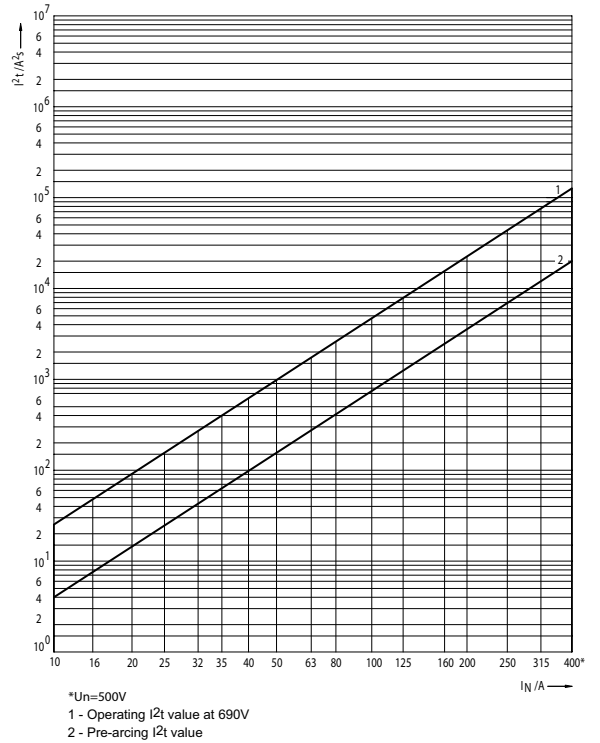
RATED VOLTAGE
~690V

aR

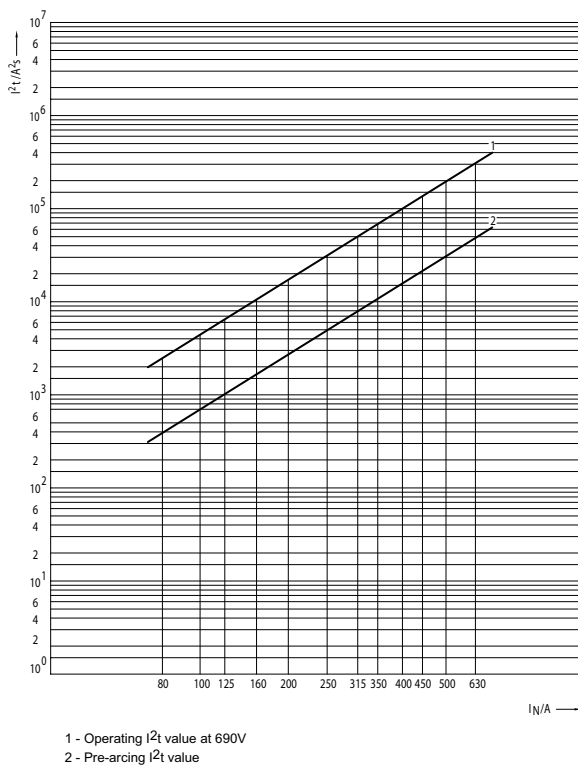
Time/current characteristics of fuse-links Ultra Quick S, G - size 3



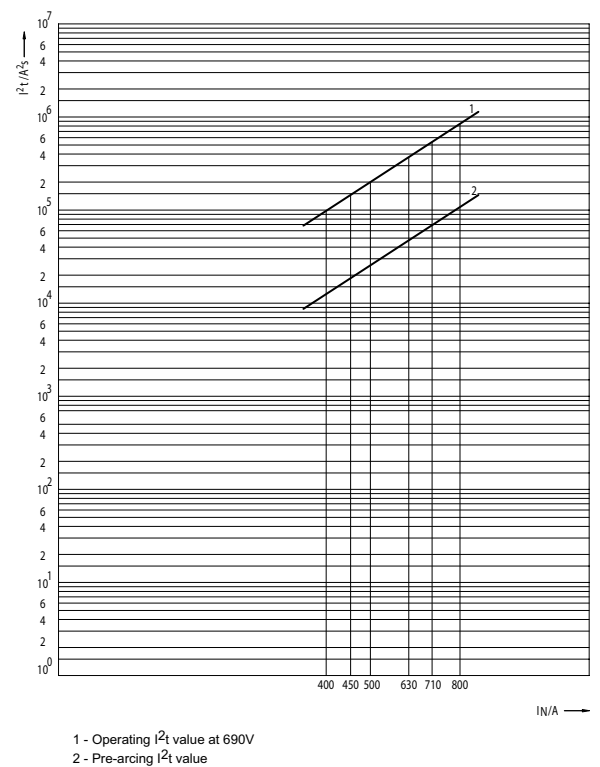
Joule Integral (I^2t) for Ultra Quick M and S - size 00C and 00



Joule Integral (I^2t) for Ultra Quick S, G - size 1



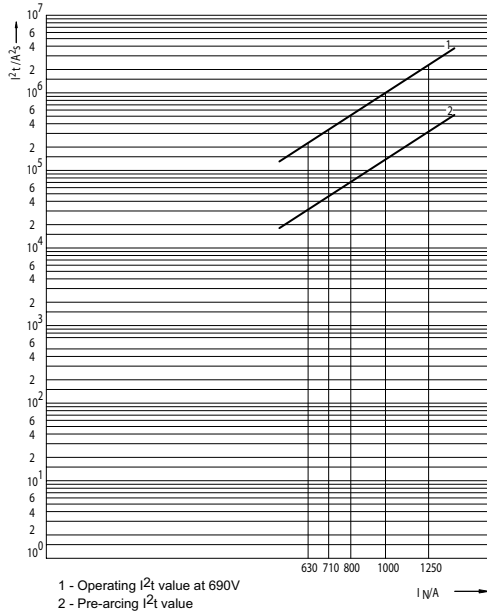
Joule Integral (I^2t) for Ultra Quick S, G - size 2



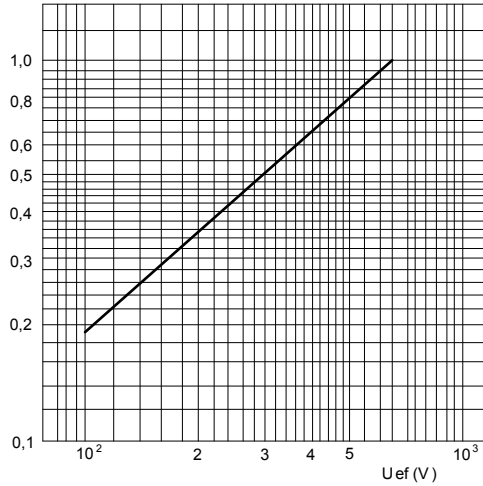
aR

RATED VOLTAGE
~690V

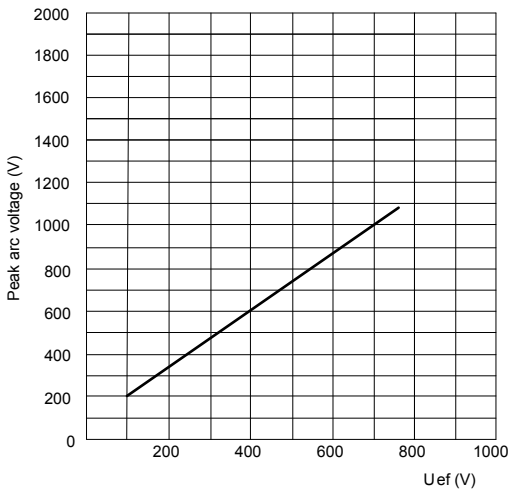
Joule Integral (I^2t) for Ultra Quick S, G - size 3



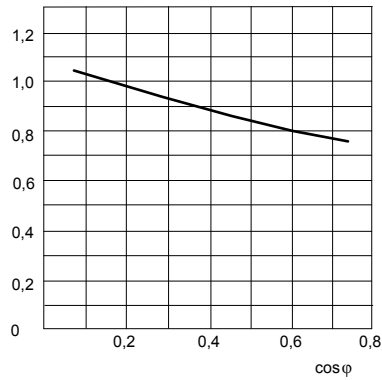
Conversion factor for total Joule integral



Maximum arc voltage occurring



Correction factor for performance factor $\cos\varphi \neq 0,15$ for operating I^2t values



Correction factor for converting the power dissipation for percentage load

Load(%)	Correction factor
10	0,005
20	0,025
30	0,063
40	0,122
50	0,204
60	0,31
70	0,442
80	0,6
90	0,785
100	1

RATED VOLTAGE
~690V

aR

Power dissipation, pre-arcing Joule Integral and Operating Joule Integral for Ultra Quick

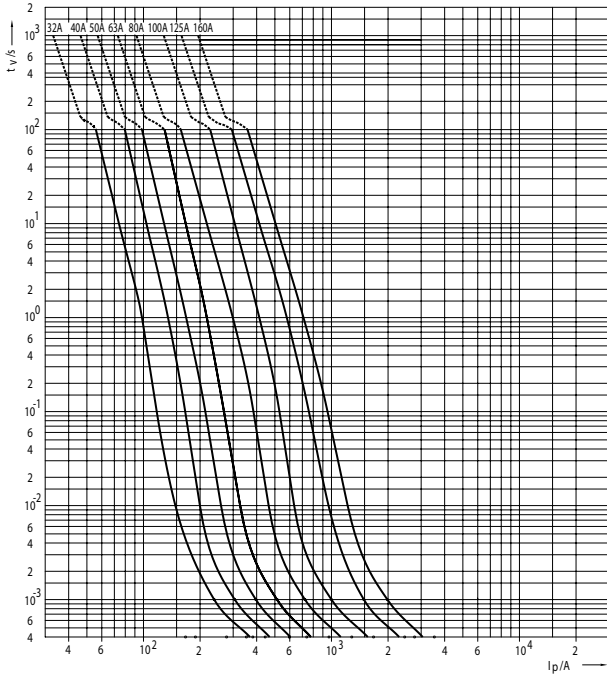
Size	I _n	Power dissipation	Pre-arcing	Operating	Operating	Operating	Operating
			Joule integral I ² t (1ms)	Joule Integral I ² t ~230V	Joule Integral I ² t ~400V	Joule Integral I ² t ~500V	Joule Integral I ² t ~690V
	A	W	A ² s	A ² s	A ² s	A ² s	A ² s
M00, S00C and S00	10	3,00	3	4	9	14	23
	16	4,00	8	18	28	37	46
	20	5,00	16	38	57	76	95
	25	6,00	26	66	99	132	165
	32	7,00	46	116	174	232	290
	35	8,00	64	160	240	320	400
	40	9,00	110	256	384	512	640
	50	10,00	165	400	600	800	1.000
	63	12,3	300	720	1.080	1.440	1.800
	80	16,3	440	1.120	1.680	2.240	2.800
	100	20,0	800	1.840	2.760	3.680	4.600
	125	26,9	1.400	3.200	4.800	6.400	8.000
	160	31,6	2.500	6.600	9.900	13.200	16.500
	200	38,7	4.000	9.200	13.800	18.400	23.000
	250	43,8	8.000	18.400	27.600	36.800	46.000
	315	54	14.000	32.000	48.000	64.000	80.000
350	60	15.000	40.000	60.000	80.000	100.000	
400*	70	20.000	65.000	104.000	130.000	120.000	
S1, G1	80	15,6	400	920	1.380	1.840	2.300
	100	20,0	660	1.840	2.760	3.680	4.600
	125	25,0	1.000	2.640	3.960	5.280	6.600
	160	32,2	1.650	4.000	6.000	8.000	10.000
	200	39,4	2.800	7.200	10.800	14.400	18.000
	250	49,4	4.600	12.800	19.200	25.600	32.000
	315	60	8.000	23.200	34.800	46.400	58.000
	350	63	11.000	31.200	46.800	62.400	78.000
	400	66	16.000	44.000	66.000	88.000	110.000
	450	72	22.000	62.000	93.000	124.000	155.000
500	73	32.000	80.000	120.000	160.000	200.000	
630	86	52.000	132.000	198.000	264.000	330.000	
S2, G2	400	70	11.000	34.000	51.000	68.000	85.000
	450	76	16.500	50.000	75.000	100.000	125.000
	500	80	22.000	66.000	99.000	132.000	165.000
	630	85	44.000	124.000	186.000	248.000	310.000
	710	91	64.000	184.000	276.000	368.000	460.000
	800	95	100.000	288.000	432.000	576.000	720.000
S3, G3	630	102	33.000	104.000	156.000	208.000	260.000
	710	109	46.000	132.000	198.000	264.000	330.000
	800	117	78.000	200.000	300.000	400.000	500.000
	1000	131	150.000	400.000	600.000	800.000	1.000.000
1250	152	320.000	920.000	1.380.000	1.840.000	2.300.000	

* Un = 500V

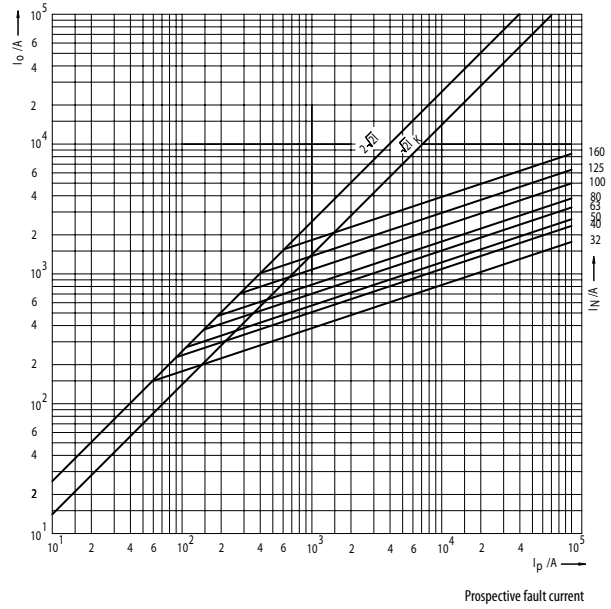
aR

RATED VOLTAGE
~1000V

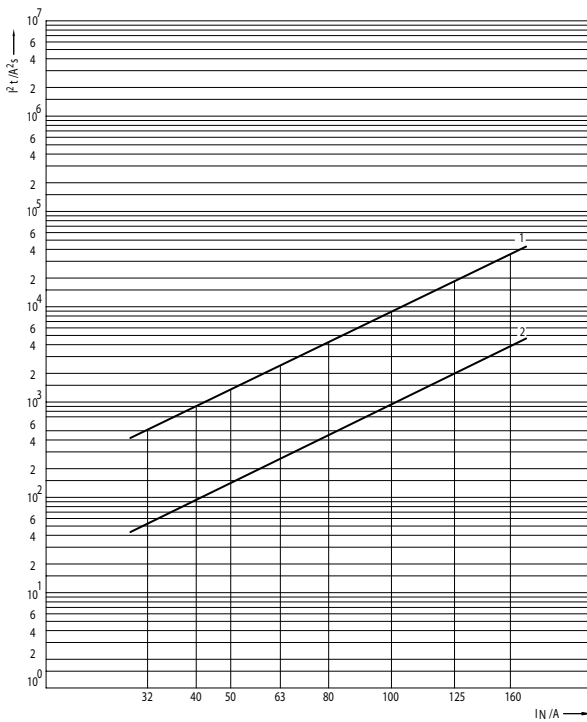
Time/current characteristics of fuse-links Ultra Quick M, S - size 0



Cut-off characteristics of fuse-links Ultra Quick M, S - size 0



Joule Integral (I^2t) for Ultra Quick M, S - size 0

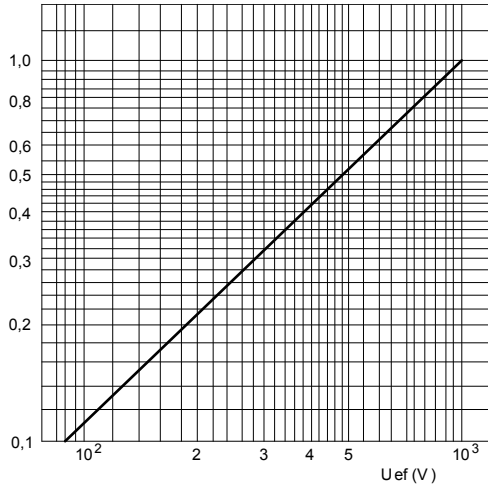


1 - Operating I^2t value at 1000V
2 - Pre-arcing I^2t value

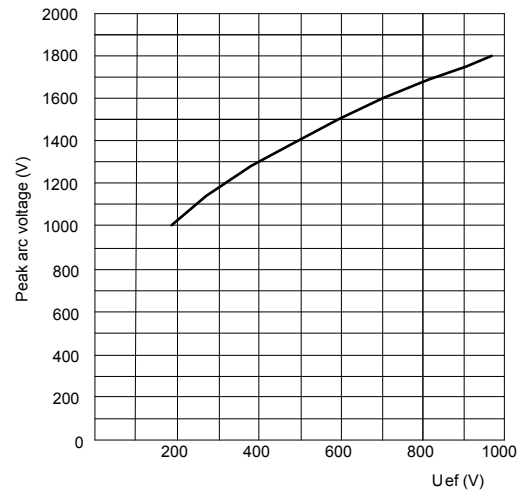
RATED VOLTAGE
~1000V

aR

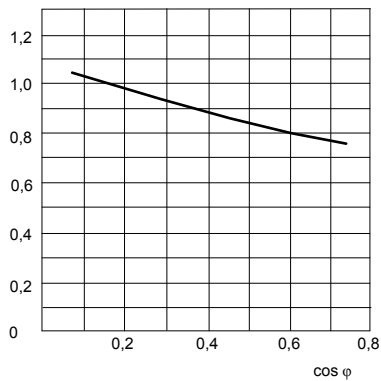
Conversion factor for total Joule integral Size 0



Maximum arc voltage occurring



Correction factor for performance factor $\cos\varphi \neq 0,15$ for operating I^2t values



Correction factor for converting the power dissipation for percentage load

Load (%)	Correction factor
10	0,005
20	0,025
30	0,063
40	0,122
50	0,204
60	0,31
70	0,442
80	0,6
90	0,785
100	1

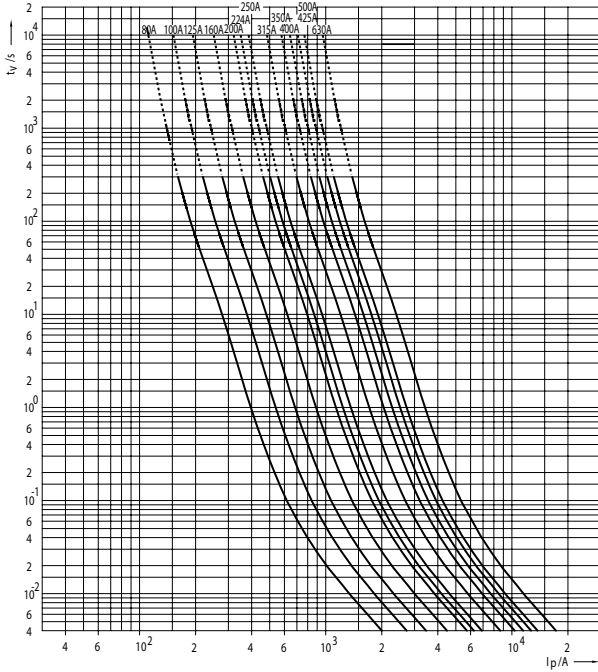
Power dissipation, pre-arcing Joule Integral and Operating Joule Integral for Ultra Quick

Size	I_N	Power dissipation	Pre-arcing	Operating	Operating	Operating	Operating	Operating
			Joule integral I^2t (1ms)	Joule Integral $I^2t \sim 230V$	Joule Integral $I^2t \sim 400V$	Joule Integral $I^2t \sim 500V$	Joule Integral $I^2t \sim 690V$	Joule Integral $I^2t \sim 1000V$
	A	W	A ² s	A ² s	A ² s	A ² s	A ² s	A ² s
M0	32	12,5	51	140	210	255	350	480
	40	14,4	90	250	370	450	610	840
	50	19,3	140	380	570	700	950	1.300
	63	22,3	250	680	1.000	1.250	1.700	2.320
	80	28,8	420	1.150	1.700	2.100	2.850	3.900
	100	31,5	860	2.350	3.500	4.300	5.850	8.000
	125	34,3	1.970	5.380	8.000	9.800	13.400	18.300
160	40,5	3.800	10.380	15.400	18.900	25.800	35.300	

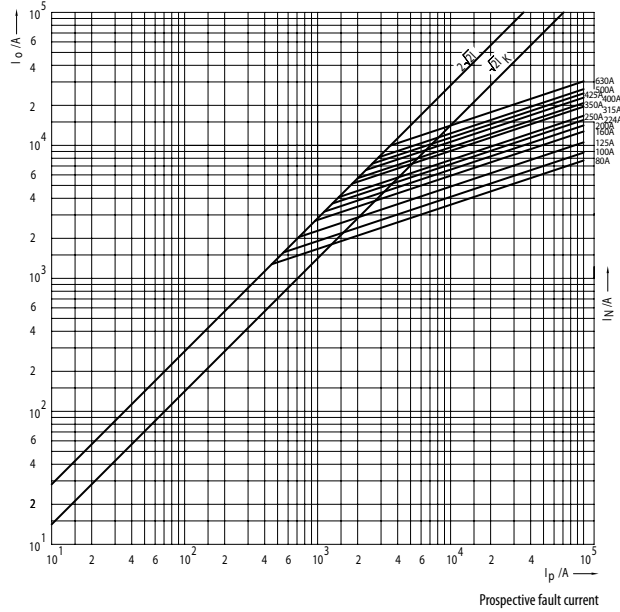
aR

RATED VOLTAGE
~1200V

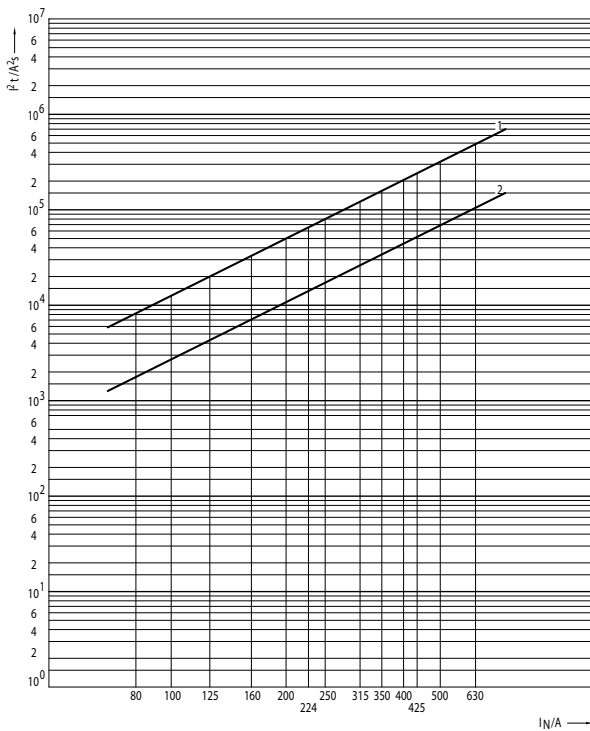
Time/current characteristics of fuse-links Ultra Quick M - size 1, 2, 3



Cut-off characteristics of fuse-links Ultra Quick M - size 1, 2, 3



Joule Integral (I²t) for Ultra Quick M - size 1, 2, 3

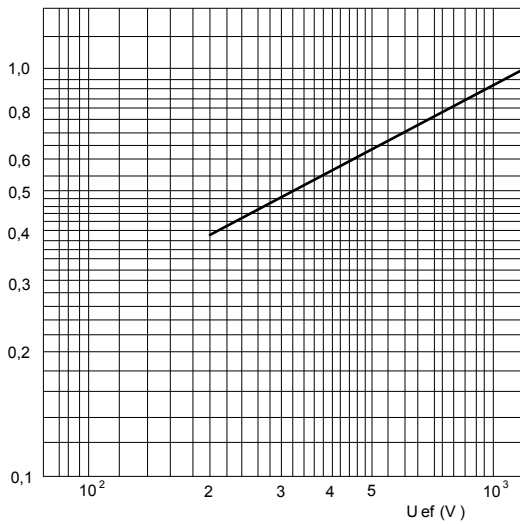


1 - Operating I²t value at 1200V
2 - Pre-arcing I²t value

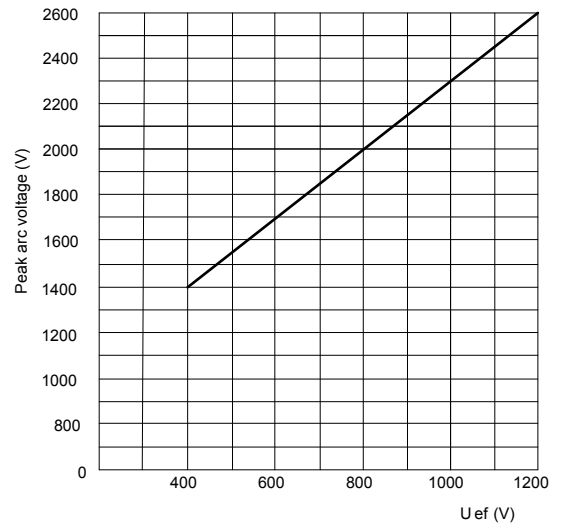
RATED VOLTAGE
~1200V

aR

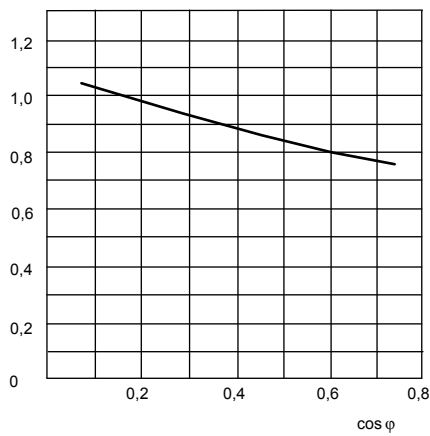
Conversion factor for total Joule integral



Maximum arc voltage occurring



Correction factor for performance factor $\cos\varphi \neq 0,15$ for operating I^2t values



Correction factor for converting the power dissipation for percentage load

Load (%)	Correction factor
10	0,005
20	0,025
30	0,063
40	0,122
50	0,204
60	0,31
70	0,442
80	0,6
90	0,785
100	1

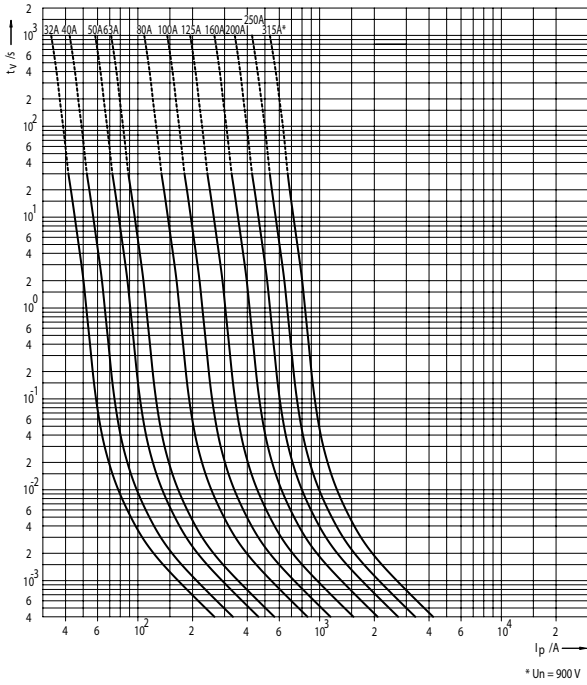
Power dissipation, pre-arcing Joule Integral and Operating Joule Integral for Ultra Quick

Size	I_N	Power dissipation	Pre-arcing Joule integral I^2t (1ms)	Operating Joule Integral $I^2t \sim 230V$	Operating Joule Integral $I^2t \sim 400V$	Operating Joule Integral $I^2t \sim 500V$	Operating Joule Integral $I^2t \sim 690V$	Operating Joule Integral $I^2t \sim 1000V$	Operating Joule Integral $I^2t \sim 1200V$
	A	W	A ² s	A ² s	A ² s	A ² s	A ² s	A ² s	A ² s
M1, M2, M3	80	35,0	1.650	3.440	4.240	5.200	6.000	7.200	8.000
	100	45,9	2.500	5.375	6.625	8.125	9.375	11.250	12.500
	125	55	4.200	8.600	10.600	13.000	15.000	18.000	20.000
	160	67	7.000	13.760	16.960	20.800	24.000	28.800	32.000
	200	84	11.000	21.500	26.500	32.500	37.500	45.000	50.000
	224	93	15.000	27.090	33.390	40.950	47.250	56.700	63.000
	250	104	17.000	34.400	42.400	52.000	60.000	72.000	80.000
	315	125	25.000	51.600	63.600	78.000	90.000	108.000	120.000
	350	141	32.000	68.800	84.800	104.000	120.000	144.000	160.000
	400	159	42.000	86.000	106.000	130.000	150.000	180.000	200.000
	425	172	58.000	98.900	121.900	149.500	172.500	207.000	230.000
	500	185	77.000	137.600	169.600	208.000	240.000	288.000	320.000
630	198	110.000	215.000	265.000	325.000	375.000	450.000	500.000	

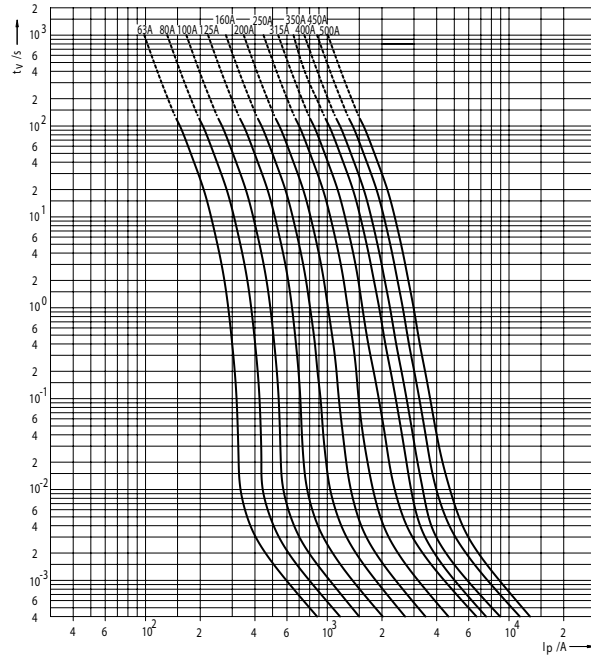
aR

RATED VOLTAGE
~1000V

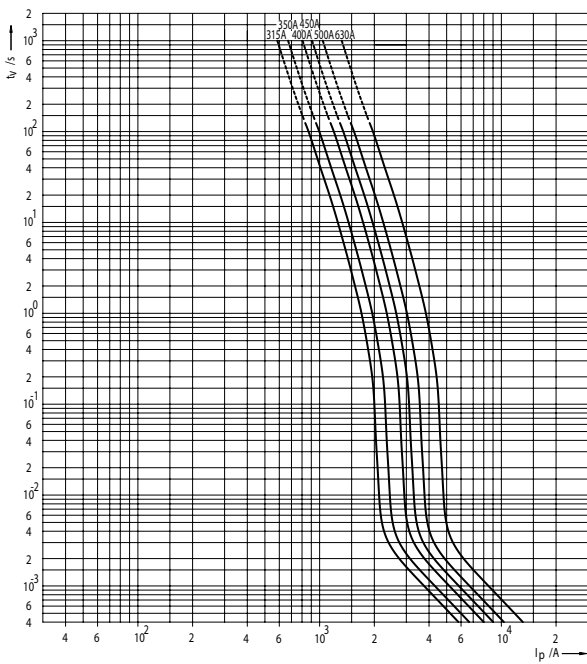
Time/current characteristics of fuse-links Ultra Quick S - size 00



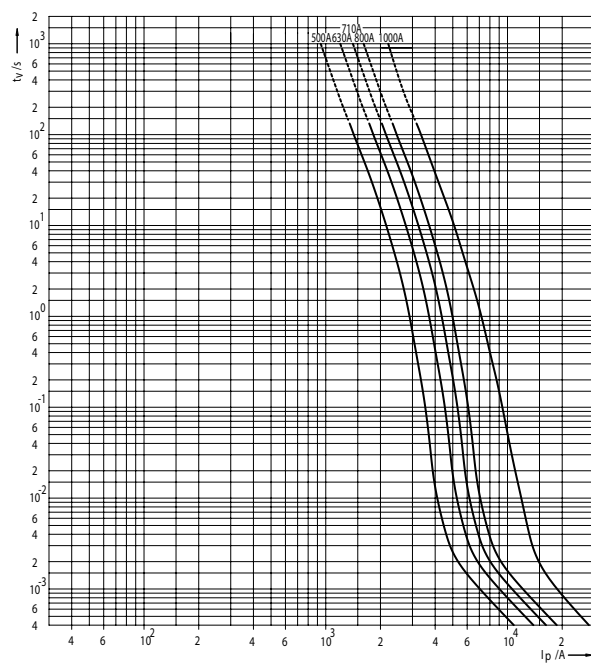
Time/current characteristics of fuse-links Ultra Quick S, G - size 1



Time/current characteristics of fuse-links Ultra Quick S, G - size 2



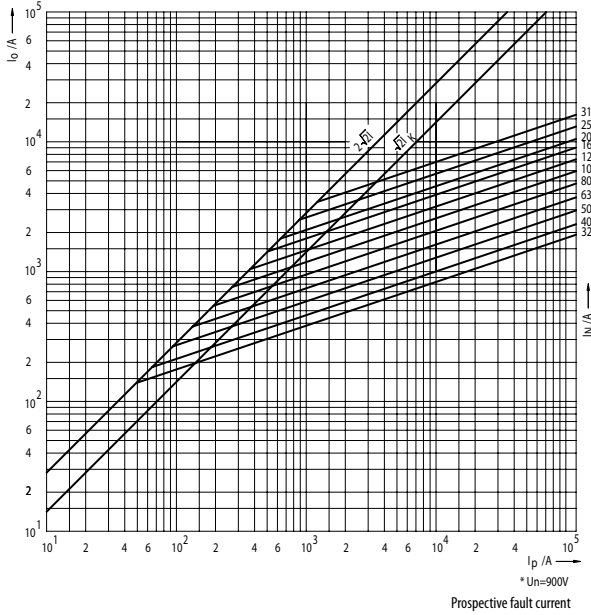
Time/current characteristics of fuse-links Ultra Quick S, G - size 3



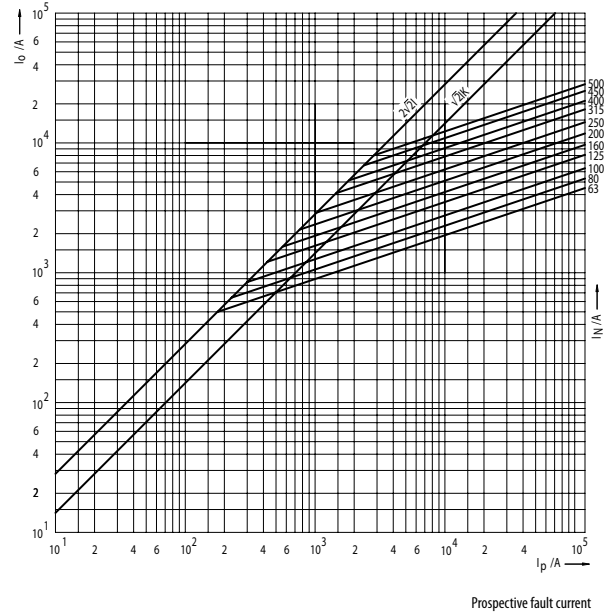
RATED VOLTAGE
~1000V

aR

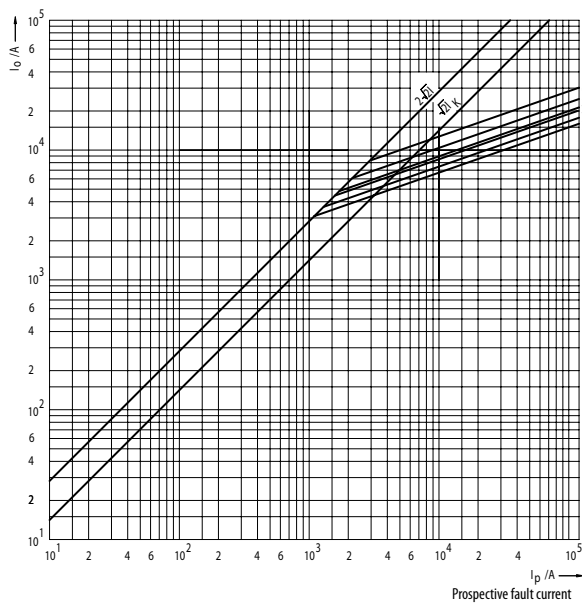
Cut-off characteristics of fuse-links Ultra Quick S - size 00



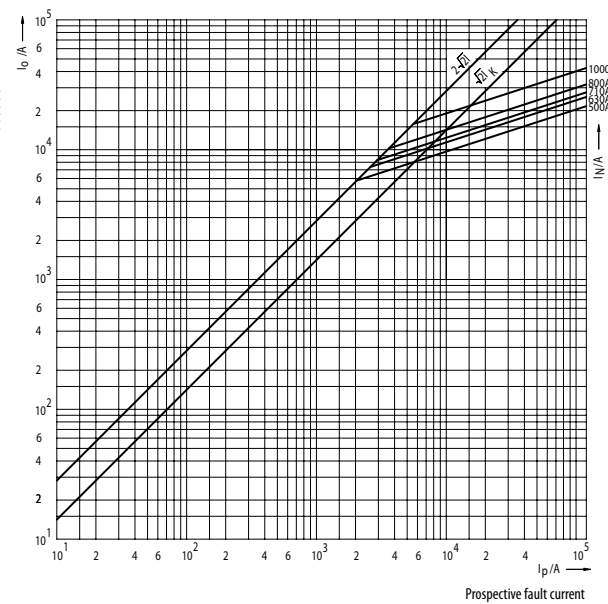
Cut-off characteristics of fuse-links Ultra Quick S, G - size 1



Cut-off characteristics of fuse-links Ultra Quick S, G - size 2



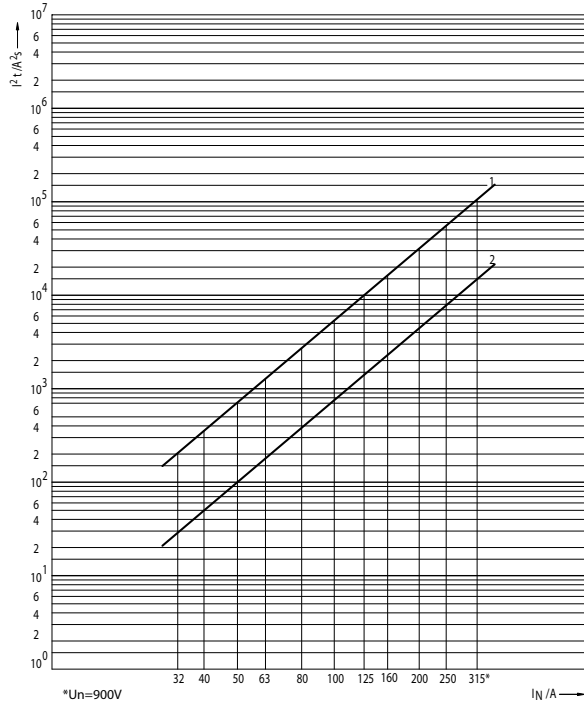
Cut-off characteristics of fuse-links Ultra Quick S, G - size 3



aR

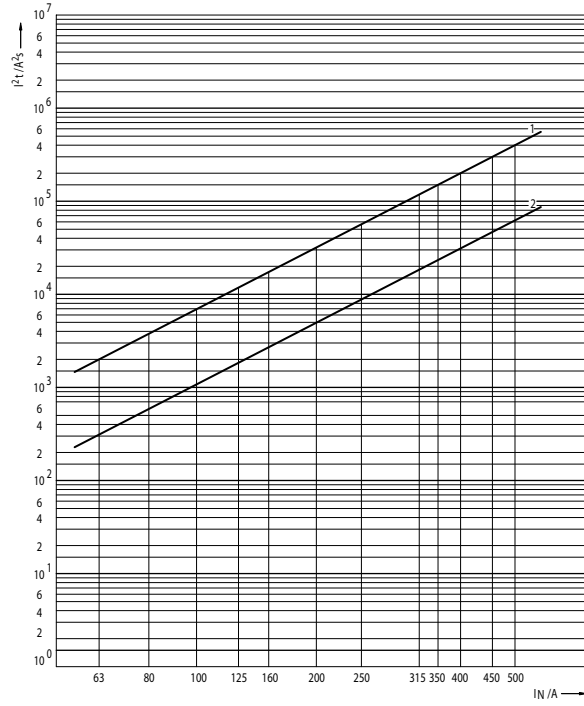
RATED VOLTAGE
~1000V

Joule Integral (I^2t) for Ultra Quick S - size 00



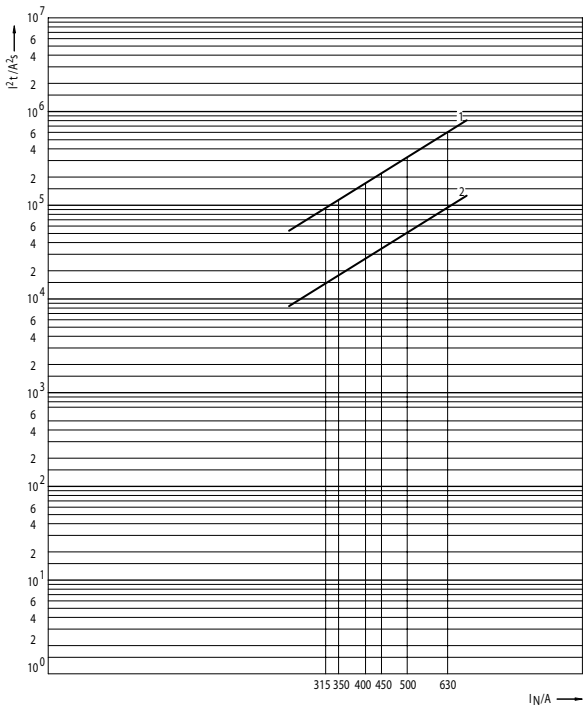
1 - Operating I^2t value at 1000V
2 - Pre-arcing I^2t value

Joule Integral (I^2t) for Ultra Quick S, G - size 1



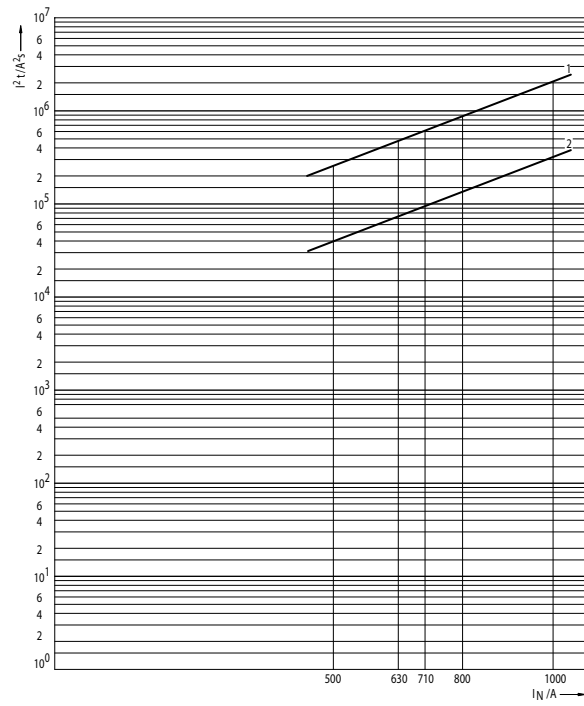
1 - Operating I^2t value at 1000V
2 - Pre-arcing I^2t value

Joule Integral (I^2t) for Ultra Quick S, G - size 2



1 - Operating I^2t value at 1000V
2 - Pre-arcing I^2t value

Joule Integral (I^2t) for Ultra Quick S, G - size 3

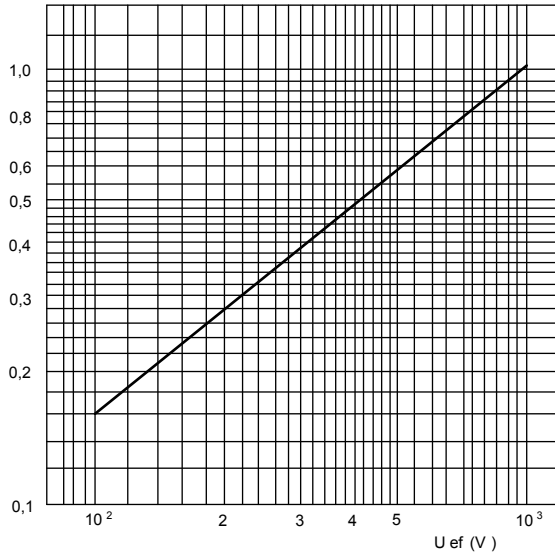


1 - Operating I^2t value at 1000V
2 - Pre-arcing I^2t value

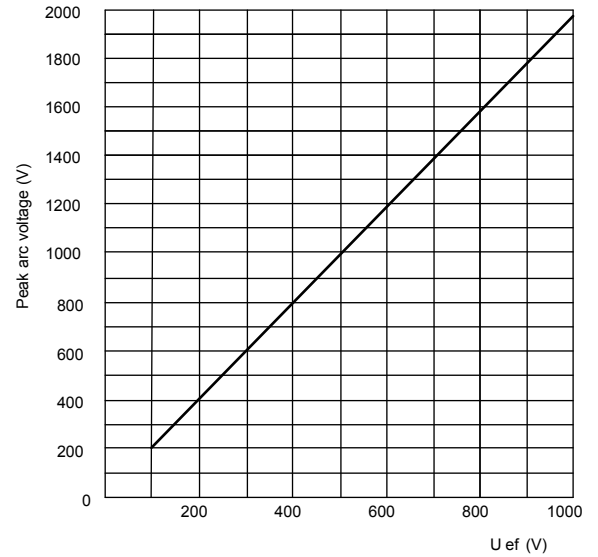
RATED VOLTAGE
~1000V

aR

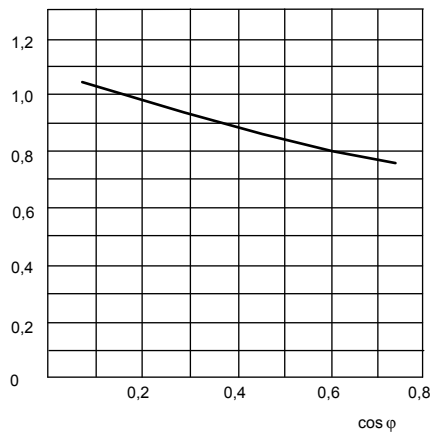
Conversion factor for total Joule integral



Maximum arc voltage accuring



Correction factor for performance factor $\cos\varphi \neq 0,15$ for operating I^2t values



Correction factor for converting the power dissipation for percentage load

Load(%)	Correction factor
10	0,005
20	0,025
30	0,063
40	0,122
50	0,204
60	0,31
70	0,442
80	0,6
90	0,785
100	1

aR

RATED VOLTAGE
~1000V

Power dissipation, pre-arcing Joule Integral and Operating Joule Integral for Ultra Quick

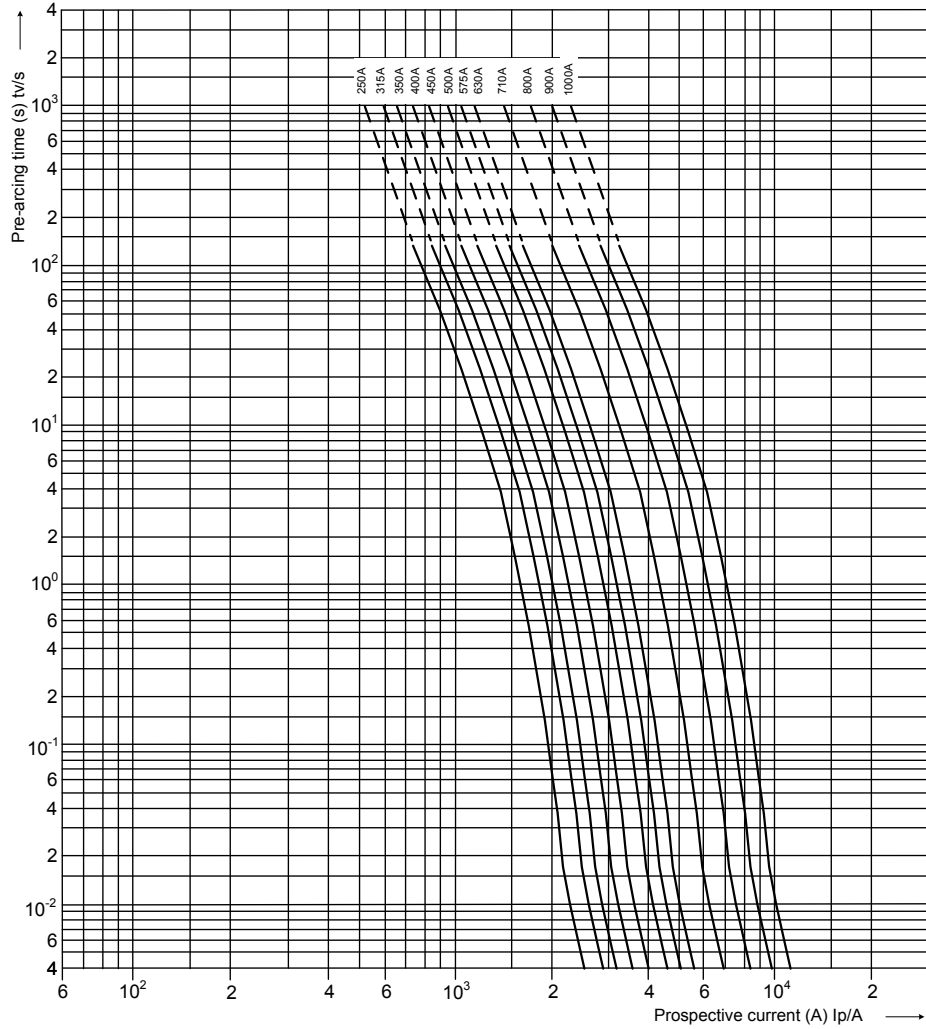
Size	I _N	Power dissipation	Pre-arcing Joule integral I ² t (1ms)	Operating Joule Integral I ² t ~230V	Operating Joule Integral I ² t ~400V	Operating Joule Integral I ² t ~500V	Operating Joule Integral I ² t ~690V	Operating Joule Integral I ² t ~1000V
	A	W	A ² s	A ² s	A ² s	A ² s	A ² s	A ² s
S00	32	15,1	26	63	98	116	150	200
	40	18,1	45	104	162	191	248	330
	50	20,0	100	211	328	389	503	670
	63	24,3	165	410	637	754	975	1.300
	80	27,4	330	756	1.176	1.392	1.800	2.400
	100	30,0	660	1.481	2.303	2.726	3.525	4.700
	125	38,2	1.500	3.150	4.900	5.800	7.500	10.000
	160	47,2	2.100	5.040	7.840	9.280	12.000	16.000
	200	57	4.000	9.450	14.700	17.400	22.500	30.000
	250	67	8.000	18.270	28.420	33.640	43.500	58.000
	315*	78	15.000	34.650	53.900	63.800	82.500	110.000
S1, G1	63	15,1	300	630	980	1.160	1.500	2.000
	80	20,0	600	1.071	1.666	1.972	2.550	3.400
	100	25,0	1.000	1.922	2.989	3.538	4.575	6.100
	125	30,0	1.650	3.465	5.390	6.380	8.250	11.000
	160	35,0	2.700	5.355	8.330	9.860	12.750	17.000
	200	45,3	4.800	9.765	15.190	17.980	23.250	31.000
	250	54	8.000	15.750	24.500	29.000	37.500	50.000
	315	60	16.500	34.650	53.900	63.800	82.500	110.000
	350	65	21.000	47.250	73.500	87.000	112.500	150.000
	400	70	32.000	63.000	98.000	116.000	150.000	200.000
	450	74	46.000	97.650	151.900	179.800	232.500	310.000
500	80	64.000	126.000	196.000	232.000	300.000	400.000	
S2, G2	315	66	15.000	26.775	41.650	49.300	63.750	85.000
	350	70	18.000	40.950	63.700	75.400	97.500	130.000
	400	80	28.000	53.550	83.300	98.600	127.500	170.000
	450	86	33.000	69.300	107.800	127.600	165.000	220.000
	500	90	55.000	100.800	156.800	185.600	240.000	320.000
S3, G3	630	108	100.000	189.000	294.000	348.000	450.000	600.000
	500	100	41.000	78.750	122.500	145.000	187.500	250.000
	630	110	80.000	157.500	245.000	290.000	375.000	500.000
	710	125	100.000	211.050	328.300	388.600	502.500	670.000
	800	136	150.000	274.050	426.300	504.600	652.500	870.000
1000	157	310.000	630.000	980.000	1.160.000	1.500.000	2.000.000	

* Un = 900V

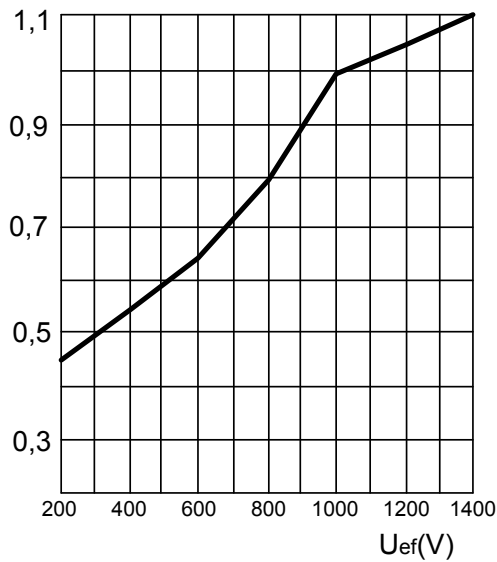
RATED VOLTAGE
~1250V

aR

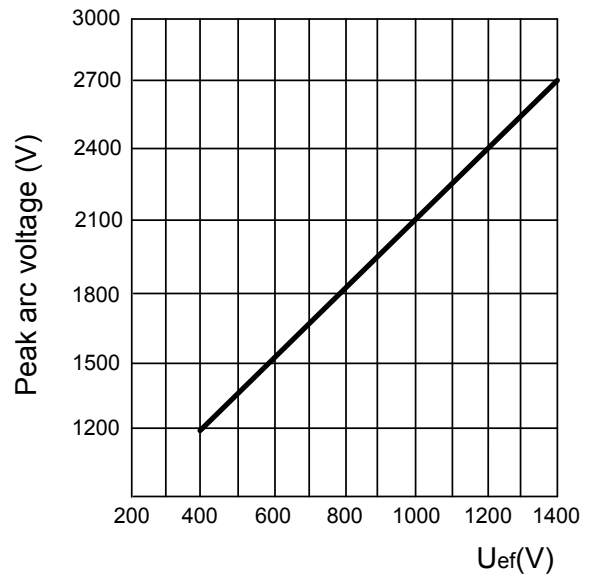
Time-current characteristics



Conversion factor for total Joule integral



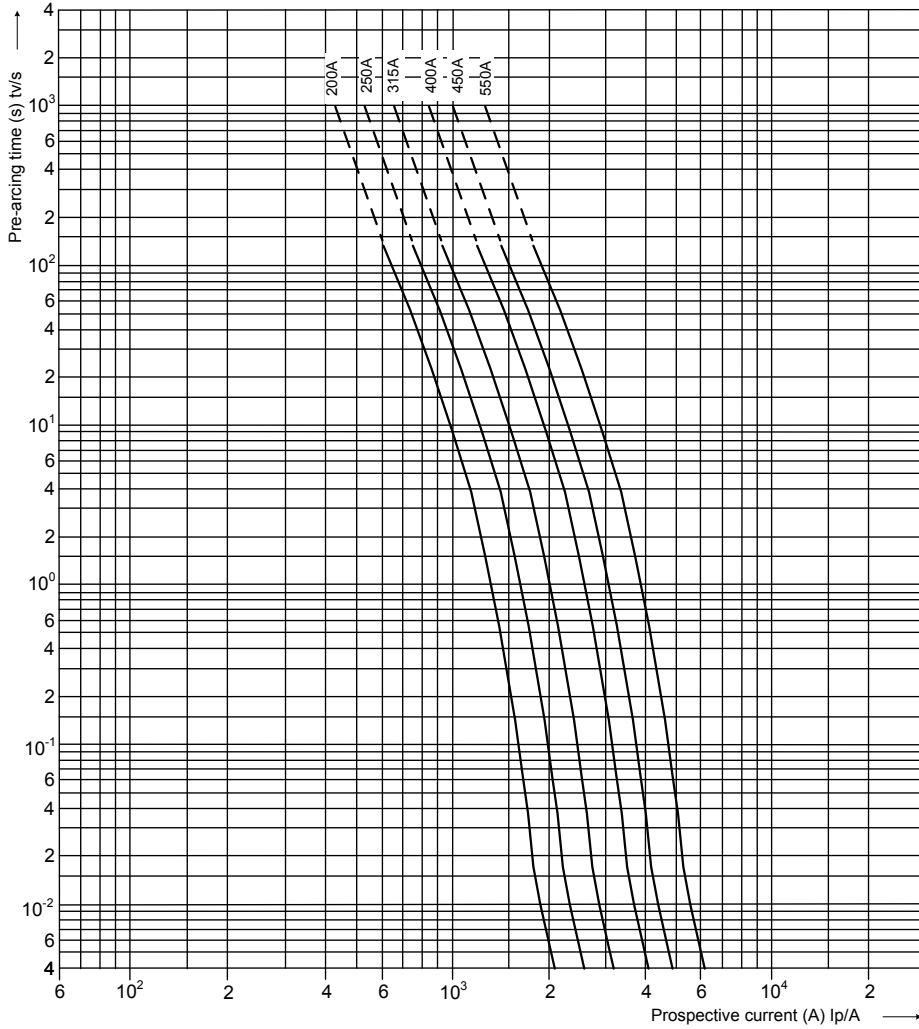
Maximum arc voltage accuring



aR

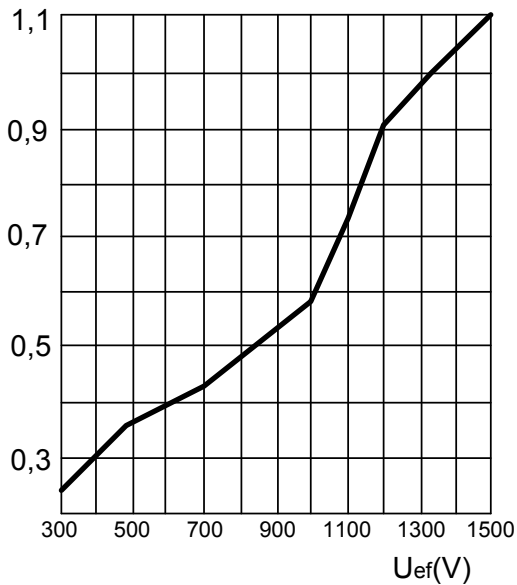
RATED VOLTAGE
~1500V

Time-current characteristics

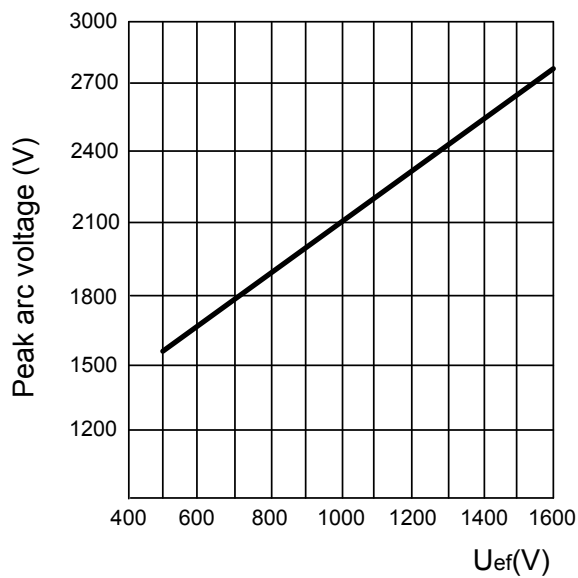


ULTRA QUICK

Conversion factor for total Joule integral



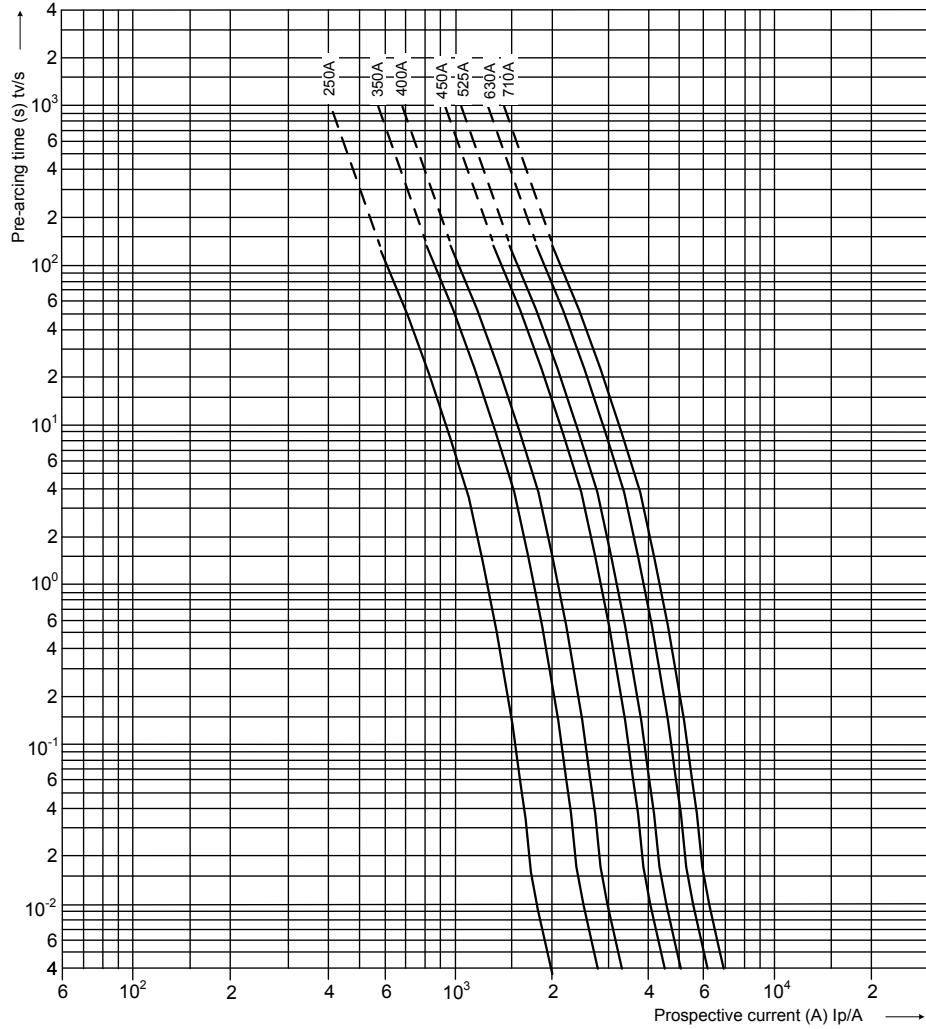
Maximum arc voltage accuring



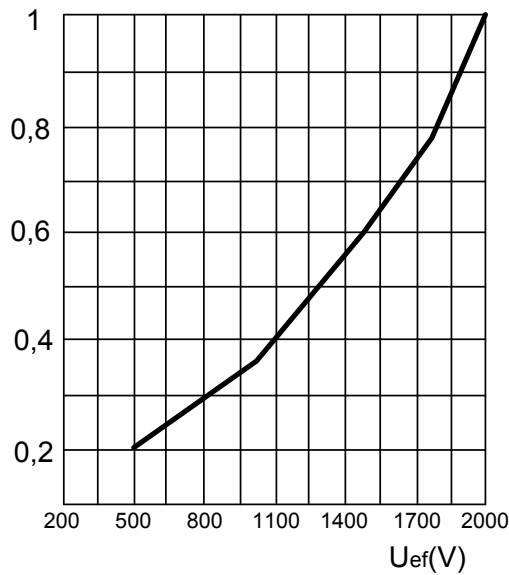
RATED VOLTAGE
~2000V

aR

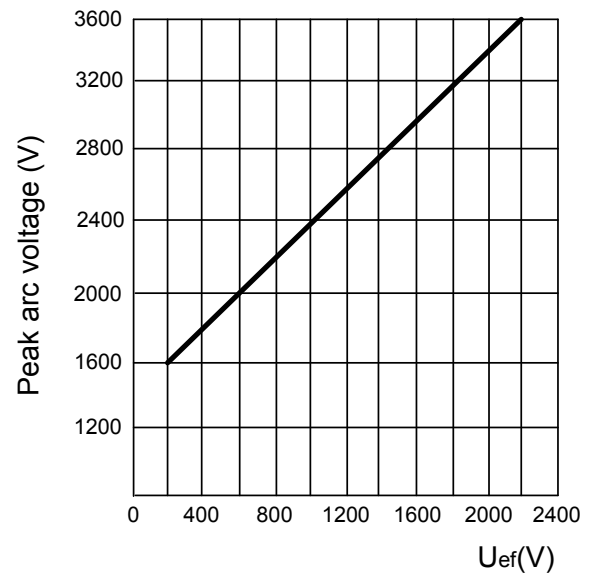
Time-current characteristics



Conversion factor for total Joule integral



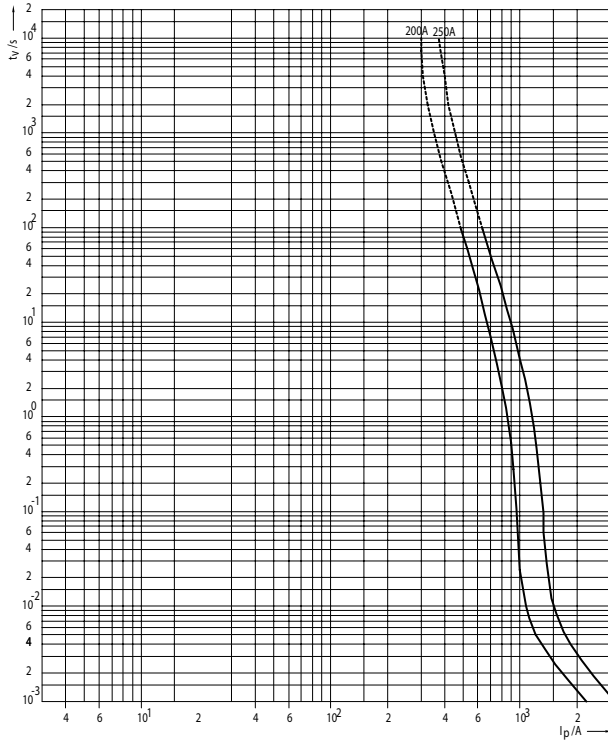
Maximum arc voltage occurring



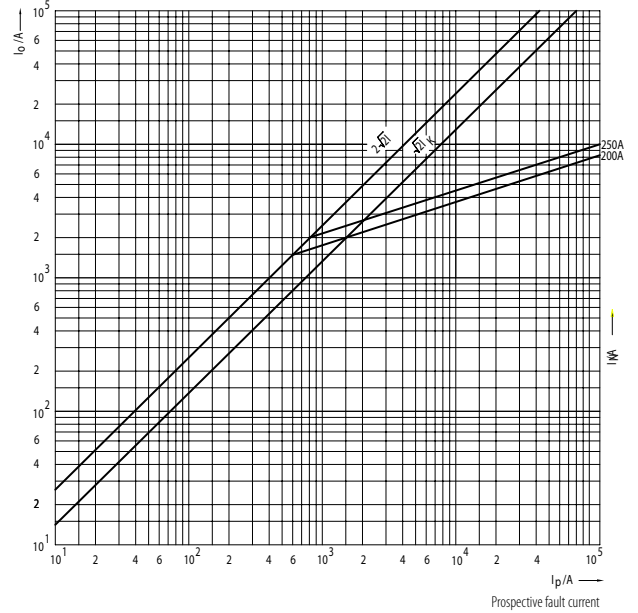
RATED VOLTAGE
~690V

aR

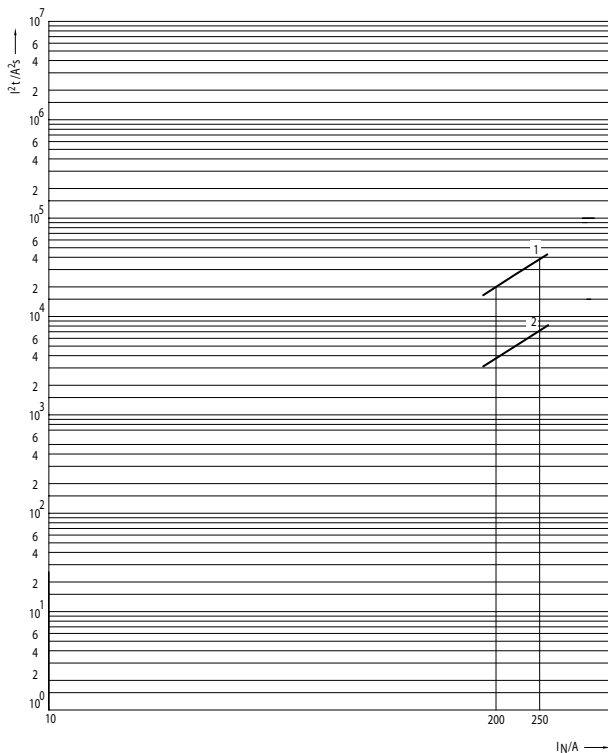
Time/current characteristics of fuse-links Ultra quick MUQ02 – size 00



Cut-off characteristics of fuse – links Ultra Quick MUQ02 – size 00



Joule integral (I²t) for Ultra Quick MUQ02 – size 00

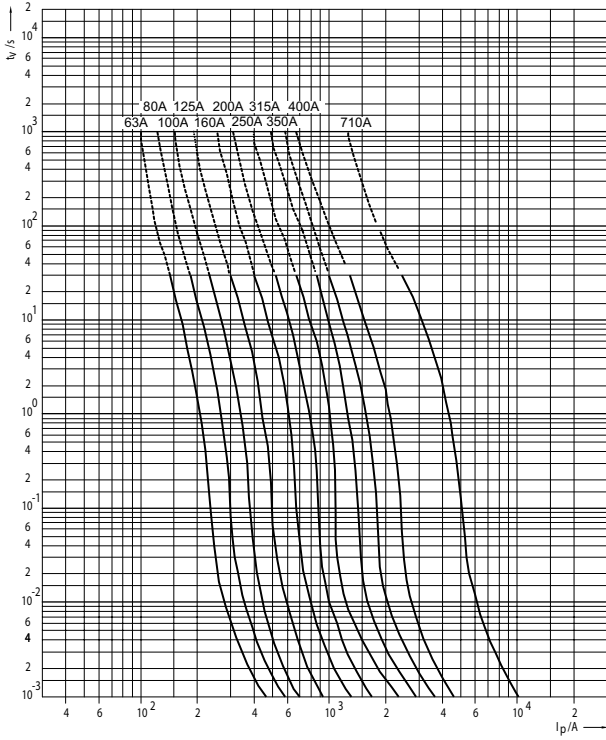


1 - Operating I²t value at 690V
2 - Pre-arcing I²t value

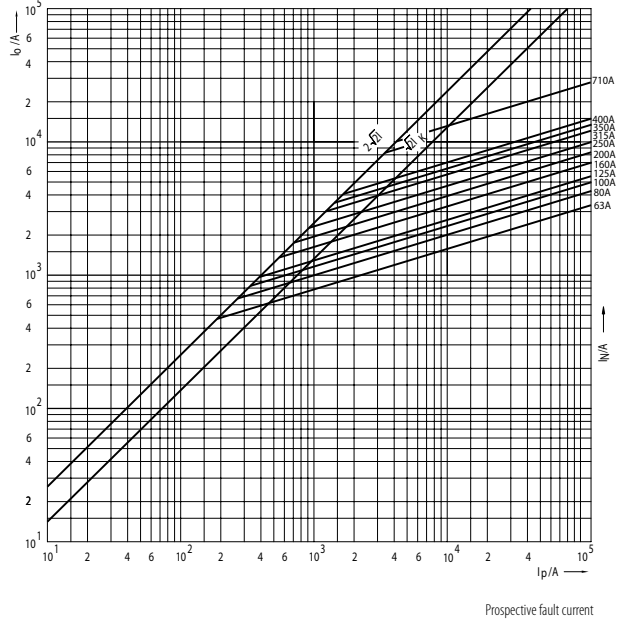
aR

RATED VOLTAGE
~690V

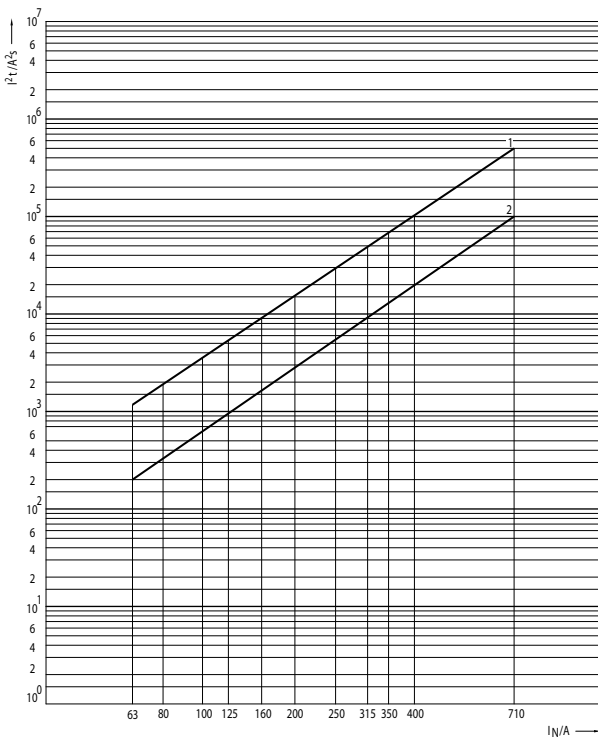
Time/current characteristics of fuse-links Ultra quick MUQ02, SUQ02, GUQ02 – size 1



Cut-off characteristics of fuse – links Ultra Quick MUQ02, SUQ02, GUQ02 – size 1



Joule integral (I^2t) for Ultra Quick MUQ02, SUQ02, GUQ02 – size 1

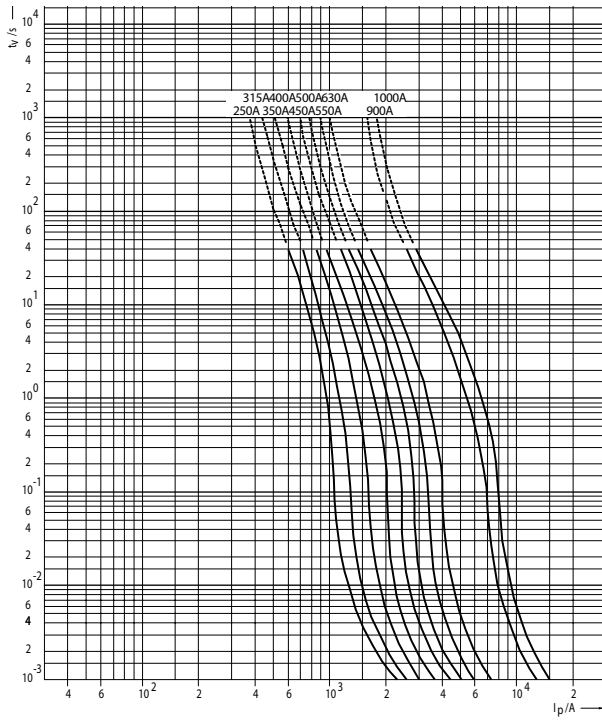


1 - Operating I^2t value at 690V
2 - Pre-arcing I^2t value

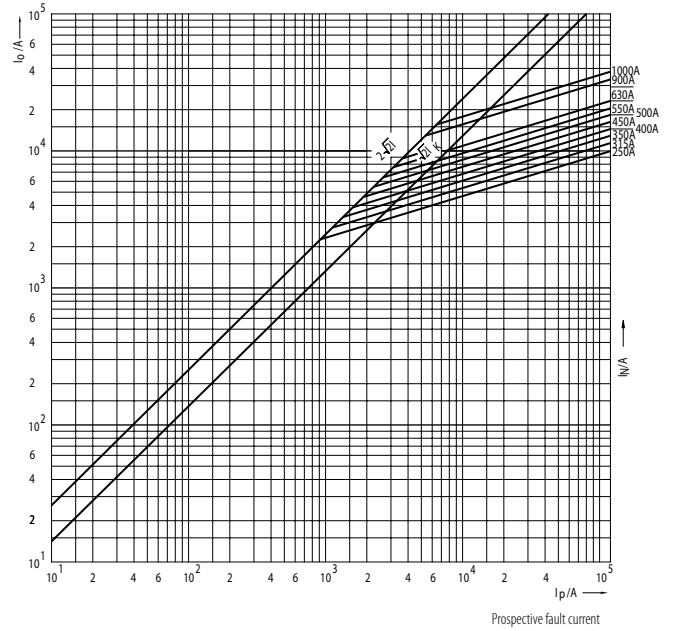
RATED VOLTAGE
~690V

aR

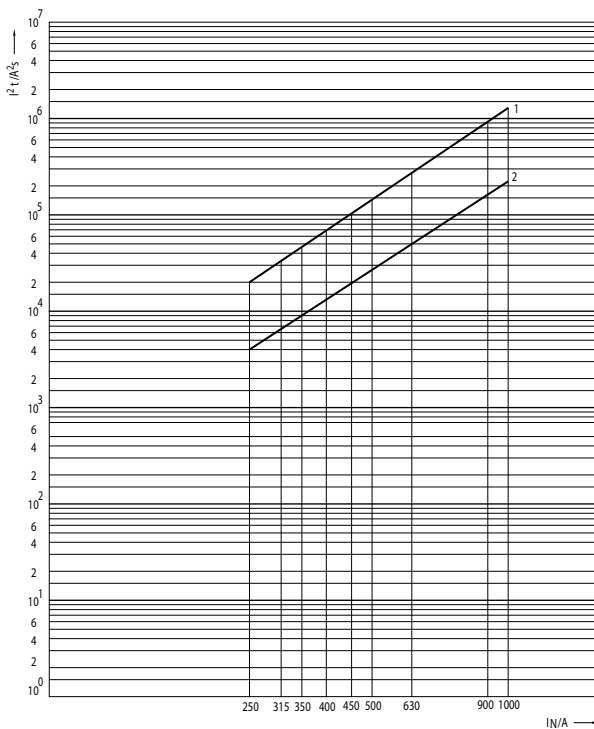
Time/current characteristics of fuse-links Ultra quick MUQ02, SUQ02, GUQ02 – size 2



Cut-off characteristics of fuse – links Ultra Quick MUQ02, SUQ02, GUQ02 – size 2



Joule integral (I^2t) for Ultra Quick MUQ02, SUQ02, GUQ02 – size 2

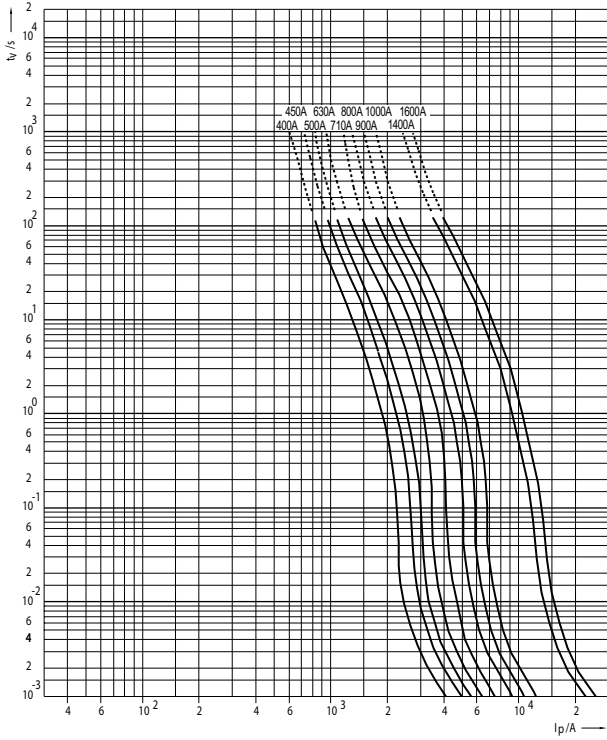


1 - Operating I^2t value at 690V
2 - Pre-arcing I^2t value

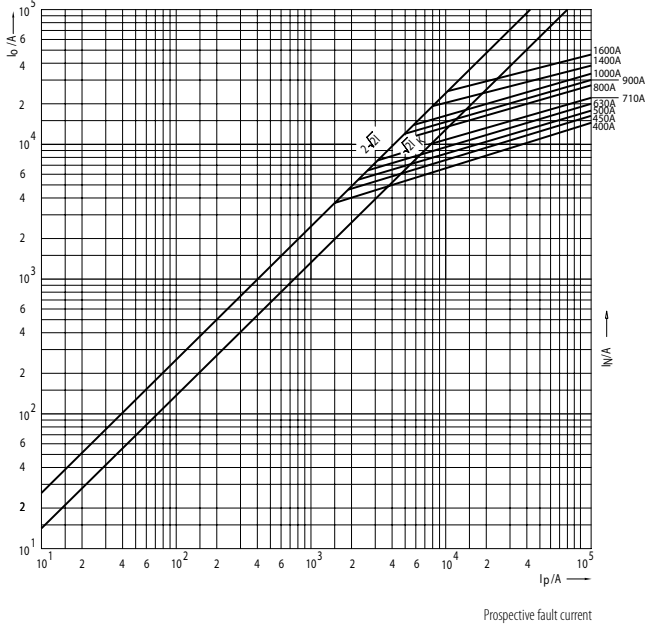
aR

RATED VOLTAGE
~690V

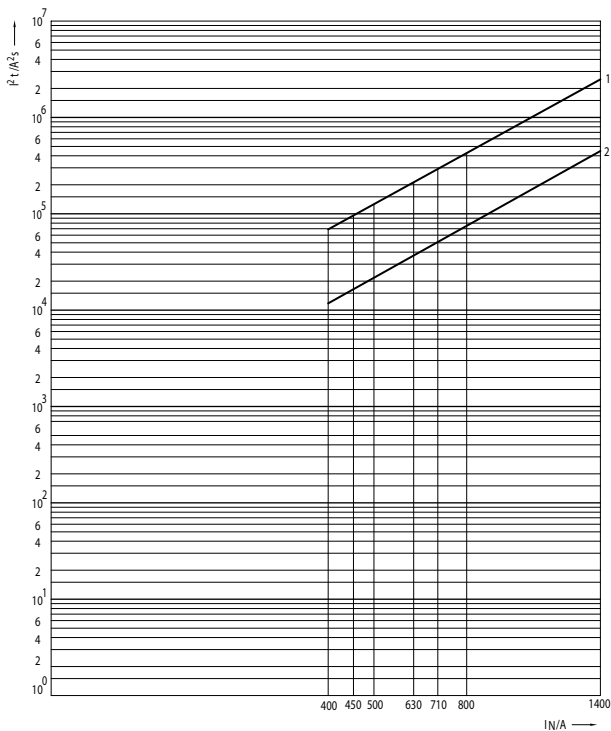
Time/current characteristics of fuse-links Ultra quick MUQ02, SUQ02, GUQ02 – size 3



Cut-off characteristics of fuse – links Ultra Quick MUQ02, SUQ02, GUQ02 – size 3



Joule integral (I²t) for Ultra Quick MUQ02, SUQ02, GUQ02 – size 3

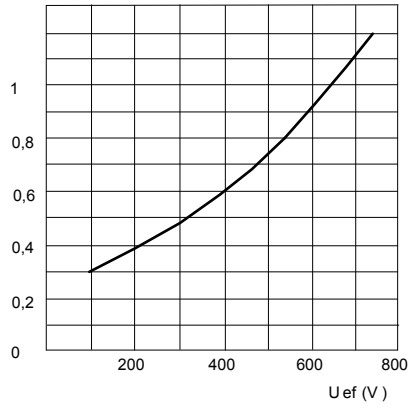


1 - Operating I²t value at 690V
2 - Pre-arcing I²t value

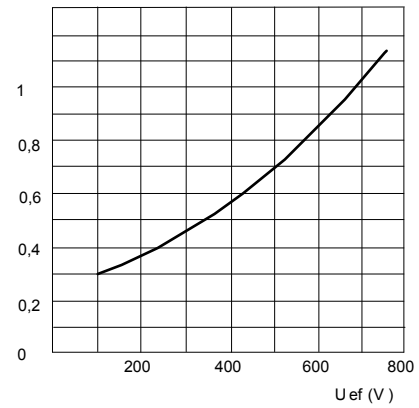
RATED VOLTAGE
~690V

aR

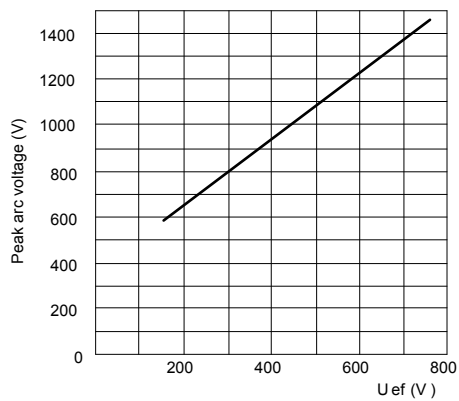
Conversion factor for total Joule integral size 00



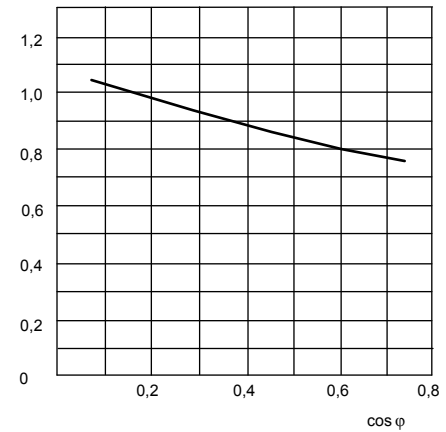
Conversion factor for total Joule integral size 1,2,3



Maximum arc voltage accuring



Correction factor for performance factor $\cos\varphi \neq 0,15$ for operating I²t values



Correction factor for converting the power dissipation for percentage load

Load(%)	Correction factor
10	0,005
20	0,025
30	0,063
40	0.122
50	0,204
60	0,31
70	0,442
80	0,6
90	0,785
100	1

aR

RATED VOLTAGE
~690V

Power dissipation, pre-arcing Joule integral and Operating Joule integral for Ultra Quick

Size	I_N		Pre-arcing Joule integral I^2t (1ms)	Operating Joule Integral $I^2t \sim 230V$	Operating Joule Integral $I^2t \sim 400V$	Operating Joule Integral $I^2t \sim 500V$	Operating Joule Integral $I^2t \sim 690V$
	A	W					
M00	200	46	4.200	6.547	12.685	16.368	22.000
	250	49	8.300	13.243	25.659	33.108	44.500
M1	63	15	200	357	692	893	1.200
	80	20	350	536	1.038	1.339	1.800
	100	27	450	738	1.430	1.845	2.480
	125	31	830	1.369	2.652	3.422	4.600
	160	35	1.550	2.515	4.872	6.287	8.450
	200	46	2.600	4.166	8.072	10.416	14.000
	250	51	4.800	7.738	14.992	19.344	26.000
	315	66	7.600	12.499	24.217	31.248	42.000
	350	68	11.000	16.070	31.136	40.176	54.000
	400	70	18.500	29.165	56.507	72.912	98.000
S1, G1	710	92	96.000	139.872	271.002	349.680	470.000
M2	250	53	4.000	6.398	12.397	15.996	21.500
	315	68	6.300	10.059	19.489	25.147	33.800
	350	71	9.100	14.553	28.196	36.382	48.900
	400	70	15.500	25.296	49.011	63.240	85.000
	450	75	21.500	35.712	69.192	89.280	120.000
	500	80	28.000	44.640	86.490	111.600	150.000
	550	86	36.000	56.544	109.554	141.360	190.000
	630	93	56.000	86.304	167.214	215.760	290.000
S2, G2	900	115	178.000	273.792	530.472	684.480	920.000
M3	1000	124	235.000	386.880	749.580	967.200	1.300.000
	400	81	12.800	20.534	39.785	51.336	69.000
	450	89	17.800	28.570	55.354	71.424	96.000
	500	110	23.500	37.795	73.228	94.488	127.000
	630	108	40.000	63.984	123.969	159.960	215.000
	710	112	53.000	95.232	184.512	238.080	320.000
	800	116	90.000	141.360	273.885	353.400	475.000
S3, G3	1400	156	455.000	773.760	1.499.160	1.934.400	2.600.000