ULTRA QUICK

FUSES FOR PROTECTION OF SEMICONDUCTORS

ETI POWER NEEDS CONTROL

Typical applications protected by Ultra Quick fuse-links

more info in "Ultra Quick industry application.pdf"

DC drives

Power controls

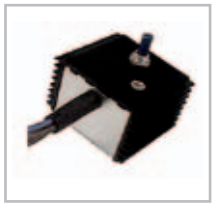
Soft- starters

AC servo regulators-brushless

Frequency inverters

Thyristor switches

UPS



Variable power regulators

Power rectifires

Voltage regulators

SSR- semiconductor relays

Welding inverters

Solbrakes

Temperature controlers

Batery chargers

Solar power

Traction inverters

Wind power

The products on this cross-reference table are some of the most commonly used fuses for semiconductor protection.

Cylindrical



ETI	Bussmann	Ferraz	Siba
SIZE 10 x 38			
CH10/6A/600V	FWC-6A10F	E330008	60 03 205
CH10/8A/600V	FWC-8A10F	F330009	60 03 205
CH10/10A/600V	FWC-10A10F	G330010	60 03 205
CH10/12A/600V	FWC-12A10F	H330011	60 06 306
CH10/16A/600V	FWC-16A10F	J330012	60 06 306
CH10/20A/600V	FWC-20A10F	K330013	60 06 306
CH10/25A/600V	FWC-25A10F	L330014	60 03 305
CH10/32A/600V	FWC-32A10F	V330278	-
SIZE 14 x 51			
CH14/10A/690V	FWP-10A14F	T093903	50 12 406
CH14/12A/690V	-	-	-
CH14/16A/690V	FWP-15A14F	W093905	50 12 406
CH14/20A/690V	FWP-20A14F	X093906	50 12 406
CH14/25A/690V	FWP-25A14F	Y093907	50 12 406
CH14/32A/690V	FWP-32A14F	Z093908	50 12 406
CH14/40A/690V	FWP-40A14F	A093909	50 12 406
CH14/50A/690V	FWP-50A14F	B093910	50 05 806
SIZE 22 x 58			
CH22/20A/690V	FWP-20A22F	-	50 14 006
CH22/25A/690V	FWP-25A22F	B093956	50 14 006
CH22/32A/690V	FWP-32A22F	Z094828	50 14 006
CH22/40A/690V	FWP-40A22F	S094822	50 14 006
CH22/50A/690V	FWP-50A22F	W094779	50 14 006
CH22/63A/690V	FWP-63A22F	T094823	50 14 006
CH22/80A/690V	FWP-80A22F	A094829	50 14 006
CH22/100A/500V	FWP-100A22F	Y094827	50 14 006

BS88 part 4 – 690V


ETI	Bussmann	Ferraz	GE
BS17			
BS17/63/25A/690V	ET25	J075885	GSB25
BS17/63/32A/690V	ET32	K075886	GSGB30
BS17/63/35A/690V	FE35	-	GSGB35
BS17/63/40A/690V	FE40	-	GSGB40
BS17/63/45A/690V	FE45	-	GSGB45
BS17/63/50A/690V	FE50	-	GSGB55
BS17/63/56A/690V	ET56	-	GSGB55
BS17/63/63A/690V	FE63	-	GSGB55
BS17/63/71A/690V	FE71	-	-
BS17/63/80A/690V	FE80	-	GSGB80
BS17/63/90A/690V	FE90	-	GSGB85
BS17/63/100A/690V	FE100	-	-
BS17D			
BS17D/70/90A/690V	EET90	A099959	GSGB85
BS17D/70/110A/690V	EET110	B099959	GSGB110
BS17D/70/120A/690V	FEE120	B099959	GSGB125
BS17D/70/140A/690V	FEE140	J075908	-
BS17D/70/160A/690V	FEE160	K075909	GSGB160
BS38			
BS38/83/160A/690V	MT160	Q097166	GSB100
BS38/83/180A/690V	FM180	-	GSGB170
BS38/83/200A/690V	FM200	-	GSGB190
BS38/83/250A/690V	FM250	-	GSGB235
BS38/83/315A/690V	FM315	-	GSGB300
BS38/83/350A/690V	FM350	-	GSGB325
BS38T			
BS38T/83/200A/690V	MMT200	F097272	-
BS38T/83/225A/690V	MMT225	J097275	-
BS38T/83/315A/690V	MMT315	K097276	-
BS38T/83/355A/690V	MMT355	S0972783	-
BS38T/83/400A/690V	FMM400	-	-
BS38T/83/450A/690V	FMM450	-	GSGB400
BS38T/83/500A/690V	FMM500	-	GSGB500
BS38T/83/630A/690V	FMM630	-	-
BS38T/83/700A/690V	FMM700	-	-



Square body type M: DIN 43620 – 690V

ETI	Bussmann	Ferraz	Siba
SIZE 00C			
M00/35A/690V	170M1562	X322043	-
M00/40A/690V	170M1563	B322047	-
M00/50A/690V	170M1564	F322051	-
M00/63A/690V	170M1585	K322055	-
M00/80A/690V	170M1566	Q320059	-
M00/100A/690V	170M1567	V320063	-
M00/125A/690V	170M1568	X320065	-
M00/160A/690V	170M1569	N320069	-
M00/200A/690V	170M1570	D320071	-
M00/250A/690V	170M1571	H320075	-
SIZE 1			
M1/63A/690V	170M3810	M320355	20 00 304
M1/80A/690V	170M3811	K320399	20 00 304
M1/100A/690V	170M3812	W320363	20 00 304
M1/125A/690V	170M3813	Y320365	20 00 304
M1/160A/690V	170M3814	C320369	20 00 304
M1/200A/690V	170M3815	E320371	20 00 304
M1/250A/690V	170M3816	J320375	20 00 304
M1/315A/690V	170M3817	N320379	20 00 304
M1/350A/690V	170M3818	P320380	20 00 304
M1/400A/690V	170M3819	S320383	20 00 304
SIZE 2			
M2/400A/690V	170M5808	B320483	20 00 404
M2/450A/690V	170M5809	D320485	20 00 404
M2/500A/690V	170M5810	F320487	20 00 404
M2/630A/690V	170M5812	H320489	20 00 404
SIZE 3			
M3/500A/690V	170M6808	P320587	20 00 504
M3/630A/690V	170M6810	R320589	20 00 504
M3/710A/690V	170M6811	S320590	20 00 504
M3/800A/690V	170M6812	T320591	20 00 504

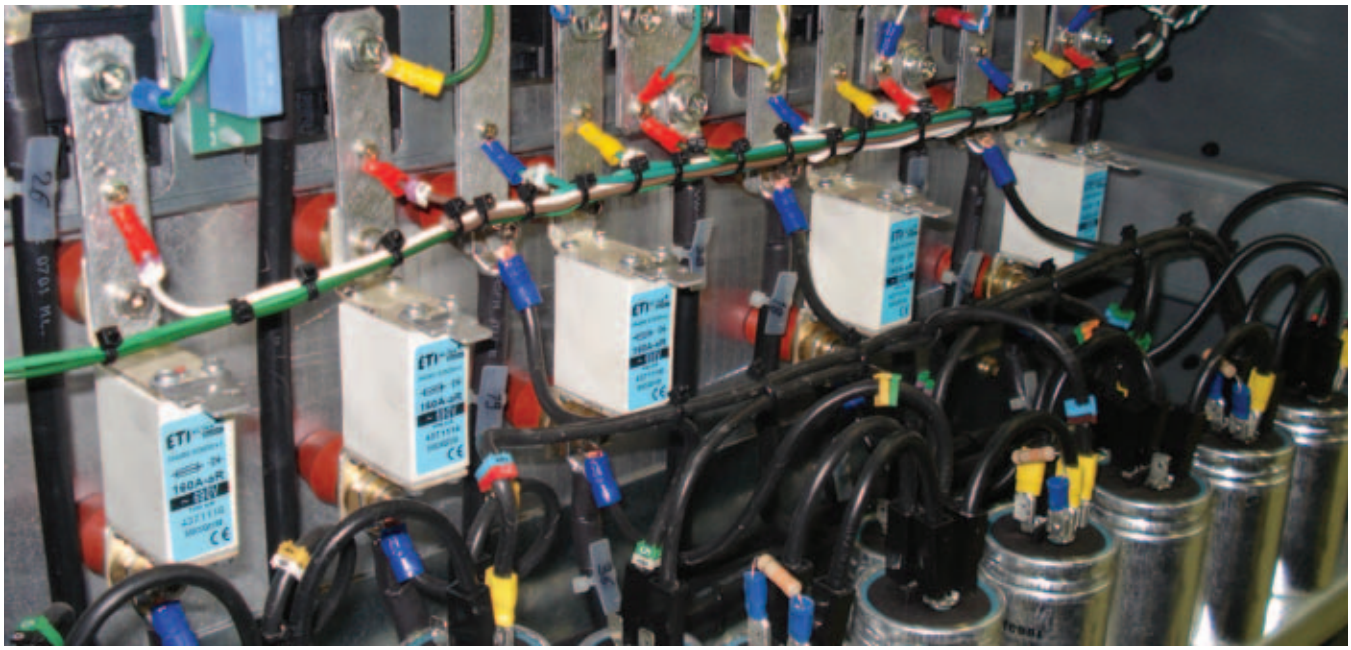
Square body type G: DIN 43653 – 690V

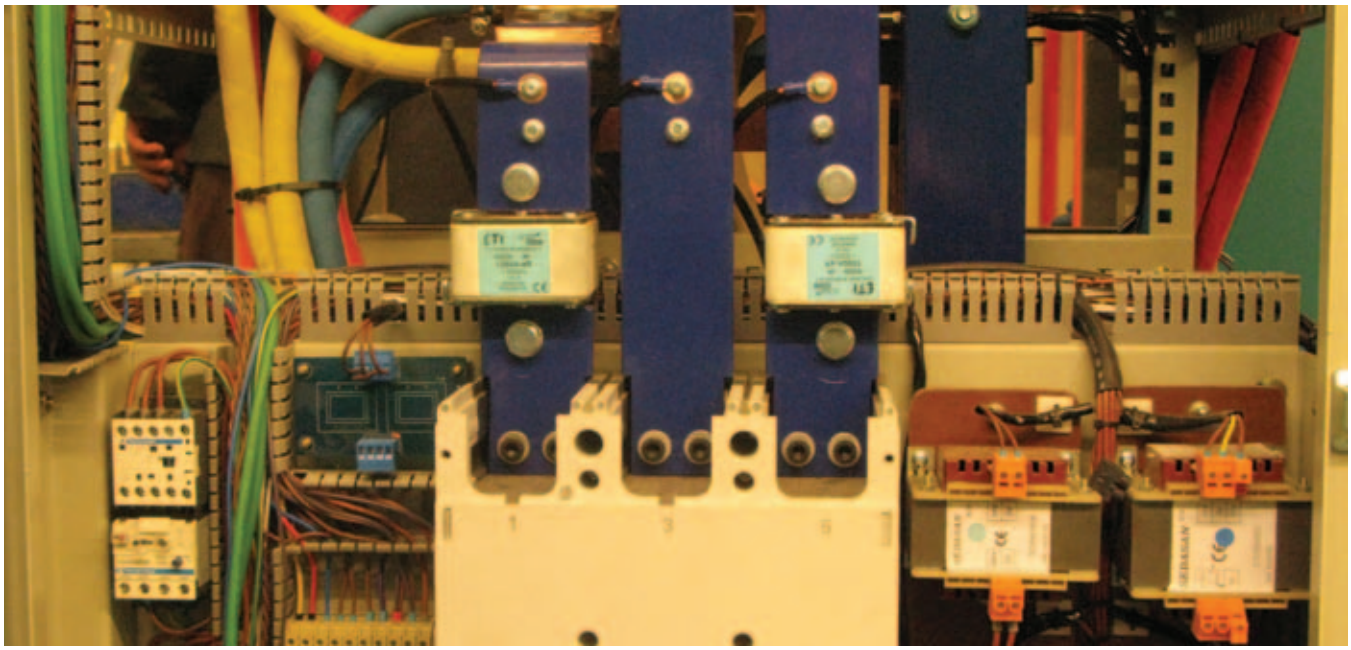
ETI	Bussmann	Ferraz	Siba
SIZE 1			
G1M/250A/690V	170M4459	Y300056C	20 325 20
G1M/315A/690V	170M4460	M302162C	20 325 20
G1M/350A/690V	170M4461	A300058C	20 325 20
G1M/400A/690V	170M4462	B300059C	20 325 20
G1M/450A/690V	170M4463	S300005C	20 325 20
G1M/500A/690V	170M4464	T300006C	20 325 20
G1M/550A/690V	170M4465	H300479	20 325 20
G1M/630A/690V	170M4466	W300008C	20 325 20
G1M/710A/690V	170M4467	K300481	20 325 20
SIZE 2			
G2M/500A/690V	170M5460	K300067C	20 334 22
G2M/550A/690V	170M5461	R300464	20 334 22
G2M/630A/690V	170M5462	L300068C	20 334 22
G2M/710A/690V	170M5463	N300070C	20 334 22
G2M/800A/690V	170M5464	P300071C	20 334 22
G2M/900A/690V	170M5465	W300468	20 334 22
G2M/1000A/690V	170M5466	X300469	20 334 22
SIZE 3			
G3M/630A/690V	170M6460	X300078	20 343 22
G3M/710A/690V	170M6461	Y300079C	20 343 22
G3M/800A/690V	170M6462	Z300080C	20 343 22
G3M/900A/690V	170M6463	B300450	20 343 22
G3M/1000A/690V	170M6464	B300082C	20 343 22
G3M/1250A/690V	170M6466	D300084C	20 343 22
G3M/1400A/690V	170M6467	F300454	20 343 22

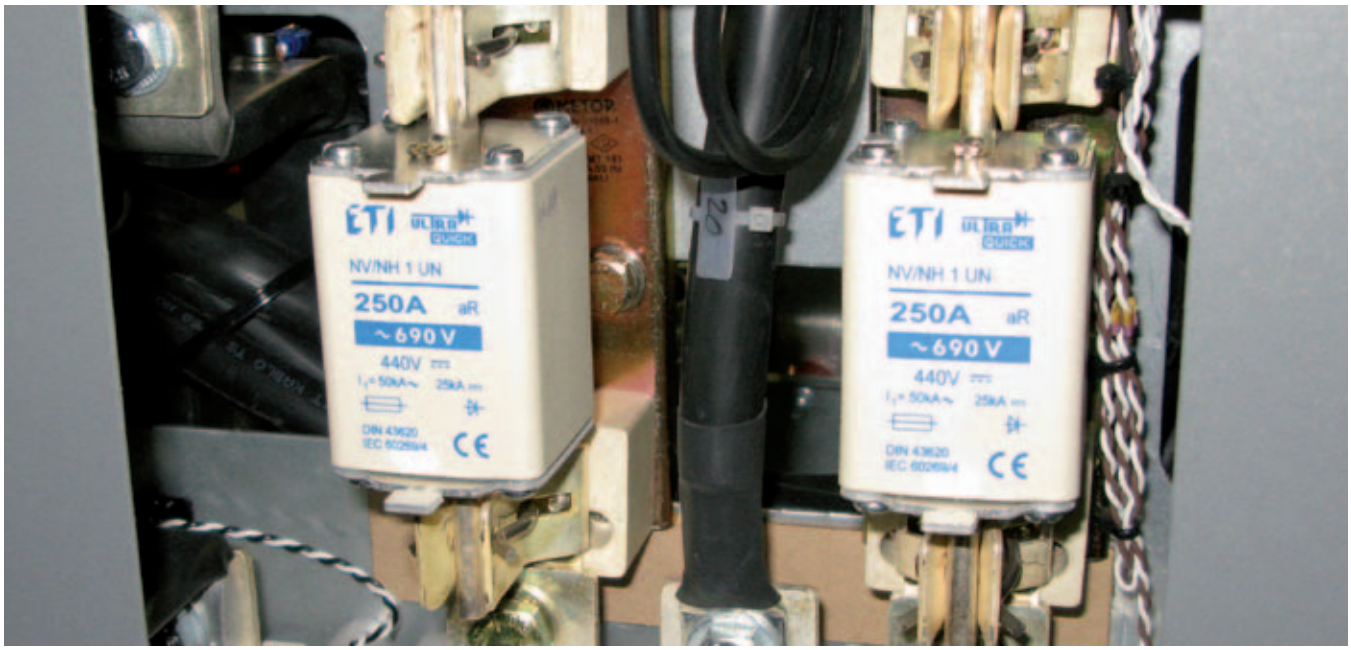

Square body type S: DIN 43653 – 690V

ETI	Bussmann	Ferraz	Siba
SIZE 00C			
S00C/80/63A/690V	170M2662	R330272C	20 28 204
S00C/80/80A/690V	170M2663	A330073	20 28 204
S00C/80/100A/690V	170M2664	L330037	20 28 204
S00C/80/125A/690V	170M2665	M330038	20 28 204
S00C/80/160A/690V	170M2666	N330039	20 28 204
S00C/80/200A/690V	170M2667	P330040	20 28 204
S00C/80/250A/690V	170M2668	B330028	20 28 204
S00C/80/315A/690V	170M2669	A330188	20 28 204
S00/80/350A/690V	170M2670	B330189	20 28 204
S00/80/400A/500V	170M2671	E330192	20 28 204
SIZE 1			
S1M/110/250A/690V	170M4209	J300020C	20 27 134
S1M/110/315A/690V	170M4210	K300021C	20 27 134
S1M/110/350A/690V	170M4211	L302161C	20 27 134
S1M/110/400A/690V	170M4212	A300127C	20 27 134
S1M/110/450A/690V	170M4213	M300023C	20 27 134
S1M/110/500A/690V	170M4214	N300024C	20 27 134
S1M/110/550A/690V	170M4215	P200025C	20 27 134
S1M/110/630A/690V	170M4216	Q300026C	20 27 134
S1M/110/710A/690V	170M4217	R300027C	20 27 134
SIZE 2			
S2M/110/500A/690V	170M5210	S300258C	20 27 434
S2M/110/550A/690V	170M5211	S300189C	20 27 434
S2M/110/630A/690V	170M5212	T300190C	20 27 434
S2M/110/710A/690V	170M5213	R300027C	20 27 434
S2M/110/800A/690V	170M5214	H300709C	20 27 434
S2M/110/900A/690V	170M5215	X300193C	20 27 434
S2M/110/1000A/690V	170M5216	Y300194C	20 27 434
SIZE 3			
S3M/110/630A/690V	170M6210	V300260C	20 27 734
S3M/110/710A/690V	170M6211	W300261C	20 27 734
S3M/110/800A/690V	170M6212	X300262C	20 27 734
S3M/110/900A/690V	170M6213	Y300194C	20 27 734
S3M/110/1000A/690V	170M6214	Y300194	20 27 734
S3M/110/1250A/690V	170M6216	B300266C	20 27 734
S3M/110/1400A/690V	170M6217	C300267C	20 27 734

Ultra Quick Application



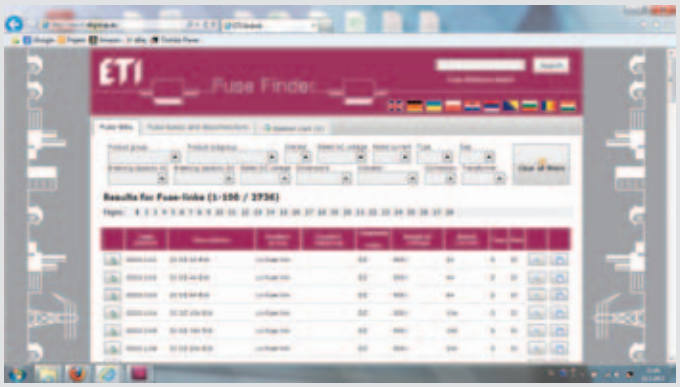




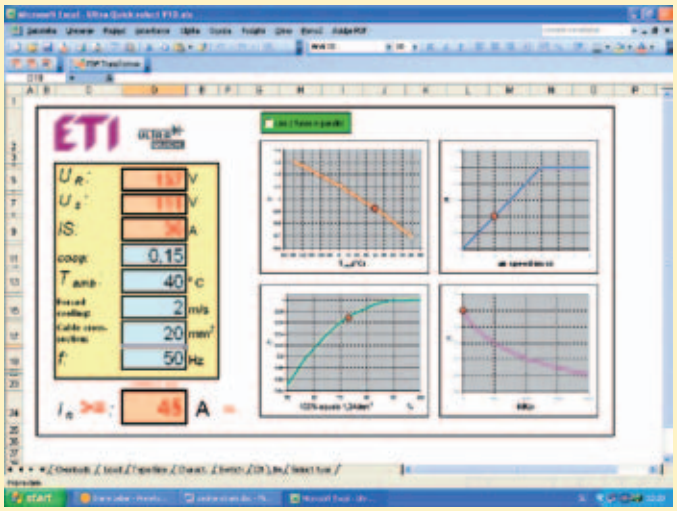
Support for Ultra Quick

Cross-reference on internet

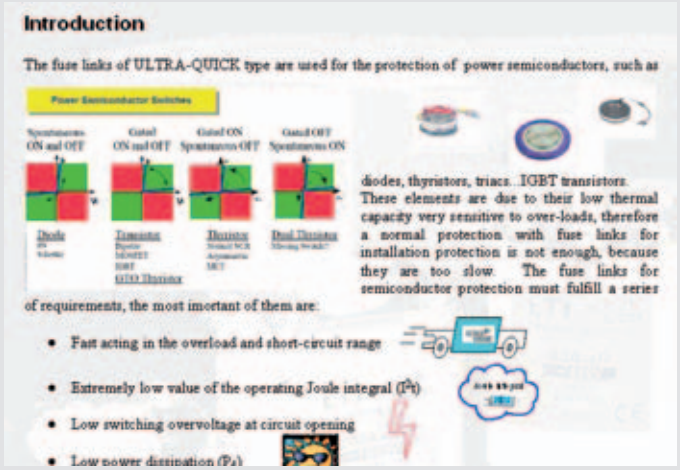
for MRO (maintenance replacement operation)



Software Ultra Quick select
for OEM (original equipment manufacturer)



Application guide



Fuses for semiconductor devices protection

General information

Fuses are the oldest protective devices in the electrical industry. Because of the advantageous features, fuses have been and are used in an extensive fields of applications – one of them is protection of semiconductor devices (diodes, thyristors, power transistors, GTO) in current and frequency converters. Semiconductor devices are being produced with high maximum continuous currents and peak inverse voltages. Unfortunately, that devices still have poor overload capacities and continue to need sensitive and fast-acting protection.

ETI fuses for semiconductor protection series ULTRA-QUICK are optimal solution for the protection of power semiconductors.

General informations about fuse marking

Fuse marking consists of two letters, where the first letter describes the breaking ranges

a - partial range
Opearates by all currents between the lowest current indicated on its operating time current characteristic and its rated breaking capacity.

g - full range
Opearates by all currents which cause the melting of the fuse element up to its rated breaking capacity

The second letter describes the applications (characteristics or utilization category).

L – mainly for conductor protection
B – mining equipment
M – motor circuit and switching devices protection
R – semiconductor protection
Tr – transformers protection

The combination of "breaking ranges" and "applications" indicate many combinations describes in standards and technical report IEC TR 61818 "Application-guide for low voltage fuses"

gL:	Full range	- general application, mainly for conductor protection
aM:	Partial range (back-up)	- short-circuit protection of motor circuit
gR, gS:	Full range	- semiconductor protection
aR:	Partial range (back-up)	- semiconductor protection
gB:	Full range	- mining equipment protection
gTr:	Full range	- transformer protection

ETI fuses for semiconductor protection series "ULTRA-QUICK" comply with the IEC 60269 and VDE 0636 series standard. A list of the standards for characteristics and dimensions is included below:

- IEC 60269-4: Supplementary requirements for fuselinks for the protection of semiconductor devices
- IEC 60269-4-1: Examples of standardized fuses
- IEC 60269-3-1: Supplementary requirements for fuses for use by unskilled persons (fuses mainly for householdand similar applications)
- IEC 60269-2-1: Supplementary requirements for fuses for use by authorized persons (fuses mainly for industrial application) for the protection of semiconductor devices
- DIN 43 620, DIN 43 653
- VDE 0636-201 Niederspannungssicherungen (NH-System)
- DIN EN 60269-4, VDE 0636 Teil 40 Niederspannungssicherungen Teil 4: Zusätliche Anforderung an
- BS 88 Part 4

Fuse-links as protective equipment for semiconductors should ensure that the following conditions are met:
- Interruption should be effected quickly enough to prevent damage to other devices
- Interruption should take place before damage to semiconductor devices – quick action
- High rated breaking capacity
- High d.c. switching capacity
- High current limitation
- Operation of the protective equipment should not cause unacceptably high over-voltages to be impressed on any of the semiconductor devices – low arc voltage

Selecting the fuses for semiconductor protection (FSP)

What the user should know about FSP to be able to select the best FSP for his special purpose?

In practice, there exist no common regulations covering FSPs, except IEC60146-6„Applications guide for the protection of semiconductor convertors against overcurrent by fuses". The object of this report is to advise on the specific fuse features and on the specific convertor features which are to be observed to ensure correct application of FSP in convertors, and to give specific recommendations for trouble-free operation of convertors protected by fuses.

Before the fuse selection the user must be fully aware of the conditions under which the FSP is to function. This applies to normal service conditions as well as to conditions during fault. Here is few basic suggestions for FSP selection:

A: The load current through the semiconductor (Isem) should be lower or equal as the rated current of the selected fuse-link (Inv). For continuous duty the FSP can withstand this current indefinetly. In case of pulsed current, the user should consult ETI.

$$I_{sem} \leq I_{nv}$$

B: The operating voltage on the semiconductor (Usem) should be lower or equal as the rated voltage of the fuse-link (Unv). Consult ETI with respect to a.c. and d.c. applied voltage, time constant and power factor.

$$U_{sem} \leq U_{nv}$$

C: The operating (pre-arcing + arcing) I^2t values of the selected fuse-link (I^2t_{opv}) should be lower than I^2t of the semiconductor (I^2t_{sem}). Consult ETI with respect to parallel operation, discrimination and loss of coordination at higher fault levels

$$I^2t_{opv} < I^2t_{sem}$$

D: For other current rating, which are not included in this catalogue, please consult ETI R&D department.

Short product range review of fuses for semiconductor protection series ULTRA-QUICK

Systems	Types	Sizes	Rated current	Rated voltage	Characteristic	Pages
D0		D01, D02	2A – 63A	400V	gR	20
D		DI, DII, DIII, DIV, DV	2A – 200A	500V	gR	21
C		CH10	6A – 32A	600V	aR	22
		CH14, CH-S 14	6A – 50A	690V	aR	22
		CH22, CH-S 22	20A – 100A	690V	aR	22
BS		BS8, BS17, BS38, BS38T	6A – 800A	240V	aR	23
		BS8, BS17, BS17D, BS38, BS38T	6A – 700A	690V	aR	24
NV/NH 50 kA	M	00C, 00, 0, 1, 2, 3	6A – 630A	690V	aR/gR	25-26
	S80mm	00C, 00	6A – 160A	690V	aR/gR	27
	S97mm	0	6A – 160A	690V	aR/gR	27
	S110mm	1, 2, 3	35A – 630A	690V	aR/gR	28
NV/NH 200 kA	M	00	10A – 250A	690V	aR	29
		1, 2, 3	63A – 800A	690V	aR	30
	S80mm	00C, 00	10A – 400A	690V	aR	31
		1, 2, 3	80A – 1400A	690V	aR	32
	S110mm	1, 2, 3	80A – 1400A	690V	aR	33
	G	1, 2, 3	80A – 1400A	690V	aR	34-35
	M	0	32A – 160A	1000V	aR	36
		1, 2, 3	63A – 800A	1000V	aR	37
		1, 2, 3	80A – 630A	1200V	aR	38
	S80mm	00	32A – 315A	1000V	aR	39
	S	0	16A – 160A	1000V	aR	40
	S110mm	1, 2, 3	63A – 1250A	1000V	aR	41
	G	1, 2, 3	63A – 1250A	1000V	aR	42
NV/NH 100 kA	S	2, 3	250A – 1000A	1250V	aR	43
	G	3	315A – 1000A	1250V	aR	44
NV/NH 50 kA	S	3	250A – 550A	1500V	aR	45
	G	3	200A, 250A	1500V	aR	46
	S	3	250A – 710A	2000V	aR	47
NV/NH 200 kA	M, striker	00C	10A – 160A	690V	gR	48
		1, 2, 3	35A – 630A	690V	gR	49
	M, S150mm	4, 4a	800A – 1600A	500V	gR	50
	S80mm	00C	10A – 160A	690V	gR	51
	S110mm	1, 2, 3	80A – 630A	690V	gR	52
	G	1, 2, 3	35A – 630A	500V	gR	53
	M	00C, 00	16A – 160A	690V	gS	54
		1, 2, 3	160A – 630A	690V	gS	55
	S110mm	1,2,3	160A – 630A	690V	gS	56
Accessories						57-58

Marking of fuses for semiconductor protection series ULTRA-QUICK:

1. **System D and D0**

D0-fuse links

D01	UQ	2A
D02		max. 63A
size	trade mark	current

D-fuse links

DI	UQ	2A
DII		max. 200A
DIII		
DIV		
DV		
size	trade mark	current

2. **System BS and NV/NH**

BS - fuse links

BS	8	UQ	38	2A	240V
	17		41	max. 800A	690V
	17D		59		
	38		63		
	38T		64		
			70		
			83		
type	diameter (T-twin, D-double)	trade mark	length	current	voltage

NV/NH - fuse links

S	00	M	UQ	U	/80	/10A	/690V
M	0	*		U-N	110	max. 1600A	500V
G	00C				97		1000V
	1						1200V
	2						
	3						
	4						
	4a						
type	size	micro-switch	trade mark	50kA breaking capacity	distance	current	voltage

3. **System C**

CH - fuse links

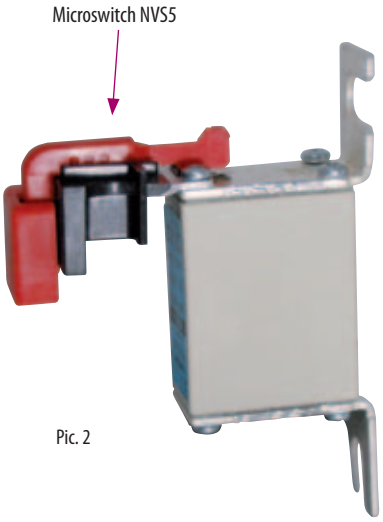
CH	22	UQ	/2A	/600V
CH-S	14		max. 100A	690V
	10			500V
type	size	trade mark	current	voltage

Operation indicators of ULTRA-QUICK fuse links

The operation-sensing device is a fine wire which is connected in parallel with the fuse melting element. This wire is used to hold in a flag (made of thin metal band) usually placed on the upper cover. When the wire breaks because of fuse operate, the flag is pushed out and in this way an indication of operation is given.

The indicator on pic.1 is a visual indication of fuse operating. When only indication is not enough, we offering possibility to add a microswitch NVS5 on the upper cover for remote signalling of fuse operating (Pic.2).

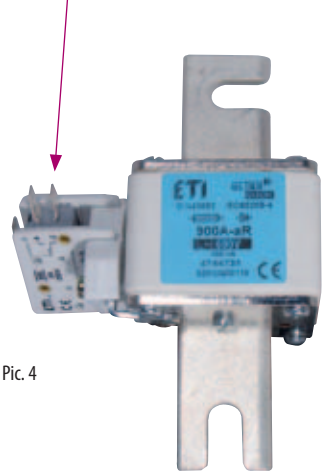
Pic. 1



Pic. 2

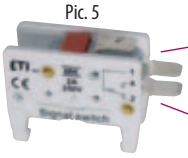
Another type of signalling of fuse operating is indicator, called "middle". It is located in the center of the ceramic body in front of the fuse link. After fuse operation, the particular plastic striker is pushed out from the ceramic body (Pic.3).

Pic. 3



Pic. 4

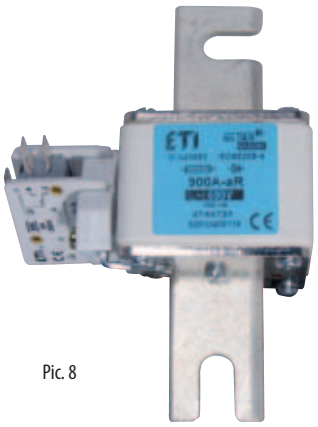
For remote signaling we offering microswitch MK (Pic.4 and Pic.5) mounted on additional adapters AMK (Pic.6 and Pic. 7)



Pic. 5

Pic. 6

Pic. 7



Pic. 8

The purpose of adapters AMK1 and AMK2 are microswitch type MK setting up on the fuse link body of sizes for 690V and 1000V.

D0

Technical data on page 60

gR

RATED VOLTAGE
~400V

D01UQ6A

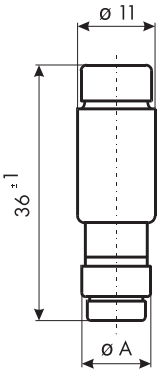
D02UQ50A

Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~50kA / ⎓ 8kA Rated voltage: ~400V / ⎓ 250V		Fuse-links of system D0 are applied in fuse base E14 and E18 and fuse-switch disconnectors VLD01 and STV D02.

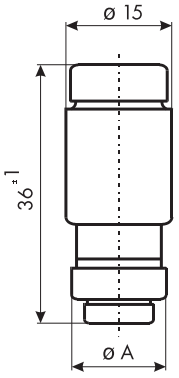
Size	In (A)	Type	Code No.	Operating I²t-value (A²s)	Power dissipation (W)	Char.	Colour	Dimension A	Packaging (pcs)	Weight (g)
D01	2	D01UQ2A	004311001	6,3	2,3	gR	pink	7.3	10/500	6
	4	D01UQ4A	004311002	13	3,1	gR	brown	7.3	10/500	6
	6	D01UQ6A	004311003	20	4,0	gR	green	7.3	10/500	6
	10	D01UQ10A	004311004	65	4,2	gR	red	8.5	10/500	6
	16	D01UQ16A	004311005	200	5,3	gR	grey	9.7	10/500	6
D02	20	D02UQ20A	004312001	275	8,0	gR	blue	10.9	10/500	11
	25	D02UQ25A	004312002	480	9,0	gR	brown	12.1	10/500	12
	35	D02UQ35A	004312003	1.000	10,0	gR	black	13.3	10/500	13
	50	D02UQ50A	004312004	1.800	15,0	gR	white	14.5	10/500	13
	63	D02UQ63A	004312005	2.500	17,0	gR	copper	15.9	10/500	15

Dimensions:

D01



D02



remember

The standard IEC 60947-4-2 defines two types of co-ordination according to the expected level of service continuity. The standard IEC 60947-1, general rule are applicable to this standard, where specifically called for.

Type 1: Coordination requires that, under short-circuit conditions, the device shall cause no danger to persons or installation and may not be suitable for further service withouth repair and replacement of parts.

Type 2: Coordination requires that, under short-circuit conditions, the device shall cause no danger to persons or installation and shall be suitable for further use. For hybrid controllers and starters, the risk of contact welding is recognized in which case the manufacturer shall indicate the measures to be taken as regards the maintenance of the equipment.

Note: When using a softstarter in a type 2 co-ordination, replacing the fuses and restart has to be accepted after a short-circuit. Only »fuses for semiconductor protection« can be used to achieve a type 2 coordination for soft-starters.

For more information visit: www.eti.si/Electrotechnical products/Semiconductor protection

gR

RATED VOLTAGE
~500V

Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~50kA / ⎓ 8kA Rated voltage: ~500V / ⎓ 315V		Fuse-links of system D are mounted in fuse base E16, E27, E33, R 1 1/4", R2".

Size	In (A)	Type	Code No.	Operating I^2t-value (A^2s)	Power dissipation (W)	Char.	Colour	Dimension B	Packaging (pcs)	Weight (g)
D I	2	DIUQ2A	004321001	5,8	2,1	gR	pink	6	10/500	12
	4	DIUQ4A	004321002	11	2,5	gR	brown	6	10/500	12
	6	DIUQ6A	004321003	18	3,2	gR	green	6	10/500	12
	10	DIUQ10A	004321004	40	3,6	gR	red	8	10/500	13
	16	DIUQ16A	004321005	60	6,3	gR	grey	10	10/500	14
	20	DIUQ20A	004321006	139	7,3	gR	blue	12	10/500	15
	25	DIUQ25A	004321007	205	9,0	gR	yellow	14	10/500	16
D II	2	DIIUQ2A	004322001	5,8	2,1	gR	pink	6	5/500	27
	4	DIIUQ4A	004322002	11	2,5	gR	brown	6	5/500	27
	6	DIIUQ6A	004322003	18	3,2	gR	green	6	5/500	27
	10	DIIUQ10A	004322004	40	3,6	gR	red	8	5/500	27
	16	DIIUQ16A	004322005	60	6,3	gR	grey	10	5/500	28
	20	DIIUQ20A	004322006	139	7,3	gR	blue	12	5/500	29
	25	DIIUQ25A	004322007	205	9,0	gR	yellow	14	5/500	30
	30	DIIUQ30A	004322008	310	10,0	gR	black	14	5/500	30
D III	35	DIIIUQ35A	004323001	539	12,0	gR	black	16	5/500	48
	50	DIIIUQ50A	004323002	1.250	19,0	gR	white	18	5/500	49
	63	DIIIUQ63A	004323003	1.890	23,0	gR	copper	20	5/500	52
D IV	80	DIVUQ80A	004324001	4.200	33,0	gR	silver	5	3/48	105
	100	DIVUQ100A	004324002	8.450	51,0	gR	red	7	3/48	110
D V	125	DVUQ125A	004325001	16.000	60,0	gR	yellow	5	10/60	185
	160	DVUQ160A	004325002	24.000	71,0	gR	copper	7	10/60	210
	200	DVUQ200A	004325003	40.000	90,0	gR	blue	9	10/60	215

DIUQ4A

DIIUQ16A

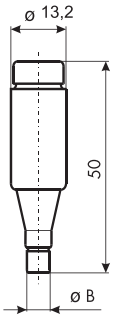
DIIIUQ35A

DIVUQ80A

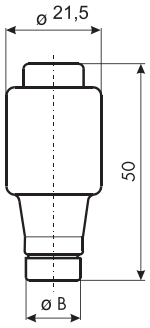
DVUQ200A

Dimensions:

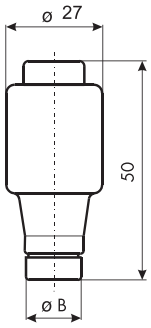
DI



DII



DIII



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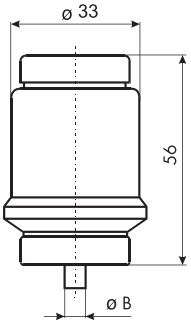

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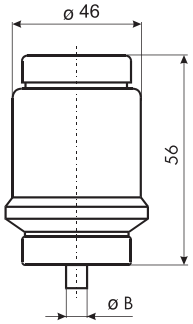


For more information visit: www.eti.si/Electrotechnical products/Semiconductor protection

aR

TYPES
CH, CH-S

RATED VOLTAGE
~690V

Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~200 kA Rated voltage: ~600V ,~690V		Fuse-links of system C are applied in fuse disconnectors EFD, EFH and PCF.

CH10

CH22

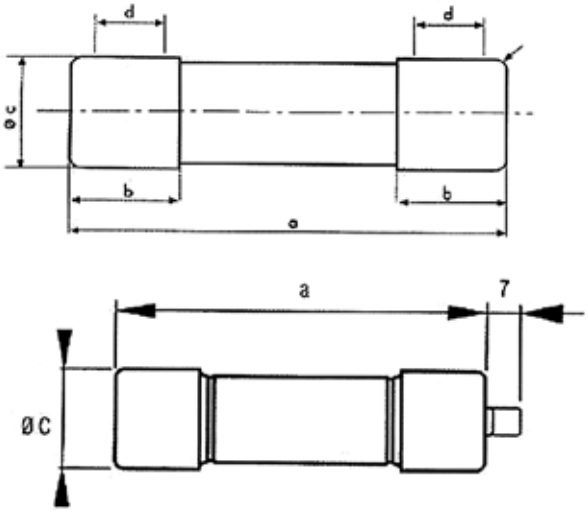
Size	In (A)	Type without indicator	Code No. ETI	Operating I^2t-value (A^2s)	Power dissipation(W)	Type with striker	Code No. ETI	Char.	Pack. (pcs.)	Weight (g)
10x38	6	CH10UQ/6A/600V	002625005	30	1,5	-		aR	10	10
	8	CH10UQ/8A/600V	002625006	50	2	-		aR	10	10
	10	CH10UQ/10A/600V	002625007	70	2,5	-		aR	10	10
	12	CH10UQ/12A/600V	002625008	120	3	-		aR	10	10
	16	CH10UQ/16A/600V	002625009	150	3,5	-		aR	10	10
	20	CH10UQ/20A/600V	002625011	260	4,8	-		aR	10	10
	25	CH10UQ/25A/600V	002625013	290	6	-		aR	10	10
	32	CH10UQ/32A/600V	002625015	600	7,5	-		aR	10	10
14x51	10	CH14UQ/10A/690V	002635007	22	4	CH-S14/10A/690V	002635107	aR	10	22.5
	12	CH14UQ/12A/690V	002635008	50	5	CH-S14/12A/690V	002635108	aR	10	22.5
	16	CH14UQ/16A/690V	002635009	75	5,5	CH-S14/16A/690V	002635109	aR	10	22.5
	20	CH14UQ/20A/690V	002635011	180	6	CH-S14/20A/690V	002635111	aR	10	22.5
	25	CH14UQ/25A/690V	002635013	320	7	CH-S14/25A/690V	002635113	aR	10	22.5
	32	CH14UQ/32A/690V	002635015	600	7,6	CH-S14/32A/690V	002635115	aR	10	22.5
	40	CH14UQ/40A/690V	002635017	750	8	CH-S14/40A/690V	002635117	aR	10	22.5
	50	CH14UQ/50A/500V	002635019	1.800	9	CH-S14/50A/500V	002635119	aR	10	22.5
22x58	20	CH22UQ/20A/690V	002645011	260	5,6	CH-S22/20A/690V	002645111	aR	10	45
	25	CH22UQ/25A/690V	002645013	410	5,6	CH-S22/25A/690V	002645113	aR	10	45
	32	CH22UQ/32A/690V	002645015	605	7	CH-S22/32A/690V	002645115	aR	10	45
	40	CH22UQ/40A/690V	002645017	750	8,5	CH-S22/40A/690V	002645117	aR	10	45
	50	CH22UQ/50A/690V	002645019	1.600	9,5	CH-S22/50A/690V	002645119	aR	10	45
	63	CH22UQ/63A/690V	002645021	3.080	11	CH-S22/63A/690V	002645121	aR	10	45
	80	CH22UQ/80A/690V	002645023	6.600	13,5	CH-S22/80A/690V	002645123	aR	10	45
	100	CH22UQ/100A/500V	002645025	12.500	16	CH-S22/100A/500V	002645125	aR	10	45

CH10
6-25A (700V DC/breaking capacity ⎓ 50kA)
32A (400V DC/breaking capacity ⎓ 50kA)

CH14, CH-S 14
700V DC/breaking capacity ⎓ 50kA

CH22, CH-S 22
500V DC/breaking capacity ⎓ 50kA

Dimensions: CH and CH-S



Size	a	b	c	d
10x38	38	10,5	10,3	6
14x51	51	13,8	14,3	7,5
22x58	58	16,2	22,3	11

For more information visit: www.eti.si/Electrotechnical products/Semiconductor protection

aR

RATED VOLTAGE
~240V

Technical data:			Application:
Standards: BS88: Part 4 IEC 60269-4	Breaking capacity: ~100kA / ⎓100kA Rated voltage: ~240V / ⎓120V		Fuse-links of system BS are mounted by screws to busbars.

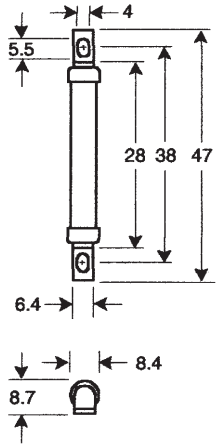
Size	In (A)	Type	Code No.	Operating I^2t-value (A^2s)	Power dissipation (W)	Char.	Packaging (pcs)	Weight (g)
BS8	6	BS8UQ/38/6A/240V	004750001	9	1	aR	10	5.5
	10	BS8UQ/38/10A/240V	004750002	22	2,5	aR	10	5.5
	12	BS8UQ/38/12A/240V	004750003	32	2,5	aR	10	5.5
	16	BS8UQ/38/16A/240V	004750004	100	2,5	aR	10	5.5
	20	BS8UQ/38/20A/240V	004750005	160	4	aR	10	5.5
BS17	25	BS17UQ/41/25A/240V	004750106	240	1,7	aR	10	31
	32	BS17UQ/41/32A/240V	004750108	420	2,2	aR	10	31
	35	BS17UQ/41/35A/240V	004750109	500	2,3	aR	10	31
	50	BS17UQ/41/50A/240V	004750112	1.200	3,3	aR	10	31
	63	BS17UQ/41/63A/240V	004750115	1.900	4,3	aR	10	31
	80	BS17UQ/41/80A/240V	004750119	3.100	6	aR	10	31
	100	BS17UQ/41/100A/240V	004750122	5.000	7,5	aR	10	31
	125	BS17UQ/41/125A/240V	004750125	5.500	12	aR	10	31
	160	BS17UQ/41/160A/240V	004750128	6.500	19,5	aR	10	31
	180	BS17UQ/41/180A/240V	004750131	8.700	24	aR	10	31
BS38	160	BS38UQ/59/160A/240V	004750227	12.500	12	aR	10	180
	200	BS38UQ/59/200A/240V	004750233	18.500	16,5	aR	10	180
	250	BS38UQ/59/250A/240V	004750236	27.500	20	aR	10	180
	315	BS38UQ/59/315A/240V	004750239	42.500	28,4	aR	10	180
	355	BS38UQ/59/355A/240V	004750242	67.000	30	aR	10	180
	400	BS38UQ/59/400A/240V	004750244	78.000	37	aR	10	180
	450	BS38UQ/59/450A/240V	004750245	96.000	44,5	aR	10	180
BS38T	400	BS38TUQ/59/400A/240V	004750344	88.000	30	aR	5	370
	500	BS38TUQ/59/500A/240V	004750346	145.000	38	aR	5	370
	630	BS38TUQ/59/630A/240V	004750349	214.000	50	aR	5	370
	710	BS38TUQ/59/710A/240V	004750352	290.000	62	aR	5	370
	800	BS38TUQ/59/800A/240V	004750353	335.000	78	aR	5	370

Note: brand name Italweber

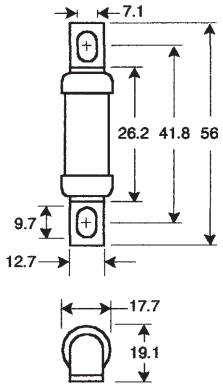
ULTRA QUICK

Dimensions:

BS8



BS17



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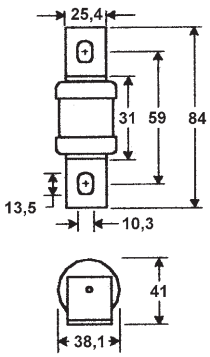

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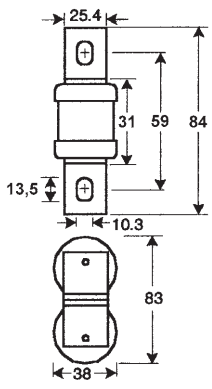


aR

RATED VOLTAGE
~690V

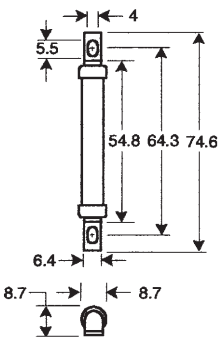
Technical data:			Application:
Standards: BS88: Part 4 IEC 60269-4	Breaking capacity: ~100kA / ⎓100kA Rated voltage: ~690V / ⎓350V		Fuse-links of system BS are mounted by screws to busbars.

Size	In (A)	Type	Code No.	Operating I²t-value (A²s)	Power dissipation (W)	Char.	Packaging (pcs)	Weight g)
BS8	6	BS8UQ/64/6A/690V	004750501	12	2	aR	10	8
	10	BS8UQ/64/10A/690V	004750502	48	3	aR	10	8
	12	BS8UQ/64/12A/690V	004750503	65	3	aR	10	8
	16	BS8UQ/64/16A/690V	004750504	110	7	aR	10	8
	20	BS8UQ/64/20A/690V	004750505	220	7	aR	10	8
BS17	25	BS17UQ/63/25A/690V	004750606	250	5,8	aR	10	42
	32	BS17UQ/63/32A/690V	004750608	350	6,8	aR	10	42
	35	BS17UQ/63/35A/690V	004750609	200	7,2	aR	10	42
	40	BS17UQ/63/40A/690V	004750610	700	8	aR	10	42
	45	BS17UQ/63/45A/690V	004750611	900	8,5	aR	10	42
	50	BS17UQ/63/50A/690V	004750612	1.300	9,5	aR	10	42
	56	BS17UQ/63/56A/690V	004750613	1.450	10,4	aR	10	42
	63	BS17UQ/63/63A/690V	004750615	2.100	11,5	aR	10	42
	71	BS17UQ/63/71A/690V	004750617	2.800	13	aR	10	42
	80	BS17UQ/63/80A/690V	004750619	3.500	14,5	aR	10	42
	90	BS17UQ/63/90A/690V	004750621	5.200	15,5	aR	10	42
	100	BS17UQ/63/100A/690V	004750622	6.800	16	aR	10	42
BS17D	90	BS17DUQ/70/90A/690V	004750721	3.600	16,6	aR	5	90
	110	BS17DUQ/70/110A/690V	004750723	5.900	21	aR	5	90
	120	BS17DUQ/70/120A/690V	004750724	7.400	22	aR	5	90
	140	BS17DUQ/70/140A/690V	004750726	11.000	24,5	aR	5	90
	160	BS17DUQ/70/160A/690V	004750728	14.500	28	aR	5	90
BS38	160	BS38UQ/83/160A/690V	004750628	14.500	27,7	aR	5	240
	180	BS38UQ/83/180A/690V	004750631	23.000	29	aR	5	240
	200	BS38UQ/83/200A/690V	004750633	30.000	31	aR	5	240
	250	BS38UQ/83/250A/690V	004750636	53.000	37	aR	5	240
	315	BS38UQ/83/315A/690V	004750640	97.000	47	aR	5	240
	350	BS38UQ/83/350A/690V	004750642	140.000	57	aR	5	240
BS38T	200	BS38TUQ/83/200A/690V	004750933	21.000	32	aR	5	450
	225	BS38TUQ/83/225A/690V	004750935	30.000	39	aR	5	450
	315	BS38TUQ/83/315A/690V	004750939	75.000	48	aR	5	450
	355	BS38TUQ/83/355A/690V	004750943	110.000	56	aR	5	450
	400	BS38TUQ/83/400A/690V	004750944	147.000	60	aR	5	450
	450	BS38TUQ/83/450A/690V	004750945	210.000	65	aR	5	450
	500	BS38TUQ/83/500A/690V	004750946	277.000	68	aR	5	450
	630	BS38TUQ/83/630A/690V	004750950	520.000	83	aR	5	450
	700	BS38TUQ/83/700A/690V	004750952	600.000	94	aR	5	450

Note: brand name Italweber

Dimensions:

BS8



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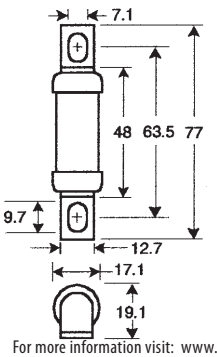

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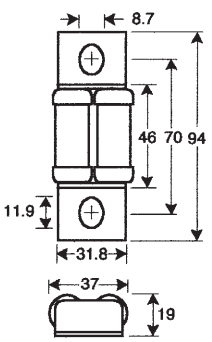

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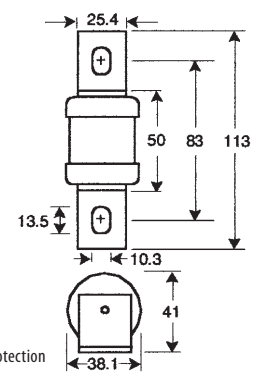
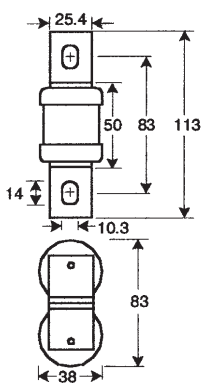


BS38T



aR/gR

TYPES
M

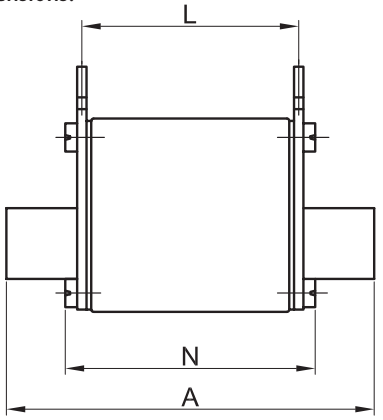
RATED VOLTAGE
~690V

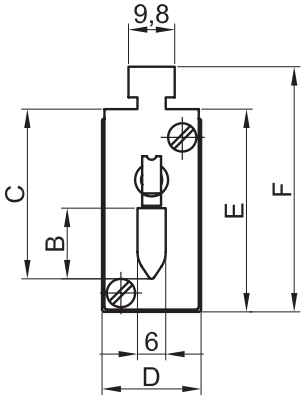
Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~50kA / ⎓25kA Rated voltage: ~690V		Fuse-links type M are applied in fuse base (for example) PK.

Size	In (A)	Type (visual indicator with grip for microswitch NVS 5)	Code No.	Operating I^2t-value (A^2s)	Power dissipation (W)	Char.	Packaging (pcs)	Weight (g)
00C	6	M00CUQU-N/6A/690V	004331018	19	2,8	gR	3/120	180
	10	M00CUQU-N/10A/690V	004331019	62	3,3	gR	3/120	180
	16	M00CUQU-N/16A/690V	004331020	154	4,1	gR	3/120	180
	20	M00CUQU-N/20A/690V	004331021	290	5	gR	3/120	180
	25	M00CUQU-N/25A/690V	004331022	590	5,8	gR	3/120	180
	35	M00CUQU-N/35A/690V	004331023	1.160	8	gR	3/120	180
	40	M00CUQU-N/40A/690V	004331024	1.500	11	gR	3/120	180
	50	M00CUQU-N/50A/690V	004331025	2.370	16	gR	3/120	180
	63	M00CUQU-N/63A/690V	004331026	4.650	20	gR	3/120	180
	80	M00CUQU-N/80A/690V	004331027	5.350	25	gR	3/120	180
	100	M00CUQU-N/100A/690V	004331028	10.500	32	gR	3/120	180
	125	M00CUQU-N/125A/690V	004331029	21.300	40	gR	3/120	180
00	6	M00UQU-N/6A/690V	004331201	18	2,8	gR	3/90	180
	10	M00UQU-N/10A/690V	004331202	60	3,3	gR	3/90	180
	16	M00UQU-N/16A/690V	004331203	170	4,1	gR	3/90	180
	20	M00UQU-N/20A/690V	004331204	250	5	gR	3/90	180
	25	M00UQU-N/25A/690V	004331205	460	5,8	gR	3/90	180
	35	M00UQU-N/35A/690V	004331214	1.000	8	gR	3/90	180
	40	M00UQU-N/40A/690V	004331208	1.300	11	gR	3/90	180
	50	M00UQU-N/50A/690V	004331209	1.500	16	gR	3/90	180
	63	M00UQU-N/63A/690V	004331210	3.000	20	gR	3/90	180
	80	M00UQU-N/80A/690V	004331211	5.300	25	gR	3/90	180
	100	M00UQU-N/100A/690V	004331212	9.000	32	gR	3/90	180
	125	M00UQU-N/125A/690V	004331213	16.000	40	gR	3/90	180
	160	M00UQU-N/160A/690V	004331215	24.000	44	aR	3/90	180
0	6	M0UQU-N/6A/690V	004332201	18	2,8	gR	3/45	320
	10	M0UQU-N/10A/690V	004332202	60	3,3	gR	3/45	320
	16	M0UQU-N/16A/690V	004332203	170	4,1	gR	3/45	320
	20	M0UQU-N/20A/690V	004332204	250	5	gR	3/45	320
	25	M0UQU-N/25A/690V	004332205	460	5,8	gR	3/45	320
	35	M0UQU-N/35A/690V	004332216	1.000	8	gR	3/45	320
	40	M0UQU-N/40A/690V	004332208	1.300	11	gR	3/45	320
	50	M0UQU-N/50A/690V	004332209	1.500	16	gR	3/45	320
	63	M0UQU-N/63A/690V	004332210	3.000	20	gR	3/45	320
	80	M0UQU-N/80A/690V	004332211	5.300	25	gR	3/45	320
	100	M0UQU-N/100A/690V	004332212	9.000	32	gR	3/45	320
	125	M0UQU-N/125A/690V	004332213	16.000	40	gR	3/45	320
	160	M0UQU-N/160A/690V	004332214	24.000	44	aR	3/45	320

M00 UQU-N/6A/690V

Dimensions:





Size	A	B	C	D	E	F	L	N
00C	80	15	35	21	40	50,5	47	54
00	80	15	35	28	40	50,5	47	54
0	125	15	35	28	47	56,5	66	66

For more information visit: www.eti.si/Electrotechnical products/Semiconductor protection

NV/NH

Technical data on page 74

aR/gR

TYPES
M

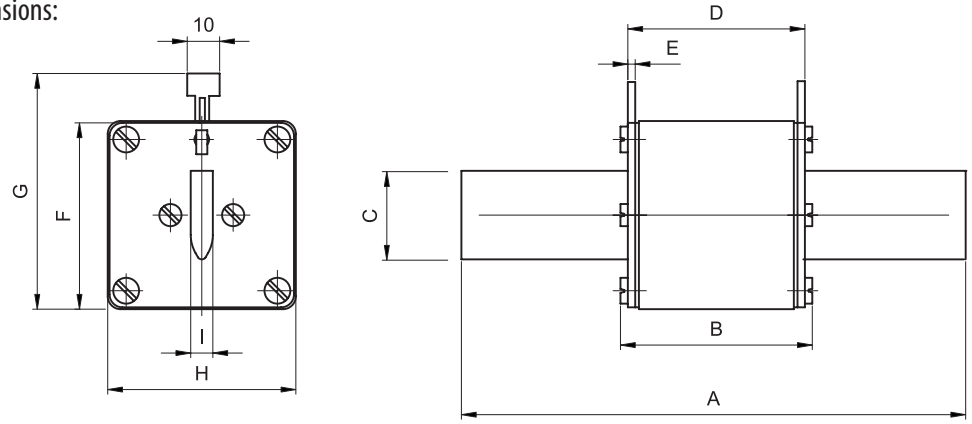
RATED VOLTAGE
~690V

Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~50kA/ ⎓ 25kA Rated voltage: ~690V		Fuse-links type M are applied in fuse base (for example) PK.

M2UQU-N/80A/690V

Size	In (A)	Type (visual indicator with grip for microswitch NVS 5)	Code No.	Operating I²t-value (A²s)	Power dissipation (W)	Char.	Packaging (pcs)	Weight (g)
1	35	M1UQU-N/35A/690V	004333217	1.000	8	gR	3/24	450
	50	M1UQU-N/50A/690V	004333208	1.500	16	gR	3/24	450
	63	M1UQU-N/63A/690V	004333209	3.000	20	gR	3/24	450
	80	M1UQU-N/80A/690V	004333210	5.300	25	gR	3/24	450
	100	M1UQU-N/100A/690V	004333211	9.000	32	gR	3/24	450
	125	M1UQU-N/125A/690V	004333212	16.000	40	gR	3/24	450
	160	M1UQU-N/160A/690V	004333213	24.000	44	aR	3/24	450
	200	M1UQU-N/200A/690V	004333214	40.000	58	aR	3/24	450
	224	M1UQU-N/224A/690V	004333215	52.000	60	aR	3/24	450
	250	M1UQU-N/250A/690V	004333216	65.000	63	aR	3/24	450
2	80	M2UQU-N/80A/690V	004334209	5.300	25	gR	3/15	680
	100	M2UQU-N/100A/690V	004334210	9.000	32	gR	3/15	680
	125	M2UQU-N/125A/690V	004334211	16.000	40	gR	3/15	680
	160	M2UQU-N/160A/690V	004334213	24.000	44	aR	3/15	680
	200	M2UQU-N/200A/690V	004334214	40.000	58	aR	3/15	680
	250	M2UQU-N/250A/690V	004334216	60.000	63	aR	3/15	680
	280	M2UQU-N/280A/690V	004334218	100.000	75	aR	3/15	680
	300	M2UQU-N/300A/690V	004334219	140.000	85	aR	3/15	680
	315	M2UQU-N/315A/690V	004334220	175.000	95	aR	3/15	680
	355	M2UQU-N/355A/690V	004334221	220.000	100	aR	3/15	680
	400	M2UQU-N/400A/690V	004334222	270.000	105	aR	3/15	680
3	250	M3UQU-N/250A/690V	004335207	60.000	63	aR	3/12	880
	280	M3UQU-N/280A/690V	004335208	100.000	75	aR	3/12	880
	315	M3UQU-N/315A/690V	004335209	175.000	95	aR	3/12	880
	355	M3UQU-N/355A/690V	004335210	300.000	100	aR	3/12	880
	400	M3UQU-N/400A/690V	004335211	441.700	105	aR	3/12	880
	450	M3UQU-N/450A/690V	004335213	530.000	115	aR	3/12	880
	500	M3UQU-N/500A/690V	004335214	620.000	130	aR	3/12	880
	560	M3UQU-N/560A/690V	004335215	730.000	135	aR	3/12	880
	630	M3UQU-N/630A/690V	004335216	850.000	140	aR	3/12	880

Dimensions:



Size	A	B	C	D	E	F	G	H	I
1	135	75	20	68	2	40	61,5	46	6
2	150	75	26	68	2	48	71,5	57	6
3	150	75	36	68	2	60	81,5	69	6

For more information visit: www.eti.si/Electrotechnical products/Semiconductor protection

aR/gR

TYPES
S80mm/97mm

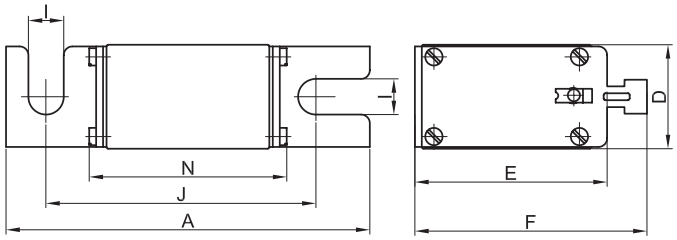
RATED VOLTAGE
~690V

Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~50kA / ⎓25kA Rated voltage: ~690V		Fuse-links type S of size 00C, 00 and 0 are applied in fuse base US00-1/80 and mounted by screws to busbars.

Size	In (A)	Type (visual indicator with grip for microswitch NVS 5)	Code No.	Operating I^2t-value (A^2s)	Power dissipation (W)	Char.	Packaging (pcs)	Weight (g)
00C	6	S00CUQU/80/6A/690V	004331003	19	2,8	aR	3/120	180
	10	S00CUQU/80/10A/690V	004331004	62	3,3	aR	3/120	180
	16	S00CUQU/80/16A/690V	004331005	154	4,1	aR	3/120	180
	20	S00CUQU/80/20A/690V	004331006	290	5	aR	3/120	180
	25	S00CUQU/80/25A/690V	004331007	590	5,8	aR	3/120	180
	35	S00CUQU/80/35A/690V	004331008	1.160	8	aR	3/120	180
	40	S00CUQU/80/40A/690V	004331009	1.500	11	aR	3/120	180
	50	S00CUQU/80/50A/690V	004331010	2.370	16	aR	3/120	180
	63	S00CUQU/80/63A/690V	004331011	4.650	20	aR	3/120	180
	80	S00CUQU/80/80A/690V	004331012	5.350	25	aR	3/120	180
	100	S00CUQU/80/100A/690V	004331013	10.500	32	aR	3/120	180
	125	S00CUQU/80/125A/690V	004331014	21.300	40	aR	3/120	180
00	6	S00UQU/80/6A/690V	004331102	18	2,8	gR	3/90	180
	10	S00UQU/80/10A/690V	004331103	60	3,3	gR	3/90	180
	16	S00UQU/80/16A/690V	004331104	170	4,1	gR	3/90	180
	20	S00UQU/80/20A/690V	004331105	250	5	gR	3/90	180
	25	S00UQU/80/25A/690V	004331106	460	5,8	gR	3/90	180
	35	S00UQU/80/35A/690V	004331116	1.000	8	gR	3/90	180
	40	S00UQU/80/40A/690V	004331110	1.300	11	gR	3/90	180
	50	S00UQU/80/50A/690V	004331111	1.500	16	gR	3/90	180
	63	S00UQU/80/63A/690V	004331112	3.000	20	gR	3/90	180
	80	S00UQU/80/80A/690V	004331113	5.300	25	gR	3/90	180
	100	S00UQU/80/100A/690V	004331114	9.000	32	gR	3/90	180
	125	S00UQU/80/125A/690V	004331115	16.000	40	gR	3/90	180
	160	S00UQU/80/160A/690V	004331117	24.000	44	aR	3/90	180
0	6	S0UQU/97/6A/690V	004332101	18	2,8	gR	3/45	320
	10	S0UQU/97/10A/690V	004332102	60	3,3	gR	3/45	320
	16	S0UQU/97/16A/690V	004332103	170	4,1	gR	3/45	320
	20	S0UQU/97/20A/690V	004332104	250	5	gR	3/45	320
	25	S0UQU/97/25A/690V	004332105	460	5,8	gR	3/45	320
	35	S0UQU/97/35A/690V	004332116	1.000	8	gR	3/45	320
	40	S0UQU/97/40A/690V	004332108	1.300	11	gR	3/45	320
	50	S0UQU/97/50A/690V	004332109	1.500	16	gR	3/45	320
	63	S0UQU/97/63A/690V	004332110	3.000	20	gR	3/45	320
	80	S0UQU/97/80A/690V	004332111	5.300	25	gR	3/45	320
	100	S0UQU/97/100A/690V	004332112	9.000	32	gR	3/45	320
	125	S0UQU/97/125A/690V	004332113	16.000	40	gR	3/45	320
	160	S0UQU/97/160A/690V	004332114	24.000	44	aR	3/45	320

S00UQU/80/6A/690V

Dimensions:



Size	A	D	E	F	I	J	N
00C	105	21	48	58	8,5	80	54
00	105	27	48	58	11,5	80	54
0	121	27	48	58	11,5	97	69

NV/NH

Technical data on page 74

aR/gR	TYPES S110mm	RATED VOLTAGE ~690V

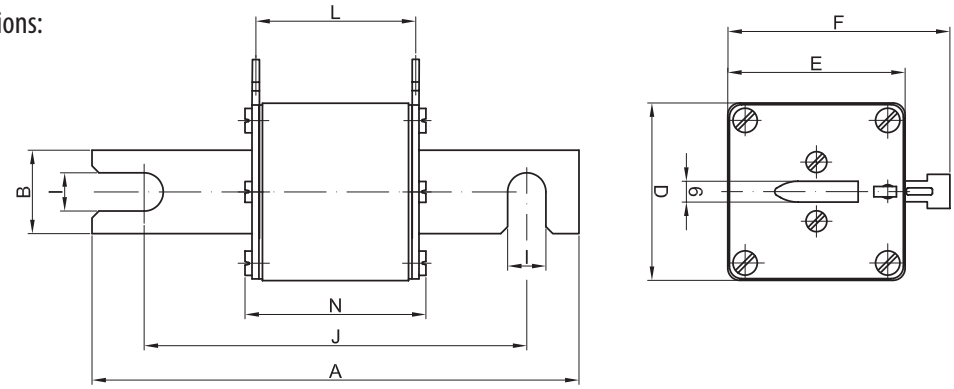
Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~50kA / ⎓25kA Rated voltage: ~690V		Fuse-links type S 110mm of size 1, 2, 3 are applied in universal fuse base US1..3-1/80-110 and mounted by screws to busbars.

S2UQU/110/80A/690V

Size	In (A)	Type (visual indicator with grip for microswitch NVS 5)	Code No.	Operating I^2t-value (A^2s)	Power dissipation (W)	Char.	Packaging (pcs)	Weight (g)
1	35	S1UQU/110/35A/690V	004333117	1.000	8	gR	3/24	450
	50	S1UQU/110/50A/690V	004333108	1.500	16	gR	3/24	450
	63	S1UQU/110/63A/690V	004333109	3.000	20	gR	3/24	450
	80	S1UQU/110/80A/690V	004333110	5.300	25	gR	3/24	450
	100	S1UQU/110/100A/690V	004333111	9.000	32	gR	3/24	450
	125	S1UQU/110/125A/690V	004333112	16.000	40	gR	3/24	450
	160	S1UQU/110/160A/690V	004333113	24.000	44	aR	3/24	450
	200	S1UQU/110/200A/690V	004333114	40.000	58	aR	3/24	450
	224	S1UQU/110/224A/690V	004333115	52.000	60	aR	3/24	450
	250	S1UQU/110/250A/690V	004333116	65.000	63	aR	3/24	450
2	80	S2UQU/110/80A/690V	004334109	5.300	25	gR	3/15	680
	100	S2UQU/110/100A/690V	004334110	9.000	32	gR	3/15	680
	125	S2UQU/110/125A/690V	004334111	16.000	40	gR	3/15	680
	160	S2UQU/110/160A/690V	004334112	24.000	44	aR	3/15	680
	200	S2UQU/110/200A/690V	004334113	40.000	58	aR	3/15	680
	250	S2UQU/110/250A/690V	004334115	60.000	63	aR	3/15	680
	280	S2UQU/110/280A/690V	004334116	100.000	75	aR	3/15	680
	300	S2UQU/110/300A/690V	004334121	140.000	85	aR	3/15	680
	315	S2UQU/110/315A/690V	004334117	175.000	95	aR	3/15	680
	355	S2UQU/110/355A/690V	004334118	220.000	100	aR	3/15	680
	400	S2UQU/110/400A/690V	004334119	270.000	105	aR	3/15	680
3	250	S3UQU/110/250A/690V	004335117	60.000	63	aR	3/12	880
	280	S3UQU/110/280A/690V	004335108	100.000	75	aR	3/12	880
	315	S3UQU/110/315A/690V	004335109	175.000	95	aR	3/12	880
	355	S3UQU/110/355A/690V	004335110	300.000	100	aR	3/12	880
	400	S3UQU/110/400A/690V	004335111	441.700	105	aR	3/12	880
	450	S3UQU/110/450A/690V	004335113	530.000	115	aR	3/12	880
	500	S3UQU/110/500A/690V	004335114	620.000	130	aR	3/12	880
	560	S3UQU/110/560A/690V	004335115	730.000	135	aR	3/12	880
	630	S3UQU/110/630A/690V	004335116	850.000	140	aR	3/12	880

Not possible for mounting NVS5 for size 1.

Dimensions:



Size	A	B	D	E	F	I	J	L	N
1	140	26	46	46	57,5	11,5	110	66	75
2	140	26	57	57	71,5	11,5	110	66	75
3	140	36	69	69	81,5	11,5	110	66	75

For more information visit: www.eti.si/Electrotechnical products/Semiconductor protection

aR	TYPES	RATED VOLTAGE
	M	~690V

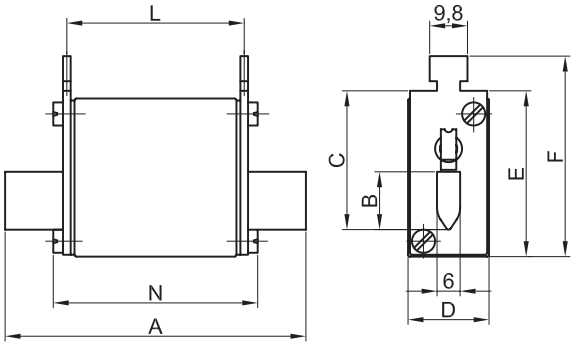
Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~200kA Rated voltage: ~690V		Fuse-links type M are applied in fuse base (for example PK).

M00UQ01/160A/690V

Size	In (A)	Type (visual indicator with grip for microswitch NVS 5)	Code No.	Operating I^2t-value (A^2s)	Power dissipation (W)	Char.	Packaging (pcs)	Weight (g)
00	10	M00UQ01/10A/690V	004371204	23	3	aR	3/72	140
	16	M00UQ01/16A/690V	004371205	46	4	aR	3/72	140
	20	M00UQ01/20A/690V	004371206	95	5	aR	3/72	140
	25	M00UQ01/25A/690V	004371207	165	6	aR	3/72	140
	32	M00UQ01/32A/690V	004371208	290	7	aR	3/72	140
	35	M00UQ01/35A/690V	004371209	400	8	aR	3/72	140
	40	M00UQ01/40A/690V	004371210	640	9	aR	3/72	140
	50	M00UQ01/50A/690V	004371211	1.000	10	aR	3/72	140
	63	M00UQ01/63A/690V	004371212	1.800	12,3	aR	3/72	140
	80	M00UQ01/80A/690V	004371213	2.800	16,3	aR	3/72	140
	100	M00UQ01/100A/690V	004371214	4.600	20	aR	3/72	140
	125	M00UQ01/125A/690V	004371215	8.000	26,9	aR	3/72	140
	160	M00UQ01/160A/690V	004371216	16.500	31,6	aR	3/72	140
	200*	M00UQ02/200A/690V	004741217	22.000	46	aR	3/72	140
	250*	M00UQ02/250A/690V	004741219	44.000	49	aR	3/72	140
	315	M00UQ01/315A/690V	004371219	80.000	54	aR	3/72	140

*Technical data on page 103.

Dimensions:



Size	A	B	C	D	E	F	L	N
00	78	15	35	30	42	51	48	52

remember

Motor drives: Servo drive

Servo drive for AC servo motor (CNC machine)

For more information visit: www.eti.si/Electrotechnical products/Semiconductor protection

NV/NH

Technical data on page104

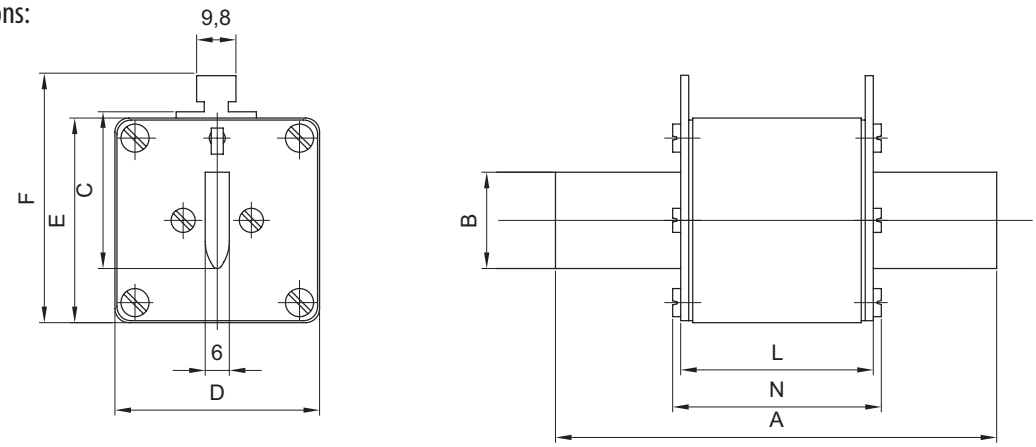
aR	TYPES	RATED VOLTAGE
	M	~690V

Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~200kA Rated voltage: ~690V		Fuse-link type M are applied in fuse base PK

M1UQ02/160A/690V

Size	In (A)	Type (visual indicator)	Code No.	Operating I^2t-value (A^2s)	Power dissipation (W)	Char.	Packaging (pcs.)	Weight (g)
1	63	M1UQ02/63A/690V	004743212	1.200	16	aR	3/24	500
	80	M1UQ02/80A/690V	004743213	1.800	21	aR	3/24	500
	100	M1UQ02/100A/690V	004743214	2.500	27	aR	3/24	500
	125	M1UQ02/125A/690V	004743215	4.600	32	aR	3/24	500
	160	M1UQ02/160A/690V	004743216	8.400	36	aR	3/24	500
	200	M1UQ02/200A/690V	004743217	14.000	46	aR	3/24	500
	250	M1UQ02/250A/690V	004743219	26.000	51	aR	3/24	500
	315	M1UQ02/315A/690V	004743221	42.000	66	aR	3/24	500
	350	M1UQ02/350A/690V	004743222	54.000	69	aR	3/24	500
	400	M1UQ02/400A/690V	004743223	98.000	80	aR	3/24	500
2	250	M2UQ02/250A/690V	004744219	21.500	53	aR	1/16	650
	315	M2UQ02/315A/690V	004744221	33.800	68	aR	1/16	650
	350	M2UQ02/350A/690V	004744222	48.900	71	aR	1/16	650
	400	M2UQ02/400A/690V	004744223	85.000	75	aR	1/16	650
	450	M2UQ02/450A/690V	004744225	120.000	80	aR	1/16	650
	500	M2UQ02/500A/690V	004744226	150.000	91	aR	1/16	650
	550	M2UQ02/550A/690V	004744227	200.000	100	aR	1/16	650
	630	M2UQ02/630A/690V	004744228	305.000	120	aR	1/16	650
3	400	M3UQ02/400A/690V	004745223	69.000	81	aR	3/24	850
	450	M3UQ02/450A/690V	004745225	96.000	89	aR	3/24	850
	500	M3UQ02/500A/690V	004745226	127.000	110	aR	3/24	850
	630	M3UQ02/630A/690V	004745228	225.000	121	aR	3/24	850
	710	M3UQ02/710A/690V	004745229	320.000	130	aR	3/24	850
	800	M3UQ02/800A/690V	004745230	525.000	145	aR	3/24	850
	900	M3UQ02/900A/690V	004745231	900.000	160	aR	3/24	850
	1000	M3UQ02/1000A/690V	004745232	1.000.000	170	aR	3/24	850
	1250	M3UQ02/1250A/690V	004745233	2.000.000	190	aR	3/24	850

Dimensions:



Size	A	B	C	D	E	F	L	N
1	135	24	40	46	52	62	65	72
2	150	30	48	54	61	71	65	72
3	150	37	60	74	74	84	65	72

aR

TYPES
S80mm

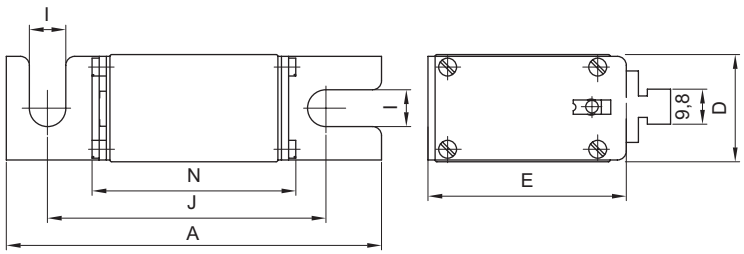
RATED VOLTAGE
~690V

Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~200kA Rated voltage: ~690V		Fuse-links type S of size 00C and 00 are applied in fuse base US00-1/80 and mounted by screws to busbars.

S00UQ01/80/350A/690V

Size	In (A)	Type (visual indicator with grip for microswitch NVS 5)	Code No.	Operating I^2t-value (A^2s)	Power dissipation (W)	Char.	Packaging (pcs)	Weight (g)
00C	10	S00CUQ01/80/10A/690V	004371104	23	3	aR	3/54	150
	16	S00CUQ01/80/16A/690V	004371105	46	4	aR	3/54	150
	20	S00CUQ01/80/20A/690V	004371106	95	5	aR	3/54	150
	25	S00CUQ01/80/25A/690V	004371107	165	6	aR	3/54	150
	32	S00CUQ01/80/32A/690V	004371108	290	7	aR	3/54	150
	35	S00CUQ01/80/35A/690V	004371109	400	8	aR	3/54	150
	40	S00CUQ01/80/40A/690V	004371110	640	9	aR	3/54	150
	50	S00CUQ01/80/50A/690V	004371111	1.000	10	aR	3/54	150
	63	S00CUQ01/80/63A/690V	004371112	1.800	12,3	aR	3/54	150
	80	S00CUQ01/80/80A/690V	004371113	2.800	16,3	aR	3/54	150
	100	S00CUQ01/80/100A/690V	004371114	4.600	20	aR	3/54	150
	125	S00CUQ01/80/125A/690V	004371115	8.000	26,9	aR	3/54	150
	160	S00CUQ01/80/160A/690V	004371116	16.500	31,6	aR	3/54	150
	200	S00CUQ01/80/200A/690V	004371117	23.000	38,7	aR	3/54	150
	250	S00CUQ01/80/250A/690V	004371119	46.000	43,8	aR	3/54	150
	315	S00CUQ01/80/315A/690V	004371121	80.000	54	aR	3/54	150
00	350	S00UQ01/80/350A/690V	004371122	100.000	60	aR	3/54	150
	400	S00UQ01/80/400A/500V	004371123	120.000	70	aR	3/54	150

Dimensions:



Size	A	D	E	I	J	N
00C	101	21	40	8,5	78	54
00	105	30	51	10,3	78	56

remember

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NV/NH

Technical data on page 77

aR	TYPES S80mm	RATED VOLTAGE ~690V

Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~200kA Rated voltage: ~690V		Fuse-links type S 80mm of size 1, 2, 3 are applied in universal fuse base US1..3-1/80-110 and mounted by screws to busbars.

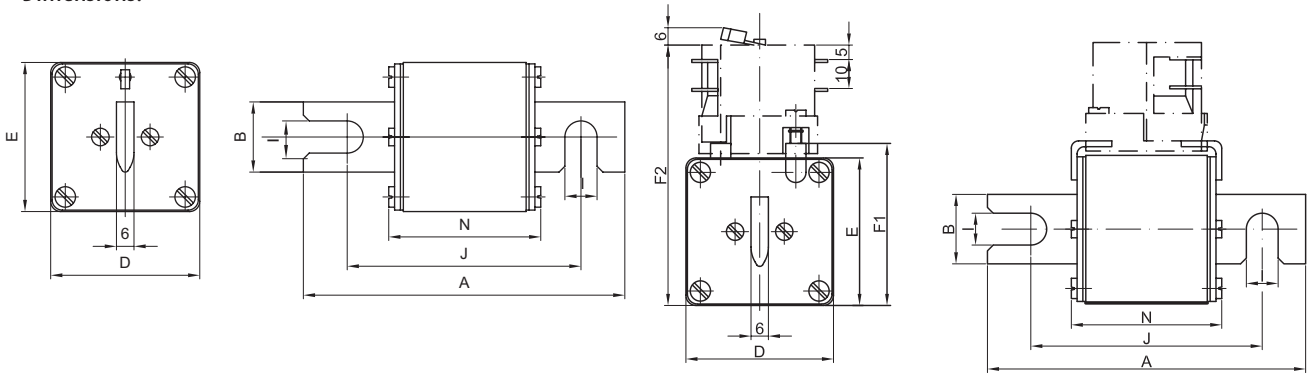
S1UQ01/80/350A/690V

S1MUQ01/80/350A/690V

Size	In (A)	Type with visual indicator	Code No.	Operating I^2t-value (A^2s)	Power dissipation (W)	Type with centre trip indicator for microswitch MK	Code No.	Char.	Pack. (pcs)	Weight (g)
1	80	S1UQ01/80/80A/690V	004383113	2.300	15,6	S1MUQ01/80/80A/690V	004383713	aR	1/26	500
	100	S1UQ01/80/100A/690V	004383114	4.600	20	S1MUQ01/80/100A/690V	004383714	aR	1/26	500
	125	S1UQ01/80/125A/690V	004383115	6.600	25	S1MUQ01/80/125A/690V	004383715	aR	1/26	500
	160	S1UQ01/80/160A/690V	004383116	10.000	32,2	S1MUQ01/80/160A/690V	004383716	aR	1/26	500
	200	S1UQ01/80/200A/690V	004383117	18.000	39,4	S1MUQ01/80/200A/690V	004383717	aR	1/26	500
	250	S1UQ01/80/250A/690V	004383119	32.000	49,4	S1MUQ01/80/250A/690V	004383719	aR	1/26	500
	315	S1UQ01/80/315A/690V	004383121	58.000	60	S1MUQ01/80/315A/690V	004383721	aR	1/26	500
	350	S1UQ01/80/350A/690V	004383122	78.000	63	S1MUQ01/80/350A/690V	004383722	aR	1/26	500
	400	S1UQ01/80/400A/690V	004383123	110.000	66	S1MUQ01/80/400A/690V	004383723	aR	1/26	500
	450	S1UQ01/80/450A/690V	004383125	155.000	72	S1MUQ01/80/450A/690V	004383725	aR	1/26	500
	500	S1UQ01/80/500A/690V	004383126	200.000	73	S1MUQ01/80/500A/690V	004383726	aR	1/26	500
	550	S1UQ01/80/550A/690V	004383127	250.000	80	S1MUQ01/80/550A/690V	004383727	aR	1/26	500
	630	S1UQ01/80/630A/690V	004383128	330.000	86	S1MUQ01/80/630A/690V	004383728	aR	1/26	500
	710*	S1UQ01/80/710A/690V	004383129	470.000	92	S1MUQ02/80/710A/690V	004743735	aR	1/26	500
2	400	S2UQ01/80/400A/690V	004384123	85.000	70	S2MUQ01/80/400A/690V	004384723	aR	1/16	650
	450	S2UQ01/80/450A/690V	004384125	125.000	76	S2MUQ01/80/450A/690V	004384725	aR	1/16	650
	500	S2UQ01/80/500A/690V	004384126	165.000	80	S2MUQ01/80/500A/690V	004384726	aR	1/16	650
	550	S2UQ01/80/550A/690V	004384127	220.000	82	S2MUQ01/80/550A/690V	004384727	aR	1/16	650
	630	S2UQ01/80/630A/690V	004384128	310.000	85	S2MUQ01/80/630A/690V	004384728	aR	1/16	650
	710	S2UQ01/80/710A/690V	004384129	460.000	91	S2MUQ01/80/710A/690V	004384729	aR	1/16	650
	800	S2UQ01/80/800A/690V	004384130	720.000	95	S2MUQ01/80/800A/690V	004384730	aR	1/16	650
	900*	S2UQ01/80/900A/690V	004384131	920.000	115	S2MUQ02/80/900A/690V	004744735	aR	1/16	650
	1000*	S2UQ01/80/1000A/690V	004384132	1.300.000	124	S2MUQ02/80/1000A/690V	004744736	aR	1/16	650
3	630	S3UQ01/80/630A/690V	004385128	260.000	102	S3MUQ01/80/630A/690V	004385728	aR	1/15	850
	710	S3UQ01/80/710A/690V	004385129	330.000	109	S3MUQ01/80/710A/690V	004385729	aR	1/15	850
	800	S3UQ01/80/800A/690V	004385130	500.000	117	S3MUQ01/80/800A/690V	004385730	aR	1/15	850
	900	S3UQ01/80/900A/690V	004385131	920.000	115	S3MUQ01/80/900A/690V	004385731	aR	1/15	850
	1000	S3UQ01/80/1000A/690V	004385132	1.000.000	131	S3MUQ01/80/1000A/690V	004385732	aR	1/15	850
	1100	S3UQ01/80/1100A/690V	004385135	1.500.000	140	S3MUQ01/80/1100A/690V	004385734	aR	1/15	850
	1250	S3UQ01/80/1250A/690V	004385133	2.300.000	152	S3MUQ01/80/1250A/690V	004385733	aR	1/15	850
	1400*	S3UQ01/80/1400A/690V	004385134	2.600.000	156	S3MUQ01/80/1400A/690V	004745735	aR	1/15	850

*Technical data on page 104.

Dimensions:



Size	A	B	D	E	F1	F2	I	J	N
1	110	24	51	51	56	90	11	80	52
2	110	30	60	60	65	99	11	80	52
3	110	37	75	75	80	114	11	80	52

For more information visit: www.eti.si/Electrotechnical products/Semiconductor protection

Technical data on page 77

aR

TYPES
S110mm

RATED VOLTAGE
~690V

Technical data:

Standards:
IEC 60269-4

Breaking capacity:
~200kA
Rated voltage:
~690V

Application:

Fuse-links type S 110mm of size 1, 2, 3 are applied in universal fuse base US1..3-1/80-110 and mounted by screws to busbars.

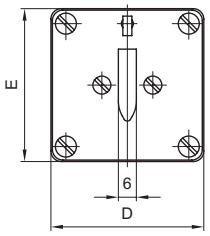
Size	In (A)	Type with visual indicator	Code No.	Operating I^2t-value (A^2s)	Power dissipation (W)	Type with centre trip indicator for microswitch MK	Code No.	Char.	Pack. (pcs)	Weight (g)
1	80	S1UQ01/110/80A/690V	004393113	2.300	15,6	S1MUQ01/110/80A/690V	004393713	aR	1/26	500
	100	S1UQ01/110/100A/690V	004393114	4.600	20	S1MUQ01/110/100A/690V	004393714	aR	1/26	500
	125	S1UQ01/110/125A/690V	004393115	6.600	25	S1MUQ01/110/125A/690V	004393715	aR	1/26	500
	160	S1UQ01/110/160A/690V	004393116	10.000	32,2	S1MUQ01/110/160A/690V	004393716	aR	1/26	500
	200	S1UQ01/110/200A/690V	004393117	18.000	39,4	S1MUQ01/110/200A/690V	004393717	aR	1/26	500
	250	S1UQ01/110/250A/690V	004393119	32.000	49,4	S1MUQ01/110/250A/690V	004393719	aR	1/26	500
	315	S1UQ01/110/315A/690V	004393121	58.000	60	S1MUQ01/110/315A/690V	004393721	aR	1/26	500
	350	S1UQ01/110/350A/690V	004393122	78.000	63	S1MUQ01/110/350A/690V	004393722	aR	1/26	500
	400	S1UQ01/110/400A/690V	004393123	110.000	66	S1MUQ01/110/400A/690V	004393723	aR	1/26	500
	450	S1UQ01/110/450A/690V	004393125	155.000	72	S1MUQ01/110/450A/690V	004393725	aR	1/26	500
	500	S1UQ01/110/500A/690V	004393126	200.000	73	S1MUQ01/110/500A/690V	004393726	aR	1/26	500
	550	S1UQ01/110/550A/690V	004393127	250.000	80	S1MUQ02/110/550A/690V	004743727	aR	1/26	500
	630	S1UQ01/110/630A/690V	004393128	330.000	86	S1MUQ01/110/630A/690V	004393728	aR	1/26	500
	710*	S1UQ01/110/710A/690V	004393129	470.000	92	S1MUQ02/110/710A/690V	004743729	aR	1/26	500
2	400	S2UQ01/110/400A/690V	004394123	85.000	70	S2MUQ01/110/400A/690V	004394723	aR	1/16	650
	450	S2UQ01/110/450A/690V	004394125	125.000	76	S2MUQ01/110/450A/690V	004394725	aR	1/16	650
	500	S2UQ01/110/500A/690V	004394126	165.000	80	S2MUQ01/110/500A/690V	004394726	aR	1/16	650
	550	S2UQ01/110/550A/690V	004394127	220.000	82	S2MUQ02/110/550A/690V	004744727	aR	1/16	650
	630	S2UQ01/110/630A/690V	004394128	310.000	85	S2MUQ01/110/630A/690V	004394728	aR	1/16	650
	710	S2UQ01/110/710A/690V	004394129	460.000	91	S2MUQ01/110/710A/690V	004394729	aR	1/16	650
	800	S2UQ01/110/800A/690V	004394130	720.000	95	S2MUQ01/110/800A/690V	004394730	aR	1/16	650
	900*	S2UQ01/110/900A/690V	004394131	920.000	115	S2MUQ02/110/900A/690V	004744731	aR	1/16	650
	1000*	S2UQ01/110/1000A/690V	004394132	1.300.000	124	S2MUQ02/110/1000A/690V	004744732	aR	1/16	650
3	630	S3UQ01/110/630A/690V	004395128	260.000	102	S3MUQ01/110/630A/690V	004395728	aR	3/24	850
	710	S3UQ01/110/710A/690V	004395129	330.000	109	S3MUQ01/110/710A/690V	004395729	aR	3/24	850
	800	S3UQ01/110/800A/690V	004395130	500.000	117	S3MUQ01/110/800A/690V	004395730	aR	3/24	850
	900	S3UQ01/110/900A/690V	004395131	710.000	118	S3MUQ01/110/900A/690V	004395731	aR	3/24	850
	1000	S3UQ01/110/1000A/690V	004395132	1.000.000	131	S3MUQ01/110/1000A/690V	004395732	aR	3/24	850
	1100	S3UQ01/110/1100A/690V	004395134	1.300.000	130	S3MUQ01/110/1100A/690V	004395734	aR	3/24	850
	1250	S3UQ01/110/1250A/690V	004395133	2.300.000	152	S3MUQ01/110/1250A/690V	004395733	aR	3/24	850
	1400*	S3UQ01/110/1400A/690V	004395135	2.600.000	156	S3MUQ02/110/1400A/690V	004745734	aR	3/24	850

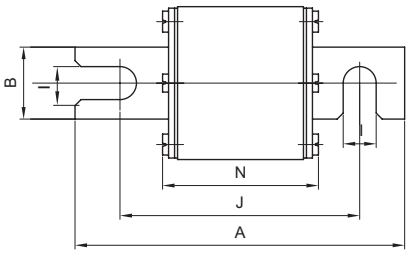
*Technical data on page 104.

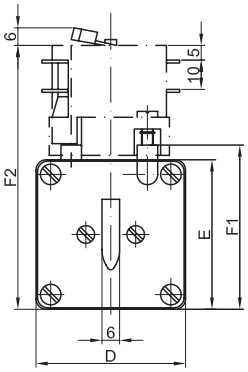
S1UQ01/110/450A/690V

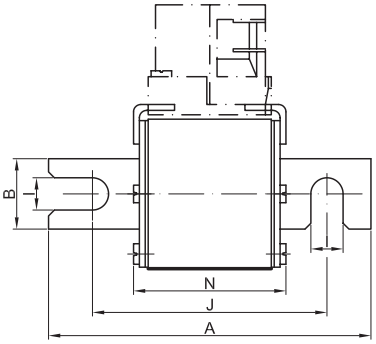
S1MUQ01/110/450A/690V

Dimensions:









Size	A	B	D	E	F1	F2	I	J	N
1	140	24	51	51	56	90	11	110	52
2	140	30	60	60	65	99	11	110	52
3	140	37	75	75	80	114	11	110	52

For more information visit: www.eti.si/Electrotechnical products/Semiconductor protection

NV/NH

Technical data on page 77

aR	TYPES	RATED VOLTAGE
	G	~690V

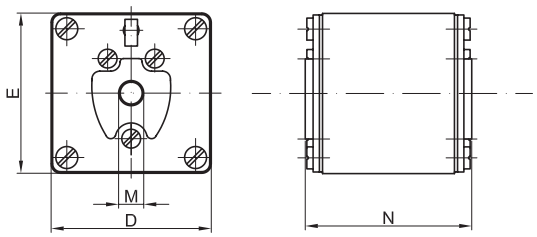
Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~200kA Rated voltage: ~690V		Fuse-links type G has threaded studs so fuses are mounted by special screws to busbars.

G1UQ01/630A/690V

Size	In (A)	Type with visual indicator	Code No.	Operating I^2t-value (A^2s)	Power dissipation (W)	Char.	Pack. (pcs)	Weight (g)
1	80	G1UQ01/80A/690V	004373513	2.300	15,6	aR	2/52	500
	100	G1UQ01/100A/690V	004373514	4.600	20	aR	2/52	500
	125	G1UQ01/125A/690V	004373515	6.600	25	aR	2/52	500
	160	G1UQ01/160A/690V	004373516	10.000	32,2	aR	2/52	500
	200	G1UQ01/200A/690V	004373517	18.000	39,4	aR	2/52	500
	250	G1UQ01/250A/690V	004373519	32.000	49,4	aR	2/52	500
	315	G1UQ01/315A/690V	004373521	58.000	60	aR	2/52	500
	350	G1UQ01/350A/690V	004373522	78.000	63	aR	2/52	500
	400	G1UQ01/400A/690V	004373523	110.000	66	aR	2/52	500
	450	G1UQ01/450A/690V	004373525	155.000	72	aR	2/52	500
	500	G1UQ01/500A/690V	004373526	200.000	73	aR	2/52	500
	550	G1UQ01/550A/690V	004373527	250.000	80	aR	2/52	500
	630	G1UQ01/630A/690V	004373528	330.000	86	aR	2/52	500
	710*	G1UQ01/710/690V	004373529	470.000	84	aR	2/52	500
2	400	G2UQ01/400A/690V	004374523	85.000	70	aR	2/32	650
	450	G2UQ01/450A/690V	004374525	125.000	76	aR	2/32	650
	500	G2UQ01/500A/690V	004374526	165.000	80	aR	2/32	650
	550	G2UQ01/550A/690V	004374527	220.000	82	aR	2/32	650
	630	G2UQ01/630A/690V	004374528	310.000	85	aR	2/32	650
	710	G2UQ01/710A/690V	004374529	460.000	91	aR	2/32	650
	800	G2UQ01/800A/690V	004374530	720.000	95	aR	2/32	650
	900*	G2UQ01/900A/690V	004374531	920.000	116	aR	2/32	650
	1000*	G2UQ01/1000A/690V	004374532	1.300.000	121	aR	2/32	650
3	630	G3UQ01/630A/690V	004375528	260.000	102	aR	2/32	850
	710	G3UQ01/710A/690V	004375529	330.000	109	aR	2/32	850
	800	G3UQ01/800A/690V	004375530	500.000	117	aR	2/32	850
	900	G3UQ01/900A/690V	004375531	710.000	128	aR	2/32	850
	1000	G3UQ01/1000A/690V	004375532	1.000.000	131	aR	2/32	850
	1250	G3UQ01/1250A/690V	004375533	2.300.000	152	aR	2/32	850
	1400*	G3UQ01/1400A/690V	004375534	2.600.000	162	aR	2/32	850
	1600*	G3UQ01/1600A/500V	004375535	2.300.000	180	aR	2/32	850

*Technical data on page 104.

Dimensions:



Size	D	E	F1	F2	M	N
1	51	51	56	90	M8	53
2	60	60	65	99	M10	53
3	75	75	80	114	M12	53

Technical data on page 77

aR	TYPES G	RATED VOLTAGE ~690V

Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~200kA Rated voltage: ~690V		Fuse-links type G has threaded studs so fuses are mounted by special screws to busbars.

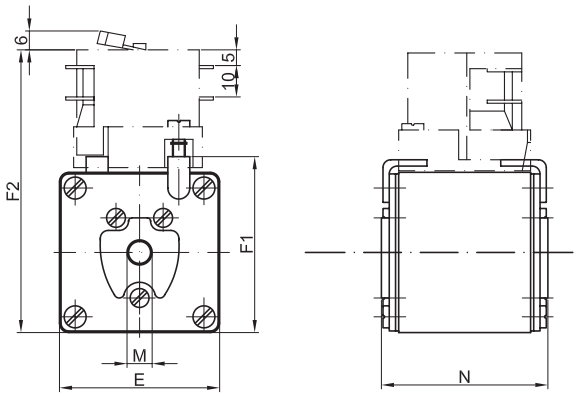
Size	In (A)	Type with centre trip indicator for microswitch MK	Code No.	Operating I^2t-value (A^2s)	Power dissipation (W)	Char.	Pack. (pcs)	Weight (g)
1	80	G1MUQ01/80A/690V	004373613	2.300	15,6	aR	2/52	500
	100	G1MUQ01/100A/690V	004373614	4.600	20	aR	2/52	500
	125	G1MUQ01/125A/690V	004373615	6.600	25	aR	2/52	500
	160	G1MUQ01/160A/690V	004373616	10.000	32,2	aR	2/52	500
	200	G1MUQ01/200A/690V	004373617	18.000	39,4	aR	2/52	500
	250	G1MUQ02/250A/690V	004743619	32.000	49,4	aR	2/52	500
	315	G1MUQ01/315A/690V	004373621	58.000	60	aR	2/52	500
	350	G1MUQ01/350A/690V	004373622	78.000	63	aR	2/52	500
	400	G1MUQ01/400A/690V	004373623	110.000	66	aR	2/52	500
	450	G1MUQ01/450A/690V	004373625	155.000	72	aR	2/52	500
	500	G1MUQ01/500A/690V	004373626	200.000	73	aR	2/52	500
	550	G1MUQ02/550A/690V	004743627	250.000	80	aR	2/52	500
	630	G1MUQ01/630A/690V	004373628	330.000	86	aR	2/52	500
	710*	G1MUQ02/710A/690V	004743629	470.000	84	aR	2/52	500
2	400	G2MUQ01/400A/690V	004374623	85.000	70	aR	2/32	650
	450	G2MUQ01/450A/690V	004374625	125.000	76	aR	2/32	650
	500	G2MUQ01/500A/690V	004374626	165.000	80	aR	2/32	650
	550	G2MUQ02/550A/690V	004744627	220.000	82	aR	2/32	650
	630	G2MUQ01/630A/690V	004374628	310.000	85	aR	2/32	650
	710	G2MUQ01/710A/690V	004374629	460.000	91	aR	2/32	650
	800	G2MUQ01/800A/690V	004374630	720.000	95	aR	2/32	650
	900*	G2MUQ02/900A/690V	004744631	920.000	116	aR	2/32	650
	1000*	G2MUQ02/1000A/690V	004744632	1.300.000	121	aR	2/32	650
3	630	G3MUQ01/630A/690V	004375628	260.000	102	aR	2/32	850
	710	G3MUQ01/710A/690V	004375629	330.000	109	aR	2/32	850
	800	G3MUQ01/800A/690V	004375630	500.000	117	aR	2/32	850
	900	G3MUQ01/900A/690V	004745631	710.000	128	aR	2/32	850
	1000	G3MUQ01/1000A/690V	004375632	1.000.000	131	aR	2/32	850
	1250	G3MUQ01/1250A/690V	004375633	2.300.000	152	aR	2/32	850
	1400*	G3MUQ02/1400A/690V	004745634	2.600.000	162	aR	2/32	850
	1600*	G3MUQ01/1600A/500V	004745636	2.300.000	180	aR	2/32	850

*Technical data on page 104.

G2MUQ01/630A/690V

ULTRA QUICK

Dimensions:



Size	D	E	F1	F2	M	N
1	51	51	56	90	M8	53
2	60	60	65	99	M10	53
3	75	75	80	114	M12	53

NV/NH

Technical data on page 82

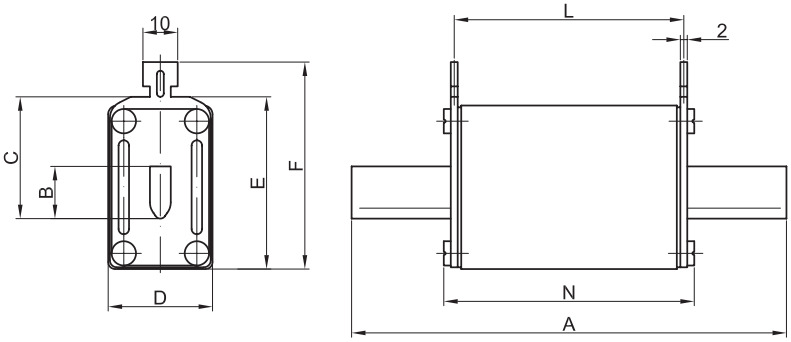
aR	TYPES	RATED VOLTAGE
	M	~1000V

M0UQ1/100A/1000V

Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~200kA Rated voltage: ~1000V		Fuse-links type M are applied in fuse base (for example PK).

Size	In (A)	Type (visual indicator with grip for microswitch NVS 5)	Code No.	Operating I^2t-value (A^2s)	Power dissipation (W)	Char.	Packaging (pcs)	Weight (g)
0	16	M0UQ1/16A/1000V	004362205	200	8	aR	3/24	250
	20	M0UQ1/20A/1000V	004362206	300	9	aR	3/24	250
	25	M0UQ1/25A/1000V	004362207	390	11	aR	3/24	250
	32	M0UQ1/32A/1000V	004362208	480	12,5	aR	3/24	250
	40	M0UQ1/40A/1000V	004362210	840	14,4	aR	3/24	250
	50	M0UQ1/50A/1000V	004362211	1.300	19,3	aR	3/24	250
	63	M0UQ1/63A/1000V	004362212	2.320	22,3	aR	3/24	250
	80	M0UQ1/80A/1000V	004362213	3.900	28,8	aR	3/24	250
	100	M0UQ1/100A/1000V	004362214	8.000	31,5	aR	3/24	250
	125	M0UQ1/125A/1000V	004362215	18.300	34,3	aR	3/24	250
	160	M0UQ1/160A/1000V	004362216	35.300	40,5	aR	3/24	250

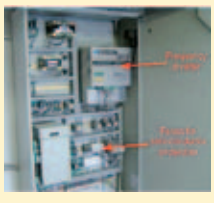
Dimensions:



Size	A	B	C	D	E	F	L	N
0	125	15	35	30	50	59,5	66	72

remember

Motor drives: Frequency inverter



Frequency inverter for 3 phase AC motor (lift-elevator)

For more information visit: www.eti.si/Electrotechnical products/Semiconductor protection

Technical data on page 86

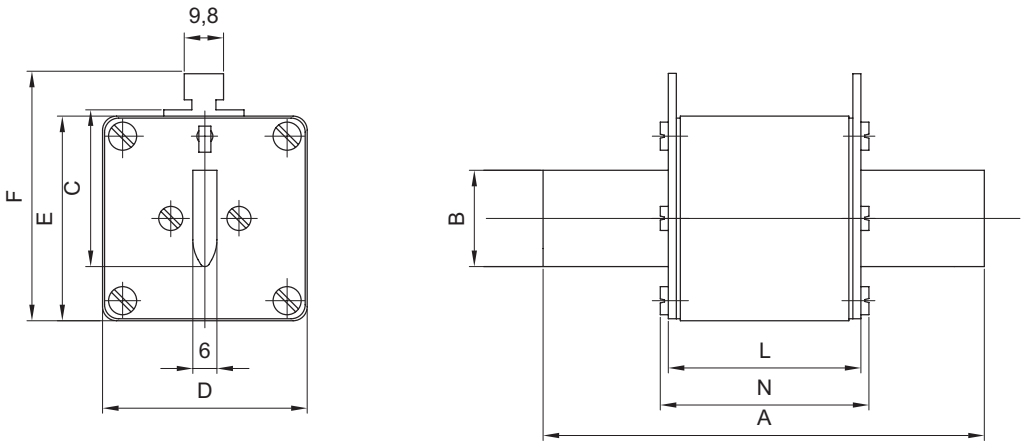
aR	TYPES M	RATED VOLTAGE ~1000V

Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~200kA Rated voltage: ~1000V		Fuse link type M are applied in fuse base PK.

Size	In (A)	Type with visual indicator	Code No.	Operating I^2t-value (A^2s)	Power dissipation (W)	Char.	Pack. (pcs)	Weight (g)
1	63	M1UQ01/63A/1000V	004303212	2.000	15	aR	1/26	500
	80	M1UQ01/80A/1000V	004303213	3.400	20	aR	1/26	500
	100	M1UQ01/100A/1000V	004303214	6.100	25	aR	1/26	500
	125	M1UQ01/125A/1000V	004303215	11.000	30	aR	1/26	500
	160	M1UQ01/160A/1000V	004303216	17.000	35	aR	1/26	500
	200	M1UQ01/200A/1000V	004303217	31.000	45	aR	1/26	500
	250	M1UQ01/250A/1000V	004303219	50.000	54	aR	1/26	500
	315	M1UQ01/315A/1000V	004303221	110.000	60	aR	1/26	500
	350	M1UQ01/350A/1000V	004303222	150.000	65	aR	1/26	500
	400	M1UQ01/400A/1000V	004303223	200.000	70	aR	1/26	500
2	315	M2UQ01/315A/1000V	004304221	85.000	66	aR	1/16	650
	350	M2UQ01/350A/1000V	004304222	130.000	70	aR	1/16	650
	400	M2UQ01/400A/1000V	004304223	170.000	80	aR	1/16	650
	450	M2UQ01/450A/1000V	004304225	220.000	86	aR	1/16	650
	500	M2UQ01/500A/1000V	004304226	320.000	90	aR	1/16	650
	630	M2UQ01/630A/1000V	004304228	600.000	108	aR	1/16	650
3	500	M3UQ01/500A/1000V	004305226	250.000	100	aR	1/15	850
	630	M3UQ01/630A/1000V	004305228	500.000	110	aR	1/15	850
	710	M3UQ01/710A/1000V	004305229	670.000	125	aR	1/15	850
	800	M3UQ01/800A/1000V	004305230	870.000	136	aR	1/15	850

M1UQ01/400A/1000V

Dimensions:



Size	A	B	C	D	E	F	L	N
1	135	24	40	46	52	62	65	72
2	150	30	48	54	61	71	65	72
3	150	37	60	74	74	84	65	72

NV/NH

Technical data on page 84

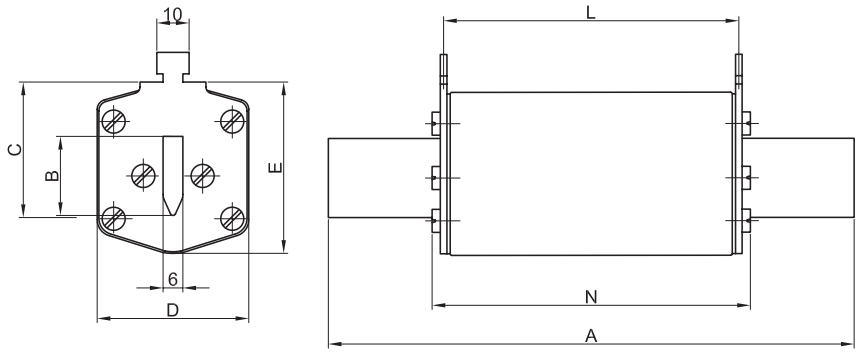
aR	TYPES M	RATED VOLTAGE ~1200V

M3UQ2/630A/1200V

Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~200kA Rated voltage: ~1200V		Fuse-links type M are applied in fuse base (for example U1, U2, U3).

Size	In (A)	Type (visual indicator with a grip for microswitch NVS 5)	Code No.	Operating I^2t-value (A^2s)	Power dissipation (W)	Char.	Packaging (pcs)	Weight (g)
1	80	M1UQ2/80A/1200V	004733213	8.000	35	aR	1/14	700
	100	M1UQ2/100A/1200V	004733214	12.500	45,9	aR	1/14	700
	125	M1UQ2/125A/1200V	004733215	20.000	55	aR	1/14	700
	160	M1UQ2/160A/1200V	004733216	32.000	67	aR	1/14	700
	200	M1UQ2/200A/1200V	004733217	50.000	84	aR	1/14	700
	224	M1UQ2/224A/1200V	004733218	63.000	93	aR	1/14	700
	250	M1UQ2/250A/1200V	004733219	80.000	104	aR	1/14	700
2	315	M2UQ2/315A/1200V	004734221	120.000	125	aR	1/14	1050
	350	M2UQ2/350A/1200V	004734222	160.000	141	aR	1/14	1050
	400	M2UQ2/400A/1200V	004734223	200.000	159	aR	1/14	1050
3	425	M3UQ2/425A/1200V	004734224	230.000	172	aR	1/22	1360
	500	M3UQ2/500A/1200V	004734226	320.000	185	aR	1/22	1360
	630	M3UQ2/630A/1200V	004734228	500.000	198	aR	1/22	1360

Dimensions:

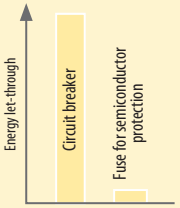


Size	A	B	C	D	E	L	N
1	194	20/24*	40	46	61,5	124	132
2	209	26/30*	48	54	71	124	132
3	209	32/37*	60	64	82	124	132

* The width of the knife is grated in dependence of rating.

remember

For the protection of drives most manufacturers seem to have accepted that circuit breakers despite many advantages are not an option for protection drives. The operational characteristics for circuit breakers are simply to slow, allowing too much energy to pass through.



For more information visit: www.eti.si/Electrotechnical products/Semiconductor protection

Technical data on page 86

aR

TYPES
S80mm

RATED VOLTAGE
~1000V

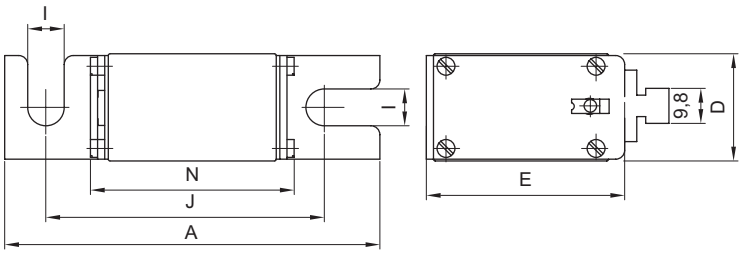
Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~200kA Rated voltage: ~1000V		Fuse-links type S of size 00C and 00 are applied in fuse base US00-1/80 and mounted by screws to busbars.

Size	In (A)	Type (visual indicator with grip for microswitch NVS 5)	Code No.	Operating I^2t-value (A^2s)	Power dissipation (W)	Char.	Packaging (pcs)	Weight (g)
00	25	S00UQ01/80/25A/1000V	004301107	150	11	aR	3/54	250
	32	S00UQ01/80/32A/1000V	004301108	200	15,1	aR	3/54	250
	40	S00UQ01/80/40A/1000V	004301110	330	18,1	aR	3/54	250
	50	S00UQ01/80/50A/1000V	004301111	670	20	aR	3/54	250
	63	S00UQ01/80/63A/1000V	004301112	1.300	24,3	aR	3/54	250
	80	S00UQ01/80/80A/1000V	004301113	2.400	27,4	aR	3/54	250
	100	S00UQ01/80/100A/1000V	004301114	4.700	30	aR	3/54	250
	125	S00UQ01/80/125A/1000V	004301115	10.000	38,2	aR	3/54	250
	160	S00UQ01/80/160A/1000V	004301116	16.000	47,2	aR	3/54	250
	200	S00UQ01/80/200A/1000V	004301117	30.000	57	aR	3/54	250
	250	S00UQ01/80/250A/1000V	004301119	58.000	67	aR	3/54	250
	315*	S00UQ01/80/315A/900V	004301121	110.000	78	aR	3/54	250

*900V

S00UQ01/80/200A/1000V

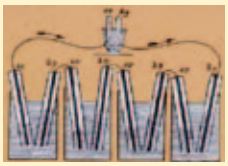
Dimensions:



Size	A	D	E	I	J	N
00	105	30	51	10	78	56

remember

Future applications:
Protection for alternative energy power plant:
- Wind power
- Solar power
- Fuel cell



For more information visit: www.eti.si/Electrotechnical products/Semiconductor protection

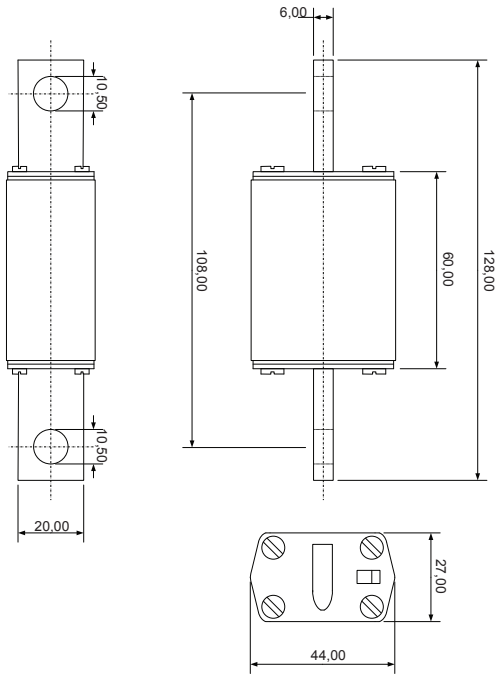
aR	TYPES S-M10	RATED VOLTAGE ~1000V

S0/108/160A/1000V M10

Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~200kA Rated voltage: ~1000V		Fuse-links type S0 M10 are mounted by screws to busbars.

Size	In (A)	Type (visual indicator)	Code No.	Operating I^2t-value (A^2s)	Power dissipation (W)	Char.	Packaging (pcs)	Weight (g)
0	16	S0/108/16A/1000V M10	004362217	200	8	aR	3/24	250
	20	S0/108/20A/1000V M10	004362218	300	9	aR	3/24	250
	25	S0/108/25A/1000V M10	004362219	390	11	aR	3/24	250
	32	S0/108/32A/1000V M10	004362220	480	12,5	aR	3/24	250
	40	S0/108/40A/1000V M10	004362221	840	14,4	aR	3/24	250
	50	S0/108/50A/1000V M10	004362222	1.300	19,3	aR	3/24	250
	63	S0/108/63A/1000V M10	004362223	2.320	22,3	aR	3/24	250
	80	S0/108/80A/1000V M10	004362224	3.900	28.8	aR	3/24	250
	100	S0/108/100A/1000V M10	004362225	8.000	31,5	aR	3/24	250
	125	S0/108/125A/1000V M10	004362226	18.300	34,3	aR	3/24	250
	160	S0/108/160A/1000V M10	004362227	35.300	40,5	aR	3/24	250

Dimensions:



aR

TYPES
S110mm

RATED VOLTAGE
~1000V

Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~200kA Rated voltage: ~1000V		Fuse-links type S 110mm of size 1, 2, 3 are applied in universal fuse base US1..3-1/80-110 and mounted by screws to busbars.

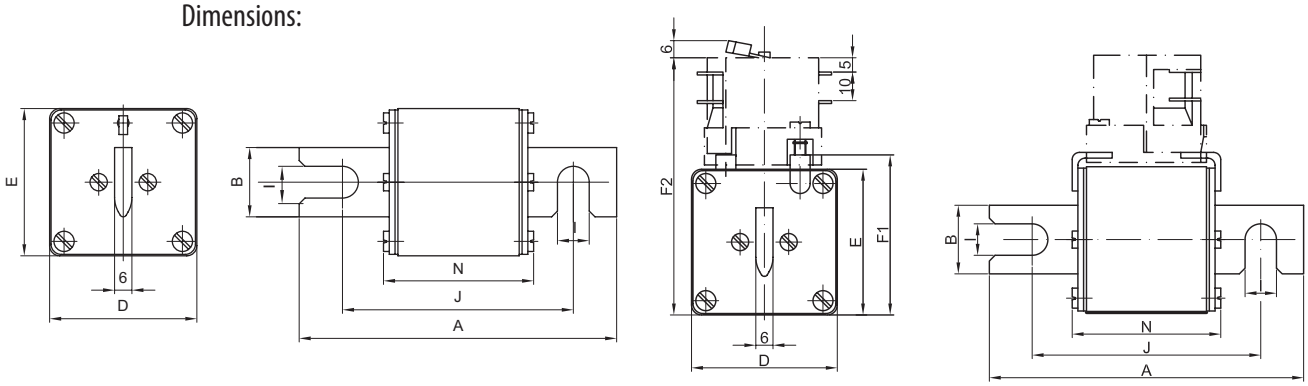
Size	In (A)	Type with visual indicator	Code No.	Operating I^2t-value (A^2s)	Power dissipation (W)	Type with centre trip indicator for microswitch MK	Code No.	Char.	Pack. (pcs)	Weight (g)
1	63	S1UQ01/110/63A/1000V	004303112	2.000	15,1	S1MUQ01/110/63A/1000V	004303712	aR	1/26	500
	80	S1UQ01/110/80A/1000V	004303113	3.400	20	S1MUQ01/110/80A/1000V	004303713	aR	1/26	500
	100	S1UQ01/110/100A/1000V	004303114	6.100	25	S1MUQ01/110/100A/1000V	004303714	aR	1/26	500
	125	S1UQ01/110/125A/1000V	004303115	11.000	30	S1MUQ01/110/125A/1000V	004303715	aR	1/26	500
	160	S1UQ01/110/160A/1000V	004303116	17.000	35	S1MUQ01/110/160A/1000V	004303716	aR	1/26	500
	200	S1UQ01/110/200A/1000V	004303117	31.000	45,3	S1MUQ01/110/200A/1000V	004303717	aR	1/26	500
	250	S1UQ01/110/250A/1000V	004303119	50.000	54	S1MUQ01/110/250A/1000V	004303719	aR	1/26	500
	315	S1UQ01/110/315A/1000V	004303121	110.000	60	S1MUQ01/110/315A/1000V	004303721	aR	1/26	500
	350	S1UQ01/110/350A/1000V	004303122	150.000	65	S1MUQ01/110/350A/1000V	004303722	aR	1/26	500
	400	S1UQ01/110/400A/1000V	004303123	200.000	70	S1MUQ01/110/400A/1000V	004303723	aR	1/26	500
	450	S1UQ01/110/450A/1000V	004303125	310.000	74	S1MUQ01/110/450A/1000V	004303725	aR	1/26	500
	500	S1UQ01/110/500A/1000V	004303126	400.000	80	S1MUQ01/110/500A/1000V	004303726	aR	1/26	500
2	315	S2UQ01/110/315A/1000V	004304121	85.000	66	S2MUQ01/110/315A/1000V	004304721	aR	1/16	650
	350	S2UQ01/110/350A/1000V	004304122	130.000	70	S2MUQ01/110/350A/1000V	004304722	aR	1/16	650
	400	S2UQ01/110/400A/1000V	004304123	170.000	80	S2MUQ01/110/400A/1000V	004304723	aR	1/16	650
	450	S2UQ01/110/450A/1000V	004304125	220.000	86	S2MUQ01/110/450A/1000V	004304725	aR	1/16	650
	500	S2UQ01/110/500A/1000V	004304126	320.000	90	S2MUQ01/110/500A/1000V	004304726	aR	1/16	650
	550	S2UQ01/110/550A/1000V	004304127	450.000	97	S2MUQ01/110/550A/1000V	004304727	aR	1/16	650
	630	S2UQ01/110/630A/1000V	004304128	600.000	108	S2MUQ01/110/630A/1000V	004304728	aR	1/16	650
3	500	S3UQ01/110/500A/1000V	004305126	250.000	100	S3MUQ01/110/500A/1000V	004305726	aR	3/15	850
	630	S3UQ01/110/630A/1000V	004305128	500.000	110	S3MUQ01/110/630A/1000V	004305728	aR	3/15	850
	710	S3UQ01/110/710A/1000V	004305129	670.000	125	S3MUQ01/110/710A/1000V	004305729	aR	3/15	850
	800	S3UQ01/110/800A/1000V	004305130	870.000	136	S3MUQ01/110/800A/1000V	004305730	aR	3/15	850
	1000	S3UQ01/110/1000A/1000V	004305132	2.000.000	157	S3MUQ01/110/1000A/1000V	004305732	aR	3/15	850
	1250	S3UQ01/110/1250A/1000V	004305134	3.000.000	170	S3MUQ01/110/1250A/1000V	004305734	aR	3/15	850

S1UQ01/110/400A/1000V

S1MUQ01/110/400A/1000V

ULTRA QUICK

Dimensions:



Size	A	B	D	E	F1	F2	I	J	N
1	140	24	51	51	56	90	11	110	74
2	140	30	60	60	65	99	11	110	74
3	140	37	75	75	80	114	11	110	74

For more information visit: www.eti.si/Electrotechnical products/Semiconductor protection

NV/NH

Technical data on page 86

aR	TYPES	RATED VOLTAGE
	G	~1000V

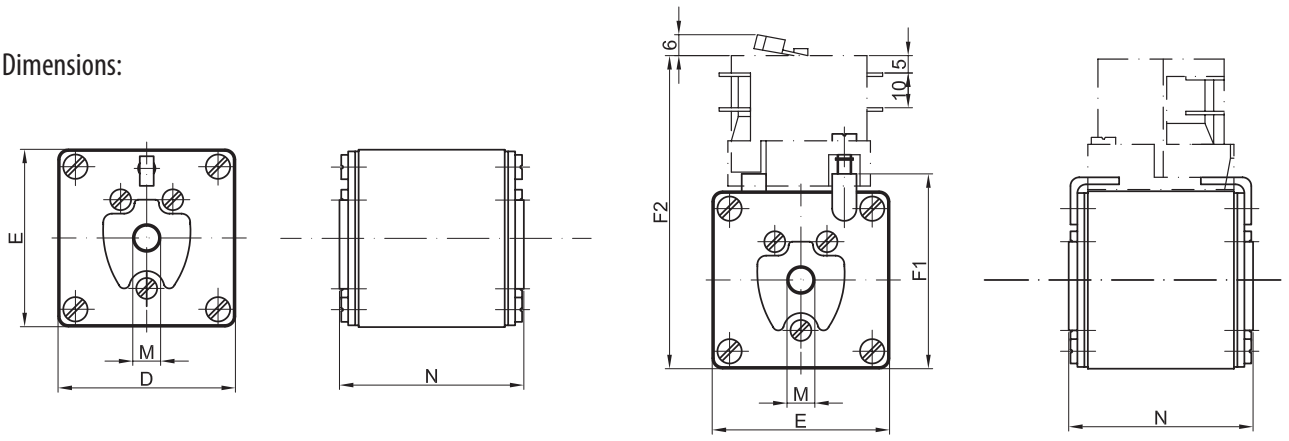
Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~200kA Rated voltage: ~1000V		Fuse-links type G has threaded studs so fuses are mounted by special screws to busbars.

G3UQ01/800A/1000V

G1MUQ01/400A/1000V

Size	In (A)	Type with visual indicator	Code No.	Operating I^2t-value (A^2s)	Power dissipa–tion (W)	Type with centre trip indicator for microswitch MK	Code No.	Char.	Pack. (pcs)	Weight (g)
1	63	G1UQ01/63A/1000V	004303512	2.000	15,1	G1MUQ01/63A/1000V	004303612	aR	2/32	500
	80	G1UQ01/80A/1000V	004303513	3.400	20	G1MUQ01/80A/1000V	004303613	aR	2/32	500
	100	G1UQ01/100A/1000V	004303514	6.100	25	G1MUQ01/100A/1000V	004303614	aR	2/32	500
	125	G1UQ01/125A/1000V	004303515	11.000	30	G1MUQ01/125A/1000V	004303615	aR	2/32	500
	160	G1UQ01/160A/1000V	004303516	17.000	35	G1MUQ01/160A/1000V	004303616	aR	2/32	500
	200	G1UQ01/200A/1000V	004303517	31.000	45,3	G1MUQ01/200A/1000V	004303617	aR	2/32	500
	250	G1UQ01/250A/1000V	004303519	50.000	54	G1MUQ01/250A/1000V	004303619	aR	2/32	500
	315	G1UQ01/315A/1000V	004303521	110.000	60	G1MUQ01/315A/1000V	004303621	aR	2/32	500
	350	G1UQ01/350A/1000V	004303522	150.000	65	G1MUQ01/350A/1000V	004303622	aR	2/32	500
	400	G1UQ01/400A/1000V	004303523	200.000	70	G1MUQ01/400A/1000V	004303623	aR	2/32	500
	450	G1UQ01/450A/1000V	004303525	310.000	74	G1MUQ01/450A/1000V	004303625	aR	2/32	500
	500	G1UQ01/500A/1000V	004303526	400.000	80	G1MUQ01/500A/1000V	004303626	aR	2/32	500
2	315	G2UQ01/315A/1000V	004304521	85.000	66	G2MUQ01/315A/1000V	004304621	aR	2/32	650
	350	G2UQ01/350A/1000V	004304522	130.000	70	G2MUQ01/350A/1000V	004304622	aR	2/32	650
	400	G2UQ01/400A/1000V	004304523	170.000	80	G2MUQ01/400A/1000V	004304623	aR	2/32	650
	450	G2UQ01/450A/1000V	004304525	220.000	86	G2MUQ01/450A/1000V	004304625	aR	2/32	650
	500	G2UQ01/500A/1000V	004304526	320.000	90	G2MUQ01/500A/1000V	004304626	aR	2/32	650
	550	G2UQ01/550A/1000V	004304527	450.000	100	G2MUQ01/550A/1000V	004304627	aR	2/32	650
	630	G2UQ01/630A/1000V	004304528	600.000	108	G2MUQ01/630A/1000V	004304628	aR	2/32	650
3	500	G3UQ01/500A/1000V	004305526	250.000	100	G3MUQ01/500A/1000V	004305626	aR	2/18	850
	630	G3UQ01/630A/1000V	004305528	500.000	110	G3MUQ01/630A/1000V	004305628	aR	2/18	850
	710	G3UQ01/710A/1000V	004305529	670.000	125	G3MUQ01/710A/1000V	004305629	aR	2/18	850
	800	G3UQ01/800A/1000V	004305530	870.000	136	G3MUQ01/800A/1000V	004305630	aR	2/18	850
	1000	G3UQ01/1000A/1000V	004305532	2.000.000	157	G3MUQ01/1000A/1000V	004305632	aR	2/18	850
	1100	G3UQ01/1100A/1000V	004305533	2.500.000	165	G3MUQ01/1100A/1000V	004305633	aR	2/18	850
	1250	G3UQ01/1250A/1000V	004305534	3.000.000	170	G3MUQ01/1250A/1000V	004305634	aR	2/18	850

Dimensions:



Size	D	E	F1	F2	M	N
1	51	51	56	90	M8	75
2	60	60	65	99	M10	75
3	75	75	80	114	M12	75

For more information visit: www.eti.si/Electrotechnical products/Semiconductor protection

Technical data on page 91

aR

TYPES
S

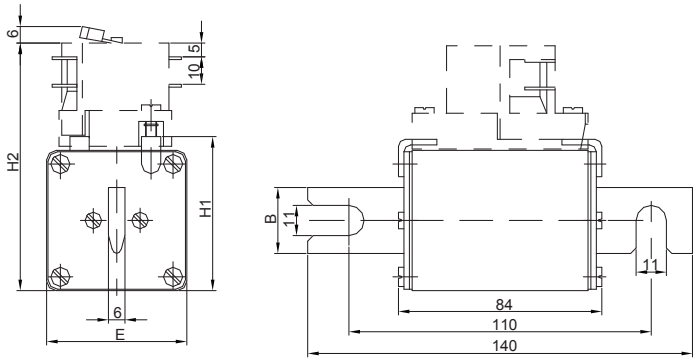
RATED VOLTAGE
~1250V

Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~100kA Rated voltage: ~1250V		Protection of semiconductors inside middle voltage inverters.

S3MUQ01/110/1000A/1250V

Size	In (A)	Type with centre trip indicator for microswitch MK	Code No.	Pre-arcing I^2t-value (A^2s)	Operating I^2t-value at 1000V (A^2s)	Operating I^2t-value at 1250V (A^2s)	Power dissipation (W)	Char.	Pack. (pcs)	Weight (g)
2	250	S2MUQ01/110/250A/1250V	004735130	7.500	40.500	52.650	54	aR	1	800
	350	S2MUQ01/110/350A/1250V	004735131	18.000	99.500	133.000	66	aR		
	400	S2MUQ01/110/400A/1250V	004735132	25.000	150.000	190.000	85	aR		
	450	S2MUQ01/110/450A/1250V	004735133	37.000	215.000	277.000	100	aR		
	630	S2MUQ01/110/630A/1250V	004735134	123.000	585.000	740.000	125	aR		
	710	S2MUQ01/110/710A/1250V	004735135	172.000	820.000	1.060.000	130	aR		
3	350	S3MUQ01/110/350A/1250V	004735136	15.500	83.500	111.000	66	aR	1	1000
	450	S3MUQ01/110/450A/1250V	004735137	33.500	190.000	246.000	98	aR		
	630	S3MUQ01/110/630A/1250V	004735138	86.000	500.000	660.000	121	aR		
	1000	S3MUQ01/110/1000A/1250V	004735139	480.000	2.100.000	2.730.000	137	aR		

Dimensions:



Size	B	E	H1	H2
2	30	60	65	99
3	37	75	80	114

NV/NH

Technical data on page 91

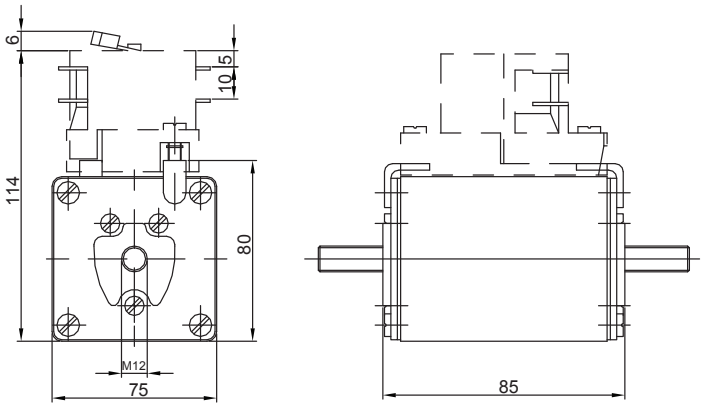
aR	TYPES G	RATED VOLTAGE ~1250V

Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~100kA Rated voltage: ~1250V		Protection of semiconductors inside middle voltage inverters.

Size	In (A)	Type with centre trip indicator for microswitch MK	Code No.	Pre-arcing I^2t-value (A^2s)	Operating I^2t-value at 1000V (A^2s)	Operating I^2t-value at 1250V (A^2s)	Power dissipation (W)	Char.	Packaging (pcs)	Weight (g)
3	315	G3MUQ01/315A/1250V	004735140	11.500	60.000	78.000	53	aR	1	1000
	500	G3MUQ01/500A/1250V	004735141	49.000	240.000	312.000	93	aR		
	575	G3MUQ01/575A/1250V	004735142	58.000	330.000	433.000	102	aR		
	630	G3MUQ01/630A/1250V	004735143	86.000	500.000	660.000	113	aR		
	710	G3MUQ01/710A/1250V	004735144	128.000	710.000	930.000	125	aR		
	800	G3MUQ01/800A/1250V	004735145	225.000	1.000.000	1.300.000	136	aR		
	900	G3MUQ01/900A/1250V	004735146	325.000	1.450.000	1.950.000	148	aR		
	1000	G3MUQ01/1000A/1250V	004735147	480.000	2.100.000	2.730.000	162	aR		

G3MUQ01/500A/1250V

Dimensions:



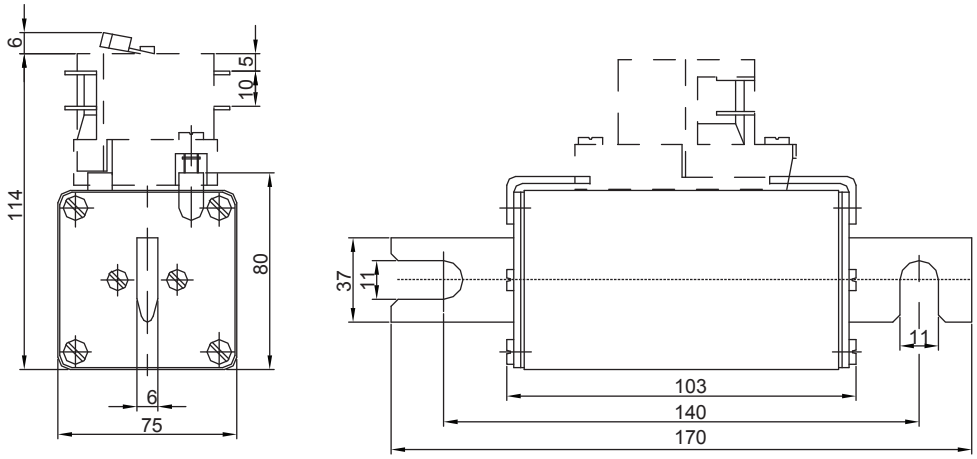
aR	TYPES S	RATED VOLTAGE ~1500V

Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~50kA Rated voltage: ~1500V		Protection of semiconductors inside middle voltage inverters.

Size	In (A)	Type with centre trip indicator for microswitch MK	Code No.	Operating I^2t-value at 1500V (A^2s)	Power dissipation (W)	Char.	Pack. (pcs)	Weight (g)
3	250	S3MUQ01/140/250A/1500V	004735150	110.000	95	aR	1	1500
	315	S3MUQ01/140/315A/1500V	004735151	170.000	110	aR		
	400	S3MUQ01/140/400A/1500V	004735152	330.000	128	aR		
	450	S3MUQ01/140/450A/1500V	004735153	390.000	135	aR		
	550	S3MUQ01/140/550A/1500V	004735154	700.000	153	aR		

S3MUQ01/140/550A/1500V

Dimensions:



NV/NH

Technical data on page 92

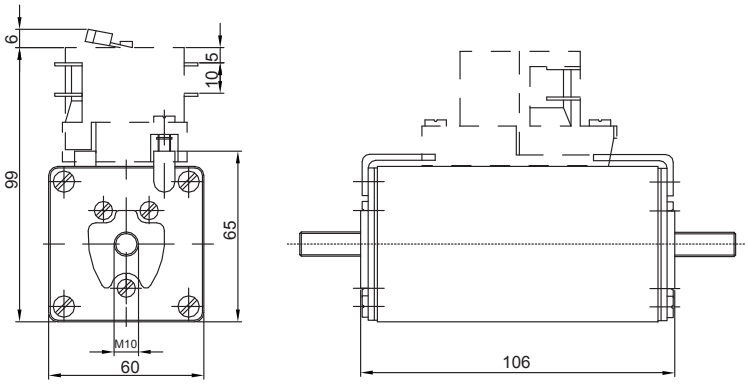
aR	TYPES G	RATED VOLTAGE ~1500V

Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~50kA Rated voltage: ~1500V		Protection of semiconductors inside middle voltage inverters.

Size	In (A)	Type with centre trip indicator for microswitch MK	Code No.	Operating I^2t-value at 1500V (A^2s)	Power dissipation (W)	Char.	Packaging (pcs)	Weight (g)
2	200	G2MUQ01/200A/1500V	004735155	45.000	40	aR	1	1500
	250	G2MUQ01/250A/1500V	004735156	125.000	60	aR	1	1500

G2MUQ01/250A/1500V

Dimensions:



Technical data on page 93

aR	TYPES S	RATED VOLTAGE ~2000V

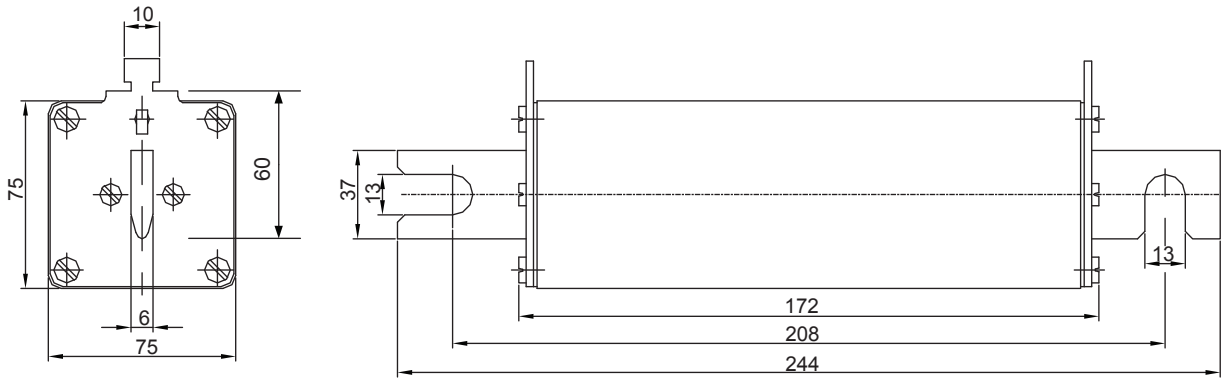
Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~50kA Rated voltage: ~2000V		Protection of semiconductors inside middle voltage inverters.

Size	In (A)	Type with centre trip indicator for microswitch MK	Code No.	Pre-arcing I^2t-value (A^2s)	Operating I^2t-value at 2000V (A^2s)	Power dissipation (W)	Char.	Pack. (pcs)	Weight (g)
3	250	S3UQ1/210-165/250A/2000V	004735160	30.000	225.000	105	aR	1	2000
	350	S3UQ1/210-165/350A/2000V	004735161	76.000	565.000	125	aR		
	400	S3UQ1/210-165/400A/2000V	004735162	118.000	900.000	142	aR		
	450	S3UQ1/210-165/450A/2000V	004735163	130.000	965.000	160	aR		
	525	S3UQ1/210-165/525A/2000V	004735164	150.000	1.150.000	202	aR		
	630	S3UQ1/210-165/630A/2000V	004735165	270.000	2.100.000	235	aR		
	710	S3UQ1/210-165/710A/2000V	004735166	380.000	3.200.000	280	aR		

S3UQ1/210-165/250A/2000V

Protection of semiconductors inside middle voltage inverters.

Dimensions:



For more information visit: www.eti.si/Electrotechnical products/Semiconductor protection

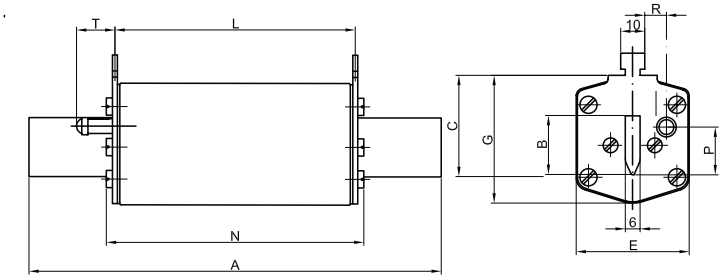
gR	TYPES	RATED VOLTAGE
	M, M-STRIKER PIN	~690V

Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~200kA Rated voltage: ~690V		For semiconductor protection.

Size	In (A)	Type (visual indicator with grip for microswitch NVS 5)	Code No.	Operating I^2t-value (A^2s)	Power dissipation (W)	Type with striker pin	Code No.	Char.	Packaging (pcs)	Weight (g)
00C	10	M00CUQ2/10A/690V	004721204	100	6,5	-	-	gR	3/120	140
	16	M00CUQ2/16A/690V	004721205	220	8	M00CUQ2/16A/690V-K	004721220	gR	3/120	140
	20	M00CUQ2/20A/690V	004721206	320	9,5	M00CUQ2/20A/690V-K	004721221	gR	3/120	140
	25	M00CUQ2/25A/690V	004721207	600	11,8	M00CUQ2/25A/690V-K	004721222	gR	3/120	140
	32	M00CUQ2/32A/690V	004721208	920	12,5	M00CUQ2/32A/690V-K	004721223	gR	3/120	140
	35	M00CUQ2/35A/690V	004721209	920	13,1	M00CUQ2/35A/690V-K	004721224	gR	3/120	140
	40	M00CUQ2/40A/690V	004721210	1.400	14,1	M00CUQ2/40A/690V-K	004721225	gR	3/120	140
	50	M00CUQ2/50A/690V	004721211	2.250	15,6	M00CUQ2/50A/690V-K	004721226	gR	3/120	140
	63	M00CUQ2/63A/690V	004721212	3.600	17,8	M00CUQ2/63A/690V-K	004721227	gR	3/120	140
	80	M00CUQ2/80A/690V	004721213	6.200	20,6	M00CUQ2/80A/690V-K	004721228	gR	3/120	140
	100	M00CUQ2/100A/690V	004721214	10.000	23,7	M00CUQ2/100A/690V-K	004721229	gR	3/120	140
	125	M00CUQ2/125A/690V	004721215	13.000	30	M00CUQ2/125A/690V-K	004721230	gR	3/120	140
	160	M00CUQ2/160A/690V	004721216	23.000	35,9	M00CUQ2/160A/690V-K	004721231	gR	3/120	140

Dimensions:

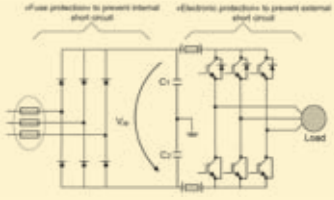
M00CUQ2/125A/690V



Size	A	B	C	E	G	S	L	N	P	T
00C	78	15	35	21	42	6	46	53	20,5	18

remember

In the past, all soft-starters and drives incorporated internal high-speed fusing. As these devices have gotten smaller, cheaper, many manufacturers of medium to low power motor controllers have eliminated internal fusing. Adequate electrical protection is now in hand of designers.



For more information visit: www.eti.si/Electrotechnical products/Semiconductor protection

Technical data on page 94

gR

TYPES
M, M-STRIKER PIN

RATED VOLTAGE
~690V

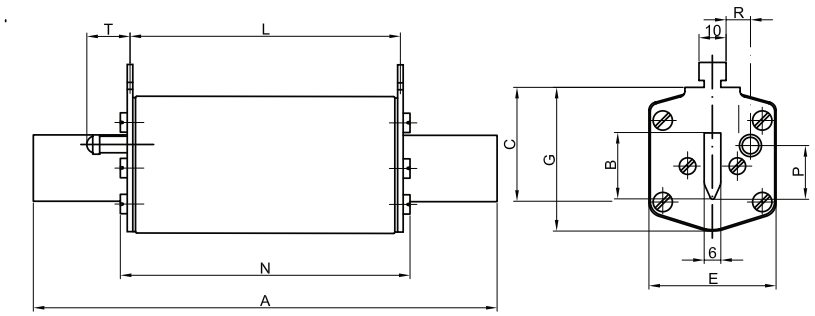
Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~200kA Rated voltage: ~690V, ⎓550V		For semiconductor protection.

Size	In (A)	Type (visual indicator with grip for microswitch NVS 5)	Code No.	Operating I^2t-value (A^2s)	Power dissipation (W)	Type with striker pin	Code No.	Char.	Packaging (pcs)	Weight (g)
1	35	M1UQ2/35A/690V	004723209	920	5	-	-	gR	3/24	420
	40	M1UQ2/40A/690V	004723210	1.400	6	-	-	gR	3/24	420
	50	M1UQ2/50A/690V	004723211	2.250	7	M1UQ2/50A/690V-K	004723240	gR	3/24	420
	63	M1UQ2/63A/690V	004723212	3.600	9	M1UQ2/63A/690V-K	004723241	gR	3/24	420
	80	M1UQ2/80A/690V	004723213	6.200	12	M1UQ2/80A/690V-K	004723242	gR	3/24	420
	100	M1UQ2/100A/690V	004723214	10.000	15	M1UQ2/100A/690V-K	004723243	gR	3/24	420
	125	M1UQ2/125A/690V	004723215	13.000	20	M1UQ2/125A/690V-K	004723244	gR	3/24	420
	160	M1UQ2/160A/690V	004723216	23.000	26	M1UQ2/160A/690V-K	004723245	gR	3/24	420
	200	M1UQ2/200A/690V	004723217	47.000	31,5	M1UQ2/200A/690V-K	004723246	gR	3/24	420
	224	M1UQ2/224A/690V	004723218	60.000	36,8	M1UQ2/224A/690V-K	004723247	gR	3/24	420
	250	M1UQ2/250A/690V	004723219	70.000	42,7	M1UQ2/250A/690V-K	004723248	gR	3/24	420
2	125	M2UQ2/125A/690V	004724215	13.000	20	M2UQ2/125A/690V-K	004724241	gR	3/24	660
	160	M2UQ2/160A/690V	004724216	23.000	26	M2UQ2/160A/690V-K	004724242	gR	3/24	660
	200	M2UQ2/200A/690V	004724217	47.000	31,5	M2UQ2/200A/690V-K	004724243	gR	3/24	660
	224	M2UQ2/224A/690V	004724218	60.000	36,8	M2UQ2/224A/690V-K	004724244	gR	3/24	660
	250	M2UQ2/250A/690V	004724219	70.000	42,7	M2UQ2/250A/690V-K	004724245	gR	3/24	660
	315	M2UQ2/315A/690V	004724221	110.000	57	M2UQ2/315A/690V-K	004724246	gR	3/24	660
	350	M2UQ2/350A/690V	004724222	150.000	67	M2UQ2/350A/690V-K	004724247	gR	3/24	660
	400	M2UQ2/400A/690V	004724223	170.000	76	M2UQ2/400A/690V-K	004724248	gR	3/24	660
3	250	M3UQ2/250A/690V	004725219	70.000	42,7	M3UQ2/250A/690V-K	004725241	gR	3/24	870
	315	M3UQ2/315A/690V	004725221	110.000	57	M3UQ2/315A/690V-K	004725242	gR	3/24	870
	350	M3UQ2/350A/690V	004725222	150.000	67	M3UQ2/350A/690V-K	004725243	gR	3/24	870
	400	M3UQ2/400A/690V	004725223	170.000	76	M3UQ2/400A/690V-K	004725244	gR	3/24	870
	425	M3UQ2/425A/690V	004725224	200.000	84	M3UQ2/425A/690V-K	004725245	gR	3/24	870
	500	M3UQ2/500A/690V	004725226	240.000	110	M3UQ2/500A/690V-K	004725246	gR	3/24	870
	630	M3UQ2/630A/690V	004725228	400.000	160	M3UQ2/630A/690V-K	004725247	gR	3/24	870

Note: 550V d.c.: size1: 35A to 200A, size 2: 125A to 400A, size 3: 250A to 630A

M2UQ2/250A/690V

Dimensions:



Size	A	B	C	E	G	S	L	N	P	R	T
1	135	24	40	46	52	6	65	73	20,5	13,7	27,5
2	150	30	48	54	61	6	65	73	27,3	16,2	27,5
3	150	37	60	64	74	6	65	73	35,6	17	27,5

NV/NH

Technical data on page 98

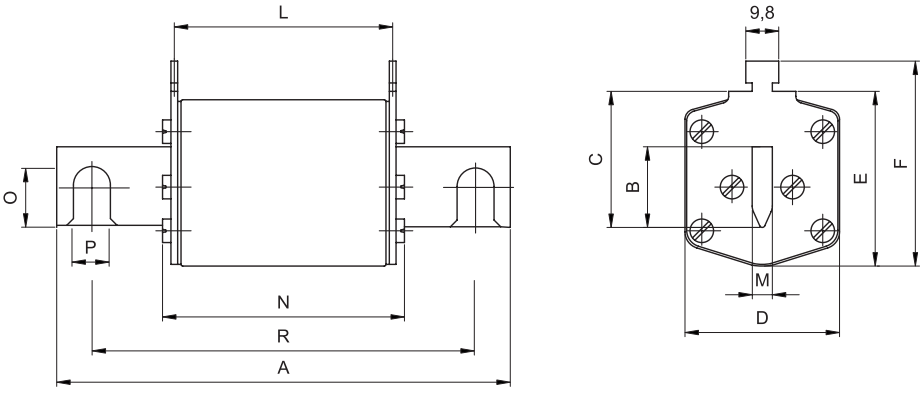
gR	TYPES	RATED VOLTAGE
	M, S	~500V

Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~200kA Rated voltage: ~500V		Fuse-links type M are applied in fuse base: -PK4 for size 4 -HVL4a for size 4a

Size	In (A)	Type (visual indicator with grip for microswitch NVS 5)	Code No.	Operating I^2t-value (A^2s)	Power dissipation (W)	Char.	Packaging (pcs)	Weight (g)
4	800	S4UQ2/800A/500V	004716130	620.000	164	gR	1	2350
	1000	S4UQ2/1000A/500V	004716132	1.150.000	188	gR	1	2350
	1250	S4UQ2/1250A/500V	004716133	2.000.000	246	gR	1	2350
4a	800	M4aUQ2/800A/500V	004717230	620.000	164	gR	1	2700
	1000	M4aUQ2/1000A/500V	004717232	1.150.000	188	gR	1	2700
	1250	M4aUQ2/1250A/500V	004717233	2.000.000	246	gR	1	2700
	1500	M4aUQ2/1500A/500V	004717235	3.800.000	310	gR	1	2700
	1600	M4aUQ2/1600A/500V	004717236	4.500.000	320	gR	1	2700

ULTRA QUICK

Dimensions:



Size	A	B	C	D	E	F	L	N	M	O	P	R
4	200	50	87	95	112	122	65	78	8	32	16	150
4a	200	50	85	95	112	122	87	97	6	–	–	–

Technical data on page 94

gR

TYPES
S80mm

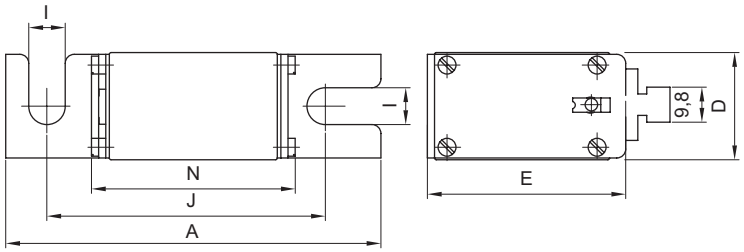
RATED VOLTAGE
~690V

Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~200kA Rated voltage: ~690V		For semiconductor protection.

Size	In (A)	Type (visual indicator with grip for microswitch NVS 5)	Code No.	Operating I^2t-value (A^2s)	Power dissipation (W)	Char.	Packaging (pcs)	Weight (g)
00C	10	S00CUQ2/80/10A/690V	004721104	100	6,5	gR	3/54	140
	16	S00CUQ2/80/16A/690V	004721105	220	8	gR	3/54	140
	20	S00CUQ2/80/20A/690V	004721106	320	9,5	gR	3/54	140
	25	S00CUQ2/80/25A/690V	004721107	600	11,8	gR	3/54	140
	32	S00CUQ2/80/32A/690V	004721108	920	12,5	gR	3/54	140
	35	S00CUQ2/80/35A/690V	004721109	920	13,1	gR	3/54	140
	40	S00CUQ2/80/40A/690V	004721110	1.400	14,1	gR	3/54	140
	50	S00CUQ2/80/50A/690V	004721111	2.250	15,6	gR	3/54	140
	63	S00CUQ2/80/63A/690V	004721112	3.600	17,8	gR	3/54	140
	80	S00CUQ2/80/80A/690V	004721113	6.200	20,6	gR	3/54	140
	100	S00CUQ2/80/100A/690V	004721114	10.000	23,7	gR	3/54	140
	125	S00CUQ2/80/125A/690V	004721115	13.000	30	gR	3/54	140
	160	S00CUQ2/80/160A/690V	004721116	23.000	35,9	gR	3/54	140

S00CUQ2/80/125A/690V

Dimensions:



Size	A	D	E	I	J	N
00C	101	21	40	8,5	78	54

remember

One of the fastest growing markets for fuses is protection of semiconductor devices !!!

For more information visit: www.eti.si/Electrotechnical products/Semiconductor protection

NV/NH

Technical data on page 94

gR	TYPES S110mm	RATED VOLTAGE ~690V

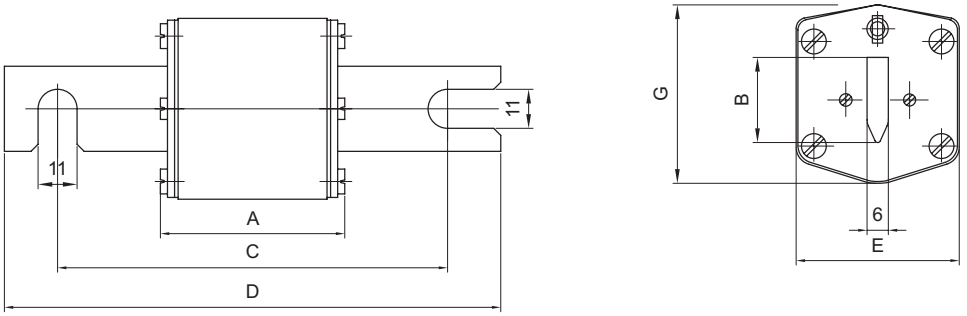
Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~200kA Rated voltage: ~690V, ⎓550V		For semiconductor protection.

S1UQ2/110/250A/690V

Size	In (A)	Type with visual indicator	Code No.	Operating I^2t-value (A^2s)	Power dissipation (W)	Char.	Packaging (pcs)	Weight (g)
1	80	S1UQ2/110/80A/690V	004723113	6.200	9,5	gR	1/26	390
	100	S1UQ2/110/100A/690V	004723114	10.000	12,7	gR	1/26	390
	125	S1UQ2/110/125A/690V	004723115	13.000	17,6	gR	1/26	390
	160	S1UQ2/110/160A/690V	004723116	23.000	23,8	gR	1/26	390
	200	S1UQ2/110/200A/690V	004723117	47.000	31,5	gR	1/26	390
	224	S1UQ2/110/224A/690V	004723118	60.000	36,8	gR	1/26	390
	250	S1UQ2/110/250A/690V	004723119	70.000	42,7	gR	1/26	390
2	125	S2UQ2/110/125A/690V	004724115	13.000	17,6	gR	3/24	510
	160	S2UQ2/110/160A/690V	004724116	23.000	23,8	gR	3/24	510
	200	S2UQ2/110/200A/690V	004724117	47.000	31,5	gR	3/24	510
	224	S2UQ2/110/224A/690V	004724118	60.000	36,8	gR	3/24	510
	250	S2UQ2/110/250A/690V	004724119	70.000	42,7	gR	3/24	510
	315	S2UQ2/110/315A/690V	004724121	110.000	57	gR	3/24	510
	350	S2UQ2/110/350A/690V	004724122	150.000	67	gR	3/24	510
	400	S2UQ2/110/400A/690V	004724123	170.000	76	gR	3/24	510
3	250	S3UQ2/110/250A/690V	004725119	70.000	42,7	gR	3/24	830
	315	S3UQ2/110/315A/690V	004725121	110.000	57	gR	3/24	830
	350	S3UQ2/110/350A/690V	004725122	150.000	67	gR	3/24	830
	400	S3UQ2/110/400A/690V	004725123	170.000	76	gR	3/24	830
	425	S3UQ2/110/425A/690V	004725124	200.000	84	gR	3/24	830
	500	S3UQ2/110/500A/690V	004725126	240.000	102	gR	3/24	830
	630	S3UQ2/110/630A/690V	004725128	400.000	138	gR	3/24	830

Note: 550V d.c.: size1: 80A to 200A, size 2: 125A to 400A, size 3: 250A to 630A

Dimensions:



Size	A	B	C	D	E	G
1	72	24	110	140	46	51
2	72	30	110	140	54	59
3	72	37	110	140	64	70

Technical data on page 97

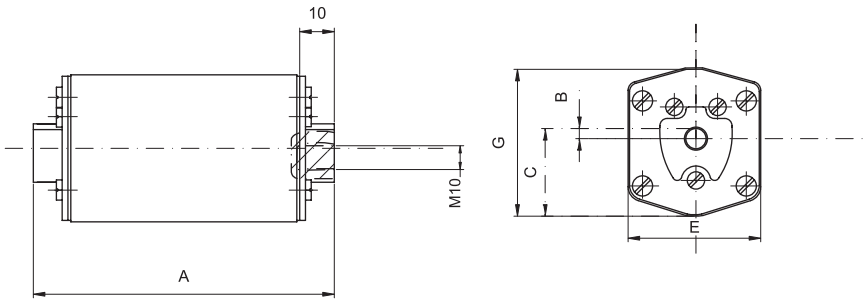
gR	TYPES	RATED VOLTAGE
	G	~500V

Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~200kA Rated voltage: ~500V		Fuse-links type G has threaded studs so fuses are mounted by special screws to busbars.

Size	In (A)	Type with visual indicator	Code No.	Operating I^2t-value (A^2s)	Power dissipation (W)	Char.	Packaging (pcs)	Weight (g)
1	35	G1UQ2/35A/500V	004713509	670	15	gR	1/24	360
	40	G1UQ2/40A/500V	004713510	1.000	16,2	gR	1/24	360
	50	G1UQ2/50A/500V	004713511	1.500	17,5	gR	1/24	360
	63	G1UQ2/63A/500V	004713512	2.200	20	gR	1/24	360
	80	G1UQ2/80A/500V	004713513	3.300	23,1	gR	1/24	360
	100	G1UQ2/100A/500V	004713514	7.200	26,4	gR	1/24	360
	125	G1UQ2/125A/500V	004713515	10.000	34	gR	1/24	360
	160	G1UQ2/160A/500V	004713516	21.000	40,1	gR	1/24	360
	200	G1UQ2/200A/500V	004713517	30.000	43,8	gR	1/24	360
	224	G1UQ2/224A/500V	004713518	41.000	48,5	gR	1/24	360
	250	G1UQ2/250A/500V	004713519	52.000	53	gR	1/24	360
2	125	G2UQ2/125A/500V	004714515	10.000	34	gR	1/24	520
	160	G2UQ2/160A/500V	004714516	21.000	40,1	gR	1/24	520
	200	G2UQ2/200A/500V	004714517	30.000	43,8	gR	1/24	520
	224	G2UQ2/224A/500V	004714518	41.000	48,5	gR	1/24	520
	250	G2UQ2/250A/500V	004714519	52.000	53	gR	1/24	520
	315	G2UQ2/315A/500V	004714521	82.000	63	gR	1/24	520
	350	G2UQ2/350A/500V	004714522	110.000	66	gR	1/24	520
	400	G2UQ2/400A/500V	004714523	160.000	70	gR	1/24	520
3	250	G3UQ2/250A/500V	004715519	52.000	53	gR	1/24	800
	315	G3UQ2/315A/500V	004715521	82.000	63	gR	1/24	800
	350	G3UQ2/350A/500V	004715522	110.000	66	gR	1/24	800
	400	G3UQ2/400A/500V	004715523	160.000	70	gR	1/24	800
	425	G3UQ2/425A/500V	004715524	200.000	70	gR	1/24	800
	500	G3UQ2/500A/500V	004715526	260.000	96	gR	1/24	800
	630	G3UQ2/630A/500V	004715528	340.000	135	gR	1/24	800

G2UQ2/350A/500V

Dimensions:



Size	A	B	C	E	G
1	85	8.5	25	46	50
2	72	2	29,5	54	59
3	83	2	34	64	70

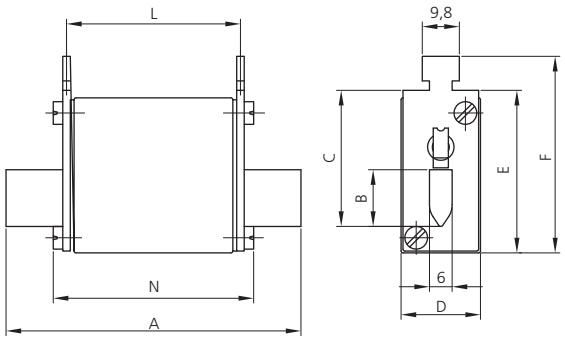
gS	TYPES	RATED VOLTAGE
	M	~690V

Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~100kA Rated voltage: ~690V		Special designed for protection of variable speed drive, soft starter, servo drive, DC drive.

M00C/16A/690V-gS

Size	In (A)	Type (visual indicator with grip for microswitch NVS 5)	Code No.	Operating I²t-value (A²s)	Power dissipation (W)	Char.	Packaging (pcs)	Weight (g)
00C	16	M00C/16A/690V-gS	004721240	210	2,8	gS	3/120	140
	20	M00C/20A/690V-gS	004721241	440	3,3	gS	3/120	140
	25	M00C/25A/690V-gS	004721242	760	4,2	gS	3/120	140
	35	M00C/35A/690V-gS	004721243	1.680	5,2	gS	3/120	140
	40	M00C/40A/690V-gS	004721244	3.100	5,8	gS	3/120	140
	50	M00C/50A/690V-gS	004721245	4.500	6,2	gS	3/120	140
	63	M00C/63A/690V-gS	004721246	9.250	7,3	gS	3/120	140
	80	M00C/80A/690V-gS	004721247	18.300	8,1	gS	3/120	140
	100	M00C/100A/690V-gS	004721248	34.200	10,5	gS	3/120	140
	125	M00C/125A/690V-gS	004721249	64.500	11,7	gS	3/120	140
00	160	M00/160A/690V-gS	004721250	77.000	14,0	gS	3/120	140

Dimensions:



Size	A	B	C	D	E	F	L	N
00C	78	15	35	21	42	52	46	53
00	78	15	35	30	42	52	46	53

Technical data on page102

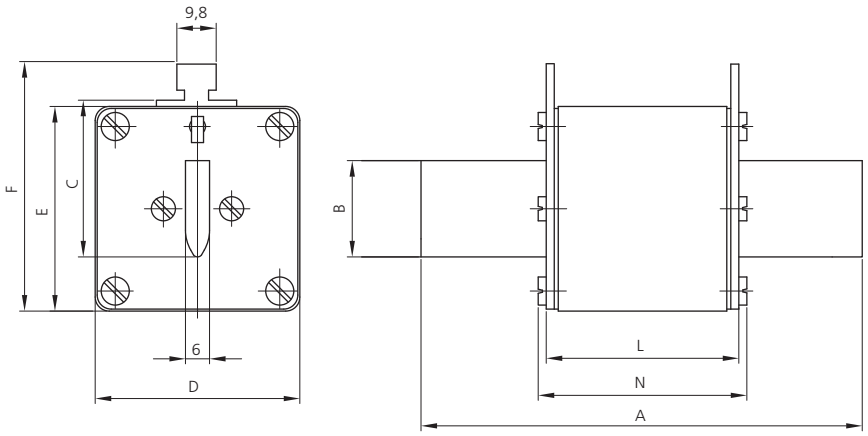
gS	TYPES	RATED VOLTAGE
	M	~690V

Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~100kA Rated voltage: ~690V		Special designed for protection of variable speed drive, soft starter, servo drive, DC drive.

M2/160A/690V-gS

Size	In (A)	Type (with visual indicator)	Code No.	Operating I^2t-value (A^2s)	Power dissipation (W)	Char.	Packaging (pcs)	Weight (g)
1	160	M1/160A/690V-gS	004723230	61.500	23	gS	3/24	420
	200	M1/200A/690V-gS	004723231	101.000	26	gS	3/24	420
	250	M1/250A/690V-gS	004723232	202.000	30	gS	3/24	420
	315	M1/315A/690V-gS	004723233	312.000	36	gS	3/24	420
2	350	M2/350A/690V-gS	004724230	425.000	41	gS	3/24	660
	400	M2/400A/690V-gS	004724231	585.000	45	gS	3/24	660
	450	M2/450A/690V-gS	004724232	765.000	52	gS	3/24	660
	500	M2/500A/690V-gS	004724233	970.000	56	gS	3/24	660
3	560	M3/560A/690V-gS	004725230	1.800.000	55	gS	3/24	870
	630	M3/630A/690V-gS	004725231	2.300.000	57	gS	3/24	870

Dimensions:



Size	A	B	C	D	E	F	L	N
1	135	24	40	46	52	62	65	72
2	150	30	48	54	61	71	65	72
3	150	37	60	64	74	84	65	72

NV/NH

Technical data on page102

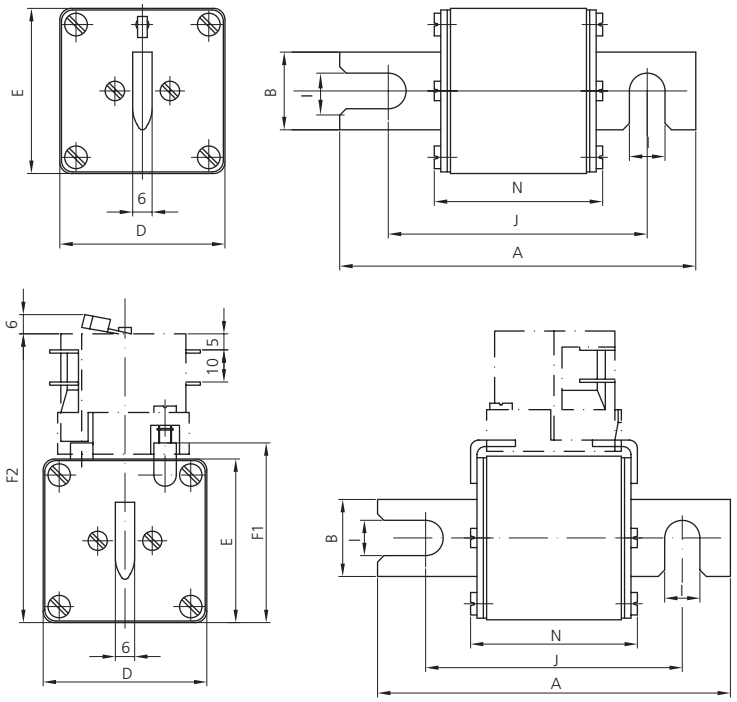
gS	TYPES S110mm	RATED VOLTAGE ~690V

Technical data:			Application:
Standards: IEC 60269-4	Breaking capacity: ~100kA Rated voltage: ~690V		Special designed for protection of variable speed drive, soft starter, servo drive, DC drive.

Size	In (A)	Type with visual indicator	Code No.	Operating I^2t-value (A^2s)	Power dissipation (W)	Type with center trip indicator for microswitch MK	Code No.	Char.	Packaging (pcs)	Weight (g)
1	160	S1/110/160A/690V-gS	004723250	61.500	23	S1M/110/160A/690V-gS	004723255	gS	1/26	420
	200	S1/110/200A/690V-gS	004723251	101.000	26	S1M/110/200A/690V-gS	004723256	gS	1/26	420
	250	S1/110/250A/690V-gS	004723252	202.000	30	S1M/110/250A/690V-gS	004723257	gS	1/26	420
	315	S1/110/315A/690V-gS	004723253	312.000	36	S1M/110/315A/690V-gS	004723258	gS	1/26	420
2	350	S2/110/350A/690V-gS	004724250	425.000	41	S2M/110/350A/690V-gS	004724255	gS	1/16	660
	400	S2/110/400A/690V-gS	004724251	585.000	45	S2M/110/400A/690V-gS	004724256	gS	1/16	660
	450	S2/110/450A/690V-gS	004724252	765.000	52	S2M/110/450A/690V-gS	004724257	gS	1/16	660
	500	S2/110/500A/690V-gS	004724253	970.000	56	S2M/110/500A/690V-gS	004724258	gS	1/16	660
3	560	S3/110/560A/690V-gS	004725250	1.800.000	55	S3M/110/560A/690V-gS	004725255	gS	3/24	870
	630	S3/110/630A/690V-gS	004725251	2.300.000	57	S3M/110/630A/690V-gS	004725256	gS	3/24	870

S2/110/350A/690V-gS

Dimensions:



Size	A	B	D	E	F1	F2	I	J	N
1	140	24	51	51	56	90	11	110	74
2	140	30	60	60	65	99	11	110	74
3	140	37	75	75	80	114	11	110	74

ACCESSORIES

Technical data:	Application:
Rated current: ~5A Rated voltage: ~125V – ~250 V	Microswitch NVS-5 is mounted on fuse-links type M.

In (A)	Type	Code No.	Packaging (pcs)	Weight (g)
5	NVS 5	004117001	10/340	11.5

Microswitch MK

Technical data:	Application:
Rated current: ~2A Rated voltage: ~250 V	Microswitch MK is mounted on fuse-links type S-M and G-M.

Microswitch MK	Adapter AMK1 for fuses ~690V	Adapter AMK2 for fuses ~1000V
 Pic.05	 Pic.06	 Pic.07

In (A)	Type	Code No.	Packaging (pcs)	Weight (g)
2	MK	004349003	1/1	10g
-	AMK1	004349001	1/1	15g
-	AMK2	004349002	1/1	23g

Microswitch MK + adapter AMK1 are mounted to the fuse type S-M and G-M/ 690V.

Microswitch MK + adapter AMK2 are mounted to the fuse S-M and G-M/ 1000V.

remember

Today many different types of equipment are already fitted with Variable speed drives. In today's industry avoiding down-time can be the same as creating income.

For more information visit: www.eti.si/Electrotechnical products/Semiconductor protection

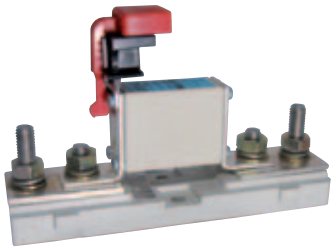
ACCESSORIES

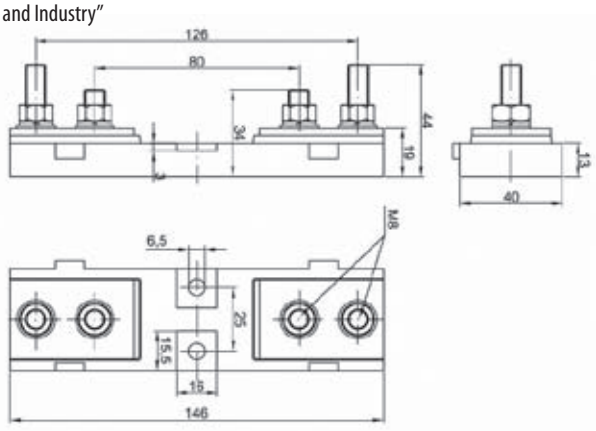
Fuse base US

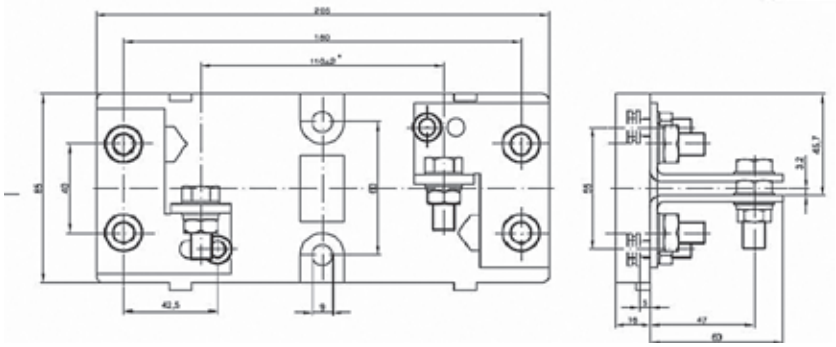
Technical data:				Application:
Rated voltage: 1000V, 1400V	US00 Rated current: 400A, 1000V	US1...3 Rated current: 630A, 1400V* *900V when fuse links with 80mm hole centres applied	US1..3/1250A Rated current: 1250A, 1400V* *900V when fuse links with 80mm hole centres applied	Fuse bases are designed for mounting fuse-links Ultra Quick type S.

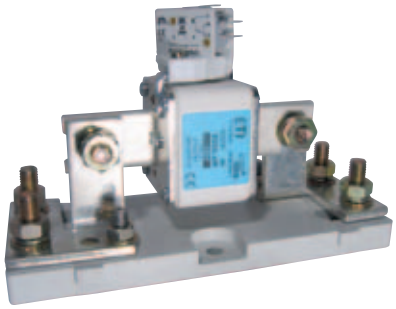
Type	Code No.	Packaging (pcs)	Weight (g)
US00-1/80	004349005	5/5	185
US1...3-1/80-110	004349006	2/2	950
US1..3-1/80-110/1250A	004122043	2/2	1100

Note: Fuse base PK, STV, VLC, PCF, D0, D Catalogue "Building and Industry"





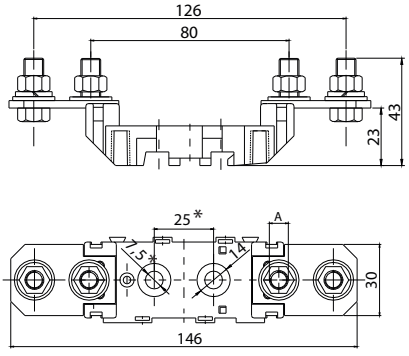




Fuse base PLNVV

Type	In (A)	Code No.	Packaging (pcs)	Weight (g)
PLNVV – 000/1 A	160	001701010	3	510
PLNVV – 00/1 A	160	001701020	3	580

Note: for all accessories for PLNVV fuse bases, please check our Building and Industry Catalogue.



	A
PLNVV -000	M8
PLNVV -00	M10

For more information visit: www.eti.si/Electrotechnical products/Semiconductor protection

CHARACTERISTICS

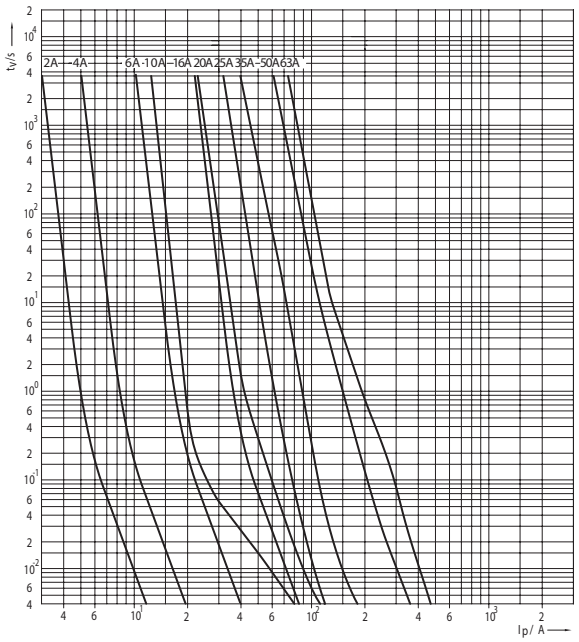
Characteristics

ETI POWER NEEDS CONTROL

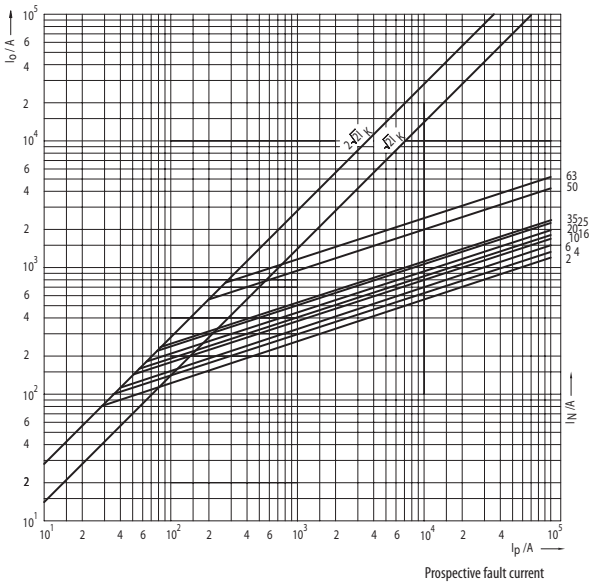
RATED VOLTAGE

~400V

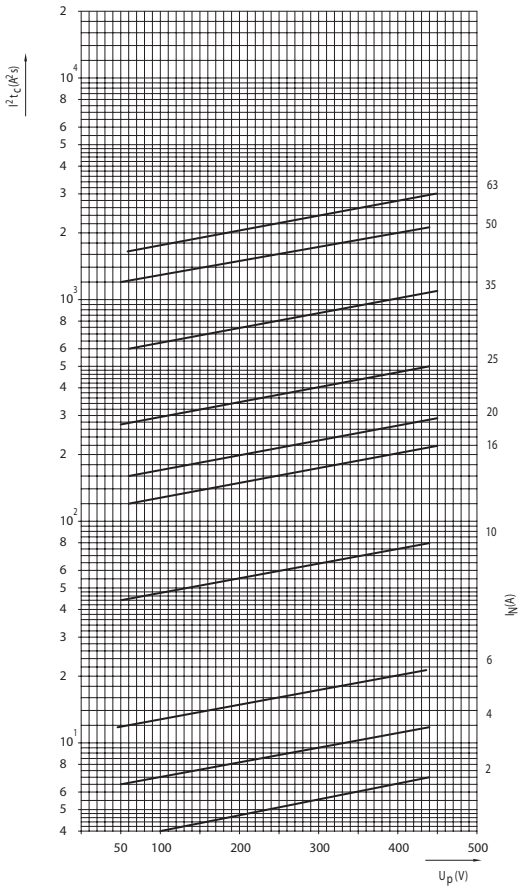
Time/current characteristics of fuse-links Ultra Quick D01 and D02



Cut-off characteristics of fuse-links Ultra Quick D01 and D02



Operating Joule Integral (I^2t) for Ultra Quick D01 and D02



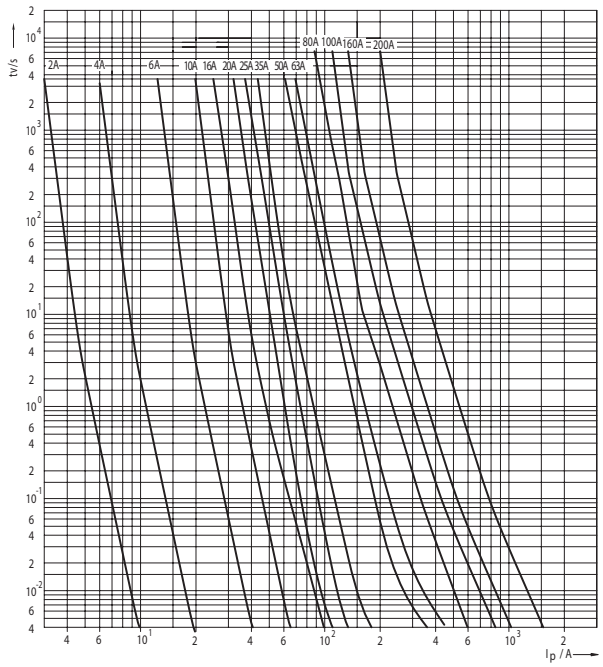
Power dissipation, pre-arcing Joule Integral and Operating Joule Integral for Ultra Quick D01 and D02

I_n	Power dissipation	Pre-arcing Joule integral I^2t (1ms)	Operating Joule Integral I^2t ~100V	Operating Joule Integral I^2t ~200V	Operating Joule Integral I^2t ~400V
A	W	A^2s	A^2s	A^2s	A^2s
2	2,3	1	2,3	4	6,3
4	3,1	2	4,7	8	13
6	4,0	5	7	12	20
10	4,2	12	25	40	65
16	5,3	35	70	100	200
20	8,0	55	120	180	275
25	9,0	85	160	280	480
35	10,0	180	250	450	1.000
50	15,0	250	550	850	1.800
63	17,0	550	800	1.200	2.500

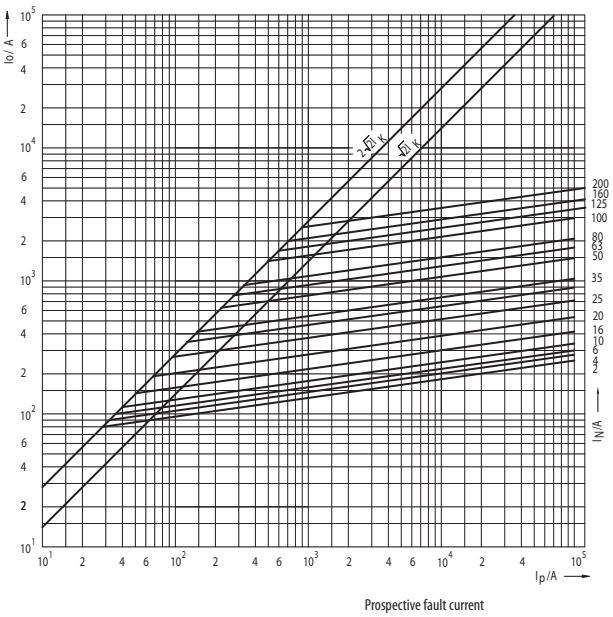
RATED VOLTAGE

~500V

Time/current characteristics of fuse-links Ultra Quick DI, DII, DIII, DIV, DV.

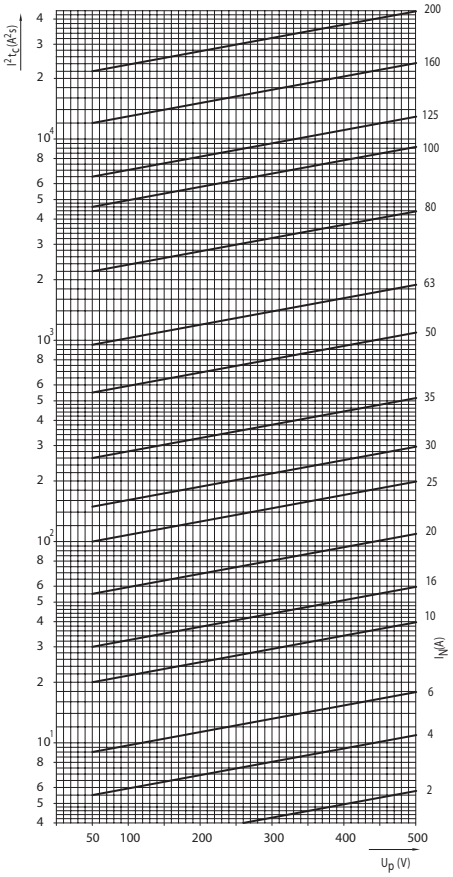


Cut-off characteristics of fuse-links Ultra Quick DI, DII, DIII, DIV, DV.



Prospective fault current

Operating Joule Integral (I^2t) for Ultra Quick DI, DII, DIII, DIV, DV



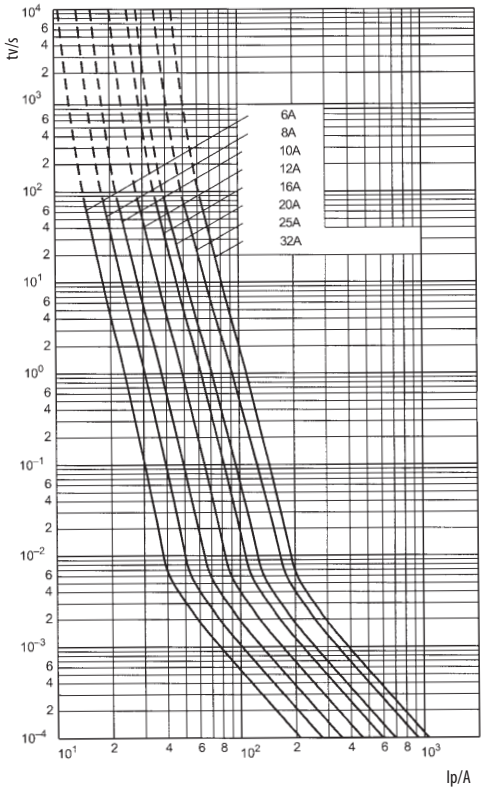
Power dissipation, pre-arcing Joule Integral and Operating Joule Integral for Ultra Quick DI, DII, DIII, DIV, DV.

I_n	Power dissipation	Pre-arcing Joule integral I^2t (1ms)	Operating Joule Integral I^2t ~125V	Operating Joule Integral I^2t ~250V	Operating Joule Integral I^2t ~500V
A	W	A^2s	A^2s	A^2s	A^2s
2	2,1	0,7	1,8	3,5	5,8
4	2,5	1,8	4,1	6	11
6	3,2	4	6	10	18
10	3,6	8	12,5	23	40
16	6,3	16,2	34	40	60
20	7,3	35,8	67	85	139
25	9,0	48,9	85	116	205
30	10,0	85	120	170	310
35	12,0	135	220	300	539
50	19,0	340	600	780	1.250
63	23,0	530	850	1.115	1.890
80	33,0	980	1.480	2.110	4.200
100	51,0	1.950	3.000	4.200	8.450
125	60,0	3.100	4.300	6.000	16.000
160	71,0	10.000	12.000	18.000	24.000
200	90,0	17.000	22.000	31.000	40.000

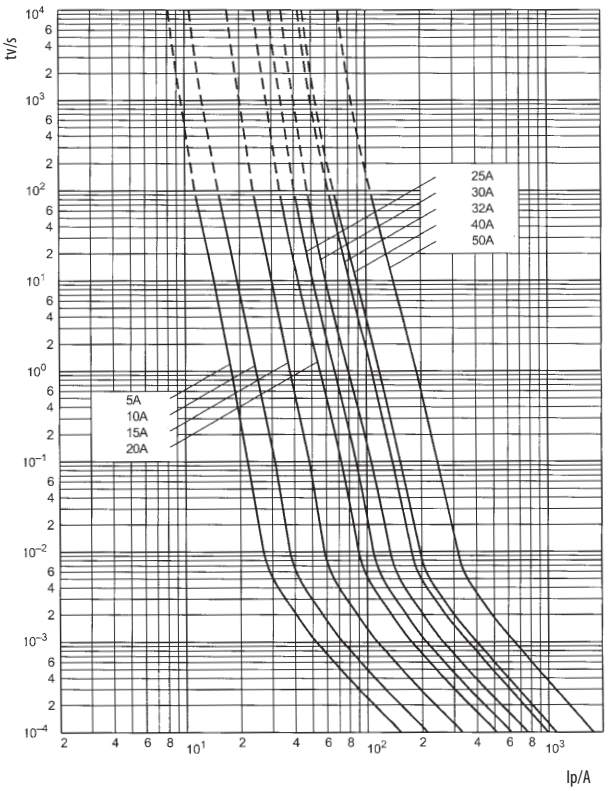
RATED VOLTAGE

~600/690V

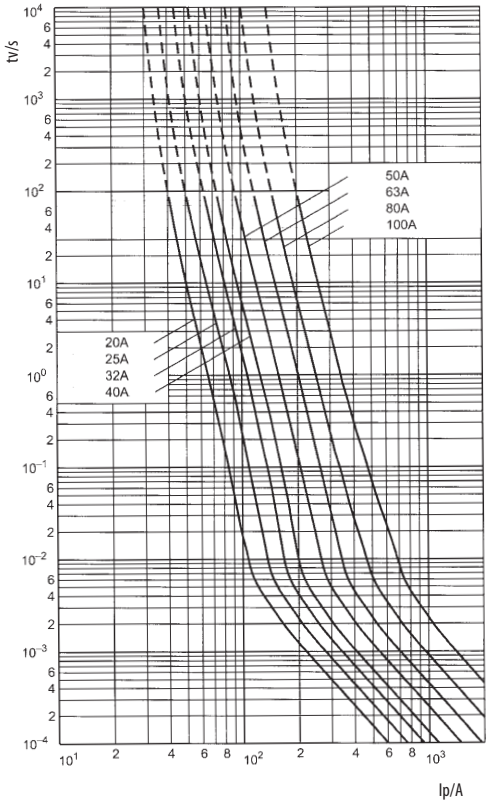
Time/current characteristics of fuse links Ultra quick CH-size 10 x 38



Time/current characteristics of fuse links Ultra quick CH, CH-S-size 14 x 51



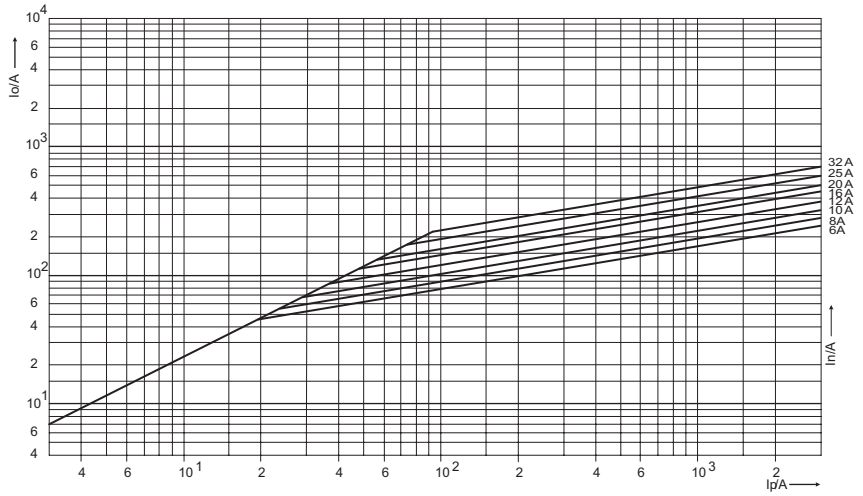
Time/current characteristics of fuse links Ultra quick CH, CH-S-size 22 x 58



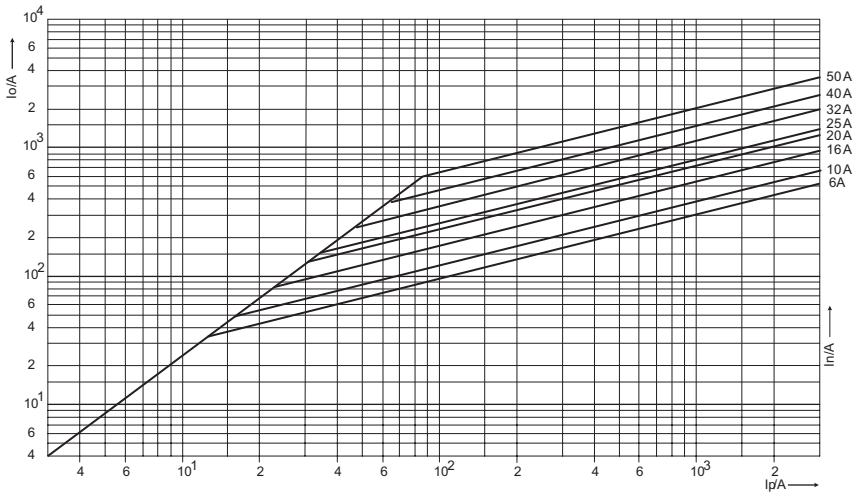
RATED VOLTAGE

~600/690V

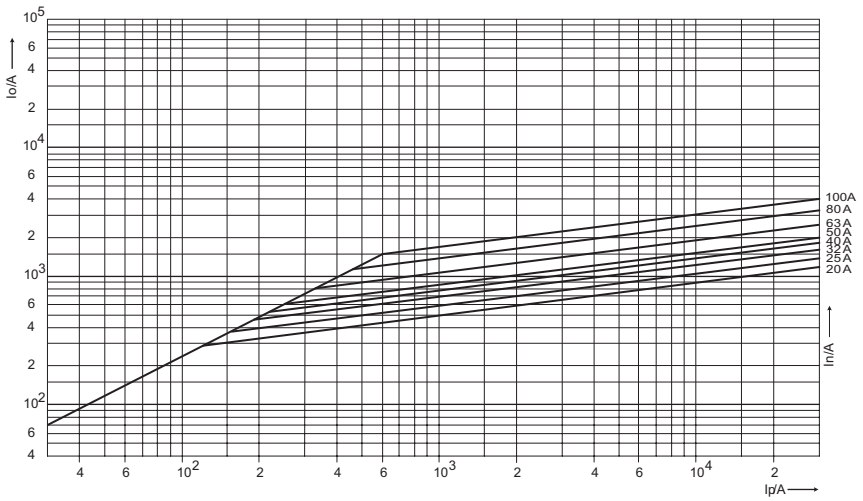
Cut-off characteristics of fuse-links Ultra Quick CH – size 10 x 38



Cut-off characteristics of fuse-links Ultra Quick CH, CH-S – size 14 x 51



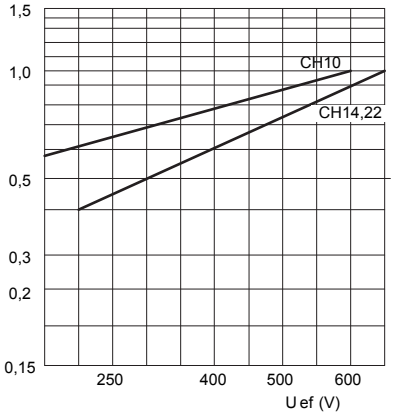
Cut-off characteristics of fuse-links Ultra Quick CH, CH-S – size 22 x 58



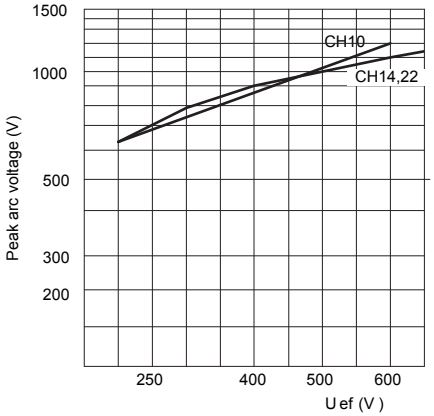
RATED VOLTAGE

~600/690V

Conversion factor for total Joule integral



Maximum arc voltage accuring



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

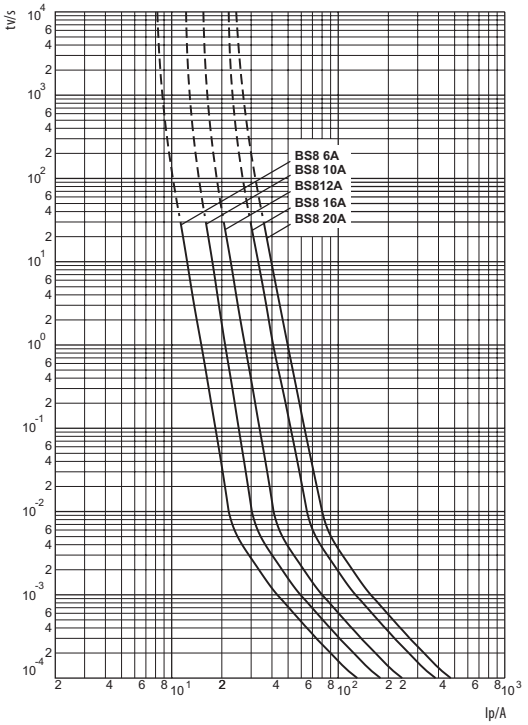
RATED VOLTAGE
~600/690V

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

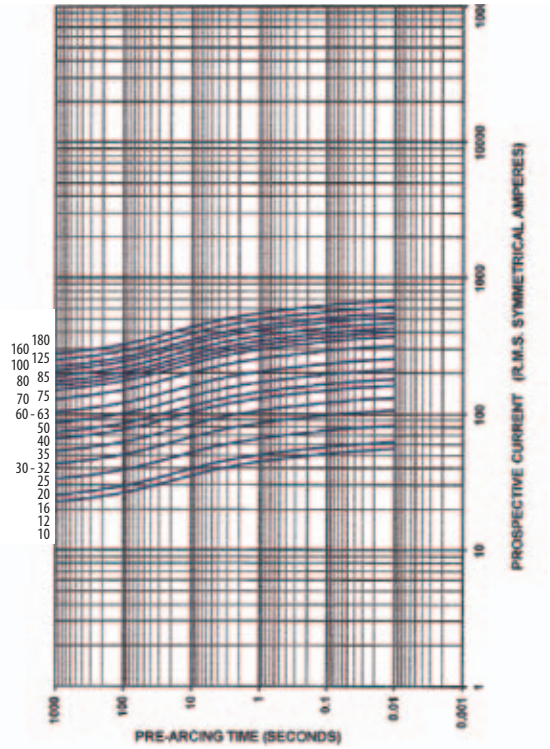
Size	In	Power dissipation	Pre-arcing Joule integral I^2t (1ms)	Operating Joule Integral I^2t ~180V	Operating Joule Integral I^2t ~330V	Operating Joule Integral I^2t ~600/690V
	A	W	A^2s	A^2s	A^2s	A^2s
CH10	6	1,5	4	17	21	30
	8	2	6	29	35	50
	10	2,5	9	40	48	70
	12	3	15	68	83	120
	16	3,5	25	86	104	150
	20	4,8	34	148	179	260
	25	6	60	165	200	290
	32	7,5	95	342	414	600
CH-S 14 CH14	10	4	4	9	10	22
	12	5	6	20	24	50
	16	5,5	10	30	35	75
	20	6	26	72	85	180
	25	7	44	128	150	320
	32	7,6	68	240	282	600
	40	8	84	300	353	750
	50	9	200	720	846	1.800
CH-S 22 CH22	20	5,6	23	104	122	260
	25	5,6	37	164	193	410
	32	7	55	242	284	605
	40	8,5	68	300	353	750
	50	9,5	155	640	752	1.600
	63	11	280	1.232	1.448	3.080
	80	13,5	600	2.640	3.102	6.600
	100	16	1.100	5.000	5.875	12.500

RATED VOLTAGE
~240V

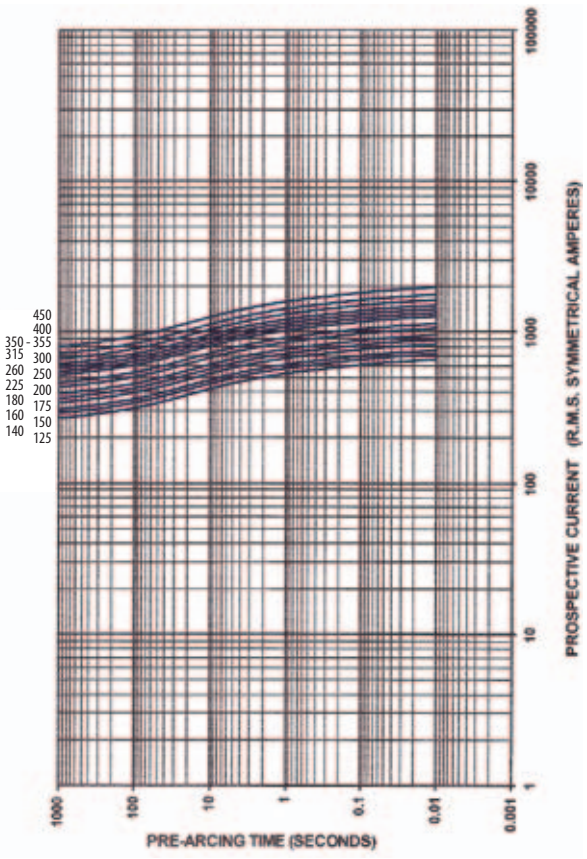
Time/current characteristics of fuse-links Ultra Quick BS8



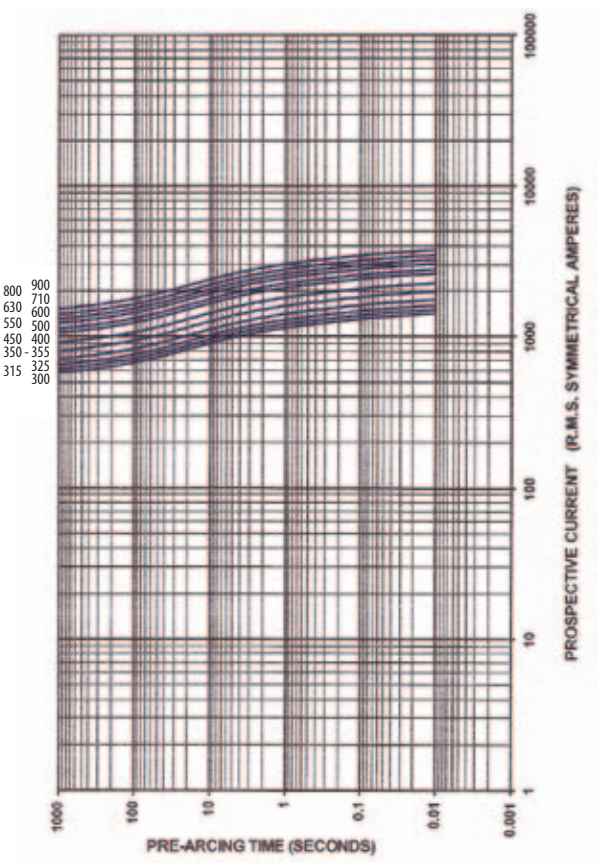
Time/current characteristics of fuse-links Ultra Quick BS17



Time/current characteristics of fuse-links Ultra Quick BS38



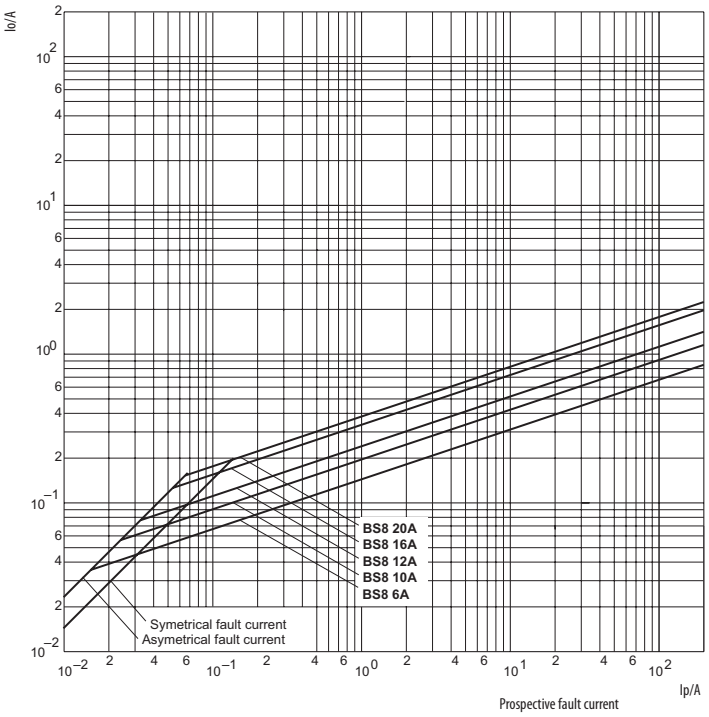
Time/current characteristics of fuse-links Ultra Quick BS38T



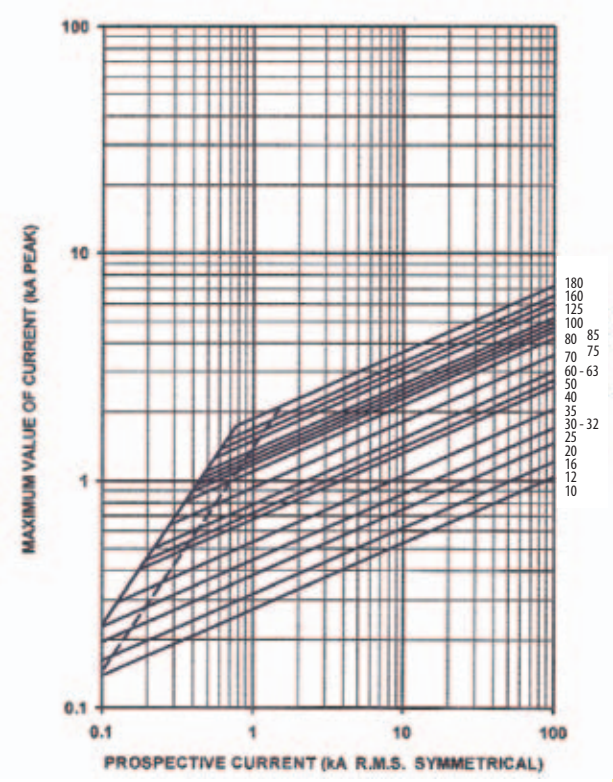
CHARACTERISTICS

RATED VOLTAGE
~240V

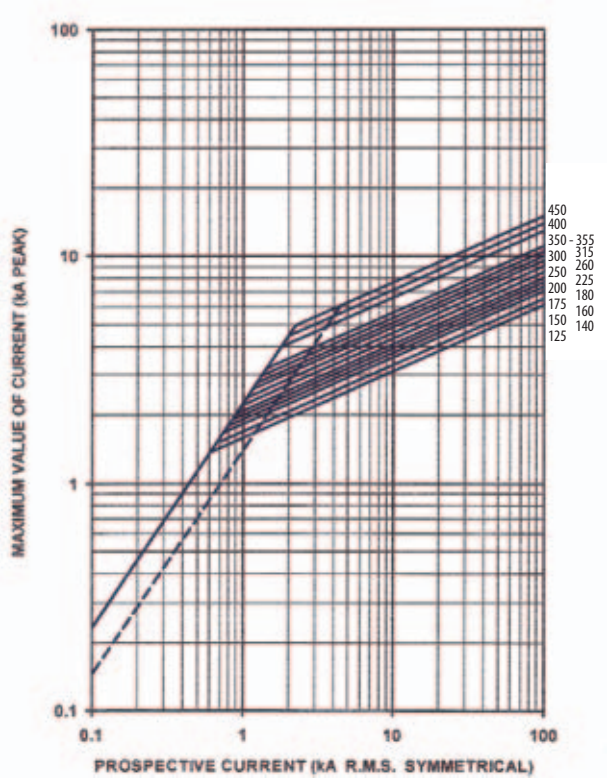
Cut-off characteristics of fuse-link Ultra Quick BS8



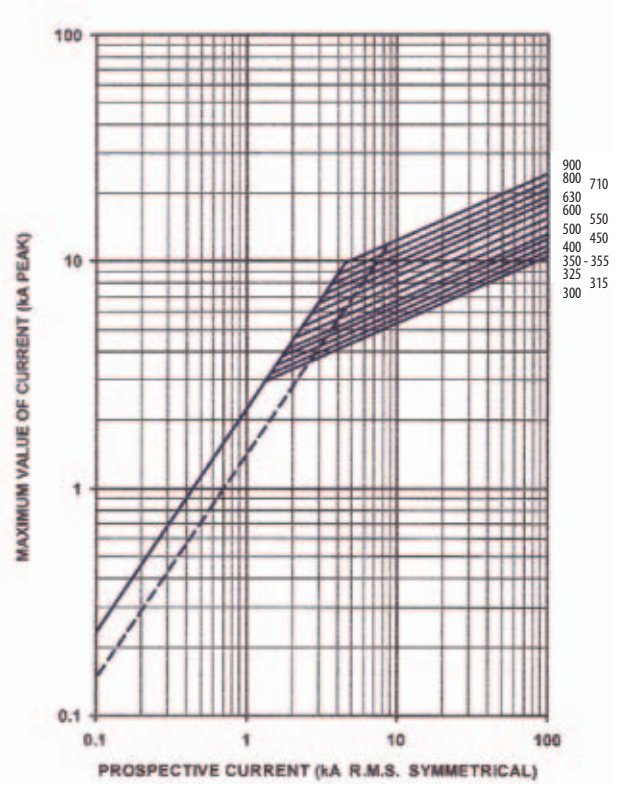
Cut-off characteristics of fuse-link Ultra Quick BS17



Cut-off characteristics of fuse-link Ultra Quick BS38

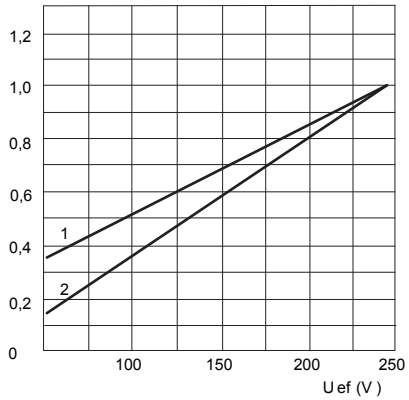


Cut-off characteristics of fuse-link Ultra Quick BS38T



RATED VOLTAGE
~240V

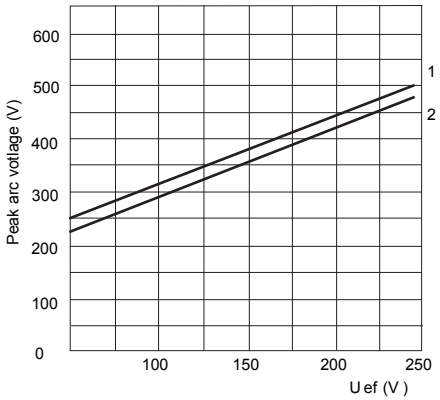
Conversion factor for total Joule integral



1) BS8

2) BS17, 38, 38T

Maximum arc voltage accuring



1) BS8

2) BS17, 38, 38T

Power dissipation, pre-arcing Joule Integral and Operating Joule Integral for Ultra Quick BS8, BS17, BS38, BS38T

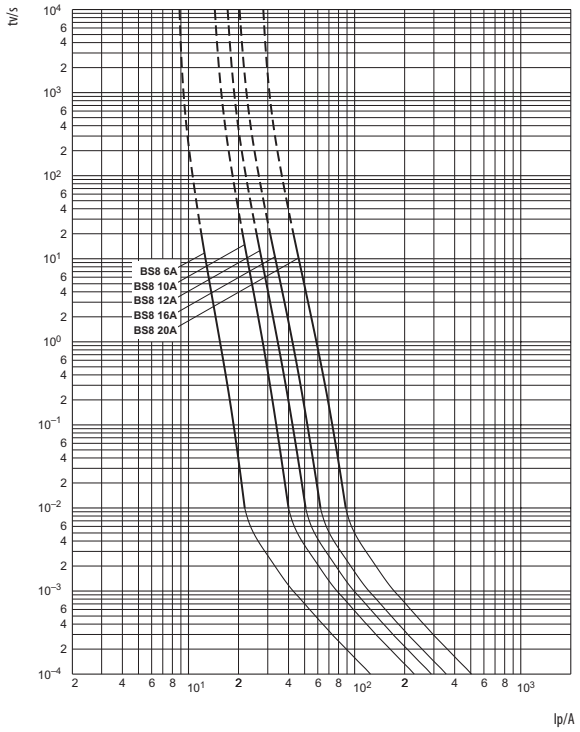
Size	I_n	Power dissipation	Pre-arcing Joule integral I^2t (1ms)	Operating Joule Integral I^2t ~120V	Operating Joule Integral I^2t ~240V
	A	W	A^2s	A^2s	A^2s
BS8	6	1	2	6	9
	10	2,5	3,8	12	22
	12	2,5	7	22	32
	16	2,5	20	50	100
	20	4	25	80	160
BS17	25	1,7	18	120	240
	32	2,2	32	210	420
	35	2,3	50	250	500
	50	3,3	100	600	1.200
	63	4,3	180	1.000	1.900
	80	6	300	1.500	3.100
	100	7,5	600	2.500	5.000
	125	12	600	2.700	5.500
	160	19,5	1.100	3.200	6.500
	180	24	1.600	4.300	8.700
BS38	160	12	1.100	6.200	12.500
	200	16,5	1.500	9.000	18.500
	250	20	3.200	13.000	27.500
	315	28,4	6.000	21.000	42.500
	355	30	8.000	33.000	67.000
	400	38	14.000	35.000	78.000
	450	44,5	18.000	45.000	96.000
BS38T	400	30	6.000	44.000	88.000
	500	38	14.000	70.000	145.000
	630	50	24.000	110.000	214.000
	710	62	32.000	140.000	290.000
	800	78	52.000	160.000	335.000

Correction factor for converting the power dissipation for percentage load

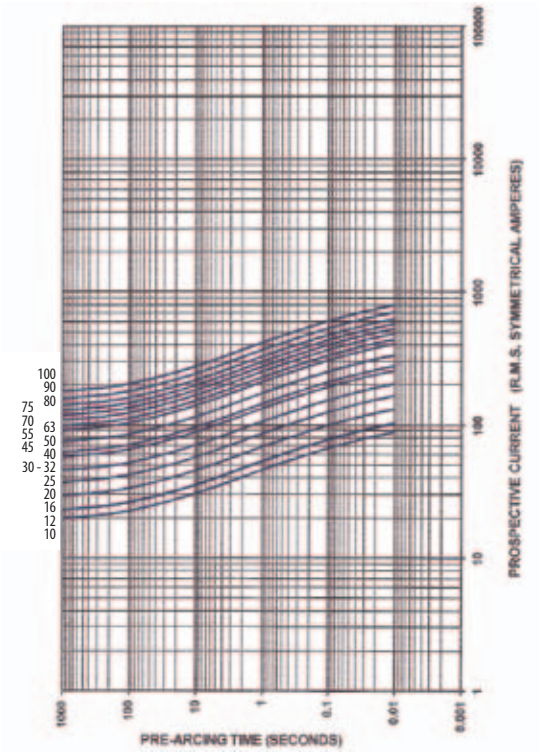
Load(%)	Correction factor
10	0,005
20	0,025
30	0,063
40	0.122
50	0,204
60	0,31
70	0,442
80	0,6
90	0,785
100	1

RATED VOLTAGE
~690V

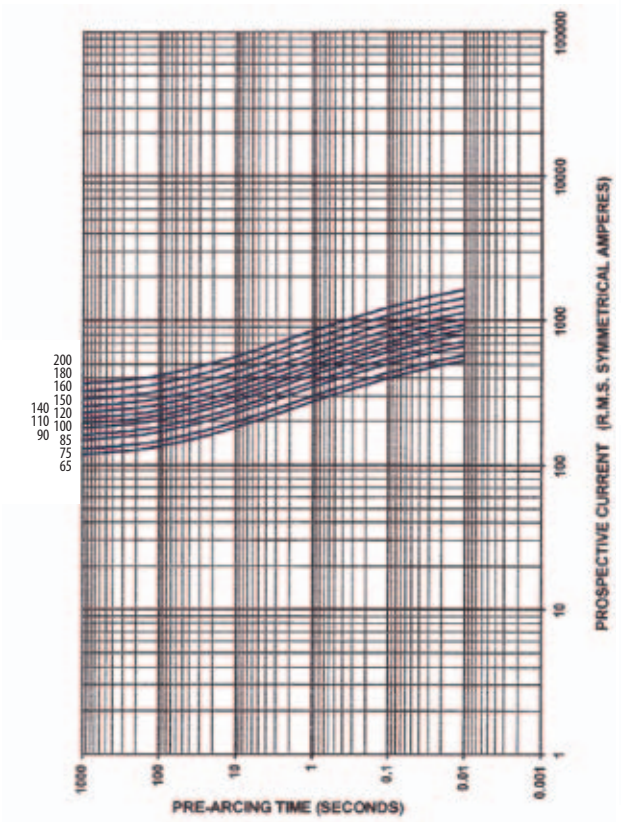
Time/current characteristics of fuse-links Ultra Quick BS8



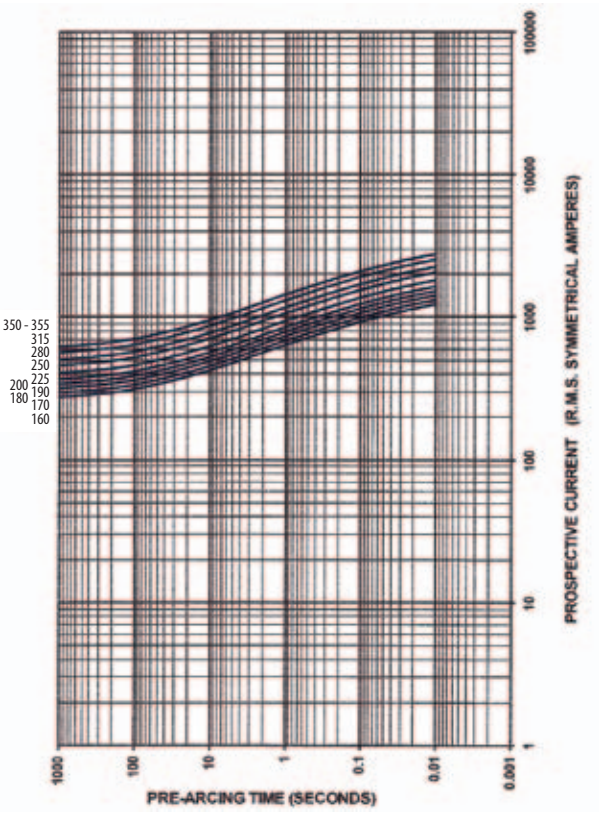
Time/current characteristics of fuse-links Ultra Quick BS17



Time/current characteristics of fuse-links Ultra Quick BS17D



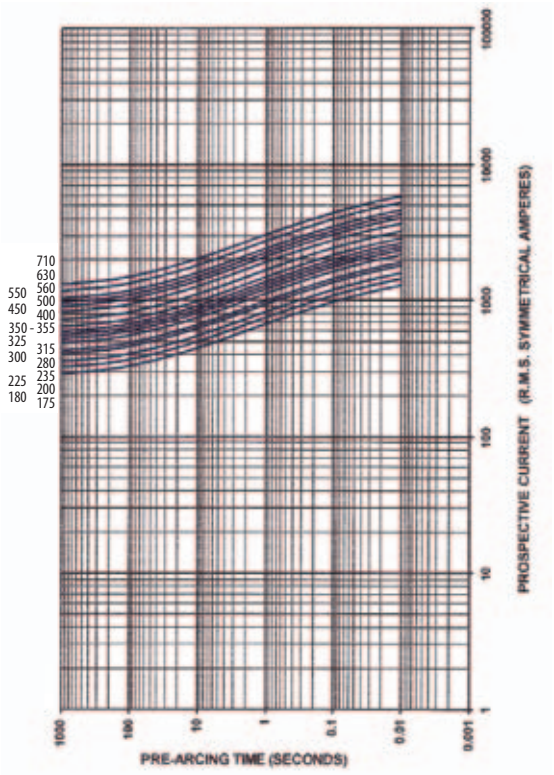
Time/current characteristics of fuse-links Ultra Quick BS38



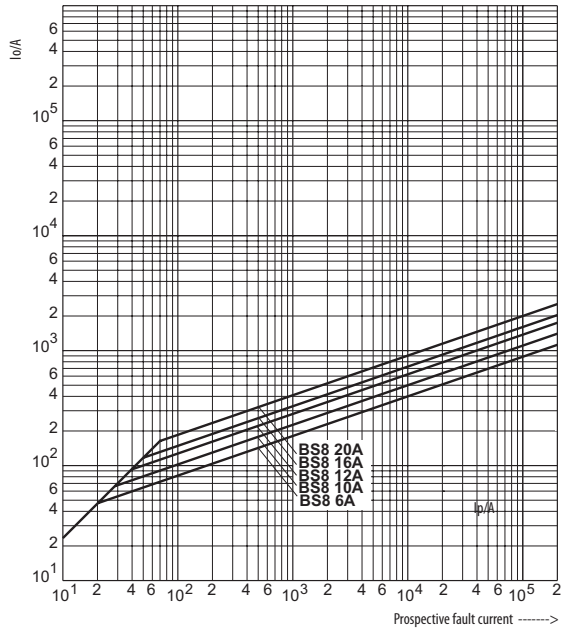
RATED VOLTAGE

~690V

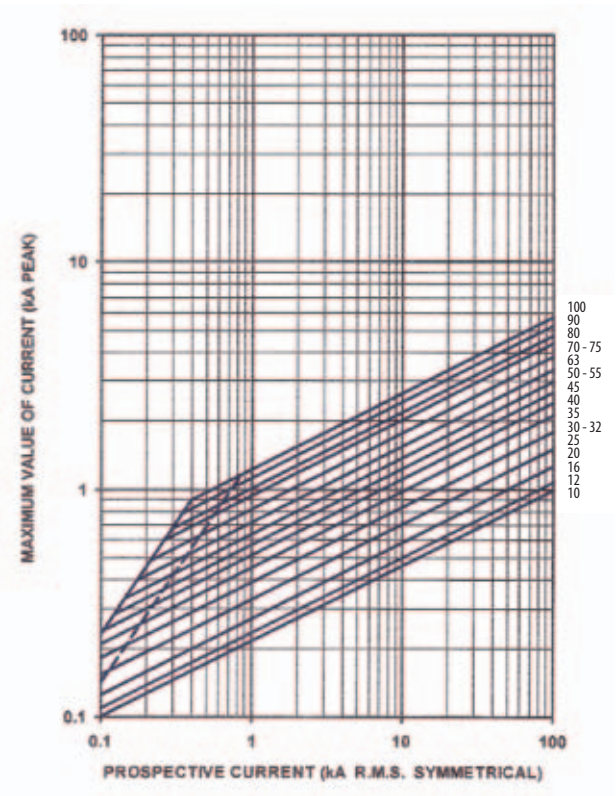
Time/current characteristics of fuse-links Ultra Quick BS38T



Cut-off characteristics of fuse-links Ultra Quick BS8

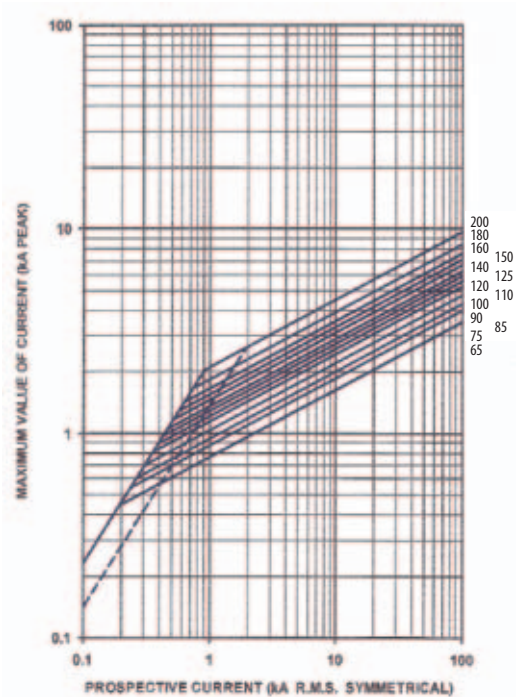


Cut-off characteristics of fuse-links Ultra Quick BS17

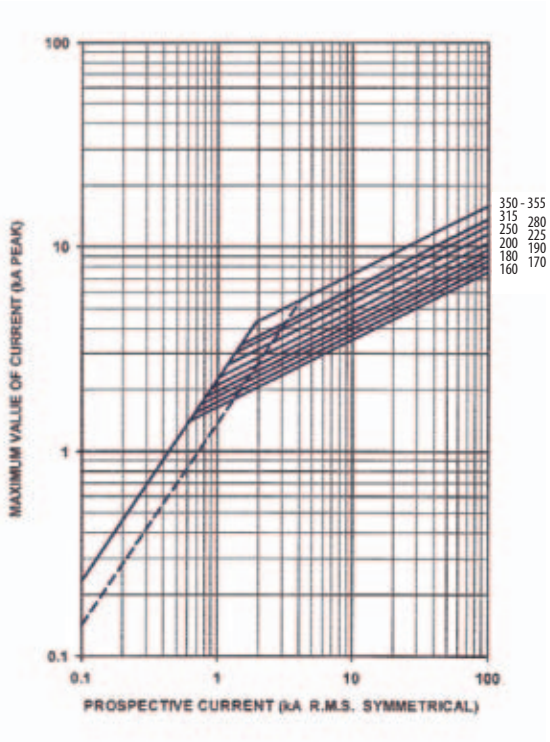


RATED VOLTAGE
~690V

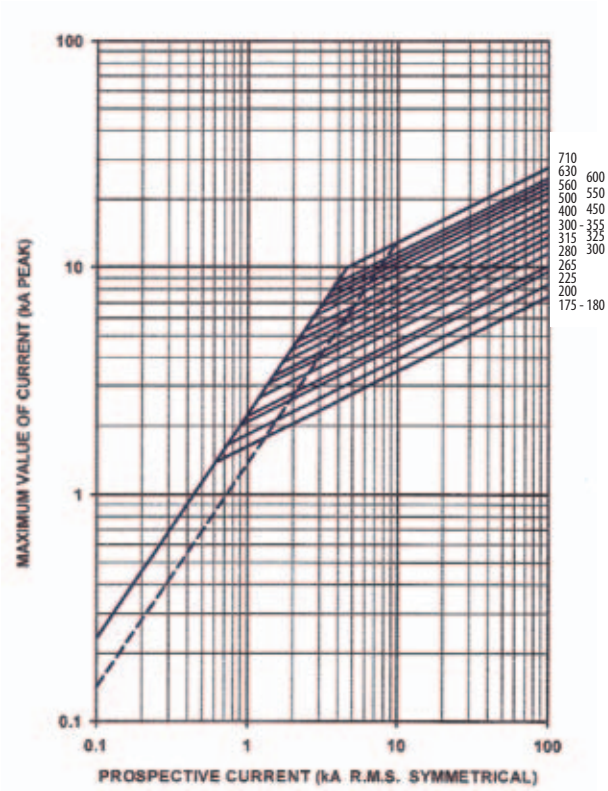
Cut-off characteristics of fuse-links Ultra Quick BS17D



Cut-off characteristics of fuse-links Ultra Quick BS38

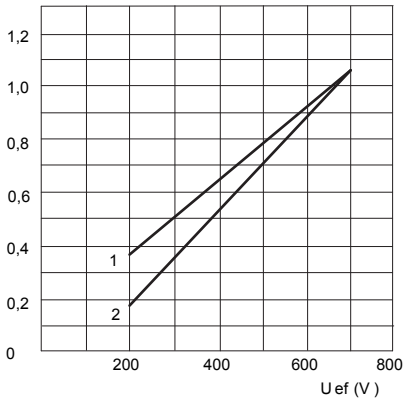


Cut-off characteristics of fuse-links Ultra Quick BS38T



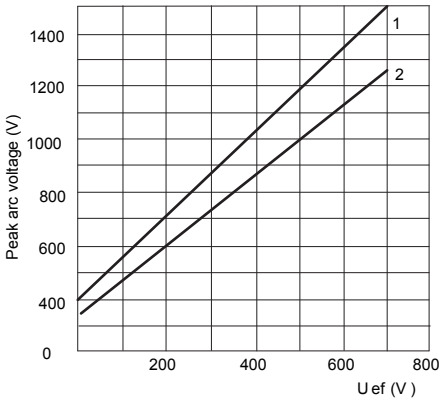
RATED VOLTAGE
~690V

Conversion factor for total Joule integral



1) BS 8, 17, 17D
2) BS 38, 38T

Maximum arc voltage accuring



1) BS 8
2) BS 17, 17D, 38, 38T

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

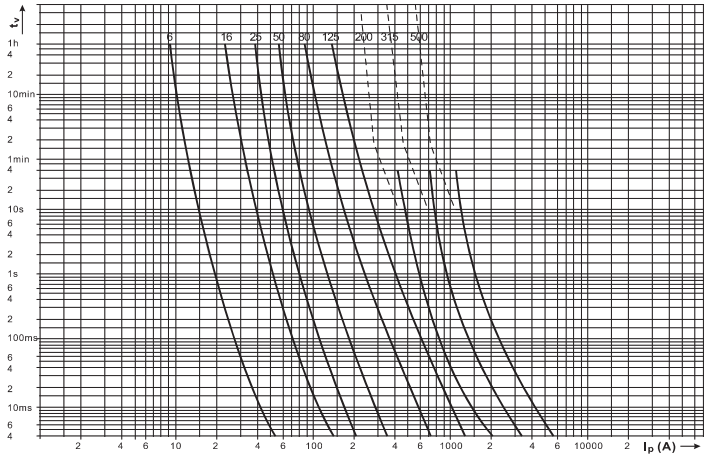
RATED VOLTAGE
~690V

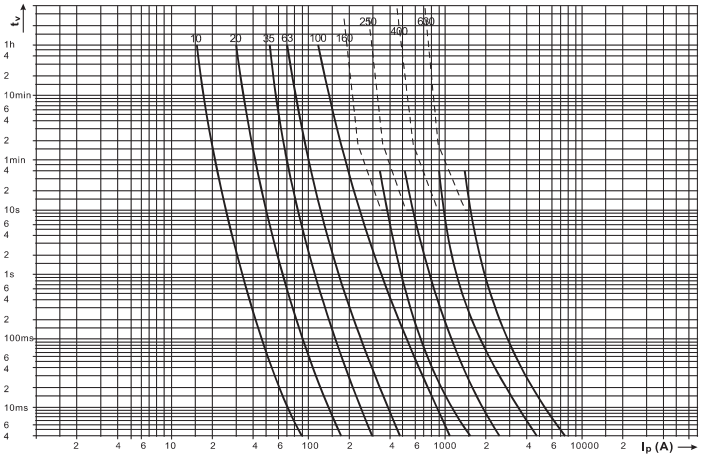
Power dissipation, pre-arcing Joule Integral and Operating Joule Integral for Ultra Quick BS8, BS17, BS17D, BS38, BS38T

Size	I_n	Power dissipation	Pre-arcing Joule integral I^2t (1ms)	Operating Joule Integral I^2t ~415V	Operating Joule Integral I^2t ~690V
	A	W	A^2s	A^2s	A^2s
BS8	6	2	1,8	8,5	12
	10	3	7	30	48
	12	3	10	40	65
	16	7	16	66	110
	20	7	32	150	220
BS17	25	5,8	25	150	250
	32	6,8	32	190	350
	35	7,2	33	130	200
	40	8	52	350	700
	45	8,5	76	450	900
	50	9,5	103	600	1.300
	56	10,4	135	700	1.450
	63	11,5	135	1.000	2.100
	71	13	210	1.400	2.800
	80	14,5	250	1.700	3.500
	90	15,5	360	2.500	5.200
	100	16	470	3.200	6.800
BS17D	90	16,6	490	1.800	3.600
	110	21	600	3.000	5.900
	120	22	540	3.700	7.400
	140	24,5	850	5.000	11.000
	160	28	1.000	7.000	14.500
BS38	160	27,7	2.400	7.000	14.500
	180	29	1.400	12.000	23.500
	200	31	2.600	15.000	30.000
	250	37	5.200	25.000	53.000
	315	47	10.000	50.000	97.000
	350	57	15.000	70.000	140.000
BS38T	200	32	2.200	10.000	21.000
	225	39	3.700	15.000	30.000
	315	48	8.600	35.000	75.000
	355	56	13.500	55.000	110.000
	400	60	10.000	70.000	147.000
	450	65	15.000	105.000	210.000
	500	68	20.000	130.000	277.000
	630	83	45.000	260.000	520.000
	700	94	60.000	300.000	600.000

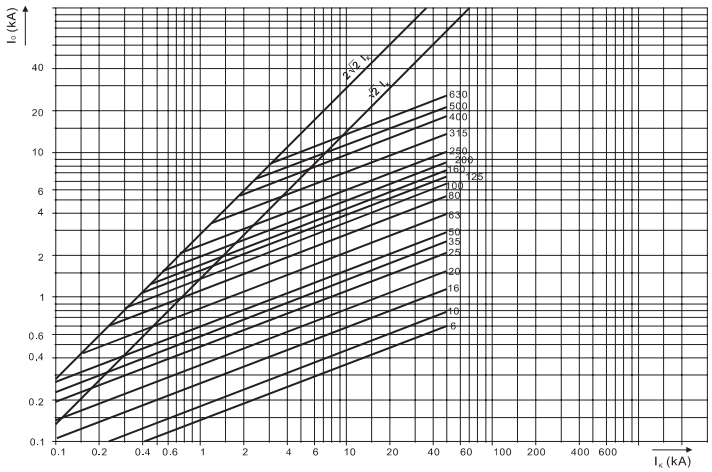
aR/gR	RATED VOLTAGE ~690V		

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





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



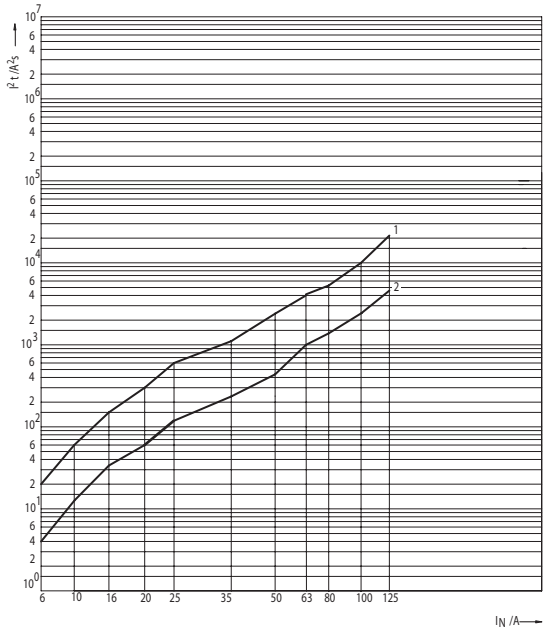
Prospective fault current ------->

ULTRA QUICK

aR/gR

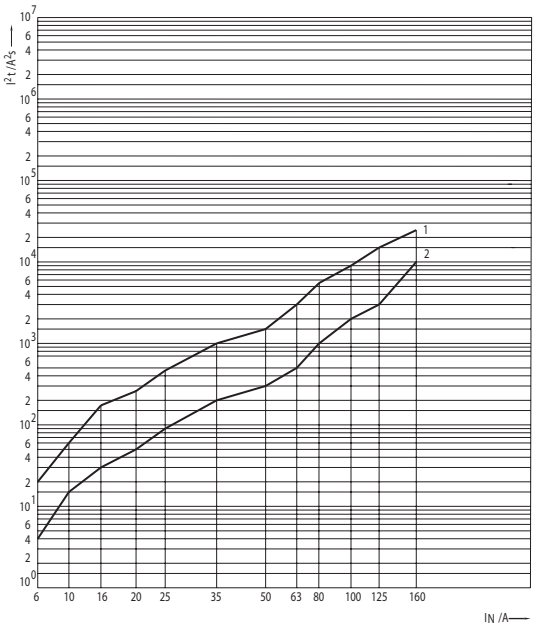
RATED VOLTAGE
~690V

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



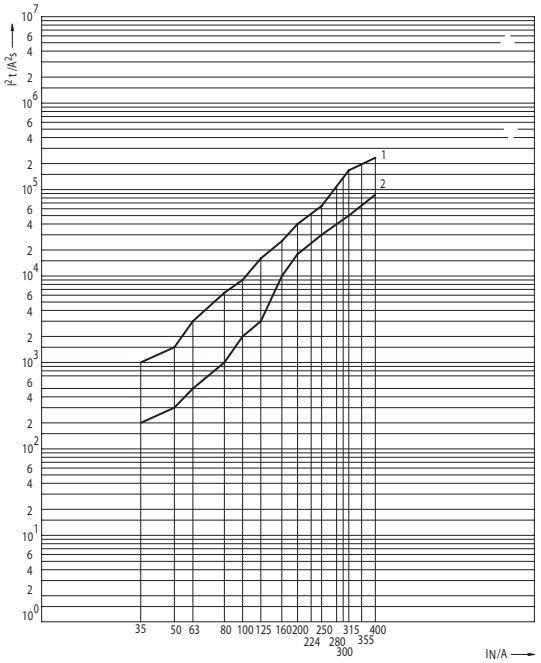
1 - Operating I^2t value at 690V
2 - Pre-arcing I^2t value

Joule Integral (I^2t) for Ultra Quick M, S - size 00 and 0



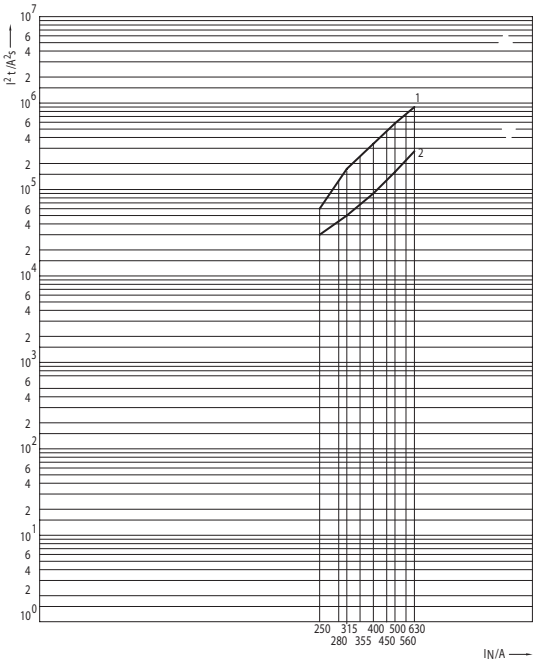
1 - Operating I^2t value at 690V
2 - Pre-arcing I^2t value

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



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

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



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

aR/gR

RATED VOLTAGE
~690V

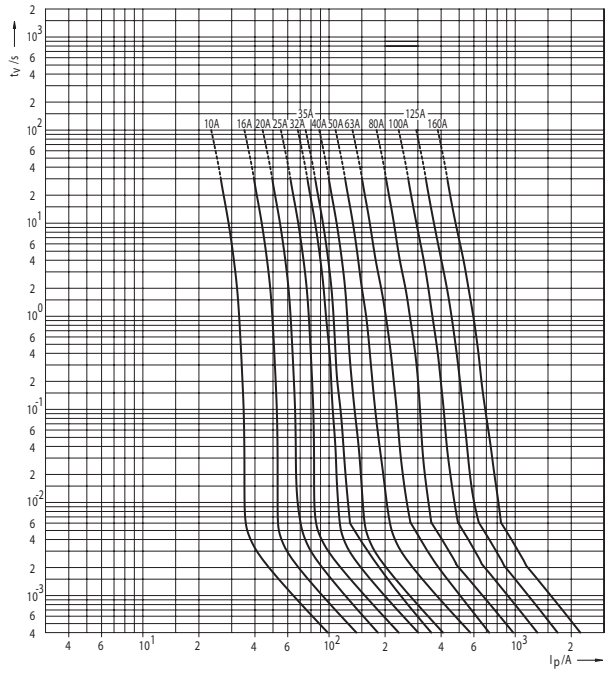
Power dissipation, pre-arcing Joule Integral and Operating Joule Integral for Ultra Quick

Size	I_n	Power dissipation	Pre-arcing Joule integral I^2t (1ms)	Operating Joule Integral I^2t ~180V	Operating Joule Integral I^2t ~330V	Operating Joule Integral I^2t ~690V
	A	W	A^2s	A^2s	A^2s	A^2s
M00C, S00C	6	2,8	4	7	10	19
	10	3,3	13	22	31	62
	16	4,1	32	54	77	154
	20	5	60	103	145	290
	25	5,8	123	209	296	590
	35	8	242	410	580	1.160
	40	11	313	530	750	1.500
	50	16	490	840	1.180	2.370
	63	20	960	1.650	2.300	4.650
	80	25	1.100	1.890	2.660	5.350
	100	32	2.180	3.690	5.200	10.500
	125	40	4.450	7.550	10.600	21.300
M00, S00, M0, S0	6	2,8	4	7	10	18
	10	3,3	13	20	35	60
	16	4,1	32	56	90	170
	20	5	52	94	140	250
	25	5,8	85	160	240	460
	35	8	190	310	500	1.000
	40	11	247	403	650	1.300
	50	16	290	520	760	1.500
	63	20	500	750	1.050	3.000
	80	25	1.000	1.550	2.200	5.300
	100	32	2.000	2.800	3.900	9.000
	125	40	3.100	4.300	6.000	16.000
	160	44	10.000	12.000	18.000	24.000
M1, S1	35	8	190	300	500	1.000
	50	16	290	520	750	1.500
	63	20	500	750	1.050	3.000
	80	25	1.000	1.500	2.200	5.300
	100	32	2.000	2.800	3.900	9.000
	125	40	3.100	4.300	6.000	16.000
	160	44	10.000	12.000	18.000	24.000
	200	58	17.000	22.000	31.000	40.000
	224	60	23.000	29.000	38.000	52.000
	250	63	29.000	37.000	44.500	65.000
M2, S2	80	25	1.000	1.500	2.200	5.300
	100	32	2.000	2.800	3.900	9.000
	125	40	3.100	4.300	6.000	16.000
	160	44	10.000	12.000	18.000	24.000
	200	58	17.000	22.000	31.000	40.000
	250	63	31.000	35.500	47.600	60.000
	280	75	51.600	59.100	79.300	100.000
	300	85	45.000	50.000	65.000	140.000
	315	95	48.000	55.000	75.000	175.000
	355	100	60.300	69.100	94.200	220.000
	400	105	85.000	101.000	140.000	270.000
M3, S3	250	63	31.000	35.000	47.000	60.000
	280	75	51.600	59.100	79.300	100.000
	315	95	48.000	55.000	75.000	175.000
	355	100	60.300	69.100	94.200	300.000
	400	105	90.000	115.000	160.000	441.700
	450	115	136.000	170.000	256.000	530.000
	500	130	160.000	200.000	300.000	620.000
	560	135	231.000	300.000	395.000	730.000
	630	140	270.000	348.000	460.000	850.000

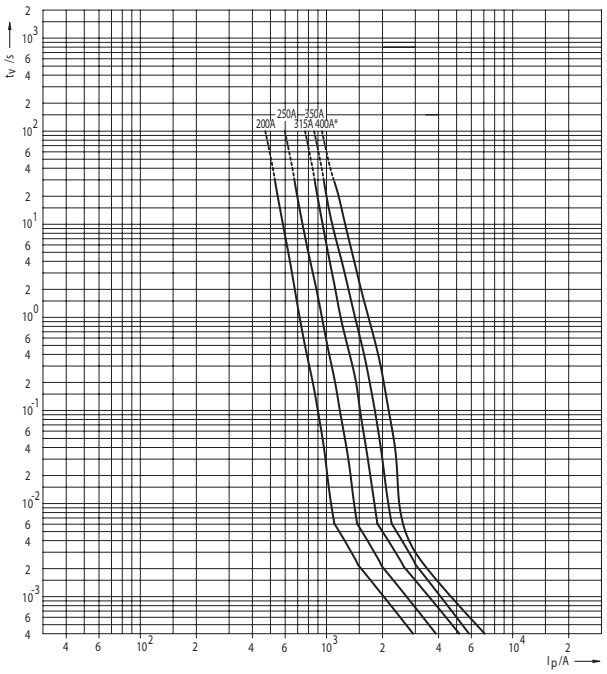
aR

RATED VOLTAGE
~690V

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

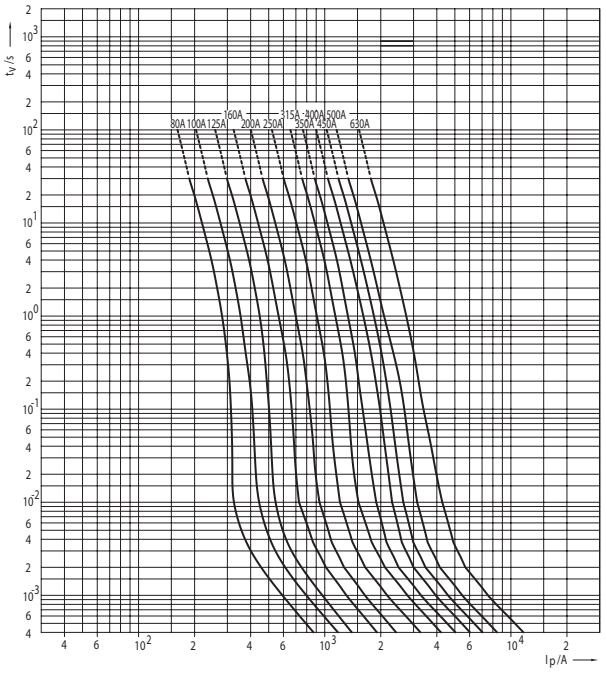


Time/current characteristics of fuse-links Ultra Quick S - size 00C and 00, 200-400A

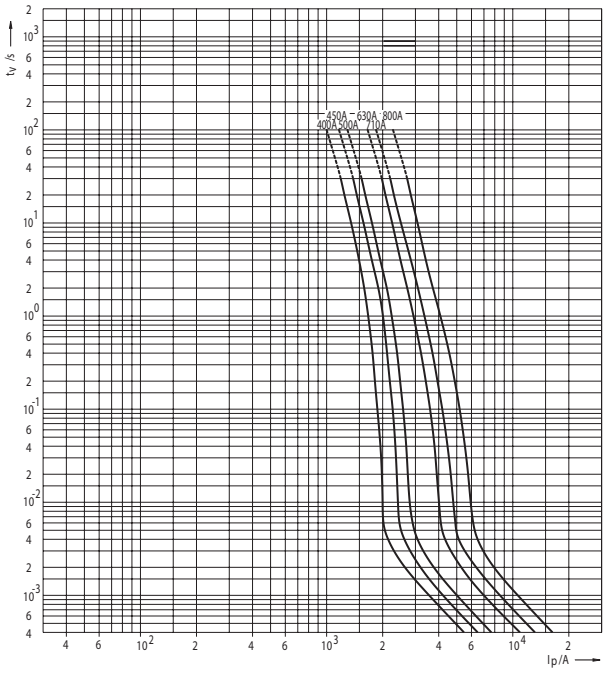


* Un = 500 V

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



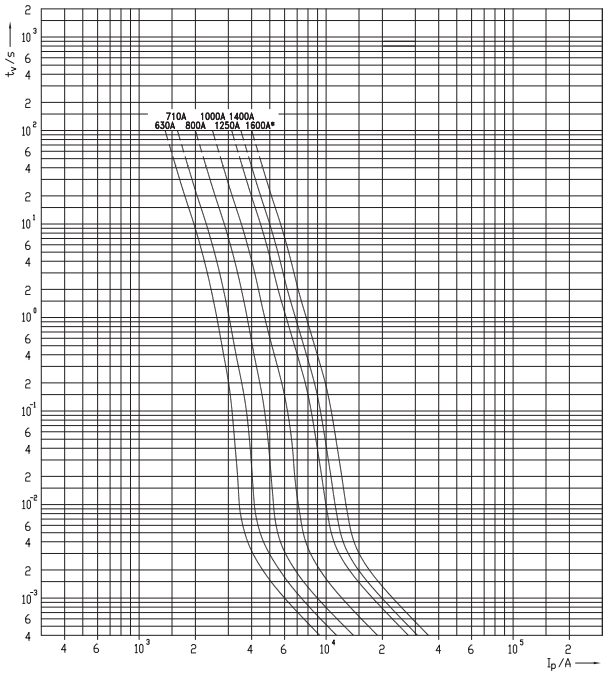
Time/current characteristics of fuse-links Ultra Quick S, G - size 2



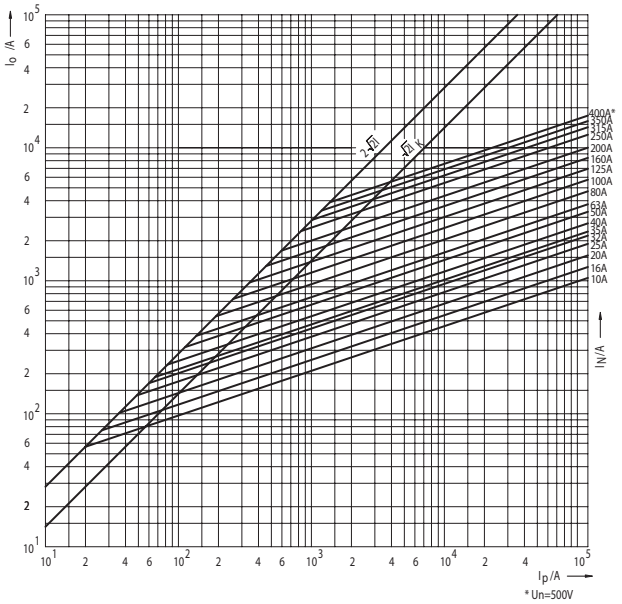
aR

RATED VOLTAGE
~690V

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

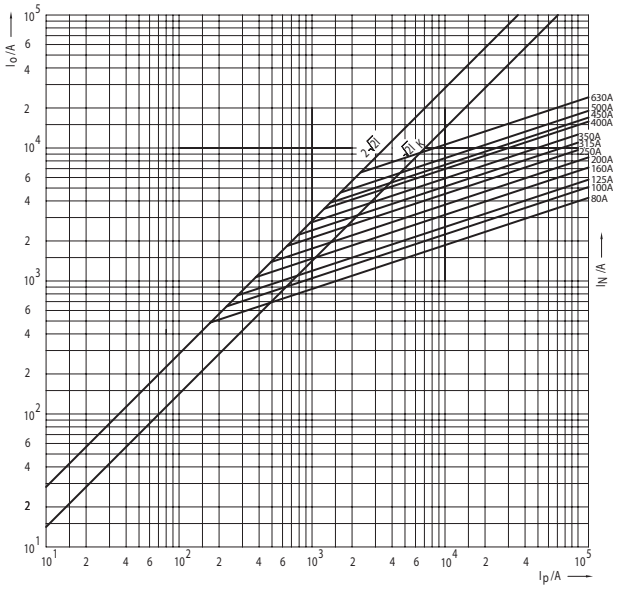


Cut-off characteristics of fuse-links Ultra Quick M and S - size 00C and 00



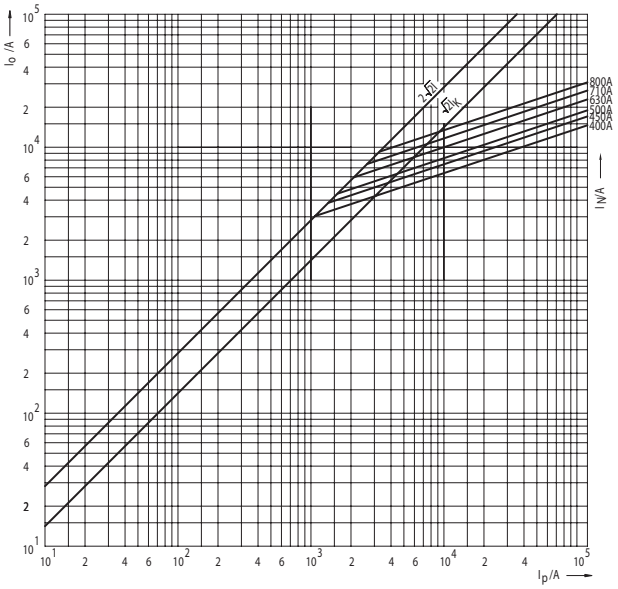
Prospective fault current

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



Prospective fault current

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

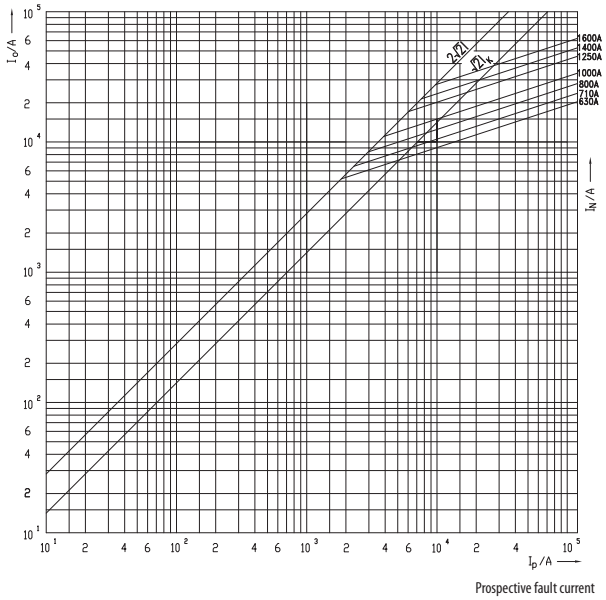


Prospective fault current

aR

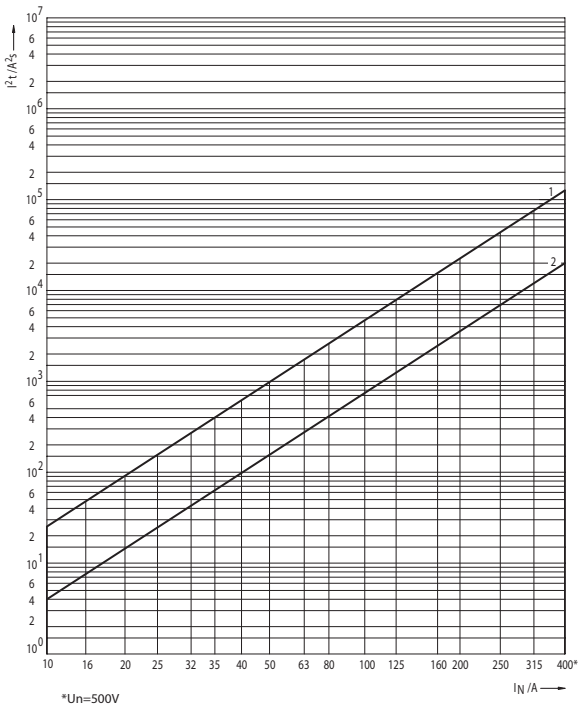
RATED VOLTAGE
~690V

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



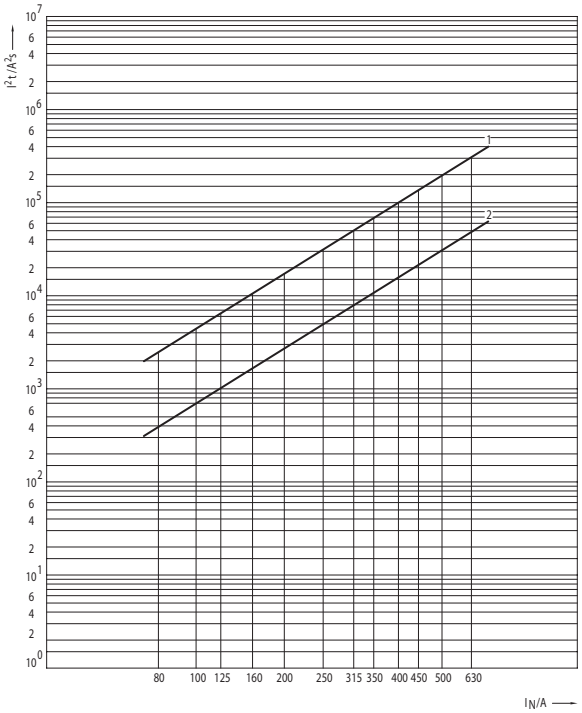
Prospective fault current

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



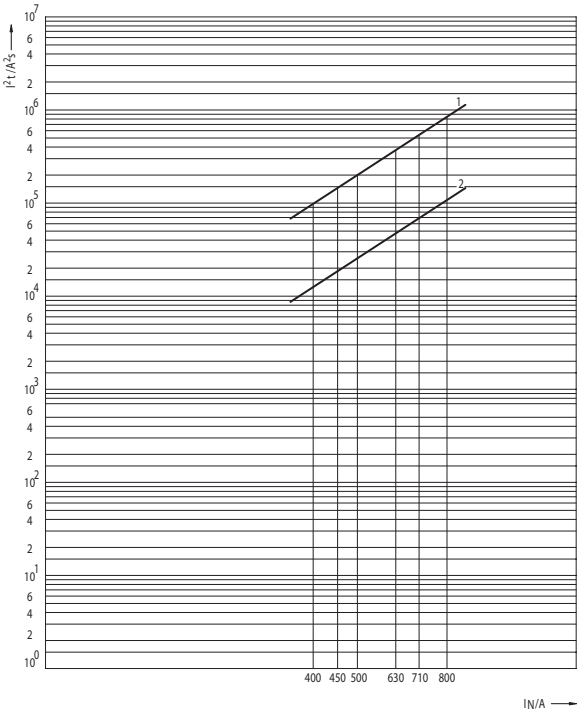
*Un=500V
1 - Operating I^2t value at 690V
2 - Pre-arcing I^2t value

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



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

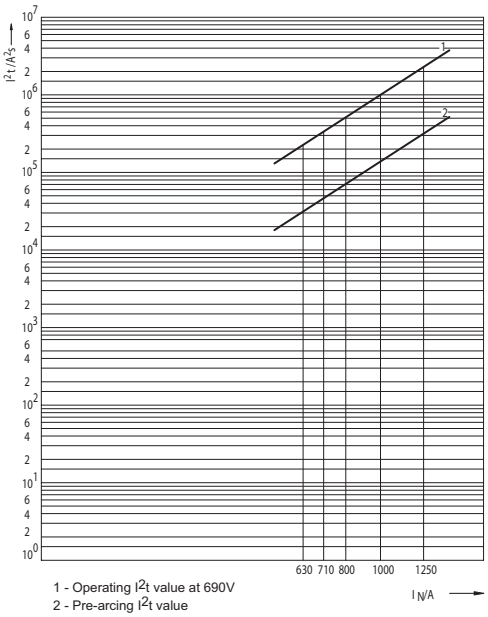
Joule Integral (I^2t) for Ultra Quick S, G - size 2



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

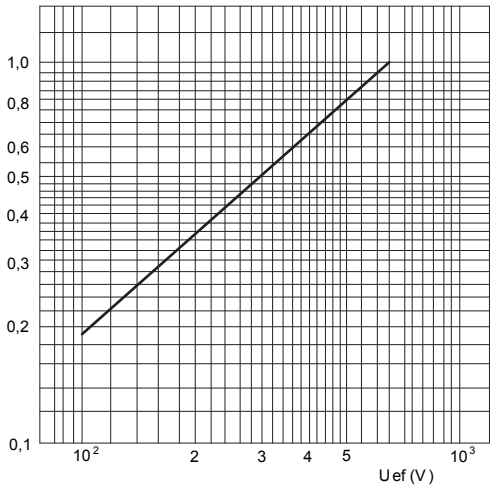
aR	RATED VOLTAGE ~690V		

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

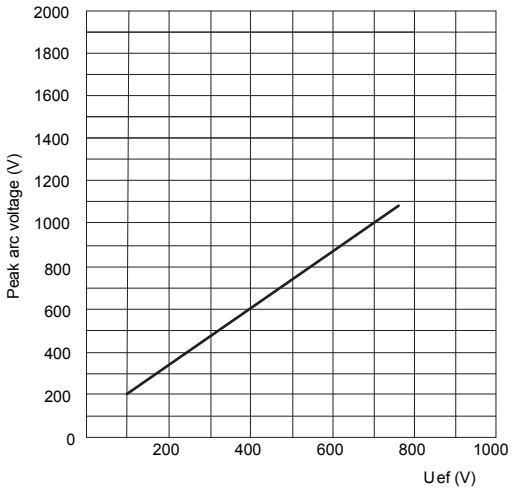


1 - Operating I^2t value at 690V
2 - Pre-arcing I^2t value

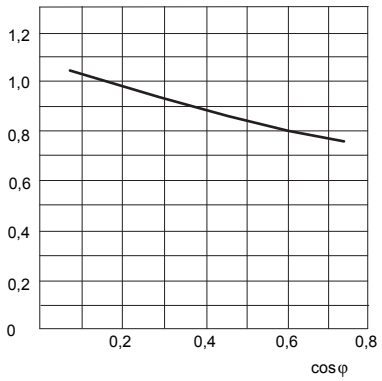
Conversion factor for total Joule integral



Maximum arc voltage accuring



Correction factor for performance factor cosφ≠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 ~690V

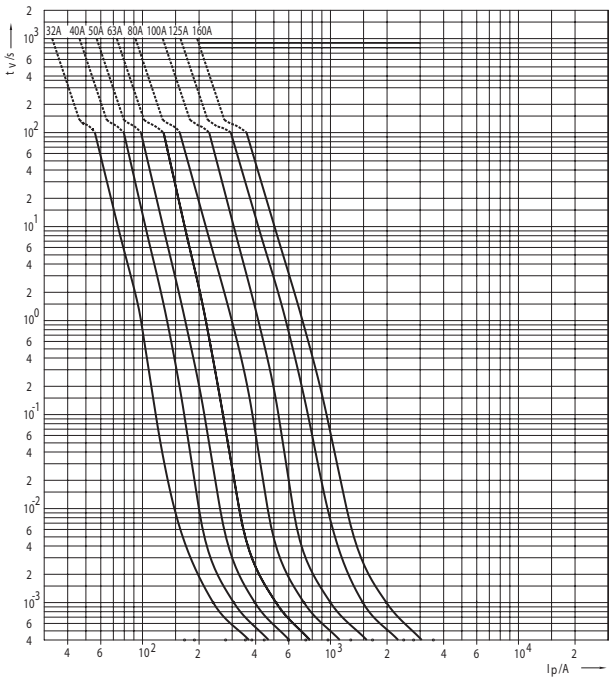
Power dissipation, pre-arcing Joule Integral and Operating Joule Integral for Ultra Quick

Size	I_n	Power dissipation	Pre-arcing Joule integral I^2t (1ms)	Operating Joule Integral I^2t ~230V	Operating Joule Integral I^2t ~400V	Operating Joule Integral I^2t ~500V	Operating Joule Integral I^2t ~690V
	A	W	A^2s	A^2s	A^2s	A^2s	A^2s
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

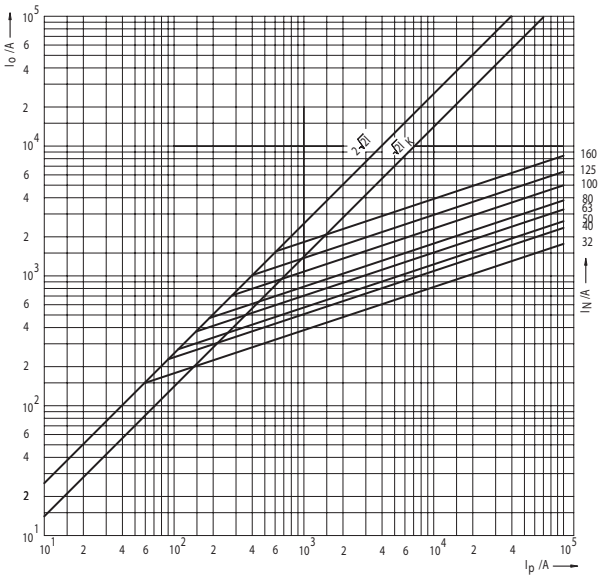
* Un = 500V

aR	RATED VOLTAGE ~1000V		

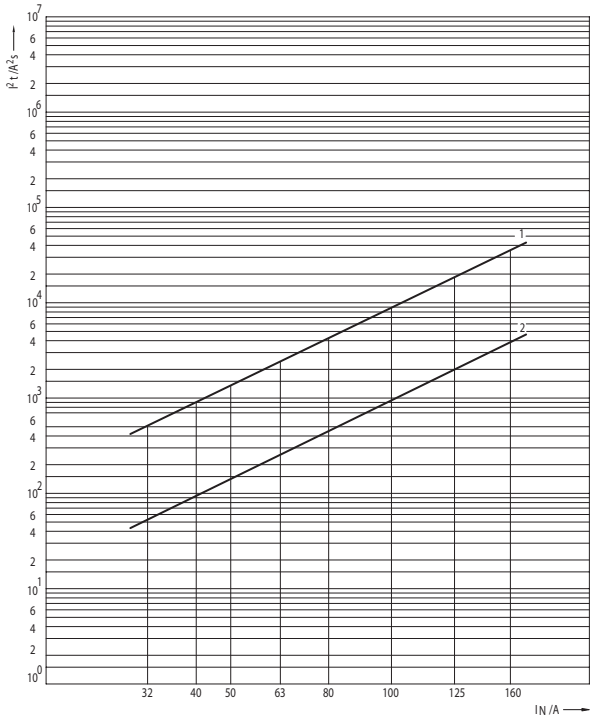
Time/current characteristics of fuse-links Ultra Quick M, S - size 0



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



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

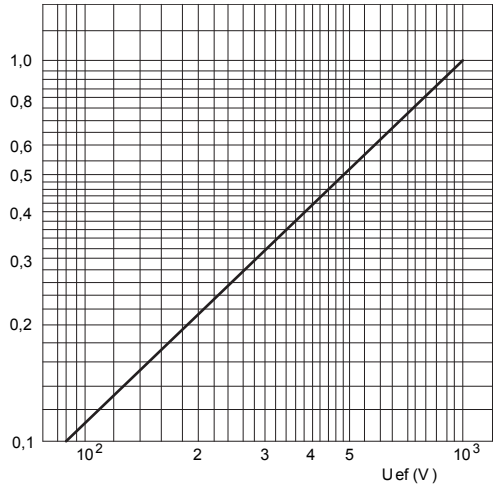


1 - Operating I^2t value at 1000V
2 - Pre-arcing I^2t value

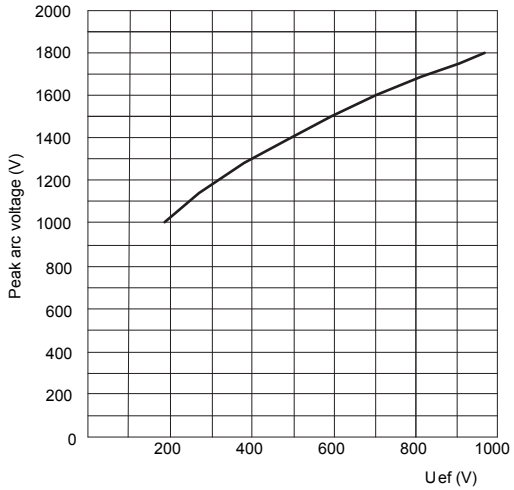
ULTRA QUICK

aR | RATED VOLTAGE ~1000V

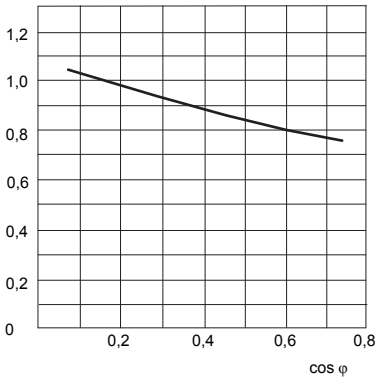
Conversion factor for total Joule integral Size 0



Maximum arc voltage accuring



Correction factor for performance factor cosφ≠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

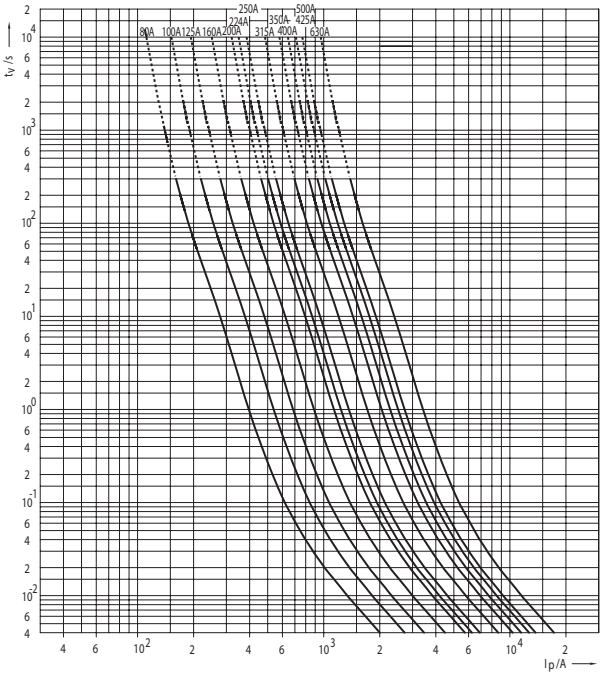
Power dissipation, pre-arcing Joule Integral and Operating Joule Integral for Ultra Quick

Size	I_N	Power dissipation	Pre-arcing Joule integral I²t (1ms)	Operating Joule Integral I²t ~230V	Operating Joule Integral I²t ~400V	Operating Joule Integral I²t ~500V	Operating Joule Integral I²t ~690V	Operating Joule Integral I²t ~1000V
	A	W	A^2s	A^2s	A^2s	A^2s	A^2s	A^2s
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

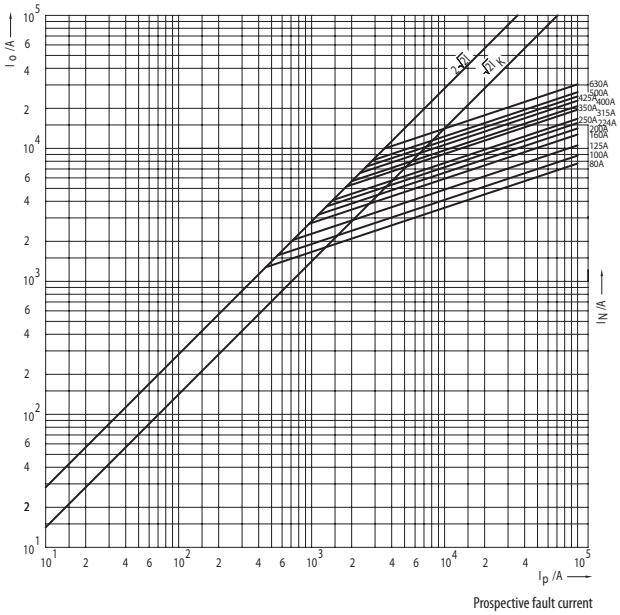
aR

RATED VOLTAGE
~1200V

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

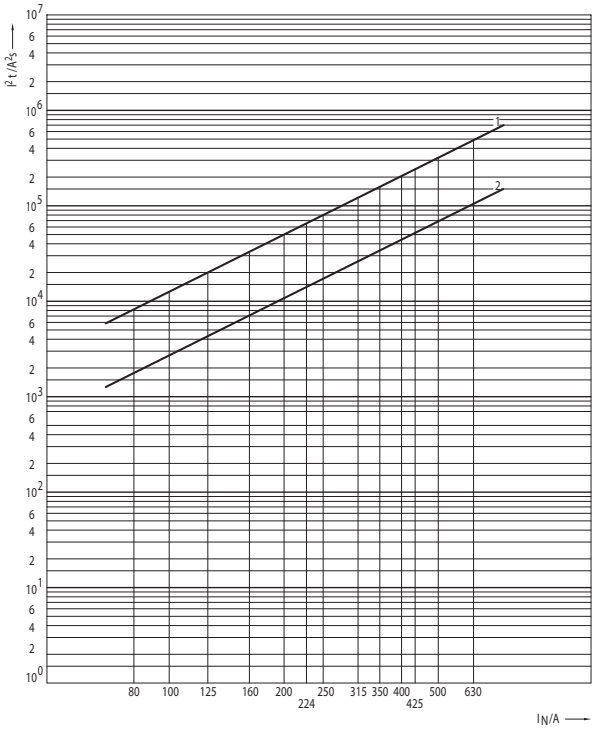


Cut-off characteristics of fuse-links Ultra Quick M - size 1, 2, 3



Prospective fault current

Joule Integral (I^2t) for Ultra Quick M - size 1, 2, 3

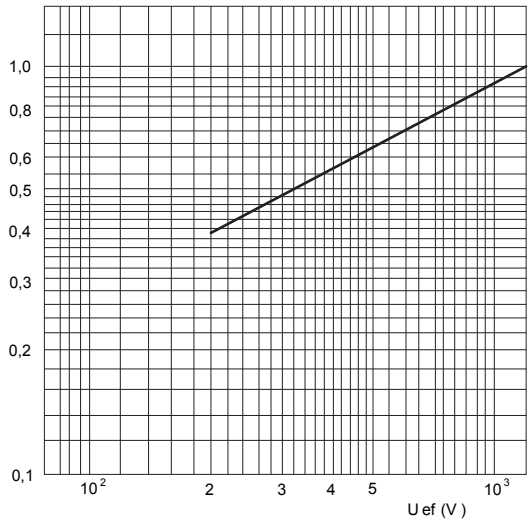


1 - Operating I^2t value at 1200V
2 - Pre-arcing I^2t value

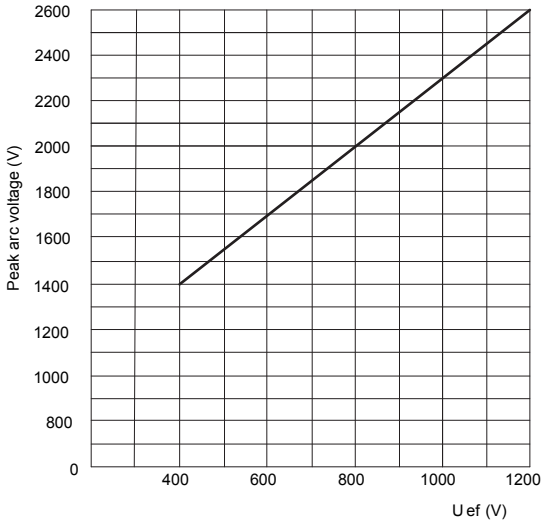
ULTRA QUICK

aR | RATED VOLTAGE ~1200V

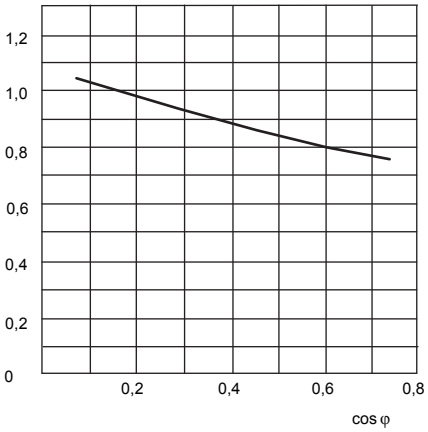
Conversion factor for total Joule integral



Maximum arc voltage accuring



Correction factor for performance factor cosφ≠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

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

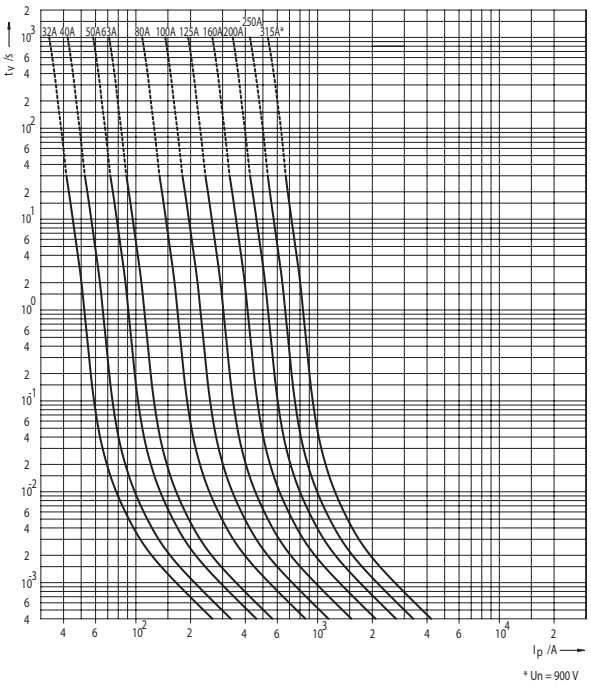
Size	I_N	Power dissipation	Pre-arcing Joule integral I²t (1ms)	Operating Joule Integral I²t ~230V	Operating Joule Integral I²t ~400V	Operating Joule Integral I²t ~500V	Operating Joule Integral I²t ~690V	Operating Joule Integral I²t ~1000V	Operating Joule Integral I²t ~1200V
	A	W	A²s	A²s	A²s	A²s	A²s	A²s	A²s
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

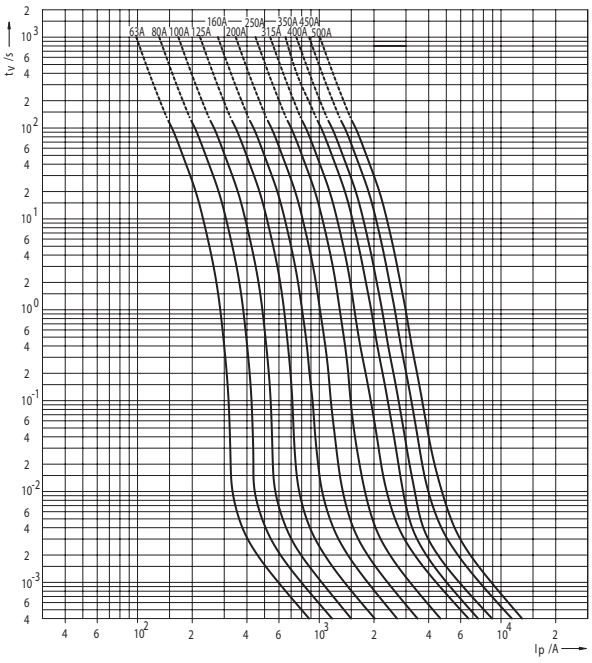
RATED VOLTAGE
~1000V

ULTRA QUICK

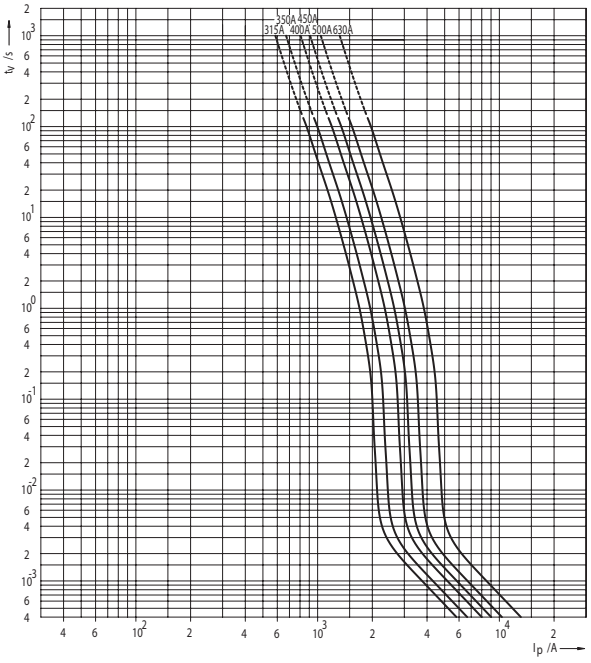
Time/current characteristics of fuse-links Ultra Quick S - size 00



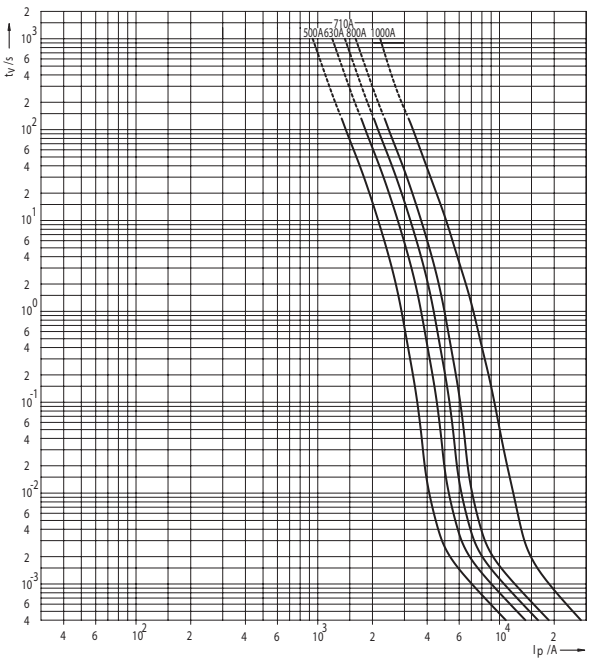
Time/current characteristics of fuse-links Ultra Quick M, S, G - size 1



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



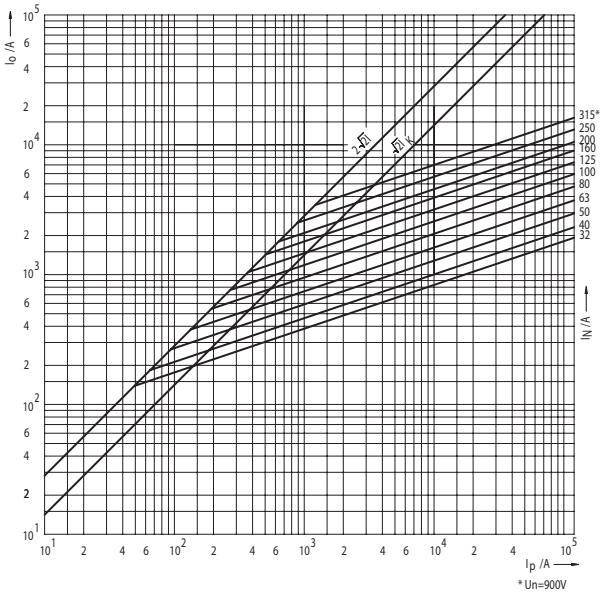
Time/current characteristics of fuse-links Ultra Quick M, S, G - size 3



aR

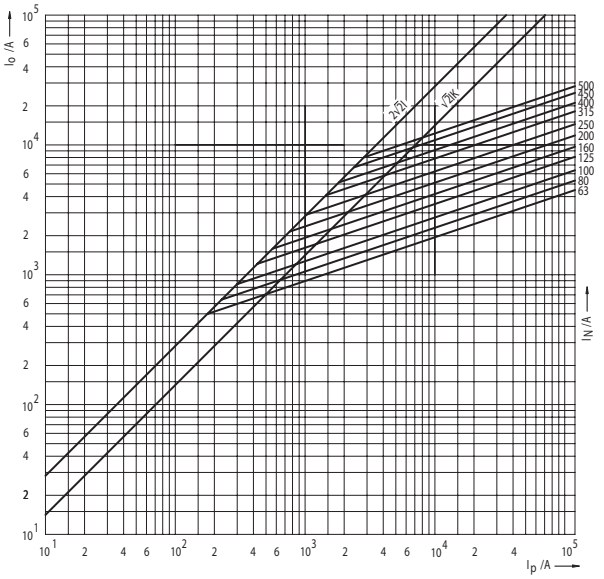
RATED VOLTAGE
~1000V

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



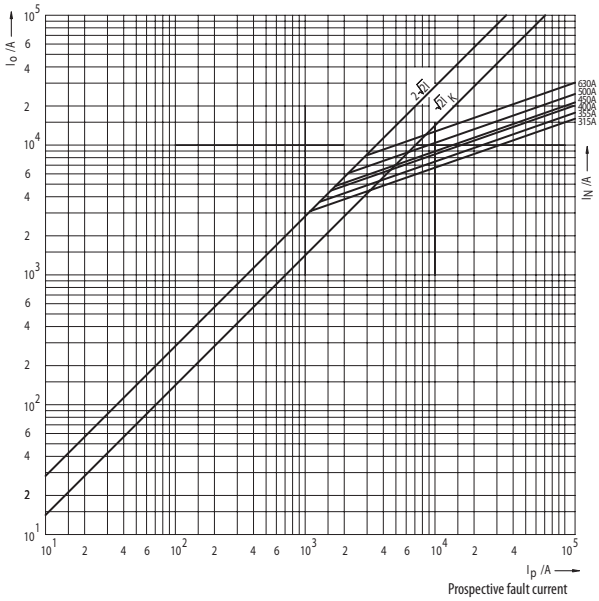
Prospective fault current

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



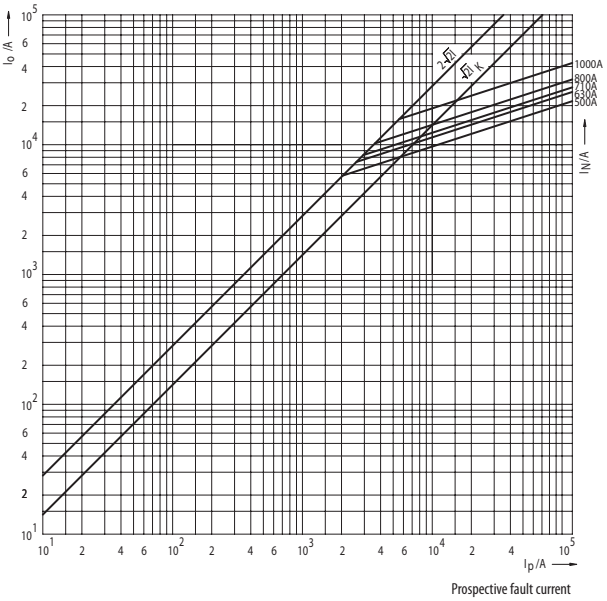
Prospective fault current

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



Prospective fault current

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

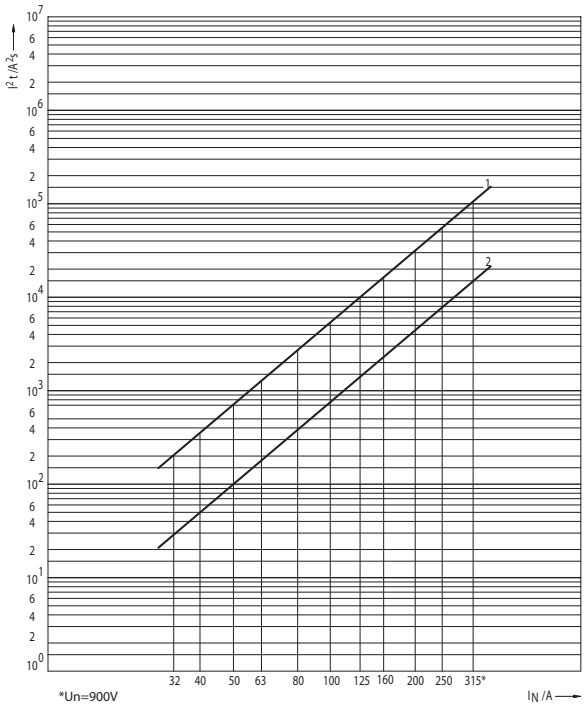


Prospective fault current

aR

RATED VOLTAGE
~1000V

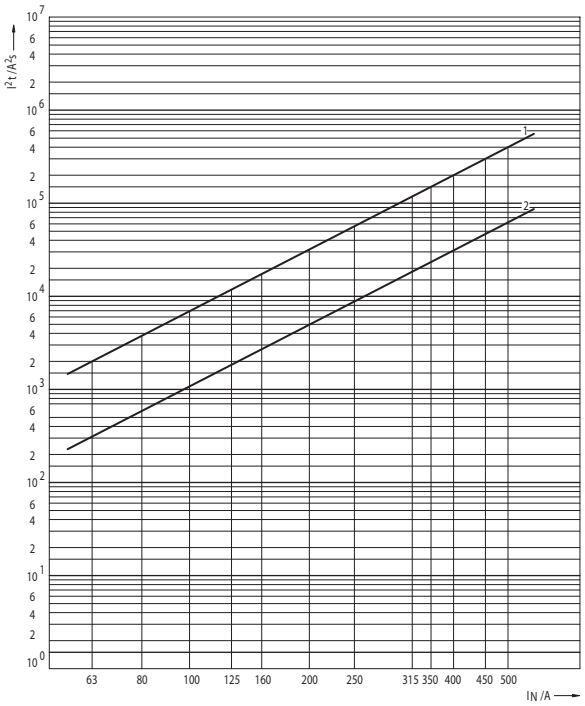
Joule Integral (I^2t) for Ultra Quick S - size 00



*Un=900V

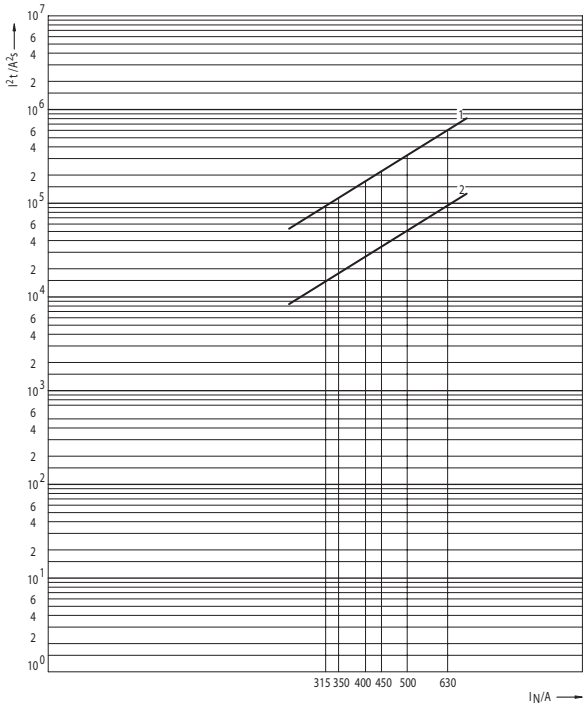
1 - Operating I^2t value at 1000V
2 - Pre-arcing I^2t value

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



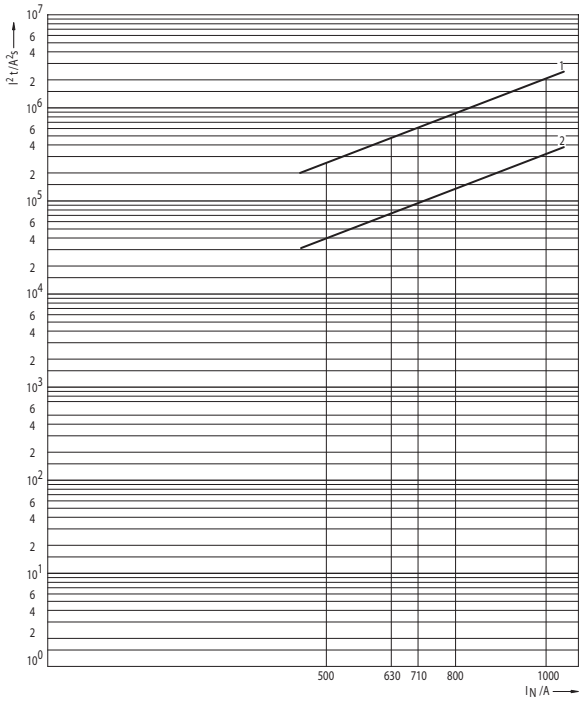
1 - Operating I^2t value at 1000V
2 - Pre-arcing I^2t value

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



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

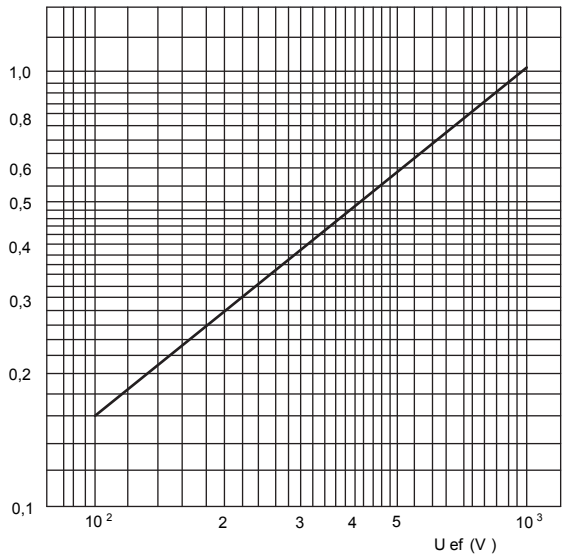
Joule Integral (I^2t) for Ultra Quick M, S, G - size 3



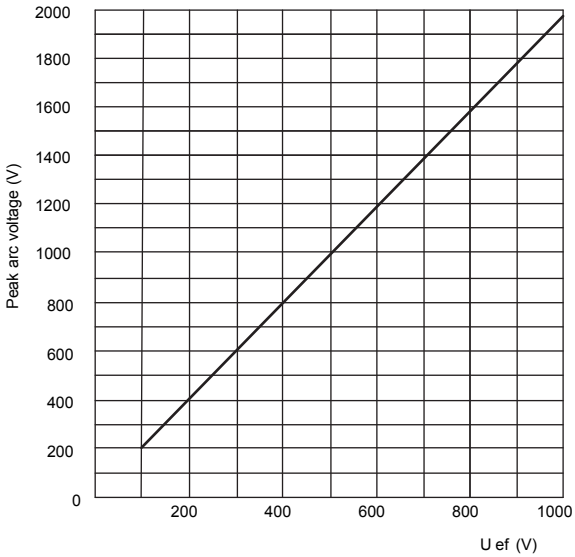
1 - Operating I^2t value at 1000V
2 - Pre-arcing I^2t value

aR	RATED VOLTAGE ~1000V		

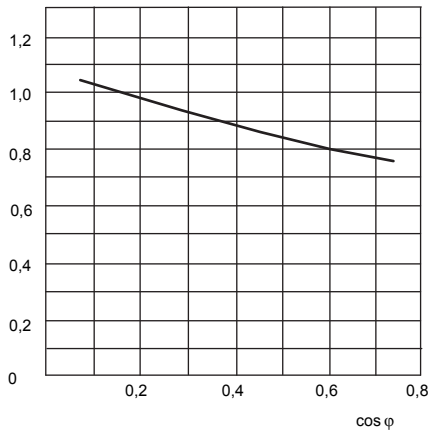
Conversion factor for total Joule integral



Maximum arc voltage accuring



Correction factor for performance factor cosφ≠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
~1000V

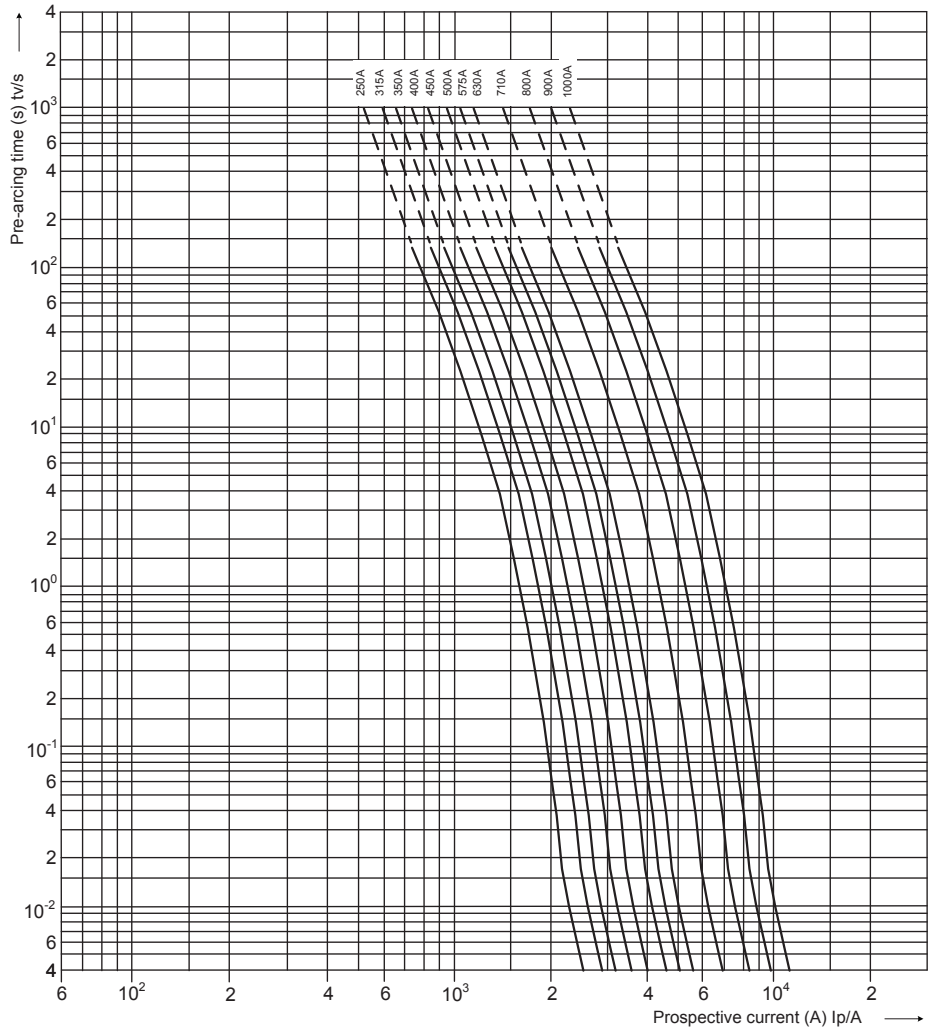
Power dissipation, pre-arcing Joule Integral and Operating Joule Integral for Ultra Quick

Size	I_N	Power dissipation	Pre-arcing Joule integral I^2t (1ms)	Operating Joule Integral I^2t ~230V	Operating Joule Integral I^2t ~400V	Operating Joule Integral I^2t ~500V	Operating Joule Integral I^2t ~690V	Operating Joule Integral I^2t ~1000V
	A	W	A^2s	A^2s	A^2s	A^2s	A^2s	A^2s
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
M1, 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
M2, 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
	630	108	100.000	189.000	294.000	348.000	450.000	600.000
M3, S3, G3	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

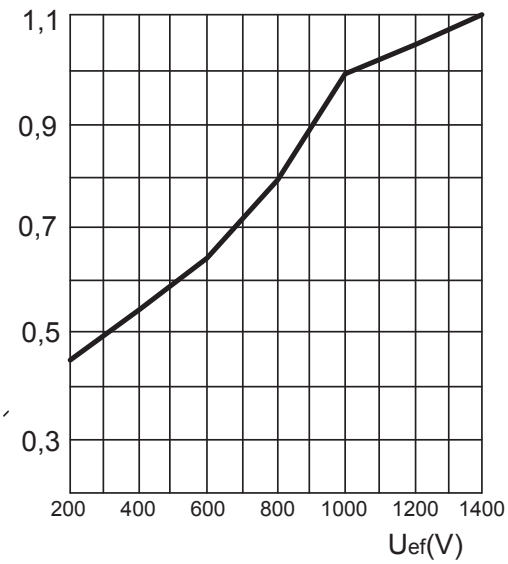
* Un = 900V

aR	RATED VOLTAGE ~1250V		

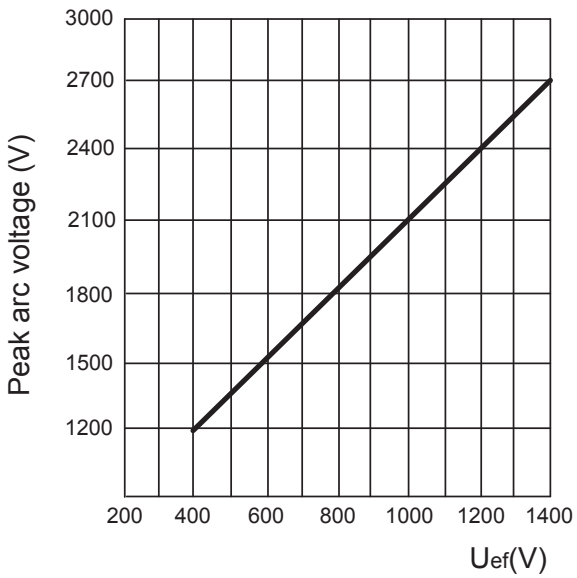
Time-current characteristics



Conversion factor for total Joule integral

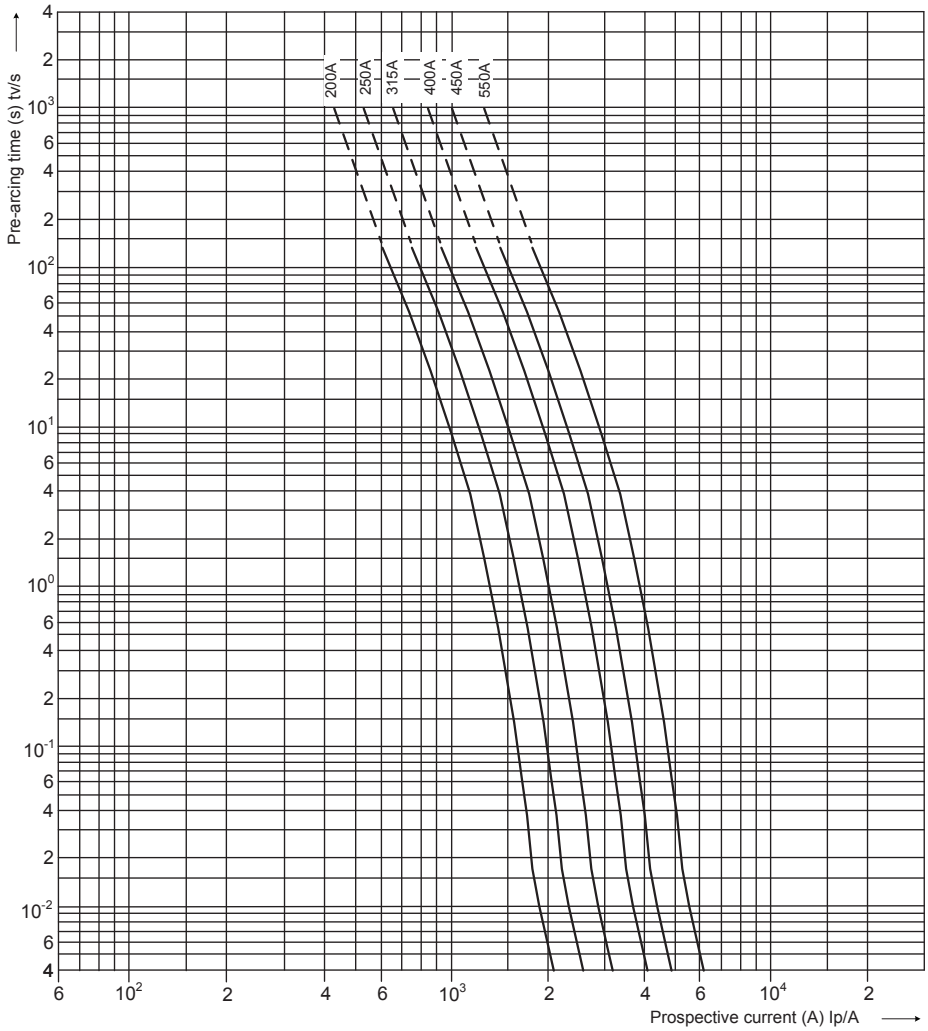


Maximum arc voltage accuring

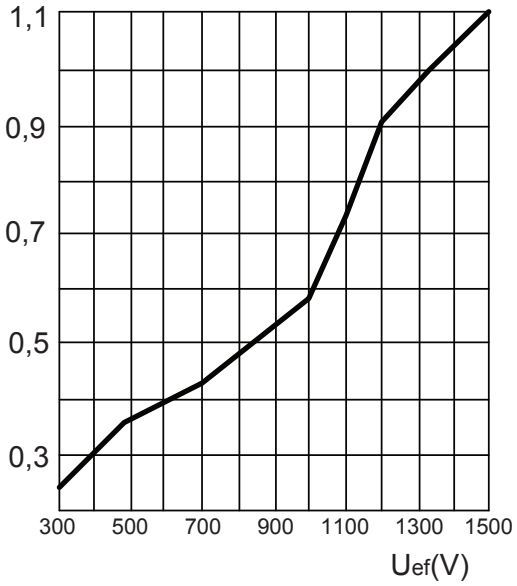


aR	RATED VOLTAGE ~1500V		

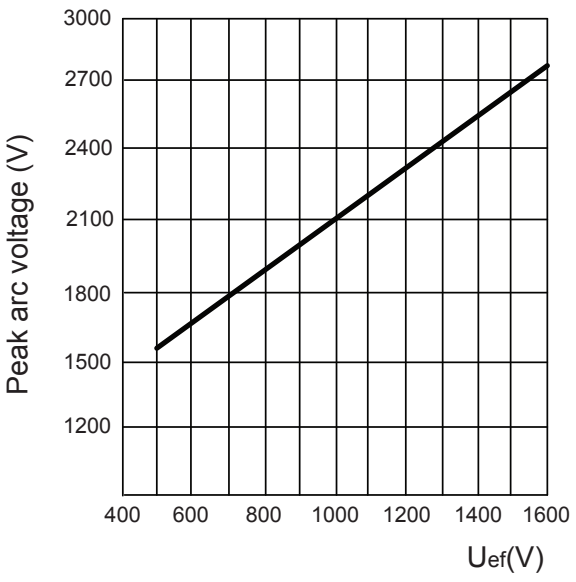
Time-current characteristics



Conversion factor for total Joule integral

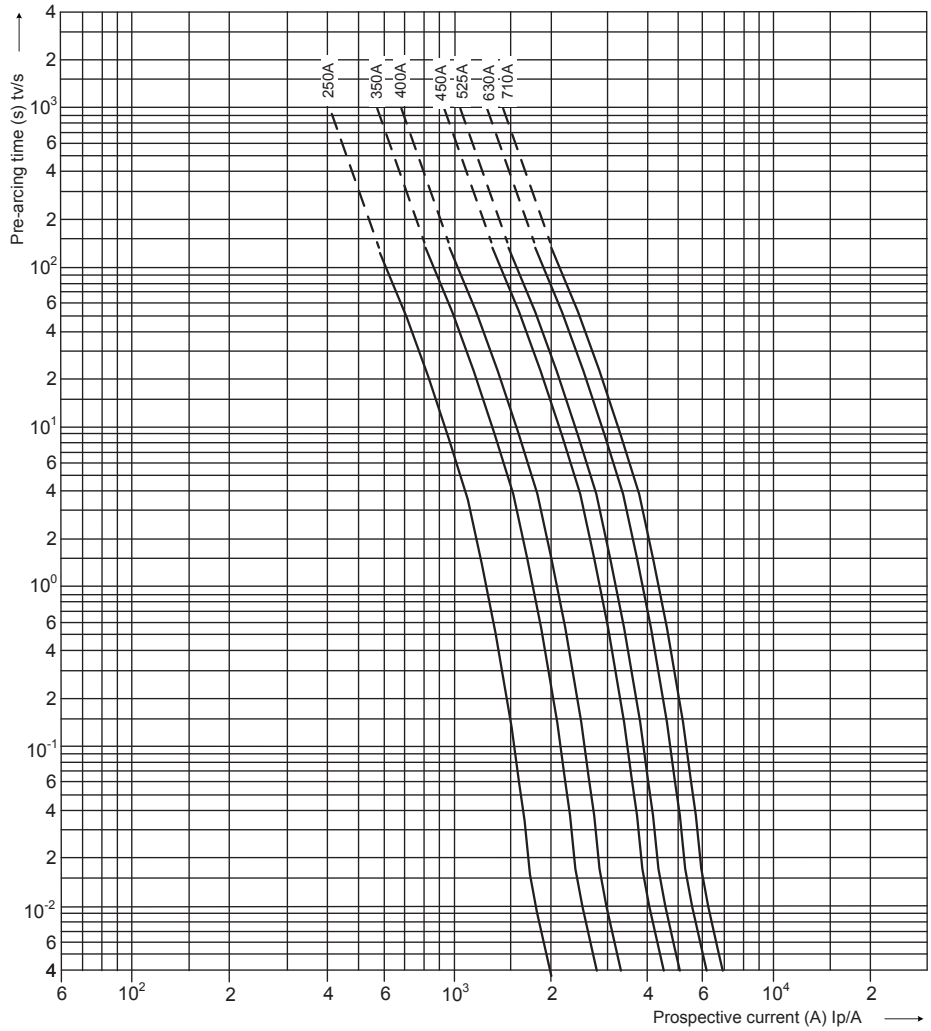


Maximum arc voltage accuring

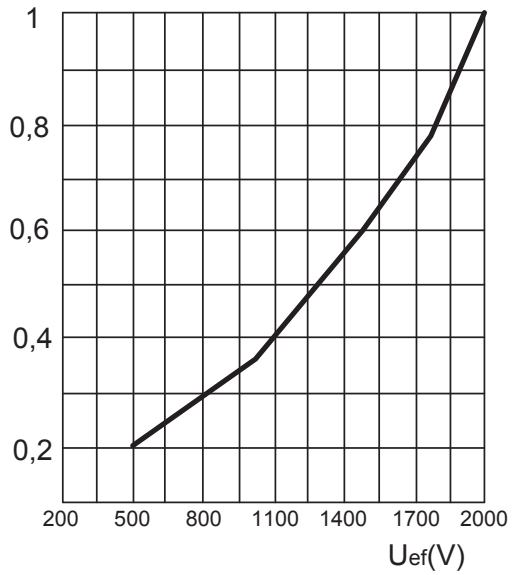


aR	RATED VOLTAGE ~2000V		

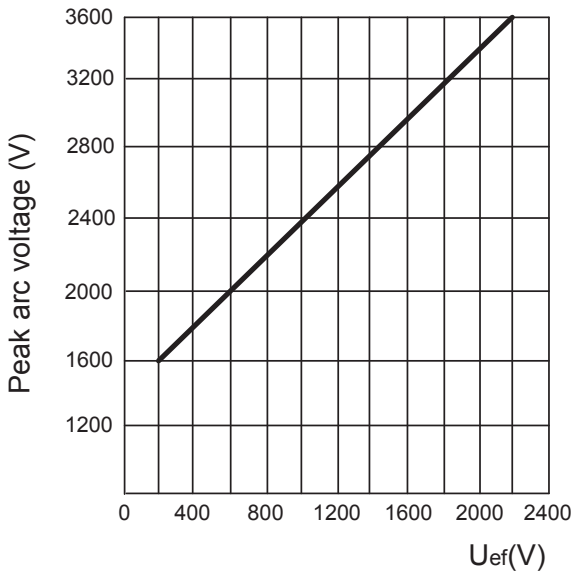
Time-current characteristics



Conversion factor for total Joule integral



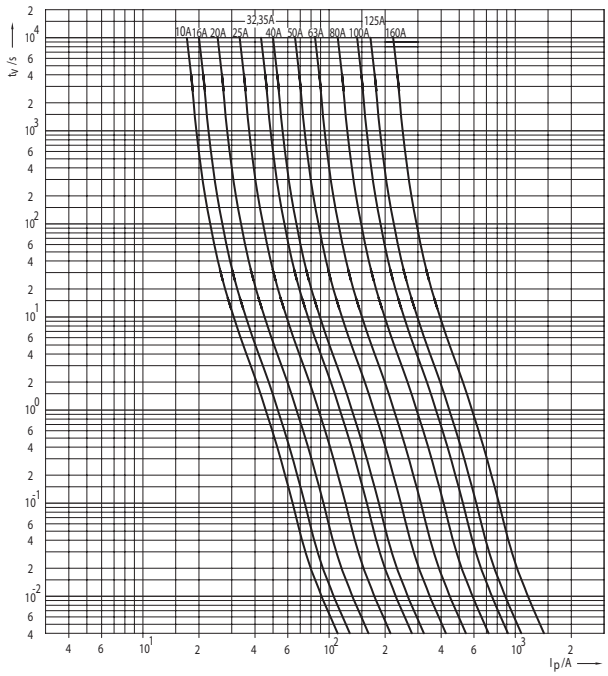
Maximum arc voltage accuring



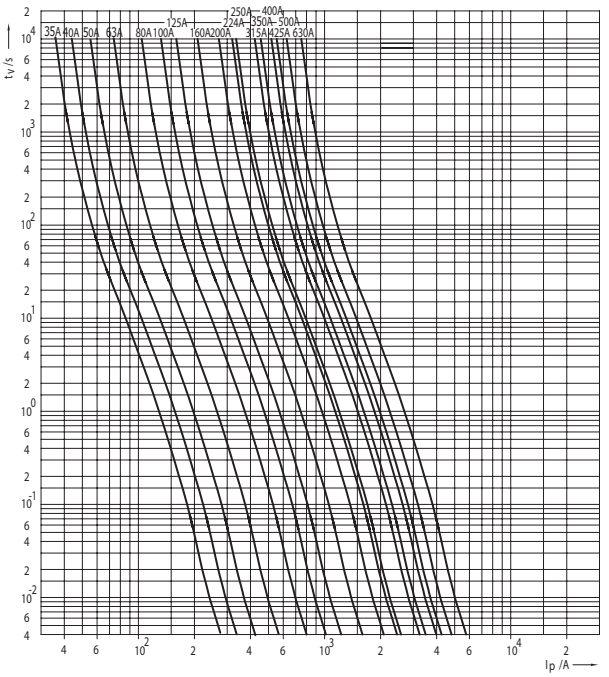
gR

RATED VOLTAGE
~690V

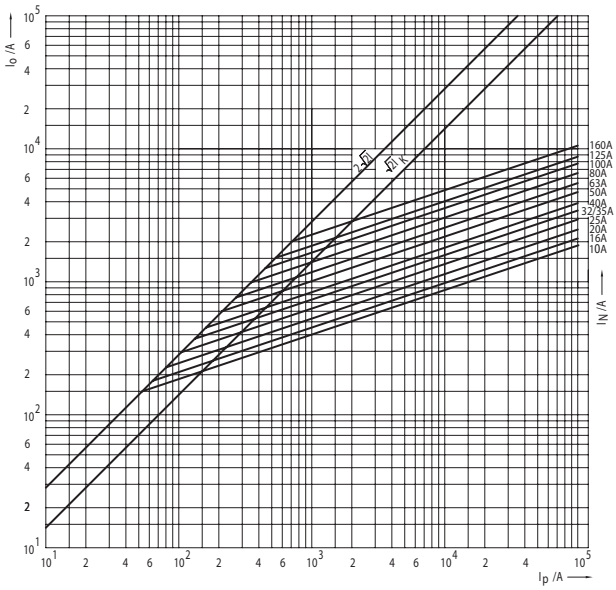
Time/current characteristics of fuse-links Ultra Quick M, S - size 00C



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

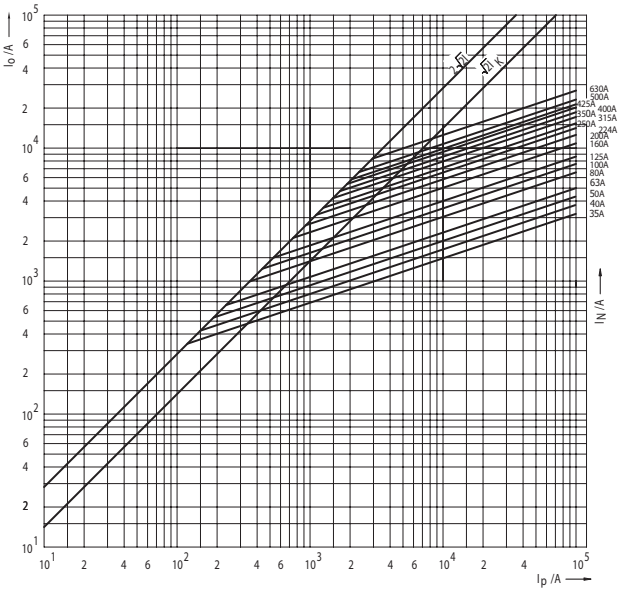


Cut-off characteristics of fuse-links Ultra Quick M, S - size 00C



Prospective fault current

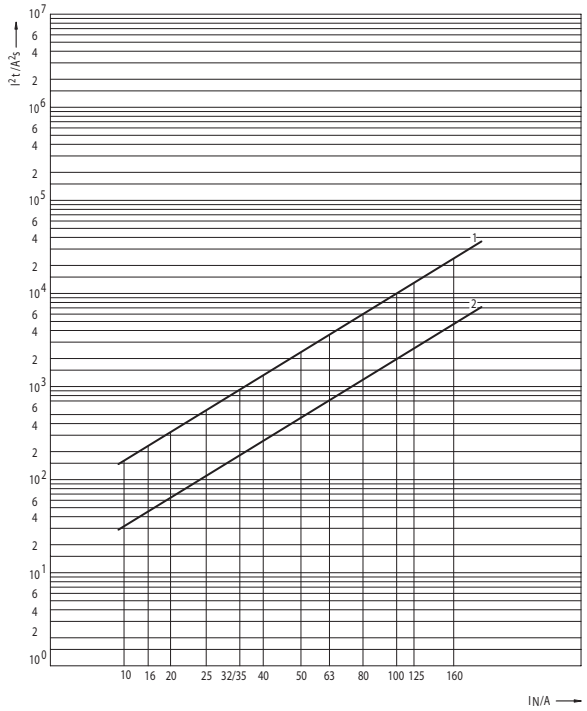
Cut-off characteristics of fuse-links Ultra Quick M, S, G - size 1, 2, 3



Prospective fault current

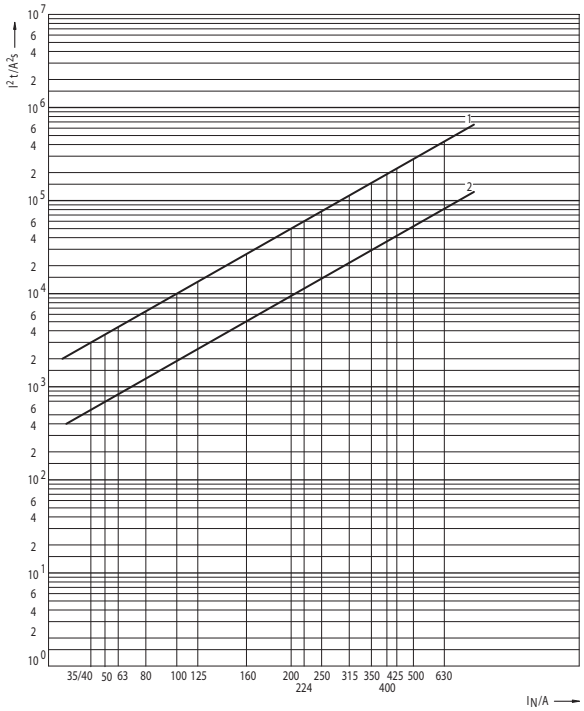
gR	RATED VOLTAGE ~690V		

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



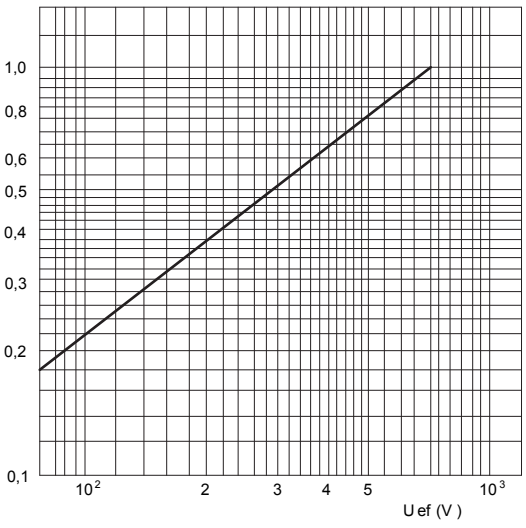
1 - Operating I^2t value at 690V
2 - Pre-arcing I^2t value

Joule Integral (I^2t) for Ultra Quick M, S, G - size 1, 2, 3

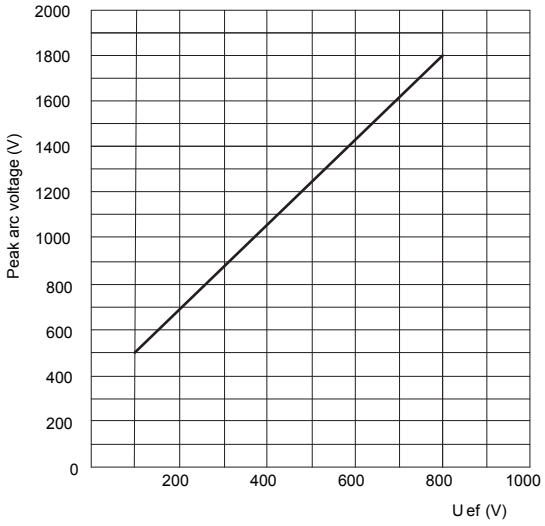


1 - Operating I^2t value at 690V
2 - Pre-arcing I^2t value

Conversion factor for total Joule integral



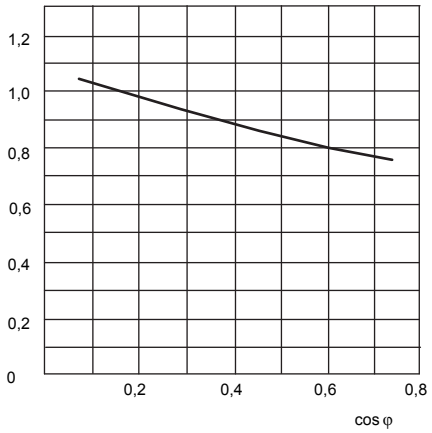
Maximum arc voltage accuring



gR

RATED VOLTAGE
~690V

Correction factor for performance factor cosφ≠0,15 for operating I²t values



Correction factor for converting the power dissipation for percentage load

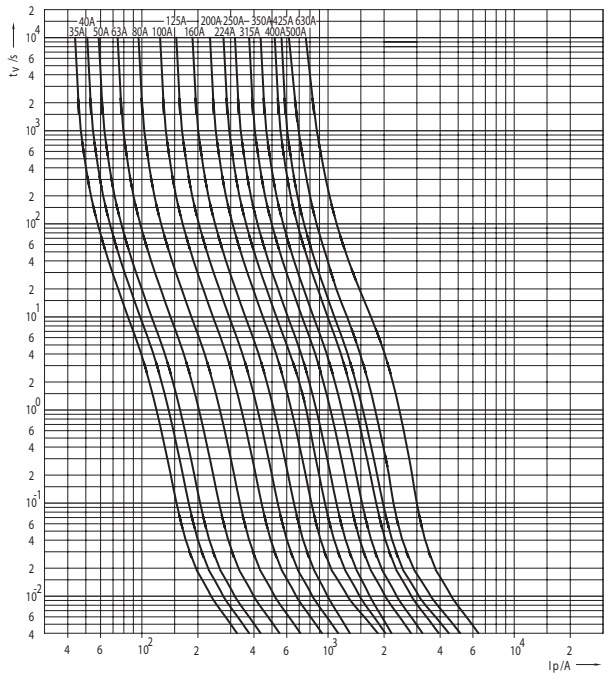
Load(%)	Correction factor
10	0,005
20	0,025
30	0,063
40	0.122
50	0,204
60	0,31
70	0,442
80	0,6
90	0,785
100	1

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

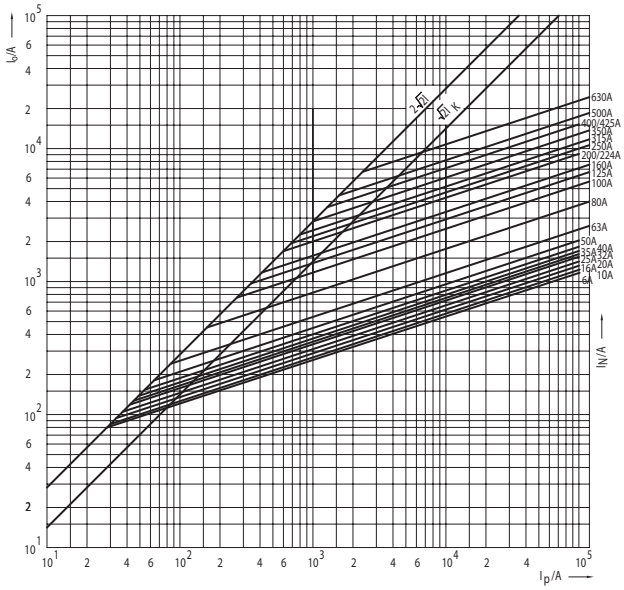
Size	I_N	Power dissipation	Pre-arcing Joule integral I²t (1ms)	Operating Joule Integral I²t ~230V	Operating Joule Integral I²t ~400V	Operating Joule Integral I²t ~500V	Operating Joule Integral I²t ~690V
	A	W	A²s	A²s	A²s	A²s	A²s
M00C, S00C	10	6,50	20	43	63	80	100
	16	7,93	42	95	139	176	220
	20	9,52	63	138	202	256	320
	25	11,8	110	258	378	480	600
	32	12,5	180	396	580	736	920
	35	13,1	180	396	580	736	920
	40	14,1	250	602	882	1.120	1.400
	50	15,6	449	968	1.418	1.800	2.250
	63	17,8	700	1.548	2.268	2.880	3.600
	80	20,6	1.100	2.666	3.906	4.960	6.200
	100	23,7	2.000	4.300	6.300	8.000	10.000
	125	30,0	2.500	5.590	8.190	10.400	13.000
	160	35,9	4.400	9.890	14.490	18.400	23.000
M1, S1, G1 M2, S2, G2 M3, S3, G3	80	9,52	1.200	2.709	3.969	5.040	6.300
	100	12,7	1.650	4.300	6.300	8.000	10.000
	125	17,6	2.200	5.590	8.190	10.400	13.000
	160	23,8	4.300	9.890	14.490	18.400	23.000
	200	31,5	8.500	20.210	29.610	37.600	47.000
	224	36,8	10.000	25.800	37.800	48.000	60.000
	250	42,7	15.000	30.100	44.100	56.000	70.000
	315	57	20.000	47.300	69.300	88.000	110.000
	350	67	28.000	64.500	94.500	120.000	150.000
	400	76	32.000	73.100	107.100	136.000	170.000
	425	84	40.000	86.000	126.000	160.000	200.000
	500	102	44.000	103.200	151.200	192.000	240.000
	630	138	80.000	172.000	252.000	320.000	400.000

gR	RATED VOLTAGE ~500V		

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

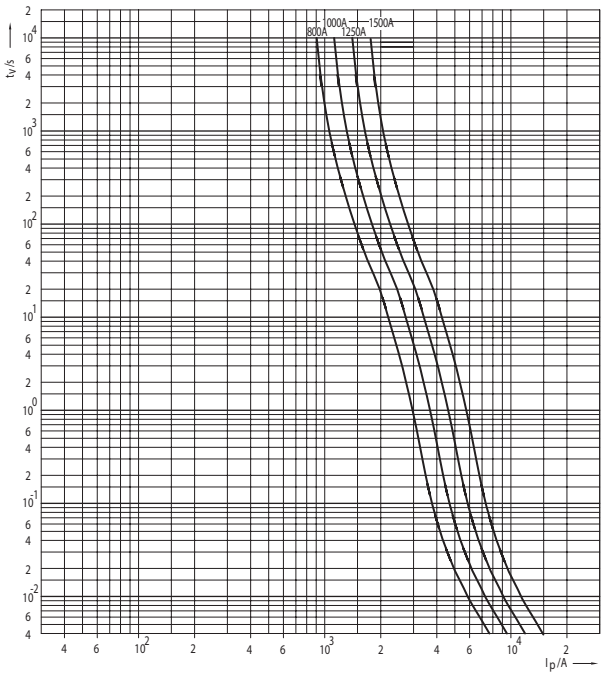


Cut-off characteristics of fuse-links Ultra Quick G - size 1, 2, 3

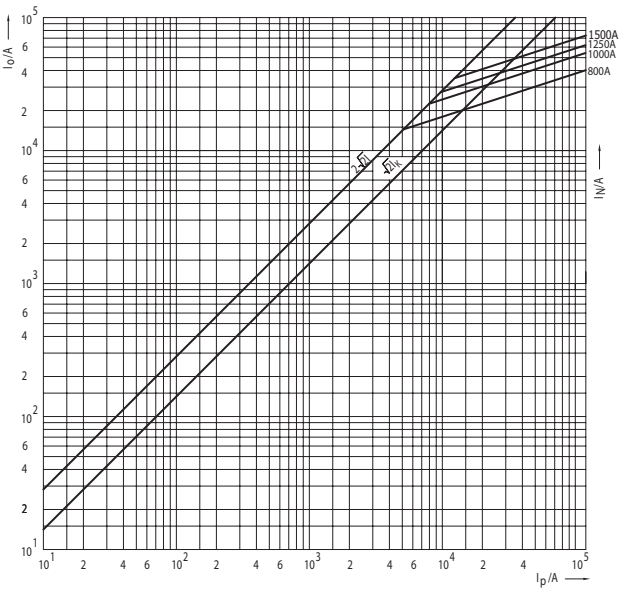


gR	RATED VOLTAGE ~500V		

Time/current characteristics of fuse-links Ultra Quick M, S - size 4 and 4a

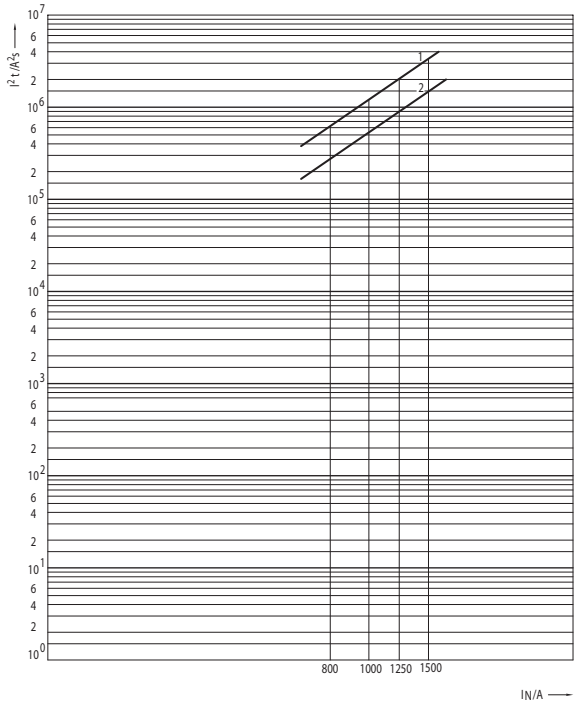


Cut-off characteristics of fuse-links Ultra Quick M, S - size 4 and 4a



Prospective fault current

Joule Integral (I^2t) for Ultra Quick M, S - size 4 and 4a



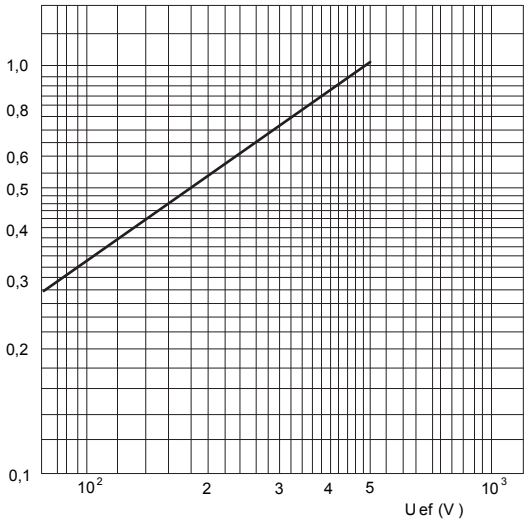
1 - Operating I^2t value at 500V
2 - Pre-arcing I^2t value

CHARACTERISTICS

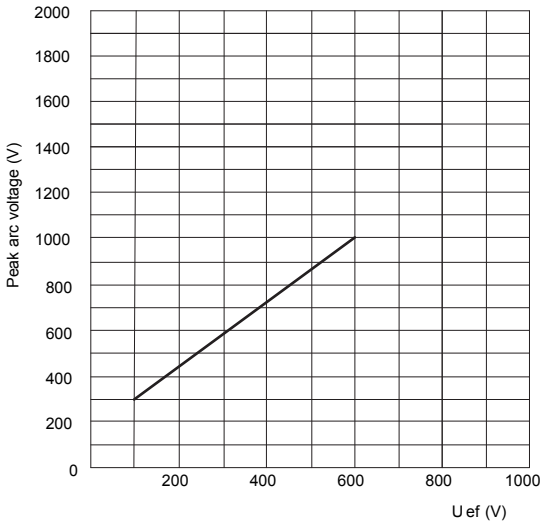
gR

RATED VOLTAGE
~500V

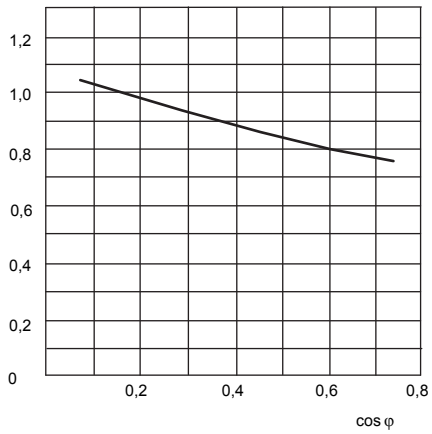
Conversion factor for total Joule integral



Maximum arc voltage accuring



Correction factor for performance factor cosφ≠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

gR

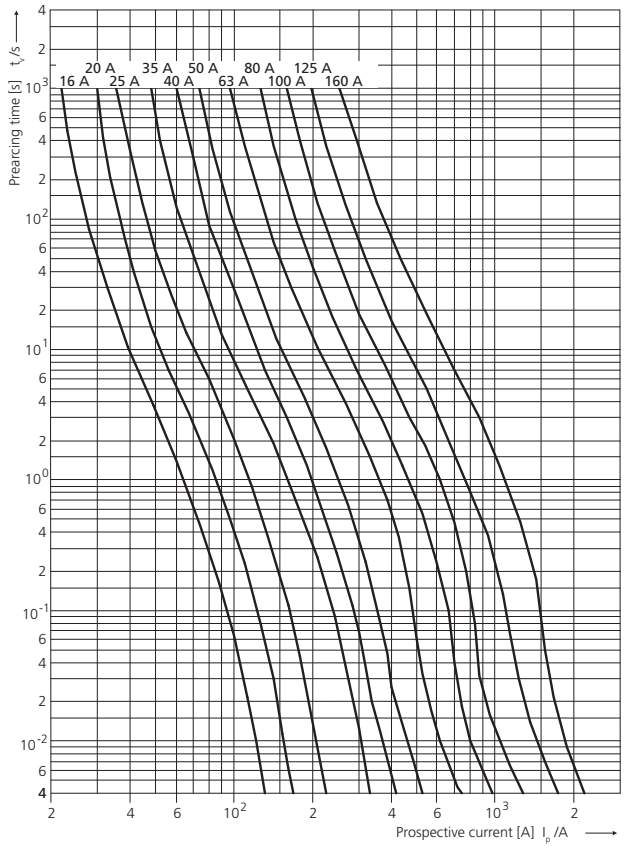
RATED VOLTAGE
~500V

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

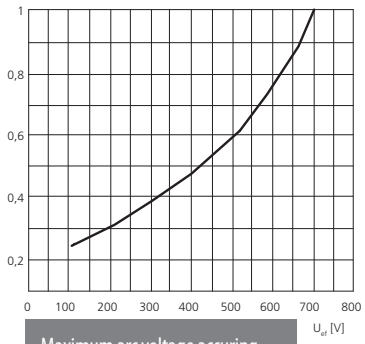
Size	I_N	Power dissipation	Pre-arcing Joule integral I^2t (1ms)	Operating Joule Integral I^2t ~230V	Operating Joule Integral I^2t ~400V	Operating Joule Integral I^2t ~500V
	A	W	A^2s	A^2s	A^2s	A^2s
G1, G2, G3, M4a, S4	35	15,0	160	369	536	670
	40	16,2	250	550	800	1.000
	50	17,5	400	825	1.200	1.500
	63	20,0	600	1.210	1.760	2.200
	80	23,1	900	1.815	2.640	3.300
	100	26,4	1.500	3.960	5.760	7.200
	125	34,0	2.500	5.500	8.000	10.000
	160	40,1	6.000	11.550	16.800	21.000
	200	43,8	7.900	16.500	24.000	30.000
	224	48,5	10.000	22.550	32.800	41.000
	250	53	12.500	28.600	41.600	52.000
	315	63	20.000	45.100	65.600	82.000
	350	66	26.000	60.500	88.000	110.000
	425	70	40.000	88.000	128.000	200.000
	500	96	50.000	110.000	160.000	260.000
	630	135	66.000	143.000	208.000	340.000
	800	164	250.000	341.000	496.000	620.000
	1000	188	580.000	632.500	920.000	1.150.000
	1250	246	900.000	1.100.000	1.600.000	2.000.000
	1500	310	1.600.000	2.090.000	3.040.000	3.800.000

gS | RATED VOLTAGE ~690V

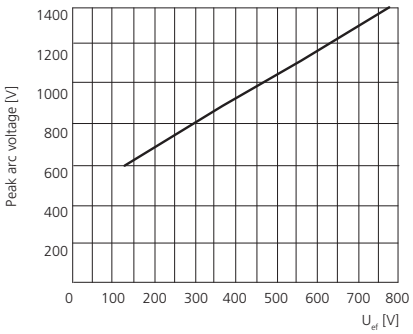
Time/current characteristics of fuse-links Ultra Quick M - size 00C, 00



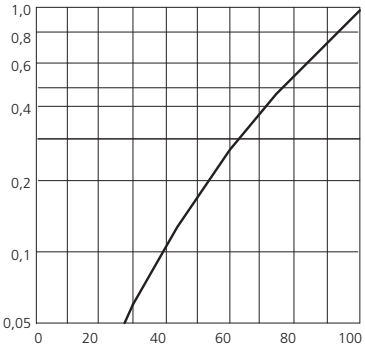
Conversion factor for total Joule integral



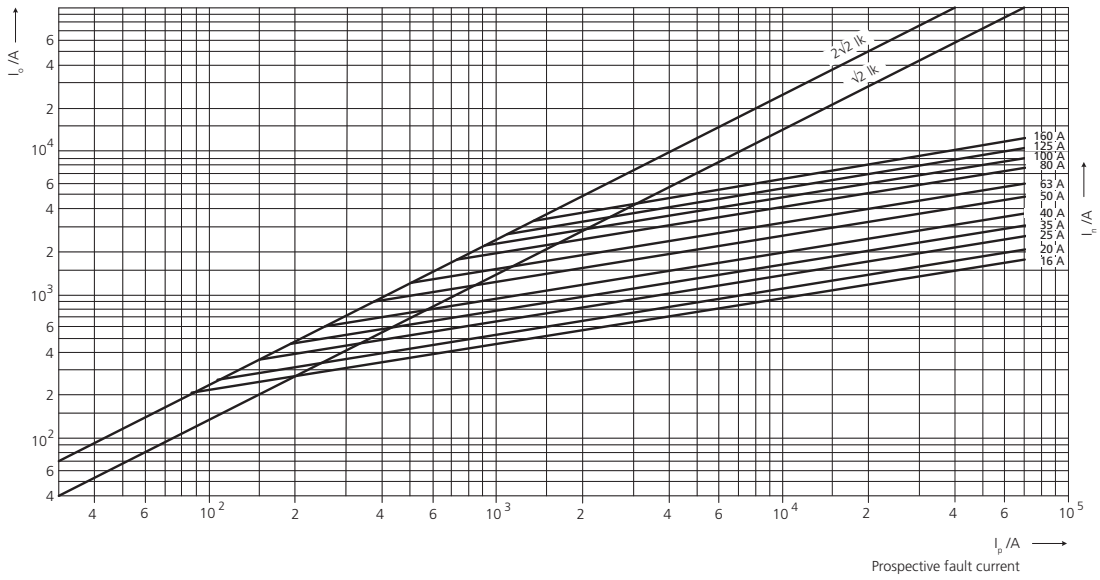
Maximum arc voltage accuring



Correction factor for converting the power diss. for percentage load



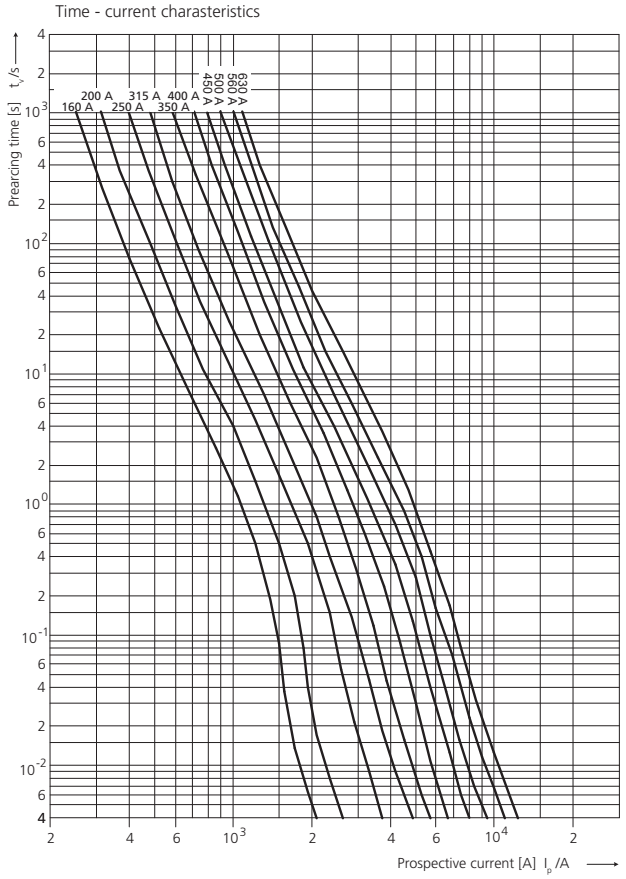
Cut-off characteristics of fuse-links Ultra Quick M - size 00C, 00



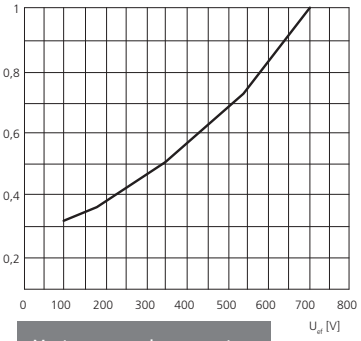
ULTRA QUICK

gS	RATED VOLTAGE ~690V		

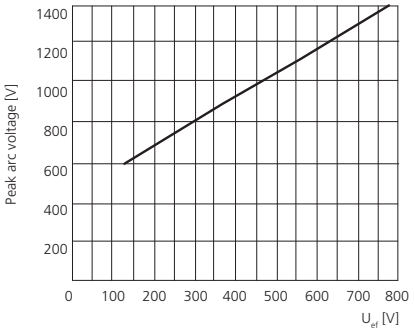
Time/current characteristics of fuse-links Ultra Quick M, S



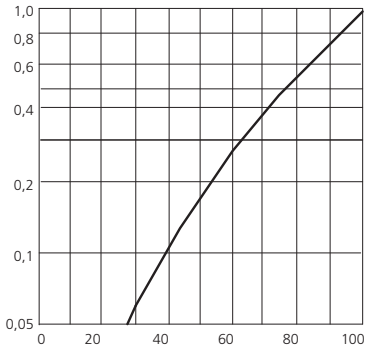
Conversion factor for total Joule integral



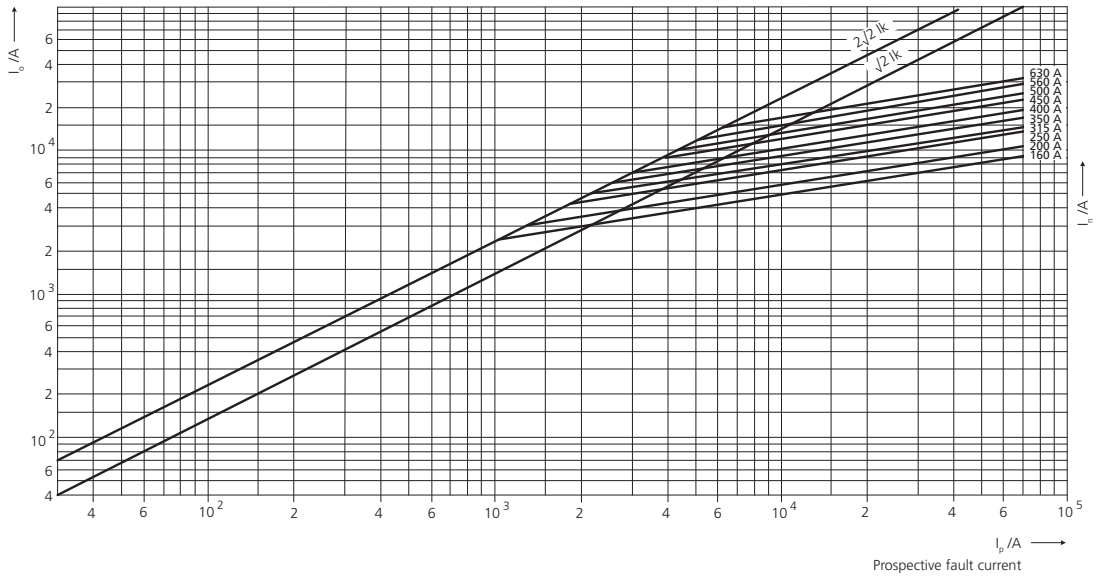
Maximum arc voltage accuring



Correction factor for converting the power diss. for percentage load



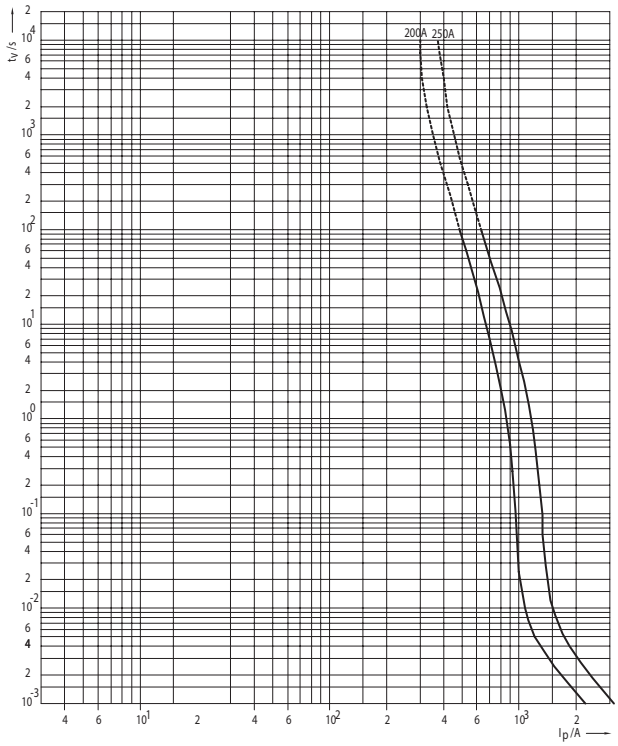
Cut-off characteristics of fuse-links Ultra Quick M, S - size 1, 2, 3



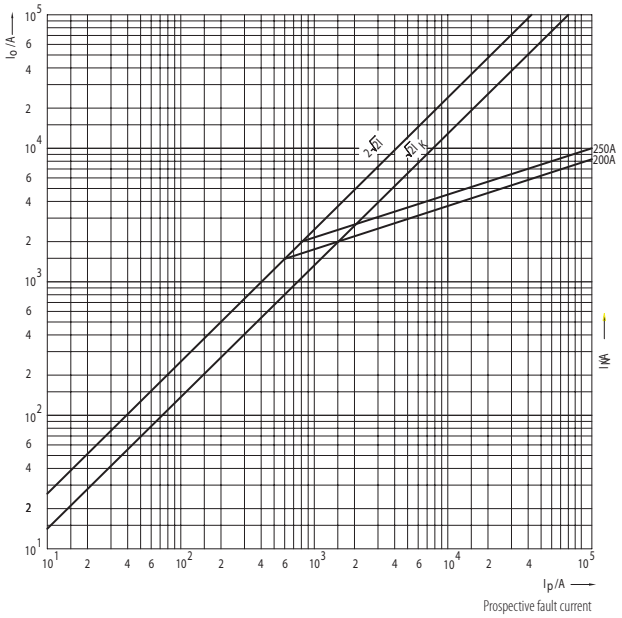
aR

RATED VOLTAGE
~690V

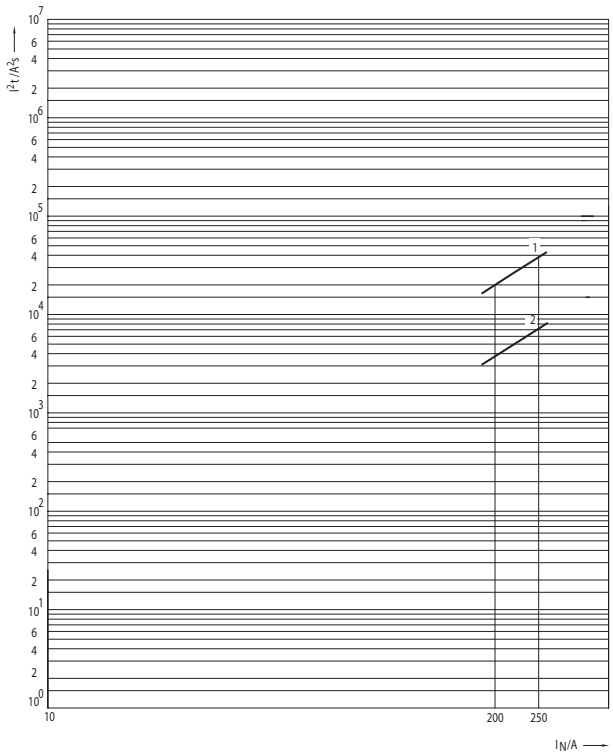
Time/current characteristics of fuse-links Ultra quick MUQ02 – size 00



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



Joule integral (I^2t) for Ultra Quick MUQ02 – size 00

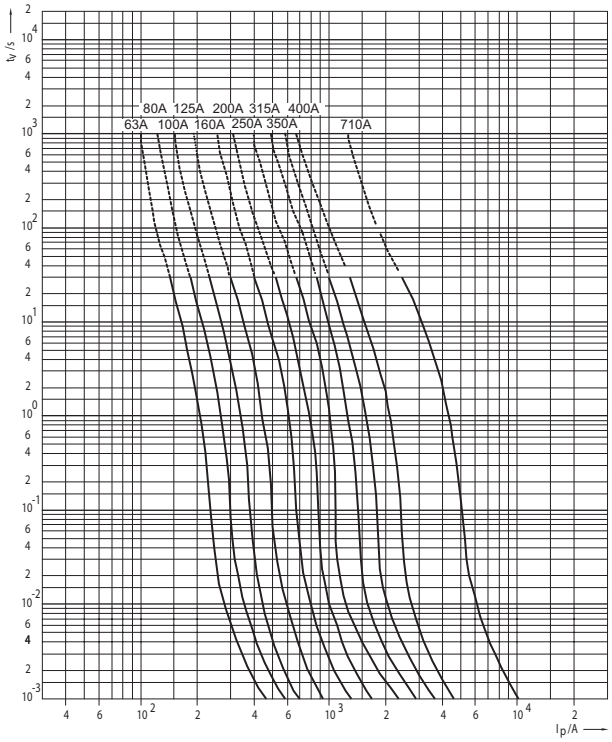


1 - Operating I^2t value at 690V
2 - Pre-arcing I^2t value

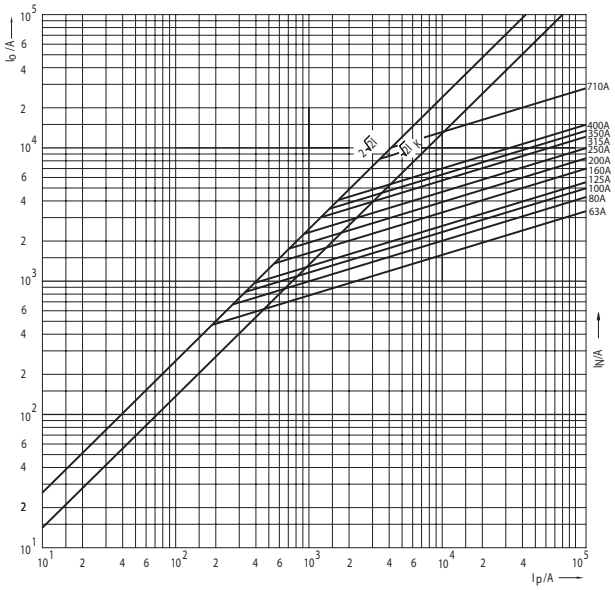
aR

RATED VOLTAGE
~690V

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

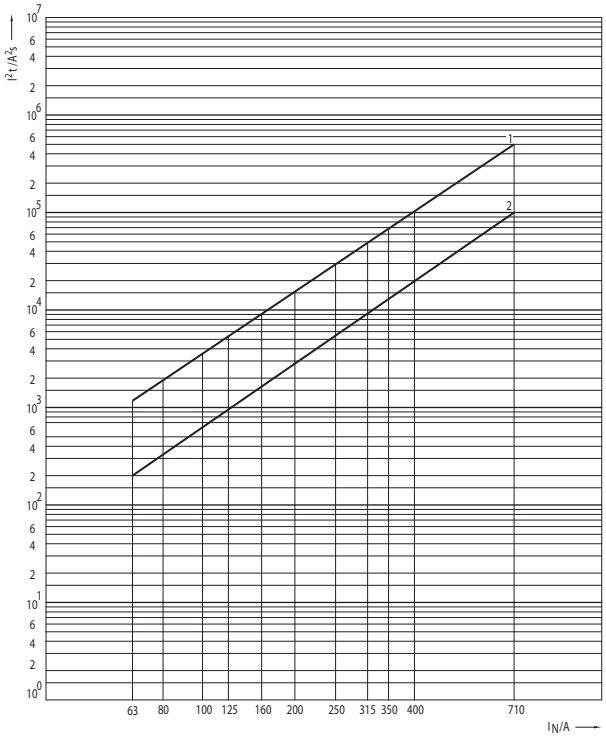


Cut-off characteristics of fuse – links Ultra Quick MUQ02, SUQ02, GUQ02 – size 1



Prospective fault current

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

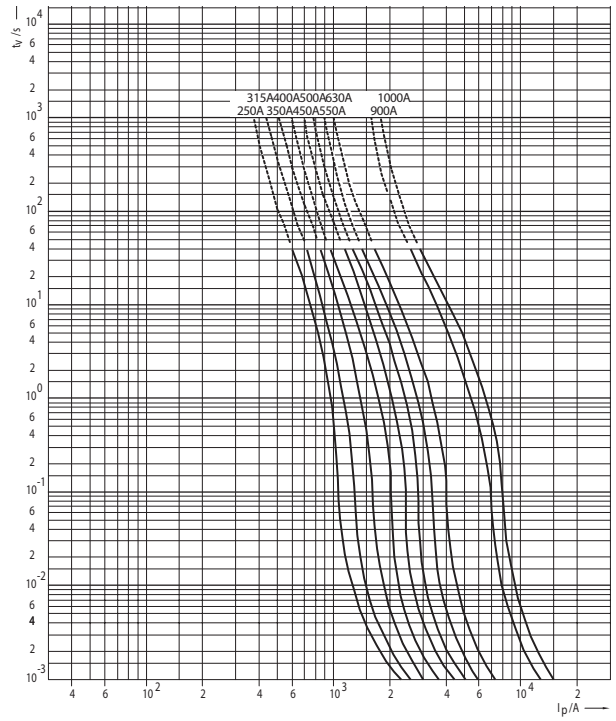


1 - Operating I^2t value at 690V
2 - Pre-arcing I^2t value

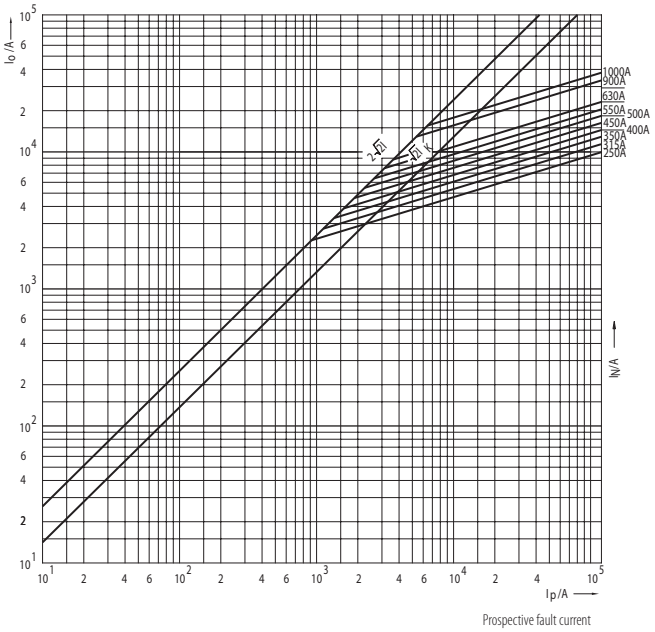
aR

RATED VOLTAGE
~690V

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

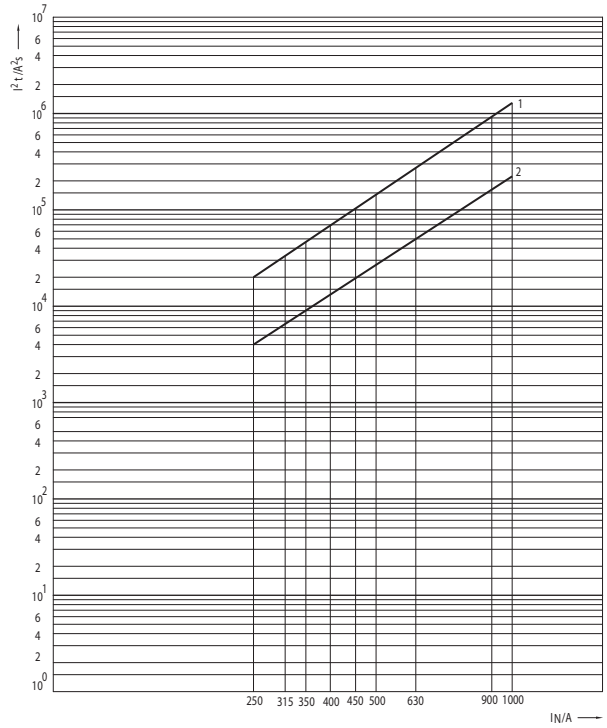


Cut-off characteristics of fuse – links Ultra Quick MUQ02, SUQ02, GUQ02 – size 2



Prospective fault current

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

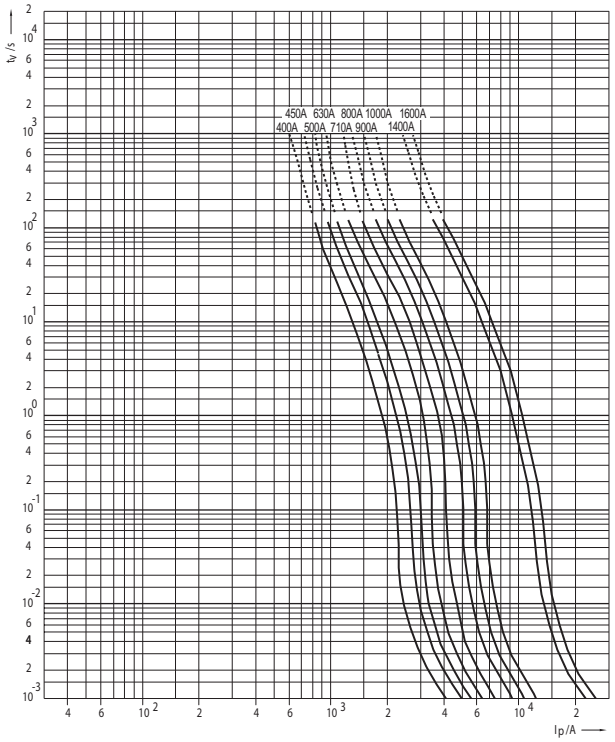


1 - Operating I^2t value at 690V
2 - Pre-arcing I^2t value

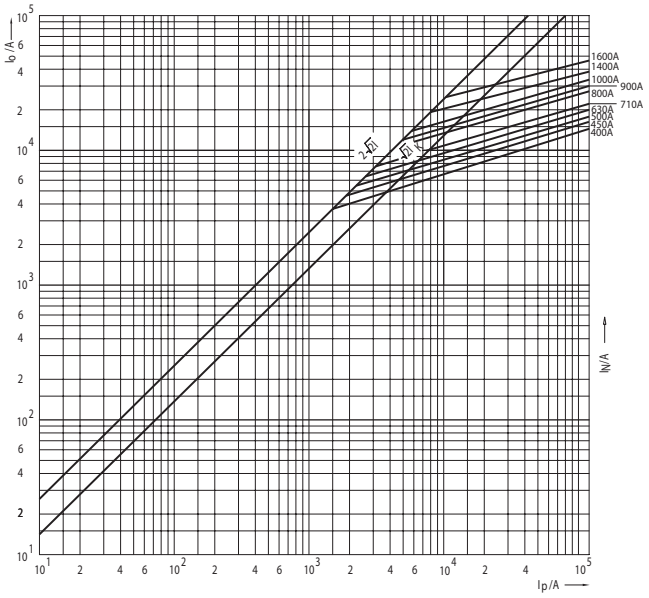
aR

RATED VOLTAGE
~690V

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

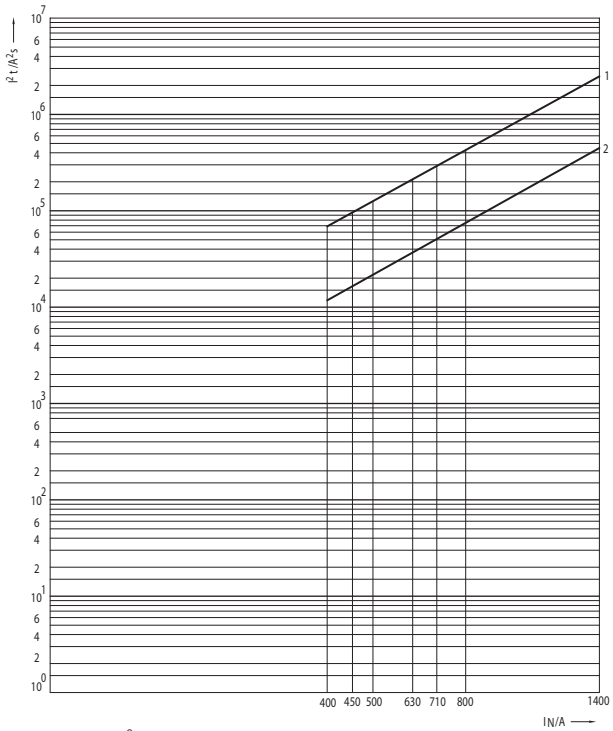


Cut-off characteristics of fuse – links Ultra Quick MUQ02, SUQ02, GUQ02 – size 3



Prospective fault current

Joule integral (I^2t) for Ultra Quick MUQ02, SUQ02, GUQ02 – size 3

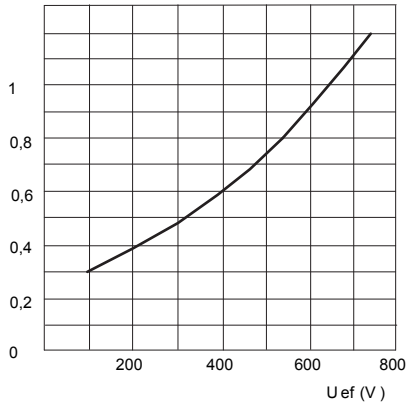


1 - Operating I^2t value at 690V
2 - Pre-arcing I^2t value

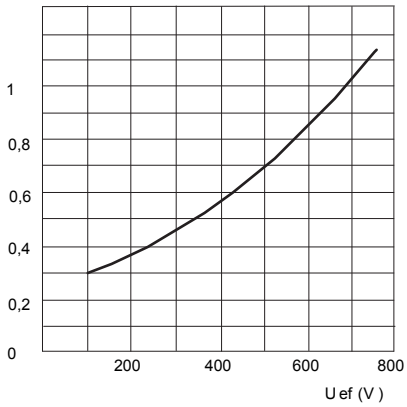
ULTRA QUICK

aR | RATED VOLTAGE ~690V

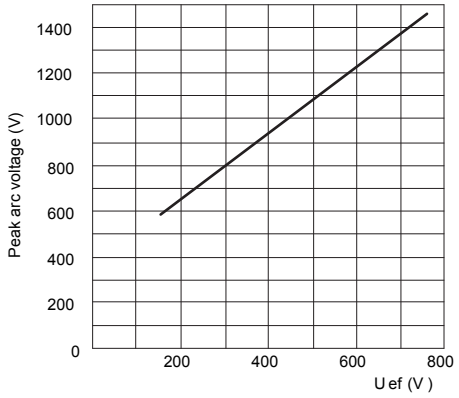
Conversion factor for total Joule integral size 00



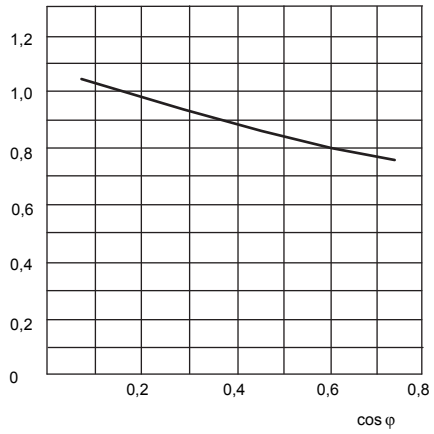
Conversion factor for total Joule integral size 1,2,3



Maximum arc voltage accuring



Correction factor for performance factor cosφ≠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	Power dissipation	Pre-arcing Joule integral I^2t (1ms)	Operating Joule Integral I^2t ~230V	Operating Joule Integral I^2t ~400V	Operating Joule Integral I^2t ~500V	Operating Joule Integral I^2t ~690V
	A	W	A^2s	A^2s	A^2s	A^2s	A^2s
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
	1000	124	235.000	386.880	749.580	967.200	1.300.000
M3	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

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Notes