



# High-speed fuses (uR)

gR and aR curves  
from 5 to 2000 A

Fuse protection

fusib\_063\_b\_1\_cat



uR type fuse  
with or without striker

fusib\_071\_b\_1\_cat



DIN 43620 type fuse,  
solid knife-edge

fusib\_066\_b\_1\_cat



DIN 43653 (T/80) type fuse,  
bracket

fusib\_075\_b\_1\_cat



K/50/80/110 type fuse  
Notched

fusib\_072\_b\_1\_cat



EK/76/86/91 type fuse  
Notched

fusib\_076\_b\_1\_cat



BK/50/75/80 type fuse  
Threaded hole

fusib\_070\_b\_1\_cat



BT/60 type fuse  
Threaded hole

## The solution for

- > Protection of power semiconductors (variable speed drives, inverters, etc.)



## Strong points

- > High level performance
- > High reliability
- > Improved safety
- > Fuse blown indicator

## Extended range

- > Compatible range of devices (FUSERBLOC, load break switches, fuse bases)
- > Other uR fuse models available on request

## Compliance with standards<sup>(1)</sup>

- > IEC 60269-1
- > NF EN 60269-1
- > IEC 60269-4
- > NF EN 60269-4
- > DIN EN 60269-4



(1) Product references on request.

## Function

High speed fuses (uR) protect power semiconductors and DC circuits.

## Advantages

### High level performance

- Very high breaking capacity up to 300 kA.
- Very high limitation of short-circuit currents (and therefore significant reduction in thermal and mechanical stress).
- Good resistance to cyclic loads.

### High reliability

- Absolute protection over time guaranteed by the simplicity of manufacture and function (Joule effect).
- No downgrading of fuse characteristics over time.

### Improved safety

The energy released whilst eliminating the fault (fuse blowing) is contained within the cartridge (no degassing).

### Fuse blown indicator

An auxiliary contact can be adapted to signal that a fuse has operated.

## References

### 690 VAC uR fuses - size 14 x 51

$I_n$ rms value (A)	Pre-arcing $I^2t$ when cold ( $A^2s$ )	Operating $I^2t$ at 690 V rms ( $A^2s$ )	Losses at $I_n$ (W)	Protection	To be ordered in multiples of	14 x 51 uR without striker Reference	14 x 51 uR with striker Reference
5	1.6	11	1.5	aR	10	170N 1405	
10	3.6	38.5	4	aR	10	170N 1410	170L 1410
15	8.6	70	5.5	aR	10	170N 1415	170L 1415
20	26	230	6	aR	10	170N 1420	170L 1420
25	46.5	375	7	aR	10	170N 1425	170L 1425
32	68	600	7.6	aR	10	170N 1432	170L 1432
40	84	750	8	aR	10	170N 1440	170L 1440
50	200	1800	9	aR	10	170N 1450	170L 1450

### Accessories

	Reference	Reference
Recommended fuse combination switch (see page 254)	FUSERBLOC	FUSERBLOC
Recommended fuse holder (see page 324)	RM 50	RMS 50

### 690 VAC uR fuses - size 22 x 58

$I_n$ rms value (A)	Pre-arcing $I^2t$ when cold ( $A^2s$ )	Operating $I^2t$ at 690 V rms ( $A^2s$ )	Losses at $I_n$ (W)	Protection	To be ordered in multiples of	22 x 58 uR without striker Reference	22 x 58 uR with striker Reference
20	19	260	5	aR	10	170N 2220	170L 2220
25	34	410	6	aR	10	170N 2225	170L 2225
32	53.5	605	8	aR	10	170N 2232	170L 2232
40	68	750	9	aR	10	170N 2240	170L 2240
50	135	1600	9.5	aR	10	170N 2250	170L 2250
63	280	3080	11	aR	10	170N 2263	170L 2263
80	600	6600	13.5	aR	10	170N 2280	170L 2280
100 <sup>(1)</sup>	1100	12500	16	aR	10	170N 2299	170L 2299

(1) Voltage: 600 VAC (IEC) / 700 VAC (UL)

### Accessories

	Reference	Reference
Recommended fuse combination switch (see page 254)	FUSERBLOC	FUSERBLOC
Recommended fuse holder (see page 324)	RM 100	RMS 100

# High-speed fuses (uR)

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## References (continued)

### 690 VAC uR fuses - size 000

I <sub>n</sub> rms value (A)	Pre-arcing I <sup>2</sup> t when cold (A <sup>2</sup> s)	Operating I <sup>2</sup> t at 660 V rms (A <sup>2</sup> s)	Losses at I <sub>n</sub> (W)	Protection	DIN 43653 (T/80)	DIN 43620
					Brackets <sup>(1)</sup>	Solid knife-edge <sup>(3)</sup>
					Reference	Reference
10	3.8	25.5	3	gR	170M 1408	170M 1558
16	7.2	48	5.5	gR	170M 1409	170M 1559
20	11.5	78	7	gR	170M 1410	170M 1560
25	19	130	9	gR	170M 1411	170M 1561
32	40	270	10	gR	170M 1412	170M 1562
40	69	460	12	gR	170M 1413	170M 1563
50	115	770	15	gR	170M 1414	170M 1564
63	215	1450	16	gR	170M 1415	170M 1565
80	380	2550	19	aR	170M 1416	170M 1566
100	695	4650	24	aR	170M 1417	170M 1567
125	1200	8500	28	aR	170M 1418	170M 1568
160	2300	16 000	32	aR	170M 1419	170M 1569
200	4200	28 000	37	aR	170M 1420	170M 1570
250	7750	51 500	42	aR	170M 1421	170M 1571
315	12 000	80 500	52	aR	170M 1422	170M 1572

(1) UL / CSA. - (2) With indicator. - (3) UL.

### Accessories

	Reference	Reference
Fuse blown auxiliary contact	170H 0236	170H 0236
Recommended fuse base	170H 1007	6500 1010 <sup>(1)</sup>
Recommended fuse combination switch (see page 254)		FUSERBLOC

(1) Single-pole fuse base 160 A, size 00 (see page 332).

### 690 VAC uR fuses - size 00

I <sub>n</sub> rms value (A)	Pre-arcing I <sup>2</sup> t when cold (A <sup>2</sup> s)	Operating I <sup>2</sup> t at 660 V rms (A <sup>2</sup> s)	Losses at I <sub>n</sub> (W)	Protection	DIN 43653 (T/80)	BT/60
					Brackets	Threaded hole
					Reference	Reference
25	19	130	6	gR	170M 2658	170M 2758
32	28.5	195	7	gR	170M 2659	170M 2759
40	50	360	9	gR	170M 2660	170M 2760
50	95	640	10	gR	170M 2661	170M 2761
63	170	1200	12	gR	170M 2662	170M 2762
80	310	2100	15	gR	170M 2663	170M 2763
100	620	4150	20	aR	170M 2664 <sup>(1)</sup>	170M 2764
125	1000	6950	25	aR	170M 2665 <sup>(1)</sup>	170M 2765
160	1900	13 000	30	aR	170M 2666 <sup>(1)</sup>	170M 2766
200	3400	23 000	35	aR	170M 2667 <sup>(1)</sup>	170M 2767
250	6250	42 000	45	aR	170M 2668 <sup>(1)</sup>	170M 2768
315	10 000	68 500	55	aR	170M 2669 <sup>(1)</sup>	170M 2769
350	13 500	91 500	60	aR	170M 2670 <sup>(1)</sup>	170M 2770
400	18 000	125 000	70	aR	170M 2671 <sup>(1)</sup>	170M 2771

(1) UL.

### Accessories

	Reference	Reference
Fuse blown auxiliary contact	170H 0235	170H 0235
Recommended fuse base	170H 1007	(1)

(1) Direct mounting on busbar.

#### 690 VAC uR fuses - size 0

$I_n$ rms value (A)	Pre-arcing $I^2t$ when cold (A <sup>2</sup> s)	Operating $I^2t$ at 660 V rms (A <sup>2</sup> s)	Losses at $I_n$ (W)	Protection	DIN 43620 Solid knife-edge Reference
16	3.8	25.5	5	aR	170M 7908
20	7.2	48	6	aR	170M 7909
25	11.5	78	7	aR	170M 7910
32	23.5	160	8	aR	170M 7911
40	40	270	9	aR	170M 7912
50	77	515	11	aR	170M 7913
63	115	770	14	aR	170M 7914
80	185	1250	18	aR	170M 7915
100	360	2450	21	aR	170M 7916
125	550	3700	26	aR	170M 7917
160	1100	7500	30	aR	170M 7918
200	2200	15 000	35	aR	170M 7919

#### Accessories

	Reference
Fuse blown auxiliary contact	170H 0236
Recommended fuse base	6501 1010 <sup>(1)</sup>
Recommended fuse combination switch (see page 254)	FUSERBLOC

(1) Single-pole fuse base 160 A, size 0 (see page 332).

#### 690 VAC uR fuses - size 1\*

$I_n$ rms value (A)	Pre-arcing $I^2t$ when cold (A <sup>2</sup> s)	Operating $I^2t$ at 660 V rms (A <sup>2</sup> s)	Losses at $I_n$ (W)	Protection	K/80 Notched Reference	K/110 Notched Reference	EK/76 Notched Reference	BK/50 Threaded hole Reference
40	40	270	9	aR	170M 3108 <sup>(1)</sup>	170M 3258 <sup>(1)</sup>	170M 3358 <sup>(1)</sup>	170M 3458 <sup>(1)</sup>
50	77	515	11	aR	170M 3109 <sup>(1)</sup>	170M 3259 <sup>(1)</sup>	170M 3359 <sup>(1)</sup>	170M 3459 <sup>(1)</sup>
63	115	770	14	aR	170M 3110 <sup>(1)</sup>	170M 3260 <sup>(1)</sup>	170M 3360 <sup>(1)</sup>	170M 3460 <sup>(1)</sup>
80	185	1250	18	aR	170M 3111 <sup>(1)</sup>	170M 3261 <sup>(1)</sup>	170M 3361 <sup>(1)</sup>	170M 3461 <sup>(1)</sup>
100	360	2450	21	aR	170M 3112 <sup>(1)</sup>	170M 3262 <sup>(1)</sup>	170M 3362 <sup>(1)</sup>	170M 3462 <sup>(1)</sup>
125	550	3700	26	aR	170M 3113 <sup>(1)</sup>	170M 3263 <sup>(1)</sup>	170M 3363 <sup>(1)</sup>	170M 3463 <sup>(1)</sup>
160	1100	7500	30	aR	170M 3114 <sup>(1)</sup>	170M 3264 <sup>(1)</sup>	170M 3364 <sup>(1)</sup>	170M 3464 <sup>(1)</sup>
200	2200	15 000	35	aR	170M 3115 <sup>(1)</sup>	170M 3265 <sup>(1)</sup>	170M 3365 <sup>(1)</sup>	170M 3465 <sup>(1)</sup>
250	4200	28 500	40	aR	170M 3116 <sup>(1)</sup>	170M 3266 <sup>(1)</sup>	170M 3366 <sup>(1)</sup>	170M 3466 <sup>(1)</sup>
315	7000	46 500	50	aR	170M 3117 <sup>(1)</sup>	170M 3267 <sup>(1)</sup>	170M 3367 <sup>(1)</sup>	170M 3467 <sup>(1)</sup>
350	10 000	68 500	55	aR	170M 3118 <sup>(1)</sup>	170M 3268 <sup>(1)</sup>	170M 3368 <sup>(1)</sup>	170M 3468 <sup>(1)</sup>
400	15 000	105 000	60	aR	170M 3119 <sup>(1)</sup>	170M 3269 <sup>(1)</sup>	170M 3369 <sup>(1)</sup>	170M 3469 <sup>(1)</sup>
450	21 000	140 000	65	aR	170M 3120 <sup>(1)</sup>	170M 3270 <sup>(1)</sup>	170M 3370 <sup>(1)</sup>	170M 3470 <sup>(1)</sup>
500	27 000	180 000	70	aR	170M 3121 <sup>(1)</sup>	170M 3271 <sup>(1)</sup>	170M 3371 <sup>(1)</sup>	170M 3471 <sup>(1)</sup>
550	34 000	230 000	75	aR	170M 3122 <sup>(1)</sup>	170M 3272 <sup>(1)</sup>		170M 3472 <sup>(1)</sup>
630	48 500	325 000	80	aR	170M 3123 <sup>(1)</sup>	170M 3273 <sup>(1)</sup>		170M 3473 <sup>(1)</sup>

(1) UL / CSA.

#### Accessories

	Reference	Reference	Reference	Reference
Fuse blown auxiliary contact	170H 0069	170H 0069	170H 0069	170H 0069
Recommended fuse base	170H 3004	170H 3006	170A 0601 <sup>(1)</sup>	<sup>(2)</sup>
Recommended load break switches (see page 254)		FUSERBLOC		

(1)  $I_{max} = 200$  A.

(2) Direct mounting on busbar.

# High-speed fuses (uR)

gR and aR curves

from 5 to 2000 A

## References (continued)

### 690 VAC uR fuses - size 1

$I_n$ rms value (A)	Pre-arcing $I^2t$ when cold (A <sup>2</sup> s)	Operating $I^2t$ at 660 V rms (A <sup>2</sup> s)	Losses at $I_n$ (W)	Protection	K/80 Notched Reference	K/110 Notched Reference	DIN 43620 Solid knife-edge Reference	EK/86 Notched Reference	BK/50 Threaded hole Reference
40	40	285	4	aR			170M 3808 <sup>(1)</sup>		
50	78	550	4.5	aR			170M 3809 <sup>(1)</sup>		
63	120	850	6.5	aR			170M 3810 <sup>(1)</sup>		
80	185	1350	8.5	aR			170M 3811 <sup>(1)</sup>		
100	360	2600	10	aR			170M 3812 <sup>(1)</sup>		
125	550	3900	11	aR			170M 3813 <sup>(1)</sup>		
160	1150	8250	12	aR			170M 3814 <sup>(1)</sup>		
200	1650	11 500	45	aR	170M 4108 <sup>(2)</sup>	170M 4258 <sup>(2)</sup>		170M 4358 <sup>(2)</sup>	170M 4458 <sup>(2)</sup>
200	2300	16 500	12.5	aR			170M 3815 <sup>(1)</sup>		
250	3100	21 000	55	aR	170M 4109 <sup>(2)</sup>	170M 4259 <sup>(2)</sup>		170M 4359 <sup>(2)</sup>	170M 4459 <sup>(2)</sup>
250	4350	31 000	16	aR			170M 3816 <sup>(1)</sup>		
315	6200	42 000	58	aR	170M 4110 <sup>(2)</sup>	170M 4260 <sup>(2)</sup>		170M 4360 <sup>(2)</sup>	170M 4460 <sup>(2)</sup>
315	7300	52 000	20	aR			170M 3817 <sup>(1)</sup>		
350	10 000	73 000	21.5	aR			170M 3818 <sup>(1)</sup>		
350	8500	59 000	60	aR	170M 4111 <sup>(2)</sup>	170M 4261 <sup>(2)</sup>		170M 4361 <sup>(2)</sup>	170M 4461 <sup>(2)</sup>
400	13 500	91 500	65	aR	170M 4112 <sup>(2)</sup>	170M 4262 <sup>(2)</sup>		170M 4362 <sup>(2)</sup>	170M 4462 <sup>(2)</sup>
400	16 000	115 000	23	aR			170M 3819 <sup>(1)</sup>		
450	17 000	120 000	70	aR	170M 4113 <sup>(2)</sup>	170M 4263 <sup>(2)</sup>		170M 4363 <sup>(2)</sup>	170M 4463 <sup>(2)</sup>
500	25 000	170 000	72	aR	170M 4114 <sup>(2)</sup>	170M 4264 <sup>(2)</sup>		170M 4364 <sup>(2)</sup>	170M 4464 <sup>(2)</sup>
550	34 000	230 000	75	aR	170M 4115 <sup>(2)</sup>	170M 4265 <sup>(2)</sup>		170M 4365 <sup>(2)</sup>	170M 4465 <sup>(2)</sup>
630	52 000	350 000	80	aR	170M 4116 <sup>(2)</sup>	170M 4266 <sup>(2)</sup>		170M 4366 <sup>(2)</sup>	170M 4466 <sup>(2)</sup>
700	69 500	465 000	85	aR	170M 4117 <sup>(2)</sup>	170M 4267 <sup>(2)</sup>		170M 4367 <sup>(2)</sup>	170M 4467 <sup>(2)</sup>
800	105 000	725 000	95	aR	170M 4118 <sup>(2)</sup>	170M 4268 <sup>(2)</sup>		170M 4368 <sup>(2)</sup>	170M 4468 <sup>(2)</sup>
900	155 000	850 000	100	aR	170M 4119 <sup>(2)</sup>	170M 4269 <sup>(2)</sup>			170M 4469 <sup>(2)</sup>

(1) UL. - (2) UL / CSA. - (3) For DIN 43620 only. For others  $I^2t$  at 660 V

### Accessories

	Reference	Reference	Reference	Reference	Reference
Fuse blown auxiliary contact	170H 0069	170H 0069	170H 0236	170H 0069	170H 0069
Recommended fuse base	170H 3004	170H 3006	6501 1011 <sup>(1)</sup>	170A 0611 <sup>(2)</sup>	<sup>(3)</sup>
Recommended load break switches (see page 254)		FUSERBLOC	FUSERBLOC		

(1) Single-pole fuse base 250 A, size 1 (see page 332).

(2)  $I_{max} = 250$  A.

(3) Direct mounting on busbar.

### 690 VAC uR fuses - size 2

$I_n$ rms value (A)	Pre-arcing $I^2t$ when cold (A <sup>2</sup> s)	Operating $I^2t$ at 660 V rms (A <sup>2</sup> s)	Losses at $I_n$ (W)	Protection	K/80 Notched Reference	K/110 Notched Reference	DIN 43620 Solid knife-edge Reference	EK/91 Notched Reference	BK/50 Threaded hole Reference
200	1200	8200	50	aR			170M 5804 <sup>(1)</sup>		
250	2450	16 500	55	aR			170M 5805 <sup>(1)</sup>		
315	4950	33 000	60	aR			170M 5806 <sup>(1)</sup>		
350	7000	46 500	60	aR			170M 5807 <sup>(1)</sup>		
400	11 000	74 000	65	aR	170M 5108 <sup>(2)</sup>	170M 5258 <sup>(2)</sup>		170M 5358 <sup>(2)</sup>	170M 5458 <sup>(2)</sup>
450	15 500	105 000	70	aR	170M 5109 <sup>(2)</sup>	170M 5259 <sup>(2)</sup>		170M 5359 <sup>(2)</sup>	170M 5459 <sup>(2)</sup>
500	21 500	145 000	75	aR	170M 5110 <sup>(2)</sup>	170M 5260 <sup>(2)</sup>		170M 5360 <sup>(2)</sup>	170M 5460 <sup>(2)</sup>
550	28 000	190 000	80	aR	170M 5111 <sup>(2)</sup>	170M 5261 <sup>(2)</sup>		170M 5361 <sup>(2)</sup>	170M 5461 <sup>(2)</sup>
630	41 000	275 000	90	aR	170M 5112 <sup>(2)</sup>	170M 5262 <sup>(2)</sup>		170M 5362 <sup>(2)</sup>	170M 5462 <sup>(2)</sup>
700	60 500	405 000	95	aR	170M 5113 <sup>(2)</sup>	170M 5263 <sup>(2)</sup>		170M 5363 <sup>(2)</sup>	170M 5463 <sup>(2)</sup>
800	86 000	575 000	105	aR	170M 5114 <sup>(2)</sup>	170M 5264 <sup>(2)</sup>		170M 5364 <sup>(2)</sup>	170M 5464 <sup>(2)</sup>
900	125 000	840 000	110	aR	170M 5115 <sup>(2)</sup>	170M 5265 <sup>(2)</sup>		170M 5365 <sup>(2)</sup>	170M 5465 <sup>(2)</sup>
1000 <sup>(3)</sup>	180 000	1250 000	115	aR	170M 5116 <sup>(2)</sup>	170M 5266 <sup>(2)</sup>		170M 5366 <sup>(2)</sup>	170M 5466 <sup>(2)</sup>
1100 <sup>(3)</sup>	245 000	1600 000	120	aR	170M 5117 <sup>(2)</sup>	170M 5267 <sup>(2)</sup>			170M 5467 <sup>(2)</sup>
1250	365 000	2400 000	130	aR	170M 5118 <sup>(2)</sup>	170M 5268 <sup>(2)</sup>			170M 5468 <sup>(2)</sup>
400	11 000	79 000	65	aR			170M 5808 <sup>(1)</sup>		
450	16 000	115 000	70	aR			170M 5809 <sup>(1)</sup>		
500	21 500	155 000	75	aR			170M 5810 <sup>(1)</sup>		
550	29 000	215 000	80	aR			170M 5811 <sup>(1)</sup>		
630	41 000	295 000	90	aR			170M 5812 <sup>(1)</sup>		
700	60 500	430 000	95	aR			170M 5813 <sup>(1)</sup>		

(1) UL. - (2) UL / CSA. - (3) 1100 A and 1250 A, at 600 V,  $I^2t$  at 600 V

### Accessories

	Reference	Reference	Reference	Reference	Reference
Fuse blown auxiliary contact	170H 0069	170H 0069	170H 0235	170H 0069	170H 0069
Recommended fuse base	170H 3004	170H 3006	6501 1012 <sup>(1)</sup>	170A 0621 <sup>(2)</sup>	<sup>(3)</sup>
Recommended fuse combination switch (see page 254)		FUSERBLOC	FUSERBLOC		FUSERBLOC

(1) Single-pole fuse base 400 A, size 2 (see page 332).

(2)  $I_{max} = 400$  A.

(3) Direct mounting on busbar.

## 690 VAC uR fuses - size 3

I <sub>n</sub> rms value (A)	Pre-arcing I <sup>2</sup> t when cold (A <sup>2</sup> s)	Operating I <sup>2</sup> t at 660 V rms (A <sup>2</sup> s)	Losses at I <sub>n</sub> (W)	Protection	K/80 Notched <sup>(1)</sup> Reference	K/110 Notched <sup>(1)</sup> Reference	DIN 43620 Solid knife-edge <sup>(2)</sup> Reference	EK/91 Notched <sup>(1)</sup> Reference	BK/50 Threaded hole <sup>(1)</sup> Reference
500	14 000	95 000	95	aR	170M 6108	170M 6258	170M 6808	170M 6358	170M 6458
550	19 500	135 000	100	aR	170M 6109	170M 6259	170M 6809	170M 6359	170M 6459
630	31 000	210 000	105	aR	170M 6110	170M 6260	170M 6810	170M 6360	170M 6460
700	44 500	300 000	110	aR	170M 6111	170M 6261	170M 6811	170M 6361	170M 6461
800	69 500	465 000	115	aR	170M 6112	170M 6262	170M 6812	170M 6362	170M 6462
900	100 000	670 000	120	aR	170M 6113	170M 6263	170M 6813	170M 6363	170M 6463
1000	140 000	945 000	125	aR	170M 6114	170M 6264	170M 6814	170M 6364	170M 6464
1100	190 000	1300 000	130	aR	170M 6115	170M 6265		170M 6365	170M 6465
1250	290 000	1950 000	140	aR	170M 6116	170M 6266	170M 8554	170M 6366	170M 6466
1400	370 000	2450 000	155	aR	170M 6117	170M 6267		170M 6367	170M 6467
1500	460 000	3100 000	160	aR	170M 6118	170M 6268		170M 6368	170M 6468
1600	580 000	3900 000	160	aR	170M 6119	170M 6269			170M 6469
1800 <sup>(5)</sup>	880 000	5250 000	165	aR	170M 6120 <sup>(3)</sup>	170M 6270 <sup>(3)</sup>			170M 6470 <sup>(3)</sup>
2000 <sup>(6)</sup>	1150 000	6350 000	175	aR	170M 6121 <sup>(4)</sup>	170M 6271 <sup>(4)</sup>			170M 6471 <sup>(4)</sup>

(1) UL / CSA.

(2) UL and CCC up to 1000 A.

(3) Rated voltage 600 VAC.

(4) Rated voltage 550 VAC.

(5) At 600 V, I<sup>2</sup>t at 600 V

(6) At 550 V, I<sup>2</sup>t at 550 V

### Accessories

	Reference	Reference	Reference	Reference	Reference
Fuse blown auxiliary contact	170H 0069	170H 0069	170H 0236	170H 0069	170H 0069
Recommended fuse base	170H 3004	170H 3006	6501 1013 <sup>(1)</sup>	170A 0632 <sup>(2)</sup>	<sup>(3)</sup>
Recommended fuse combination switch (see page 254)		FUSERBLOC	FUSERBLOC		FUSERBLOC

(1) Single-pole fuse base 630 A, size 3 (see page 332).

(2) I<sub>max</sub> = 710 A.

(3) Direct mounting on busbar.

## 1000 VAC uR fuses - size 00

I <sub>n</sub> rms value (A)	Pre-arcing I <sup>2</sup> t when cold (A <sup>2</sup> s)	Operating I <sup>2</sup> t at 660 V rms (A <sup>2</sup> s)	Losses at I <sub>n</sub> (W)	Protection	DIN 43620 Solid knife-edge Reference
10	3.8	23	5	aR	170M 2672
20	15	110	8.5	aR	170M 2673
25	28.5	210	9.5	aR	170M 2674
32	53	390	11	aR	170M 2675
35	69	500	12	aR	170M 2676
40	105	760	13	aR	170M 2677
50	215	1550	14	aR	170M 2678
63	380	2750	16	aR	170M 2679
80	815	5900	18	aR	170M 2680
100	1550	11500	21	aR	170M 2681
125	3000	22000	23	aR	170M 2682
160	6250	45000	26	aR	170M 2683
200	12000	86500	31	aR	170M 2684

### Accessories

	Reference
Fuse blown auxiliary contact	170H 0236
Recommended fuse base	6500 1010 <sup>(1)</sup>
Recommended fuse combination switch (see page 254)	FUSERBLOC

(1) Single-pole fuse base 160 A, size 00 (see page 332).

# High-speed fuses (uR)

gR and aR curves

from 5 to 2000 A

## References (continued)

### 1250 VAC uR fuses - size 1\*

$I_n$ rms value (A)	Pre-arcing $I^2t$ when cold (A <sup>2</sup> s)	Operating $I^2t$ at 660 V rms (A <sup>2</sup> s)	Losses at $I_n$ (W)	Protection	K/110 Notched <sup>(1)</sup> Reference	BK/75 Threaded hole <sup>(1)</sup> Reference	BK/80 Threaded hole <sup>(1)</sup> Reference
50	135	1100	15	aR	170M 3238	170M 3388	170M 3438
63	215	1750	20	aR	170M 3239	170M 3389	170M 3439
80	420	3350	25	aR	170M 3240	170M 3390	170M 3440
100	750	5950	30	aR	170M 3241	170M 3391	170M 3441
125	1450	11 500	35	aR	170M 3242	170M 3392	170M 3442
160	2600	21 000	40	aR	170M 3243	170M 3393	170M 3443
200	5150	41 000	45	aR	170M 3244	170M 3394	170M 3444
250	9200	73 000	55	aR	170M 3245	170M 3395	170M 3445
315	18 500	150 000	60	aR	170M 3246	170M 3396	170M 3446
350	27 000	220 000	65	aR	170M 3247	170M 3397	170M 3447
400	53 000	335 000	70	aR	170M 3248		170M 3448

(1) UL.

### Accessories

	Reference	Reference	Reference
Fuse blown auxiliary contact	170H 0069	170H 0069	170H 0069
Recommended fuse base	170H 3006	(1)	(1)

(1) Direct mounting on busbar.

### 1250 VAC uR fuses - size 1

$I_n$ rms value (A)	Pre-arcing $I^2t$ when cold (A <sup>2</sup> s)	Operating $I^2t$ at 660 V rms (A <sup>2</sup> s)	Losses at $I_n$ (W)	Protection	K/110 Notched <sup>(1)</sup> Reference	BK/75 Threaded hole <sup>(1)</sup> Reference	BK/80 Threaded hole <sup>(1)</sup> Reference
160	1900	15 500	45	aR	170M 4238	170M 4388	170M 4438
200	3800	30 000	50	aR	170M 4239	170M 4389	170M 4439
250	7750	61 500	60	aR	170M 4240	170M 4390	170M 4440
315	15 000	120 000	65	aR	170M 4241	170M 4391	170M 4441
350	20 000	165 000	70	aR	170M 4242	170M 4392	170M 4442
400	29 500	235 000	75	aR	170M 4243	170M 4393	170M 4443
450	42 000	335 000	80	aR	170M 4244	170M 4394	170M 4444
500	69 500	435 000	85	aR	170M 4245	170M 4395 <sup>(2)(6)</sup>	170M 4445
550	95 000	590 000	95	aR	170M 4246	170M 4396 <sup>(3)(7)</sup>	170M 4446
630	130 000	600 000 <sup>(4)</sup>	100	aR	170M 4247 <sup>(2)(5)</sup>	170M 4397 <sup>(3)(8)</sup>	170M 4447 <sup>(2)(9)</sup>

(1) UL.

(2) Rated voltage 1100 VAC.

(3) Rated voltage 1000 VAC.

(4)  $I^2t$  operation at 1000 V eff. (A<sup>2</sup>s).

(5) At 690 V,  $I^2t$  at 690 V

(6) At 1100 V,  $I^2t$  at 1250 V

(7) At 1000 V,  $I^2t$  at 1250 V

(8) At 1000 V,  $I^2t$  at 1100 V ( $I^2t = 660 000$ )

(9) At 1100 V,  $I^2t$  at 1000 V ( $I^2t = 660 000$ )

### Accessories

	Reference	Reference	Reference
Fuse blown auxiliary contact	170H 0069	170H 0069	170H 0069
Recommended fuse base	170H 3006	(1)	(1)

(1) Direct mounting on busbar.

## 1250 VAC uR fuses - size 2

I <sub>n</sub> rms value (A)	Pre-arcing I <sup>2</sup> t when cold (A <sup>2</sup> s)	Operating I <sup>2</sup> t at 660 V rms (A <sup>2</sup> s)	Losses at I <sub>n</sub> (W)	Protection	K/110 Notched <sup>(1)</sup> Reference	BK/75 Threaded hole <sup>(1)</sup> Reference	BK/80 Threaded hole <sup>(1)</sup> Reference
250	6500	51 500	65	aR	170M 5238	170M 5388	170M 5438
280	9350	74 500	70	aR	170M 5239	170M 5389	170M 5439
315	13 000	105 000	75	aR	170M 5240	170M 5390	170M 5440
350	16 500	135 000	80	aR	170M 5241	170M 5391	170M 5441
400	23 000	180 000	85	aR	170M 5242	170M 5392	170M 5442
450	34 000	270 000	90	aR	170M 5243	170M 5393	170M 5443
500	48 000	380 000	95	aR	170M 5244	170M 5394	170M 5444
550	62 000	495 000	100	aR	170M 5245	170M 5395	170M 5445
630	115 000	730 000	110	aR	170M 5246	170M 5396 <sup>(3)</sup>	170M 5446
700	160 000	1050 000	115	aR	170M 5247	170M 5397 <sup>(4)</sup>	170M 5447 <sup>(6)</sup>
800	245 000	1550 000	120	aR	170M 5248	170M 5398 <sup>(5)</sup>	170M 5448 <sup>(6)</sup>
900	360 000	1750 000	125	aR	170M 5249 <sup>(2)</sup>		
1000	480 000	2350 000	135	aR	170M 5250 <sup>(2)</sup>		

(1) UL.

(2) At 1100 V, I<sup>2</sup>t at 1000 V

(3) At 1100 V, I<sup>2</sup>t at 1000 V (I<sup>2</sup>t = 575 000)

(4) At 1000 V, I<sup>2</sup>t at 1000 V (I<sup>2</sup>t = 795 000)

(5) At 1000 V, I<sup>2</sup>t at 1000 V (I<sup>2</sup>t = 1200 000)

(6) At 1100 V, I<sup>2</sup>t at 1000 V (I<sup>2</sup>t = 795 000)

### Accessories

	Reference	Reference	Reference
Fuse blown auxiliary contact	170H 0069	170H 0069	170H 0069
Recommended fuse base	170H 3006	(1)	(1)

(1) Direct mounting on busbar.

## 1250 VAC uR fuses - size 3

I <sub>n</sub> rms value (A)	Pre-arcing I <sup>2</sup> t when cold (A <sup>2</sup> s)	Operating I <sup>2</sup> t at 660 V rms (A <sup>2</sup> s)	Losses at I <sub>n</sub> (W)	Protection	K/110 Notched <sup>(1)</sup> Reference	BK/75 Threaded hole <sup>(1)</sup> Reference	BK/80 Threaded hole <sup>(1)</sup> Reference
315	9500	77 500	85	aR	170M 6238	170M 6338	170M 6538
350	13 500	110 000	90	aR	170M 6239	170M 6339	170M 6539
400	19 500	160 000	95	aR	170M 6240	170M 6340	170M 6540
450	31 000	245 000	100	aR	170M 6241	170M 6341	170M 6541
500	39 000	310 000	105	aR	170M 6242	170M 6342	170M 6542
550	55 000	435 000	110	aR	170M 6243	170M 6343	170M 6543
630	83 500	665 000	115	aR	170M 6244	170M 6344	170M 6544
700	115 000	940 000	120	aR	170M 6245	170M 6345	170M 6545
800	205 000	1300 000	125	aR	170M 6246	170M 6346 <sup>(2)</sup>	170M 6546
900	305 000	1900 000	130	aR	170M 6247	170M 6347 <sup>(3)</sup>	170M 6547 <sup>(2)</sup>
1000	450 000	2750 000	135	aR	170M 6248	170M 6348 <sup>(3)</sup>	170M 6548 <sup>(2)</sup>
1100	575 000	3600 000	140	aR	170M 6249	170M 6349 <sup>(3)</sup>	170M 6549 <sup>(3)</sup>
1250	810 000	3950 000 <sup>(4)</sup>	145	aR	170M 6250 <sup>(2)</sup>		
1400	1250 000	6000 000 <sup>(4)</sup>	150	aR	170M 6251 <sup>(2)</sup>		

(1) UL.

(2) At 1100 V, I<sup>2</sup>t at 1000 V

(3) At 1100 V, I<sup>2</sup>t at 1250 V (I<sup>2</sup>t = 995 000)

(4) At 1000 V, I<sup>2</sup>t at 1000 V (I<sup>2</sup>t = 1500 000)

(5) At 1000 V, I<sup>2</sup>t at 1000 V (I<sup>2</sup>t = 2150 000)

(6) At 1000 V, I<sup>2</sup>t at 1000 V (I<sup>2</sup>t = 2800 000)

### Accessories

	Reference	Reference	Reference
Fuse blown auxiliary contact	170H 0069	170H 0069	170H 0069
Recommended fuse base	170H 3006	(1)	(1)

(1) Direct mounting on busbar.



# High-speed fuses (uR)

gR and aR curves

from 5 to 2000 A

## Accessories

### Fuse blown auxiliary contact

#### Connection

6.3 x 0.8 mm fast-on terminals.

#### Electronic principle

An auxiliary contact detects if a fuse has blown.

#### Electrical characteristics

Voltage (VAC)	Nominal current (A)
250	2

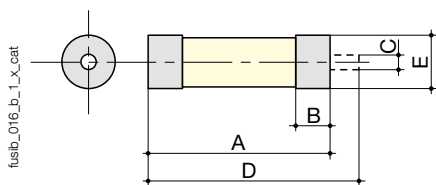


fusb\_061\_a1\_cat

## Dimensions

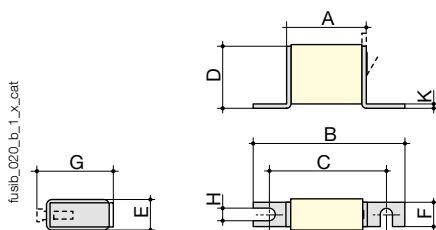
### uR 690 VAC fuses

#### 14 x 51 and 22 x 58



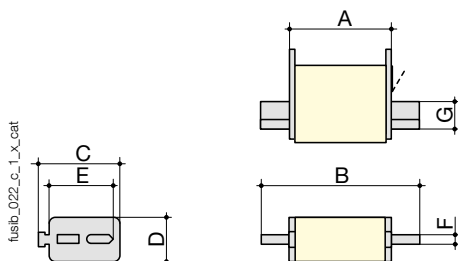
Size	A	B	C	D	E
14 x 51	51	11	4	59	Ø 14.3
22 x 58	58	15	4	66	Ø 22.2

#### DIN 43653 and T/80



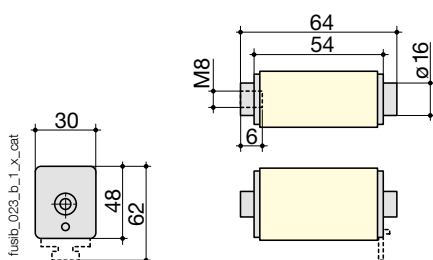
Size	A	B	C	D	E	F	G	H	K
000	54	100	78	40	21	20	51	8	2
00	54	100	78	51	30	28	67	10	2

#### DIN 43620



Size	A	B	C	D	E	F	G
000	54	79	48	21	35	6	15
00	46	79	60	30	35	6	15
0	68	125	60	35	35	6	15
1	71	135	58	45	40	6	20
2	72	150	71	55	48	6	26
3	72	150	88	76	60	6	33

#### BT/60

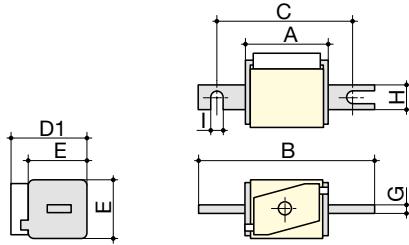


## Dimensions (continued)

### uR 690 VAC fuses (continued)

#### K/80 and K/110

fusb\_024\_b\_1\_x\_cat



#### K/80

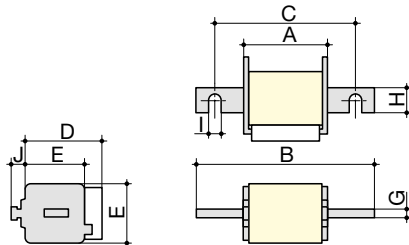
Size	A	B	C	D1	E	G	H	I
1*	50	104	78	59	45	6	22	11
1	50	108	78	69	53	6	25	11
2	50	108	78	77	61	6	25	11
3	51	109	78	92	76	6	30	11

#### K/110

Size	A	B	C	D1	E	G	H	I
1*	50	134	108	59	45	6	22	11
1	50	138	108	69	53	6	25	11
2	50	138	108	77	61	6	25	11
3	51	139	108	92	76	6	30	11

#### EK/76 - EK/86 - EK/91

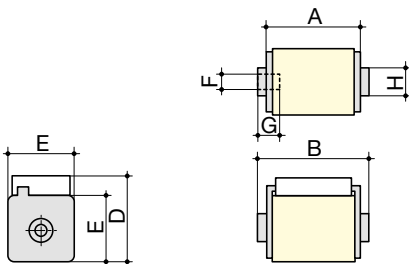
fusb\_029\_b\_1\_x\_cat



Size	A	B	C	D	E	G	H	I	J
1*	50	102	76	59	45	6	18	9	13
1	50	111	86	69	53	6	25	11	11
2	50	126	91	77	61	6	30	13	12
3	51	126	91	92	76	6	36	13	13

#### BK/50

fusb\_030\_b\_1\_x\_cat



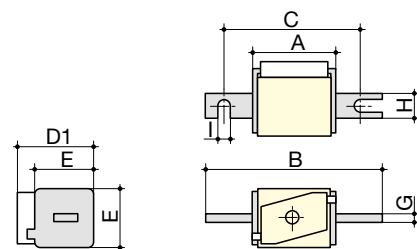
Size	A	B	D	E	F	G	H
1*	50	51	59	45	M8	5	Ø 17
1	50	51	59	53	M8	8	Ø 20
2	50	51 <sup>(1)</sup>	77	61	M10	10	Ø 24
3	51	53 <sup>(2)</sup>	92	76	M12	10	Ø 30

(1) B = 65 mm for rating 1100 to 1250 A.  
 (2) B = 65 mm for rating 1600 to 2000 A.

### uR 1250 VAC fuses

#### K/110

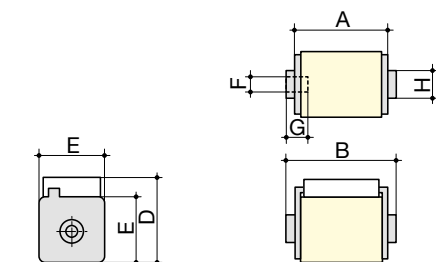
fusb\_163\_a\_1\_x\_cat



Size	A	B	C	D1	E	G	H	I
1*	80	138	108	59	45	6	20	11
1	80	138	108	69	53	6	25	11
2	80	138	108	77	61	6	25	11
3	81	139	108	92	76	6	30	11

#### BK/75 and BK/80

fusb\_164\_a\_1\_x\_cat



#### BK/75

Size	A	B	D	T	F	G	H
1*	74	75	59	45	M8	5	Ø 17
1	74	75	69	53	M8	8	Ø 20
2	74	75	77	61	M10	10	Ø 24
3	74	76	92	76	M12	10	Ø 30

#### BK/80

Size	A	B	D	T	F	G	H
1*	80	81	59	45	M8	5	Ø 17
1	80	81	69	53	M8	8	Ø 20
2	80	81	77	61	M10	10	Ø 24
3	81	83	92	76	M12	10	Ø 30