df Electric

RAPIDPLUS

HIGH SPEED FUSE LINKS FOR SEMICONDUCTORS

Rapidplus®

gS
NH 690V

semiconductor protection
fuse links

NH NH3

NH000 NH00 NH1 NH2 NH3

PROTECTING THE WORLD

dfelectric.es

Electric

gS
NH 690V
semiconductor protection fuse links

NH3

RAPIDPLUS

Rapidplus®

NH3

RATED VOLTAGE
690V AC

RATED CURRENT
355A...630A

BREAKING CAPACITY
100kA

STANDARDS
IEC/EN 60269-1
IEC/EN 60269-4

Rapidplus®
NH fuse links for semiconductors

RAPIDPLUS NH gS fuse links are capable to clearing all types of overcurrents, overloads as well as shortcircuits, thus the fuse links protect semiconductors as well as cables and all switchgear of installation.

They are optimized to have reduced power dissipations that allow the utilization of a wide range of fuse bases, disconnectors and fuse switches.

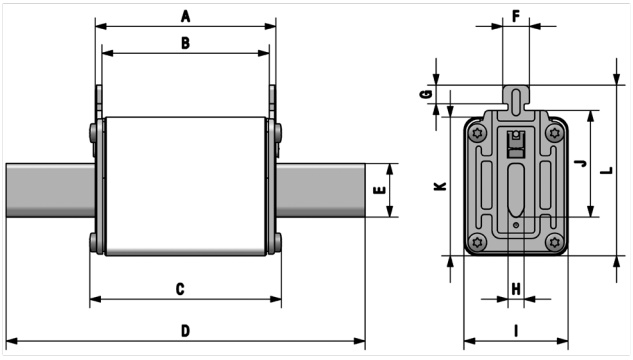
The range comprises the following fuse links:

→ **Size NH3 690V AC 355A to 630A**

Typical application 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.

RoHS COMPLIANT

Dimensions



A	B	C	D	E	F	G	H	I	J	K	L
68	62	73	150	32	10	9,5	6	70	60	75	87

Weight 1,02kg

Range

In (A)	REFERENCE	PACKING Uni /BOX
355	**371450**	1/15
400	**371455**	1/15
450	**371463**	1/15
500	**371465**	1/15
630	**371470**	1/15

gS
NH 690V
semiconductor protection fuse links

RAPIDPLUS

Rapidplus®

NH3

Technical data

Rated voltage	690V AC 550V DC (L/R=10ms)
Rated current	355A...630A
Rated breaking capacity	100kA @690V AC 30kA @550V DC
Operating class	gS
Storage temperature	-40°C ... 80°C
Operating temperature *	-25°C ... 60°C

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

Standards

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

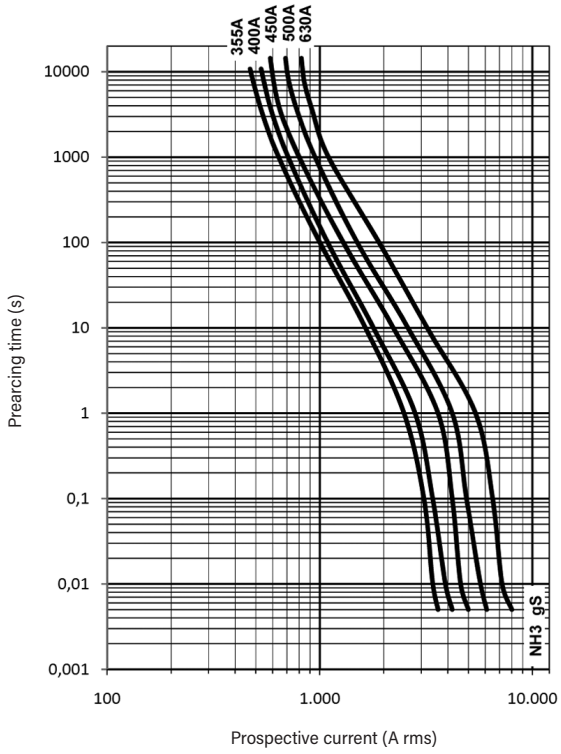
Materials

Body	Steatite C221
Contact blades	Copper or brass (silver plated)
Plates	Aluminium
Screws	Zinc plated steel

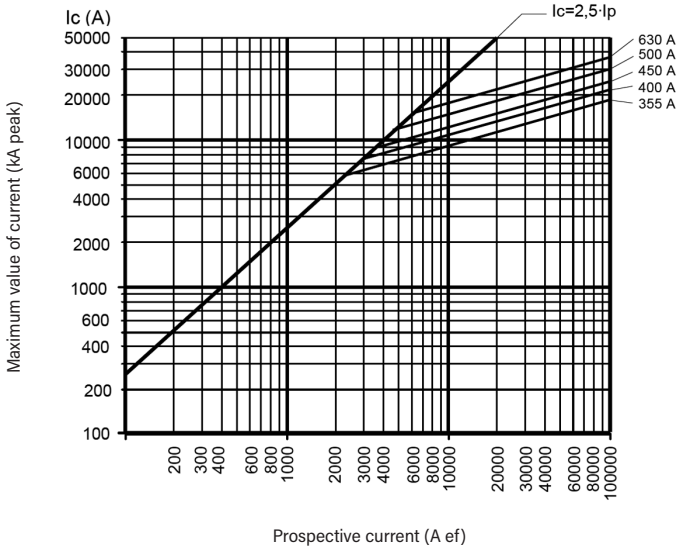
Power dissipation

I_n (A)	POWER DISSIPATION In (W)	POWER DISSIPATION 0,8 · In (A^2S)	PREARCING I^2t (A^2S)	OPERATING I^2t (A^2S)
355	39,6	22,76	54240	151700
400	42,7	24,3	75760	211900
450	46	26,3	114770	320970
500	47,1	27,6	165270	309000
630	60,4	34,3	303060	847570

t-I characteristics



Cut-off characteristics

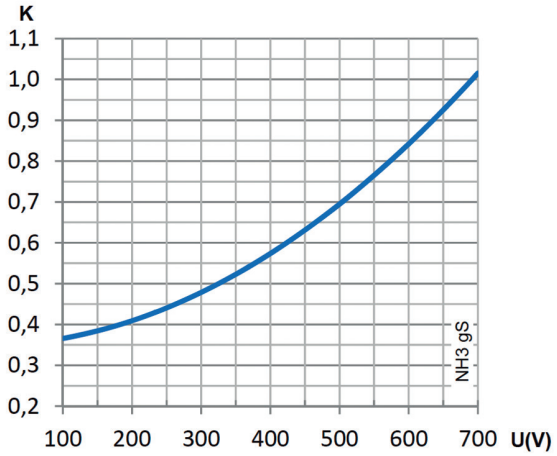


gS
NH 690V
semiconductor protection fuse links

RAPIDPLUS

Rapidplus®

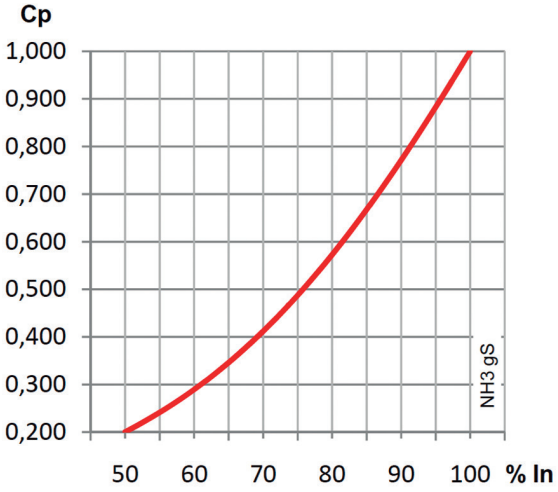
NH3



I^2t Correction factor

The total clearing I^2t at rated voltage and at power factor of 0,15 are given in the electrical characteristics.

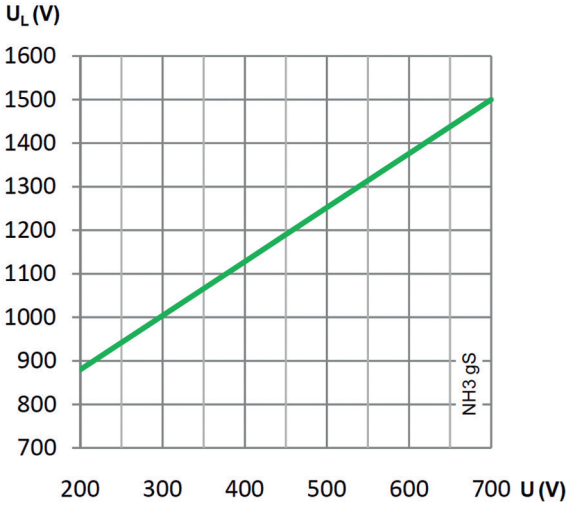
For other voltages, the clearing I^2t is found by multipliying by correction factor, K.



Correction factor for power loss

Watts loss at rated current are given in the electrical characteristics. The curve allows the calculation of the power losses at load currents lower than the rated value.

The correction factor Cp, is given as a function of the RMS load current Ib in % of the rated current.

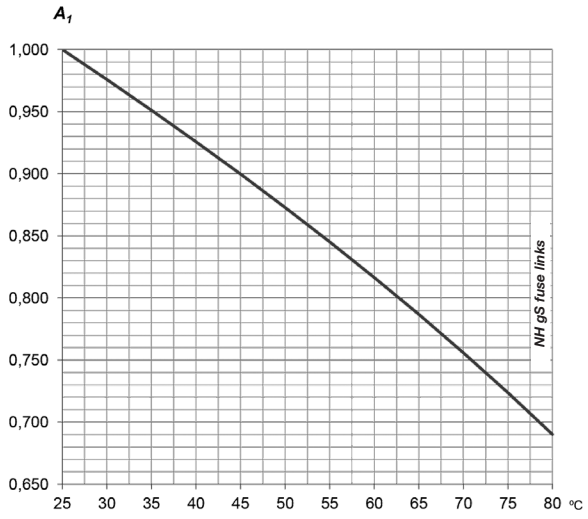


Peak arc voltage

This curve gives the peak arc voltage, U_L, wich may appear across the fuse during its operation as a function of the applied working voltage, Eg (RMS) at a power factor of 0,15.

Ambient temperature correction coefficient

Fuse current ratings are established by type tests with an ambient temperature of 25°C. When the utilization ambient temperature is higher than this reference value, the fuse-link must be "de-rated". The rated current of fuse link must be multiplied by a derating factor $\mathbf{A_1}$ to find the maximum operating current.

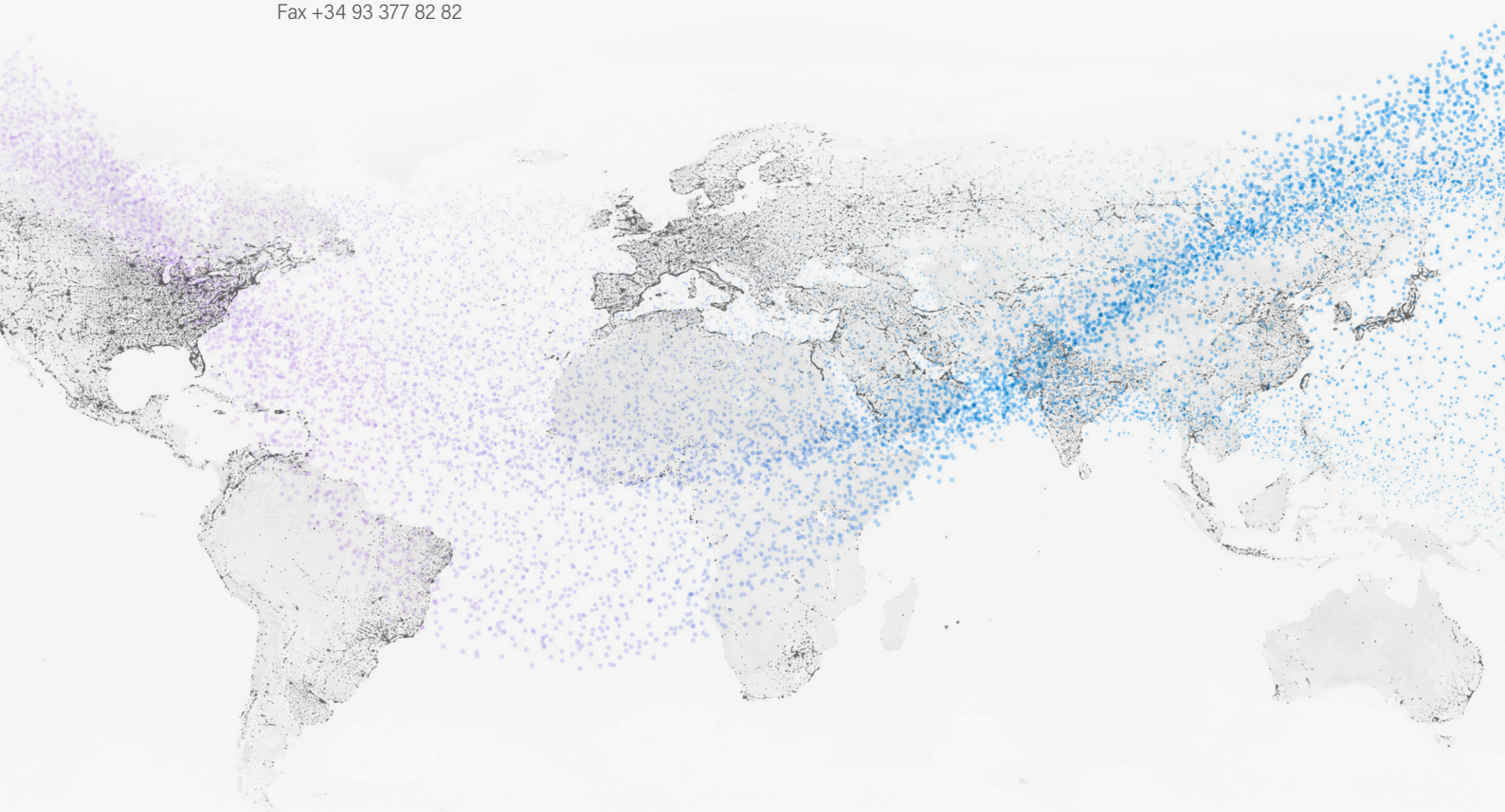


PROTECTING THE WORLD

HEAD OFFICE AND FACTORY
SILICI, 67-69
08940 CORNELLA DE LLOBREGAT
BARCELONA · SPAIN
Tel. +34 93 377 85 85
Fax +34 93 377 82 82

INTERNATIONAL SALES
Tel. +34 93 475 08 64
Fax +34 93 480 07 75
export@dfelectric.es

NATIONAL SALES
Tel. 93 475 08 64
Fax 93 480 07 76
comercial@dfelectric.es



dfelectric.es

FABRICADO EN ESPAÑA
MADE IN SPAIN

According to the waste of electrical and electronic equipment directive, electrical material should not be part of the usual waste. This symbol alerts users that these products should be recycled according to local environmental waste disposal regulations.

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.

The data reflected in this technical record are subject to the correct installation of the product in accordance with manufacturer's instructions, relevant installation standards and professional practices, maintained and used in applications for which they were made.

The products described in this document have been designed, developed and tested in accordance with specific standard. They are considered components that are integrated as part of installation, machine or equipment. The correct general operation of the referred product is responsibility of the manufacturer of the installation, machine or equipment.

DF ELECTRIC cannot guarantee the characteristics of an installation, machine or equipment that has been designed by a third party. Once a product has been selected, the user must verify that it is appropriate for its application, through the verifications and/or tests that it deems appropriate.

DF ELECTRIC retains the right to change the dimensions, specifications, materials or design of its products at any time with or without notice.