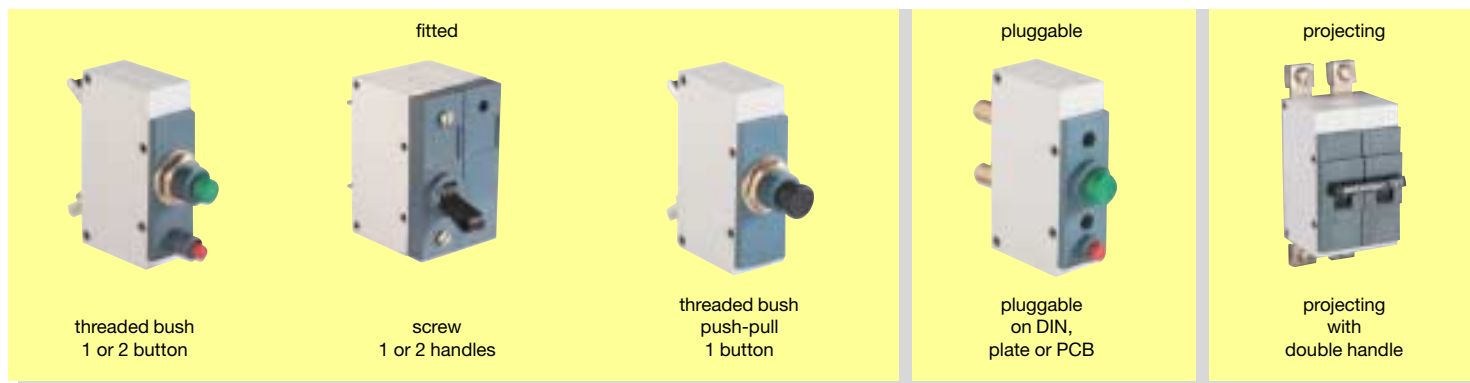
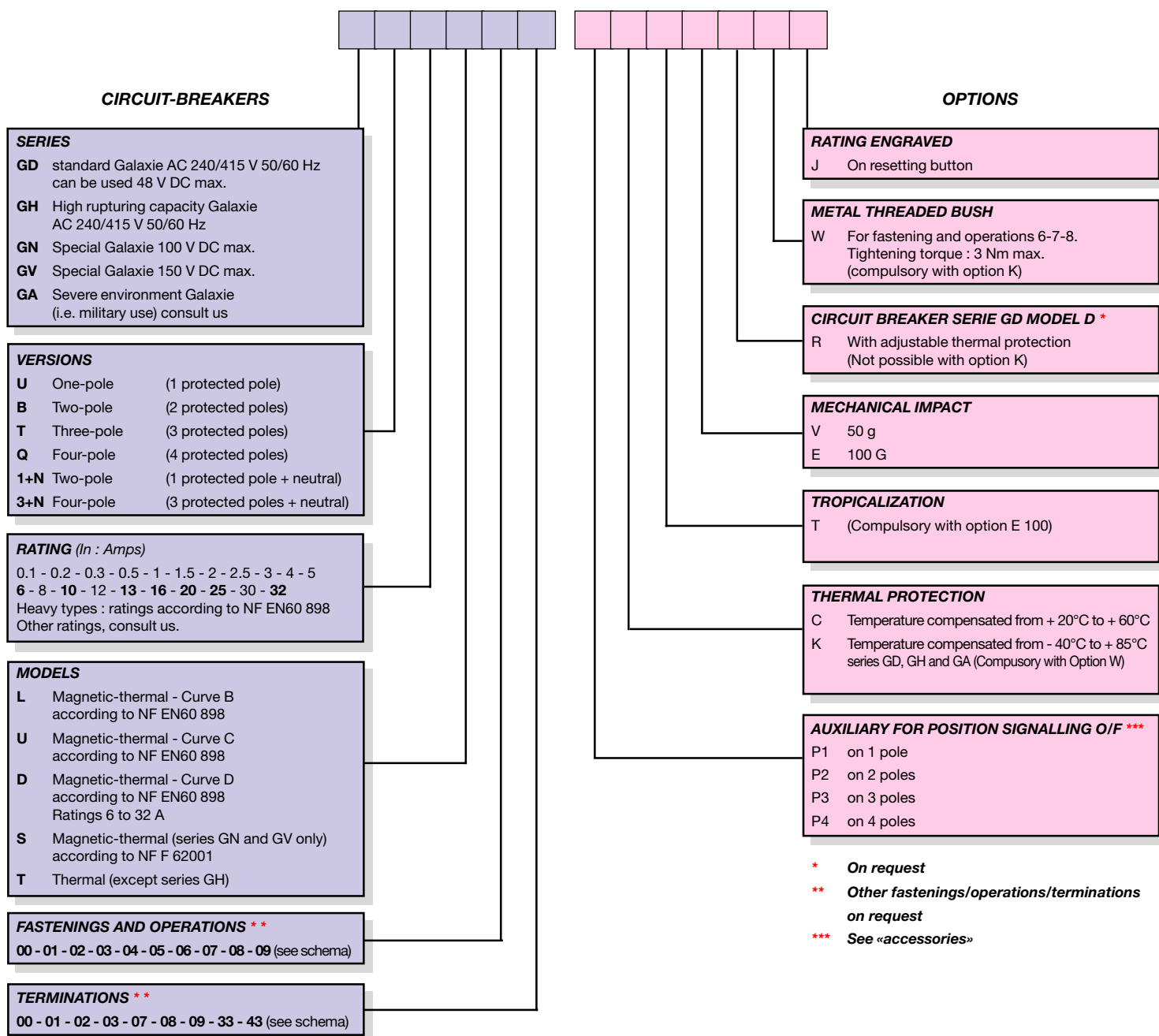


FITTED OR UNPLUGGABLE OR PROJECTING CIRCUIT-BREAKERS



HOW TO ORDER GD - GH - GN - GV SERIES CIRCUIT-BREAKERS



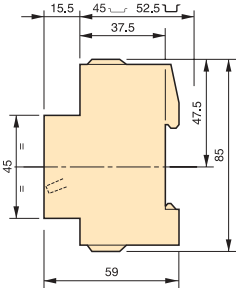
EXAMPLE :

1 **Circuit-breaker** Serie : Galaxie standard AC - Version : 2 protected poles - Rating : 10 A - Model : magnetic-thermal, curve C - Fastenings and operations : Threaded bush flush type 2 buttons - Terminations : Screws and back connectors - With Options Auxiliary for position signalling O/F : on 2 poles - Tropicalization has reference **GDB10U0703 P2T**

GD B 10 U 07 03 P2 - T - - -

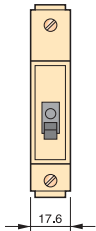
A
1

Circuit breakers
Magnetic-thermal
Alternative current
Serie GM
DIN 3



GMU...
1 pole

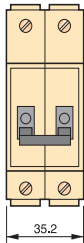
Spacing 17,6 mm (.693")



Standard blocks. Products with other options are available, example : auxiliary contact. Consult us.

GMB...
2 poles

Spacing 35,2 mm (1.38")

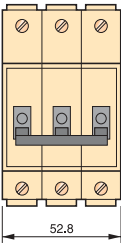


Standard blocks. Products with other options are available, example : auxiliary contact. Consult us.

Types		Rating	Part numbers			Part numbers		
The product type is getting by replace with wanted rated current		Rated current in Amps	Curve B GMU....L	Curve C GMU....U	Curve D GMU....D	Curve B GMB....L	Curve C GMB....U	Curve D GMB....D
For example :		0.1	811 112 201	811 112 301		811 212 201	811 212 301	
		0.5	811 118 201	811 118 301		811 218 201	811 218 301	
		1	811 123 201	811 123 301		811 223 201	811 223 301	
		2	811 128 201	811 128 301		811 228 201	811 228 301	
		3	811 132 201	811 132 301		811 232 201	811 232 301	
		4	811 134 201	811 134 301		811 234 201	811 234 301	
		6	811 138 201	811 138 301	811 138 401	811 238 201	811 238 301	811 238 401
		10	811 146 201	811 146 301	811 146 401	811 246 201	811 246 301	811 246 401
Other ratings available, consult us.		16	811 152 201	811 152 301	811 152 401	811 252 201	811 252 301	811 252 401
		20	811 156 201	811 156 301	811 156 401	811 256 201	811 256 301	811 256 401
		25	811 158 201	811 158 301	811 158 401	811 258 201	811 258 301	811 258 401
		32	811 162 201	811 162 301	811 162 401	811 262 201	811 262 301	811 262 401
See table 1 for current correction factor vs. temperature.			For additional order options, according to UL, CSA or other standards, consult us.			For additional order options, according to UL, CSA or other standards, consult us.		
			UL (240 VAC - 0.25-25 A)	CSA (250 VAC - 0.1-25 A) (600 VAC - 6-25 A - curve C only)	CE	UL (240 VAC - 0.25-25 A)	CSA (250 VAC - 0.1-25 A) (600 VAC - 6-25 A - curve C only)	CE
Characteristics			240-415 V AC, 50 - 60 Hz			415 V AC, 50 - 60 Hz		
Rated voltage		V						
Rated wire size		mm² / AWG	screw clamp for 5 AWG (16 mm²)			screw clamp for 5 AWG (16 mm²)		
Interrupting capacity			6 000 Amps			6 000 Amps		
According to standard NF-EN 60 898								
According to standard IEC 947-2			10 000 Amps			10 000 Amps		
Other characteristics			4 000			4 000		
Life, number of cycles (On+Off)			2 000 V rms			2 000 V rms		
Dielectric withstanding voltage			See table 2			See table 2		
Internal resistance			Curve B : 3 ln < S < 5 ln - Curve C : 5 ln < S < 10 ln - Curve D : 10 ln < S < 20 ln			Curve B : 3 ln < S < 5 ln - Curve C : 5 ln < S < 10 ln - Curve D : 10 ln < S < 20 ln		
Tripping curves		S						
Degree of protection			IP 20			IP 20		
Weight			94 g			188 g		
Mecanical shock			30 g.			30 g.		
Ambient Temperature			-5° C to 40° C			-5° C to 40° C		
Connection			Ø 4,5 mm max.			Ø 4,5 mm max.		
Accessories			Type	Part number		Type	Part number	
Adaptor for DIN 1 rail mount			A466	822A 466 01		A466	822A 466 01	

GMT...
3 poles

Spacing 52,8 mm (2.08")



Standard blocks. Products with other options are available, example : auxiliary contact. Consult us.

Part numbers

Curve B GMT...L	Curve C GMT...U	Curve D GMT...D
811 312 201	811 312 301	
811 318 201	811 318 301	
811 323 201	811 323 301	
811 328 201	811 328 301	
811 332 201	811 332 301	
811 334 201	811 334 301	
811 338 201	811 338 301	811 338 401
811 346 201	811 346 301	811 346 401
811 352 201	811 352 301	811 352 401
811 356 201	811 356 301	811 356 401
811 358 201	811 358 301	811 358 401
811 362 201	811 362 301	811 362 401

For additional order options, according to UL, CSA or other standards, consult us.

UL (240 VAC - 0.25-25 A) (250 VAC - 0.1-25 A)
(600 VAC - 6-25 A - curve C only)



For additional order options, according to UL or other standards, consult us.

UL (240 VAC - 0.25-25 A)



415 V AC, 50 - 60 Hz

screw clamp for 5 AWG (16 mm²)

6 000 Amps

10 000 Amps

4 000

2 000 V rms

See table 2

Curve B : 3 In < S < 5 In - Curve C : 5 In < S < 10 In - Curve D : 10 In < S < 20 In

IP 20

282 g

30 g.

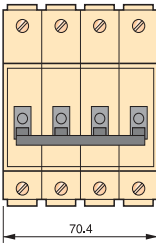
-5° C to 40° C

Ø 4,5 mm max.

Type Part number
A466 822A 466 01

GMQ...
4 poles

Spacing 70,4 mm (2.77")



Standard blocks. Products with other options are available, example : auxiliary contact. Consult us.

Part numbers

Curve B GMQ...L	Curve C GMQ...U	Curve D GMQ...D
811 412 201	811 412 301	
811 418 201	811 418 301	
811 423 201	811 423 301	
811 428 201	811 428 301	
811 432 201	811 432 301	
811 434 201	811 434 301	
811 438 201	811 438 301	811 438 401
811 446 201	811 446 301	811 446 401
811 452 201	811 452 301	811 452 401
811 456 201	811 456 301	811 456 401
811 458 201	811 458 301	811 458 401
811 462 201	811 462 301	811 462 401

For additional order options, according to UL or other standards, consult us.

UL (240 VAC - 0.25-25 A)



415 V AC, 50 - 60 Hz

screw clamp for 5 AWG (16 mm²)

6 000 Amps

10 000 Amps

4 000

2 000 V rms

See table 2

Curve B : 3 In < S < 5 In - Curve C : 5 In < S < 10 In - Curve D : 10 In < S < 20 In

IP 20

376 g

30 g.

-5° C to 40° C

Ø 4,5 mm max.

Type Part number
A466 822A 466 01

Table 1

Current correction
factor vs. temperature

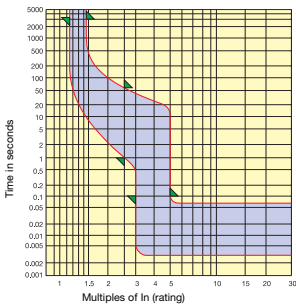
Ambient temperature °C	°F	Correction factor (to multiply)
- 20	- 4	1.25
- 10	+ 14	1.20
- 5	+ 23	1.17
- 0	+ 32	1.15
+ 10	+ 50	1.10
+ 20	+ 68	1.05
+ 30	+ 86	1.00
+ 40	+ 104	0.95
+ 50	+ 122	0.90
+ 60	+ 140	0.85
+ 70	+ 158	0.80

Table 2

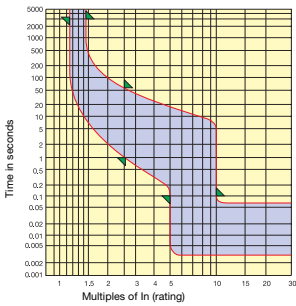
Internal resistance
vs. current rating

Current rating (A)	Internal resistance (mΩ)
0.5	4 000
1	1 200
2	420
4	160
10	13
20	6

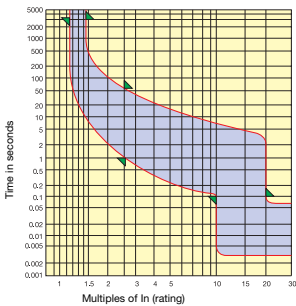
Curve B



Curve C



Curve D



See following page big scale curves.

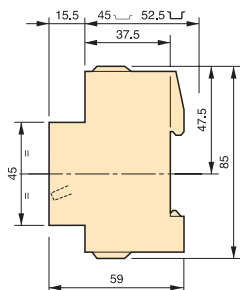
Circuit breakers

Magnetic-thermal

Alternative current

Serie GM

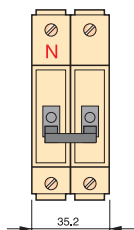
└ DIN 3



GM1+N...

1 pole + neutral

Spacing 35.2 mm (1.38")

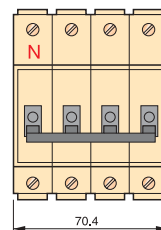


Standard blocks. Products with other options are available, example : auxiliary contact. Consult us.

GM3+N...

3 poles + neutral

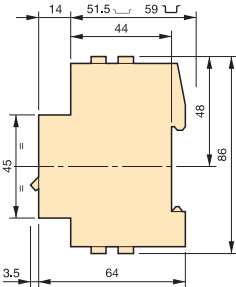
Spacing 70.4 mm (2.77")



Standard blocks. Products with other options are available, example : auxiliary contact. Consult us.

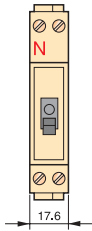
Types	Rating	Part numbers			Part numbers		
The product type is getting by replace with wanted rated current For example : GM1+N 0.5 L GM1+N 10 U GM1+N 32 D Other ratings available, consult us. See table 1 for current correction factor vs. temperature.	Rated current in Amps	Curve B	Curve C	Curve D	Curve B	Curve C	Curve D
	0.1	GM1+N....L	GM1+N....U	GM1+N....D	GM3+N....L	GM3+N....U	GM3+N....D
	0.5	811 512 201	811 512 301		811 612 201	811 612 301	
	1	811 518 201	811 518 301		811 618 201	811 618 301	
	2	811 523 201	811 523 301		811 623 201	811 623 301	
		811 528 201	811 528 301		811 628 201	811 628 301	
	3	811 532 201	811 532 301		811 632 201	811 632 301	
	4	811 534 201	811 534 301		811 634 201	811 634 301	
	6	811 538 201	811 538 301	811 538 401	811 638 201	811 638 301	811 638 401
	10	811 546 201	811 546 301	811 546 401	811 646 201	811 646 301	811 646 401
	16	811 552 201	811 552 301	811 552 401	811 652 201	811 652 301	811 652 401
	20	811 556 201	811 556 301	811 556 401	811 656 201	811 656 301	811 656 401
	25	811 558 201	811 558 301	811 558 401	811 658 201	811 658 301	811 658 401
	32	811 562 201	811 562 301	811 562 401	811 662 201	811 662 301	811 662 401
		CE			CE		
Characteristics							
Rated voltage	V	240 V AC, 50 - 60 Hz			415 V AC, 50 - 60 Hz		
Rated wire size	mm ² / AWG	screw clamp for 5 AWG (16 mm ²)			screw clamp for 5 AWG (16 mm ²)		
Interrupting capacity							
According to standard IEC 898		6 000 Amps			6 000 Amps		
According to standard IEC 947-2		10 000 Amps			10 000 Amps		
Other characteristics							
Life, number of cycles (On+Off)		4 000			4 000		
Dielectric withstanding voltage		2 000 V rms			2 000 V rms		
Internal resistance		See table 2			See table 2		
Tripping curves	S	Curve B : 3 In < S < 5 In - Curve C : 5 In < S < 10 In - Curve D : 10 In < S < 20 In			Curve B : 3 In < S < 5 In - Curve C : 5 In < S < 10 In - Curve D : 10 In < S < 20 In		
Degree of protection		IP 20			IP 20		
Weight		188 g			376 g		
Mechanical shock		30 g.			30 g.		
Ambient Temperature		-5° C to 40° C			-5° C to 40° C		
Connection		Ø 4.5 mm max.			Ø 4.5 mm max.		
Accessories		Type	Part number		Type	Part number	
Adaptor for DIN 1 rail mount		A466	822A 466 01		A466	822A 466 01	

Circuit breakers
Magnetic-thermal
Alternative current
Serie GZ
└─ DIN 3



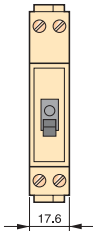
GZ1+N...
1 pole + neutral

Spacing 17,6 mm (.693")



GZB...
2 poles

Spacing 17,6 mm (.693")



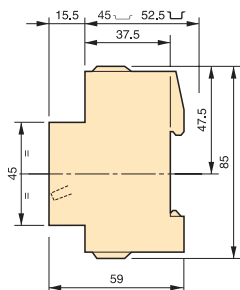
Standard blocks. Products with other options are available,
example : auxiliary contact. Consult us.

Types		Rating	Part numbers			Part numbers		
The product type is getting by replace with wanted rated current For example : GZ1+N 0.5 L GZ1+N 10 U GZB 32 D	Rated current in Amps	Curve B GZ1+N.....L	Curve C GZ1+N.....U	Curve D GZ1+N.....D	Curve B GZB.....L	Curve C GZB.....U	Curve D GZB.....D	
	0.1	814 512 201	814 512 301		814 212 201	814 212 301		
	0.5	814 518 201	814 518 301		814 218 201	814 218 301		
	1	814 523 201	814 523 301		814 223 201	814 223 301		
	2	814 528 201	814 528 301		814 228 201	814 228 301		
	3							
	4	814 532 201	814 532 301		814 232 201	814 232 301		
	6	814 534 201	814 534 301		814 234 201	814 234 301		
	10	814 538 201	814 538 301	814 538 401	814 238 201	814 238 301	814 238 401	
		814 546 201	814 546 301	814 546 401	814 246 201	814 246 301	814 246 401	
Other ratings available, consult us.	16	814 552 201	814 552 301	814 552 401	814 252 201	814 252 301	814 252 401	
	20	814 556 201	814 556 301	814 556 401	814 256 201	814 256 301	814 256 401	
	25	814 558 201	814 558 301	814 558 401	814 258 201	814 258 301	814 258 401	
	32	814 562 201	814 562 301	814 562 401	814 262 201	814 262 301	814 262 401	
See table 1 for current correction factor vs. temperature.								
		CE			CE			
Characteristics								
Rated voltage	V	240 V AC, 50 - 60 Hz			415 V AC, 50 - 60 Hz			
Rated wire size	mm² / AWG	screw clamp for 5 AWG (16 mm²)			screw clamp for 5 AWG (16 mm²)			
Interrupting capacity								
According to standard NF-EN 60 898		3 000 Amps			4 500 Amps			
According to standard IEC 947-2		4 500 Amps			6 000 Amps			
Other characteristics								
Life, number of cycles (On+Off)		4 000			4 000			
Dielectric withstanding voltage		2 000 V rms			2 000 V rms			
Internal resistance		See table 2			See table 2			
Tripping curves		S			S			
Degree of protection		IP 20			IP 20			
Weight		99 g			110 g			
Mecanical shock		30 g.			30 g.			
Ambient Temperature		-5° C to 40° C			-5° C to 40° C			
Connection		Ø 4.5 mm max.			Ø 4.5 mm max.			
Accessories		Type	Part number	Type	Part number	Type	Part number	
Adaptor for DIN 1 rail mount		A466	822A 466 01	A466	822A 466 01			

Thermal Circuit breakers

Alternative current Serie GM

└ DIN 3



GMU...T 1 pole

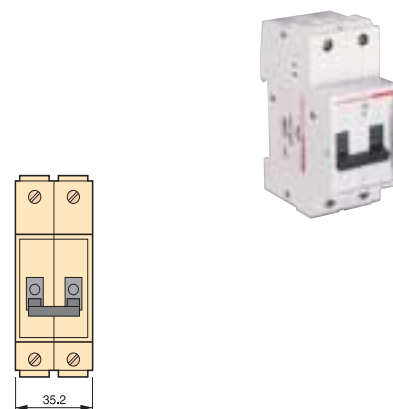
Spacing 17,6 mm (.693")



Standard blocks. Products with other options are available, example : auxiliary contact. Consult us.

GMB...T 2 poles

Spacing 35,2 mm (1.38")



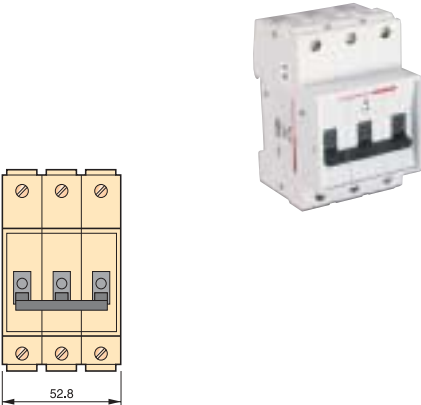
Standard blocks. Products with other options are available, example : auxiliary contact. Consult us.

Types	Types	Part number	Types	Part number
Other ratings available, consult us.	Rated current in Amps	Curve T		Curve T
	0.1	GMU 0.1T 811 112 601	GMB 0.1T 811 212 601	
	0.5	GMU 0.5 T 811 118 601	GMB 0.5 T 811 218 601	
	1	GMU 1 T 811 123 601	GMB 1 T 811 223 601	
	2	GMU 2 T 811 128 601	GMB 2 T 811 228 601	
See table 1 for current correction factor vs. temperature.	3	GMU 3 T 811 132 601	GMB 3 T 811 232 601	
	4	GMU 4 T 811 134 601	GMB 4 T 811 234 601	
	6	GMU 6 T 811 138 601	GMB 6 T 811 238 601	
	10	GMU 10 T 811 146 601	GMB 10 T 811 246 601	
	16	GMU 16 T 811 152 601	GMB 16 T 811 252 601	
	20	GMU 20 T 811 156 601	GMB 20 T 811 256 601	
	25	GMU 25 T 811 158 601	GMB 25 T 811 258 601	
	32	GMU 32 T 811 162 601	GMB 32 T 811 262 601	
		For additional order options, according to UL or other standards, consult us.	1 pole + neutral version available on request.	For additional order options, according to UL or other standards, consult us.
		UL (240 VAC - 0.25-25 A)	UL (240 VAC - 0.25-25 A)	UL (240 VAC - 0.25-25 A)
Characteristics	Characteristics	Characteristics	Characteristics	Characteristics
Rated voltage	240-415 V AC, 50 - 60 Hz	415 V AC, 50 - 60 Hz		
Rated wire size mm² / AWG	screw clamp for 5 AWG (16 mm²)	screw clamp for 5 AWG (16 mm²)		
Interrupting capacity	Interrupting capacity	Interrupting capacity	Interrupting capacity	Interrupting capacity
Curve T	10 In Rating < 5 Amps - 20 In Rating ≥ 5 Amps	10 In Rating < 5 Amps - 20 In Rating ≥ 5 Amps		
Other characteristics	Other characteristics	Other characteristics	Other characteristics	Other characteristics
Life, number of cycles (On+Off)	4 000	4 000		
Dielectric withstanding voltage	2 000 V rms	2 000 V rms		
Internal resistance	See table 3	See table 3		
Tripping curves				
Degree of protection	IP 20	IP 20		
Weight	87 g	174 g		
Mecanical shock	30 g.	30 g.		
Ambient Temperature	-5° C to 40° C	-5° C to 40° C		
Connection	Ø 4.5 mm max.	Ø 4.5 mm max.		
Accessories	Accessories	Accessories	Accessories	Accessories
Adaptor for DIN 1 rail mount	Type A466 Part number 822A 466 01	Type A466 Part number 822A 466 01		

GMT...T

3 poles

Spacing 52,8 mm (2.08")



Standard blocks. Products with other options are available, example : auxiliary contact. Consult us.

Types	Part number
Curve T	
GMT 0.1T	811 312 601
GMT 0.5 T	811 318 601
GMT 1 T	811 323 601
GMT 2 T	811 328 601
GMT 3 T	811 332 601
GMT 4 T	811 334 601
GMT 6 T	811 338 601
GMT 10 T	811 346 601
GMT 16 T	811 352 601
GMT 20 T	811 356 601
GMT 25 T	811 358 601
GMT 32 T	811 362 601

For additional order options, according to UL or other standards, consult us.

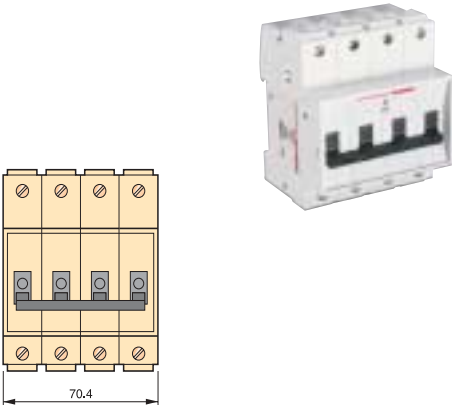
415 V AC, 50 - 60 Hz
screw clamp for 5 AWG (16 mm²)
10 In Rating < 5 Amps - 20 In Rating ≥ 5 Amps
4 000
2 000 V rms
See table 3
IP 20
261 g
30 g.
-5° C to 40° C
Ø 4.5 mm max.

Type	Part number
A466	822A 466 01

GMQ...T

4 poles

Spacing 70,4 mm (2.77")



Standard blocks. Products with other options are available, example : auxiliary contact. Consult us.

Types	Part number
Curve T	
GMQ 0.1T	811 412 601
GMQ 0.5 T	811 418 601
GMQ 1 T	811 423 601
GMQ 2 T	811 428 601
GMQ 3 T	811 432 601
GMQ 4 T	811 434 601
GMQ 6 T	811 438 601
GMQ 10 T	811 446 601
GMQ 16 T	811 452 601
GMQ 20 T	811 456 601
GMQ 25 T	811 458 601
GMQ 32 T	811 462 601

1 pole + neutral version available on request.

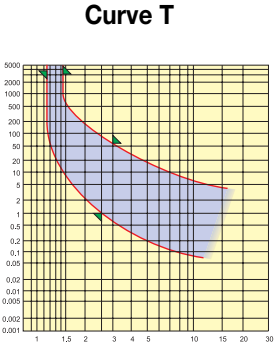
For additional order options, according to UL or other standards, consult us.

415 V AC, 50 - 60 Hz
screw clamp for 5 AWG (16 mm²)
10 In Rating < 5 Amps - 20 In Rating ≥ 5 Amps
4 000
2 000 V rms
See table 3
IP 20
348 g
30 g.
-5° C to 40° C
Ø 4.5 mm max.

Type	Part number
A466	822A 466 01

Table 1		
Current correction factor vs. temperature		
Ambient temperature		Correction factor (to multiply)
°C	°F	
- 20	- 4	1.25
- 10	+ 14	1.20
- 5	+ 23	1.17
- 0	+ 32	1.15
+ 10	+ 50	1.10
+ 20	+ 68	1.05
+ 30	+ 86	1.00
+ 40	+ 104	0.95
+ 50		0.90
+ 60		0.85
+ 70		0.80

Table 3	
Internal resistance vs. current rating	
Current rating (A)	Internal resistance (mΩ)
0.5	3 000
1	1 000
2	350
4	130
10	10
20	5



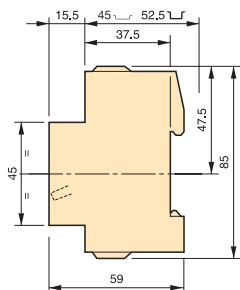
See following page big scale curves.

A
1

Magnetic-thermal Circuit breakers

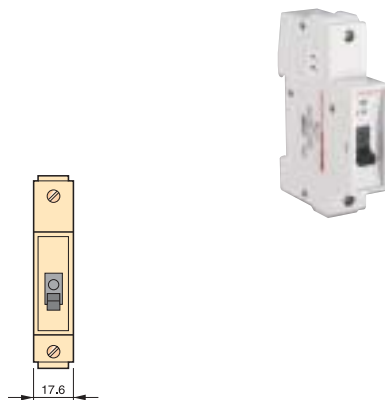
Direct current 100 V max Serie GF

└ DIN 3



GFU... 1 pole

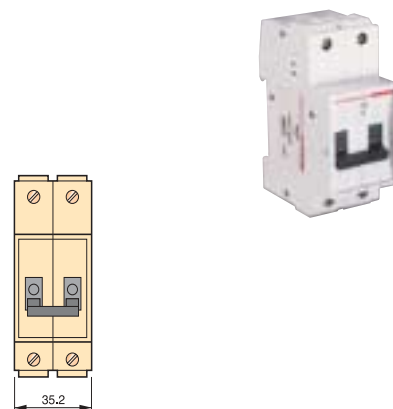
Spacing 17,6 mm (.693")



Standard blocks. Products with other options are available,
example : auxiliary contact. Consult us.

GFB... 2 poles

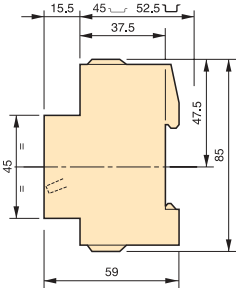
Spacing 35,2 mm (1.38")



Standard blocks. Products with other options are available,
example : auxiliary contact. Consult us.

Rating		Types	Part numbers	Types	Part numbers
Other ratings available, consult us.	Rated current in Amps				
	0.1	GFU 0.1 S	812 112 501	GFB 0.1 S	812 212 501
	0.5	GFU 0.5 S	812 118 501	GFB 0.5 S	812 218 501
	1	GFU 1 S	812 123 501	GFB 1 S	812 223 501
	2	GFU 2 S	812 128 501	GFB 2 S	812 228 501
	3	GFU 3 S	812 132 501	GFB 3 S	812 232 501
	4	GFU 4 S	812 134 501	GFB 4 S	812 234 501
	6	GFU 6 S	812 138 501	GFB 6 S	812 238 501
	10	GFU 10 S	812 146 501	GFB 10 S	812 246 501
	16	GFU 16 S	812 152 501	GFB 16 S	812 252 501
	20	GFU 20 S	812 156 501	GFB 20 S	812 256 501
	25	GFU 25 S	812 158 501	GFB 25 S	812 258 501
	32	GFU 32 S	812 162 501	GFB 32 S	812 262 501
		CE		CE	
Characteristics					
Rated voltage	V	100 V DC maxi.		100 V DC maxi.	
Rated wire size	mm ² / AWG	screw clamp for 5 AWG (16 mm ²)		screw clamp for 5 AWG (16 mm ²)	
Interrupting capacity					
According to standard NF F62 001		1 000 Amps		1 000 Amps	
Other characteristics					
Life, number of cycles (On+Off)		4 000		4 000	
Dielectric withstanding voltage	V	2 000 V rms		2 000 V rms	
Internal resistance		See table 2		See table 2	
Tripping curves	S	Current rating 0.1 to 2 A : 5 ln < S < 10 ln - 3 to 32 A : 7 ln < S < 14 ln		Current rating 0.1 to 2 A : 5 ln < S < 10 ln - 3 to 32 A : 7 ln < S < 14 ln	
Degree of protection		IP 20		IP 20	
Weight		94 g		188 g	
Mecanical shock		30 g.		30 g.	
Ambient Temperature		- 25° C to + 70° C		- 25° C to + 70° C	
Connection		Ø 4.5 mm max.		Ø 4.5 mm max	
Accessories		Type	Part number	Type	Part number
Adaptor for DIN 1 rail mount		A466	822A 466 01	A466	822A 466 01

Magnetic-thermal
Circuit breakers
Direct current
150 V maxi
Serie GC
DIN 3



GCU...
1 pole

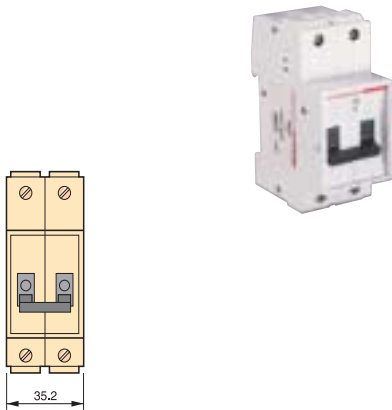
Spacing 17,6 mm (.693)



Standard blocks. Products with other options are available, example : auxiliary contact. Consult us.

GCB...
2 poles

Spacing 35,2 mm (1.38")



Standard blocks. Products with other options are available, example : auxiliary contact. Consult us.

Rating		Types	Part numbers	Types	Part numbers
Other ratings available, consult us.	Rated current in Amps				
	0.1	GCU 0.1 S	813 112 501	GCB 0.1 S	813 212 501
	0.5	GCU 0.5 S	813 118 501	GCB 0.5 S	813 218 501
	1	GCU 1 S	813 123 501	GCB 1 S	813 223 501
	2	GCU 2 S	813 128 501	GCB 2 S	813 228 501
	3	GCU 3 S	813 132 501	GCB 3 S	813 232 501
	4	GCU 4 S	813 134 501	GCB 4 S	813 234 501
	6	GCU 6 S	813 138 501	GCB 6 S	813 238 501
	10	GCU 10 S	813 146 501	GCB 10 S	813 246 501
	16	GCU 16 S	813 152 501	GCB 16 S	813 252 501
	20	GCU 20 S	813 156 501	GCB 20 S	813 256 501
	25	GCU 25 S	813 158 501	GCB 25 S	813 258 501
	32	GCU 32 S	813 162 501	GCB 32 S	813 262 501
			CE		CE
Characteristics					
Rated voltage	V	150 V DC maxi.		100 V DC maxi.	
Rated wire size	mm² / AWG	screw clamp for 5 AWG (16 mm²)		screw clamp for 5 AWG (16 mm²)	
Interrupting capacity					
According to standard NF F62 001		1 500 Amps		1 500 Amps	
Other characteristics					
Life, number of cycles (On+Off)		4 000		4 000	
Dielectric withstanding voltage		2 000 V rms		2 000 V rms	
Internal resistance		See table 2		See table 2	
Tripping curves		Current rating 0.1 to 2 A : 5 In < S < 10 In - 3 to 32 A : 7 In < S < 14 In		Current rating 0.1 to 2 A : 5 In < S < 10 In - 3 to 32 A : 7 In < S < 14 In	
Degree of protection		IP 20		IP 20	
Weight		94 g		188 g	
Mecanical shock		30 g.		30 g.	
Ambient Temperature		- 25° C to + 70° C		- 25° C to + 70° C	
Connection		Ø 4.5 mm max.		Ø 4.5 mm max.	
Accessories		Type	Part number	Type	Part number
Adaptor for DIN 1 rail mount		A466	822A 466 01	A466	822A 466 01

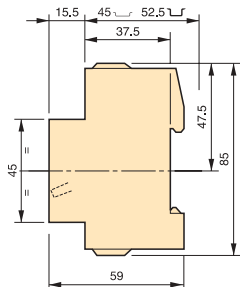
A
1

Thermal Circuit breakers

Direct current 100 V maxi

Serie GF

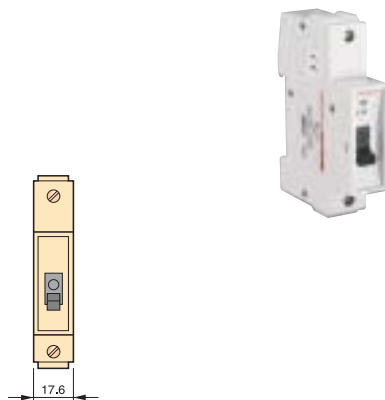
└ DIN 3



GFU...T

1 pole

Spacing 17,6 mm (.629")

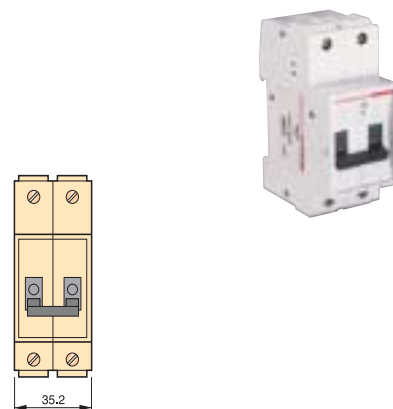


Standard blocks. Products with other options are available,
example : auxiliary contact. Consult us.

GFB...T

2 poles

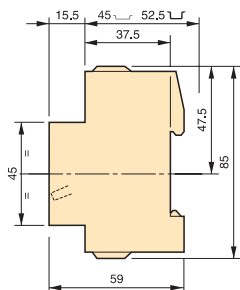
Spacing 35,2 mm (1.38")



Standard blocks. Products with other options are available,
example : auxiliary contact. Consult us.

Types		Types	Part number	Types	Part number
Other ratings available, consult us.		Curve T		Curve T	
Rated current in Amps		GFU 0.1 T	812 112 601	GFB 0.1 T	812 212 601
		GFU 0.5 T	812 118 601	GFB 0.5 T	812 218 601
		GFU 1 T	812 123 601	GFB 1 T	812 223 601
		GFU 2 T	812 128 601	GFB 2 T	812 228 601
See table 1 for current correction factor vs. temperature.		GFU 3 T	812 132 601	GFB 3 T	812 232 601
		GFU 4 T	812 134 601	GFB 4 T	812 234 601
		GFU 6 T	812 138 601	GFB 6 T	812 238 601
		GFU 10 T	812 146 601	GFB 10 T	812 246 601
		GFU 16 T	812 152 601	GFB 16 T	812 252 601
		GFU 20 T	812 156 601	GFB 20 T	812 256 601
		GFU 25 T	812 158 601	GFB 25 T	812 258 601
		GFU 32 T	812 162 601	GFB 32 T	812 262 601
		CE		CE	
Characteristics					
Rated voltage	V	100 V DC maxi		100 V DC maxi	
Rated wire size	mm ² / AWG				
Interrupting capacity					
Curve T		10 In Rating < 5 Amps - 20 In Rating ≥ 5 Amps		10 In Rating < 5 Amps - 20 In Rating ≥ 5 Amps	
Other characteristics					
Life, number of cycles (On+Off)		4 000		4 000	
Dielectric withstanding voltage		2 000 V rms		2 000 V rms	
Internal resistance		See table 3		See table 3	
Degree of protection		IP 20		IP 20	
Weight		87 g		174 g	
Mecanical shock		30 g.		30 g.	
Ambient Temperature		- 5° C to 40° C		-5° C to 40° C	
Connection		Ø 4.5 mm. maxi		Ø 4.5 mm. maxi	
Accessories		Type	Part number	Type	Part number
Adaptor for DIN 1 rail mount		A466	822A 466 01	A466	822A 466 01

**Thermal
Circuit breakers
Direct current
100 V maxi
Serie GC**
↳ DIN 3



GCU...T
1 pole

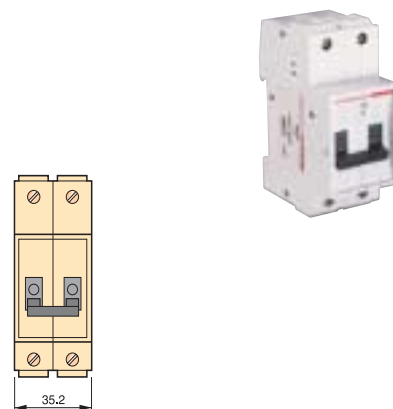
Spacing 17.6 mm (.629")



Standard blocks. Products with other options are available, example : auxiliary contact. Consult us.

GCB...T
2 poles

Spacing 35.2 mm (1.38")

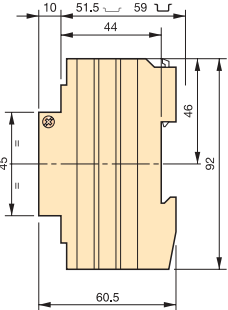


Standard blocks. Products with other options are available, example : auxiliary contact. Consult us.

Types		Types	Part number	Types	Part number	
Other ratings available, consult us. See table 1 for current correction factor vs. temperature.	Rated current in Amps	Curve T		Curve T		
	0.1	GCU 0.1 T	813 112 601	GCB 0.1 T	813 212 601	
	0.5	GCU 0.5 T	813 118 601	GCB 0.5 T	813 218 601	
	1	GCU 1 T	813 123 601	GCB 1 T	813 223 601	
	2	GCU 2 T	813 128 601	GCB 2 T	813 228 601	
	3	GCU 3 T	813 132 601	GCB 3 T	813 232 601	
	4	GCU 4 T	813 134 601	GCB 4 T	813 234 601	
	6	GCU 6 T	813 138 601	GCB 6 T	813 238 601	
	10	GCU 10 T	813 146 601	GCB 10 T	813 246 601	
	16	GCU 16 T	813 152 601	GCB 16 T	813 252 601	
	20	GCU 20 T	813 156 601	GCB 20 T	813 256 601	
	25	GCU 25 T	813 158 601	GCB 25 T	813 258 601	
	32	GCU 32 T	813 162 601	GCB 32 T	813 262 601	
			CE			CE
Characteristics						
Rated voltage	V	150 V DC maxi		150 V DC maxi		
Rated wire size	mm² / AWG					
Interrupting capacity						
Curve T		10 In Rating < 5 Amps - 20 In Rating ≥ 5 Amps		10 In Rating < 5 Amps - 20 In Rating ≥ 5 Amps		
Other characteristics						
Life, number of cycles (On+Off)		4 000		4 000		
Dielectric withstanding voltage		2 000 V rms		2 000 V rms		
Internal resistance		See table 3		See table 3		
Degree of protection		IP 20		IP 20		
Weight		87 g		174 g		
Mecanical shock		30 g.		30 g.		
Ambient Temperature		- 5° C to 40° C		-5° C to 40° C		
Connection		Ø 4.5 mm. maxi		Ø 4.5 mm. maxi		
Accessories		Type	Part number	Type	Part number	
Adaptor for DIN 1 rail mount		A466	822A 466 01	A466	822A 466 01	

A
1

Differential
Circuit breakers
Magnetic-thermal
Alternative current
Serie DDI
└ DIN 3



DDI1+N...C...
1 pole + neutral into 2 modules

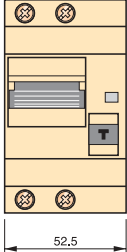
Spacing 35 mm (1.38")



Standard blocks. Products with other options are available.
Consult us.

DDIB...C...
2 poles protected into 3 modules

Spacing 52,5 mm (2.06)



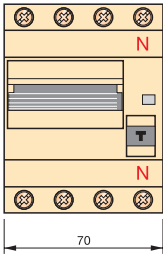
Standard blocks. Products with other options are available.
Consult us.

Types		Rating		Part numbers			Part numbers		
The product type is getting by replace with wanted rated current For example : DDI1+N 6 C 0.03 DDI1+N 10 C 0.01 DDIB 25 C 0.3 <i>Other ratings available, consult us.</i>	Curve :	Curve C		Curve C		Curve C		Curve C	
	Type :	DDI1+N...C0.01		DDI1+N...C0.03		DDI1+N...C0.3		DDIB...C0.01	
	Sensitivity :	10 mA		30 mA		300 mA		DDIB...C0.03	
	Rated current in Amps							10 mA	
								30 mA	
								300 mA	
	6	863 538 311		863 538 321		863 538 341		863 238 311	
	10	863 546 311		863 546 321		863 546 341		863 246 311	
	16	863 552 311		863 552 321		863 552 341		863 252 311	
20			863 556 321		863 556 341		863 256 311		
25			863 558 321		863 558 341		863 258 311		
32			863 562 321		863 562 341		863 262 311		
40			863 566 321		863 566 341		863 266 311		

DDI3+N

3 poles protected + neutral into 4 modules

Spacing 70 mm (2.76")



Standard blocks. Products with other options are available, example : auxiliary contact. Consult us.

Part number

Curve C		
DDI3+N...C0.01 10 mA	DDI3+N...C0.03 30 mA	DDI3+N...C0.3 300 mA
863 638 311	863 638 321	863 638 341
863 646 311	863 646 321	863 646 341
863 652 311	863 652 321	863 652 341
863 656 311	863 656 321	863 656 341
863 658 311	863 658 321	863 658 341
863 662 311	863 662 321	863 662 341
863 666 311	863 666 321	863 666 341



415 V AC, 50 - 60 Hz

screw clamp for 3 AWG (25 mm²)

6 000 Amps

4 000
2 000 V rms
See table 2

IP 20
261 g
30 g.

-5° C to 40° C

Type	Part number
A466	822A 466 01

Table 1

Current correction factor vs. temperature

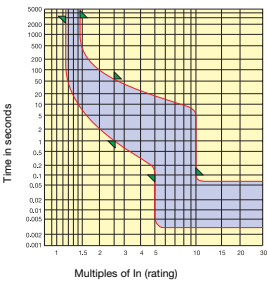
Ambient temperature		Correction factor (to multiply)
°C	°F	
- 20	- 4	?
- 10	+ 14	?
- 5	+ 23	1.17
- 0	+ 32	1.15
+ 10	+ 50	1.10
+ 20	+ 68	1.05
+ 30	+ 86	1.00
+ 40	+ 104	0.95
+ 50		special P/N
+ 60		special P/N
+ 70		special P/N

Table 2

Internal resistance vs. current rating

Current rating (A)	Internal resistance (mΩ)
0.5	4 000
1	1 200
2	420
4	160
10	13
20	6

Curve C



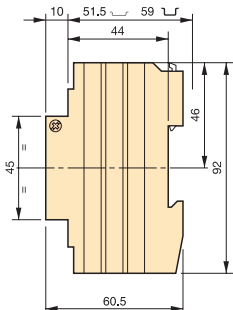
See following page big scale curves.

Differential switches

Alternative current

Serie IDI

└ DIN 3



IDIB...N...

2 poles

Spacing 35 mm (1.38")

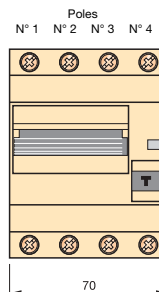


Standard blocks. Products with other options are available.
Consult us.

IDIQ...N...

4 poles

Spacing 70 mm (2.76")



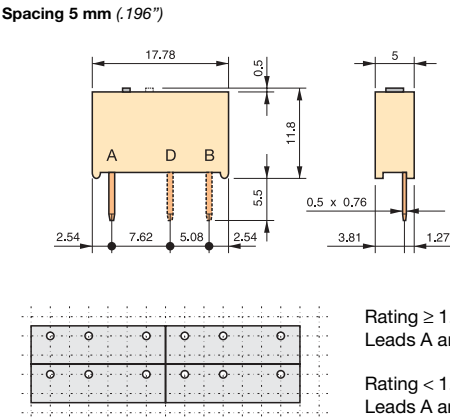
Standard blocks. Products with other options are available.
Consult us.

Types		Rating		Part numbers		Part numbers	
The product type is getting by replace with wanted rated current For exemple : IDIB 25 N 0.03 IDIQ 40 N 0.3 Other ratings available, consult us.	Type :	IDIB... N 0.03	IDIB... N 0.3	IDIQ.....N 0.03	IDIQ.....N 0.3		
	Sensitivity :	30 mA	300 mA	30 mA	300 mA		
	Rated current in Amps						
	25	861 258 721	861 258 741	861 458 721	861 458 741		
	40	861 266 721	861 266 741	861 466 721	861 466 741		
Characteristics							
Rated voltage		V		240 V AC, 50/60 Hz		415 V AC, 50/60 Hz	
Rated wire size		mm² / AWG		screw clamp for 3 AWG (25 mm²)		screw clamp for 3 AWG (25 mm²)	
Sensitivity							
According to standard IEC 1 008-1		Standard : 30 mAmps (10 mAmps, 300 mAmps)		Standard : 30 mAmps (10 mAmps, 300 mAmps)			

Subminiature circuit breaker for printed circuit board
Series «TINY»



TY...



Description

The «TINY» subminiature circuit breaker is equipped with a «thermal» type detection device. Therefore, it can withstand transitory currents and avoid untimely tripping which the capacitors fitted in the protected circuit may cause.

As this device has no polarity, the «TINY» can be used either with alternating current or with direct current.

It is fitted with a sliding resetting switch which makes the position of contacts visible by its position. The «TINY» circuit breaker allows:

- resetting after automatic tripping
- manual tripping (switch function)

As it is compact with a relatively high rupturing capacity, this circuit breaker is highly suitable to protect printed circuit boards against high currents and short circuits.

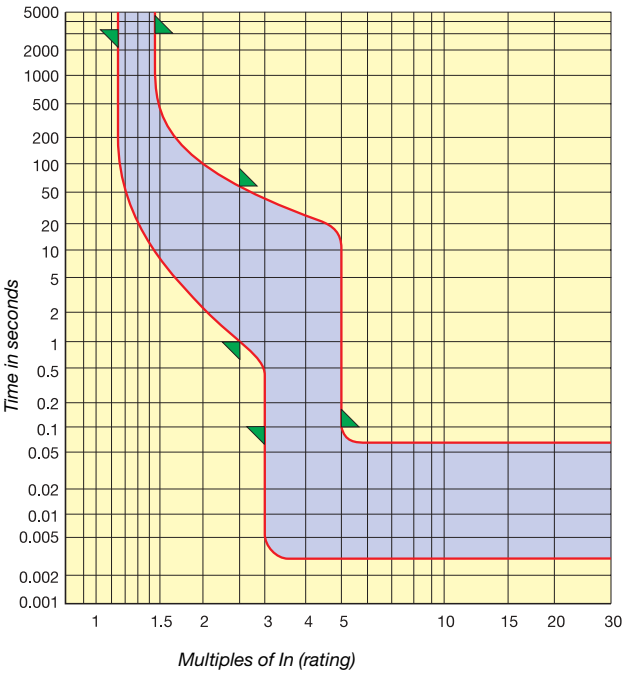
The rupture isolates the faulty line and prevents the other components from being destroyed in cascade.

Rating	Type	Part number	Tripping curves with no warming up time
Rating in Amps Rating marked on the casing 0.10 0.20 0.40 0.60 1.00 1.60 3.00 For other P.C.B. applications, it is possible to use our screw flush mounting GD - GN - GV series. See our circuit breaker catalog for specifications.	Standard terminals (straight) TY 0.10 TY 0.20 TY 0.40 TY 0.60 TY 1 TY 1.6 TY 3 Curved terminals on request CNET CE	809 012 001 809 014 001 809 017 001 809 019 001 809 023 001 809 026 001 809 032 001	
Characteristics	Operating voltage24 V DC or 24 V AC (Any other voltage, consult us)		
Rupturing capacity	See curves		
At 24 V DC, resistive load	Presumed current	True current	Breaking time at 20° C
Rating	0.10 A	2 A	150 - 500 ms
	0.20 A	4 A	150 - 500 ms
	0.40 A	10 A	150 - 400 ms
	0.60 A	12 A	100 - 400 ms
	1.00 A	13 A	200 - 700 ms
	1.60 A	32 A	50 - 150 ms
	3.00 A	45 A	80 - 300 ms
Others characteristics	Lifetime (O + F)500 cycles under 24 V DC and rating current		
Breakdown voltage	> 1 500 V		
Power consumption under rating current	< 0.20 Watt		
Lifetime of contacts	500 cycles under 24 V DC, 5 Amps		
Surge voltage withstanding	3 kv surge (1.2/50 µs)		
Contacts	Silver alloy		
Ambient temperature	-20° C to 60° C		
Weight	1.2 g		
Accessories	Type	Part number	

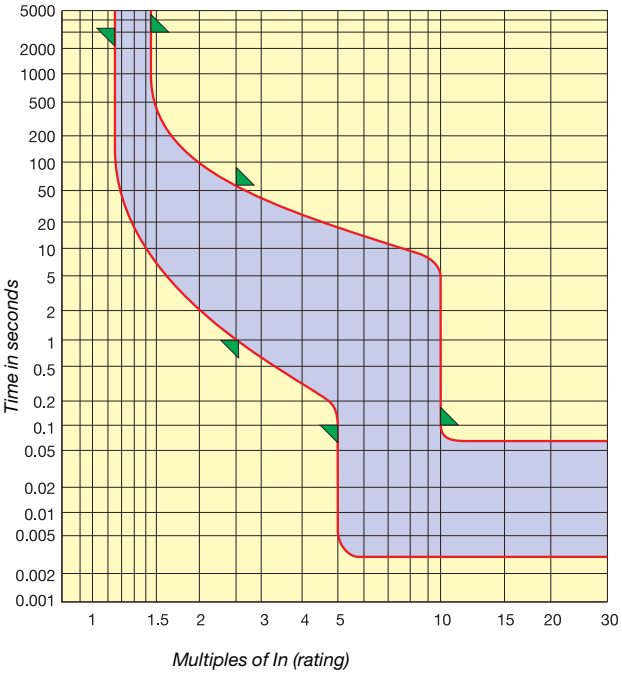
TRIPPING CURVES
FOR SERIE «GM» «GD» «GZ» «GH»

ALTERNATIVE CURRENT, at 30° C
according to IEC.898 standard

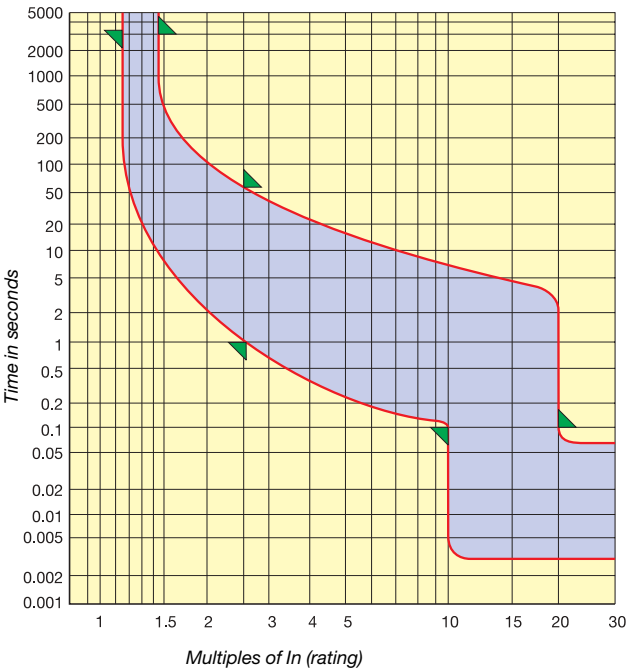
CURVE B



CURVE C



CURVE D



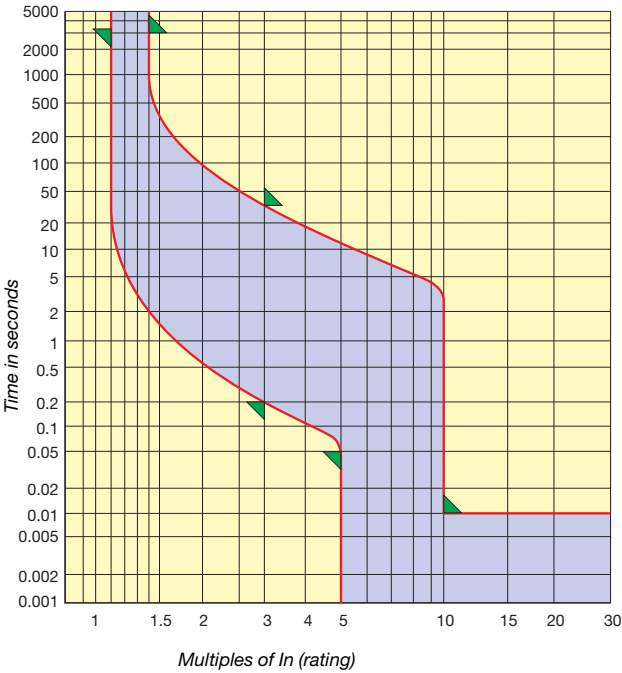
Limits standard
For information

Tests realized - cold ($I = 0$ before overload)
- overload on all the poles
for multipoles

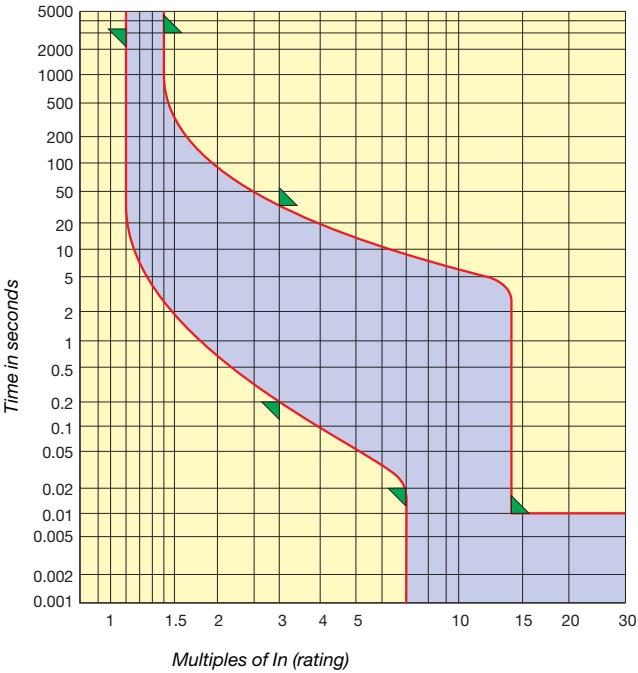
**THERMAL MAGNETIC DC CURRENT CURVES
FOR SERIES «GF», «GC», «GN» ET «GV» TYPE S**

**ALTERNATIVE CURRENT, at 20° C
according to NF F 62001 standard**

CURVE B



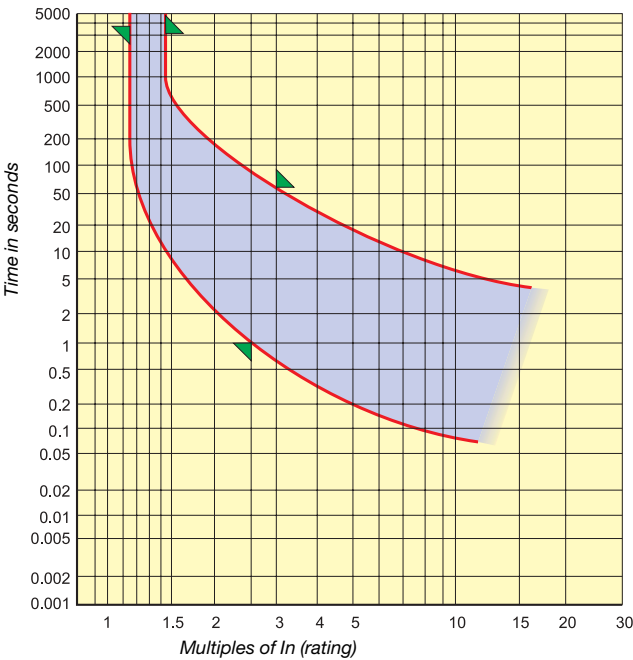
CURVE C



**CURVES OF THERMAL ALTERNATIVE OR DIRECT CURRENT
FOR «GM», «GD», «GF», «GC», «GN» AND «GV» SERIES MODEL T**

ALTERNATIVE OR DIRECT CURRENT

CURVE T

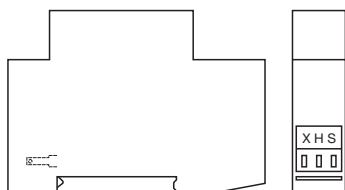
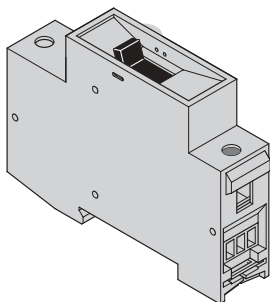


OPTIONS AND ACCESSORIES OF MODULAR CIRCUIT BREAKERS SERIES GM - GF - GC - GZ

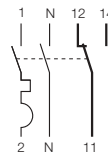
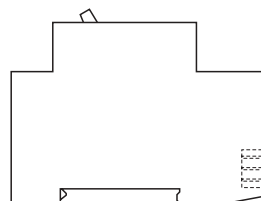
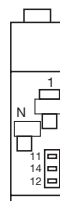
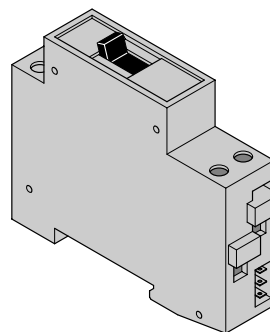
All circuit breakers are available with one or several (multipole)

auxiliary contacts

Series GM - GF - GC



Serie GZ (1+N only)



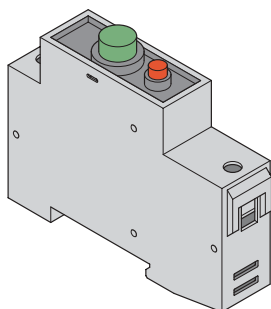
Characteristics

Switching capacity (resistive circuit) :

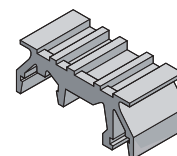
- max. value : 3 A with 240 V AC.
3 A with 48 V DC.
- min. value : 5 mA with 15 V DC.

Quick-connect tabs 2,8 x 0,8 mm (S.H.X. terminals)

GM, GF, GC can be ordered equipped with a push button



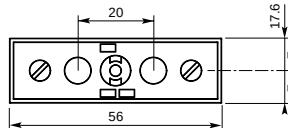
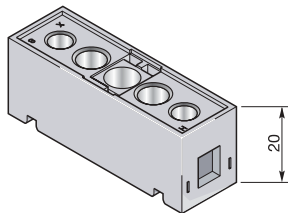
Adapter for mounting on DIN 1 / DIN 3 rails



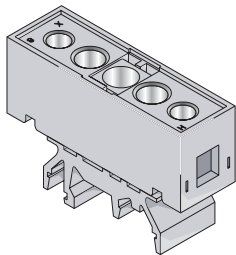
822A 466 01

ACCESSORIES OF FITTED CIRCUIT BREAKERS SERIES GD - GN - GV

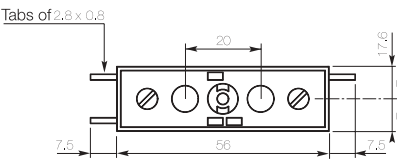
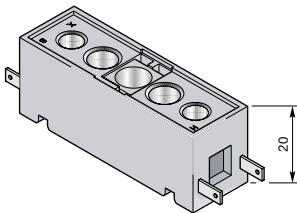
BASE MOUNTING
Without auxiliary contact



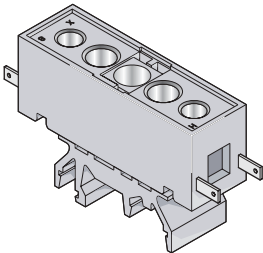
DIN RAIL MOUNTING
Without auxiliary contact



With auxiliary contact



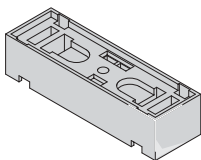
With auxiliary contact



	1 pole	2 poles	3 poles	4 poles
without contact	821B10001	821B20001	821B30001	821B40001
with contact 1	821B10101	821B20101	821B30101	821B40101
with contact 2		821B20201	821B30201	821B40201
with contact 3			821B30301	821B40301
with contact 4				821B40401

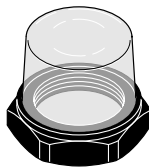
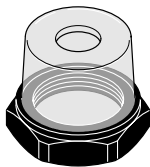
	1 pole	2 poles	3 poles	4 poles
without contact	821B13001	821B23001	821B33001	821B43001
with contact 1	821B13101	821B23101	821B33101	821B43101
with contact 2		821B23201	821B33201	821B43201
with contact 3			821B33301	821B43301
with contact 4				821B43401

Base for PCB



	1 pole	2 poles	3 poles	4 poles
Part number	821B11001	821B21001	821B31001	821B41001

Cover + waterproof equipment



Part number :

821E20801

Part number :

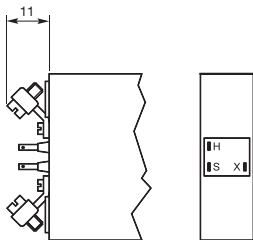
821E20601

Part number :

821E10001

OPTIONS

Auxiliary contact



Adjustable thermal protection

