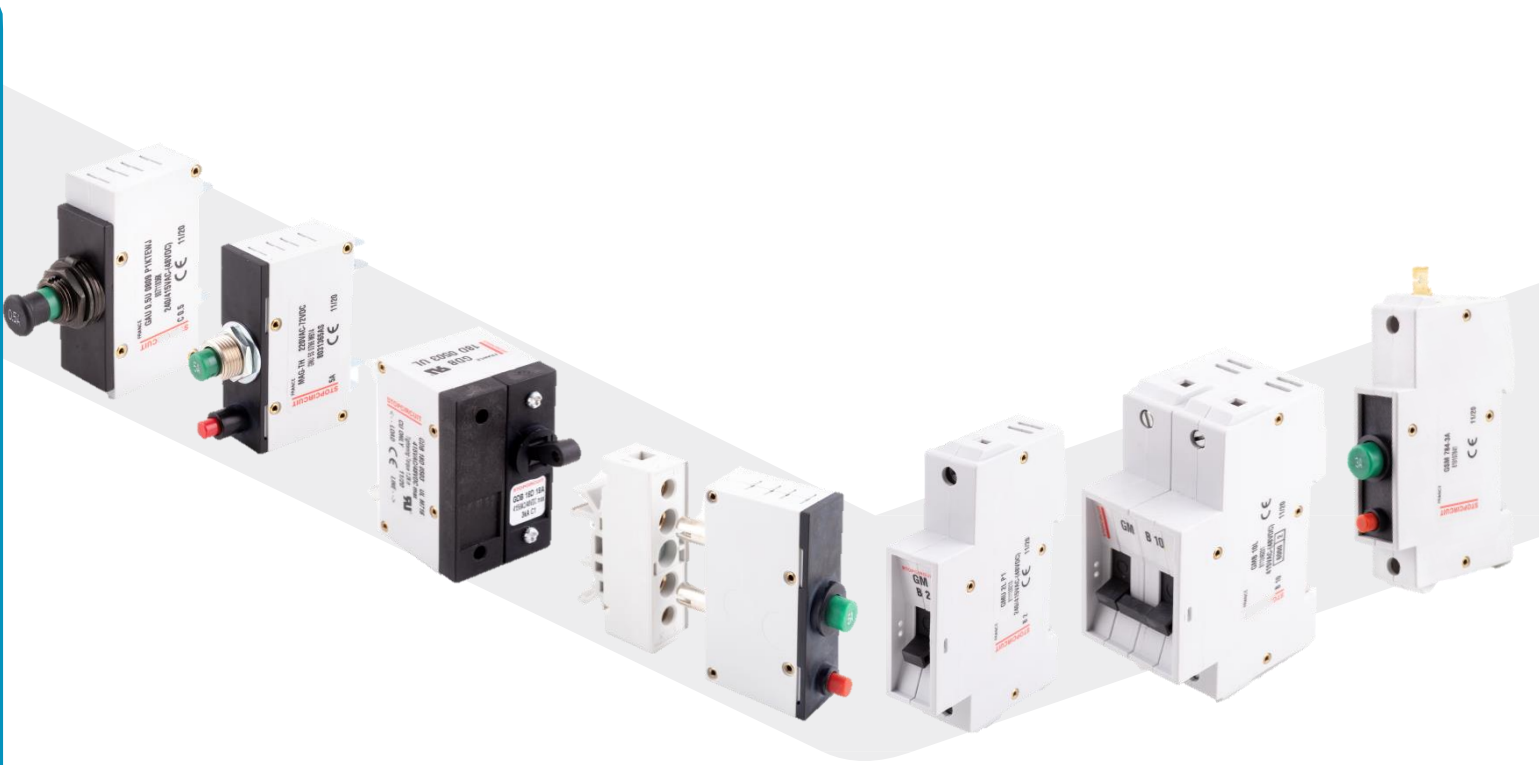


STOPCIRCUIT



MINIATURE CIRCUIT BREAKERS

PROTECTION SOLUTIONS FOR HARSH ENVIRONMENTS



MAFELEC TEAM



CIRCUIT BREAKERS

Summary



Flush mounting and DIN Rail miniature circuit breakers

Technical characteristics	1
Protection curves	2

GD - GN - GV series

Dimensions	4
Fastening - Terminals	5
Accessories – Mounting on base	6
Accessories – Sealing	7
Options - Auxiliary contacts	7
Options - Adjustable thermal protection	7
How to order ?	8

GM - GF - GC series

Dimensions	9
Options - Auxiliary contacts	9
Accessories – Mounting on DIN rail 1-3	9
How to order ?	10



CIRCUIT BREAKERS

Technical characteristics



<ul style="list-style-type: none"> ✓ Magneto-Thermic protection ✓ Magnetic protection ✓ Thermic protection 		GD-GN-GV series		GM-GF-GC series	
Rated current	Standard	0,1 to 32 A			
	On demand	0,04 to 50 A			
Max operating voltage DC		GD	48 VDC	GM	48 VDC
		GN	100 VDC	GF	100 VDC
		GV	150 VDC	GC	150 VDC
Max operating voltage AC		GD	240 / 415 VAC	GM	240 / 415 VAC
Breaking capacity	IEC 60898	GD	3 kA	GM	3 kA
	NF F 62001	GN	0,5 kA	GF	1 kA
		GV	1 kA	GC	1,5 kA
Service life (number of cycles ON/OFF)	MCB	4000 cycles			
	Auxiliary	4000 cycles			
With stand to mechanical shocks IEC 61373	Standard	30 G			
	With options	50G / 100 G (Cat 1 Class B)			
Operating temperature IEC 60068	Standard	- 5°C to + 40°C			
	With options	- 25°C to + 70°C			
		- 40°C to + 85°C			
Fire and smoke EN 45545-2		R22-R23-R24-R26 / HL1-HL2-HL3			
Certifications					
		* In Progress			



CIRCUIT BREAKERS

Protection Curves

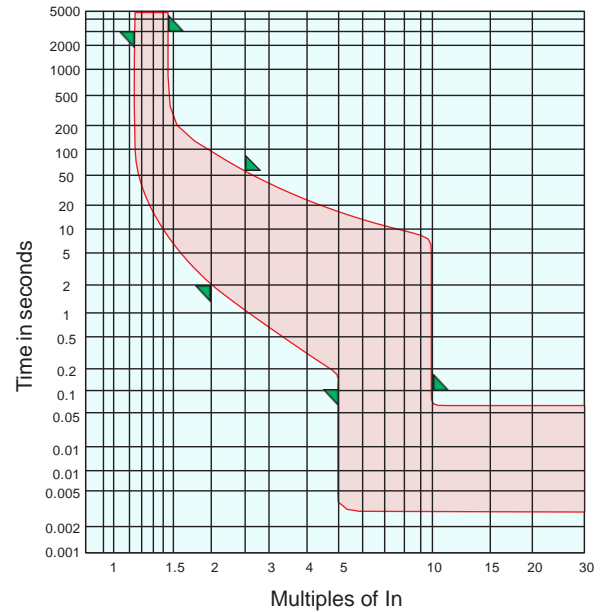
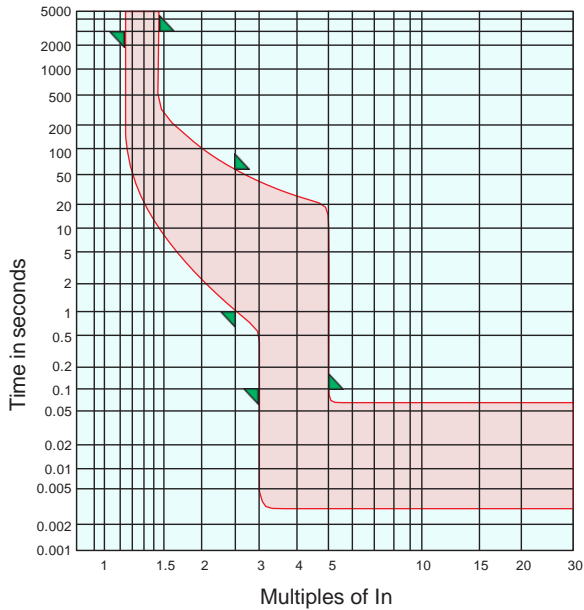


AC tripping curves*
Magneto-Thermic protection
(IEC 60898 standard)

GD - GM Series

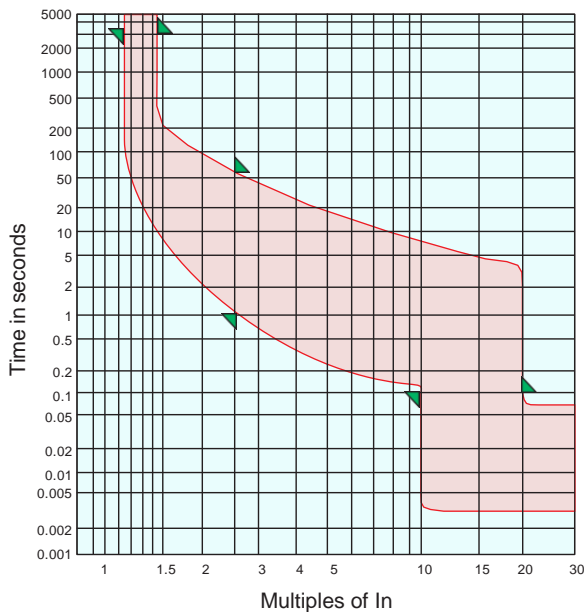
CURVE B

CURVE C



CURVE D

Legend



* Tripping at +30°C according to IEC 60898

Tests realized :

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

Standard limits

For information

Uncertain tripping zone



CIRCUIT BREAKERS

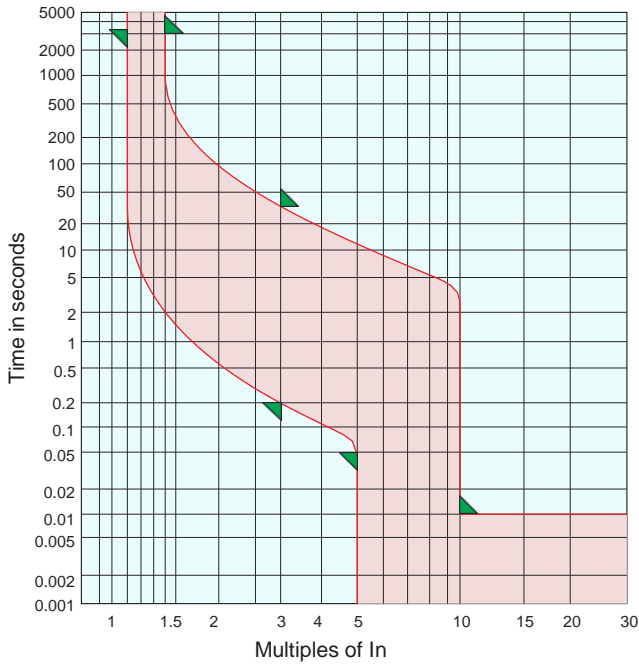
Protection Curves



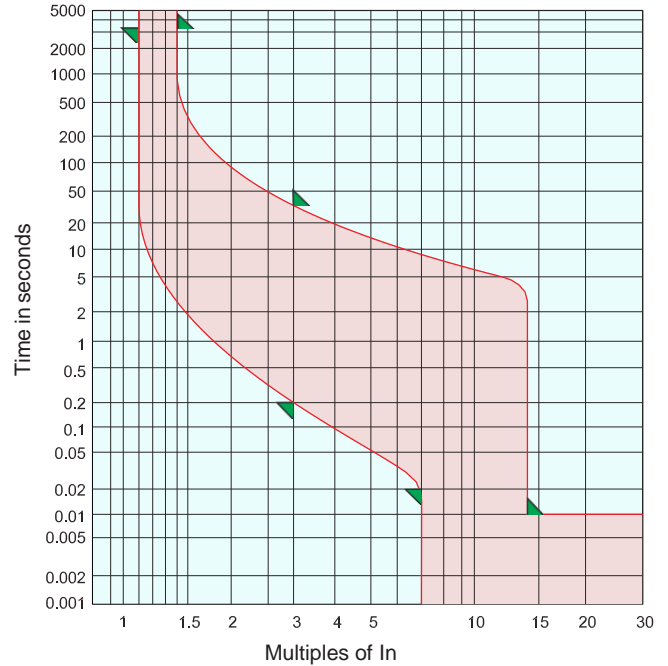
DC tripping curves*
 Magneto-Thermic protection
 (IEC 60898 standard)

GN - GV - GF - GC Series

CURVE S : Rating from 0,1 A to 2 A included



CURVE S : Rating from > 2 A to 32 A included



Legend

* Tripping at +20°C according to NF F 62001

Tests realized:

- at cold (I=0 before overload)
- Overload on all the poles for multipoles

▼ ▲ Standard limits

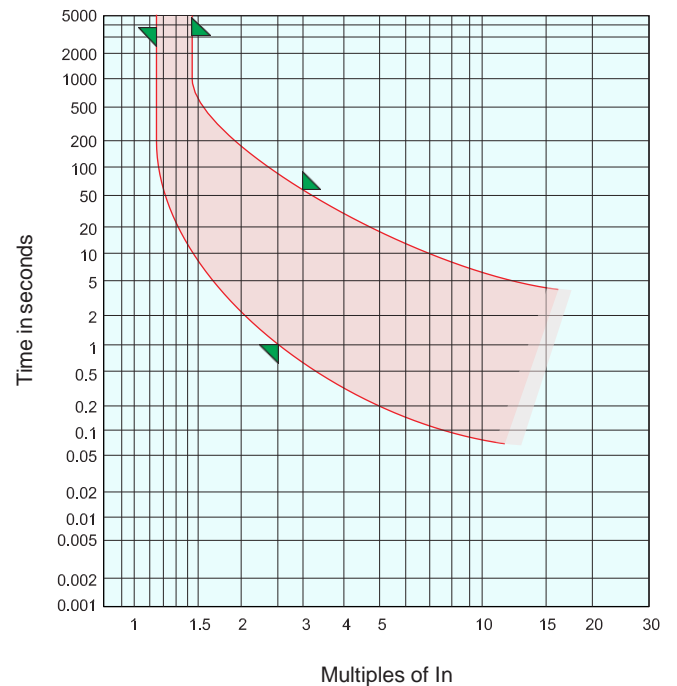
— For information

■ Uncertain tripping zone

AC and DC tripping curve

All series

Thermic protection only (model T)





GD-GN-GV Series

Technical Information



Flush mount or unpluggable versions : Dimensions drawings

Flush mount versions. Circuit breaker one pole to 3 poles.

Mounting by screws or by plastic threaded bush (or metal, option W)

Fastening and operations compatible : 03 - 04 - 06 - 07 - 08 - 09

Side view	Version U 1 pole	Version B or 1+N 2 poles	Version T 3 poles	Examples	
				Command 07 : 2 buttons	Command 08 : 1 push pull button

Flush mount versions. Circuit breaker one pole to 4 poles. Mounting by screws

Fastening and operations compatible : 05

Side view	Version U 1 pole	Version B or 1+N 2 poles	Version T 3 poles	Version Q or 3+N 4 poles (2 handles)	Example
					Command 05 : 1 handle

Unpluggable versions. Circuit breaker one pole to 3 poles. Bases on DIN Rail or plate

Fastening and operations compatible : 00 - 01 - 02 / Terminals compatible : 10

Side view	Version U 1 pole	Version B or 1+N 2 poles	Version T 3 poles	Example
				Command 01 : 2 buttons



GD-GN-GV Series

Technical Information



Flush mount or unpluggable versions : Fastenings and terminals

Fastening drawings*

Projection			Screw fastening			Fastening threaded bush			
00	01	02	03	04	05	06	07	08	09

*Other variants available : contact us

Terminals drawings*

10	01	02	03	33	43	04	05	06	07	08	09

*Other variants available : contact us

Dimensions

	Unpluggable			Screw			Threaded bush			

Fastening / Operations	00	01	02	03	04	05	06	07	08	09
Dimension A (mm)	8	8	8	8	8	17,5	15	15	21	28
Dimension C (mm)	32	32	32	32	32	37	32	32	32	32
Panel thickness max. (mm)				3	3	3	6	6	6	6

Terminals	10	01	02	03	33	43	04	05	06	07	08	09
Dimension B (mm)	15	4	4	12	12	12	4	5	7	4	4	11



GD-GN-GV Series

Technical Information



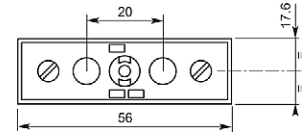
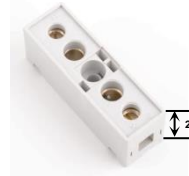
Accessories and options

Bases for unpluggable circuit breakers

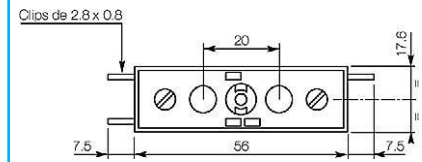
Mounting on plate

Number of auxiliary change-over contacts	1 pole	2 poles	3 poles	4 poles
0	B100	B200	B300	B400
1	B101	B201	B301	B401
2		B202	B302	B402
3			B303	B403
4				B404

Without auxiliary contact



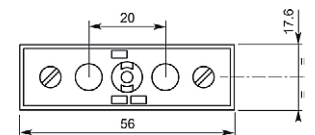
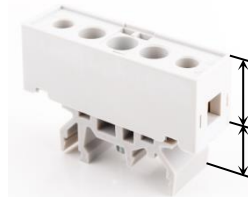
With auxiliary contact



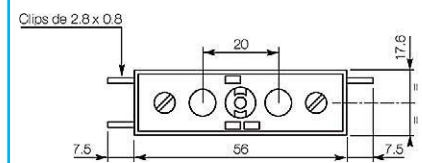
Mounting on DIN rail 1-3

Number of auxiliary change-over contacts	1 pole	2 poles	3 poles	4 poles
0	B130	B230	B330	B430
1	B131	B231	B331	B431
2		B232	B332	B432
3			B333	B433
4				B434

Without auxiliary contact

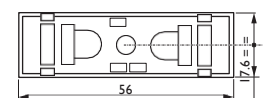
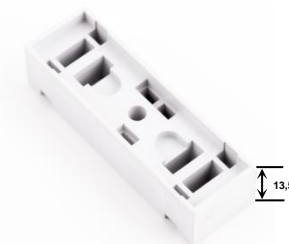
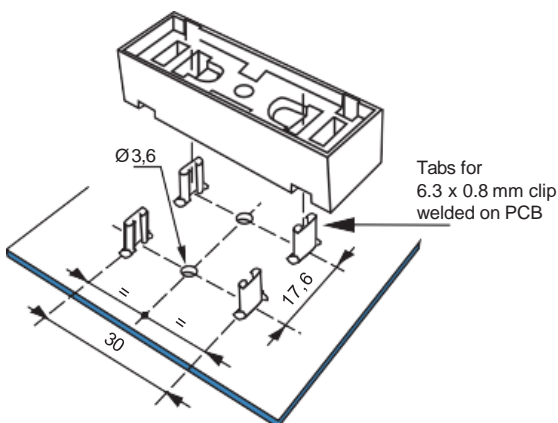


With auxiliary contact



Mounting on PCB – With terminals 09

Part number B110







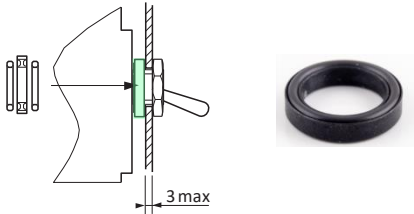
GD-GN-GV Series

Technical Information



Accessories and options

Sealing

Part number	Description	
E206	Hooded sealing for Fastening / operation N° 06	
E208	Hooded sealing for Fastening / operation N° 08	
E100	Equipment sealing for fastening / operation N° 09 . 1 ring, 2 seals (providing a seal to the artificial rain in front face) <u>Requires the T option for the circuit-breaker</u>	

Options

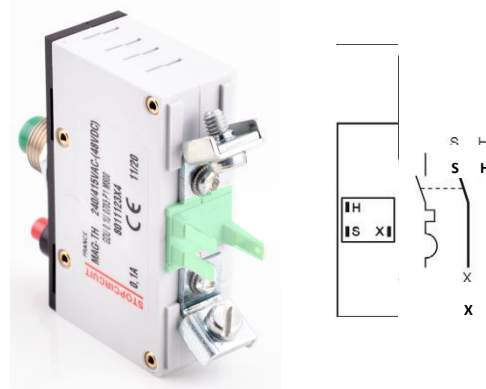
Change-over auxiliary contacts (options P1-P2-P3-P4)

Switching capacity (resistive circuit)

Maximum value :
3A under 240 VAC / 48 VDC

Minimum value :
5mA under 15 VDC

Connection with tabs 2.8 x 0.8 for clips (terminals S.H.X)



GD series Circuit-breaker, model D with thermal protection adjustable (option R)

The magnetic thresholds are defined according to the D curve and from the lowest rated current of the range

Adjusting range (A) :

| 0,1 / 0,16 | 0,16 / 0,25 | 0,25 / 0,4 | 0,4 / 0,6 | 1 / 1,6 |
| 1,6 / 2,5 | 2,5 / 4 | 4 / 6 | | 6 / 10 |





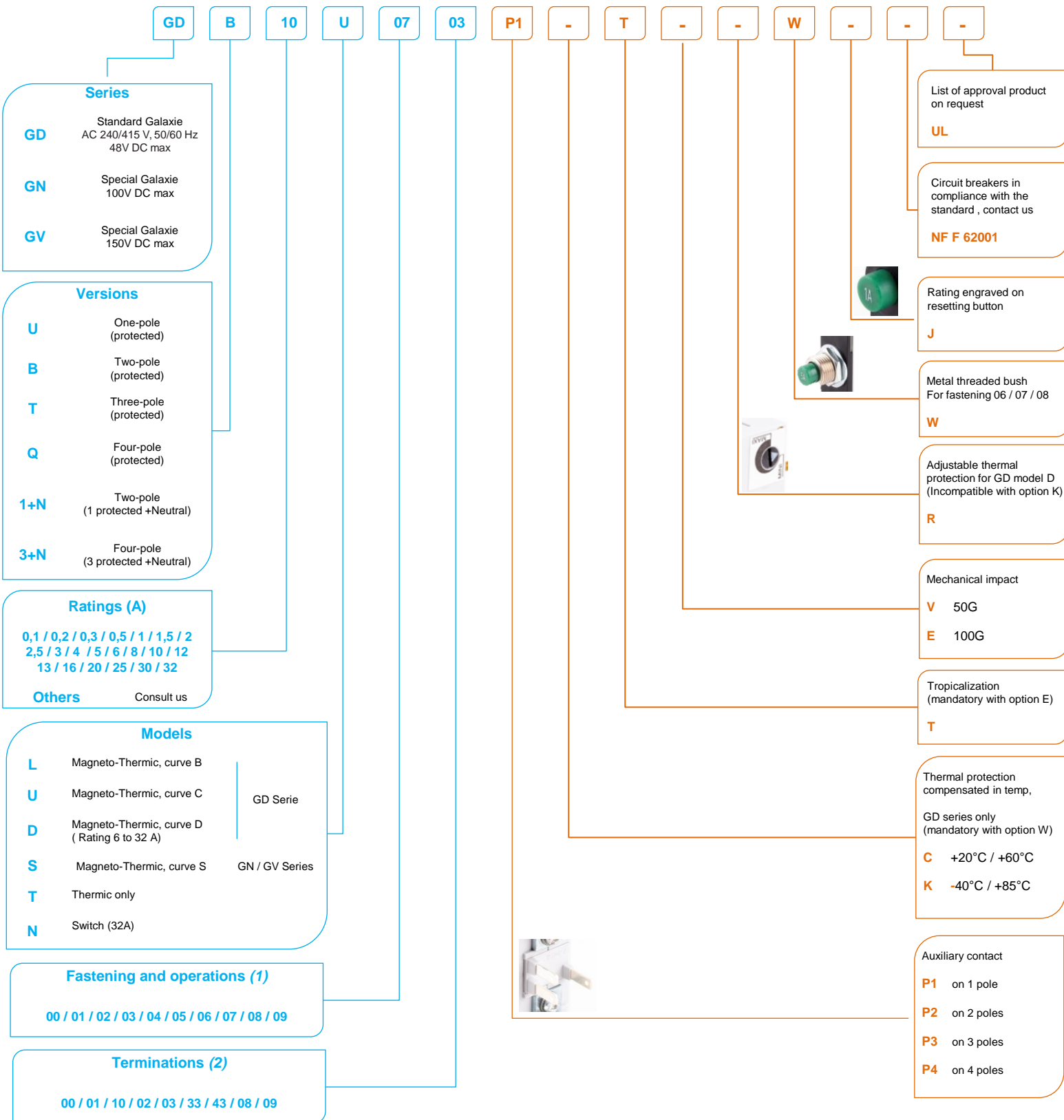
GD-GN-GV Series

How to order ?



Example:

1 Circuit-breaker - **Serie** : Galaxie standard AC - **Versión** : 2 protected poles - **Rating** : 10 A - **Model** : magnetic-thermic, 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 1 pole - Tropicalization



STOPCIRCUIT also accompanies you in the definition of special products on specifications (reference GS)



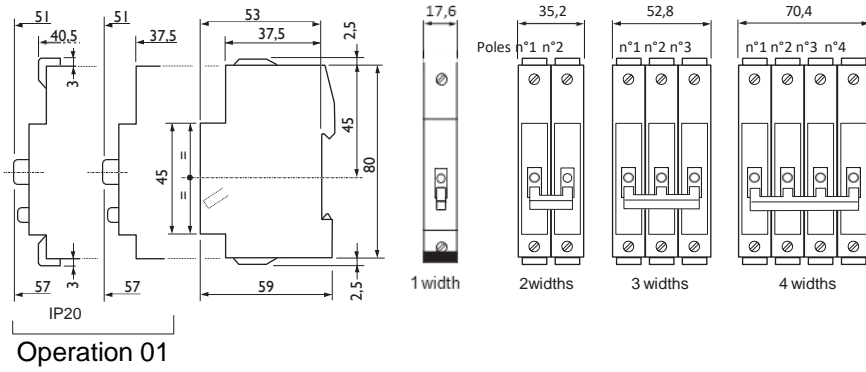
GM-GF-GC Series

Technical Information



DIN Rail mount versions

Dimensions drawings



Note : Operation N° 00 or 01 on the first pole if 2 poles, or on the second pole if 3 poles

* Possibility of specific terminals on request

Options

Change-over auxiliary contacts (options P1-P2-P3-P4)

Switching capacity (resistive circuit)

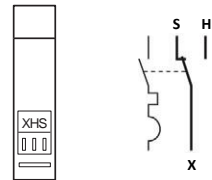
Maximum value :

3A under 240 VAC / 48 VDC

Minimum value :

5mA under 15 VDC

Connection with tabs 2.8 x 0.8 for clips (terminals S.H.X)



Mounting on DIN rail 1-3

Part number

A466





GM-GF-GC series

How to order ?



Example:

1 Circuit-breaker - **Serie** : Galaxie Modular AC - **Versión** : 4 protected poles - **Rating** : 16 A - **Model** : magnetic-thermal, curve C
 - **Option** : Tropicalization

GM **Q** **16** **U** **-** **-** **-** **T** **-** **-** **-** **-**

Series

- GM** Standard Galaxie
AC 240/415 V, 50/60 Hz
48V DC max
- GF** Special Galaxie
100V DC max
- GC** Special Galaxie
150V DC max

Versions

- U** One-pole
(protected)
- B** Two-pole
(protected)
- T** Three-pole
(protected)
- Q** Four-pole
(protected)
- 1+N** Two-pole
(1 protected +Neutral)
- 3+N** Four-pole
(3 protected +Neutral)

Ratings (A)

0,1 / 0,2 / 0,3 / 0,5 / 1 / 1,5 / 2
 2,5 / 3 / 4 / 5 / 6 / 8 / 10 / 12
 13 / 16 / 20 / 25 / 30 / 32

Others Consult us

Models

- L** Magneto-Thermic, curve B
 - U** Magneto-Thermic, curve C
 - D** Magneto-Thermic, curve D
(Rating 6 to 32 A)
 - S** Magneto-Thermic, curve S
 - T** Thermic only
 - N** Switch (32A)
- GM Serie
- GF / GC Series

Operations

- 00** 1 button
 - 01** 2 buttons
- 3 poles max.

List of approval product
on request

UL

Circuit breakers in
compliance with the
standard , contact us

NF F 62001

Rating engraved on
resetting button

J

Mechanical impact

V 50G

Tropicalization

T

Thermal protection
compensated in temp,

C +20°C / +60°C

Auxiliary contact

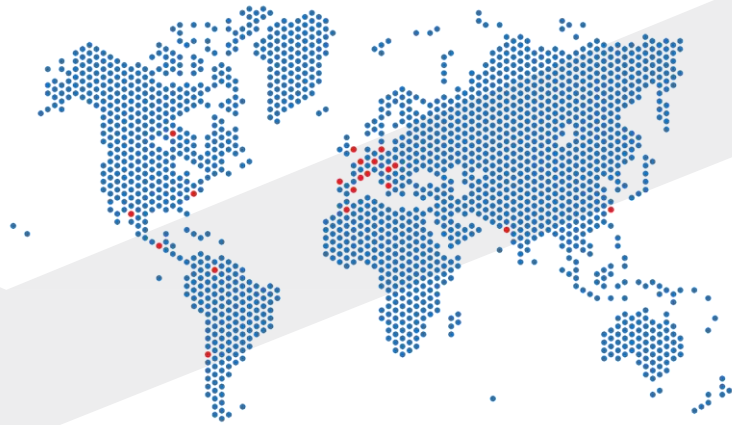
P1 on 1 pole

P2 on 2 poles

P3 on 3 poles

P4 on 4 poles

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<http://www.stopcircuit.fr/>

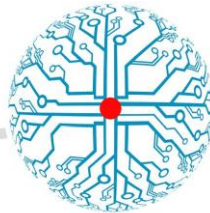


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