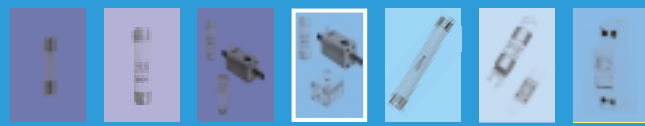


Semi conductor fuses PSC 690 V DIN 43620

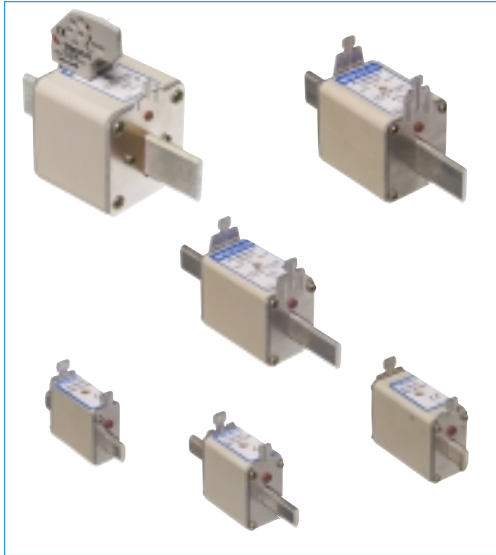




Semiconductor Fuses

European square-body fuses

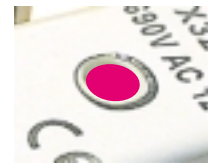
PSC® - URD 690 VAC



Ferraz Shawmut PSC-URD 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 such as diodes, thyristors. These 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 solidified sand which provides optimized I²t and high interrupting rating. All contact surfaces are plated and all hardware non-magnetic. All fuses are standard with a low voltage blown fuse indicator. This indicator can operate a microswitch which is easily mounted directly onto the fuse in service.



Beige melted



Red non melted

FEATURES

- Ultra fast acting
- Highly current limiting.
- High breaking capacities
- Very low I²t
- 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.

INOVATIONS

- Double indicator(Visual and mechanical).
- Largest range of the market
- Connexion improvement between trip indicator - Micro switch
- Cd / Pb free
- Low voltage indicator - 50V

Ratings

AC: up to 1000 A
690 VAC
80-170 kA IR

DC: Consult Factory

Approvals

AC: Tested to IEC 269.4

Features/Benefits

Broad range of ampere ratings in each body size for design flexibility

IEC 269-4 compliance for fuses for worldwide semiconductor applications



Semiconductor Fuses

European square-body fuses

German standard PSC[®] - 690VAC URD - DIN 43 620 blades

Voltage	Size	Type	Rating In (A)	Pre-Arcing I ² t @ 1ms kA ² s	Total I ² t @ 690 V kA ² s	Pn: Power losses (W)		Breaking capacities @ Un
						PV 43620	0,8In	
		URD	16	10	48		1,0	
		URD	20	15	90		1,5	
		URD	25	22	130		2,0	
		URD	32	45	270		2,5	
		URD	40	69	400		4,0	
		URD	50	107	630		5,0	
		URD	63	220	1 300		6,0	
690 V	000	URD	80	350	2 000		8,0	80
		URD	100	720	4 300		9,5	
		URD	125	1 400	8 200		10,5	
		URD	160	2 100	12 200		15,0	
		URD	200	3 900	22 700		18,0	
		URD	250	7 600	44 400		22,0	
		URD	315	15 400	90 700		30,0	
		URD	20	15	90		1,5	
		URD	25	22	130		2,0	
		URD	32	45	270		2,5	
		URD	40	69	400		4,0	
		URD	50	110	630		5,0	
		URD	63	220	1 300		6,0	
690 V	00	URD	80	350	2 000		8,0	170
		URD	100	720	4 300		8,5	
		URD	125	1 390	8 200		10,0	
		URD	160	2 100	12 200		14,0	
		URD	200	3 900	22 700		17,0	
		URD	250	7 600	44 400		20,0	
		URD	315	15 400	90 700		29,0	
		URD	32	32	170		9,5	
		URD	40	53	280		10,0	
		URD	50	87	470		10,5	
		URD	63	130	700		11,5	
		URD	80	180	970		12,5	170
690 V	0	URD	100	390	2 080		15,0	
		URD	125	720	3 890		18,0	
		URD	160	1 550	8 320		22,0	
		URD	200	2 950	15 900		27,0	
		URD	250	5 560	29 900		33,0	
		URD	315	11 600	62 300		40,0	

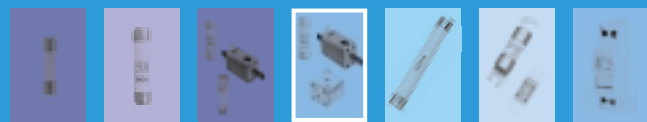
Time/current characteristics see page 7,8,9

Cut off characteristics see page 7,8,9

Total I²t and total operating time see page 7,8,9

Other curves see page 10

Fuse holder derating page 10

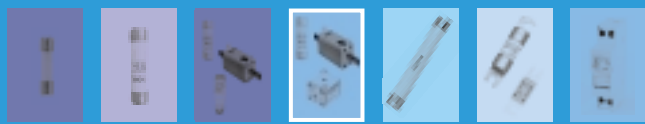


Semiconductor Fuses

European square-body fuses

German standard PSC® - 690VAC URD - DIN 43 620 blades

Voltage	Size	Type	Rating In (A)	Pre-Arcing I _t @ 1ms kA ² s	Total I _t @ 690 V kA ² s	Pn: Power losses (W)		Breaking capacities @ Un
						PV 43620	0,8In	
690 V	1	URD	63	130	700		18	
		URD	80	220	1 170		21,5	
		URD	100	290	1 570		23,0	
		URD	125	620	3 320		26,0	
		URD	160	1 170	6 270		29,0	
		URD	200	2 470	13 300		33,0	170
		URD	250	4 670	25 100		37,0	
		URD	315	9 570	51 400		42,0	
		URD	350	13 400	72 300		44,0	
		URD	400	19 500	105 000		48,0	
690 V	2	URD	160	960	5 180		38	
		URD	200	1 710	9 220		42	
		URD	250	3 480	18 700		46,5	
		URD	315	6 860	36 900		54,0	
		URD	350	9 570	51 400		58,0	
		URD	400	13 400	72 300		62,5	170
		URD	450	21 000	113 000		69,0	
		URD	500	27 400	147 000		73,0	
		URD	560	38 300	206 000		78,0	
		URD	630	58 700	315 000		85,0	
690 V	3	URD	700	78 100	420 000		87,0	
		URD	315	5 251	28 200		57,0	
		URD	350	7 562	40 600		58,0	
		URD	400	10 500	56 500		65,5	
		URD	450	15 700	84 300		70,0	
		URD	500	22 200	119 000		75,0	170
		URD	560	30 200	163 000		80,0	
		URD	630	42 000	226 000		89,0	
		URD	700	61 700	332 000		100,0	
		URD	800	88 900	478 000		112,0	
URD	900	123 900	666 000		125,0			
URD	1000	178 400	959 000		140,0			

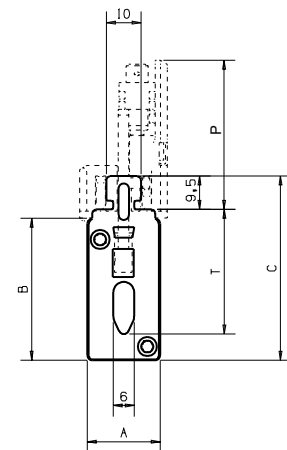
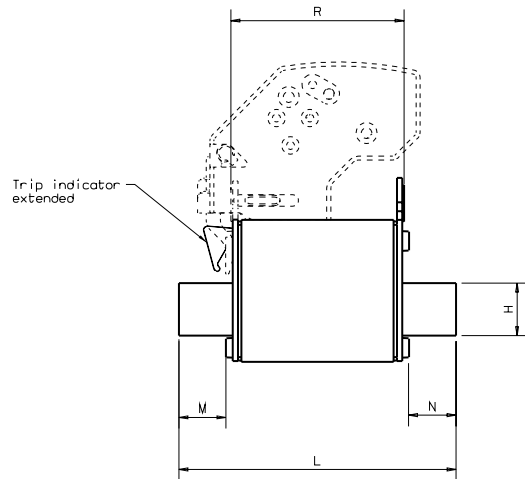


Semiconductor Fuses

European square-body fuses

German standard PSC[®] - 690VAC URD - DIN 43 620 blades

Size	Catalog Number	Reference Number	Weight (g)	Packaging
	6,9 URD 000 PV 0016	P320035C		
	6,9 URD 000 PV 0020	R320037C		
	6,9 URD 000 PV 0025	T320039C		
	6,9 URD 000 PV 0032	Y320043C		
	6,9 URD 000 PV 0040	C320047C		
	6,9 URD 000 PV 0050	G320051C		
000	6,9 URD 000 PV 0063	L320055C	135	3
	6,9 URD 000 PV 0080	O320059C		
	6,9 URD 000 PV 0100	V320063C		
	6,9 URD 000 PV 0125	X320065C		
	6,9 URD 000 PV 0160	B320069C		
	6,9 URD 000 PV 0200	D320071C		
	6,9 URD 000 PV 0250	H320075C		
	6,9 URD 000 PV 0315	M320079C		
	Neutral	Z218269J		10
	Extraction puller	P215592A		1
	6,9 URD 00 PV 0020	A320137C		
	6,9 URD 00 PV 0025	C320139C		
	6,9 URD 00 PV 0032	G320143C		
	6,9 URD 00 PV 0040	L320147C		
	6,9 URD 00 PV 0050	O320151C		
	6,9 URD 00 PV 0063	V320155C		3
00	6,9 URD 00 PV 0080	Z320159C	200	
	6,9 URD 00 PV 0100	D320163C		
	6,9 URD 00 PV 0125	F320165C		
	6,9 URD 00 PV 0160	K320169C		
	6,9 URD 00 PV 0200	M320171C		
	6,9 URD 00 PV 0250	R320175C		
	6,9 URD 00 PV 0315	W320179C		
	Neutral	Z218269J		10
	Extraction puller	P215592A		1
	6,9 URD 0 PV 0032	O320243C		
	6,9 URD 0 PV 0040	V320247C		
	6,9 URD 0 PV 0050	Z320251C		
	6,9 URD 0 PV 0063	D320255C		
	6,9 URD 0 PV 0080	H320259C		
0	6,9 URD 0 PV 0100	M320263C	250	3
	6,9 URD 0 PV 0125	P320265C		
	6,9 URD 0 PV 0160	T320269C		
	6,9 URD 0 PV 0200	W320271C		
	6,9 URD 0 PV 0250	A320275C		
	6,9 URD 0 PV 0315	E320279C		
	Neutral	Z219304J		10
	Extraction puller	P215592A		1



Microswitches

MS 4L 2-5 B6 + PRES	F210156C	(6,3mm clips)
MS 4L 2-5 B2 + PRES	G210157C	(2.8 mm clips)

Automatically resettable, 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)

Microswitches supplied separately

Size	A	B	C	H	L	M	N	P	R	T
000	20,8 0.82"	40,5 1.59"	52,5 2.07"	15 0.59"	79 3.11"	13,5 0.53"	13,5 0.53"	43,4 1.71"	49,5 1.95"	35 1.38"
00	29,5 1.16"	47,5 1.87"	59,5 2.34"	15 0.59"	79 3.11"	13,1 0.52"	13,1 0.52"	43,4 1.71"	50 1.97"	35 1.38"
0	29,5 1.16"	47,5 1.87"	59,5 2.34"	15 0.59"	125 4.92"	29,1 1.15"	29,1 1.15"	43,4 1.71"	66 2.60"	35 1.38"

Fuse holder solution, see p.11

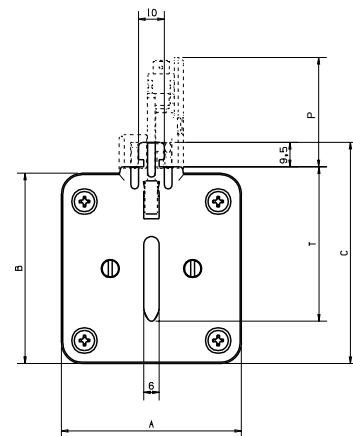
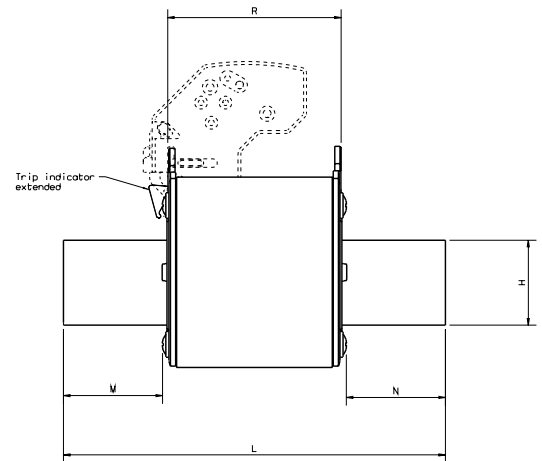


Semiconductor Fuses

European square-body fuses

German standard PSC® - 690VAC URD - DIN 43 620 blades

Size	Catalog Number	Reference Number	Weight (g)	Packaging
	6,9 URD 1 PV 0063	M320355C		
	6,9 URD 1 PV 0080	K320399C		
	6,9 URD 1 PV 0100	W320363C		
	6,9 URD 1 PV 0125	Y320365C		
	6,9 URD 1 PV 0160	C320369C		
1	6,9 URD 1 PV 0200	E320371C	430	3
	6,9 URD 1 PV 0250	J320375C		
	6,9 URD 1 PV 0315	N320379C		
	6,9 URD 1 PV 0350	P320380C		
	6,9 URD 1 PV 0400	S320383C		
	Neutral	A219834E		5
	Extraction puller	P215592A		1
	6,9 URD 2 PV 0160	L320469C		
	6,9 URD 2 PV 0200	N320471C		
	6,9 URD 2 PV 0250	S320475C		
	6,9 URD 2 PV 0315	X320479C		
	6,9 URD 2 PV 0350	Y320480C		
2	6,9 URD 2 PV 0400	B320483C	600	3
	6,9 URD 2 PV 0450	D320485C		
	6,9 URD 2 PV 0500	F320487C		
	6,9 URD 2 PV 0550	G320488C		
	6,9 URD 2 PV 0630	H320489C		
	6,9 URD 2 PV 0700	J320490C		
	Neutral	N222514E		5
	Extraction puller	P215592A		1
	6,9 URD 3 PV 0315	F320579A		
	6,9 URD 3 PV 0350	G320580A		
	6,9 URD 3 PV 0400	K320583A		
	6,9 URD 3 PV 0450	M320585A		
	6,9 URD 3 PV 0500	P320587A		
	6,9 URD 3 PV 0550	Q320588A		
3	6,9 URD 3 PV 0630	R320589A	750	3
	6,9 URD 3 PV 0700	S320590A		
	6,9 URD 3 PV 0800	T320591A		
	6,9 URD 3 PV 0900	V320592A		
	6,9 URD 3 PV 1000	W320593A		
	Neutral	E223035E		5
	Extraction puller	P215592A		1



Microswitches

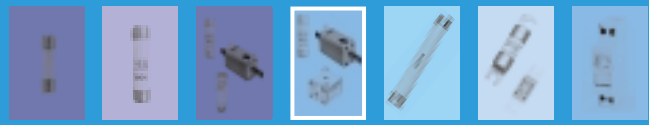
MS 4L 2-5 B6 + PRES	F210156C	(6,3mm clips)
MS 4L 2-5 B2 + PRES	G210157C	(2.8 mm clips)

Automatically resettable, 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)

Microswitches supplied separately

Size	A	B	C	H	L	M	N	P	R	T
1	39,5 1.56"	52,5 2.07"	64,5 2.54"	20 0.79"	135 5.32"	32,1 1.26"	32,1 1.26"	43,4 1.71"	68 2.68"	40 1.57"
2	51 2.01"	60 2.36"	72 2.85"	26 1.02"	150 5.91"	38,85 1.53"	38,85 1.53"	43,4 1.71"	68 2.68"	48 1.89"
3	70 2.76"	74 2.91"	86 3.39"	33 1.30"	150 5.91"	38,85 1.53"	38,85 1.53"	43,4 1.71"	68 2.68"	60 2.36"

Fuse holder solution, see p.11

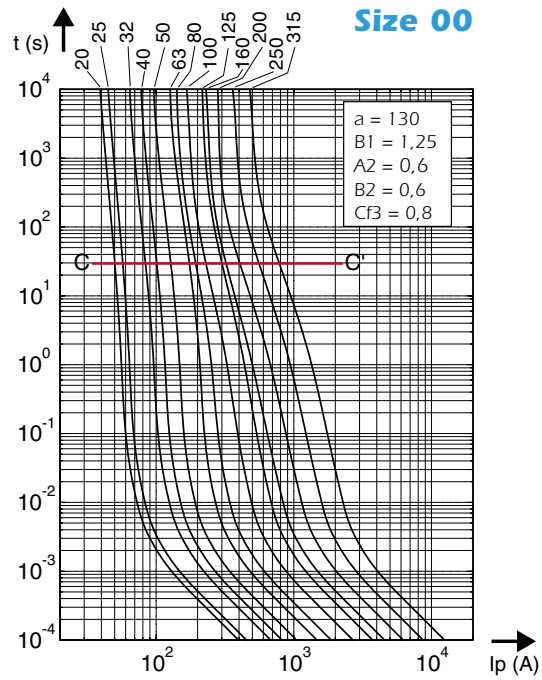
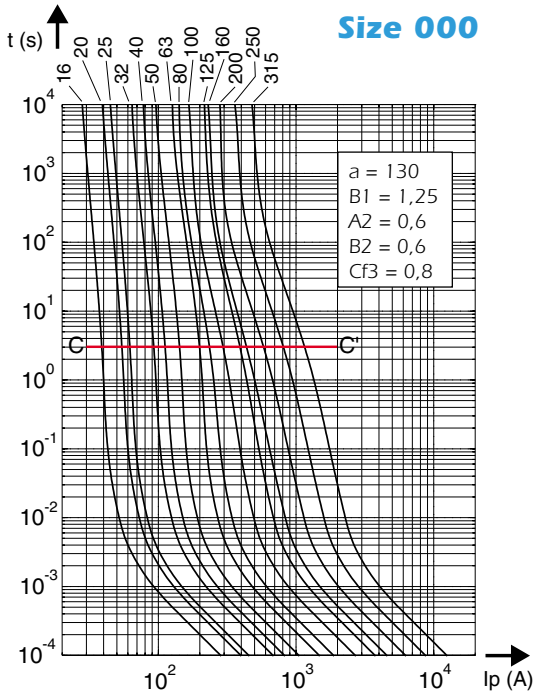


Semiconductor Fuses

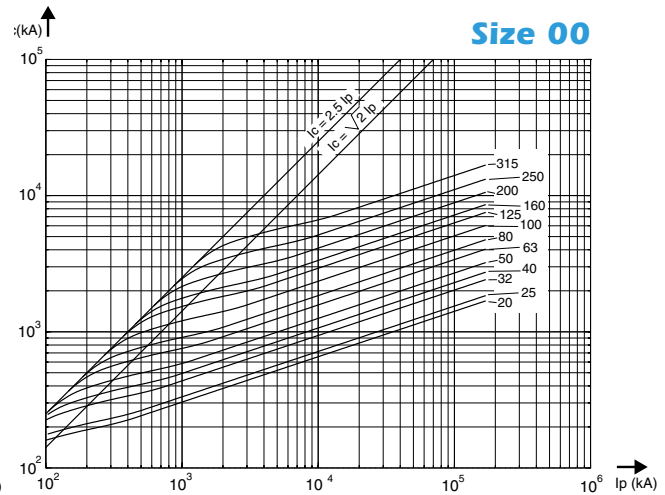
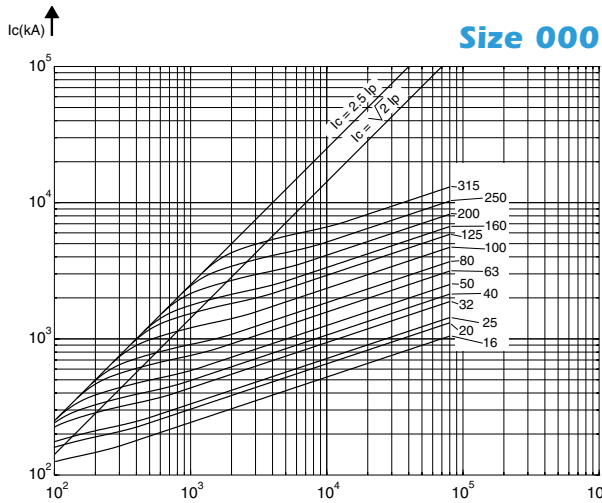
European square-body fuses

German standard PSC[®] - 690VAC URD - DIN 43 620 blades

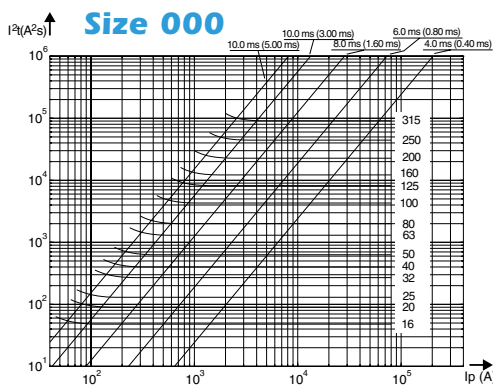
Times/Current Characteristics



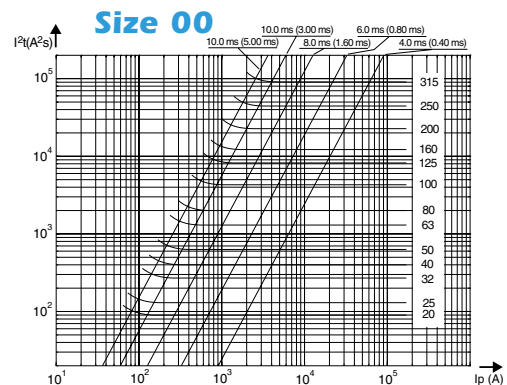
Cut off characteristics - Peak let thru current



Total I²t and total operating time @ 690 V



Value between parentheses pertain to prearcing I²t



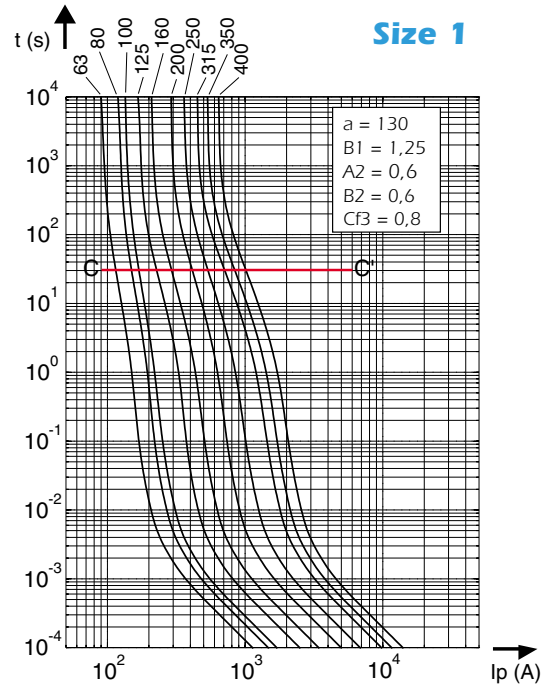
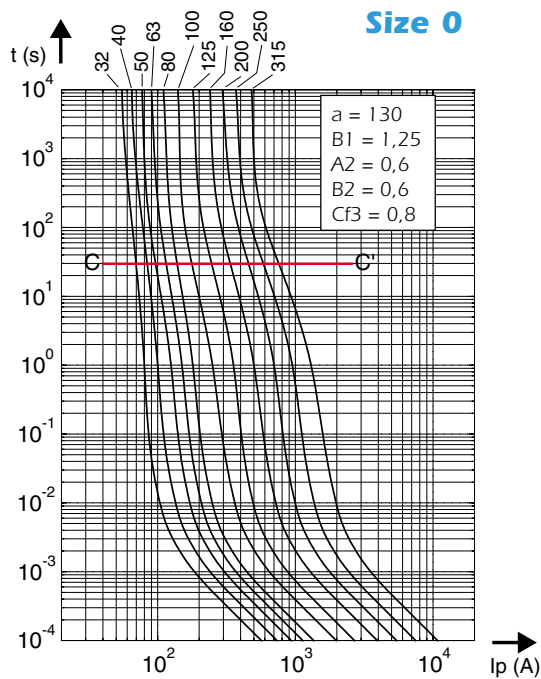


Semiconductor Fuses

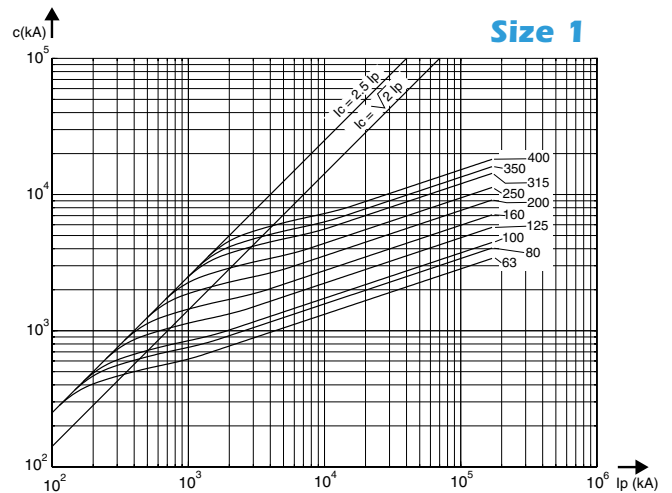
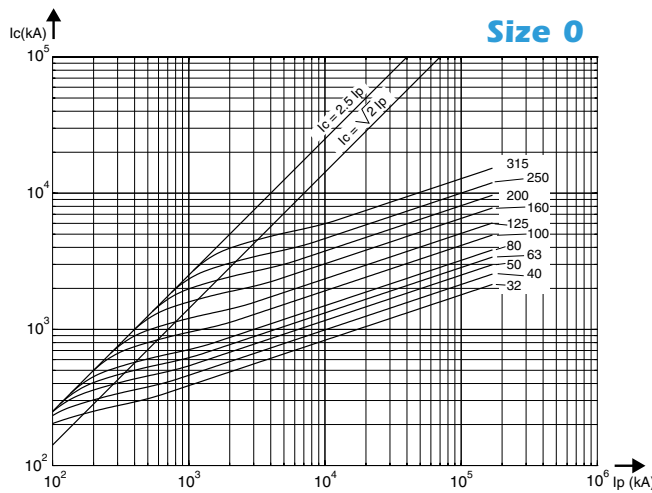
European square-body fuses

German standard PSC[®] - 690VAC URD - DIN 43 620 blades

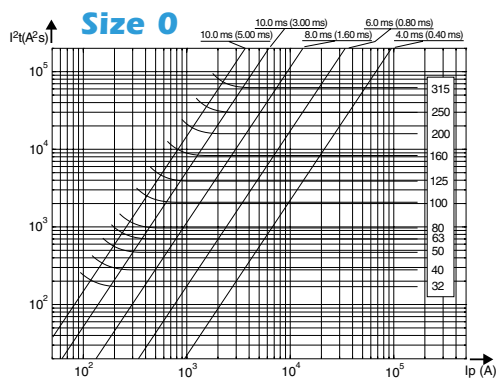
Times/Current Characteristics



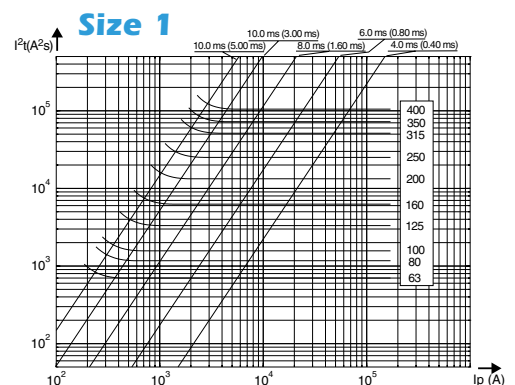
Cut off characteristics - Peak let thru current



Total I²t and total operating time @ 690 V



Value between parentheses pertain to prearcing I²t



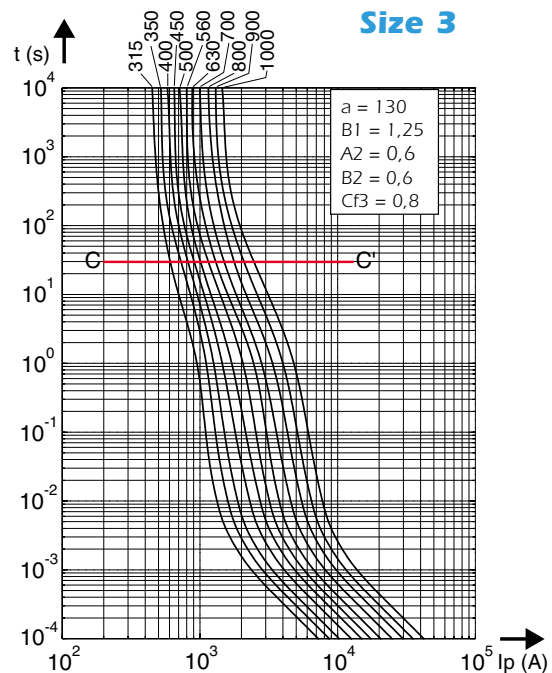
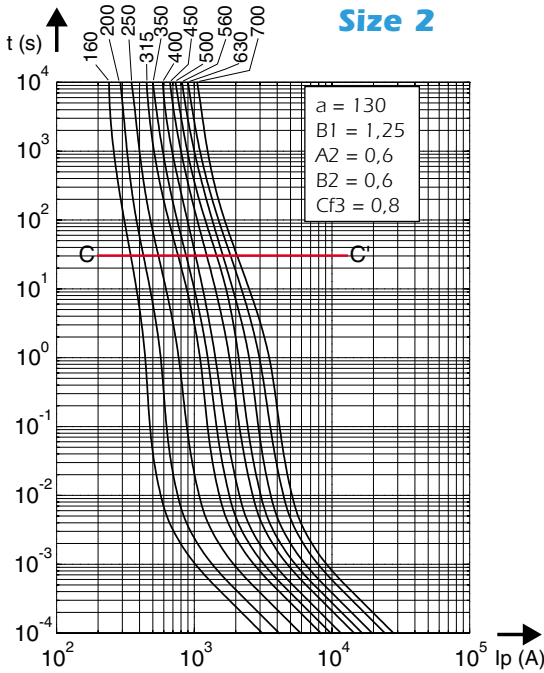


Semiconductor Fuses

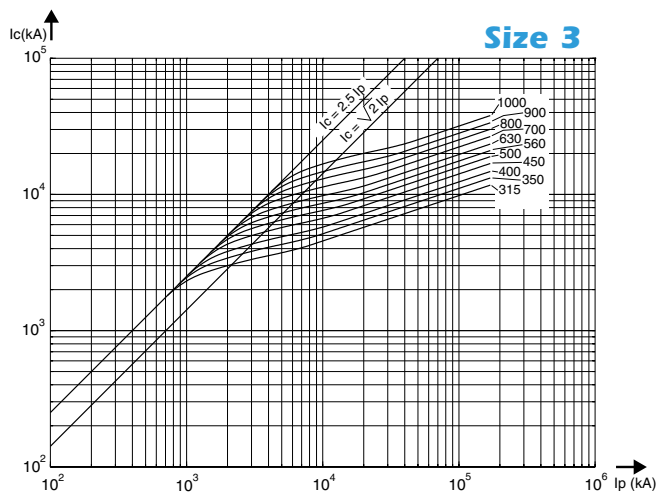
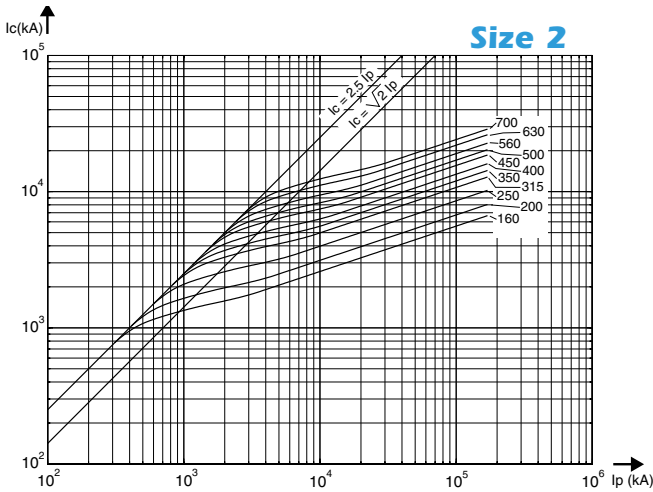
European square-body fuses

German standard PSC[®] - 690VAC URD - DIN 43 620 blades

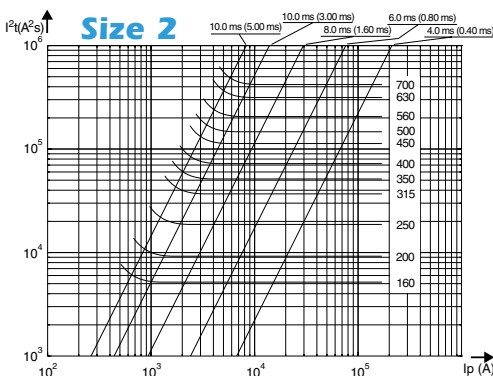
Times/Current Characteristics



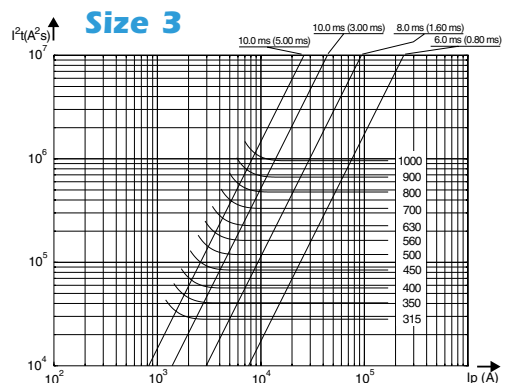
Cut off characteristics - Peak let thru current



Total I²t and total operating time @ 690 V



Value between parentheses pertain to prearcing I²t





Semiconductor Fuses

European square-body fuses

German standard PSC® - 690VAC URD - DIN 43 620 blades

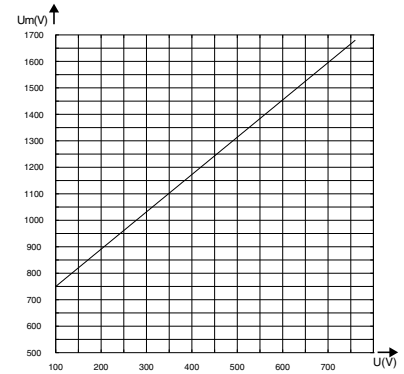
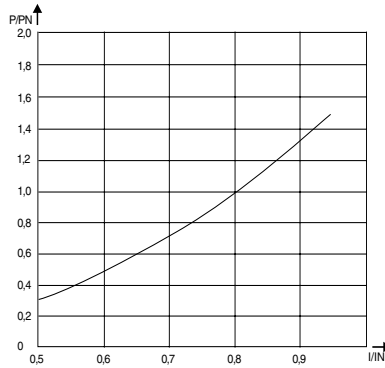
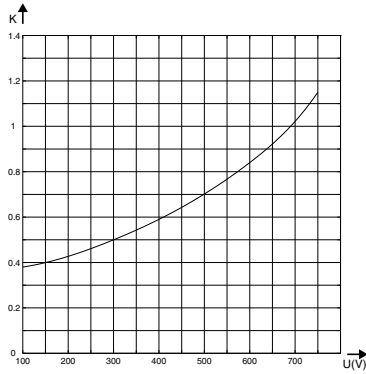
k=f(U)

Multiplier coefficient to calculate total I²t and total operating time losses at various currents

P/PN

Multiplier coefficient to calculate the power

Peak arc voltage



Derating in fuse holders

- 1- Derating for plastic bases (see page 11, picture 1)
- 2- Derating for switch-disconnectors BS and Multivert (see page 11, picture 2)
- 3- Derating for fused switch-disconnectors ITC (see page 11, picture 3)
- 4- Derating for fused switch-disconnectors ITC with finger safe protection (see page 11, picture 4)

	In	1	2	3	4
Size 000	16	1,00	1,00	1,00	1,00
	20	1,00	1,00	1,00	1,00
	25	1,00	1,00	1,00	1,00
	32	1,00	1,00	1,00	1,00
	40	1,00	1,00	1,00	1,00
	50	1,00	1,00	0,90	0,90
	63	1,00	1,00	0,90	0,90
	80	1,00	0,90	0,75	0,75
	100	1,00	0,90	0,75	0,75
	125	1,00	0,85	0,70	0,70
	160	0,90	0,75	0,60	0,60
	200	0,85	0,70	0,55	0,55
250	0,75	0,60	0,50	0,50	
315	0,70	0,55	0,45	0,45	
Size 00	20	1,00	1,00	1,00	1,00
	25	1,00	1,00	1,00	1,00
	32	1,00	1,00	1,00	1,00
	40	1,00	1,00	1,00	1,00
	50	1,00	1,00	1,00	1,00
	63	1,00	1,00	1,00	1,00
	80	1,00	0,95	0,95	0,95
	100	1,00	0,90	0,90	0,90
	125	1,00	0,85	0,85	0,85
	160	0,90	0,75	0,75	0,75
	200	0,85	0,70	0,70	0,70
	250	0,80	0,65	0,65	0,65
315	0,70	0,55	0,55	0,55	
Size 0	32	1,00			
	40	1,00			
	50	1,00			
	63	1,00			
	80	0,95			
	100	0,95			
	125	0,85			
	160	0,85			
	200	0,80			
	250	0,75			
315	0,65				

	In	1	2	3	4	
Size 1	63	1,00	0,95	1,00	1,00	
	80	0,95	0,85	0,95	0,90	
	100	0,85	0,75	0,85	0,80	
	125	0,85	0,75	0,85	0,80	
	160	0,80	0,70	0,80	0,75	
	200	0,80	0,70	0,80	0,70	
	250	0,75	0,70	0,75	0,70	
	315	0,75	0,65	0,75	0,70	
	350	0,70	0,65	0,70	0,65	
	400	0,65	0,60	0,65	0,60	
	Size 2	160	0,90	0,80	0,90	0,85
		200	0,85	0,75	0,85	0,80
250		0,85	0,70	0,80	0,75	
315		0,75	0,65	0,70	0,65	
350		0,70	0,65	0,70	0,65	
400		0,70	0,60	0,70	0,60	
450		0,70	0,60	0,65	0,60	
500		0,70	0,60	0,65	0,60	
550		0,65	0,60	0,65	0,60	
630		0,65	0,55	0,65	0,60	
700	0,60	0,55	0,60	0,55		
Size 3	315	0,85	0,75	0,80	0,75	
	350	0,85	0,75	0,80	0,75	
	400	0,80	0,70	0,75	0,70	
	450	0,80	0,70	0,75	0,70	
	500	0,75	0,65	0,75	0,70	
	550	0,75	0,65	0,75	0,70	
	630	0,70	0,60	0,70	0,65	
	700	0,70	0,60	0,65	0,60	
	800	0,65	0,55	0,60	0,55	
	900	0,60	0,50	0,60	0,55	
1000	0,60	0,50	0,55	0,50		

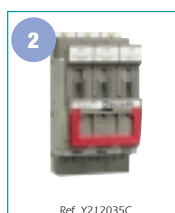


Semiconductor Fuses

European square-body fuses

German standard PSC[®] - 690VAC URD - DIN 43 620 blades

Bases and fuse holders



Type	Characteristics	Poles	Size 000/00	Size 0	Size 1	Size 2	Size 3
Fuse holder	Unprotected (4) screw connection for hole and bar terminals for 35mm Din rail	1	R216192C	T218241C	A223008C	E211075C	X213644C
		2	F218758B	G218759B	G200796B	V211595B	B214154B
		3	V219277A	W219278A	Y201340A	D212109A	F214664A
		4	Z223007C	H222486A	H201855A	R212627A	K215174A
	Unprotected (4) screw connection for holes or bar terminals for panels	1	F215170C	N216695C	E218757C	F201853C	W213643C
		2	A217212B	B217213B	F222484B	S211593B	D214662B
		3	F217723A	G217724A	Y223006A	B212107A	H215172A
		4	S219275A	R218239A	X201339A	C213143A	L215681A
	Finger Safe Protected screw connection for hole and bar terminals for DIN rail	1	S218240C	G226717C	P226724C	R226726C	T226728C
3		G222485A	J226719A	Q226725A	S226727A	V226729A	
Switch- disconnecter	Horizontal Class AC22	3	S222932A		W212033A	Y213070A	T214078A
	Horizontal Linocur AC23	1	N216626A N222882A				
		2	B218685A C201781A				
		3	Y212035A W213574A				
Vertical Multivert	3	E200725A		T201267A	O207359A	Z212036A	
Fused switch- disconnecter front handle	ITC III	3	K227824A		M228861A	O210832A	P210831A
	ITCP 160 III	3	F210409A				
	ITC 63 III complete ⁽¹⁾	3	G210824A				
	ITC 160 III complete ⁽¹⁾	3	K227824A				
	ITC 250 III complete ⁽²⁾	3			N210830A + Y210770A ⁽³⁾		
	ITC 400 III complete	3				O210832A + Y210770A ⁽³⁾	
	ITC 630 III complete	3					P210831A + Y210770A ⁽³⁾
	ITC 800 III complete	3					W229674A + Y210770A ⁽³⁾

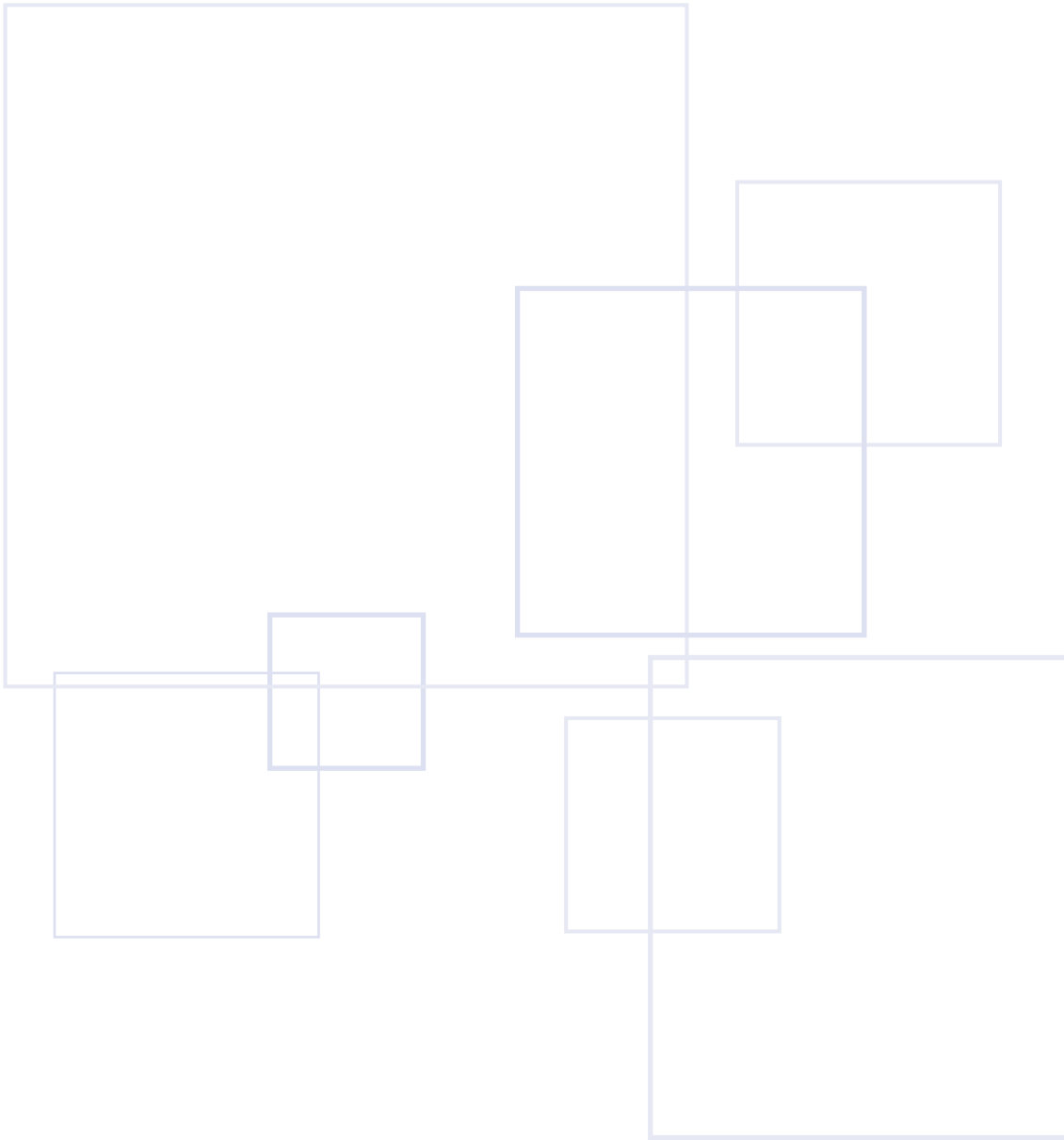
(1) Impossible to use microswitch

(2) The axis of operation must be fragmented if the heighten (Y210770A) is not used - Internal or external control.

(3) Necessary heighten for the use of microswitch (F210156C or G210157C)

(4) Unprotected against accidental contact-not finger safe

"Warning : for all holders, please check maximum fuse and fuse holder operating limit".



Your contact

