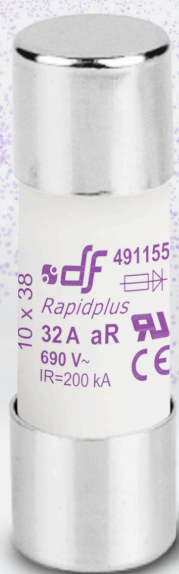


Rapidplus®



**PROTECTING
THE WORLD**

RAPIDPLUS

HIGH SPEED FUSE LINKS FOR SEMICONDUCTORS

aR CYLINDRICAL

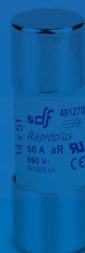
semiconductor protection
fuse links

CYL

10x38



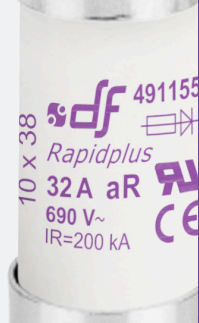
10x38



14x51



22x58



RATED VOLTAGE
690V AC

RATED CURRENT
1A...32A

BREAKING CAPACITY
200kA

STANDARDS

IEC/EN 60269-1
IEC/EN 60269-4
UL248-1
UL248-13



Rapidplus®

Cylindrical fuse links for semiconductors

RAPIDPLUS CYL aR fuse links are intended for clearing short-circuits and have been designed and manufactured to have very low I^2t values as well as reduced arc voltages that guarantee an optimum protection of semiconductors. They have a very good cycling ability.

The range comprises the following fuse links:

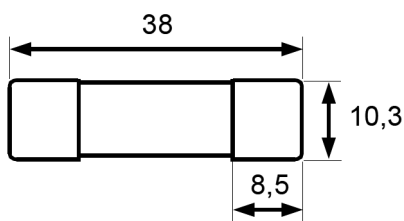
→ Size 10x38 690V AC 1A to 32A

Typical applications comprise protection of semiconductors (diodes, thyristors, triacs, etc) used in power rectifiers, UPS, converters, motor drives (AC and DC), soft starters, solid state relays, photovoltaic inverters, welding inverters and any application where it is necessary to protect semiconductor devices.

UL certification according to UL248 standard. UL file Nr. E477155.














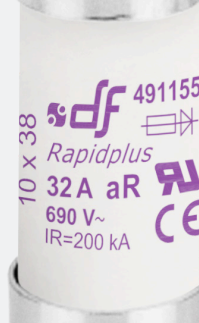
Dimensions



Weight 8gr

Range

I_n (A)	REFERENCE	PACKING Uni /BOX
1	491105	10/100
2	491107 	10/100
3	491100 	10/100
4	491113 	10/100
6	491115 	10/100
8	491120 	10/100
10	491125 	10/100
12	491130 	10/100
16	491135 	10/100
20	491140 	10/100
25	491145 	10/100
32	491155 	10/100



Technical data

Rated voltage	690V AC (UL/IEC) 700V DC (L/R=10ms)(IEC)
Rated current	1A...32A
Rated breaking capacity	200kA @690V AC 30kA @700V DC
Operating class	aR
Storage temperature	-40°C ... 90°C
Operating temperature *	-40°C ... 80°C

* For ambient temperatures higher than 25°C it is necessary to apply a derating in maximum current.

Standards

IEC/EN 60269-1
IEC/EN 60269-4
UL248-1
UL248-13
RoHS Compliant



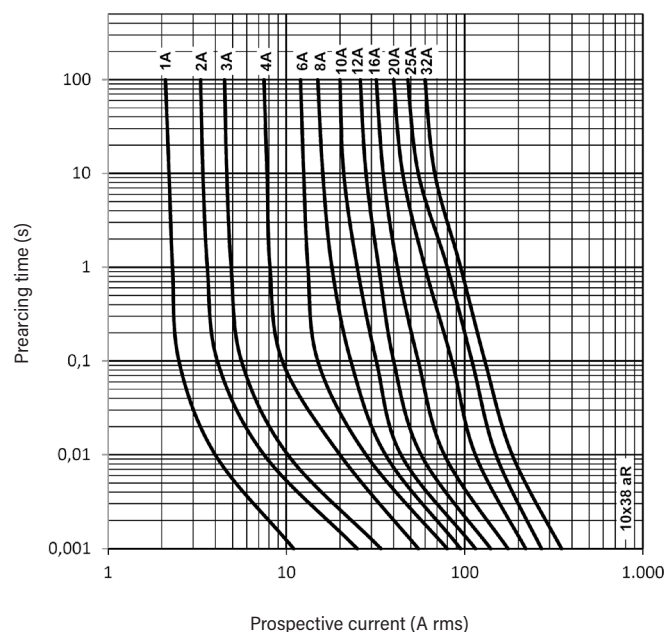
Certifications



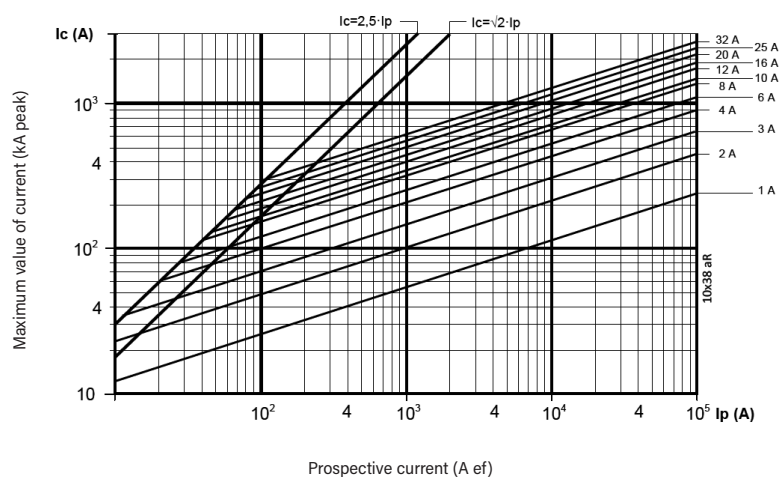
Power dissipation

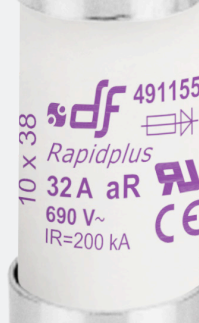
I_n	POWER DISSIPATION I_n	POWER DISSIPATION $0.8 \cdot I_n$	PREARcing I^2t	I^2t 690V
(A)	(W)	(W)	(A²S)	(A²S)
1	0,75	0,45	0,20	1,2
2	1,40	0,75	0,80	2,6
3	1,70	0,95	2,5	8,0
4	1,69	0,97	4,9	10
6	2,46	1,4	14,0	28
8	1,52	0,91	3,0	24
10	2,07	1,23	4,7	38
12	2,62	1,53	6,8	54
16	3,72	2,11	12,0	96
20	4,50	2,57	18,8	150
25	4,55	2,60	48,0	384
32	6,65	3,65	75,0	600

t-I characteristics

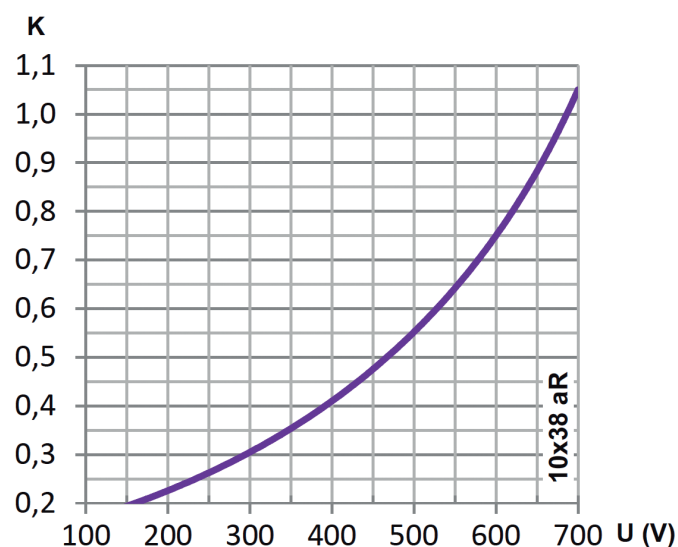


Cut-off characteristics

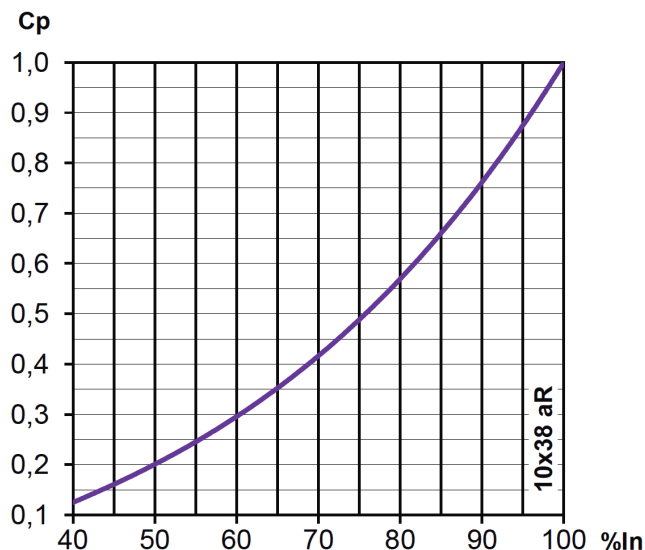




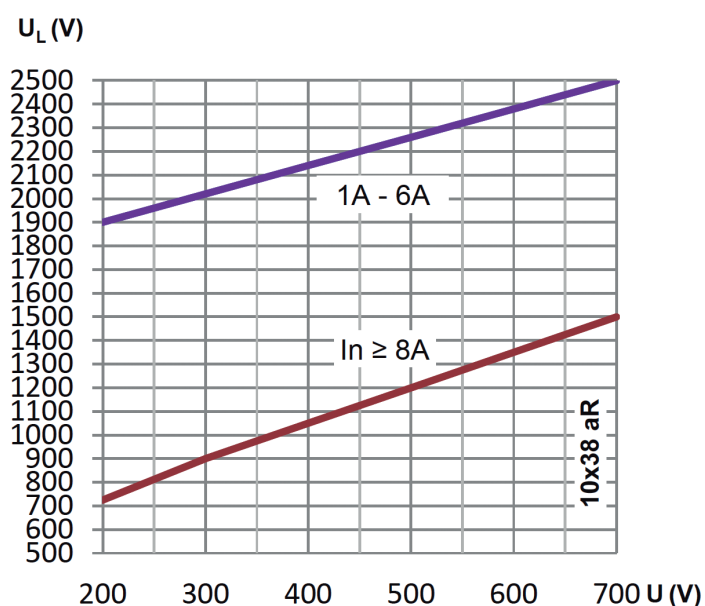
I²t Total clearing correction factor



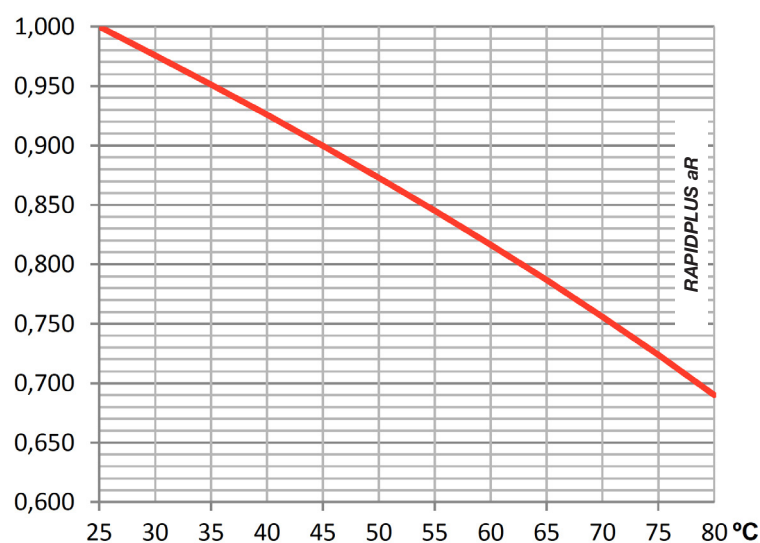
Power dissipation correction factor

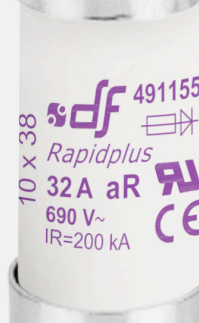


Arc voltage



Ambient temperature correction coefficient





TECHNICAL CHARACTERISTICS

(Introduction)

I^2t Total clearing correction factor

Total clearing I^2t values at rated voltage and at power factor of 0,15 are given in electrical characteristics tables.

For other voltages, clearing I^2t values can be calculated multiplying these values by correction factor **K**.

Arc voltage U_L

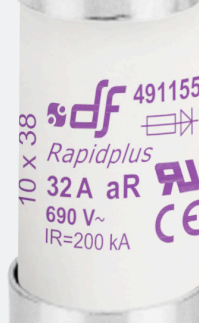
This graphic gives the peak arc voltage U_L that can appear across the fuse link during operation as a function of working voltage.

Power dissipation

Power dissipation values are given at rated voltage (I_n) and at $0,8 \cdot I_n$ (80% of rated current). It is possible to calculate values of power dissipation for other currents multiplying these values by correction factor for power loss (**C_p**) as a function of % of rated current.

This value is very important to choose the appropriate fuse base to install these fuse links. The power dissipation of fuse link at the normal working conditions must be lower than the maximum value that the fuse base can withstand.

See the section "FUSE HOLDERS AND OPEN FUSE BASES" at the end of this document.





PROTECTING THE WORLD

HEAD OFFICE AND FACTORY

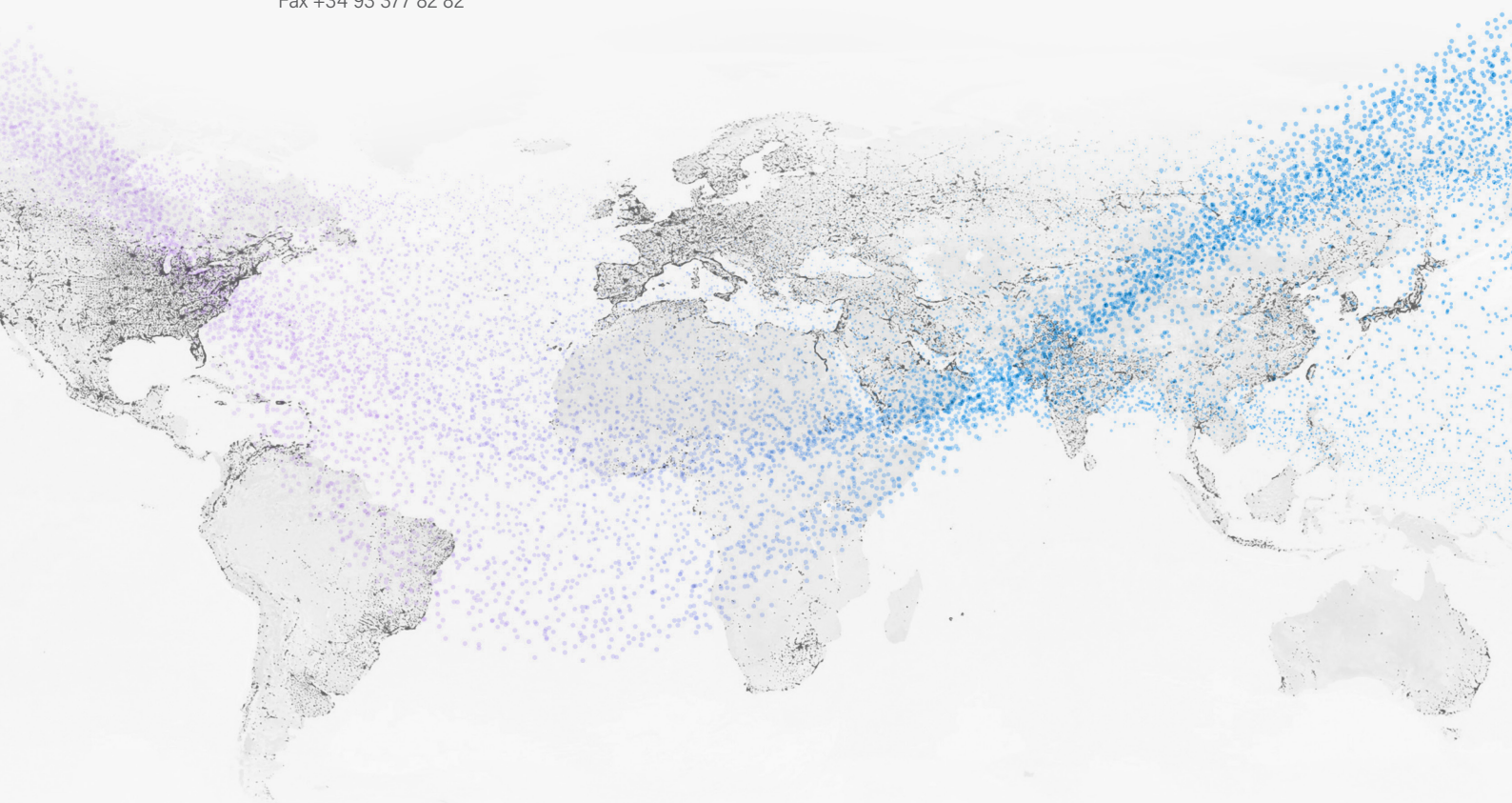
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The "electro technical expert" logo marked on the products included in this data sheet indicates that the installation of these products must be carried out by expert personnel with specialized knowledge.



To prevent electrical hazards, carry out the installation without voltage.



Safety notice
Please capture the following QR code and read our safety notice carefully before installing our products.



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