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HIGH SPEED FUSES FOR
SEMICONDUCTOR PROTECTION

RAPIDPLUS

aR

gR

HIGH SPEED FUSES FOR SEMICONDUCTOR PROTECTION

RAPIDPLUS **aR** **gR**

Semiconductors are electronic components extremely sensible to overloads and short-circuit, therefore they cannot be protected with general purpose fuse-links. For this reason there are ultra rapid fuse-links for this specific purpose, with very fast melting characteristics, low let-through energy values (I^2t) and adequate selective coordination with protection devices upstream.

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.

RAPIDPLUS range comprise three sizes with dimensions 10x38, 14x51 and 22x58, with rated currents between 4A and 100A and a rated voltage of 690 V AC. Sizes 14x51 and 22x58 are available also with striker, for use in fuse bases with micro-switch. There are two operating classes **aR** and **gR**.

Made of ceramic tube with high withstand to internal pressure and thermal shock, that allow a high breaking capacity in a reduced physical space, as well as a good thermal conductivity. End caps are made of silver plated copper for optimal contact with fuse base. Melting elements are made of pure silver and have a special design to obtain low I^2t values and reduced arc voltages, as well as good aging resistance. These fuse-links meet IEC/EN60269-1 and IEC/EN60269-4 standards and RoHS directive 2002/95/EC.

aR Class

Protection against short circuit
Very low I^2t values
Rated voltage 690V AC (700V DC L/R = 10 ms)
Rated breaking capacity 100 kA

gR Class

Protection against overload and short circuit
Rated voltage 690V AC (440V DC L/R = 10 ms)
Rated breaking capacity 100 kA



aR 10x38

I _n (A)	U (V AC)	BREAKING CAPACITY (kA AC)	REFERENCE	
			WITHOUT STRIKER	WITH STRIKER
4	690	100	491113	-
6	690	100	491115	-
8	690	100	491120	-
10	690	100	491125	-
12	690	100	491130	-
16	690	100	491135	-
20	690	100	491140	-
25	690	100	491145	-
32	690	100	491155	-

700V DC / BREAKING CAPACITY 30kA



491125

gR 10x38

I _n (A)	U (V AC)	BREAKING CAPACITY (kA)	REFERENCE	
			WITHOUT STRIKER	WITH STRIKER
4	690	100	492003	-
6	690	100	492004	-
8	690	100	492005	-
10	690	100	492006	-
12	690	100	492007	-
16	690	100	492008	-
20	690	100	492009	-
25	690	100	492010	-
32	690	100	492011	-

440V DC / BREAKING CAPACITY 30kA



492006

aR 14x51

I _n (A)	U (V AC)	BREAKING CAPACITY (kA AC)	REFERENCE	
			WITHOUT STRIKER	WITH STRIKER
4	690	100	491215	-
6	690	100	491225	-
8	690	100	491230	491730
10	690	100	491235	491735
12	690	100	491237	491737
16	690	100	491241	491741
20	690	100	491245	491745
25	690	100	491250	491750
32	690	100	491260	491760
40	690	100	491265	491765
50	690	100	491270	491770

700V DC / BREAKING CAPACITY 30kA



491215

gR 14x51

I _n (A)	U (V AC)	BREAKING CAPACITY (kA)	REFERENCE	
			WITHOUT STRIKER	WITH STRIKER
4	690	100	492014	-
6	690	100	492015	-
8	690	100	492016	492116
10	690	100	492017	492117
12	690	100	492018	492118
16	690	100	492019	492119
20	690	100	492020	492120
25	690	100	492021	492121
32	690	100	492022	492122
40	690	100	492023	492123
50	690	100	492024	492124

440V DC / BREAKING CAPACITY 30kA



492014

aR 22x58

I _n (A)	U (V AC)	BREAKING CAPACITY (kA AC)	REFERENCE	
			WITHOUT STRIKER	WITH STRIKER
20	690	100	491300	491800
25	690	100	491305	491805
32	690	100	491310	491810
40	690	100	491315	491815
50	690	100	491320	491820
63	690	100	491325	491825
80	690	100	491330	491830
100	690	100	491335	491835

700V DC / BREAKING CAPACITY 30kA



491335

gR 22x58

I _n (A)	U (V AC)	BREAKING CAPACITY (kA)	REFERENCE	
			WITHOUT STRIKER	WITH STRIKER
20	690	100	492033	492133
25	690	100	492034	492134
32	690	100	492035	492135
40	690	100	492036	492136
50	690	100	492037	492137
63	690	100	492038	492138
80	690	100	492039	492139
100	690	100	492040	492140

440V DC / BREAKING CAPACITY 30kA



492040