

Btdin RCBO 6000A up to 63A (2P)

Cat N° (s):

GN823AC6 - GN823AC10 - GN823AC16 - GN823AC20 -
GN823AC25 - GN823AC32 - GN823AC40 - GN823AC50 -
GN823AC63



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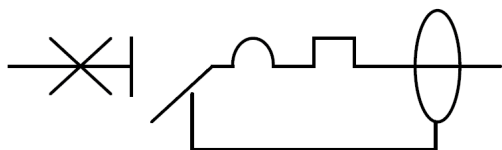
1. DESCRIPTION

Residual current operated circuit breaker with integral overcurrent protection (residual current breaking overload RCBO).

For control, disconnection and protection of electrical circuits against overcurrent and insulation faults.

For protection of people against direct and indirect electric shocks.

Symbol:



Technology:

- . Current limiting device.
- . Electromagnetic residual current operating by sensitive relay

2. PRODUCT RANGE:

Number of poles:

- . Double pole (2P)

Width:

- . Double pole – 4 modules (4 x 17.8 mm = 71.2 mm).

Rated current at 30°C:

- . 6 / 10 / 16 / 20 / 25 / 32 / 40 / 50 / 63 A.

Tripping characteristics and magnetic tripping calibrations:

- . Curve C (between 5 and 10 In)

Thermal threshold:

according to IEC/EN 61009-1

- . Non operating current (In): 1.13 In.

- . Operating current (If): 1.45 In.

according to IEC /EN 60947-2

- . Non operating current (In): 1.05 In.

- . Operating current (If): 1.3 In.

Types :

- . AC (sinusoidal AC fault currents).

Sensitivities and tripping time:

- . 30 mA i instantaneous.

2. PRODUCTRANGE (continued):

Rated Voltage / Frequency:

- . Double pole 230 V ~, 50 Hz with standard tolerances.

Operating voltage ~ 50 Hz with standard tolerances :

U	Double pole
U mini	170 V ~
U maxi	253 V ~

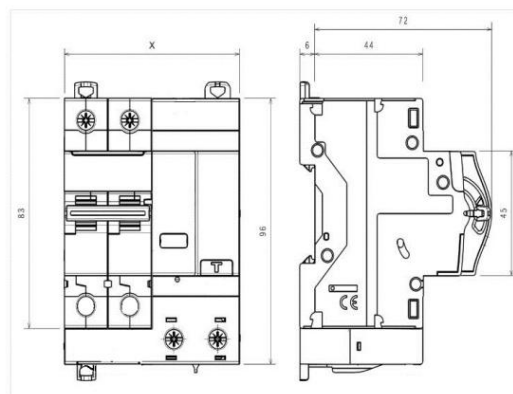
Breaking capacity:

- . 6000 A according to IEC/EN 61009-1
- . 10 kA according to IEC/EN 60947-2

Residual breaking capacity $I_{\Delta m}$:

- . In accordance with standard IEC/ EN 61009-1
($I_{\Delta m}$: short-circuit to ground) $I_{\Delta m} = 6000A$

3. OVERALL DIMENSIONS



N° of poles	"X"
2P	71.2 mm

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4. PREPARATION - CONNECTION

Fixing:

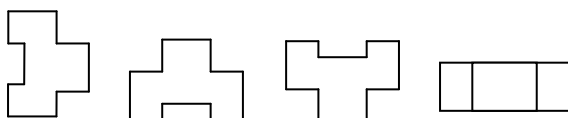
- . On symmetrical IEC/EN 60715 rail or DIN 35 rail.

Power supply:

- . From the top through the m.c.b. associated or from the bottom directly on the differential block.

Operating position :

- . *Vertical, Horizontal, Flat.*



Screw terminals:

- . Terminals protected against accidental contact (IP20).
- . Cage terminals, with release and captive screw
- . Terminal depth: 14 mm.
- . Stripping length recommended: 11 mm
- . Screw head: Mixed, Slotted and Pozidriv n°2.
- . Recommended tightening torque: 3 Nm.
- . The screw terminals are separated by built-in shields.

Connectable section:

- . In the power terminals in the lower part of the product.
- . Copper cable.

	Without ferrule	With ferrule
Rigid cable	1 x 35 mm²	-
Flexible cable	1 x 25 mm²	1 x 25 mm²

Recommended tools:

- . For the terminals: screwdriver Pozidriv n°2 or flat screwdriver 5,5 mm (6,5 mm maximum).
- . For fixing on the DIN rail: flat screwdriver 5 mm (from 4 to 5 mm).

4. PREPARATION - CONNECTION *(continued):*

Manual actuation of the add-on module:

- . By the 2-position ergonomic handle of the associated MCB:
 - 1 / ON: Closed circuit.
 - 0 / OFF: Opened circuit.

Contacts status display:

- . By marking of the associated MCB handle:
 - "O-Off" white on a green background = contacts opened.
 - "I-On" white on a red background = contacts closed

Display of differential fault trip:

- . Yellow mechanical signaller into the window on front-side marking zone.

Lockout:

- . By 5 mm padlock with padlock support (cat. N° F80BL)

Labelling:

- . Identification of the circuit by insertion of a label in the label holder.

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GN823AC63

5. GENERAL CHARACTERISTICS :

Front side marking :

- . By permanent ink pad printing showing and laser marking.
- . Cat No: GN823AC6
- . Trade name: ground fault interrupter
- . Differential rated current.
- . Electrical diagram.
- . Bticino mark.

Code structure :

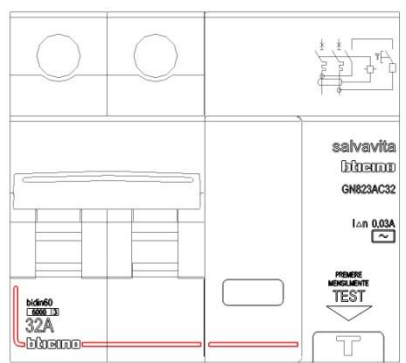
G	N	8	2	3	AC
---	---	---	---	---	----

- . Initial code root composed of six elements:
 - Letter "G" shows the device type: Add-on module (BDA).
 - Letter "N" breaking capacity 6000A
 - Numbers 8 shows device with MCB protection
 - Numbers of poles "2" = Two.
 - Sensitivity, $I_{\Delta n}$ (mA): N° 3 = 30mA.
 - Indication of the type "AC" = AC type.

6

- . Numerical part composed of one element:
 - Rated current of RCD., I_n (A).

Marking exemple :



5. GENERAL CHARACTERISTICS (continued):

Short-circuit breaking capacity:

- . single-phase or three-phase network (50/60 Hz AC)
- According to IEC/EN 61009-1
- . $I_{cn} = I_{cs}$ 6000A
- according to IEC /EN 60947-2
- . I_{cn} 10kA
- . $I_{cs} = 75\% I_{cn}$

Test key operating voltages :

U test	Duble pole
U mini	170 V ~
U maxi	253 V ~

Neutral system :

- . IT – TT – TN.

Residual breaking capacity $I_{\Delta m}$:

- . In accordance with standard IEC/EN 61009-1 ($I_{\Delta m}$: short-circuit to ground)
- $I_{\Delta m} = 60\%$ of I_{cn} of the associated MCB.

Insulation rated voltage:

- . $U_i = 500$ V in accordance with standard IEC/EN 61009-1

Pollution degree:

- . 2.

Dielectric strength:

- . 2500 V

Pulse rated voltage:

- . $U_{imp} = 4$ kV (wave 1.2 / 50 μ s).

Btdin RCBO 6000A up to 63A (2P)

Cat N° (s):

GN823AC6 - GN823AC10 - GN823AC16 - GN823AC2
- GN823AC25 - GN823AC32 - GN823AC40 -
GN823AC50 - GN823AC63

5. GENERAL CHARACTERISTICS *(continued)*:

Protection against unwanted tripping:

- . Damped recurrent wave – 0.5 µs/10kHz : 200A for all types
- . Held to the wave 8/20 µs: 250A

Protection class :

- . Protection index of terminals against solid and liquid bodies:
IP 20 (in accordance with standards IEC/EN 60529 et NF C 20-010).
- . Protection index of the box against solid and liquid bodies:
IP 40 (in accordance with standards IEC/ EN 60529 et NF C 20-010).
- . Class II compared to conductive parts.
- . Protection index against mechanical shocks:
IK 02 (in accordance with standards EN 50102 et NF C 20-015).

Mechanical endurance :

- . 20000 operations without load.
- . 10000 operations with load.
- . 750 differential tripping operations by the Test key.
- . 750 differential tripping operations for fault current.

Specific use:

- . Appropriate to be used in humid environment and polluted by chlorine (pool-type)

Load to close and to open a RCBO by the handle:

- . 0,5 Nm per pole to close.
- . 0,3 Nm per pole to open.

Power dissipated and impedance average per pole at In :

Double-pole		
In	Z (mΩ)	P (W)
6 A	32	1.15
10 A	19	1.9
16 A	8.8	2.26
20 A	6.5	2.61
25 A	5.3	3.34
32 A	4.2	4.26
40 A	3.5	5.64
50 A	2.2	5.57
63 A	1.8	7.2

5. GENERAL CHARACTERISTICS *(continued)*:

Enclosure material :

- . Ployester.
- . Polycarbonate.
- . Characteristics of this material: self extinguishing, heat and fire resistant in accordance with standard IEC/EN 61009-1, glow-wire test at 960°C for external parts made of insulating material necessary to retain in position current-carrying parts and parts of protective circuit (650°C for all other external parts made of insulating material).

Calorific value :

Double-pole	
MJ	6.12

Average weight per device :

- . Double pole : 0,5 kg

Packed volume:

- . Double pole: 0,9 dm³ per device.

Ambient operating temperature :

- . Min. = -25°C – Max. = +70°C

Ambient storage temperature :

- . Min. = -40°C – Max. = +70°C

Derating according to ambient temperature :

- . Reference temperature: 30 °C in accordance with standard IEC/EN 61009-1.
- . No derating of the differential block depending on the ambient temperature between - 25 ° C and +30 ° C.
- . Derating between + 30 °C to + 70 °C :

Temperature	30 °C	40 °C	50 °C	60 °C	70 °C
% In	100 %	95 %	90 %	85 %	80 %

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5. GENERAL CHARACTERISTICS *(continued)*:

Resistance to sinusoidal vibrations:

- . in accordance with standard IEC 60068-2-35.
- . Axis: x, y, z.
- . Frequency range: 5÷100 Hz ; duration 90 min.
- . Displacement (5÷13,2 Hz) : 1mm
- . Acceleration (13,2÷100 Hz) : 0,7g (g=9,81 m/s²).

Influence of the altitude :

	2000 m	3000 m	4000 m	5000 m
Dielectric strength	3000 V	2500 V	2000 V	1500 V
Max operating voltage	400 V	400 V	400 V	400 V
Derating at 30°C	none	none	none	none

Derating of circuit-breakers depending on the ambient temperature :

- . Rated characteristics of a circuit breaker are modified depending on the ambient temperature which prevails inside the cabinet or the enclosure where the circuit breaker is located.

- . Reference temperature: 30°C according to IEC/EN 60898-1

In (A)	Ambient temperature / In									
	- 25°C	- 10°C	0°C	10°C	20°C	30°C	40°C	50°C	60°C	70°C
6	7.5	7.0	6.6	6.4	6.2	6.0	5.8	5.6	5.4	5.3
10	12.5	11.5	11.1	10.7	10.3	10.0	9.7	9.3	9.0	8.7
16	20.0	18.7	18.0	17.3	16.6	16.0	15.4	14.7	14.1	13.5
20	25.0	23.2	22.4	21.6	20.8	20.0	19.2	18.4	17.6	16.8
25	31.5	29.5	28.3	27.2	26.0	25.0	24.0	22.7	21.7	20.7
40	51.0	48.0	46.0	44.0	42.0	40.0	38.0	36.0	34.0	32.0
50	64.0	60.0	57.5	55.0	52.5	50.0	47.5	45.0	42.5	40.0
63	80.6	75.6	72.5	69.9	66.1	63.0	59.8	56.1	52.9	49.7

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5. GENERAL CHARACTERISTICS *(continued)*

Derating of RCBOs function of the number of devices side by side:

When several RCBOs are juxtaposed and operate simultaneously, the heat dissipation of the poles is limited. This results in an increase in operating temperature of the circuit breakers which can cause unwanted tripping. It is recommended to apply the following coefficients to the rated currents.

Number of circuit breakers side by side	Coefficient
2 - 3	0.9
4 – 5	0.8
6 - 9	0.7
≥ 10	0.6

These values are given by the recommendation of IEC/EN 60439-1, NF C 63421 standards.

To avoid to have to use these coefficients, it is necessary to allow a good ventilation and to keep the devices apart with 0.5 module spacing elements (cat. N° F80/05D).

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5. GENERAL CHARACTERISTICS *(continued)*:

Coordination between circuit-breakers and fuses, three-phase network (+ neutral) 400 / 415 V~ according to IEC/EN 60947-2:

For TT or TN neutral system in 230/400 V network, to know the breaking capacity of the combination of a double pole breaker (connected between phase and neutral under 230V) downstream of a triple-pole circuit-breaker, take the values shown in Tables 230/240V.

m.c.b. downstream		Fuse upstream									
		gG Type									
		≤20A	25A	32A	40A	50A	63A	80A	100A	125A	160A
BTDIN 60 B and C Curves	6A	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	10A	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	16A	-	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	20A	-	-	100kA	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	25A	-	-	-	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	32A	-	-	-	-	100kA	100kA	100kA	100kA	100kA	40kA
	40A	-	-	-	-	-	100kA	100kA	100kA	100kA	40kA
	50A	-	-	-	-	-	-	100kA	100kA	100kA	40kA
	63A	-	-	-	-	-	-	100kA	100kA	100kA	40kA

m.c.b. downstream		Fuse upstream									
		aM Type									
		≤20A	25A	32A	40A	50A	63A	80A	100A	125A	160A
BTDIN 60 B and C Curves	6A	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	10A	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	16A	-	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	20A	-	-	100kA	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	25A	-	-	-	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	32A	-	-	-	-	100kA	100kA	100kA	100kA	100kA	40kA
	40A	-	-	-	-	-	100kA	100kA	100kA	100kA	40kA
	50A	-	-	-	-	-	-	100kA	100kA	100kA	40kA
	63A	-	-	-	-	-	-	100kA	100kA	100kA	40kA

According to the curves and ratings of circuit breakers, attention to the threshold and size of upstream fuse which must necessarily be higher.

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5. GENERAL CHARACTERISTICS *(continued)*:

Coordination between modular circuit-breakers, three-phase network (+ neutral) 400 / 415 V~ according to IEC/EN 60947-2:

For TT or TN neutral system in 230/400 V network, to know the breaking capacity of the combination of a double pole breaker (connected between phase and neutral under 230V) downstream of a triple-pole circuit-breaker, take the values shown in Tables 230/240V.

		m.c.b. upstream									
		Btdin 100									
		B and C Curves					D Curve				
m.c.b. downstream		≤25A	32A	40A	50A	63A	≤25A	32A	40A	50A	63A
BTDIN 60 C Curves	6A	10kA	10kA	10kA	10kA	10kA	10kA	10kA	10kA	10kA	10kA
	10A	10kA	10kA	10kA	10kA	10kA	10kA	10kA	10kA	10kA	10kA
	16A	10kA	10kA	10kA	10kA	10kA	10kA	10kA	10kA	10kA	10kA
	20A	10kA	10kA	10kA	10kA	10kA	10kA	10kA	10kA	10kA	10kA
	25A	-	10kA	10kA	10kA	10kA	-	10kA	10kA	10kA	10kA
	32A	-	-	10kA	10kA	10kA	-	-	10kA	10kA	10kA
	40A	-	-	-	10kA	10kA	-	-	-	10kA	10kA
	50A	-	-	-	-	10kA	-	-	-	-	10kA
	63A	-	-	-	-	-	-	-	-	-	-

		m.c.b. upstream							
		Btdin 160							
		B, C and D Curves							
m.c.b. downstream		≤25A	32A	40A	50A	63A	80A	100A	125A
BTDIN 60 C Curves	6A	16kA	16kA	16kA	16kA	16kA	16kA	16kA	16kA
	10A	16kA	16kA	16kA	16kA	16kA	16kA	16kA	16kA
	16A	16kA	16kA	16kA	16kA	16kA	16kA	16kA	16kA
	20A	16kA	16kA	16kA	16kA	16kA	16kA	16kA	16kA
	25A	-	16kA	16kA	16kA	16kA	16kA	16kA	16kA
	32A	-	-	16kA	16kA	16kA	16kA	16kA	16kA
	40A	-	-	-	16kA	16kA	16kA	16kA	16kA
	50A	-	-	-	-	16kA	16kA	16kA	16kA
	63A	-	-	-	-	-	16kA	16kA	16kA

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5. GENERAL CHARACTERISTICS *(continued)*:

		m.c.b. upstream							
		Btdin 250							
		B, C and D Curves							
m.c.b. downstream		≤25A	32A	40A	50A	63A	80A	100A	125A
BTDIN 60 C Curves	6A	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	10A	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	16A	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	20A	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	25A	-	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	32A	-	-	25kA	25kA	25kA	25kA	25kA	25kA
	40A	-	-	-	25kA	25kA	25kA	25kA	25kA
	50A	-	-	-	-	25kA	25kA	25kA	25kA
	63A	-	-	-	-	-	25kA	25kA	25kA

		m.c.b. upstream				
		Btdin 500				
		B,C and D Curves				
m.c.b. downstream		≤25A	32A	40A	50A	63A
BTDIN 60 C Curves	6A	50kA	50kA	50kA	50kA	50kA
	10A	50kA	50kA	50kA	50kA	50kA
	16A	50kA	50kA	50kA	50kA	50kA
	20A	50kA	50kA	50kA	50kA	50kA
	25A	-	50kA	50kA	50kA	50kA
	32A	-	-	50kA	50kA	50kA
	40A	-	-	-	50kA	50kA
	50A	-	-	-	-	50kA
	63A	-	-	-	-	-

According to the curves and ratings of circuit breakers, attention to the magnetic threshold and to the size of upstream circuit breakers which must necessarily be higher.

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5. GENERAL CHARACTERISTICS *(continued)*:

Coordination between modular circuit-breakers and MCCBs, three-phase network (+ neutral) 400 / 415 V~ according to IEC/EN60947-2:

For TT or TN neutral system in 230/400 V network, to know the breaking capacity of the combination of a double pole breaker (connected between phase and neutral under 230V) downstream of a triple-pole circuit-breaker, take the values shown in Tables 230/240V.

m.c.b. downstream		m.c.c.b. upstream											
		MA 125B						ME125B					
		16kA						25kA					
		16A	25A	40A	63A	100A	125A	16A	25A	40A	63A	100A	125A
BTDIN 60 C Curves	6A	16kA	16kA	16kA	16kA	16kA	16kA	25kA	25kA	25kA	25kA	25kA	25kA
	10A	16kA	16kA	16kA	16kA	16kA	16kA	25kA	25kA	25kA	25kA	25kA	25kA
	16A	-	16kA	16kA	16kA	16kA	16kA	-	25kA	25kA	25kA	25kA	25kA
	20A	-	16kA	16kA	16kA	16kA	16kA	-	25kA	25kA	25kA	25kA	25kA
	25A	-	-	16kA	16kA	16kA	16kA	-	-	25kA	25kA	25kA	25kA
	32A	-	-	16kA	16kA	16kA	16kA	-	-	25kA	25kA	25kA	25kA
	40A	-	-	-	16kA	16kA	16kA	-	-	-	25kA	25kA	25kA
	50A	-	-	-	16kA	16kA	16kA	-	-	-	25kA	25kA	25kA
	63A	-	-	-	-	16kA	16kA	-	-	-	-	25kA	25kA

m.c.b. downstream		m.c.c.b. upstream													
		ME125N						M1 160E MT / M1 160E MT+RCD							
		36kA						16kA							
		16A	25A	40A	63A	100A	125A	16A	25A	40A	63A	80A	100A	125A	160A
BTDIN 60 C Curves	6A	25kA	25kA	25kA	25kA	25kA	25kA	16kA	16kA	16kA	16kA	16kA	16kA	16kA	16kA
	10A	25kA	25kA	25kA	25kA	25kA	25kA	16kA	16kA	16kA	16kA	16kA	16kA	16kA	16kA
	16A	-	25kA	25kA	25kA	25kA	25kA	-	16kA	16kA	16kA	16kA	16kA	16kA	16kA
	20A	-	25kA	25kA	25kA	25kA	25kA	-	16kA	16kA	16kA	16kA	16kA	16kA	16kA
	25A	-	-	25kA	25kA	25kA	25kA	-	-	16kA	16kA	16kA	16kA	16kA	16kA
	32A	-	-	25kA	25kA	25kA	25kA	-	-	16kA	16kA	16kA	16kA	16kA	16kA
	40A	-	-	-	25kA	25kA	25kA	-	-	-	16kA	16kA	16kA	16kA	16kA
	50A	-	-	-	25kA	25kA	25kA	-	-	-	16kA	16kA	16kA	16kA	16kA
	63A	-	-	-	-	25kA	25kA	-	-	-	-	16kA	16kA	16kA	16kA

Btdin RCBO 6000A up to 63A (2P)

Cat N° (s):

GN823AC6 - GN823AC10 - GN823AC16 - GN823AC20 -
GN823AC25 - GN823AC32 - GN823AC40 - GN823AC50 -
GN823AC63

5. GENERAL CHARACTERISTICS *(continued)*:

		m.c.c.b. upstream												
		M1 160B MT / M1 160B MT+RCD M1 160N MT / M1 160N MT + RCD								ME 160B / N / H				
		25 - 50kA								25 - 36 - 50kA				
m.c.b. downstream		16A	25A	40A	63A	80A	100A	125A	160A	25A	40A	63A	100A	125A
BTDIN 60 C Curves	6A	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	10A	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	16A	-	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	20A	-	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	25A	-	-	25kA	25kA	25kA	25kA	25kA	25kA	-	25kA	25kA	25kA	25kA
	32A	-	-	25kA	25kA	25kA	25kA	25kA	25kA	-	25kA	25kA	25kA	25kA
	40A	-	-	-	25kA	25kA	25kA	25kA	25kA	-	-	25kA	25kA	25kA
	50A	-	-	-	25kA	25kA	25kA	25kA	25kA	-	-	25kA	25kA	25kA
	63A	-	-	-	-	25kA	25kA	25kA	25kA	-	-	-	20kA	20kA

		m.c.c.b. upstream						
		ME 250B / N / H			M2 250B MT / M2 250B MT + RCD M2 250F MT / M2 250F MT + RCD M2 250N MT / M2 250N MT + RCD M2 250H MT / M2 250H MT + RCD (Thermal-magnetic & electronic)			
		25 - 36 - 50kA			25 - 36 - 50 - 70kA			
m.c.b. downstream		100A	160A	250A	100A	160A	200A	250A
BTDIN 60 C Curves	6A	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	10A	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	16A	25kA	25kA	25kA	25kA	25k	25kA	25kA
	20A	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	25A	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	32A	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	40A	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	50A	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	63A	20kA	20kA	20kA	25kA	25kA	25kA	25kA

Btdin RCBO 6000A up to 63A (2P)

Cat N° (s):

GN823AC6 - GN823AC10 - GN823AC16 - GN823AC20 -
GN823AC25 - GN823AC32 - GN823AC40 - GN823AC50 -
GN823AC63

5. GENERAL CHARACTERISTICS (continued):

m.c.b. downstream		m.c.c.b. upstream										
		MA 160 / MH 160 MA 250 / MH 250 / ML 250 (Thermal-magnetic & electronic)						MA 400 / MH 400 / ML 400 MA 630 / MH 630 / ML 630 (Thermal-magnetic & electronic)				
		36 – 70 – 100kA						36 – 70 – 100kA				
		25A	40A	63A	100A	160A	250A	250A	320A	400A	500A	630A
BTDIN 60 C Curves	6A	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	10A	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	16A	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	20A	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	25A	-	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	32A	-	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	40A	-	-	25kA	25kA	25kA	25kA	20kA	20kA	20kA	20kA	20kA
	50A	-	-	25kA	25kA	25kA	25kA	16kA	16kA	16kA	16kA	16kA
	63A	-	-	20kA	20kA	20kA	20kA	16kA	16kA	16kA	16kA	16kA

m.c.b. downstream		m.c.c.b.. upstream	
		MA / MH / ML 630 ÷ 1250 (Thermal -magnetic)	MA / MH / ML 630 ÷ 1250 (Electronic)
		50 – 70 – 100kA	36 – 70kA
		500 to 1250A	630 to 1600A
BTDIN 60 C Curves	6A	25kA	25kA
	10A	25kA	25kA
	16A	25kA	25kA
	20A	25kA	25kA
	25A	20kA	20kA
	32A	15kA	15kA
	40A	15kA	15kA
	50A	12,5kA	12,5kA
	63A	12,5kA	12,5kA

According to the curves and ratings of circuit breakers, attention to the magnetic (or electronic) threshold and to the size of upstream circuit breakers which must necessarily be higher.

Btdin RCBO 6000A up to 63A (2P)

Cat N° (s):

GN823AC6 - GN823AC10 - GN823AC16 - GN823AC20 -
GN823AC25 - GN823AC32 - GN823AC40 - GN823AC50 -
GN823AC63

5. GENERAL CHARACTERISTICS *(continued)*:

Coordination between modular circuit-breakers and fuses, three-phase network (+ neutral) 230 / 240 V~ according to IEC/EN 60947-2:

m.c.b. downstream		Fuse upstream									
		gG Type									
		≤20A	25A	32A	40A	50A	63A	80A	100A	125A	160A
BTDIN 60 C Curves	6A	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	10A	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	16A	-	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	20A	-	-	100kA	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	25A	-	-	-	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	32A	-	-	-	-	100kA	100kA	100kA	100kA	100kA	40kA
	40A	-	-	-	-	-	100kA	100kA	100kA	100kA	40kA
	50A	-	-	-	-	-	-	100kA	100kA	100kA	40kA
	63A	-	-	-	-	-	-	100kA	100kA	100kA	40kA

m.c.b. downstream		Fuse upstream									
		aM Type									
		≤20A	25A	32A	40A	50A	63A	80A	100A	125A	160A
BTDIN 60 C Curves	6A	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	10A	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	16A	-	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	20A	-	-	100kA	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	25A	-	-	-	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	32A	-	-	-	-	100kA	100kA	100kA	100kA	100kA	40kA
	40A	-	-	-	-	-	100kA	100kA	100kA	100kA	40kA
	50A	-	-	-	-	-	-	100kA	100kA	100kA	40kA
	63A	-	-	-	-	-	-	100kA	100kA	100kA	40kA

According to the curves and ratings of circuit breakers, attention to the threshold and to the size of upstream fuses which must necessarily be higher.

Btdin RCBO 6000A up to 63A (2P)

Cat N° (s):

GN823AC6 - GN823AC10 - GN823AC16 - GN823AC20 -
GN823AC25 - GN823AC32 - GN823AC40 - GN823AC50 -
GN823AC63

5. GENERAL CHARACTERISTICS *(continued)*:

Coordination between modular circuit-breakers, three-phase network (+ neutral) 230 / 240 V~ according to IEC/EN 60947-2:

		m.c.b. upstream									
		Btdin 100									
		B and C Curves					D Curve				
m.c.b. downstream		≤25A	32A	40A	50A	63A	≤25A	32A	40A	50A	63A
BTDIN 60 C Curves	6A	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	10A	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	16A	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	20A	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	25A	-	25kA	25kA	25kA	25kA	-	25kA	25kA	25kA	25kA
	32A	-	-	25kA	25kA	25kA	-	-	25kA	25kA	25kA
	40A	-	-	-	25kA	25kA	-	-	-	25kA	25kA
	50A	-	-	-	-	25kA	-	-	-	-	25kA
	63A	-	-	-	-	-	-	-	-	-	-

		m.c.b. upstream							
		Btdin 160							
		B, C and D Curves							
m.c.b. downstream		≤25A	32A	40A	50A	63A	80A	100A	125A
BTDIN 60 C Curves	6A	32kA	32kA	25kA	25kA	25kA	25kA	25kA	25kA
	10A	32kA	32kA	25kA	25kA	25kA	25kA	25kA	25kA
	16A	32kA	32kA	25kA	25kA	25kA	25kA	25kA	25kA
	20A	32kA	32kA	25kA	25kA	25kA	25kA	25kA	25kA
	25A	-	32kA	25kA	25kA	25kA	25kA	25kA	25kA
	32A	-	-	25kA	25kA	25kA	25kA	25kA	25kA
	40A	-	-	-	25kA	25kA	25kA	25kA	25kA
	50A	-	-	-	-	25kA	25kA	25kA	25kA
	63A	-	-	-	-	-	25kA	25kA	25kA

Btdin RCBO 6000A up to 63A (2P)

Cat N° (s):

GN823AC6 - GN823AC10 - GN823AC16 - GN823AC20 -
GN823AC25 - GN823AC32 - GN823AC40 - GN823AC50 -
GN823AC63

5. GENERAL CHARACTERISTICS *(continued)*:

		m.c.b. upstream							
		Btdin 250							
		B, C and D Curves							
m.c.b. downstream		≤25A	32A	40A	50A	63A	80A	100A	125A
BTDIN 60 C Curves	6A	50kA	50kA	25kA	25kA	25kA	25kA	25kA	25kA
	10A	50kA	50kA	25kA	25kA	25kA	25kA	25kA	25kA
	16A	50kA	50kA	25kA	25kA	25kA	25kA	25kA	25kA
	20A	50kA	50kA	25kA	25kA	25kA	25kA	25kA	25kA
	25A	-	50kA	25kA	25kA	25kA	25kA	25kA	25kA
	32A	-	-	25kA	25kA	25kA	25kA	25kA	25kA
	40A	-	-	-	25kA	25kA	25kA	25kA	25kA
	50A	-	-	-	-	25kA	25kA	25kA	25kA
	63A	-	-	-	-	-	25kA	25kA	25kA

		m.c.b. upstream				
		Btdin 500				
		B, C and D Curves				
m.c.b. downstream		≤25A	32A	40A	50A	63A
BTDIN 60 C Curves	6A	50kA	50kA	50kA	50kA	50kA
	10A	50kA	50kA	50kA	50kA	50kA
	16A	50kA	50kA	50kA	50kA	50kA
	20A	50kA	50kA	50kA	50kA	50kA
	25A	-	50kA	50kA	50kA	50kA
	32A	-	-	50kA	50kA	50kA
	40A	-	-	-	50kA	50kA
	50A	-	-	-	-	50kA
	63A	-	-	-	-	-

According to the curves and ratings of circuit breakers, attention to the magnetic threshold and to the size of upstream circuit breakers which must necessarily be higher.

Btdin RCBO 6000A up to 63A (2P)

Cat N° (s):

GN823AC6 - GN823AC10 - GN823AC16 - GN823AC20 -
GN823AC25 - GN823AC32 - GN823AC40 - GN823AC50 -
GN823AC63

5. GENERAL CHARACTERISTICS *(continued)*:

Coordination between modular circuit-breakers and M.C.C.Bs (Moulded Case Circuit Breakers), three-phase network (+ neutral)
230 / 240 V~ according to IEC/EN 60947-2:

m.c.b. downstream		m.c.c.b. upstream											
		MA 125B						ME125B					
		16kA						25kA					
		16A	25A	40A	63A	100A	125A	16A	25A	40A	63A	100A	125A
BTDIN 60 C Curves	6A	22kA	22kA	22kA	22kA	22kA	22kA	35kA	35kA	35kA	35kA	35kA	35kA
	10A	22kA	22kA	22kA	22kA	22kA	22kA	35kA	35kA	35kA	35kA	35kA	35kA
	16A	-	22kA	22kA	22kA	22kA	22kA	-	35kA	35kA	35kA	35kA	35kA
	20A	-	22kA	22kA	22kA	22kA	22kA	-	35kA	35kA	35kA	35kA	35kA
	25A	-	-	22kA	22kA	22kA	22kA	-	-	35kA	35kA	35kA	35kA
	32A	-	-	22kA	22kA	22kA	22kA	-	-	35kA	35kA	35kA	35kA
	40A	-	-	-	22kA	22kA	22kA	-	-	-	35kA	35kA	35kA
	50A	-	-	-	22kA	22kA	22kA	-	-	-	35kA	35kA	35kA
	63A	-	-	-	-	22kA	22kA	-	-	-	-	35kA	35kA

m.c.b. downstream		m.c.c.b. upstream													
		ME125N						M1 160E MT / M1 160E MT+RCD							
		36kA						16kA							
		16A	25A	40A	63A	100A	125A	16A	25A	40A	63A	80A	100A	125A	160A
BTDIN 60 C Curves	6A	40kA	40kA	40kA	40kA	40kA	40kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	10A	40kA	40kA	40kA	40kA	40kA	40kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	16A	-	40kA	40kA	40kA	40kA	40kA	-	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	20A	-	40kA	40kA	40kA	40kA	40kA	-	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	25A	-	-	40kA	40kA	40kA	40kA	-	-	25kA	25kA	25kA	25kA	25kA	25kA
	32A	-	-	40kA	40kA	40kA	40kA	-	-	25kA	25kA	25kA	25kA	25kA	25kA
	40A	-	-	-	40kA	40kA	40kA	-	-	-	25kA	25kA	25kA	25kA	25kA
	50A	-	-	-	25kA	25kA	25kA	-	-	-	25kA	25kA	25kA	25kA	25kA
	63A	-	-	-	-	25kA	25kA	-	-	-	-	25kA	25kA	25kA	25kA

Btdin RCBO 6000A up to 63A (2P)

Cat N° (s):

GN823AC6 - GN823AC10 - GN823AC16 - GN823AC20 -
GN823AC25 - GN823AC32 - GN823AC40 - GN823AC50 -
GN823AC63

5. GENERAL CHARACTERISTICS *(continued)*:

		m.c.c.b. upstream							
		M1 160B MT / M1 160B MT+RCD							
		25kA							
m.c.b. downstream		16A	25A	40A	63A	80A	100A	125A	160A
BTDIN 60 C Curves	6A	40kA	40kA	40kA	40kA	40kA	40kA	40kA	40kA
	10A	40kA	40kA	40kA	40kA	40kA	40kA	40kA	40kA
	16A	-	40kA	40kA	40kA	40kA	40kA	40kA	40kA
	20A	-	40kA	40kA	40kA	40kA	40kA	40kA	40kA
	25A	-	-	40kA	40kA	40kA	40kA	40kA	40kA
	32A	-	-	40kA	40kA	40kA	40kA	40kA	40kA
	40A	-	-	-	40kA	40kA	40kA	40kA	40kA
	50A	-	-	-	40kA	40kA	40kA	40kA	40kA
	63A	-	-	-	-	40kA	40kA	40kA	40kA

		m.c.c.b. upstream							
		M1 160N MT / M1 160N MT + RCD							
		50kA							
m.c.b. downstream		16A	25A	40A	63A	80A	100A	125A	160A
BTDIN 60 C Curves	6A	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA
	10A	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA
	16A	-	50kA	50kA	50kA	50kA	50kA	50kA	50kA
	20A	-	50kA	50kA	50kA	50kA	50kA	50kA	50kA
	25A	-	-	50kA	50kA	50kA	50kA	50kA	50kA
	32A	-	-	50kA	50kA	50kA	50kA	50kA	50kA
	40A	-	-	-	50kA	50kA	50kA	50kA	50kA
	50A	-	-	-	50kA	50kA	50kA	50kA	50kA
	63A	-	-	-	-	50kA	50kA	50kA	50kA

Btdin RCBO 6000A up to 63A (2P)

Cat N° (s):

GN823AC6 - GN823AC10 - GN823AC16 - GN823AC20 -
GN823AC25 - GN823AC32 - GN823AC40 - GN823AC50 -
GN823AC63

5. GENERAL CHARACTERISTICS (continued):

		m.c.b. upstream									
		ME 160B / N / H					ME 250B / N / H				
		25 - 36 - 50kA					25 - 36 - 50kA				
m.c.b. downstream		25A	40A	63A	100A	125A	25A	40A	63A	100A	125A
BTDIN 60 C Curves	6A	40kA	40kA	40kA	40kA	40kA	50kA	50kA	50kA	50kA	50kA
	10A	40kA	40kA	40kA	40kA	40kA	50kA	50kA	50kA	50kA	50kA
	16A	40kA	40kA	40kA	40kA	40kA	50kA	50kA	50kA	50kA	50kA
	20A	40kA	40kA	40kA	40kA	40kA	50kA	50kA	50kA	50kA	50kA
	25A	-	40kA	40kA	40kA	40kA	-	50kA	50kA	50kA	50kA
	32A	-	40kA	40kA	40kA	40kA	-	50kA	50kA	50kA	50kA
	40A	-	-	40kA	40kA	40kA	-	-	50kA	50kA	50kA
	50A	-	-	36kA	36kA	36kA	-	-	36kA	36kA	36kA
	63A	-	-	-	30kA	30kA	-	-	-	30kA	30kA

		m.c.b. upstream							
		M2 250B MT / M2 250B MT + RCD M2 250F MT / M2 250F MT + RCD M2 250N MT / M2 250N MT + RCD M2 250H MT / M2 250H MT + RCD (Thermal-magnetic & electronic)				M2 250B MT / M2 250B MT + RCD M2 250F MT / M2 250F MT + RCD M2 250N MT / M2 250N MT + RCD M2 250H MT / M2 250H MT + RCD (Thermal-magnetic & electronic)			
		25kA				36 - 50 - 70kA			
m.c.b. downstream		100A	160A	200A	250A	100A	160A	200A	250A
BTDIN 60 C Curves	6A	40kA	40kA	40kA	40kA	50kA	50kA	50kA	50kA
	10A	40kA	40kA	40kA	40kA	50kA	50kA	50kA	50kA
	16A	40kA	40kA	40kA	40kA	50kA	50kA	50□A	50kA
	20A	40kA	40kA	40kA	40kA	50kA	50kA	50kA	50kA
	25A	40kA	40kA	40kA	40kA	50kA	50kA	50kA	50kA
	32A	40kA	40kA	40kA	40kA	50kA	50kA	50kA	50kA
	40A	40kA	40kA	40kA	40kA	50kA	50kA	50kA	50kA
	50A	40kA	40kA	40kA	40kA	50kA	50kA	50kA	50kA
	63A	40kA	40kA	40kA	40kA	50kA	50kA	50kA	50kA

Btdin RCBO 6000A up to 63A (2P)

Cat N° (s):

GN823AC6 - GN823AC10 - GN823AC16 - GN823AC20 -
GN823AC25 - GN823AC32 - GN823AC40 - GN823AC50 -
GN823AC63

5. GENERAL CHARACTERISTICS *(continued)*:

m.c.b. downstream		m.c.c.b. upstream										
		MA 160 / MH 160 MA 250 / MH 250 / ML 250 (Thermal-magnetic & electronic)						MA 400 / MH 400 / ML 400 MA 630 / MH 630 / ML 630 (Thermal-magnetic & electronic)				
		36 – 70 – 100kA						36 – 70 – 100kA				
		25A	40A	63A	100A	160A	250A	250A	320A	400A	500A	630A
BTDIN 60 C Curves	6A	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA
	10A	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA
	16A	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA
	20A	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA
	25A	-	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA
	32A	-	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA
	40A	-	-	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA
	50A	-	-	50kA	50kA	50kA	50kA	30kA	30kA	30kA	30kA	30kA
	63A	-	-	-	50kA	50kA	50kA	30kA	30kA	30kA	30kA	30kA

m.c.b. downstream		m.c.c.b. upstream	
		MA / MH / ML 630 ÷1250 (Thermal -magnetic)	MA / MH / ML 630 ÷1250 (Electronic)
		50 – 70 – 100kA	36 – 70kA
		500 to 1250A	630 to 1600A
BTDIN 60 C Curves	6A	50kA	50kA
	10A	50kA	50kA
	16A	50kA	50kA
	20A	50kA	50kA
	25A	50kA	50kA
	32A	50kA	50kA
	40A	50kA	50kA
	50A	25kA	25kA
	63A	25kA	25kA

According to the curves and ratings of circuit breakers, attention to the magnetic (or electronic) threshold and to the size of upstream circuit breakers which must necessarily be higher.

Btdin RCBO 6000A up to 63A (2P)

Cat N° (s):

GN823AC6 - GN823AC10 - GN823AC16 - GN823AC20 -
GN823AC25 - GN823AC32 - GN823AC40 - GN823AC50 -
GN823AC63

5. GENERAL CHARACTERISTICS *(continued)*:

Selectivity between two levels of protection

- . The downstream circuit breaker must always have a magnetic threshold and a rated current lower than those of the upstream protection.
- . Selectivity is indicated total (T) if there is selectivity up to the value of breaking capacity (according to IEC / EN 60947-2) of the downstream circuit breaker.

Selectivity between modular circuit breakers and fuses:

- . Selectivity limit at 400V~: values in Ampere.
- . T = Total discrimination

m.c.b. downstream		Fuse upstream							
		gG Type							
		32A	40A	50A	63A	80A	100A	125A	160A
BTDIN 60 C Curves	6A	1300	1900	2500	4000	4600	T	T	T
	10A	-	1600	2200	3200	3600	T	T	T
	16A	-	1400	1800	2600	3000	5600	T	T
	20A	-	1200	1500	2200	2500	4600	T	T
	25A	-	-	1300	2000	2200	4100	5500	T
	32A	-	-	1200	1700	1900	3500	4500	T
	40A	-	-	-	-	1700	3000	4000	T
	50A	-	-	-	-	1600	2600	3500	5000
	63A	-	-	-	-	-	2400	3300	5000

		Fuse upstream								
		aM Type								
m.c.b. downstream		25A	32A	40A	50A	63A	80A	100A	125A	160A
BTDIN 60 C Curves	6A	1000	1600	2100	3200	T	T	T	T	T
	10A	-	1100	1700	2500	5000	T	T	T	T
	16A	-	1000	1400	2100	4000	T	T	T	T
	20A	-	-	1300	1800	3400	5100	T	T	T
	25A	-	-	1100	1600	3000	4500	T	T	T
	32A	-	-	-	1300	2400	3800	5000	T	T
	40A	-	-	-	-	2100	3100	4200	T	T
	50A	-	-	-	-	2000	2900	3700	T	T
	63A	-	-	-	-	-	2800	3500	5500	T

- . T = Total discrimination

Btdin RCBO 6000A up to 63A (2P)

Cat N° (s):

GN823AC6 - GN823AC10 - GN823AC16 - GN823AC20 -
GN823AC25 - GN823AC32 - GN823AC40 - GN823AC50 -
GN823AC63

5. GENERAL CHARACTERISTICS *(continued)*:

Selectivity between modular circuit breakers:

. Selectivity limit at 400V~: values in Ampere.

. T = Total discrimination

		m.c.b. upstream										
		Btdin 100										
		B Curve										
m.c.b. downstream		10A	16A	20A	25A	32A	40A	50A	63A	80A	100A	125A
BTDIN 60 C Curves	6A	-	64	80	100	128	160	200	252	4000	T	T
	10A	-	-	80	100	128	160	200	252	3000	5000	T
	16A	-	-	-	-	128	160	200	252	2000	3600	5500
	20A	-	-	-	-	-	160	200	252	1600	3000	4000
	25A	-	-	-	-	-	160	200	252	1300	2400	3300
	32A	-	-	-	-	-	-	-	252	1000	1800	2700
	40A	-	-	-	-	-	-	-	-	800	1600	2400
	50A	-	-	-	-	-	-	-	-	800	900	1700
	63A	-	-	-	-	-	-	-	-	-	900	1200

		m.c.b. upstream										
		Btdin 100										
		C Curve										
m.c.b. downstream		10A	16A	20A	25A	32A	40A	50A	63A	80A	100A	125A
BTDIN 60 C Curves	6A	75	120	150	187	240	300	375	472	4000	T	T
	10A	-	120	150	187	240	300	375	472	3000	5000	T
	16A	-	-	150	187	240	300	375	472	2000	3600	5500
	20A	-	-	-	187	240	300	375	472	1600	3000	4000
	25A	-	-	-	-	240	300	375	472	1300	2400	3300
	32A	-	-	-	-	-	300	375	472	1000	1800	2700
	40A	-	-	-	-	-	-	375	472	800	1600	2400
	50A	-	-	-	-	-	-	-	472	800	900	1700
	63A	-	-	-	-	-	-	-	-	650	900	1200

Btdin RCBO 6000A up to 63A (2P)

Cat N° (s):

GN823AC6 - GN823AC10 - GN823AC16 - GN823AC20 -
GN823AC25 - GN823AC32 - GN823AC40 - GN823AC50 -
GN823AC63

5. GENERAL CHARACTERISTICS *(continued)*:

		m.c.b. upstream										
		Btdin 100										
		D Curve										
m.c.b. downstream		10A	16A	20A	25A	32A	40A	50A	63A	80A	100A	125A
BTDIN 60 C Curves	6A	120	192	240	300	384	480	600	756	4000	T	T
	10A	-	192	240	300	384	480	600	756	3000	5000	T
	16A	-	-	240	300	384	480	600	756	2000	3600	5500
	20A	-	-	-	300	384	480	600	756	1600	3000	4000
	25A	-	-	-	-	384	480	600	756	1300	2400	3300
	32A	-	-	-	-	-	480	600	756	1100	1450	2700
	40A	-	-	-	-	-	-	600	756	1000	1250	2400
	50A	-	-	-	-	-	-	-	756	950	1200	1700
	63A	-	-	-	-	-	-	-	-	950	1200	1500

		m.c.b. upstream										
		Btdin 160										
		B Curve										
m.c.b. downstream		10A	16A	20A	25A	32A	40A	50A	63A	80A	100A	125A
BTDIN 60 C Curves	6A	-	64	80	100	128	160	200	252	4000	T	T
	10A	-	-	80	100	128	160	200	252	3000	5000	T
	16A	-	-	-	-	128	160	200	252	2000	3600	5500
	20A	-	-	-	-	-	160	200	252	1600	3000	4000
	25A	-	-	-	-	-	160	200	252	1300	2400	3300
	32A	-	-	-	-	-	-	-	252	1000	1800	2700
	40A	-	-	-	-	-	-	-	-	800	1600	2400
	50A	-	-	-	-	-	-	-	-	800	900	1700
	63A	-	-	-	-	-	-	-	-	-	900	1200

Btdin RCBO 6000A up to 63A (2P)

Cat N° (s):

GN823AC6 - GN823AC10 - GN823AC16 - GN823AC20 -
GN823AC25 - GN823AC32 - GN823AC40 - GN823AC50 -
GN823AC63

5. GENERAL CHARACTERISTICS *(continued)*:

		m.c.b. upstream										
		Btdin 160										
		C Curve										
m.c.b. downstream		10A	16A	20A	25A	32A	40A	50A	63A	80A	100A	125A
BTDIN 60 C Curves	6A	75	120	150	187	240	300	375	472	4000	T	T
	10A	-	120	150	187	240	300	375	472	3000	5000	T
	16A	-	-	150	187	240	300	375	472	2000	3600	5500
	20A	-	-	-	187	240	300	375	472	1600	3000	4000
	25A	-	-	-	-	240	300	375	472	1300	2400	3300
	32A	-	-	-	-	-	300	375	472	1000	1800	2700
	40A	-	-	-	-	-	-	375	472	800	1600	2400
	50A	-	-	-	-	-	-	-	472	800	900	1700
	63A	-	-	-	-	-	-	-	-	650	900	1200

		m.c.b. upstream										
		Btdin 160										
		D Curve										
m.c.b. downstream		10A	16A	20A	25A	32A	40A	50A	63A	80A	100A	125A
BTDIN 60 C Curves	6A	120	192	240	300	384	480	600	756	4000	T	T
	10A	-	192	240	300	384	480	600	756	3000	5000	T
	16A	-	-	240	300	384	480	600	756	2000	3600	5500
	20A	-	-	-	300	384	480	600	756	1600	3000	4000
	25A	-	-	-	-	384	480	600	756	1300	2400	3300
	32A	-	-	-	-	-	480	600	756	1100	1450	2700
	40A	-	-	-	-	-	-	600	756	1000	1250	2400
	50A	-	-	-	-	-	-	-	756	950	1200	1700
	63A	-	-	-	-	-	-	-	-	950	1200	1500

Btdin RCBO 6000A up to 63A (2P)

Cat N° (s):

GN823AC6 - GN823AC10 - GN823AC16 - GN823AC20 -
GN823AC25 - GN823AC32 - GN823AC40 - GN823AC50 -
GN823AC63

5. GENERAL CHARACTERISTICS *(continued)*:

		m.c.b. upstream										
		Btdin 250										
		B Curve										
m.c.b. downstream		10A	16A	20A	25A	32A	40A	50A	63A	80A	100A	125A
BTDIN 60 C Curves	6A	-	64	80	100	700	1200	1500	3000	4000	T	T
	10A	-	-	80	100	500	700	1000	1800	3000	5000	T
	16A	-	-	-	-	300	500	700	1300	2000	3600	5500
	20A	-	-	-	-	-	400	500	1000	1600	3000	4000
	25A	-	-	-	-	-	-	500	800	1300	2400	3300
	32A	-	-	-	-	-	-	500	600	1000	1800	2700
	40A	-	-	-	-	-	-	-	600	800	1600	2400
	50A	-	-	-	-	-	-	-	-	800	900	1700
	63A	-	-	-	-	-	-	-	-	-	900	1200

		m.c.b. upstream										
		Btdin 250										
		C Curve										
m.c.b. downstream		10A	16A	20A	25A	32A	40A	50A	63A	80A	100A	125A
BTDIN 60 C Curves	6A	75	120	150	187	700	1200	1500	3000	4000	T	T
	10A	-	120	150	187	500	700	1000	1800	3000	5000	T
	16A	-	-	150	187	300	500	700	1300	2000	3600	5500
	20A	-	-	-	187	300	400	500	1000	1600	3000	4000
	25A	-	-	-	-	240	400	500	800	1300	2400	3300
	32A	-	-	-	-	-	300	500	600	1000	1800	2700
	40A	-	-	-	-	-	-	400	600	800	1600	2400
	50A	-	-	-	-	-	-	-	500	800	900	1700
	63A	-	-	-	-	-	-	-	-	650	900	1200

Btdin RCBO 6000A up to 63A (2P)

Cat N° (s):

GN823AC6 - GN823AC10 - GN823AC16 - GN823AC20 -
GN823AC25 - GN823AC32 - GN823AC40 - GN823AC50 -
GN823AC63

5. GENERAL CHARACTERISTICS *(continued)*:

		m.c.b. upstream										
		Btdin 250										
		D Curve										
m.c.b. downstream		10A	16A	20A	25A	32A	40A	50A	63A	80A	100A	125A
BTDIN 60 C Curves	6A	120	192	240	500	700	1200	1500	3000	4000	T	T
	10A	-	192	240	300	500	700	1000	1800	3000	5000	T
	16A	-	-	240	300	384	500	700	1300	2000	3600	5500
	20A	-	-	-	300	384	480	600	1000	1600	3000	4000
	25A	-	-	-	-	384	480	600	800	1300	2400	3300
	32A	-	-	-	-	-	480	600	756	1100	1450	2700
	40A	-	-	-	-	-	-	600	756	1000	1250	2400
	50A	-	-	-	-	-	-	-	756	950	1200	1700
	63A	-	-	-	-	-	-	-	-	950	1200	1500

		m.c.b. upstream							
		Btdin 500							
		B Curve							
m.c.b. downstream		10A	16A	20A	25A	32A	40A	50A	63A
BTDIN 60 C Curves	6A	-	64	170	500	700	1200	1500	3000
	10A	-	-	150	210	500	700	1000	1800
	16A	-	-	-	-	300	500	700	1300
	20A	-	-	-	-	-	400	500	1000
	25A	-	-	-	-	-	-	500	800
	32A	-	-	-	-	-	-	500	600
	40A	-	-	-	-	-	-	-	600
	50A	-	-	-	-	-	-	-	-
	63A	-	-	-	-	-	-	-	-

Btdin RCBO 6000A up to 63A (2P)

Cat N° (s):

GN823AC6 - GN823AC10 - GN823AC16 - GN823AC20 -
GN823AC25 - GN823AC32 - GN823AC40 - GN823AC50 -
GN823AC63

5. GENERAL CHARACTERISTICS *(continued)*:

		m.c.b. upstream							
		Btdin 500							
		C Curve							
m.c.b. downstream		10A	16A	20A	25A	32A	40A	50A	63A
BTDIN 60 C Curves	6A	75	120	170	500	700	1200	1500	3000
	10A	-	120	150	210	500	700	1000	1800
	16A	-	-	150	187	300	500	700	1300
	20A	-	-	-	187	300	400	500	1000
	25A	-	-	-	-	240	400	500	800
	32A	-	-	-	-	-	300	500	600
	40A	-	-	-	-	-	-	400	600
	50A	-	-	-	-	-	-	-	500
	63A	-	-	-	-	-	-	-	-

		m.c.b. upstream							
		Btdin 500							
		D Curve							
m.c.b. downstream		10A	16A	20A	25A	32A	40A	50A	63A
BTDIN 60 C Curves	6A	120	192	240	500	700	1200	1500	3000
	10A	-	192	240	300	500	700	1000	1800
	16A	-	-	240	300	384	500	700	1300
	20A	-	-	-	300	384	480	600	1000
	25A	-	-	-	-	384	480	600	800
	32A	-	-	-	-	-	480	600	756
	40A	-	-	-	-	-	-	600	756
	50A	-	-	-	-	-	-	-	756
	63A	-	-	-	-	-	-	-	-

Btdin RCBO 6000A up to 63A (2P)

Cat N° (s):

GN823AC6 - GN823AC10 - GN823AC16 - GN823AC20 -
GN823AC25 - GN823AC32 - GN823AC40 - GN823AC50 -
GN823AC63

5. GENERAL CHARACTERISTICS *(continued)*:

Selectivity between M.C.Bs and M.C.C.Bs (Moulded Case Circuit Breakers):

- . Selectivity limit at 400V~: values in Ampere.
- . T = Total discrimination

m.c.b. downstream		m.c.c.b. upstream										
		MA 125 ME 125B / N						ME 160B / N / H				
		16 - 25 - 36kA						25 - 36 - 50kA				
		16A	25A	40A	63A	100A	125A	25A	40A	63A	100A	160A
BTDIN 60 C Curves	6A	T	T	T	T	T	T	T	T	T	T	T
	10A	5000	5000	5000	5000	T	T	T	T	T	T	T
	16A	-	4000	4000	4000	T	T	T	T	T	T	T
	20A	-	4000	4000	4000	5000	5000	5000	5000	5000	5000	T
	25A	-	-	3000	3000	4500	4500	-	4500	4500	4500	T
	32A	-	-	-	3000	4000	4000	-	-	2000	3500	T
	40A	-	-	-	3000	3000	3000	-	-	2000	2500	T
	50A	-	-	-	-	3000	3000	-	-	-	2000	5500
	63A	-	-	-	-	3000	3000	-	-	-	2000	5000

m.c.b. downstream		m.c.c.b. upstream							
		M1 160B MT / M1 160B MT+RCD M1 160N MT / M1 160N MT + RCD							
		25 - 50kA							
		16A	25A	40A	63A	80A	100A	125A	160A
BTDIN 60 C Curves	6A	T	T	T	T	T	T	T	T
	10A	5000	T	T	T	T	T	T	T
	16A	-	T	T	T	T	T	T	T
	20A	-	5000	5000	5000	5000	6000	T	T
	25A	-	-	4500	4500	4500	4500	T	T
	32A	-	-	-	3000	4000	4000	T	T
	40A	-	-	-	3000	3000	3000	T	T
	50A	-	-	-	-	3000	3000	5500	T
	63A	-	-	-	-	3000	3000	5000	T

Btdin RCBO 6000A up to 63A (2P)

Cat N° (s):

GN823AC6 - GN823AC10 - GN823AC16 - GN823AC20 -
GN823AC25 - GN823AC32 - GN823AC40 - GN823AC50 -
GN823AC63

5. GENERAL CHARACTERISTICS (continued):

m.c.b. downstream		m.c.b. upstream									
		MA 160 / MH 160 MA 250 / MH 250 / ML 250 (Thermal-Magnetic & electronic)						M2 250B MT / M2 250B MT + RCD M2 250F MT / M2 250F MT + RCD M2 250N MT / M2 250N MT + RCD M2 250H MT / M2 250H MT + RCD (Thermal-Magnetic & electronic)			
		36 - 70 - 100kA						25 - 36 - 50 - 70kA			
		25A	40A	63A	100A	160A	250A	100A	160A	200A	250A
BTDIN 60 C Curves	6A	T	T	T	T	T	T	T	T	T	T
	10A	5000	5000	5000	T	T	T	T	T	T	T
	16A	4000	4000	4000	T	T	T	T	T	T	T
	20A	-	4000	4000	T	T	T	T	T	T	T
	25A	-	3000	3000	T	T	T	T	T	T	T
	32A	-	-	2000	5000	T	T	5000	T	T	T
	40A	-	-	2000	5000	T	T	5000	T	T	T
	50A	-	-	-	4000	T	T	4000	T	T	T
	63A	-	-	-	4000	T	T	4000	T	T	T

m.c.b. downstream		m.c.b. upstream		
		MA 400 / MH 400 / ML 400 MA 630 / MH 630 / ML 630 (Thermal-magnetic & electronic)	MA / MH / ML 630 ÷ 1250 (Thermal -magnetic & electronic)	MA / MH 1600ES (Electronic)
		36 - 70 - 100kA	50 - 70 - 100kA	50 - 70kA
		160 to 630A	500 to 1250A	630 to 1600A
BTDIN 60 C Curves	6A	T	T	T
	10A	T	T	T
	16A	T	T	T
	20A	T	T	T
	25A	T	T	T
	32A	T	T	T
	40A	T	T	T
	50A	T	T	T
	63A	T	T	T

Btdin RCBO 6000A up to 63A (2P)

Cat N° (s):

GN823AC6 - GN823AC10 - GN823AC16 - GN823AC20 -
GN823AC25 - GN823AC32 - GN823AC40 - GN823AC50 -
GN823AC63

6. COMPLIANCE- APPROVALS :

In accordance with standards:

- . IEC/EN 61009-1.
- . IEC/EN 60947-2.
- . Compliance with Directives 2014/35/UE (LVC), subsequent modifications and additions.
- . Compliance with Directives 2014/30/UE (EMC), subsequent modifications and additions.

Environment respect – Compliance with CEE directives:

- . Compliance with Directive 2011/65/UE called "RoHS" provides the banishment of hazardous substances, subsequent modifications and additions.
- . Compliance with Directives 91/338/CEE of 18/06/91 and decree 94-647, subsequent modifications and additions.

Plastic materials :

- . Halogen-free plastic materials.
- . Marking of parts according to ISO 11469 and ISO 1043.

Packaging:

- . Design and manufacture of packaging in accordance with decree 98-638 and Directive 94/62/EC, subsequent modifications and additions.

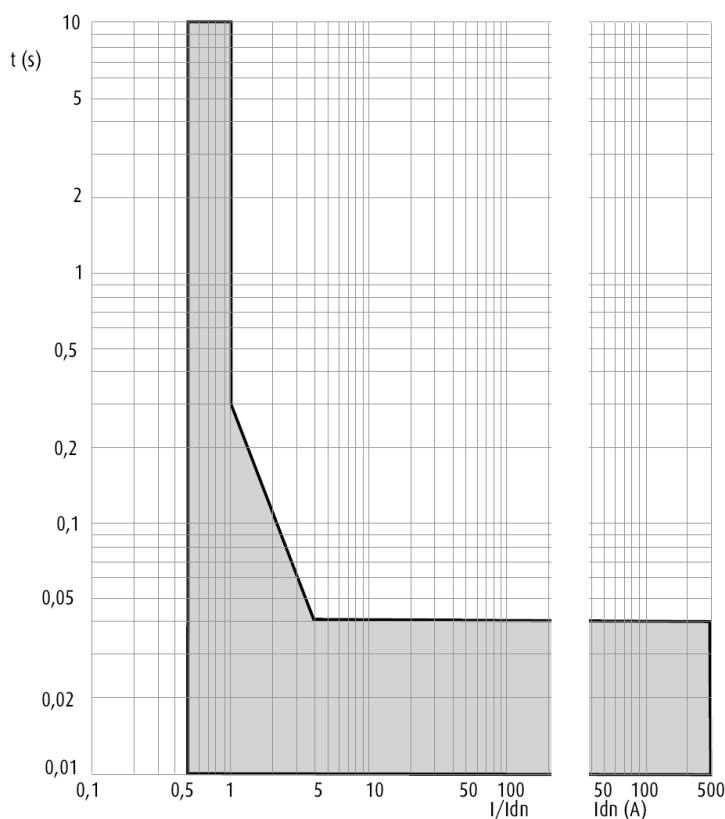
Approvals:

- . Certificates obtained from the range:
IMQ - LOVAG
- . These markings may vary depending on the article

7. CURVES :

Residual current operating characteristic :

- . Average tripping time depending on the intensity of the fault current.



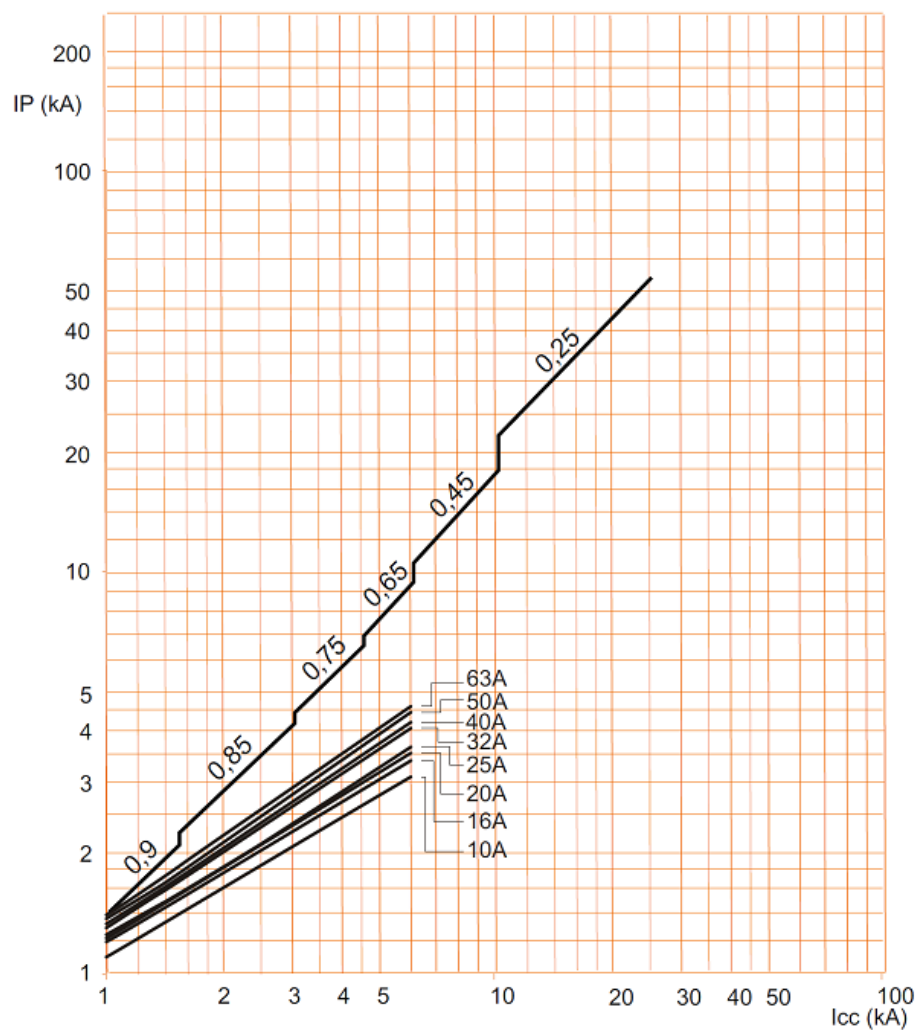
Btdin RCBO 6000A up to 63A (2P)

Cat N° (s):

GN823AC6 - GN823AC10 - GN823AC16 - GN823AC20 -
GN823AC25 - GN823AC32 - GN823AC40 - GN823AC50 -
GN823AC63

7. CURVES :

Limiting current curve: circuit breakers C curves:



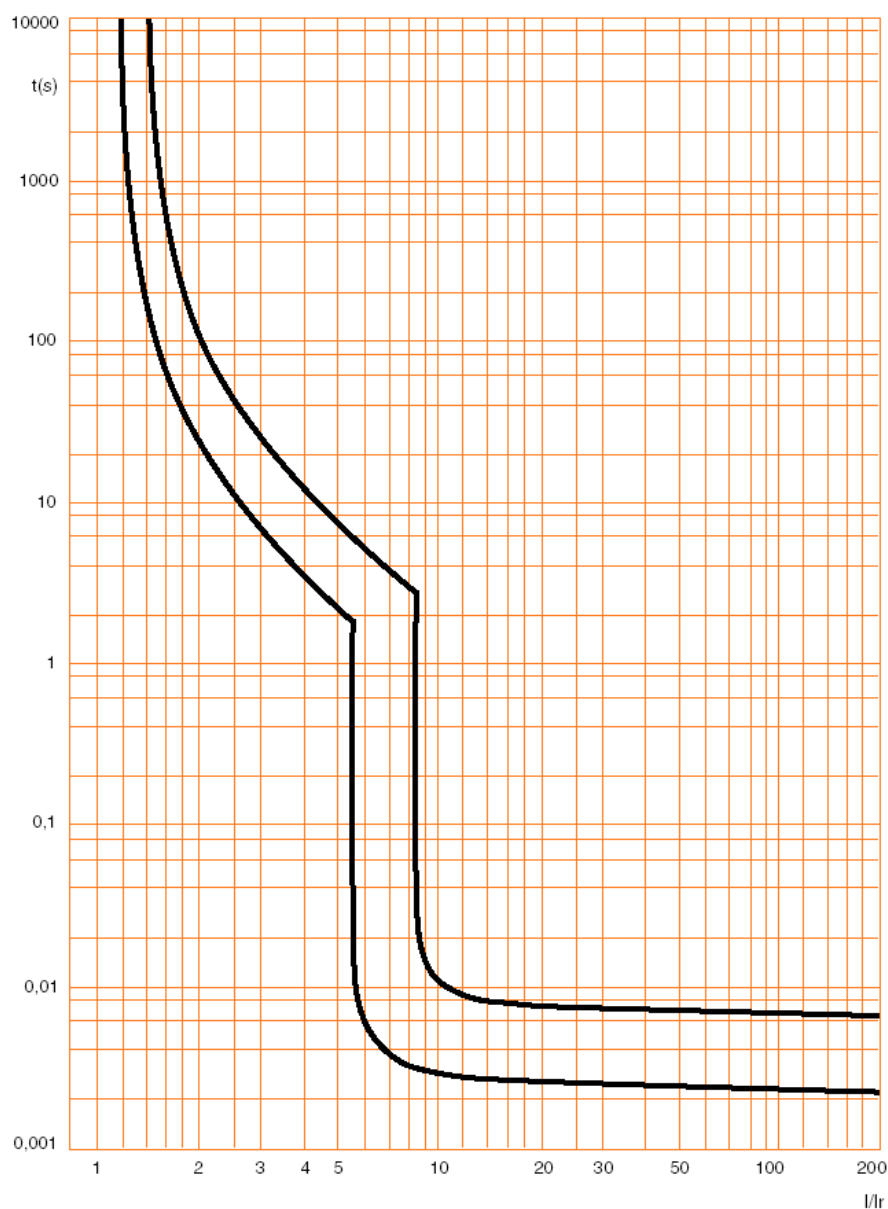
Btdin RCBO 6000A up to 63A (2P)

Cat N° (s):

GN823AC6 - GN823AC10 - GN823AC16 - GN823AC20 -
GN823AC25 - GN823AC32 - GN823AC40 - GN823AC50 -
GN823AC63

7. CURVES :

Operating characteristic of circuit breakers C curve:



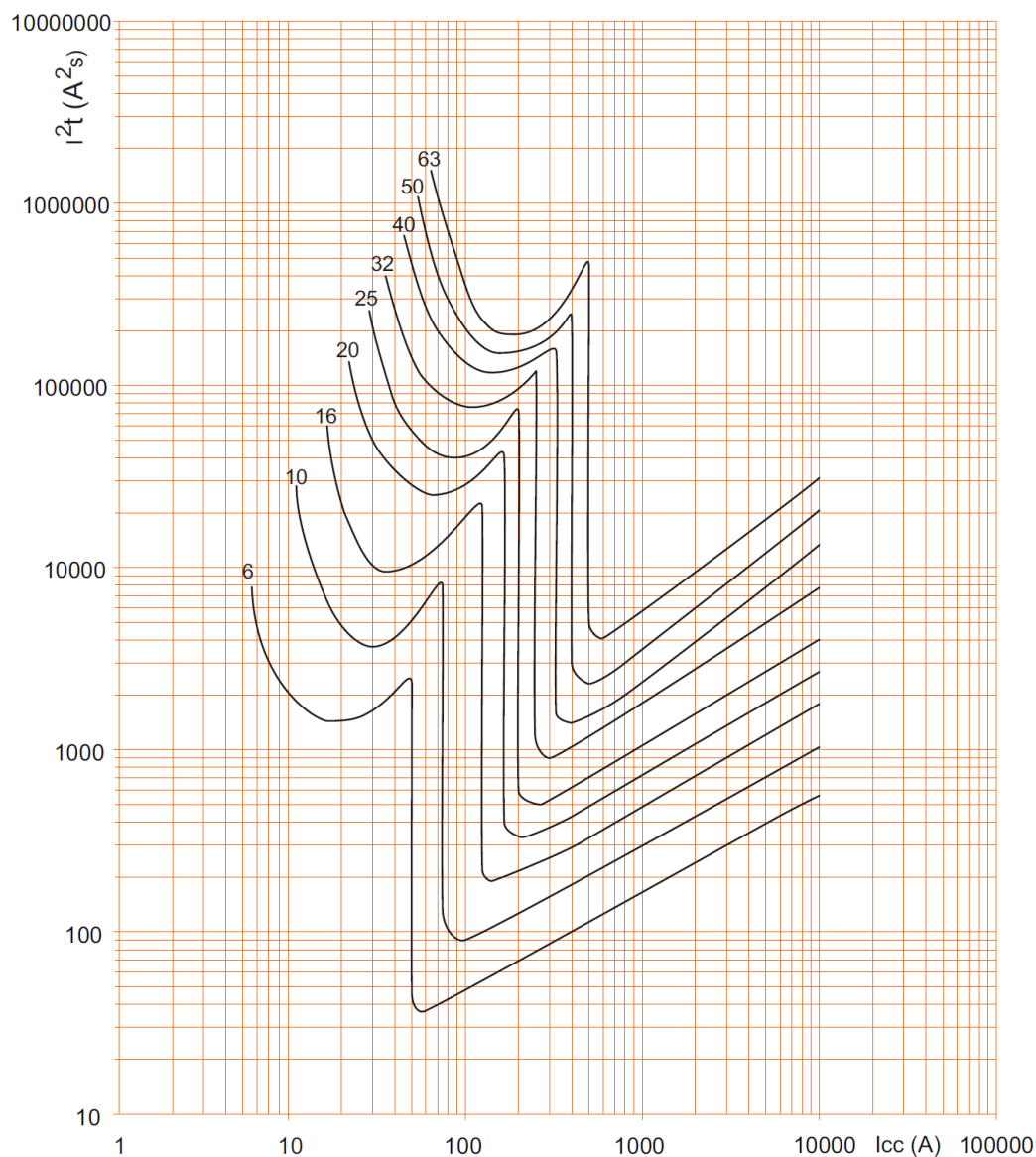
Btdin RCBO 6000A up to 63A (2P)

Cat N° (s):

GN823AC6 - GN823AC10 - GN823AC16 - GN823AC20 -
GN823AC25 - GN823AC32 - GN823AC40 - GN823AC50 -
GN823AC63

7. CURVES :

. Limiting thermal energy curve of circuit breakers C curve , 2P (230V~ / 50Hz) :



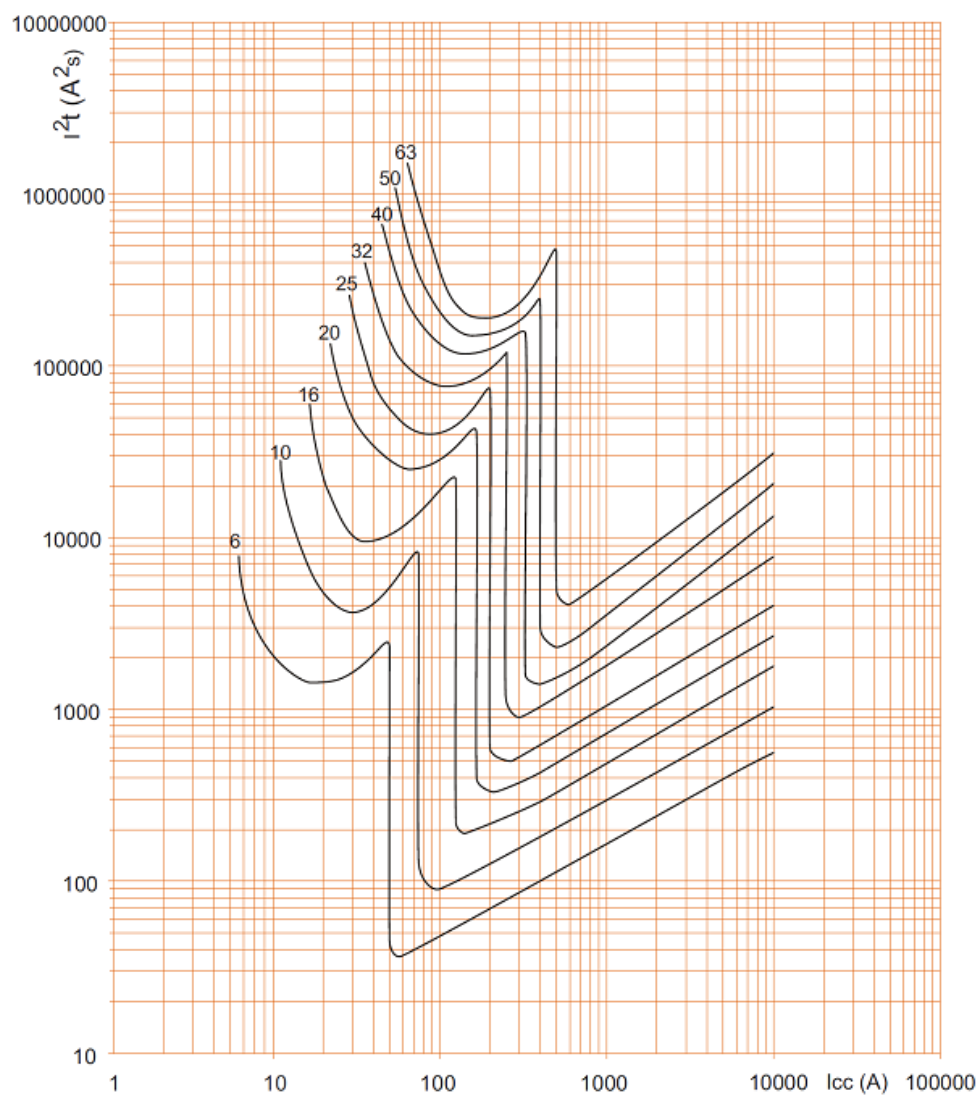
Btdin RCBO 6000A up to 63A (2P)

Cat N° (s):

GN823AC6 - GN823AC10 - GN823AC16 - GN823AC20 -
GN823AC25 - GN823AC32 - GN823AC40 - GN823AC50 -
GN823AC63

7. CURVES :

. Limiting thermal energy curve of circuit breakers C curve , 2P (400V~ / 50Hz) :



Btdin RCBO 6000A up to 63A (2P)

Cat N° (s):

GN823AC6 - GN823AC10 - GN823AC16 - GN823AC20 -
GN823AC25 - GN823AC32 - GN823AC40 - GN823AC50 -
GN823AC63

8. AUXILIARIES – ACCESSORIES

Wiring accessories:

- . Compatible with Tifast system
- . Sealable screw cover (cat n° F80CV).
- . Insulating shields (cat n° F80S)

Signalling auxiliaries:

- . Auxiliary contact (½ module – cat n° F80CA05).
- . Fault signalling changeover switch (½ module – cat n° F80CR05).
- . Auxiliary contact modifiable in default signal (½ module – cat n° F80RC05).
- . Auxiliary contact + fault signalling switch - can be modified to 2 auxiliary contacts (1 module - cat n° F8CR).

Control auxiliaries:

- . Shunt releases (1 module - cat n° F80ST1/ST2).
- . Under voltage release (1 module - cat n° F80SV1/SV2).
- . Autonomous shunt trip for NC push-button (1 module - cat n° F80SVE1/SVE2).
- . Power Overvoltage Protection (1 module – cat n° F80SVP)

Motor driven control modules

- . Motor driven control module (1 module – cat n° F80MC24, F80MC230)
- . Motor driven control module with automatic resetting integrated (2 modules – cat n° F80MR24, F80MR230)

Automatic resetting module STOP & GO :

- . Automatic resetting module Stop & Go (2 modules – cat n° F80SG)
- . Automatic resetting module Stop & Go with self-test (2 modules – cat n° F80SGB)

Possible combinations of m.c.b and auxiliaries:

- . Auxiliaries are clipped to the left of the m.c.b.
- . Maximum number of auxiliaries for one circuit-breaker: 3.
- . Two signalling auxiliaries max. (cat. n° F80CA05/CA/CR05/CR/RC05/RC).
- . Only one control auxiliary (cat. n° F80ST01/ST02/SV1/SV2/SVP/SVE/SVE2).
- . If signalling and control auxiliaries are associated on the same circuit breaker, the command auxiliary must be placed to the left of the signal auxiliary

Installation software:

- . TiQuadri