



NH Solid Blades 690 VAC sizes 000 to 3

gS-class Protistor® NH 690 VAC fuse-links provide maximum flexibility in equipment design and ultimate protection for today's power conversion equipment. This range is a fast acting, engineered to provide state of the art protection for power semiconductors in drives.

These solid blades square body fuse-links are available in various body sizes with a broad range of ampere ratings allowing the greatest flexibility in equipment design.

They have pure silver fuse elements embedded in bound sand which provides optimized I^2t and high breaking capacity.

All contact surfaces are silver plated and all hardware non-magnetic.

These products comply with the RoHS European Directive.

All fuses are standard with a low voltage dual blown fuse indicator. This indicator can operate a microswitch which is easily mounted directly on to the fuse in service.



The first gS-class range in the marketplace!

Features/Benefits

Broad range of ampere ratings in each body size for design flexibility IEC 60269-4 compliance for fuses for worldwide semiconductor applications

Ratings

AC: up to 630 A - 690 VAC - 160 kA IR

DC: up to 510 V L/R 10ms

for high di/dt (capacitor discharges), consult us

Approvals

AC: Tested to IEC 269.4 at 690V +10%

UL/CSA recognized pending

Features

- Ultra fast acting
- Highly current limiting.
- High breaking capacities
- Very low I^2t
- Reduced power losses
- No derating in standard NH fusegear (ref. to page 9)
- Worldwide mounting acceptance.
- Superior cycling ability.
- High withstanding in rush current and overloads

Applications

Protection of rectifiers, inverters, static switch, AC & DC drives and UPS systems.

Innovations

The first gS-class range in the market

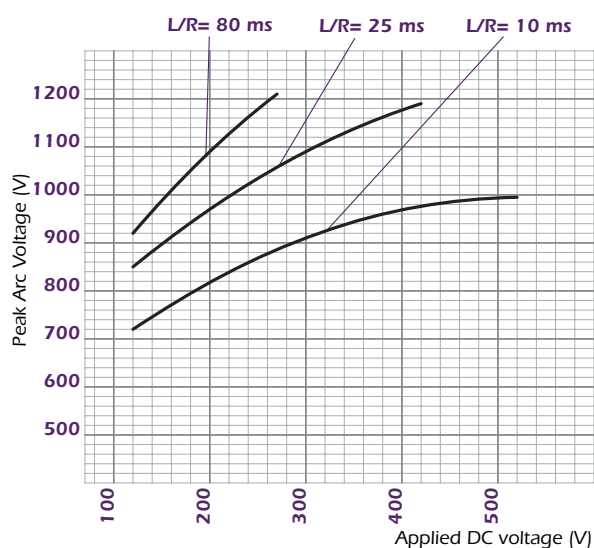


Electrical characteristics

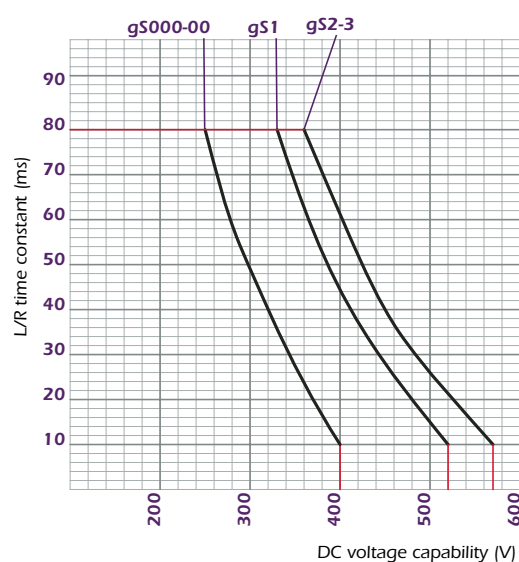
Voltage	Size	Type	Rating In (A)	Pre-Arcing I ² t @ 1ms (A ² s)	Total I ² t @ 690 V (A ² s)	Pn: Power losses (W) PV 43620 0,8In	Breaking capacities @ Un kA
690V IEC 700V UL	000	gS	25	17,1	96	7	160
	000	gS	32	38,7	218	8	160
	000	gS	40	68,7	386	9	160
	000	gS	50	136	764	10	160
	000	gS	63	275	1540	11	160
	000	gS	80	543	3050	13	160
	000	gS	100	1064	5980	14	160
	00	gS	125	2170	10850	16	160
	00	gS	160	4269	21340	19	160
	1	gS	125	1712	8560	21	160
	1	gS	160	3858	19290	23	160
	1	gS	200	7560	37800	26	160
	1	gS	250	15432	77160	29	160
	1	gS	280	18663	93310	33	160
	2	gS	250	12482	62410	33	160
	2	gS	315	27952	139760	36	160
	2	gS	350	38280	191400	38	160
	2	gS	400	54252	271260	41	160
	2	gS	450	81092	405460	43	160
	3	gS	315	19531	97650	42	160
	3	gS	350	28132	140660	44	160
	3	gS	400	42050	210250	47	160
	3	gS	450	58674	293370	50	160
	3	gS	500	87028	435140	52	160
	3	gS	550	111808	559040	56	160
	3	gS	630	149889	749440	63	160

DC working voltage possibilities

Peak Arc Voltage vs Applied DC voltage



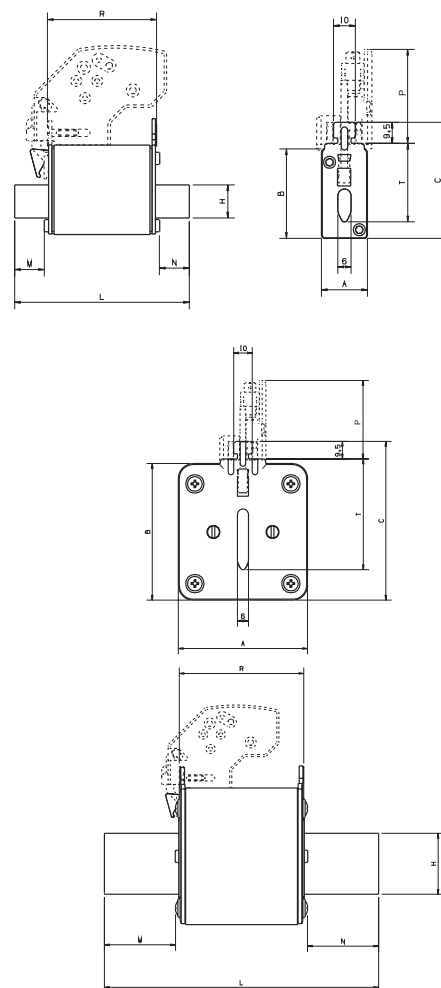
L/R Time constant vs DC voltage capability





Main dimensions and references

Size	Cat Number	Reference	Weight [kg]	Pack [pcs]
000	NH000GS69V25PV	S322039C	135	3
000	NH000GS69V32PV	X322043C	135	3
000	NH000GS69V40PV	B322047C	135	3
000	NH000GS69V50PV	F322051C	135	3
000	NH000GS69V63PV	K322055C	135	3
000	NH000GS69V80PV	P322059C	135	3
000	NH000GS69V100PV	T322063C	135	3
00	NH00GS69V125PV	E322165C	200	3
00	NH00GS69V160PV	J322169C	200	3
1	NH1GS69V125PV	X322365C	250	3
1	NH1GS69V160PV	B322369C	250	3
1	NH1GS69V200PV	D322371C	250	3
1	NH1GS69V250PV	H322375C	250	3
1	NH1GS69V280PV	L302897C	250	3
2	NH2GS69V250PV	R322475C	430	3
2	NH2GS69V315PV	W322479C	430	3
2	NH2GS69V350PV	X322480C	430	3
2	NH2GS69V400PV	A322483C	430	3
2	NH2GS69V450PV	C322485C	430	3
3	NH3GS69V315PV	E322579A	600	1
3	NH3GS69V350PV	F322580A	600	1
3	NH3GS69V400PV	J322583A	600	1
3	NH3GS69V450PV	L322585A	600	1
3	NH3GS69V500PV	N322587A	600	1
3	NH3GS69V550PV	P322588A	600	1
3	NH3GS69V630PV	Q322589A	600	1



Microswitches

MSNHB6 + PRES: consult us (6,3mm clips)

MSNHB2 + PRES: consult us (2.8 mm clips)

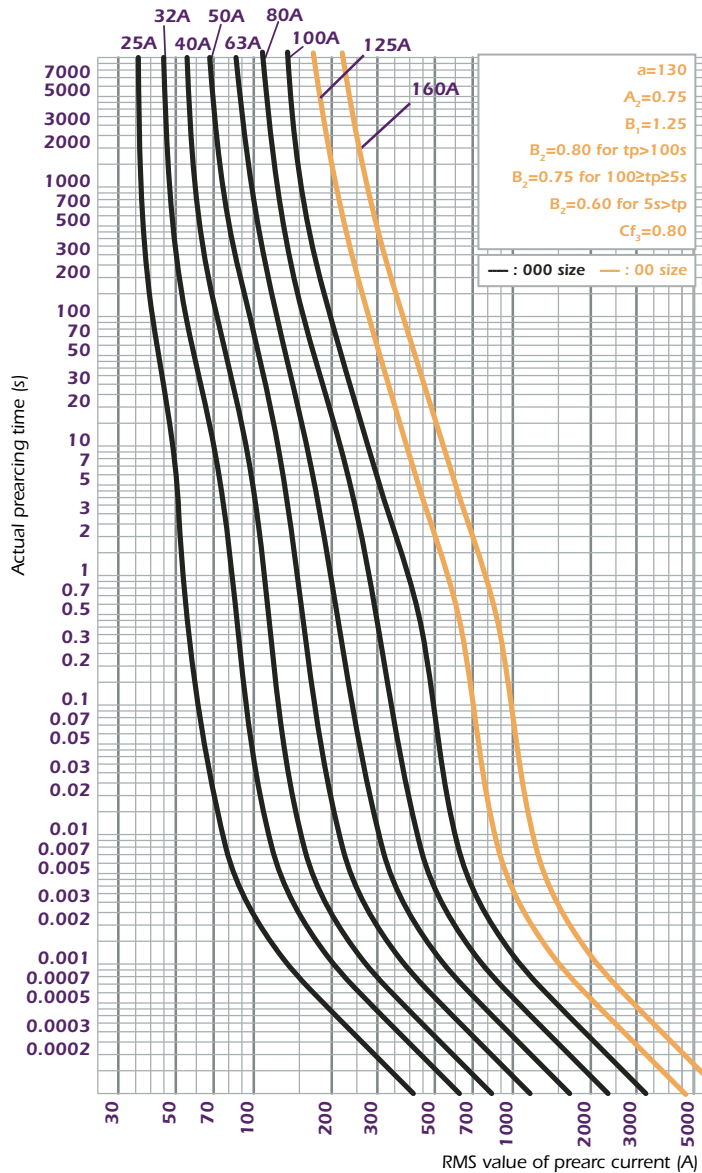
Automatically resetable, these microswitch systems indicate fuse presence (PRES) and proper mounting

In case of improper mounting or fuse melting, this is indicated (terminal 1-4 closed)

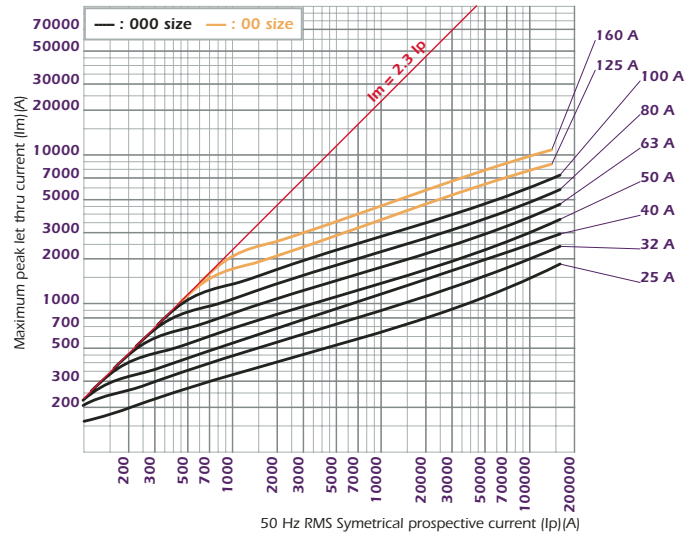
Size	A	B	C	H	L	M	N	P	R	T
000	20,8	40,5	52,5	15	79	13,5	13,5	43,4	49,5	35
000	0.82"	1.59"	2.07"	0.59"	3.11"	0.53"	0.53"	1.71"	1.95"	1.38"
00	29,5	47,5	59,5	15	79	13,1	13,1	43,4	50	35
00	1.16"	1.87"	2.34"	0.59"	3.11"	0.52"	0.52"	1.71"	1.97"	1.38"
1	39,5	52,5	64,5	20	135	32,1	32,1	43,4	68	40
1	1.56"	2.07"	2.54"	0.79"	5.32"	1.26"	1.26"	1.71"	2.68"	1.57"
2	51	60	72	26	150	38,85	38,85	43,4	68	48
2	2.01"	2.36"	2.85"	1.02"	5.91"	1.53"	1.53"	1.71"	2.68"	1.89"
3	70	74	86	33	150	38,85	38,85	43,4	68	60
3	2.76"	2.91"	3.39"	1.30"	5.91"	1.53"	1.53"	1.71"	2.68"	2.36"



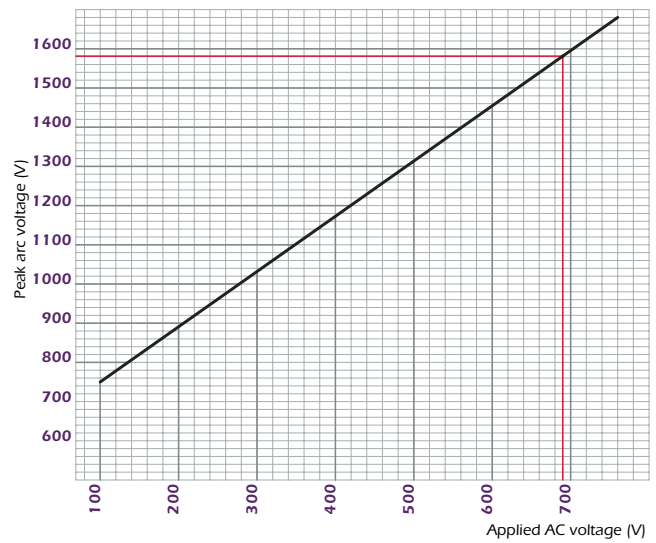
Times/Current Characteristics size 000-00



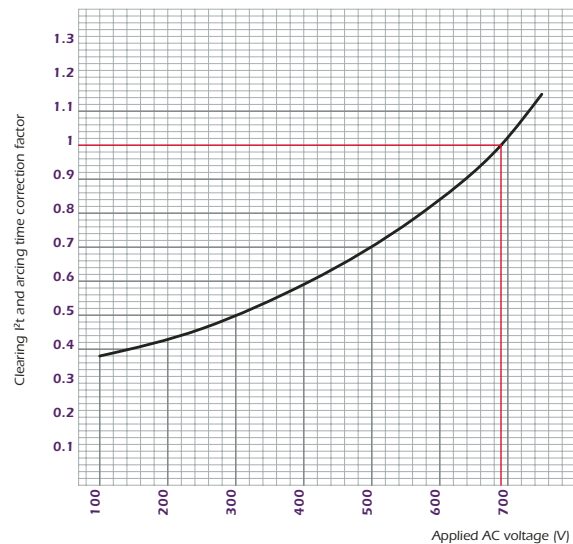
Cut off characteristics - Peak let thru current - size 000-00



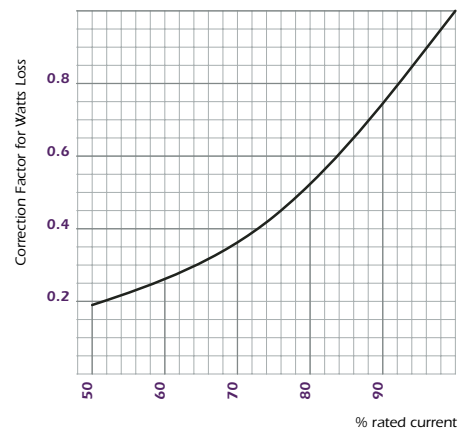
Peak arc voltage vs applied AC voltage size 000



Clearing I²t and arcing time correction factor vs Applied AC voltage size 000-00

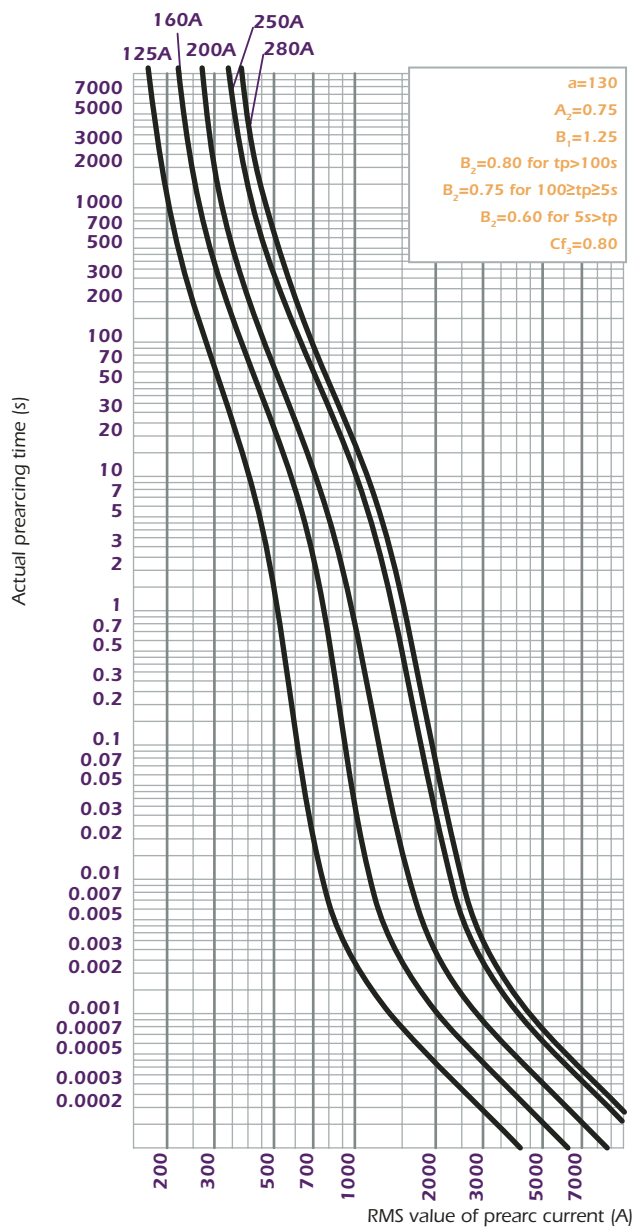


Watts loss vs % rated current size 000-00

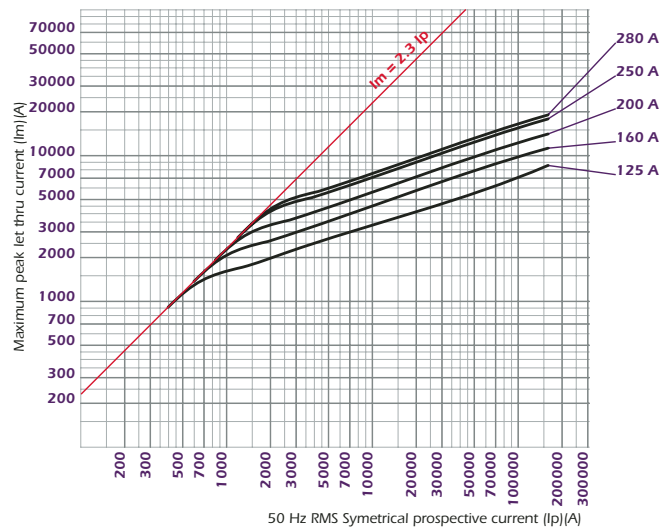




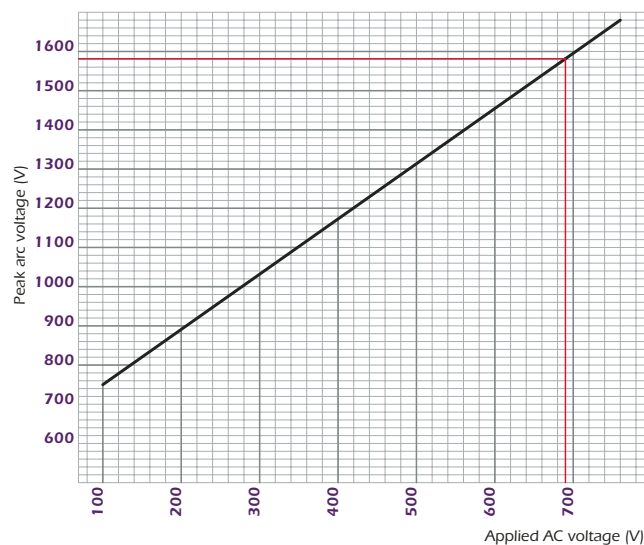
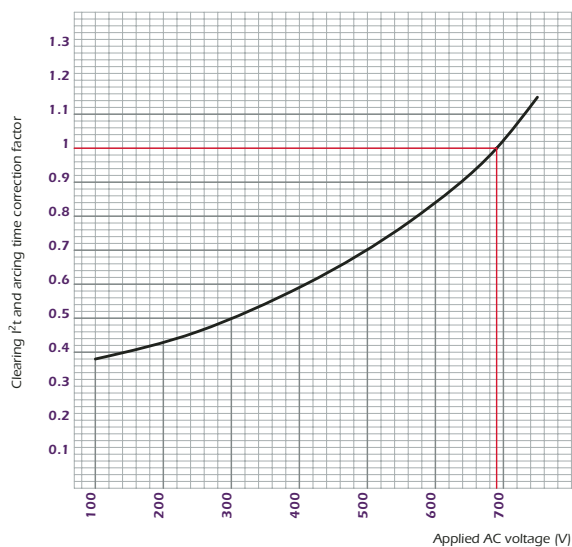
Times/Current Characteristics size 1



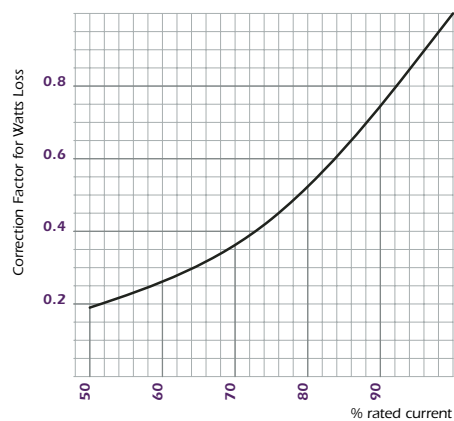
Cut off characteristics - Peak let thru current - size 1



Peak arc voltage vs applied AC voltage size 1

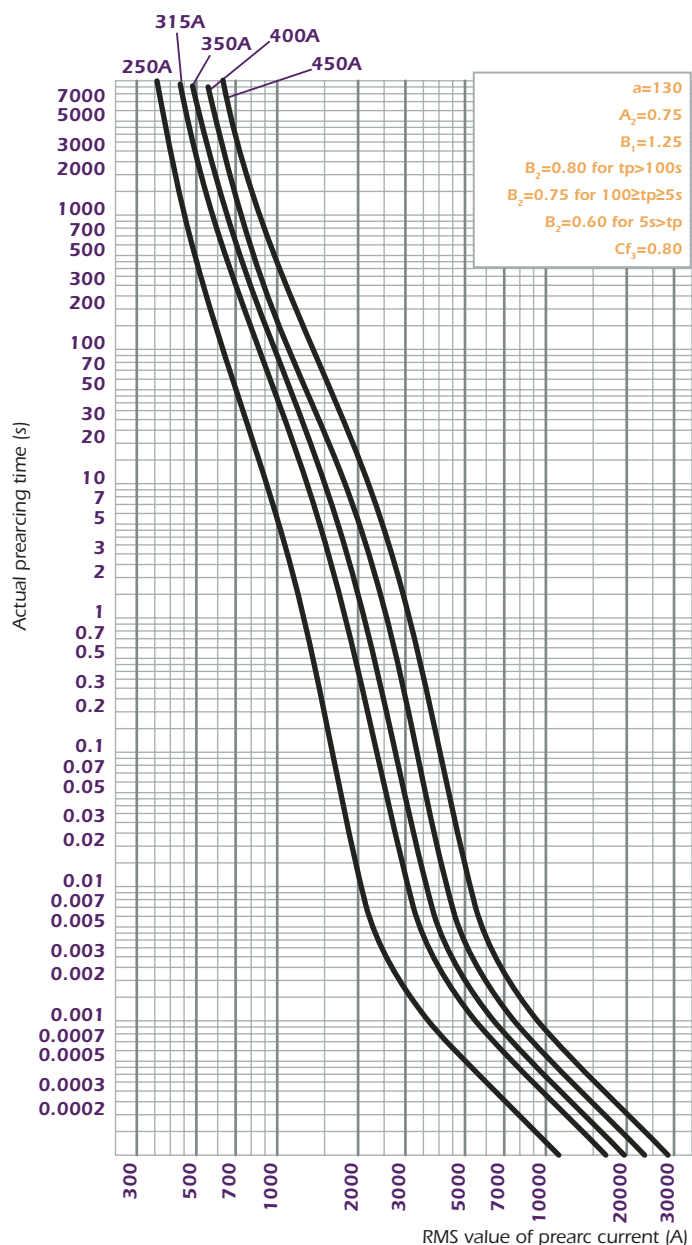
Clearing I^2t and arcing time correction factor vs Applied AC voltage size 1

Watts loss vs % rated current size 1

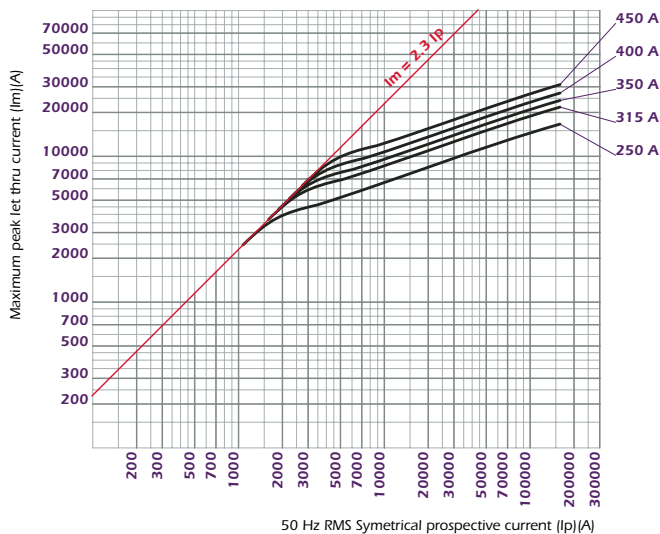




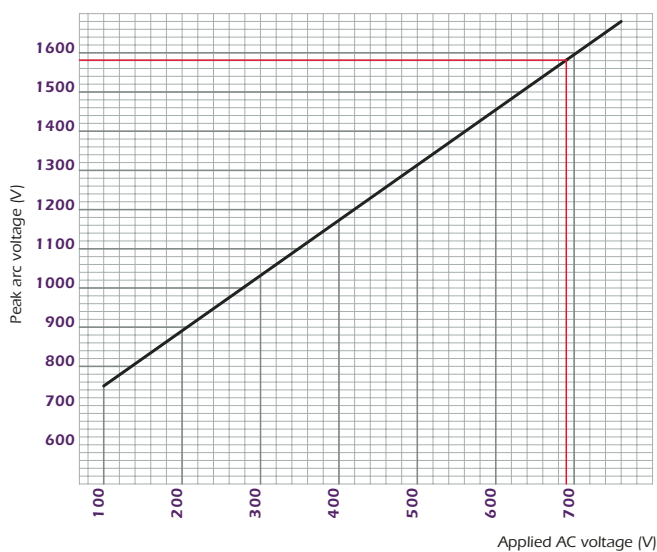
Times/Current Characteristics size 2



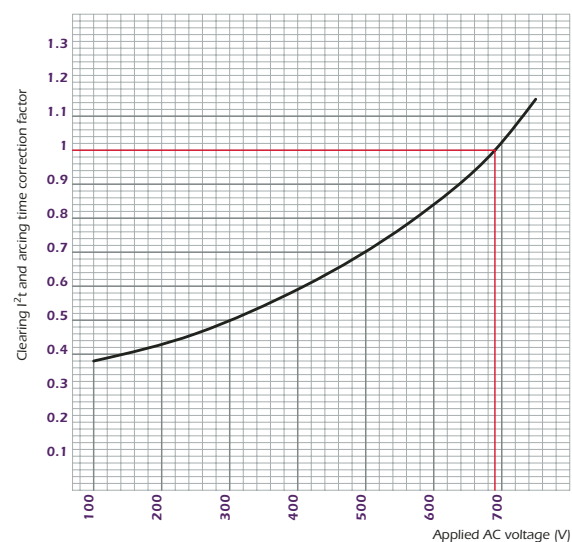
Cut off characteristics - Peak let thru current - size 2



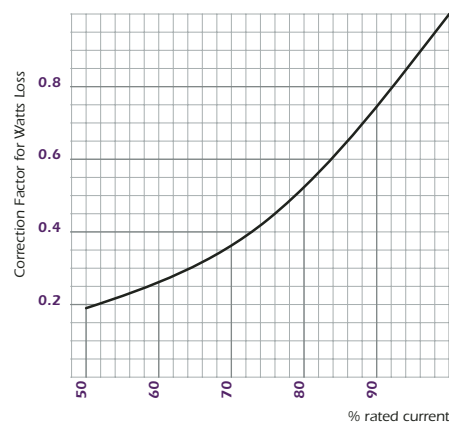
Peak arc voltage vs applied AC voltage size 2



Clearing I²t and arcing time correction factor vs Applied AC voltage size 2

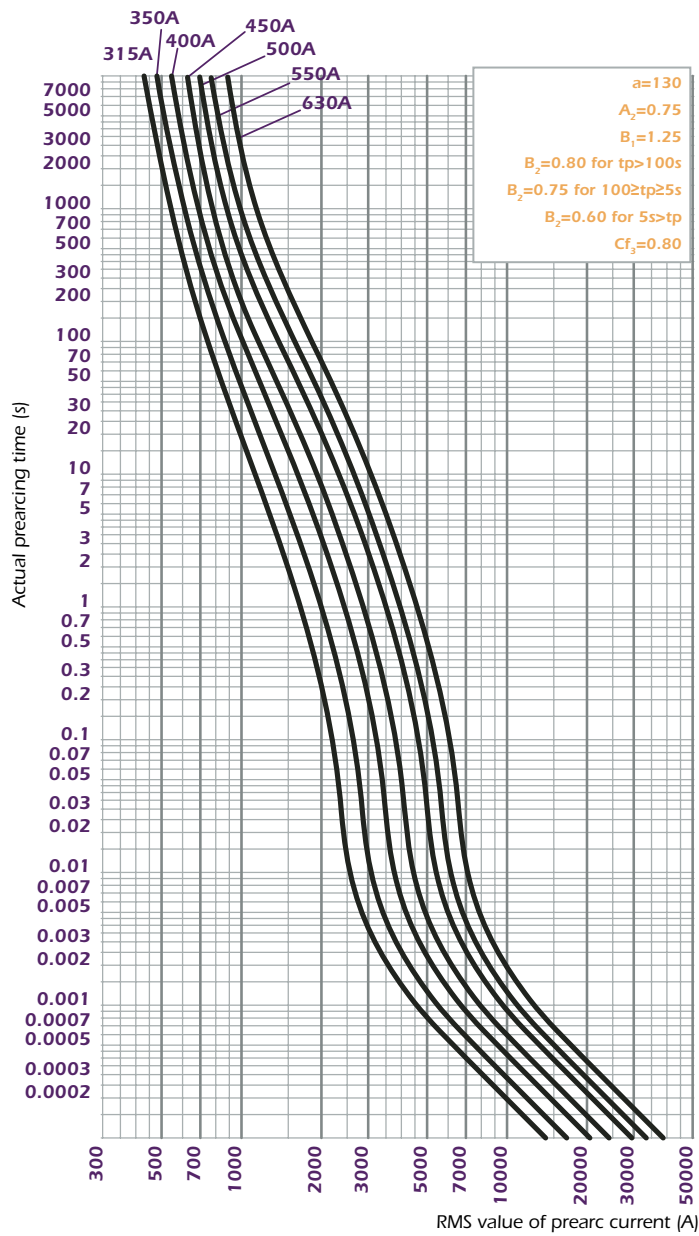


Watts loss vs % rated current size 2

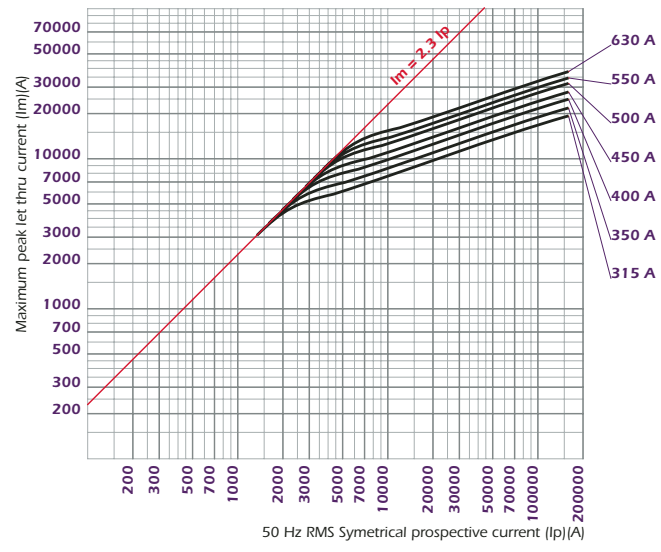




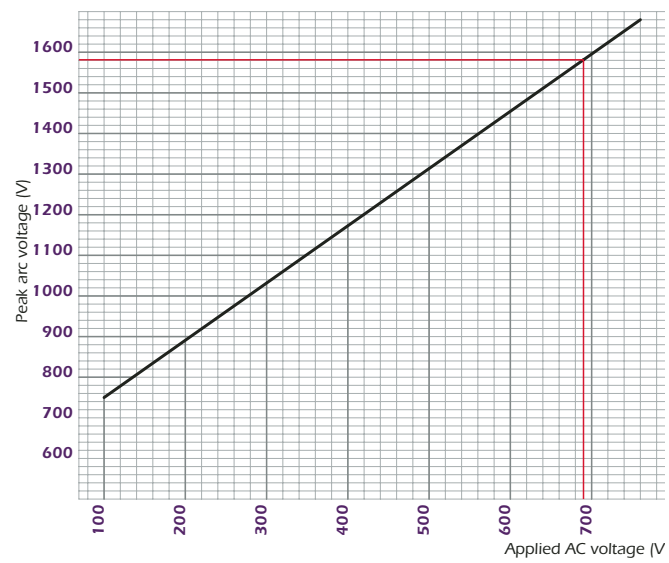
Times/Current Characteristics size 3



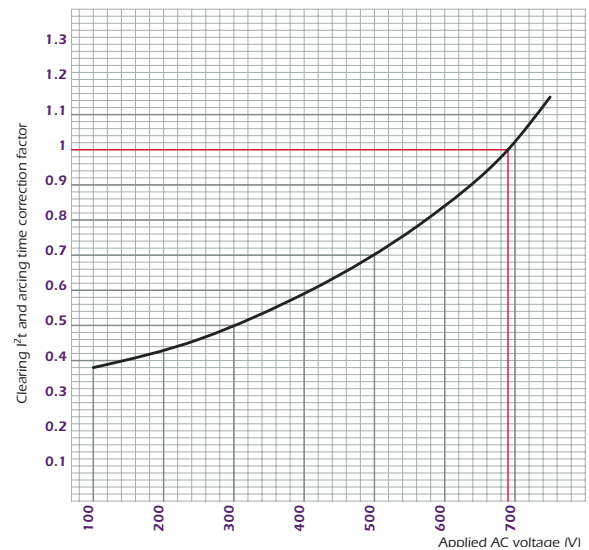
Cut off characteristics - Peak let thru current - size 3



Peak arc voltage vs applied AC voltage size 3



Clearing I²t and arcing time correction factor vs Applied AC voltage size 3



Watts loss vs % rated current size 3

