

Fusíveis Ultra-rápido para Proteção de Semicondutores. For Protection of Semicondutores.



Fusíveis tipo NH Tamh. 000 - 5
Conf Norma DIN / IEC / VDE

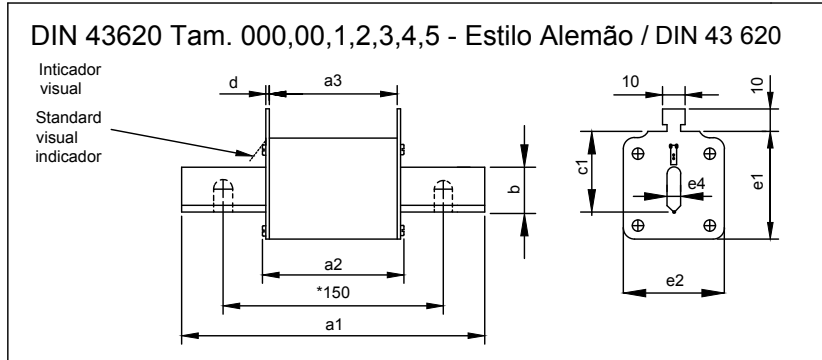
NH DIN fuse - links, siz 000 - 5
according to DIN / IEC / VDE

- alta cap.de ruptura.
- baixa perda.
- limitador de corrente.
- terminais prateado.
- baixa voltagem de arco.

Categoria aR
Category aR

- high breaking capacity.
- low power dissipation.
- high current limiting.
- silver plated contacts.
- low switching voltage.

Knife type per DIN 43620 Body size 000,00,1,2,3,



Voltagem / Voltage:
500 / 660 / 690V

Normas / Standards

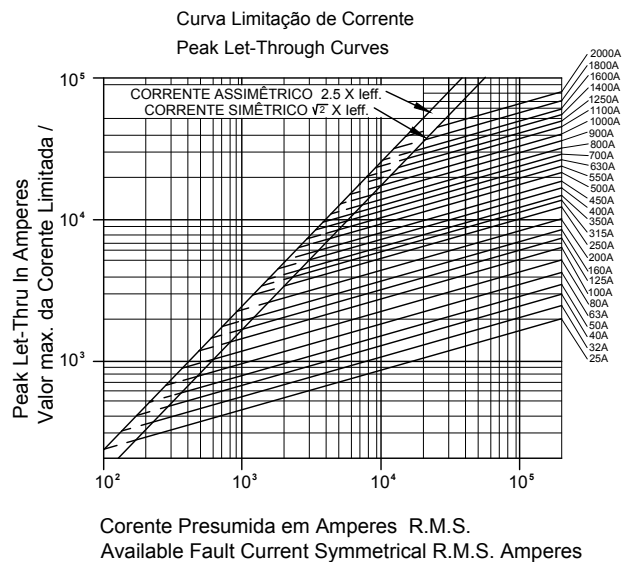
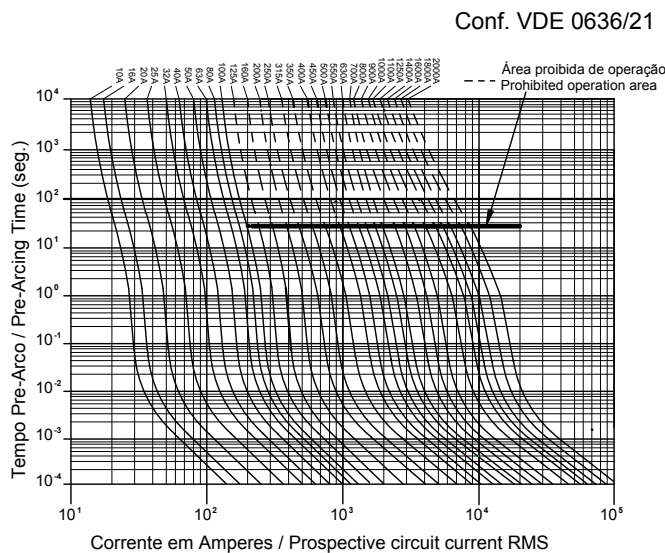
- IEC 60269-4, EN 60269-1-2,
- DIN 43620/1, DIN 43653, BS 88
- VDE 0636 /23, SEM 2810,
- VDE 0636 part 2011, DIN 43653,
- ÖVE-SN40, SEV 1066,

gR/aR = ultra rápido proteção total / ultra-rapid For protection of Semicondutores,

Dimensões / Dimensions

Nr	Tamanho Size	Corrente Current	a1	a2	a3	b	c1	d	e1	e2	e4
5329	000	2 - 100	80	49	46	15	35	1.5	41	21	6
5330	00	2 - 160	80	49	46	15	35	2	48	28	6
5331	0	6 - 160	125	66	62	15	35	2	48	28	6
5332	1	6 -250	135	72	62	20	40	2.5	53	46	6
5333	2	250 - 400	150	72	62	25	48	2.5	61	58	6
5334	3	500 - 630	150	72	62	35	60	2.5	76	72	6
5335	*4	800 - 1600	200	72	62	63.5	87	3	105	100	8
5336	*5	1800 - 2000	200	72	62	63.5	87	3	86Ø	86Ø	8

Tempo / Corrente para fusível aR - Time Current Curve for Utilization category aR, a 690V



Ultra-Rápido 690 / 800 V

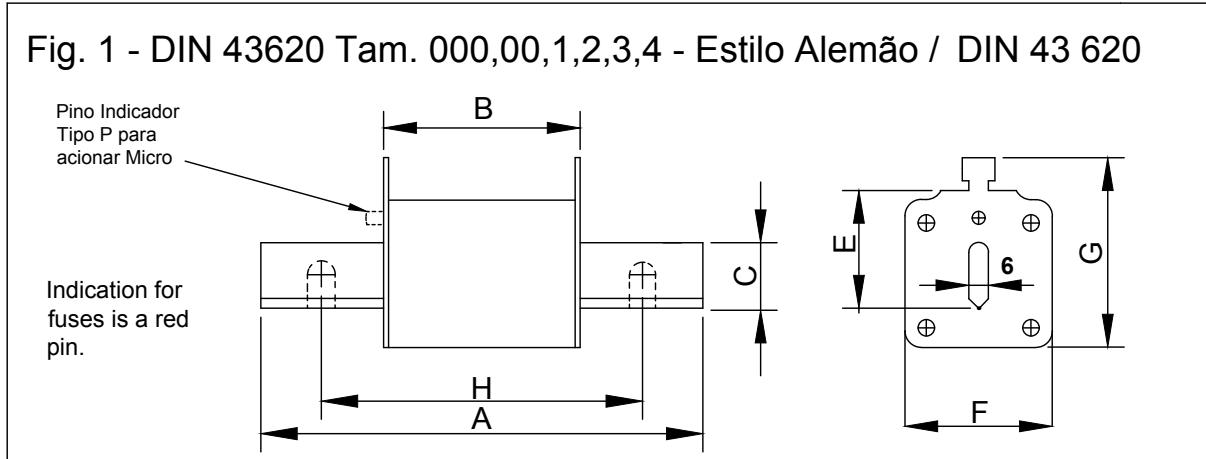
Conf. DIN 43620, IEC 269.1 - aR/gR



Semiconductor Fuses 690V / 800 V

DIN 43620 fuse, IEC 269.1 e 4 aR/gR Class

Knife type per DIN 43620 Body size 000,00,1,2,3, and 4



Dimensões / Dimensions DIN 43620

Tamh. / Size	A	B	C	E	F	G	H	TIPO TYPE
000	78	52	16	35	21	55	---	F2128
00	78	52	16	35	29	60	---	F3261
1*	135	70	20	40	45	63	---	F4378
1	135	70	20	40	45	63	---	F4378

Dimensões / Dimensions DIN 43620

Tamh. / Size	A	B	C	E	F	G	H	TIPO TYPE
2	150	70	26	48	58	72	---	F6378
3	150	70	35	60	72	87	---	F7378
4	200	70	64	87	98	113	150	1512204
5	204	80	64	80	85	---	150	1512220

Características Eletricas / Electrical Characteristics

Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts	Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts
		pre-arco Pre-arc	Total Clearing				pre-arco Pre-arc	Total Clearing	
000 / 00	10	4.4	34	3.2	1 / 2	16	7.8	43	4.8
	16	7.6	55	4.8		20	16	83	5.3
	20	12.3	83	5.3		25	26	133	7.3
	25	21.5	153	7.3		32	36	190	7.9
	32	39	263	7.9		40	44	275	9.5
	40	64	443	9.5		50	78	523	12
	50	117	776	12		63	110	703	13
	63	213	1400	13		80	179	1193	18
	80	377	2493	18		100	345	2133	21
	100	699	4680	21		125	500	3810	25
	125	1139	8300	25		160	1033	7443	33
	160	2230	15030	33		200	1990	13300	46
	200	4000	26630	35		250	3980	27500	56
	225	5800	37660	39		315	6100	44800	60
250	7250	47850	44	350	9430	61000	62		
315	11300	74580	55	400	13600	98000	66		

Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts	Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts	
		pre-arco Pre-arc	Total Clearing				pre-arco Pre-arc	Total Clearing		
2 / 3	400	11640	75100	64	4	630	39800	208000	92	
	500	22000	146600	76		700	61000	350500	96	
	630	39800	268000	92		800	65000	445000	116	
	720	61000	408500	96		900	98000	654500	122	
	500	13200	89000	100		1000	136000	890000	127	
3	630	29800	199000	106	5	1100	179000	1210500	133	
	720	46000	310900	111		1200	265500	1796000	149	
	800	73200	475000	113		1250	275300	1873000	152	
	900	119000	690000	119		1400	365000	2400000	156	
	1000	146900	944300	123		1600	580300	3960000	162	
	1250	288000	1948900	140		5	1800	876000	5300000	166
	1400	373200	2444000	153			2000	1120300	63860000	172
	1600	580000	3910000	160						
	1800	889900	5244300	166						

* Limitador de Corrente / Alta cap. de ruptura / Baixa perda
Elemento de prata. Current limiting / High interrupting rating
Low watts Loss / Silver element.

Ultra-Rápido 690V / 800V

Standard Alemão (Conf. DIN 43653)

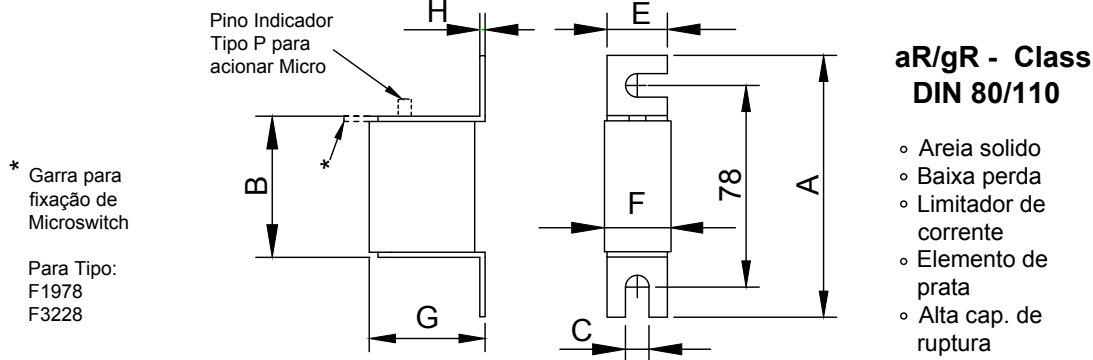


Semiconductor Fuses 690V / 800V

German Standard (DIN 43653 fuse)

Blade type DIN 80 Body size 000 and 00

Tam. 00 / 000 - Ligação Parafuso



Dimensões / Dimensions DIN 43653

Tam. / Size	A	B	C	E	F	G	H	TIPO / TYPE		
								Sem Indicador	Indicador Visual	Pino Indicador Tipo "P" para acionar Micro
000	100	54	8	20	21	40	2	F1878	F1928	F1978
00	100	54	10	28	29	60	2	-----	F3178	F3228

Características Eletricas / Electrical Characteristics

Tamh. 00 / Size: 00

Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts
		pre-arco Pre-arc	Total Clearing	
00	10	6	32	5.4
	16	8	51	7.2
	20	11	91	7.8
	25	19	138	8.5
	30	29	206	9
	40	52	371	10
	50	91	590	11
	63	210	1398	13
	80	376	2490	16
	100	691	4100	22
	125	1100	6250	27
	160	1850	12060	31
	200	3105	22100	34
	250	6569	40400	42
	315	10869	68400	53
	350	12300	89330	60
400	17210	113300	69	

Tamh. 000 / Size: 000

Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts
		pre-arco Pre-arc	Total Clearing	
000	10	4.1	27.3	3.4
	16	7.6	51	6.2
	20	10	81	7.8
	25	19.8	132	9.8
	30	39.5	276	11
	40	70	469	13
	50	114	790	16
	63	210	1398	20
	80	376	2490	23
	100	691	4556	26
	125	1180	8250	27
	160	2220	15760	33
	200	4105	27100	39
	250	7569	49400	42
	315	11869	78400	51
	350	23300	109330	60
400	32210	143300	69	

- Current limiting
- High interrupting rating
- Low watts loss
- Silver element

- Limitador de Corrente
- Alta cap. de ruptura
- Baixa perda
- Elemento de prata

Ultra-Rápido 690V / 800V

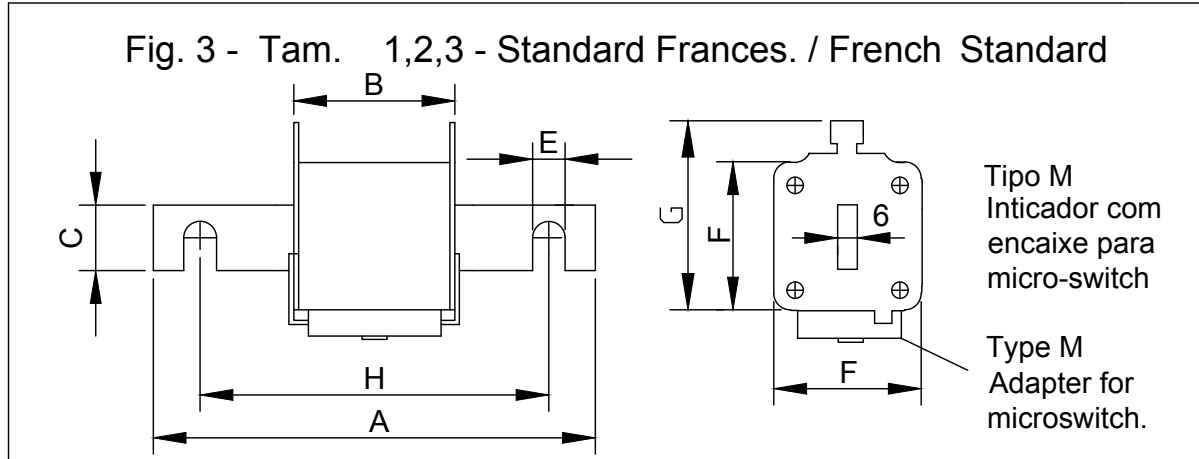
Standard Francês conf. IEC 269-1



Semiconductor Fuses 690V / 800V

Standard Francês in according to IEC 269.1

French blade type Body size 1,1,2 and 3



Dimensões / Dimensions

Tamh. / Size	A	B	C	E	F	G	H	TIPO / TYPE	
								Pino Indicador Tipo "P" para acionar Micro	Indicador Tipo "M" com encaixe para Micro
1	100	48	20	9	45	54	76	F3878	F3928
1	110	48	25	11	55	64	87	F4878	F4928
2	125	48	30	13	60	70	91	F5878	F5928
3	125	49	35	13	72	85	91	F6878	F6928

Características Eletricas / Electrical Characteristics

Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts	Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts
		pre-arco Pre-arc	Total Clearing				pre-arco Pre-arc	Total Clearing	
1	40	41	279	9.8	1	200	1640	12300	46
	50	81	580	11		250	2970	27000	56
	63	120	780	14		315	6100	44800	60
	80	184	1230	19		350	8430	51000	62
	100	360	2490	21		400	13600	98000	66
	125	543	3600	25		450	17070	135200	69
	160	1086	7350	31		500	24000	175300	73
	200	2210	14200	37		550	34600	237000	76
	250	4030	27100	40		630	52800	333000	78
	315	7080	46700	49		720	69900	423000	85
	350	10100	68000	56		800	102700	733000	98
	400	14700	102000	60					
	450	19800	129000	67					
	500	26000	172000	70					
550	33100	221000	76						
630	46800	319000	82						

Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts	Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts
		pre-arco Pre-arc	Total Clearing				pre-arco Pre-arc	Total Clearing	
2	400	11640	75100	64	3	500	13200	89000	100
	450	16000	107690	69		550	18500	132500	103
	500	22000	146600	76		630	29800	199000	106
	550	27600	185000	79		720	46000	310900	111
	630	39800	268000	92		800	65000	445000	116
	720	61000	408500	96		900	98000	654500	122
	800	83200	555000	103		1000	136000	890000	127
	900	119000	790000	112		1100	179000	1210500	133
	1000	176900	1200000	116		1250	265500	1796000	149
	1100	248000	1690000	122		1400	360000	2221000	158
	1250	348900	1980000	129		1500	460000	3100000	210
				1600	525000	3450000	243		

Limitador de Corrente / Alta cap. de ruptura / Baixa perda
 Elemento de prata. Current limiting / High interrupting rating
 Low watts Loss / Silver element.

Ultra-Rápido 690V / 800V

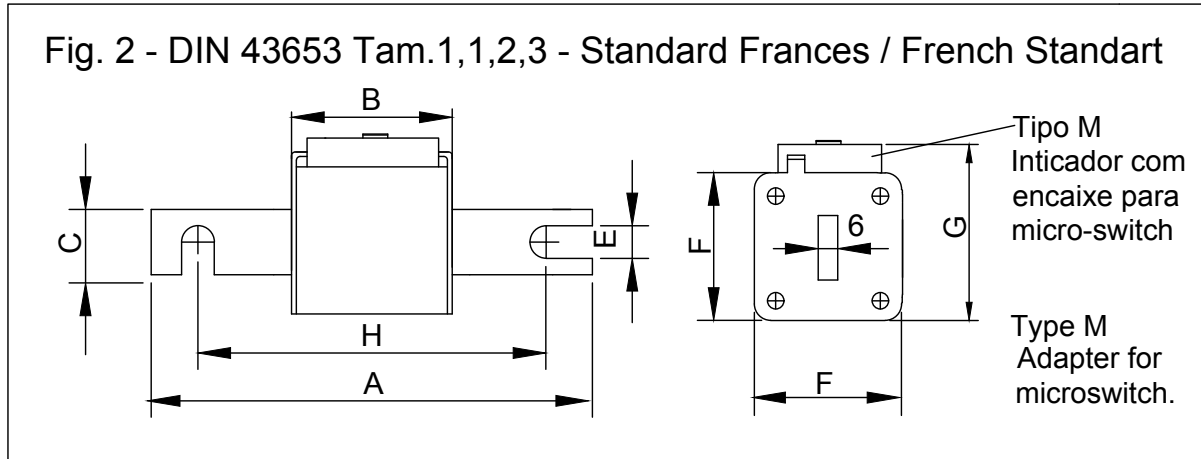
Standard Alemão DIN 43653



Semiconductor Fuses 690V / 800V

German Standard DIN 43653

Blade type DIN 80, Body size 1*,1,2 and 3



Dimensões / Dimensions DIN 80

Tamh. / Size	A	B	C	E	F	G	H	TIPO / TYPE		
								-----	-----	Indicador Tipo "M" com encaixe para Micro
1	105	49	25	11	45	54	78	-----	-----	F3678
1	109	49	25	11	55	64	78	-----	-----	F4678
2	110	49	25	11	60	70	78	-----	-----	F5678
3	110	51	35	11	72	85	78	-----	-----	F6678

Características Eletricas / Electrical Characteristics

Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts	Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts
		pre-arco Pre-arc	Total Clearing				pre-arco Pre-arc	Total Clearing	
1	40	41	279	9.8	1	200	1640	12300	46
	50	81	580	11		250	2970	27000	56
	63	120	780	14		315	6100	44800	60
	80	184	1230	19		350	8430	51000	62
	100	360	2490	21		400	13600	98000	66
	125	543	3600	25		450	17070	135200	69
	160	1086	7350	31		500	24000	175300	73
	200	2210	14200	37		550	34600	237000	76
	250	4030	27100	40		630	52800	333000	78
	315	7080	46700	49		720	69900	423000	85
	350	10100	68000	56		800	102700	733000	98
	400	14700	102000	60					
	450	19800	129000	67					
	500	26000	172000	70					
	550	33100	221000	76					
	630	46800	319000	82					

Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts	Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts
		pre-arco Pre-arc	Total Clearing				pre-arco Pre-arc	Total Clearing	
2	400	11640	75100	64	3	500	13200	89000	100
	450	16000	107690	69		550	18500	132500	103
	500	22000	146600	76		630	29800	199000	106
	550	27600	185000	79		720	46000	310900	111
	630	39800	268000	92		800	65000	445000	116
	720	61000	408500	96		900	98000	654500	122
	800	83200	555000	103		1000	136000	890000	127
	900	119000	690000	112		1100	179000	1210500	133
	1000	176900	1200000	116		1250	265500	1796000	149
	1100	248000	1690000	122		1400	360000	2221000	158
	1250	348900	1980000	129		1500	460000	3100000	210
						1600	525000	3450000	243

Limitador de Corrente / Alta cap. de ruptura / Baixa perda
Elemento de prata. Current limiting / High interrupting rating
Low watts Loss / Silver element.

Ultra-Rápido 690V / 800V

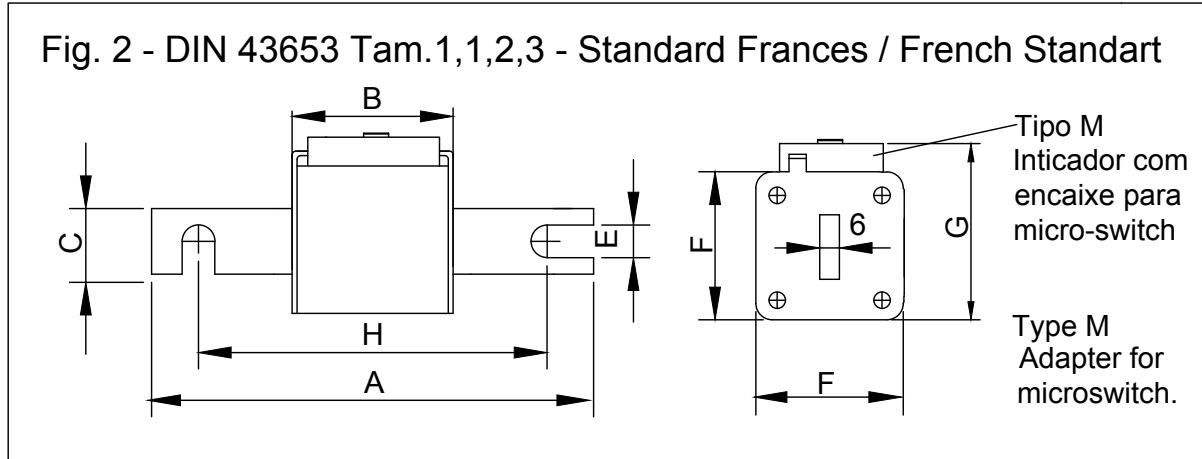
Standard Alemão DIN 43653



Semiconductor Fuses 690V / 800V

German Standard DIN 43653

Blade type DIN 80, Body size 1*,1,2 and 3



Dimensões / Dimensions DIN 110

Tamh. / Size	A	B	C	E	F	G	H	TIPO / TYPE		
								-----	-----	Indicador Tipo "M" com encaixe para Micro
1	133	49	25	11	45	54	108	-----	-----	F3828
1	138	49	25	11	55	64	108	-----	-----	F4828
2	139	49	25	11	60	70	108	-----	-----	F5828
3	139	51	35	11	72	85	108	-----	-----	F6828

Características Eletricas / Electrical Characteristics

Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts	Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts
		pre-arco Pre-arc	Total Clearing				pre-arco Pre-arc	Total Clearing	
1	40	41	279	9.8	1	200	1640	12300	46
	50	81	580	11		250	2970	27000	56
	63	120	780	14		315	6100	44800	60
	80	184	1230	19		350	8430	51000	62
	100	360	2490	21		400	13600	98000	66
	125	543	3600	25		450	17070	135200	69
	160	1086	7350	31		500	24000	175300	73
	200	2210	14200	37		550	34600	237000	76
	250	4030	27100	40		630	52800	333000	78
	315	7080	46700	49		720	69900	423000	85
	350	10100	68000	56		800	102700	733000	98
	400	14700	102000	60					
	450	19800	129000	67					
	500	26000	172000	70					
	550	33100	221000	76					
630	46800	319000	82						

Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts	Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts
		pre-arco Pre-arc	Total Clearing				pre-arco Pre-arc	Total Clearing	
2	400	11640	75100	64	3	500	13200	89000	100
	450	16000	107690	69		550	18500	132500	103
	500	22000	146600	76		630	29800	199000	106
	550	27600	185000	79		720	46000	310900	111
	630	39800	268000	92		800	65000	445000	116
	720	61000	408500	96		900	98000	654500	122
	800	83200	555000	103		1000	136000	890000	127
	900	119000	690000	112		1100	179000	1210500	133
	1000	176900	1200000	116		1250	265500	1796000	149
	1100	248000	1690000	122		1400	360000	2221000	158
	1250	348900	1980000	129		1500	460000	3100000	210
						1600	525000	3450000	243

Limitador de Corrente / Alta cap. de ruptura / Baixa perda
Elemento de prata. Current limiting / High interrupting rating
Low watts Loss / Silver element.

Ultra-Rápido 690V / 800V

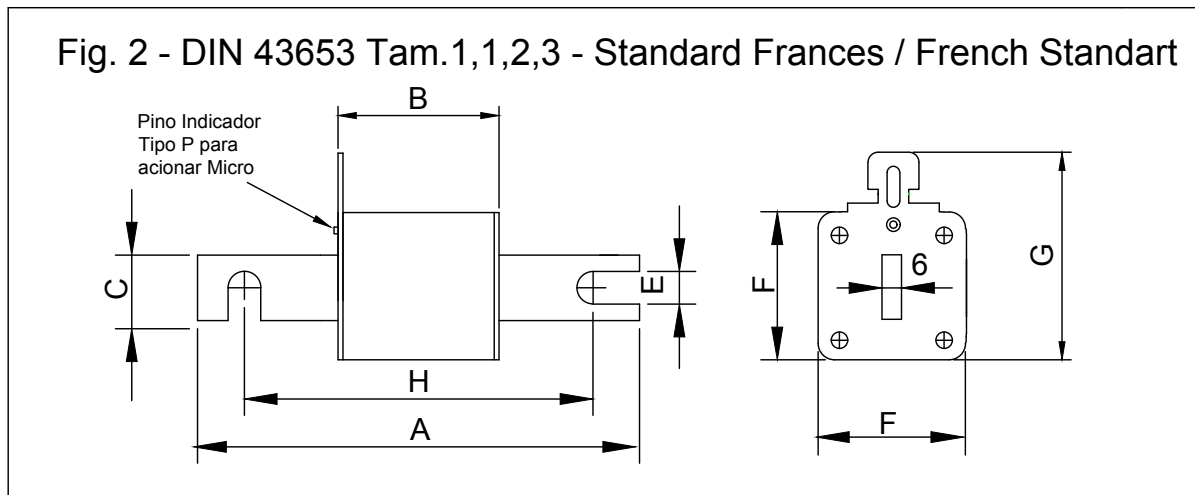
Standard Alemão DIN 43653



Semiconductor Fuses 690V / 800V

German Standard DIN 43653

Blade type DIN 110, Body size 1*,1,2 and 3



Dimensões / Dimensions DIN 80

Tamh. / Size	A	B	C	E	F	G	H	TIPO / TYPE		-----
								Indicador Visual	Pino Indicador Tipo "P" para acionar Micro	
1	105	49	25	11	45	54	78	F3578	F3628	-----
1	109	49	25	11	55	64	78	F4578	F4628	-----
2	110	49	25	11	60	70	78	F5578	F5628	-----
3	110	51	35	11	72	85	78	F6578	F6628	-----

Características Elétricas / Electrical Characteristics

Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts	Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts
		pre-arco Pre-arc	Total Clearing				pre-arco Pre-arc	Total Clearing	
1	40	41	279	9.8	1	200	1640	12300	46
	50	81	580	11		250	2970	27000	56
	63	120	780	14		315	6100	44800	60
	80	184	1230	19		350	8430	51000	62
	100	360	2490	21		400	13600	98000	66
	125	543	3600	25		450	17070	135200	69
	160	1086	7350	31		500	24000	175300	73
	200	2210	14200	37		550	34600	237000	76
	250	4030	27100	40		630	52800	333000	78
	315	7080	46700	49		720	69900	423000	85
	350	10100	68000	56		800	102700	733000	98
	400	14700	102000	60					
	450	19800	129000	67					
	500	26000	172000	70					
550	33100	221000	76						
630	46800	319000	82						

Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts	Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts
		pre-arco Pre-arc	Total Clearing				pre-arco Pre-arc	Total Clearing	
2	400	11640	75100	64	3	500	13200	89000	100
	450	16000	107690	69		550	18500	132500	103
	500	22000	146600	76		630	29800	199000	106
	550	27600	185000	79		720	46000	310900	111
	630	39800	268000	92		800	65000	445000	116
	720	61000	408500	96		900	98000	654500	122
	800	83200	555000	103		1000	136000	890000	127
	900	119000	690000	112		1100	179000	1210500	133
	1000	176900	1200000	116		1250	265500	1796000	149
	1100	248000	1690000	122		1400	360000	2221000	158
	1250	348900	1980000	129		1500	460000	3100000	210
						1600	525000	3450000	243

- Limitador de Corrente
- Alta cap. de ruptura
- Baixa perda
- Elemento de prata
- Current limiting
- High interrupting rating
- Low watts loss
- Silver element

Ultra-Rápido 690V / 800V

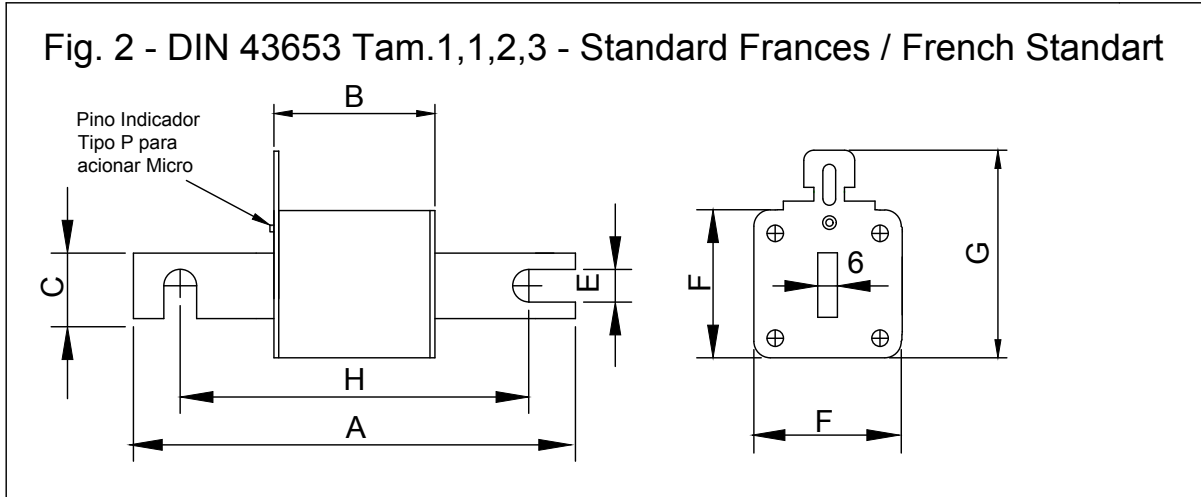
Standard Alemão DIN 43653



Semiconductor Fuses 690V / 800V

German Standard DIN 43653

Blade type DIN 80, Body size 1*,1,2 and 3



Dimensões / Dimensions DIN 110

Tamh. / Size	A	B	C	E	F	G	H	TIPO / TYPE		-----
								Indicador Visual	Pino Indicador Tipo "P" para acionar Micro	
1	133	49	25	11	45	54	108	F3728	F3778	-----
1	138	49	25	11	55	64	108	F4728	F4778	-----
2	139	49	25	11	60	70	108	F5728	F5778	-----
3	139	51	35	11	72	85	108	F6728	F6778	-----

Características Eletricas / Electrical Characteristics

Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts	Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts
		pre-arco Pre-arc	Total Clearing				pre-arco Pre-arc	Total Clearing	
1	40	41	279	9.8	1	200	1640	12300	46
	50	81	580	11		250	2970	27000	56
	63	120	780	14		315	6100	44800	60
	80	184	1230	19		350	8430	51000	62
	100	360	2490	21		400	13600	98000	66
	125	543	3600	25		450	17070	135200	69
	160	1086	7350	31		500	24000	175300	73
	200	2210	14200	37		550	34600	237000	76
	250	4030	27100	40		630	52800	333000	78
	315	7080	46700	49		720	69900	423000	85
	350	10100	68000	56		800	102700	733000	98
	400	14700	102000	60					
	450	19800	129000	67					
	500	26000	172000	70					
	550	33100	221000	76					
630	46800	319000	82						

Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts	Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts
		pre-arco Pre-arc	Total Clearing				pre-arco Pre-arc	Total Clearing	
2	400	11640	75100	64	3	500	13200	89000	100
	450	16000	107690	69		550	18500	132500	103
	500	22000	146600	76		630	29800	199000	106
	550	27600	185000	79		720	46000	310900	111
	630	39800	268000	92		800	65000	445000	116
	720	61000	408500	96		900	98000	654500	122
	800	83200	555000	103		1000	136000	890000	127
	900	119000	690000	112		1100	179000	1210500	133
	1000	176900	1200000	116		1250	265500	1796000	149
	1100	248000	1690000	122		1400	360000	2221000	158
	1250	348900	1980000	129		1500	460000	3100000	210
						1600	525000	3450000	243

- Limitador de Corrente
- Alta cap. de ruptura
- Baixa perda
- Elemento de prata
- Current limiting
- High interrupting rating
- Low watts loss
- Silver element

Ultra-Rápido 690V / 800V

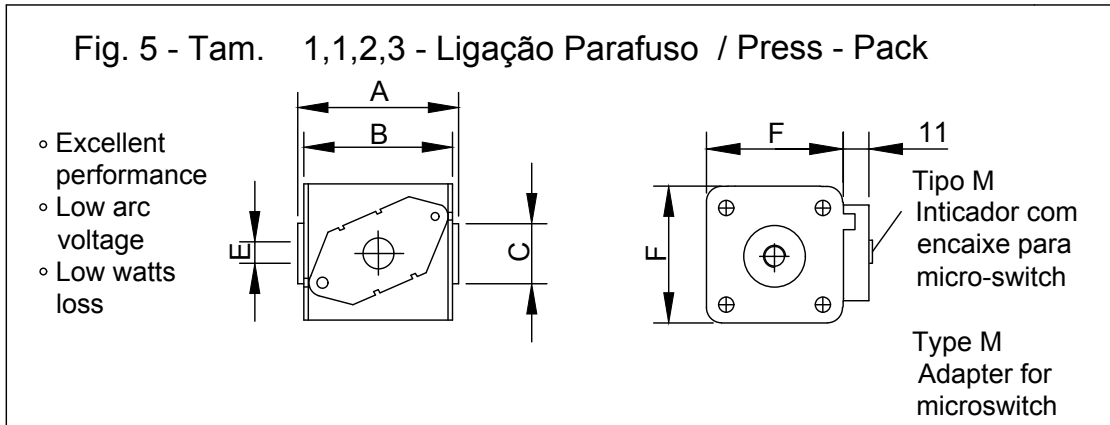


Ligação Parafuso conf. IEC 269.1 e 4

Semiconductor Fuses 690V / 800V

Press - pack in accord. to IEC 269.1 and 4

End contact type, single hole Body size 1,2,and 3



Dimensões / Dimensions

Tamh. / Size	A	B	C	E	F	TIPO / TYPE		
						Indicador Visual	Pino Indicador Tipo "P" para acionar Micro	Indicador Tipo "M" com encaixe para Micro
1	50	48	18	M8 (5/16")	45	F3978	-----	F4028
1	50	48	18	M8 (5/16")	55	F4978	-----	F5028
2	50	48	30	M10 (3/8")	60	F5978	-----	F6028
3	52	49	38	M12 (1/2")	72	F6978	-----	F7028

Características Eletricas / Electrical Characteristics

Tam. Size	I ² t (A ² s.)			Watt / Watts	Tam. Size	I ² t (A ² s.)			Watt / Watts
	Corrente Current	pre-arco Pre-arc	Total Clearing			Corrente Current	pre-arco Pre-arc	Total Clearing	
1	40	41	279	9.8	1	200	1640	12300	46
	50	81	580	11		250	2970	27000	56
	63	120	780	14		315	6100	44800	60
	80	184	1230	19		350	8430	51000	62
	100	360	2490	21		400	13600	98000	66
	125	543	3600	25		450	17070	135200	69
	160	1086	7350	31		500	24000	175300	73
	200	2210	14200	37		550	34600	237000	76
	250	4030	27100	40		630	52800	333000	78
	315	7080	46700	49		720	69900	423000	85
	350	10100	68000	56		800	102700	733000	98
	400	14700	102000	60					
	450	19800	129000	67					
	500	26000	172000	70					
550	33100	221000	76						
630	46800	319000	82						

Tam. Size	I ² t (A ² s.)			Watt / Watts	Tam. Size	I ² t (A ² s.)			Watt / Watts
	Corrente Current	pre-arco Pre-arc	Total Clearing			Corrente Current	pre-arco Pre-arc	Total Clearing	
2	400	11640	75100	64	3	500	13200	89000	100
	450	16000	107690	69		550	18500	132500	103
	500	22000	146600	76		630	29800	199000	106
	550	27600	185000	79		720	46000	310900	111
	630	39800	268000	92		800	65000	380000	116
	720	61000	308500	96		900	98000	419500	122
	800	83200	455000	103		1000	136000	485000	127
	900	119000	690000	112		1100	179000	880500	133
	1000	176900	590000	116		1250	265500	1396000	149
	1100	248000	1200000	122		1400	360000	1921000	158
	1250	348900	1690000	129		1500	460000	2990000	210
						1600	525000	3450000	243

Limitador de Corrente / Alta cap. de ruptura / Baixa perda
 Elemento de prata. Current limiting / High interrupting rating
 Low watts Loss / Silver element.

Ultra-Rápido 690V / 800V

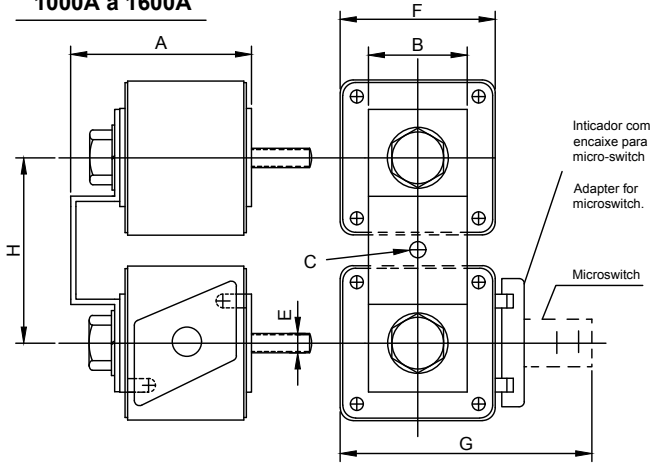
Standard Francês conf. IEC 269 -1/4

Semiconductor Fuses 690V / 800V

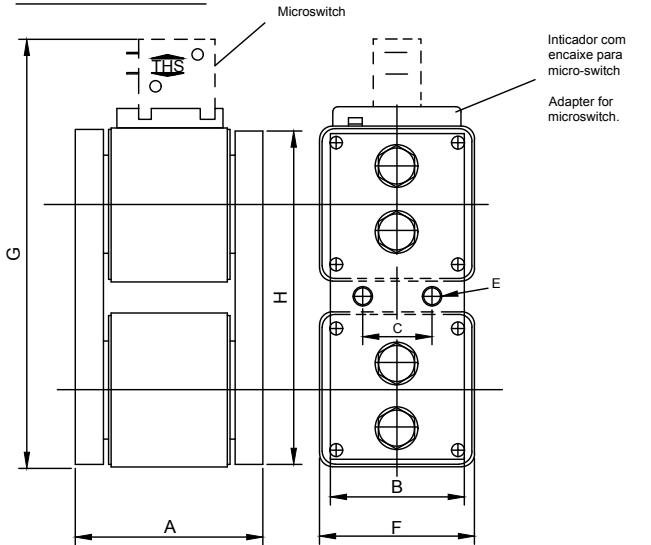
French Standard in accord. to IEC 269. 1/4

Two fuses in parallel connected with fish joint

1000A a 1600A



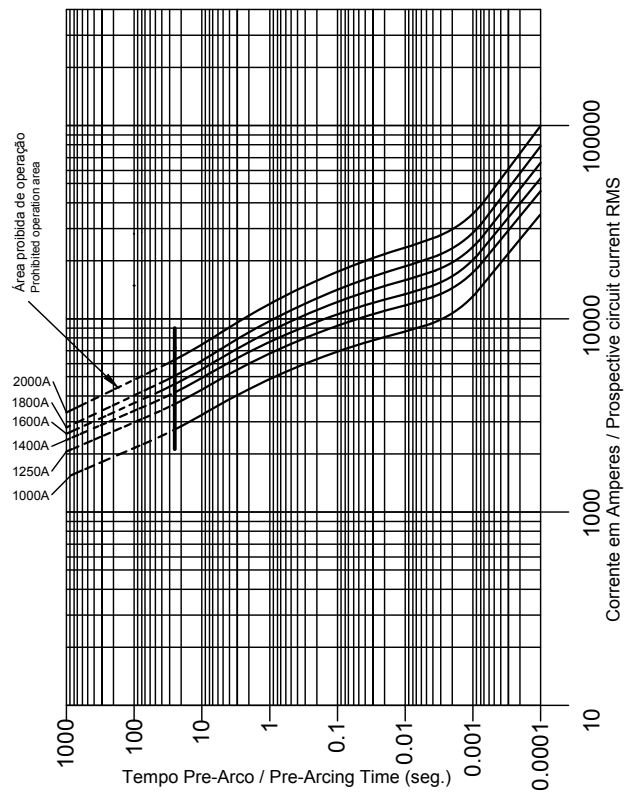
1600A a 2000A



Dimensões / Dimensions

Tamh. / Size	A	B	C	E	F	G	H	Nr. Ref.
2 x 2	67.5	35	11	M10	60	100	48	2F6028
2 x 3	65.5	51	13	M12	72	115	54	2F7028
2 x 2	91	35	11	M10	60	100	48	2F6158
2 x 3	91	51	13	M12	72	115	54	2F7108

Curva Tempo - Corrente / Time Current Curve



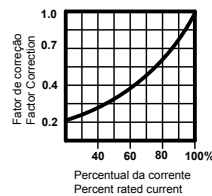
Dimensões / Dimensions

Tamh. / Size	A	B	C	E	F	G	H	Nr. Ref.
2 x 2	91.5	60	30	M10	60	188	141	2X2000A

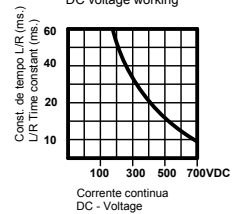
Características Eletricas / Electrical Characteristics

Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts	Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts
		pre-arco Pre-arc	Total Clearing				pre-arco Pre-arc	Total Clearing	
2 x 2/3	1000	110000	553000	162	2 x 2/3	1600	440000	2331000	220
	1250	203300	1063000	183		1800	643000	3430000	228
	1400	311980	1623880	213		2000	973000	5320000	234

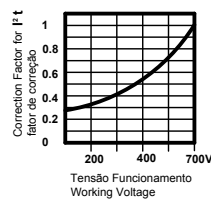
Curva de correção de perda
Watt loss correction curve



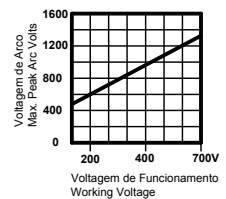
Fusível AC em DC
DC voltage working



Curva de correção I²t
I²t Correction



Voltagem de arco max.
Max. arc voltage



Ultra-Rápido 1000 / 1300 V

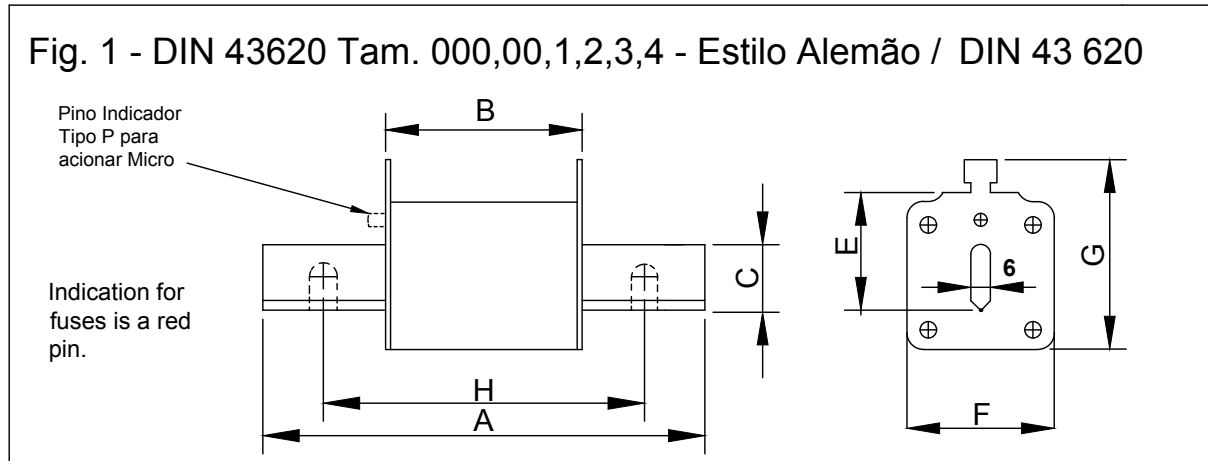
Conf. DIN 43620, IEC 269.1 - aR/gR



Semiconductor Fuses 1000V / 1300V

DIN 43620 fuse, IEC 269.1 e 4 aR/gR Class

Knife type per DIN 43620 Body size 000,00,1,2,3, and 4



Dimensões / Dimensions DIN 43620

Tamh. / Size	A	B	C	E	F	G	H	TIPO TYPE
----	---	---	---	---	---	---	---	----
1) 00	78	52	16	35	29	60	---	F3261
1*	135	70	20	40	45	63	---	F4378
1	135	70	20	40	45	63	---	F4378

1) MAX. 1000V

Dimensões / Dimensions DIN 43620

Tamh. / Size	A	B	C	E	F	G	H	TIPO TYPE
2	150	70	26	48	58	72	---	F6378
3	150	70	35	60	72	87	---	F7378
4	200	70	64	87	98	113	150	1512204
5	204	80	64	80	85	---	150	1512220

Características Eletricas / Electrical Characteristics

Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts	Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts
		pre-arco Pre-arc	Total Clearing				pre-arco Pre-arc	Total Clearing	
00	10	4.4	34	3.2	1* / 1	25	26	133	7.3
	16	7.6	55	4.8		32	36	190	7.9
	20	12.3	83	5.3		40	44	275	9.5
	25	21.5	153	7.3		50	130	1050	12
	32	39	223	7.9		63	220	1703	13
	40	64	400	9.5		80	410	3193	18
	50	117	700	12		100	755	5933	21
	63	213	1200	13		125	1400	11000	25
	80	377	2493	18		160	2033	14000	33
	100	699	4680	21		200	4590	25000	46
	125	1139	8300	25		250	7580	45050	56
	160	2230	15030	33		315	14100	80800	66
	200	4000	26630	35		350	21430	121000	69
	225	5800	37660	39		400	34600	203000	76
	250	7250	47850	44		500	65430	339000	86
	315	11300	74580	55		630	12500	670000	96

Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts	Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts
		pre-arco Pre-arc	Total Clearing				pre-arco Pre-arc	Total Clearing	
2	250	7900	45000	64	4	630	39800	268000	92
	315	13000	77600	76		700	61000	408500	96
	400	29800	168000	92		800	65000	445000	116
	500	48000	300000	96		900	98000	654500	122
	630	11200	538000	108		1000	136000	890000	127
	720	140800	710000	112		1100	179000	1210500	133
3	400	22000	130000	94	5	1200	265500	1796000	149
	500	42500	230000	107		1250	275300	1873000	152
	630	82100	456000	114		1400	365000	2400000	156
	800	195000	1080000	153		1600	580300	3960000	162
	1000	350000	1910000	160		1800	876000	4300000	166
	1250	541900	3220000	190		2000	1120300	5860000	172
	1400	770000	3910000	210					
	1600	1400000	5220000	230					

* Limitador de Corrente / Alta cap. de ruptura / Baixa perda
Elemento de prata. Current limiting / High interrupting rating
Low watts Loss / Silver element.

Ultra-Rápido 1000V / 1300V

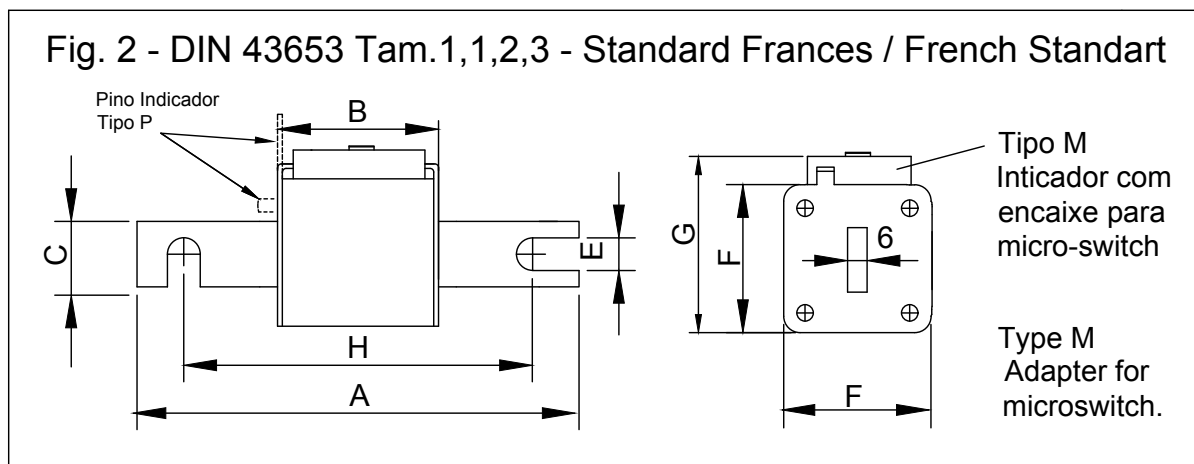
Standard Alemão DIN 43653



Semiconductor Fuses 1000V / 1300V

German Standard DIN 43653

Blade type DIN 80,110,140 Body size 0,1,2 and 3



Dimensões / Dimensions

Tamh. / Size	A	B	C	E	F	G	H	TIPO / TYPE		
								Indicador Visual	Indicador Tipo P para encaixe de MicroSwitch	Indicador Tipo M com encaixe para Micro
1	138	79	20	11	45	54	108	F3708	F3758	F3808
1	138	79	25	11	55	64	108	F4708	F4758	F4808
2	139	79	25	11	60	75	108	F5708	F5758	F5808
3	139	81	35	11	72	88	108	F6708	F6758	F6808

Características Eletricas / Electrical Characteristics

Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts	Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts
		pre-arco Pre-arc	Total Clearing				pre-arco Pre-arc	Total Clearing	
1	40	44	275	10	1	200	4590	25000	57
	50	130	1050	15		250	7580	45050	66
	63	220	1703	19		315	14100	80800	70
	80	410	3194	25		350	21430	121000	75
	100	699	5933	30		400	34600	20300	78
	125	1139	8300	37		450	44000	250000	80
	160	2033	14000	44		500	65430	339000	88
	200	4590	25000	49		550	82000	428000	94
	250	7580	45050	59		630	125500	670000	98
	315	14100	80800	62					
350	21430	121000	67						

Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts	Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts
		pre-arco Pre-arc	Total Clearing				pre-arco Pre-arc	Total Clearing	
2	250	7900	45000	70	3	500	42000	230000	112
	315	13000	77600	73		550	55600	319000	120
	350	20300	110000	76		630	82100	456000	126
	400	29800	168000	80		720	114000	645000	132
	450	42068	239300	88		800	195000	1080000	138
	500	48000	300000	97		900	235500	1300000	150
	550	70030	350000	107		1000	350000	1910000	155
	630	112000	538000	112		1100	443000	2400000	170
	720	140800	710000	118		1250	544000	3223000	195
	800	224000	1178000	130		1400	780000	3988000	210
				1500	999000	4500000	216		
				1600	1400000	5600000	233		

Limitador de Corrente / Alta cap. de ruptura / Baixa perda
 Elemento de prata. Current limiting / High interrupting rating
 Low watts Loss / Silver element.

Ultra-Rápido 1000V / 1300V

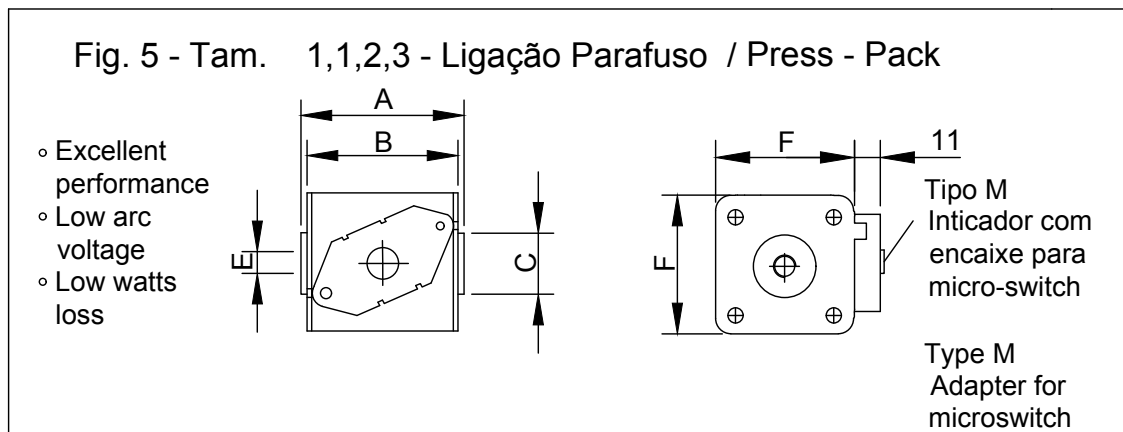


Ligação Parafuso conf. IEC 269. 1 e 4

Semiconductor Fuses 1000V / 1300V

Press - Pack in according to IEC 269. 1 and 4

End contact type, single hole Body size 1,2,and 3



Dimensões / Dimensions

Tamh. Size	A	B	C	E	F	TIPO / TYPE
						Indicador Tipo M com encaixe para Micro
1	75	72	25	M8 or 5/16"	45	F3958
1	80	73	25		55	F4008
2	75	73	31	M10 or 5/16"	60	F6158
3	76	73	38	M12 or 1/2"	72	F6908
3	83	73	38	M12	72	F7108

Tamh. Size	A	B	C	E	F	TIPO / TYPE
						Indicador Tipo M com encaixe para Micro
3	91	73	38	M12 or 1/2"	72	F7158
1	75	72	25	M8 or 5/16"	55	F4958
1	80	72	25	M8	55	F5008
2	81	72	31	M10	60	F5758
2	91	72	31	M10 or 3/8"	72	F6008

Características Elétricas / Electrical Characteristics

Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts	Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts
		pre-arco Pre-arc	Total Clearing				pre-arco Pre-arc	Total Clearing	
1	40	44	275	10	1	200	4590	25000	57
	50	130	1050	15		250	7580	45050	66
	63	220	1703	19		315	14100	80800	70
	80	410	3194	25		350	21430	121000	75
	100	699	5933	30		400	34600	20300	78
	125	1139	8300	37		450	44000	250000	80
	160	2033	14000	44		500	65430	339000	88
	200	4590	25000	49		550	82000	428000	94
	250	7580	45050	59		630	125500	670000	98
	315	14100	80800	62					
350	21430	121000	67						

Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts	Tam. Size	Corrente Current	I ² t (A ² s.)		Watt / Watts
		pre-arco Pre-arc	Total Clearing				pre-arco Pre-arc	Total Clearing	
2	250	7900	45000	70	3	500	42000	230000	112
	315	13000	77600	73		550	55600	319000	120
	350	20300	110000	76		630	82100	456000	126
	400	29800	168000	80		720	114000	645000	132
	450	42068	239300	88		800	195000	1080000	138
	500	48000	300000	97		900	235500	1300000	150
	550	70030	350000	107		1000	350000	1910000	155
	630	112000	538000	112		1100	443000	2400000	170
	720	140800	710000	118		1250	544000	3223000	195
	800	224000	1178000	130		1400	780000	3988000	210
				1500	999000	4500000	216		
				1600	1400000	5600000	233		

- Limitador de Corrente
 - Alta cap. de ruptura
 - Baixa perda
 - Elemento de prata
- Current limiting
 - High interrupting rating
 - Low watts loss
 - Silver element

Ultra-Rápido 1000V / 1250V

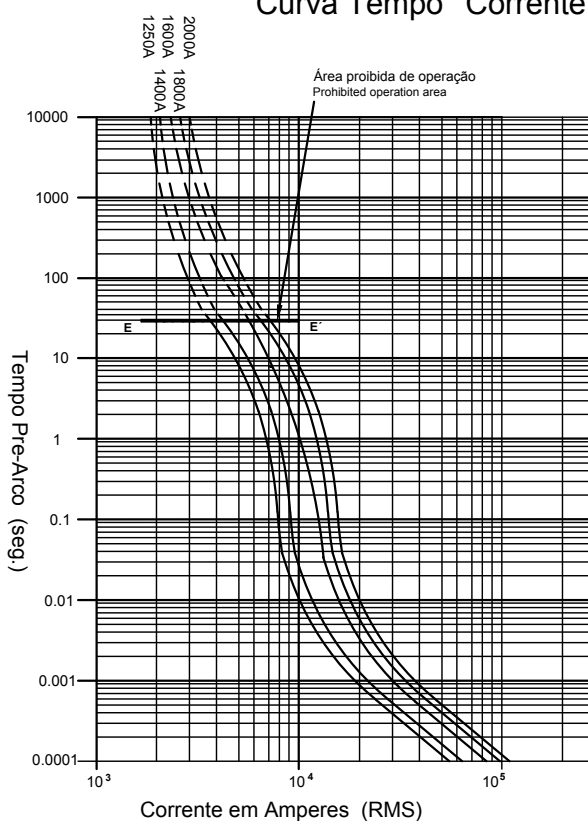


Standard Francês conf. IEC 269 -1/4

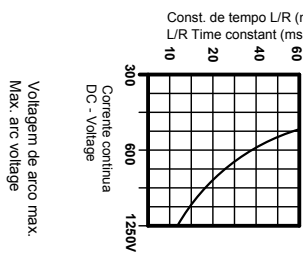
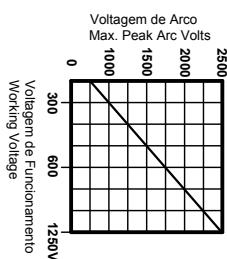
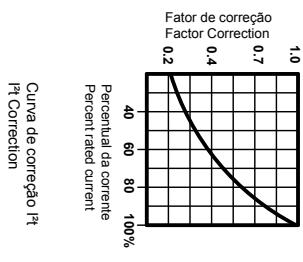
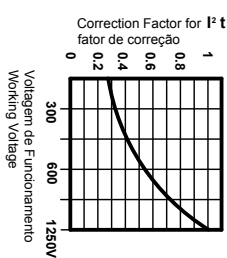
Semiconductor Fuses 1000V / 1250V

French Standard in accord. to IEC 269. 1/4

Curva Tempo Corrente



Curvas Técnicas para Fusível



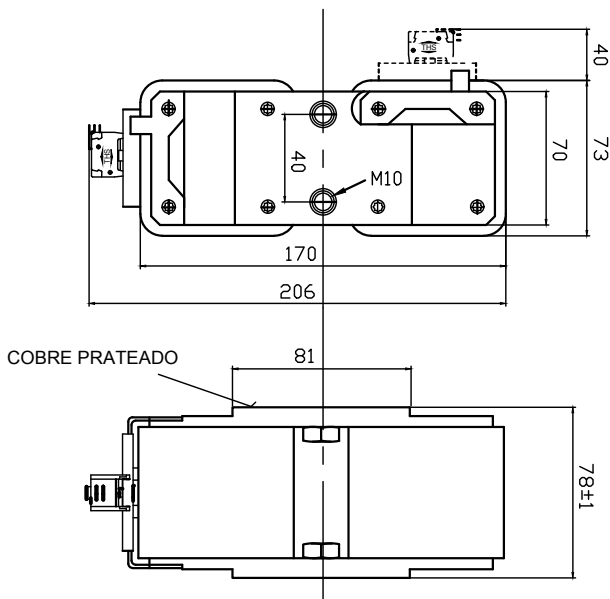
Curva de correção de perda
Watt loss correction curve

Curva de correção L/R
L/R Correction

Características Elétricas / Electrical Characteristics

1512373	Nr. Ref.
2 x 3	Tam. Size
1250	Corrente Current
1400	pre-arco Pre-arc
422980	Total Clearing
241	Watt / Watts

1512374	Nr. Ref.
2 x 3	Tam. Size
1600	Corrente Current
2000	pre-arco Pre-arc
1120000	Total Clearing
275	Watt / Watts



Limitador de Corrente / Alta cap. de ruptura / Baixa perda
Elemento de prata. Current limiting / High interrupting rating
Low watts Loss / Silver element.