

## FUSE-LINKS FOR SEMICONDUCTOR PROTECTION UP TO 690 V a.c. (WITH SCREW CONNECTIONS)



Fuse-links for semiconductor protection P5.. are intended for protection of semiconductors and devices especially sensitive to short-circuits.

- Extremely low values of  $I^2t$  and cut-off currents.
- Small dimensions and low power losses.
- Possibility of use in fuse holders SP40... page H31.
- The fuse-links do not contain harmful substances according to the RoHS Regulation (cadmium, lead and other).
- Utilization category gR for protection of semiconductor devices against overload and short-circuit.
- Utilization category aR for protection of semiconductor devices only against short circuit.
- Connection cross-section according to IEC, IEC 60269-4 (current density  $1 \div 1.6 \text{ A/mm}^2$  min. 500 mm from each side of the fuse-link).

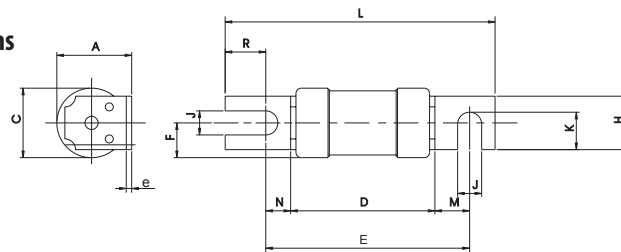
### Fuse-links for semiconductor protection

	$I_n$ [A]	Type	Product code	Power losses [W]	Temperature rise [K]	$I^2t$ total [A <sup>2</sup> s]	Weight [kg]	Package [pcs]
P50K06	6	P50K06 6A gR	06592	3.0	23	12	0.060	3
	10	P50K06 10A gR	06593	4.6	33	17	0.060	3
	16	P50K06 16A gR	06594	5.2	36	52	0.060	3
	20	P50K06 20A gR	06595	6.8	45	90	0.060	3
	25	P50K06 25A gR	06596	8.7	47	200	0.060	3
	32	P50K06 32A gR	06597	9.8	52	400	0.060	3
	40	P50K06 40A gR	06598	11.0	56	600	0.060	3
P51K06	50	P50K06 50A gR	06599	13.8	62	1 250	0.060	3
	6	P51K06 6A gR	06600	3.0	23	12	0.060	3
	10	P51K06 10A gR	06601	4.6	33	17	0.060	3
	16	P51K06 16A gR	06602	5.2	36	52	0.060	3
	20	P51K06 20A gR	06603	6.8	45	90	0.060	3
	25	P51K06 25A gR	06604	8.7	47	200	0.060	3
	32	P51K06 32A gR	06605	9.8	52	400	0.060	3
P50N06	40	P51K06 40A gR	06606	11.0	56	600	0.060	3
	50	P51K06 50A gR	06607	13.8	62	1 250	0.060	3
	25	P50N06 25A gR	06608	9.5	43	120	0.130	3
	32	P50N06 32A gR	06609	12.3	58	220	0.130	3
	40	P50N06 40A gR	06610	14.8	68	400	0.130	3
	50	P50N06 50A gR	06611	17.5	71	980	0.130	3
	63	P50N06 63A gR	06612	18.8	75	2 050	0.130	3
P50N06	80	P50N06 80A aR	06613	22.5	68	3 500	0.130	3
	100	P50N06 100A aR	06614	31.5	87	5 400	0.130	3
	125	P50N06 125A aR	06615	39.0	92	11 800	0.130	3

### Parameters

Type		P50K06	P51K06	P50N06
Rated voltage	$U_n$	690 V a.c., 440 V d.c. (240 V d.c. for P50N06 125A aR)		
Rated breaking capacity (rms)	$I_b$	690 V a.c.		120 kA
		440 V d.c.		50 kA
Rated frequency	$f_n$	50 Hz		
Connection spacing		75 mm	80 mm	80 mm
Standards		IEC 60269-1, -2, -4; EN 60269-1, -4 EN 60269		
Approval marks				

### Dimensions

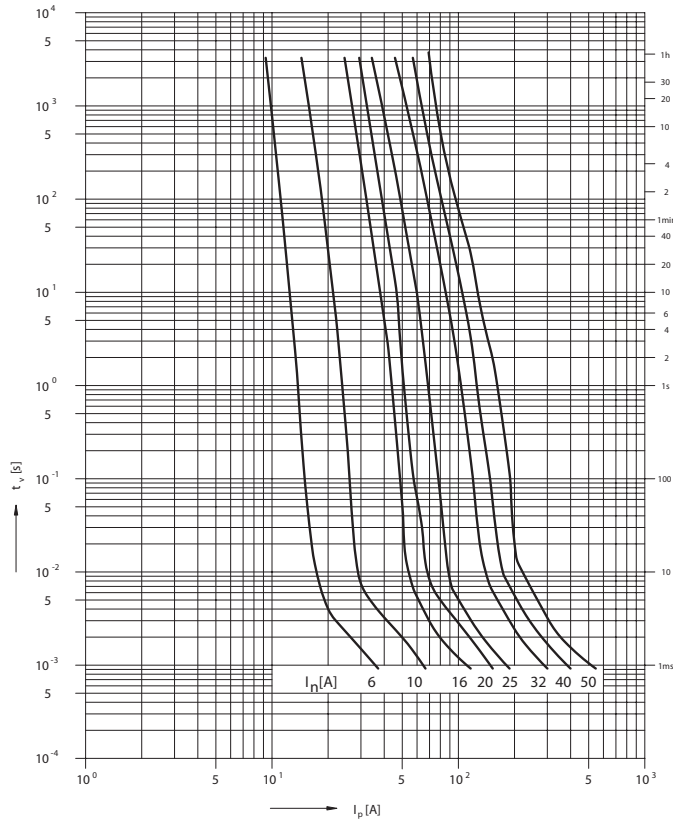


Type	A	D	E	F	H	J	K	L	M	N	R	e	ØC
	[mm]												
P50K06	19	52.5	71.5	9	12	6	9	88	12	7	14	1.4	18
P51K06	19	52.5	75.7	9	16.5	8.5	12.5	103	13.6	9.6	19.7	1.4	18
P50N06	29	53.5	75.8	13	19	9	14	103	13	9.3	19.7	2	26

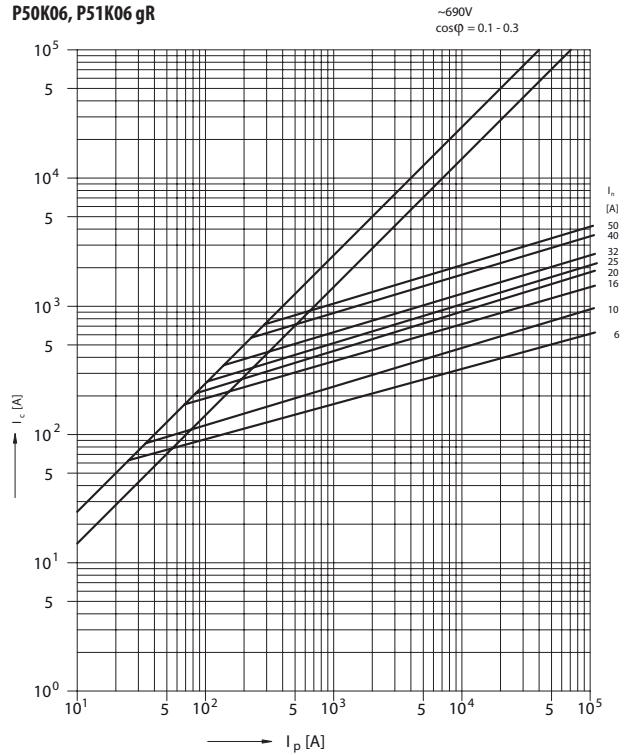
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## Characteristics

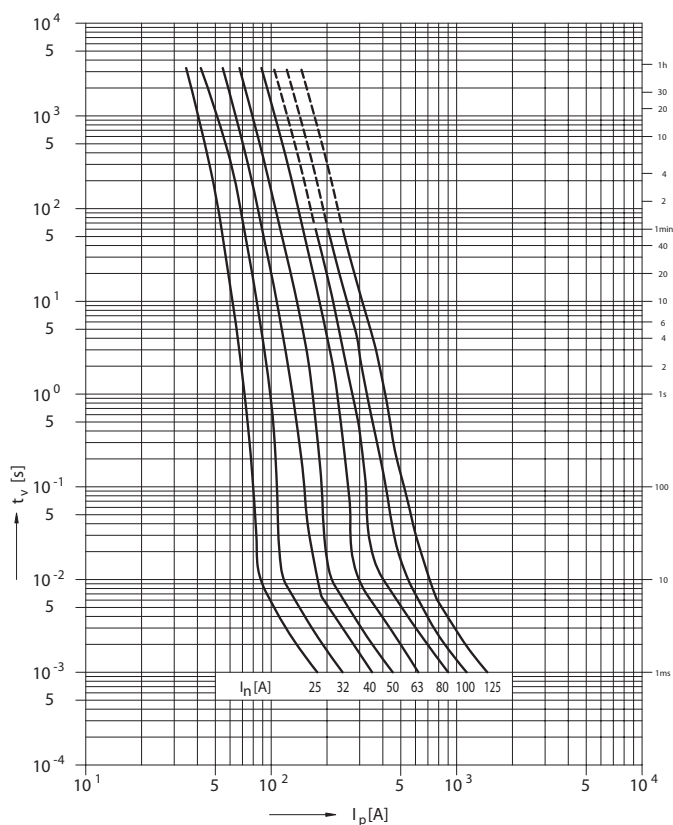
Prearcing time/current characteristic  
P50K06, P51K06 gR



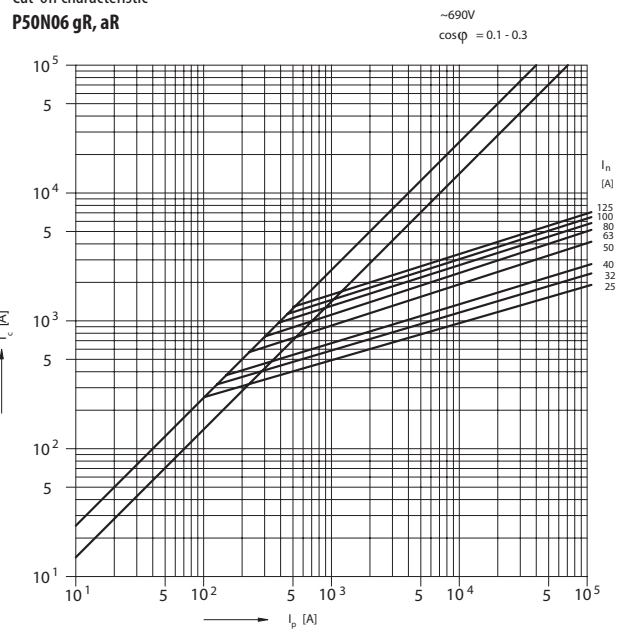
Cut-off characteristic  
P50K06, P51K06 gR



Prearcing time/current characteristic  
P50N06 gR, aR



Cut-off characteristic  
P50N06 gR, aR



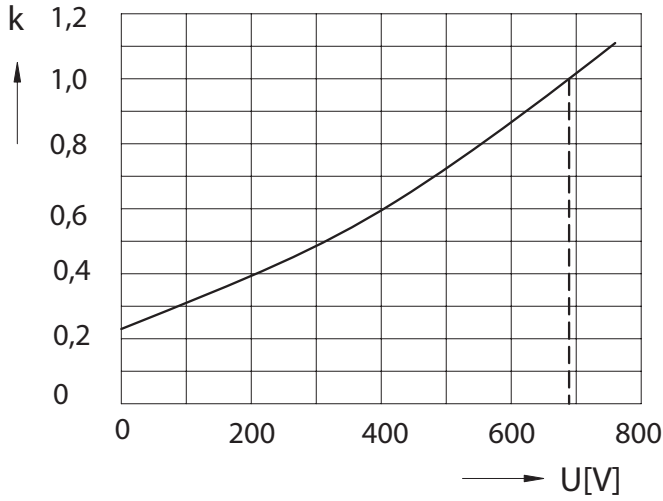
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### Characteristics

Correction factor „k“ of I<sup>2</sup>t dependence on operating voltage

$$(I^2 t_{total})_{f(U)} = k \times I^2 t_{total}$$

P50K06, P51K06, P50N06



Overvoltage dependence on operating voltage

P50K06, P51K06, P50N06

