

Circuit breaker TX³ 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

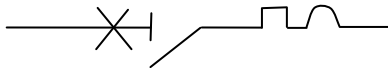


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1. DESCRIPTION - USE:

. Thermal-magnetic circuit breaker (MCB) for control, disconnection and protection of electrical circuits against overcurrents

Symbol:



Technology:

- . Current limiting circuit-breaker
- . 1 module per pole. Each pole is 17,7 mm wide

2. RANGE

Polarity:

- . 1P / 1P+N / 2P / 3P / 3P+N / 4P.

Rated currents, In:

- . C curve: 0.5 / 1 / 2 / 3 / 4 / 6 / 10 / 13 / 16 / 20 / 25 / 32 / 40 / 50 / 63A
- . B curve: 1 / 2 / 3 / 4 / 6 / 10 / 13 / 16 / 20 / 25 / 32 / 40 / 50 / 63A

Magnetic tripping curves:

- . B curve (entre 3 et 5 In).
- . C curve (between 5 and 10 In).

Thermal threshold according to IEC/EN 60898-1:

- . Non operating current (In_f): 1.13 In.
- . Operating current (I_f): 1.45 In.

Rated Voltage and Frequency:

- . 240 V ~ / 415 V~ - 50 / 60 Hz with standard tolerances.
- . 80 V per pole DC current.

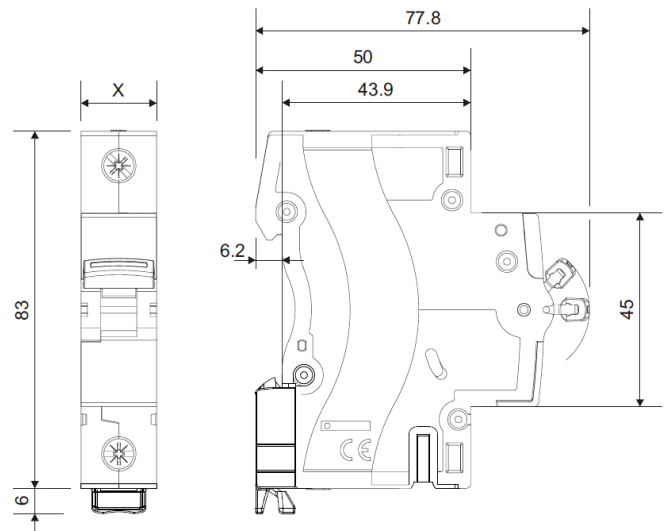
Maximum operating voltage:

- . 440 V ~ with possible derating of the breaking capacity

Breaking capacity:

- . 10000 A according to standard IEC/EN 60898-1.

3. OVERALL DIMENSIONS :



	X
1P	17.7mm
1P+N / 2P	35.4mm
3P	53.1mm
3P+N / 4P	70.8mm

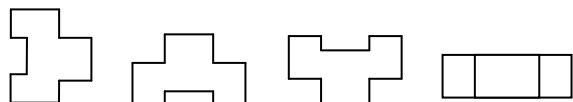
4. PREPARATION - CONNECTION

Mounting

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

Operating positions:

- Vertical Horizontal Upside down On the side



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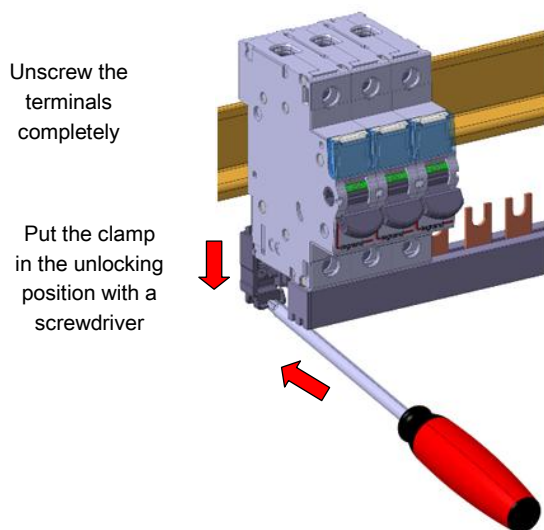
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4. PREPARATION – CONNECTION *(continued)*:

Module maintenance:

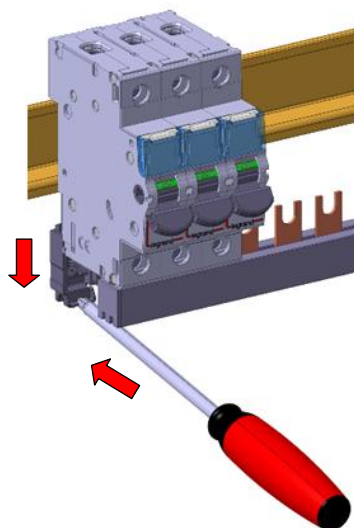
. MCBs are equipped with a din rail clamp which facilitates the removal of the circuit-breaker from the din rail in case of maintenance or replacement without the need to disconnect the entire supply line. A circuit breaker may be replaced in the middle of a supplied fork busbar row without disconnecting the other products.

This method is available for the 1 pole, 2-poles, 3-poles, 4-poles devices.

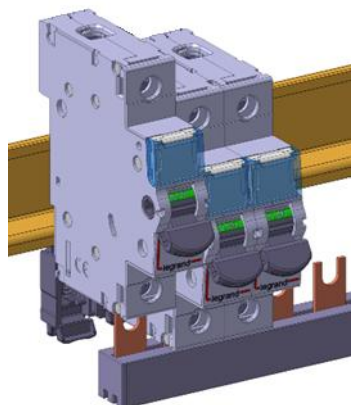


Unscrew the terminals completely

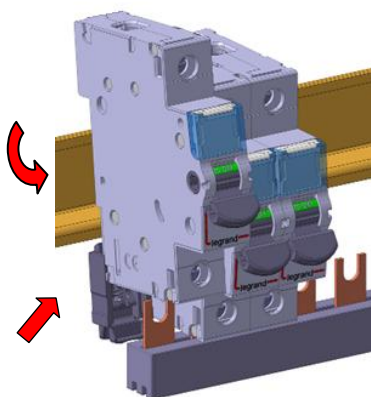
Put the clamp in the unlocking position with a screwdriver



Pull the device upward



Pull the device downward in order to release it completely from the prongs of the busbar. Then pull the device forward



4. PREPARATION – CONNECTION *(continued)*:

Power supply:

. Either from the top or the bottom

Connection:

The location of the terminals allows supplying by fork busbar bottom side

Terminal depth :

. 14 mm

Stripping length recommended:

. 11 mm

Screw head:

. Mixed, slotted and Pozidriv 2.

Tightening torque:

. Recommended: 2.5 Nm.

. Mini: 2 Nm. Maxi: 3 Nm.

Required tools:

. For the terminals: Pozidriv n°2 or flat screwdriver 5.5 mm (6 mm maximum).

. For fixing: flat screwdriver 5.5 mm (6 mm maximum).

Connector type:

	Copper cables	
	Without ferrule	With ferrule
Rigid cable	1 x 1.5 mm ² to 35 mm ² 2 x 1.5 mm ² to 16 mm ²	-
Flexible cable	1 x 1.5 mm ² to 25 mm ² 2 x 1.5 mm ² to 10 mm ²	1 x 1.5 mm ² to 25 mm ²

Manual actuation of the MCB:

. Ergonomic 2-position handle

. "O-OFF": Device open

. "I-ON": Device closed

Contact status display:

. By marking of the handle

"O-OFF" in white on a green background = contacts open

"I-ON" in white on a red background = contacts closed

Sealing:

. Possible in "Open" position (OFF) or "Close" position (ON).

Locking

. By 5 mm padlock (cat. N° 4 063 13) or 6 mm padlock (cat. N° 0 227 97) with padlock support (cat. N° 0 044 42) in "Open" position (OFF).

Labelling:

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



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5. GENERAL CHARACTERISTICS:

Neutral earthing system:

. IT, ITT, TN

Marking on the front side:

- . By permanent ink pad printing showing:
 - Trade name: TX³
 - Breaking curve
 - Rated current (in A)
 - I_{cn} (in A) rated breaking capacity in accordance with IEC/EN 60898-1 (in a box)
 - Limiting class "3" (in a square)
 - Legrand reference code and Logo 
 - Brand: Legrand.



Short-circuit breaking capacity:

. Alternate current 50/60Hz, single-phase or three-phase network, in accordance with standard: IEC/EN 60898-1

Un		1P	2P	3P / 4P
110 V~	I _{cn}	16000 A	25000 A	-
230V~		10000 A	16000 A	16000 A
400V~		-	10000 A	10000 A
440 V~		-	8000 A	8000 A
110 V~	I _{cs}	75% of I _{cn}	75% of I _{cn}	75% of I _{cn}
230V~				
400V~				
440 V~				

Short-circuit breaking capacity on one single pole:

- . Three-phase network 220 / 380 V~ to 240 / 415 V~
 - in TN neutral system, I_{cn1} = 16 kA (under 220 to 240 V~)
 - in IT neutral system, I_{it} = 4 kA (under 380 to 415 V~)
- . Three-phase network 110 / 220 V~ to 120 / 240 V~
 - in TN neutral system, I_{cn1} = 32 kA (under 110 to 127 V~)
 - in IT neutral system, I_{it} = 8 kA (under 220 to 240 V~)

Minimum operating voltage:

. 12 V a.c. / d.c. per pole.

Pulse rated voltage:

. U_{imp} = 4 kV

Insulation rated voltage:

. U_i = 500 V

5. GENERAL CHARACTERISTICS (continued):

Degree of pollution:

. 2 according to the standard IEC/EN 60898-1.

Dielectric strength:

. 2500 V

Operation at 400Hz:

. The magnetic thresholds increase by 45%.

Closing and opening via the handle:

- . 0.1 Nm per pole to close.
- . 0.075 Nm per pole to open.

Mechanical endurance:

- . 20000 operations without load.
- . 10000 operations with load (under I_n*cos φ = 0.9).
- . 2000 operations under I_n, DC current.

Enclosure material:

- . Polyester.
- . Characteristics of this material: self extinguishing, heat and fire resistant according to EN 60898-1, 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).

Average weight per pole:

. 0,150 kg.

Volume when packed (per catalogue number):

	Volume (dm ³)
Single pole	0,132
Double pole	0,271
Triple pole	0,407
Four pole	0,555

Ambient operating temperature:

. Min. = -25°C. Max. = +70°C

Ambient storage temperature:

. Min. = -40°C. Max. = +70°C

Protection class:

- . Protection index of terminals against solid and liquid bodies: IP 20 (according to standards IEC 529, EN 60529 and NF C 20-010).
- . Protection index of the box against solid and liquid bodies: IP 40 (according to standards IEC 529, EN 60529 and NF C 20-010).
- . Protection index against mechanical shocks: IK 02 (according to standards EN 50102 and NF C 20-015).

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5. GENERAL CHARACTERISTICS *(continued)*:

Resistance to sinusoidal vibration in accordance with IEC 60068.2.6:

- . Axis : x, y, z.
- . Frequency range: 5÷100 Hz ; duration 90 minutes
- . Displacement (5÷13,2 Hz) : 1mm
- . Acceleration (13,2÷100 Hz) : 0,7g (g=9,81 m/s²)

Power dissipated per pole (W) :

. Circuit breakers B and C curves

In (A)	0,5	1	2	3	4	6	10
1P ÷ 4P	1,7	2	2	2	2	1.1	1.8
In (A)	13	16	20	25	32	40	50
1P ÷ 4P	1.9	2	2.2	2.7	3.2	4	4.5
In (A)	63						
1P ÷ 4P	5.5						

- . Impedance per pole (Ω) = $\frac{P \text{ dissipated}}{I_n^2}$

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5. GENERAL CHARACTERISTICS *(continued)*:

Derating of circuit-breakers according to ambient temperature :

. The nominal characteristics of a circuit breaker are modified according to the ambient temperature inside the cabinet or the enclosure where the circuit breaker is located.

. Reference temperature: 30°C according to standard 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
0,5	0.62	0.6	0.57	0.55	0.52	0.5	0.47	0.42	0.40	0.38
1	1.5	1.4	1.3	1.2	1.1	1	0.9	0.8	0.7	0.6
2	2.8	2.6	2.5	2.3	2.2	2	2	1.9	1.8	1.7
3	3.8	3.6	3.5	3.3	3.2	3.0	2.9	2.8	2.7	2.6
4	4.5	4.2	4.0	3.9	3.7	3.5	3.4	3.3	3.2	3.1
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
13	16.3	15	14.3	13.9	13.4	13	12.6	12.1	11.7	11.3
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
32	41.0	37.8	36.5	34.9	33.3	32.0	30.7	29.1	27.8	26.5
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

Derating of MCB for use with fluorescent lights:

Ferromagnetic and electronic ballasts have a high inrush current for a short time. These currents can cause the tripping of circuit breakers.

At the time of the installation, it should take into account the maximum number of ballasts per circuit breaker that the manufacturers of lamps and ballasts indicate in their catalogues.

Influence of the altitude:

	≤2000 m	3000 m	4000 m	5000 m
Dielectric holding	3000 V	2500 V	2000 V	1500 V
Max operational Voltage	400V	400 V	400 V	400 V
Derating at 30°C	none	none	none	none

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

When several MCBs are juxtaposed and operate simultaneously, the thermal evacuation 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 60439-1, NF C 63421 and EN 60439-1 standards.

To avoid to have to use these coefficients, it is necessary to allow a good ventilation and to separate the devices with 0.5 module spacing elements (cat. N° 4 063 07).

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5. GENERAL CHARACTERISTICS *(continued)*:

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

For TT or TN neutral system in 240/415 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 230/400V.

m.c.b. downstream		Fuse upstream									
		gG Type									
		≤20A	25A	32A	40A	50A	63A	80A	100A	125A	160A
TX ³ 10000A 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
	13A	-	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
TX ³ 10000A 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
	13A	-	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

All these values are also valid for circuit breakers associated to differential blocks.

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 240/415 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 230/400V.

		m.c.b. upstream							
		DX ³ 10000/16kA							
		B, C and D Curves							
m.c.b. downstream		≤25A	32A	40A	50A	63A	80A	100A	125A
TX ³ 10000A B and C curves	≤6A	16kA	16kA	16□A	16kA	16kA	16kA	16kA	16kA
	10A	16kA	16kA	16kA	16kA	16kA	16kA	16kA	16kA
	13A	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

		m.c.b. upstream							
		DX ³ 25kA							
		B, C and D Curves							
m.c.b. downstream		≤25A	32A	40A	50A	63A	80A	100A	125A
TX ³ 10000A B and C curves	≤6A	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	10A	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	13A	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

All these values are also valid for circuit breakers associated to RCD add-on modules.

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

For TT or TN neutral system in 240/415 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 240/415 V.

m.c.b. downstream		m.c.b. upstream										
		DX ³ 36kA					DX ³ 50kA					
		C Curve					B, C and D Curves					
		≤25A	32A	40A	50A	63A	80A	≤25A	32A	40A	50A	63A
TX ³ 10000A B and C curves	≤6A	36kA	36kA	36kA	36kA	36kA	36kA	50kA	50kA	50kA	50kA	50kA
	10A	36kA	36kA	36kA	36kA	36kA	36kA	50kA	50kA	50kA	50kA	50kA
	13A	36kA	36kA	36kA	36kA	36kA	36kA	50kA	50kA	50kA	50kA	50kA
	16A	36kA	36kA	36kA	36kA	36kA	36kA	50kA	50kA	50kA	50kA	50kA
	20A	36kA	36kA	36kA	36kA	36kA	36kA	50kA	50kA	50kA	50kA	50kA
	25A	-	36kA	36kA	36kA	36kA	36kA	-	50kA	50kA	50kA	50kA
	32A	-	-	36kA	36kA	36kA	36kA	-	-	50kA	50kA	50kA
	40A	-	-	-	36kA	36kA	36kA	-	-	-	50kA	50kA
	50A	-	-	-	-	36kA	36kA	-	-	-	-	50kA
63A	-	-	-	-	-	36kA	-	-	-	-	-	

All these values are also valid for circuit breakers associated to RCD add-on modules.

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.

Coordination between modular circuit-breakers (MCB) and Moulded Case Circuit Breakers (MCCBs), three -phase network (+ neutral) 400 / 415 V~ according to standard IEC/EN 60947-2:

For TT or TN neutral system in 240/415 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 240/415 V.

m.c.b. downstream		m.c.c.b. upstream											
		DPX 125					DPX 125						
		16kA					25 - 36kA						
		16A	25A	40A	63A	100A	125A	16A	25A	40A	63A	100A	125A
TX ³ 10000A B and 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
	13A	-	16kA	16kA	16kA	16kA	16kA	-	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	

Circuit breaker TX³ 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77,
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

5. GENERAL CHARACTERISTICS *(continued)*:

Coordination between modular circuit-breakers (MCB) and Moulded Case Circuit Breakers (MCCBs), three -phase network (+ neutral) 400 / 415 V~ according to standard IEC/EN 60947-2:

For TT or TN neutral system in 240/415 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 240/415 V.

		m.c.c.b. upstream							
		DPX ³ 160 / DPX ³ 160 + RCD							
		16kA							
m.c.b. downstream		16A	25A	40A	63A	80A	100A	125A	160A
TX ³ 10000A B and C curves	≤6A	16kA	16kA	16kA	16kA	16kA	16kA	16kA	16kA
	10A	16kA	16kA	16kA	16kA	16kA	16kA	16kA	16kA
	13A	-	16kA	16kA	16kA	16kA	16kA	16kA	16kA
	16A	-	16kA	16kA	16kA	16kA	16kA	16kA	16kA
	20A	-	16kA	16kA	16kA	16kA	16kA	16kA	16kA
	25A	-	-	16kA	16kA	16kA	16kA	16kA	16kA
	32A	-	-	16kA	16kA	16kA	16kA	16kA	16kA
	40A	-	-	-	16kA	16kA	16kA	16kA	16kA
	50A	-	-	-	16kA	16kA	16kA	16kA	16kA
	63A	-	-	-	-	16kA	16kA	16kA	16kA

		m.c.c.b. upstream												
		DPX ³ 160 / DPX ³ 160 + RCD								DPX 160				
		25 - 36 - 50kA								25 - 36 - 50kA				
m.c.b. downstream		16A	25A	40A	63A	80A	100A	125A	160A	25A	40A	63A	100A	125A
TX ³ 10000A B and 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
	13A	-	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	36kA	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	25kA	-	-	-	20kA

All these values are also valid for circuit breakers associated to differential blocks.

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.

Circuit breaker TX³ 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77,
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

5. GENERAL CHARACTERISTICS *(continued)*:

Coordination between modular circuit-breakers (MCB) and Moulded Case Circuit Breakers (MCCBs), three -phase network (+ neutral) 400 / 415 V~ according to standard IEC/EN 60947-2:

For TT or TN neutral system in 240/415 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 240/415 V.

		m.c.c.b. upstream										
		DPX 250ER			DPX 250ER AB				DPX ³ 250 / DPX ³ 250+RCD (Thermal-Magnetic & electronic)			
		25 - 36 - 50kA			36kA				25 - 36 - 50kA - 70kA			
m.c.b. downstream		100A	160A	250A	90A	130A	170A	240A	100A	160A	200A	250A
TX ³ 10000A B and 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
	13A	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	25kA
	32A	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	40A	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	50A	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA
63A	20kA	20kA	20kA	20kA	20kA	20kA	20kA	20kA	25kA	25kA	25kA	25kA

		m.c.c.b. upstream												
		DPX / H / L 250 (Thermal -Magnetic & electronic)						DPX 400AB		DPX / DPXH / DPXL 630 (Thermal -Magnetic & electronic)				
		36 - 70 - 100kA						36kA		36 - 70 - 100kA				
m.c.b. downstream		25A	40A	63A	100A	160A	250A	320A	400A	250A	320A	400A	500A	630A
TX ³ 10000A B and 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
	13A	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	25kA
	20A	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	25A	-	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	32A	-	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	40A	-	-	25kA	25kA	25kA	25kA	20kA	20kA	20kA	20kA	20kA	20kA	20kA
	50A	-	-	25kA	25kA	25kA	25kA	20kA	20kA	20kA	20kA	20kA	20kA	20kA
63A	-	-	-	20kA	20kA	20kA	20kA	20kA	20kA	20kA	20kA	20kA	20kA	

All these values are also valid for circuit breakers associated to differential blocks.

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.

Circuit breaker TX³ 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77,
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

5. GENERAL CHARACTERISTICS *(continued)*:

Coordination between modular circuit-breakers (MCB) and Moulded Case Circuit Breakers (MCCBs), three -phase network (+ neutral) 400 / 415 V~ according to standard IEC/EN 60947-2:

For TT or TN neutral system in 240/415 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 240/415 V.

		m.c.c.b. upstream	
		DPX / H / L 1250 (Thermo-Magnetic)	DPX / H 1600 (electronic)
		50 – 70 – 100kA	36 – 70kA
m.c.b. downstream		500 to 1250A	630 to 1600A
TX ³ 10000A B and C curves	≤6A	25kA	25kA
	10A	25kA	25kA
	13A	25kA	25kA
	16A	25kA	25kA
	20A	25kA	25kA
	25A	20kA	20kA
	32A	16kA	16kA
	40A	16kA	16kA
	50A	16kA	16kA
	63A	16kA	16kA

All these values are also valid for circuit breakers associated to differential blocks.

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.

Circuit breaker TX³ 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77,
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

5. GENERAL CHARACTERISTICS *(continued)*:

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

m.c.b. downstream		Fuse upstream										
		gG Type										
		≤20A	25A	32A	40A	50A	63A	80A	100A	125A	160A	
TX ³ 10000A B and C curves	≤6A	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	10A	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	13A	-	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	16A	-	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	20A	-	-	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	25A	-	-	-	100kA	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	32A	-	-	-	-	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	40A	-	-	-	-	-	100kA	100kA	100kA	100kA	100kA	40kA
	50A	-	-	-	-	-	-	100kA	100kA	100kA	100kA	40kA
	63A	-	-	-	-	-	-	100kA	100kA	100kA	100kA	40kA

m.c.b. downstream		Fuse upstream										
		aM Type										
		≤20A	25A	32A	40A	50A	63A	80A	100A	125A	160A	
TX ³ 10000A B and C curves	≤6A	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	10A	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	13A	-	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	16A	-	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	20A	-	-	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	25A	-	-	-	100kA	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	32A	-	-	-	-	100kA	100kA	100kA	100kA	100kA	100kA	40kA
	40A	-	-	-	-	-	100kA	100kA	100kA	100kA	100kA	40kA
	50A	-	-	-	-	-	-	100kA	100kA	100kA	100kA	40kA
	63A	-	-	-	-	-	-	100kA	100kA	100kA	100kA	40kA

All these values are also valid for circuit breakers associated to differential blocks.

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.

Circuit breaker TX³ 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77,
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

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							
		DX ³ 10000/16kA							
		B, C and D Curves							
m.c.b. downstream		≤25A	32A	40A	50A	63A	80A	100A	125A
TX ³ 10000A B and C curves	≤6A	32kA	32kA	25kA	25kA	25kA	25kA	25kA	25kA
	10A	32kA	32kA	25kA	25kA	25kA	25kA	25kA	25kA
	13A	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	

		m.c.b. upstream							
		DX ³ 25kA							
		B, C and D Curves							
m.c.b. downstream		≤25A	32A	40A	50A	63A	80A	100A	125A
TX ³ 10000A B and C curves	≤6A	50kA	50kA	25kA	25kA	25kA	25kA	25kA	25kA
	10A	50kA	50kA	25kA	25kA	25kA	25kA	25kA	25kA
	13A	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	

All these values are also valid for circuit breakers associated to RCD add-on modules.

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.

Circuit breaker TX³ 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77,
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

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										
		DX ³ 36kA						DX ³ 50kA				
		C Curve						B, C and D Curves				
m.c.b. downstream		≤25A	32A	40A	50A	63A	80A	≤25A	32A	40A	50A	63A
TX ³ 10000A B and 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
	13A	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
	32A	-	-	50kA	50kA	50kA	50kA	-	-	50kA	50kA	50kA
	40A	-	-	-	50kA	50kA	50kA	-	-	-	50kA	50kA
	50A	-	-	-	-	50kA	50kA	-	-	-	-	50kA
63A	-	-	-	-	-	50kA	-	-	-	-	-	

All these values are also valid for circuit breakers associated to RCD add-on modules.

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.

Circuit breaker TX³ 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77,
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

5. GENERAL CHARACTERISTICS *(continued)*:

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

m.c.b. downstream		m.c.c.b. upstream											
		DPX 125						DPX 125					
		25kA						36kA					
		16A	25A	40A	63A	100A	125A	16A	25A	40A	63A	100A	125A
TX ³ 10000A B and C curves	≤6A	35kA	35kA	35kA	35kA	35kA	35kA	40kA	40kA	40kA	40kA	40kA	40kA
	10A	35kA	35kA	35kA	35kA	35kA	35kA	40kA	40kA	40kA	40kA	40kA	40kA
	13A	-	35kA	35kA	35kA	35kA	35kA	-	40kA	40kA	40kA	40kA	40kA
	16A	-	35kA	35kA	35kA	35kA	35kA	-	40kA	40kA	40kA	40kA	40kA
	20A	-	35kA	35kA	35kA	35kA	35kA	-	40kA	40kA	40kA	40kA	40kA
	25A	-	-	35kA	35kA	35kA	35kA	-	-	40kA	40kA	40kA	40kA
	32A	-	-	35kA	35kA	35kA	35kA	-	-	40kA	40kA	40kA	40kA
	40A	-	-	-	35kA	35kA	35kA	-	-	-	40kA	40kA	40kA
	50A	-	-	-	35kA	35kA	35kA	-	-	-	35kA	35kA	35kA
63A	-	-	-	-	35kA	35kA	-	-	-	-	35kA	35kA	

m.c.b. downstream		m.c.c.b. upstream							
		DPX ³ 160 / DPX ³ 160 + RCD							
		16kA							
		16A	25A	40A	63A	80A	100A	125A	160A
TX ³ 10000A B and C curves	≤6A	28kA	28kA	28kA	28kA	28kA	28kA	28kA	28kA
	10A	28kA	28kA	28kA	28kA	28kA	28kA	28kA	28kA
	13A	-	28kA	28kA	28kA	28kA	28kA	28kA	28kA
	16A	-	28kA	28kA	28kA	28kA	28kA	28kA	28kA
	20A	-	28kA	28kA	28kA	28kA	28kA	28kA	28kA
	25A	-	-	28kA	28kA	28kA	28kA	28kA	28kA
	32A	-	-	28kA	28kA	28kA	28kA	28kA	28kA
	40A	-	-	-	28kA	28kA	28kA	28kA	28kA
	50A	-	-	-	28kA	28kA	28kA	28kA	28kA
63A	-	-	-	-	28kA	28kA	28kA	28kA	

All these values are also valid for circuit breakers associated to differential blocks.

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.

Circuit breaker TX³ 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77,
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

5. GENERAL CHARACTERISTICS *(continued)*:

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

		m.c.c.b. upstream							
		DPX ³ 160 / DPX ³ 160 + RCD							
		25kA							
m.c.b. downstream		16A	25A	40A	63A	80A	100A	125A	160A
TX ³ 10000A B and C curves	≤6A	40kA	40kA	40kA	40kA	40kA	40kA	40kA	40kA
	10A	40kA	40kA	40kA	40kA	40kA	40kA	40kA	40kA
	13A	-	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							
		DPX ³ 160 / DPX ³ 160 + RCD							
		36 - 50kA							
m.c.b. downstream		16A	25A	40A	63A	80A	100A	125A	160A
TX ³ 10000A B and C curves	≤6A	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA
	10A	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA
	13A	-	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
	40A	-	-	-	50kA	50kA	50kA	50kA	50kA
	50A				50kA	50kA	50kA	50kA	50kA
63A					50kA	50kA	50kA	50kA	

All these values are also valid for circuit breakers associated to differential blocks.

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.

Circuit breaker TX³ 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77,
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

5. GENERAL CHARACTERISTICS *(continued)*:

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

m.c.b. downstream		m.c.c.b. upstream												
		DPX 160					DPX 160					DPX 250ER		
		25kA					36 - 50kA					25kA		
		25A	40A	63A	100A	125A	25A	40A	63A	100A	125A	100A	160A	250A
TX ³ 10000A B and C curves	≤6A	40kA	40kA	40kA	40kA	40kA	50kA	50kA	50kA	50kA	50kA	40kA	40kA	40kA
	10A	40kA	40kA	40kA	40kA	40kA	50kA	50kA	50kA	50kA	50kA	40kA	40kA	40kA
	13A	40kA	40kA	40kA	40kA	40kA	50kA	50kA	50kA	50kA	50kA	40kA	40kA	40kA
	16A	40kA	40kA	40kA	40kA	40kA	50kA	50kA	50kA	50kA	50kA	40kA	40kA	40kA
	20A	40kA	40kA	40kA	40kA	40kA	50kA	50kA	50kA	50kA	50kA	40kA	40kA	40kA
	25A	-	40kA	40kA	40kA	40kA	-	50kA	50kA	50kA	50kA	40kA	40kA	40kA
	32A	-	40kA	40kA	40kA	40kA	-	50kA	50kA	50kA	50kA	40kA	40kA	40kA
	40A	-	-	40kA	40kA	40kA	-	-	50kA	50kA	50kA	40kA	40kA	40kA
	50A	-	-	36kA	36kA	36kA	-	-	36kA	36kA	36kA	36kA	36kA	36kA
63A	-	-	-	36kA	36kA	-	-	-	36kA	36kA	36kA	36kA	36kA	

m.c.b. downstream		m.c.c.b. upstream										
		DPX 250ER			DPX 250ER AB				DPX ³ 250 / DPX ³ 250+RCD (Thermal-magnetic & electronic)			
		36 - 50kA			36kA				25kA			
		100A	160A	250A	90A	130A	170A	240A	100A	160A	200A	250A
TX ³ 10000A B and C curves	≤6A	50kA	50kA	50kA	50kA	50kA	50kA	50kA	40kA	40kA	40kA	40kA
	10A	50kA	50kA	50kA	50kA	50kA	50kA	50kA	40kA	40kA	40kA	40kA
	13A	50kA	50kA	50kA	50kA	50kA	50kA	50kA	40kA	40kA	40kA	40kA
	16A	50kA	50kA	50kA	50kA	50kA	50kA	50kA	40kA	40kA	40kA	40kA
	20A	50kA	50kA	50kA	50kA	50kA	50kA	50kA	40kA	40kA	40kA	40kA
	25A	50kA	50kA	50kA	50kA	50kA	50kA	50kA	40kA	40kA	40kA	40kA
	32A	50kA	50kA	50kA	50kA	50kA	50kA	50kA	40kA	40kA	40kA	40kA
	40A	50kA	50kA	50kA	50kA	50kA	50kA	50kA	40kA	40kA	40kA	40kA
	50A	36kA	36kA	36kA	36kA	36kA	36kA	36kA	40kA	40kA	40kA	40kA
63A	36kA	36kA	36kA	36kA	36kA	36kA	36kA	40kA	40kA	40kA	40kA	

All these values are also valid for circuit breakers associated to differential blocks.

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.

Circuit breaker TX³ 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77,
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

5. GENERAL CHARACTERISTICS *(continued)*:

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

		m.c.c.b. upstream									
		DPX ³ 250 / DPX ³ 250+RCD (Thermal-magnetic & electronic)					DPX / H / L 250 (Thermal-magnetic & electronic)				
		36 – 50 – 70kA					36 – 70 – 100kA				
m.c.b. downstream		100A	160A	200A	250A	25A	40A	63A	100A	160A	250A
TX ³ 10000A B and C curves	≤6A	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA
	10A	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA
	13A	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA
	16A	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA
	20A	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA
	25A	50kA	50kA	50kA	50kA	-	50kA	50kA	50kA	50kA	50kA
	32A	50kA	50kA	50kA	50kA	-	50kA	50kA	50kA	50kA	50kA
	40A	50kA	50kA	50kA	50kA	-	-	50kA	50kA	50kA	50kA
	50A	50kA	50kA	50kA	50kA	-	-	50kA	50kA	50kA	50kA
	63A	50kA	50kA	50kA	50kA	-	-	-	50kA	50kA	50kA

		m.c.c.b. upstream						
		DPX 400AB			DPX / DPXH / DPXL 630MT (Thermal-magnetic & electronic)			
		36kA			36 – 70 – 100kA			
m.c.b. downstream		320A	400A	250A	320A	400A	500A	630A
TX ³ 10000A B and C curves	≤6A	50kA	50kA	50kA	50kA	50kA	50kA	50kA
	10A	50kA	50kA	50kA	50kA	50kA	50kA	50kA
	13A	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	50kA
	32A	50kA	50kA	50kA	50kA	50kA	50kA	50kA
	40A	50kA	50kA	50kA	50kA	50kA	50kA	50kA
	50A	36kA	36kA	36kA	36kA	36kA	36kA	36kA
	63A	36kA	36kA	36kA	36kA	36kA	36kA	36kA

All these values are also valid for circuit breakers associated to differential blocks.

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.

Circuit breaker TX³ 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77,
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

5. GENERAL CHARACTERISTICS *(continued)*:

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

		m.c.c.b. upstream	
		DPX / H / L 1250 (Thermal-magnetic)	DPX / H 1600 (electronic)
		50 – 70 – 100kA	36 – 70kA
m.c.b. downstream		500 to 1250A	630 to 1600A
TX ³ 10000A B and C curves	≤6A	50kA	50kA
	10A	50kA	50kA
	13A	50kA	50kA
	16A	50kA	50kA
	20A	50kA	50kA
	25A	50kA	50kA
	32A	50kA	50kA
	40A	50kA	50kA
	50A	36kA	36kA
63A	36kA	36kA	

All these values are also valid for circuit breakers associated to differential blocks.

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.

Circuit breaker TX³ 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77,
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

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 circuits breakers and fuses:

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

		Fuse upstream							
		gG Type							
m.c.b. downstream		32A	40A	50A	63A	80A	100A	125A	160A
TX ³ 10000A B and C curves	≤6A	1300	1900	2500	4000	4600	11000	T	T
	10A	-	1600	2200	3200	3600	7000	11000	T
	13A	-	1400	1800	2600	3000	5600	8000	15000
	16A	-	1400	1800	2600	3000	5600	8000	15000
	20A	-	1200	1500	2200	2500	4600	6300	10000
	25A	-	-	1300	2000	2200	4100	5500	9000
	32A	-	-	1200	1700	1900	3500	4500	8000
	40A	-	-	-	-	1700	3000	4000	6000
	50A	-	-	-	-	16000	2600	3500	5000
	63A	-	-	-	-	-	2400	3300	5000

		Fuse upstream								
		aM Type								
m.c.b. downstream		25A	32A	40A	50A	63A	80A	100A	125A	160A
TX ³ 10000A B and C curves	≤6A	1000	1600	2100	3200	6200	15000	T	T	T
	10A	-	1100	1700	2500	5000	7800	12000	T	T
	13A	-	1000	1400	2100	4000	6000	9000	T	T
	16A	-	1000	1400	2100	4000	6000	9000	T	T
	20A	-	-	1300	1800	3400	5100	7000	14000	T
	25A	-	-	1100	1600	3000	4500	6000	9300	14000
	32A	-	-	-	1300	2400	3800	5000	7700	9000
	40A	-	-	-	-	2100	3100	4200	6400	7000
	50A	-	-	-	-	2000	2900	3700	6000	6000
	63A	-	-	-	-	-	2800	3500	5500	6000

- . T = Total discrimination

Circuit breaker TX³ 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77,
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

5. GENERAL CHARACTERISTICS *(continued)*:

Selectivity between modular circuits breakers:

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

m.c.b. downstream		m.c.b. upstream										
		DX ³ 25kA										
		B curve										
		10A	16A	20A	25A	32A	40A	50A	63A	80A	100A	125A
TX ³ 10000A B and C curves	≤6A	40	64	80	100	700	1200	1500	3000	4000	T	T
	10A	-	64	80	100	500	700	1000	1800	3000	5000	T
	13A	-	-	80	100	300	500	700	1300	2000	3600	5500
	16A	-	-	80	100	300	500	700	1300	2000	3600	5500
	20A	-	-	-	100	-	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. downstream		m.c.b. upstream										
		DX ³ 25kA										
		C curve										
		10A	16A	20A	25A	32A	40A	50A	63A	80A	100A	125A
TX ³ 10000A B and 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
	13A	-	-	150	187	300	500	700	1300	2000	3600	5500
	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	

. T = Total discrimination

Circuit breaker TX³ 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77,
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

5. GENERAL CHARACTERISTICS *(continued)*:

Selectivity between modular circuits breakers:

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

		m.c.b. upstream										
		DX ³ 25kA										
		D curve										
m.c.b. downstream		10A	16A	20A	25A	32A	40A	50A	63A	80A	100A	125A
TX ³ 10000A B and 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
	13A	-	-	240	300	384	500	700	1300	2000	3600	5500
	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								
		DX ³ 36kA								
		C curve								
m.c.b. downstream		10A	16A	20A	25A	32A	40A	50A	63A	80A
TX ³ 10000A B and C curves	≤6A	75	120	170	500	700	1200	1500	3000	4000
	10A	-	120	150	210	500	700	1000	1800	3000
	13A	-	-	150	187	300	500	700	1300	2000
	16A	-	-	150	187	300	500	700	1300	2000
	20A	-	-	-	187	300	400	500	1000	1600
	25A	-	-	-	-	240	400	500	800	1300
	32A	-	-	-	-	-	300	500	600	1000
	40A	-	-	-	-	-	-	400	600	800
	50A	-	-	-	-	-	-	-	500	800
	63A	-	-	-	-	-	-	-	-	650

. T = Total discrimination

Circuit breaker TX3 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77,
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

5. GENERAL CHARACTERISTICS *(continued)*:

Selectivity between modular circuits breakers:

. Selectivity limit at 415V~: values in Ampere.

m.c.b. downstream		m.c.b. upstream							
		DX ³ 50kA							
		B curve							
		10A	16A	20A	25A	32A	40A	50A	63A
TX ³ 10000A B and C curves	≤6A	-	64	170	500	700	1200	1500	3000
	10A	-	-	150	210	500	700	1000	1800
	13A	-	-	-	-	300	500	700	1300
	16A	-	-	-	-	300	500	700	1300
	20A	-	-	-	-	-	400	500	1000
	25A	-	-	-	-	-	-	500	800
	32A	-	-	-	-	-	-	500	600
	40A	-	-	-	-	-	-	-	600
	50A	-	-	-	-	-	-	-	-
	63A	-	-	-	-	-	-	-	-

m.c.b. downstream		m.c.b. upstream							
		DX ³ 50kA							
		C curve							
		10A	16A	20A	25A	32A	40A	50A	63A
TX ³ 10000A B and C curves	≤6A	75	120	170	500	700	1200	1500	3000
	10A	-	120	150	210	500	700	1000	1800
	13A	-	-	150	187	300	500	700	1300
	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	-	-	-	-	-	-	-	-

Circuit breaker TX³ 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77,
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

5. GENERAL CHARACTERISTICS *(continued)*:

Selectivity between modular circuits breakers:

. Selectivity limit at 415 V~: values in Ampere.

		m.c.b. upstream							
		DX ³ 50kA							
		D curve							
m.c.b. downstream		10A	16A	20A	25A	32A	40A	50A	63A
TX ³ 10000A B and C curves	≤6A	120	192	240	500	700	1200	1500	3000
	10A	-	192	240	300	500	700	1000	1800
	13A	-	-	240	300	384	500	700	1300
	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	-	-	-	-	-	-	-	-

Circuit breaker TX³ 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77,
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

5. GENERAL CHARACTERISTICS *(continued)*:

Selectivity between modular circuits breakers (MCB) and Moulded Case Circuit Breakers (MCCBs):

. Selectivity limit at 415 V~: values in Ampere.

m.c.b. downstream		m.c.c.b. upstream										
		DPX 125						DPX 160				
		16 – 25 – 36kA						25 – 36 – 50kA				
m.c.b. downstream		16A	25A	40A	63A	100A	125A	25A	40A	63A	100A	160A
TX ³ 10000A B and C curves	≤6A	6000	6000	6000	6000	T	T	12000	T	T	T	T
	10A	5000	5000	5000	5000	7500	7500	7000	7000	7000	7000	T
	13A	-	4000	4000	4000	6000	6000	6000	6000	6000	6000	T
	16A	-	4000	4000	4000	6000	6000	6000	6000	6000	6000	T
	20A	-	4000	3000	3000	5000	5000	-	5000	5000	5000	12000
	25A	-	-	3000	3000	4500	4500	-	3500	3500	4000	8500
	32A	-	-	-	2000	4000	4000	-	-	2000	3500	7000
	40A	-	-	-	2000	3000	3000	-	-	2000	2500	6000
	50A	-	-	-	-	3000	3000	-	-	-	2000	5500
	63A	-	-	-	-	3000	3000	-	-	-	2000	5000

m.c.b. downstream		m.c.c.b. upstream										
		DPX ³ 160 DPX ³ 160 + RCD								DPX 250ER		
		16 - 25 - 36 - 50kA								25 - 36 - 50kA		
m.c.b. downstream		16A	25A	40A	63A	80A	100A	125A	160A	100A	160A	250A
TX ³ 10000A B and C curves	≤6A	6000	12000	12000	T	T	T	T	T	T	T	T
	10A	5000	7000	7000	7000	T	T	T	T	T	T	T
	13A	-	6000	6000	6000	6000	T	T	T	8000	T	T
	16A	-	6000	6000	6000	6000	T	T	T	8000	T	T
	20A	-	5000	5000	5000	5000	6000	T	T	6000	T	T
	25A	-	-	4500	4500	4500	4500	8500	T	5000	8500	T
	32A	-	-	-	3000	4000	4000	7000	10000	4000	7000	T
	40A	-	-	-	3000	3000	3000	6000	8000	3500	6000	T
	50A	-	-	-	-	3000	3000	5500	7000	3000	5500	7000
	63A	-	-	-	-	3000	3000	5000	6000	2000	5000	5000

. T = Total discrimination

Circuit breaker TX³ 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77,
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

5. GENERAL CHARACTERISTICS *(continued)*:

Selectivity between modular circuits breakers (MCB) and Moulded Case Circuit Breakers (MCCBs):

. Selectivity limit at 415 V~: values in Ampere.

m.c.b. downstream		m.c.c.b. upstream									
		DPX 250ER AB				DPX 250 / H / L (Thermal-magnetic & electronic)					
		36kA				36 - 70 - 100kA					
		90A	130A	170A	240A	25A	40A	63A	100A	160A	250A
TX ³ 10000A B and C curves	≤6A	T	T	T	T	6000	6000	6000	T	T	T
	10A	T	T	T	T	5000	5000	5000	15000	T	T
	13A	T	T	T	T	4000	4000	4000	10000	T	T
	16A	T	T	T	T	4000	4000	4000	10000	T	T
	20A	T	T	T	T	-	4000	4000	8000	T	T
	25A	T	T	T	T	-	3000	3000	6000	T	T
	32A	T	T	T	T	-	-	2000	5000	T	T
	40A	3500	T	T	T	-	-	2000	5000	10000	T
	50A	3000	4000	T	T	-	-	-	4000	8000	T
	63A	2000	3000	T	T	-	-	-	4000	8000	T

m.c.b. downstream		m.c.c.b. upstream								
		DPX ³ 250 DPX ³ 250 + diff (Thermo-magnetic & electronic)				DPX 400AB		DPX / H / L 1250 (Thermo-magnetic)		DPX / H 1600 (electronic)
		25 - 36 - 50 - 70kA				36kA		50 - 70 - 100kA		36 - 70kA
		100A	160A	200A	250A	320A	400A	500 to 1250A		630 to 1600A
TX ³ 10000A B and C curves	≤6A	T	T	T	T	T	T	T		T
	10A	T	T	T	T	T	T	T		T
	13A	T	T	T	T	T	T	T		T
	16A	T	T	T	T	T	T	T		T
	20A	T	T	T	T	T	T	T		T
	25A	T	T	T	T	T	T	T		T
	32A	5000	T	T	T	T	T	T		T
	40A	5000	T	T	T	T	T	T		T
	50A	4000	T	T	T	T	T	T		T
	63A	4000	T	T	T	T	T	T		T

. T = Total discrimination

Circuit breaker TX³ 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77,
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

6. COMPLIANCE AND APPROVALS

In accordance with standards:

- . IEC/EN 60898-1 with 10000A breaking capacity
- . IEC/EN 60947-2 with 10 kA breaking capacity
- . CEE guidelines : 73/23/CEE + 93/68/CEE
- . Legrand circuit-breakers can be used under the conditions of use as defined by IEC /EN 60947.
- . The performance of circuit breakers can be influenced by particular climates: hot dry, cold dry, hot humid, salt fog atmosphere

Classification according to Annex Q (standard IEC/EN 60947-1) :

- . Category C with a range test temperature -25 °C / +70 °C
- . salt fog atmosphere according to standard IEC 60068-2-52

Environment respect – Compliance with CEE directives:

- . Compliance with Directive 2002/95/EC of 27/01/03 called "RoHS" which provides for the banning of hazardous substances such as lead, mercury, cadmium, hexavalent chromium, brominated flame retardants polybrominated biphenyls (PBBs) and polybrominated diphenyl ethers (PBDEs) from 1st July 2006
- . Compliance with Directive 91/338/CEE of 18/06/91 and Decree 94-647 of 27/07/04

Plastic materials :

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

Packaging:

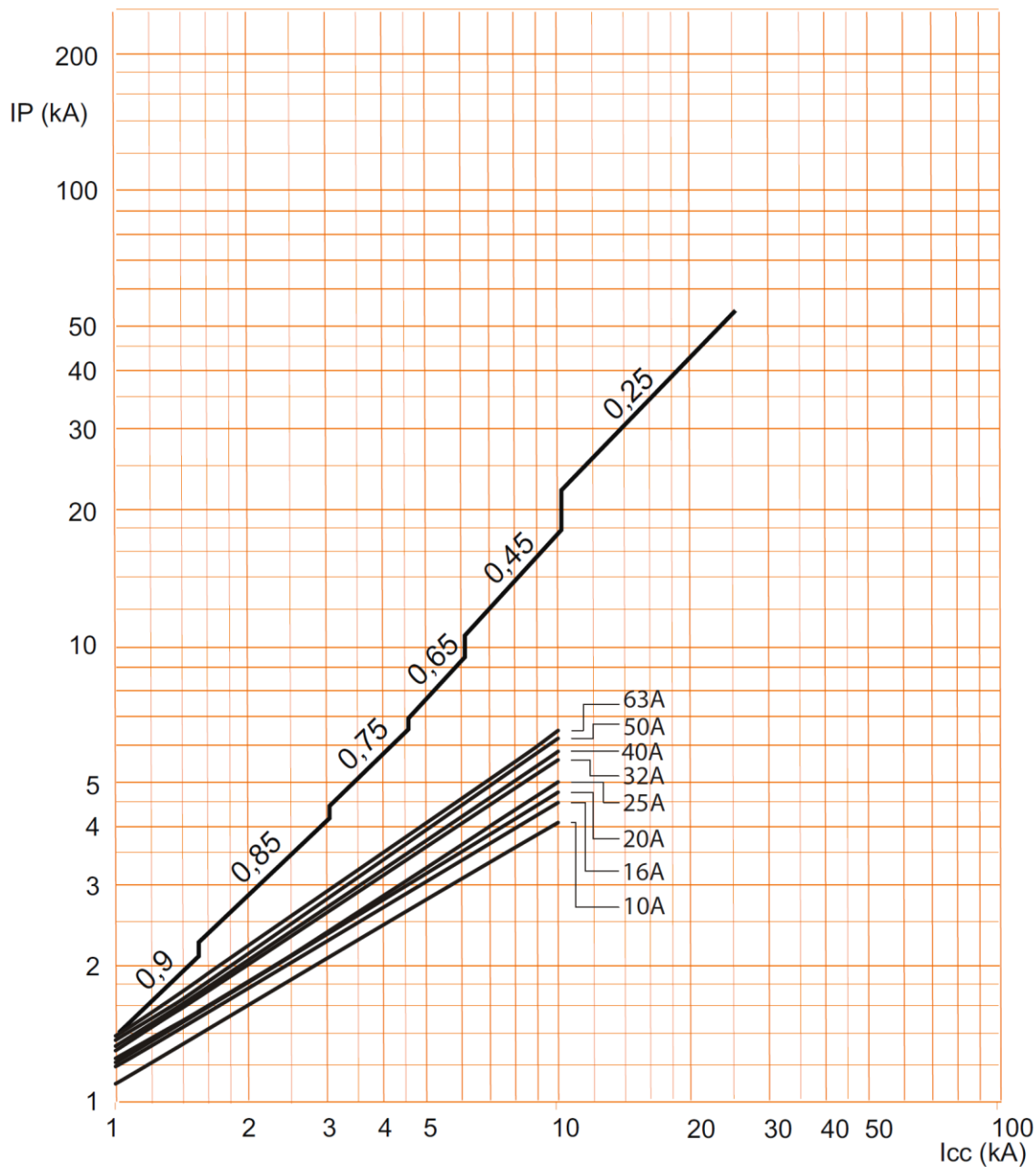
- . Design and manufacture of packaging in accordance with Decree 98-638 of 07.20.98 and Directive 94/62/EC

Circuit breaker TX³ 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77,
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

7. CHARACTERISTIC CURVES

Limiting current curve: circuit breakers B and C curves



. I_{cc} = Square value of symmetric component of the short circuit current (kA).

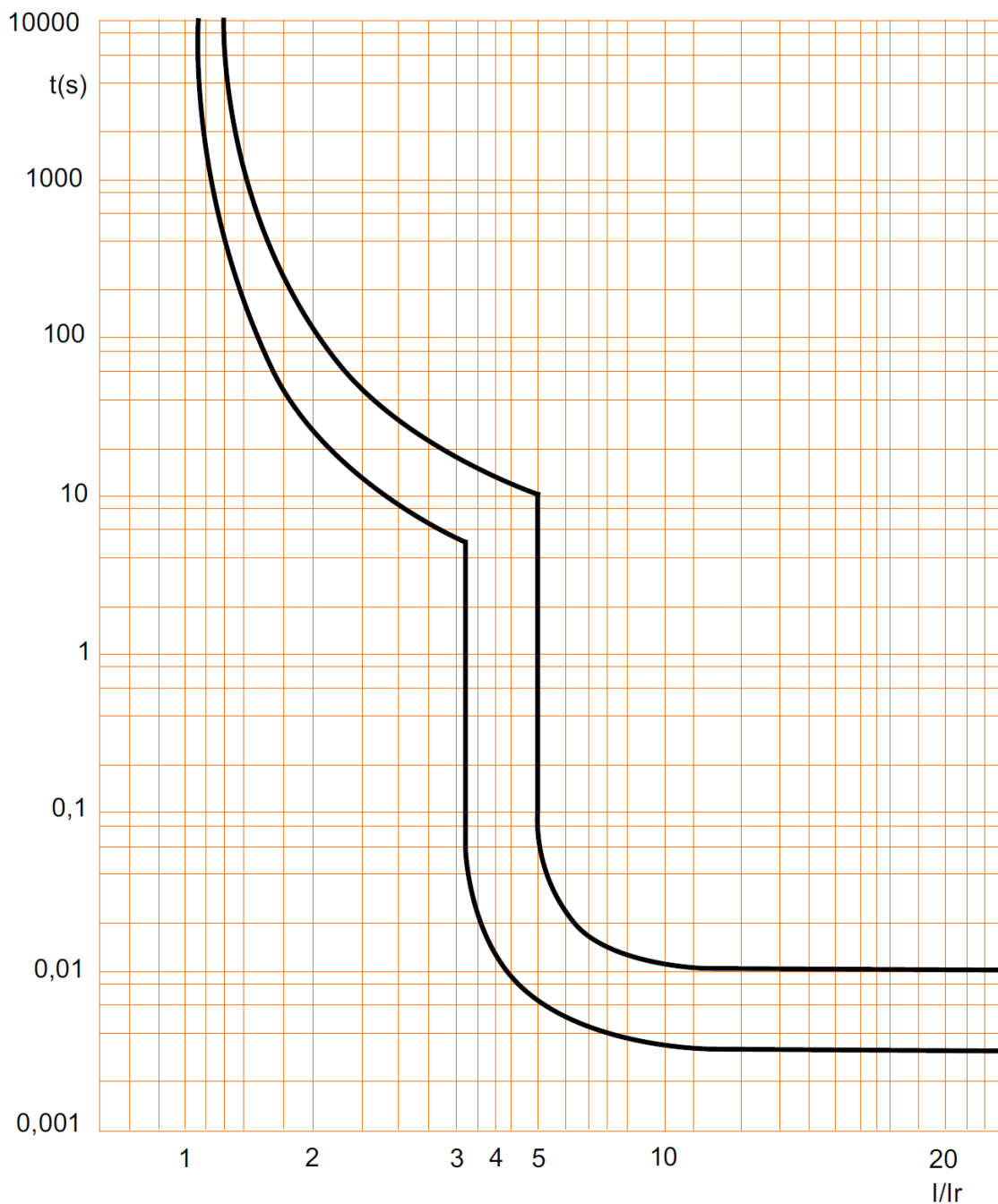
. IP = Max peak value (kA)

Circuit breaker TX³ 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77,
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

7. CHARACTERISTIC CURVES *(continued)*

Operating characteristic of circuit breakers B curve :

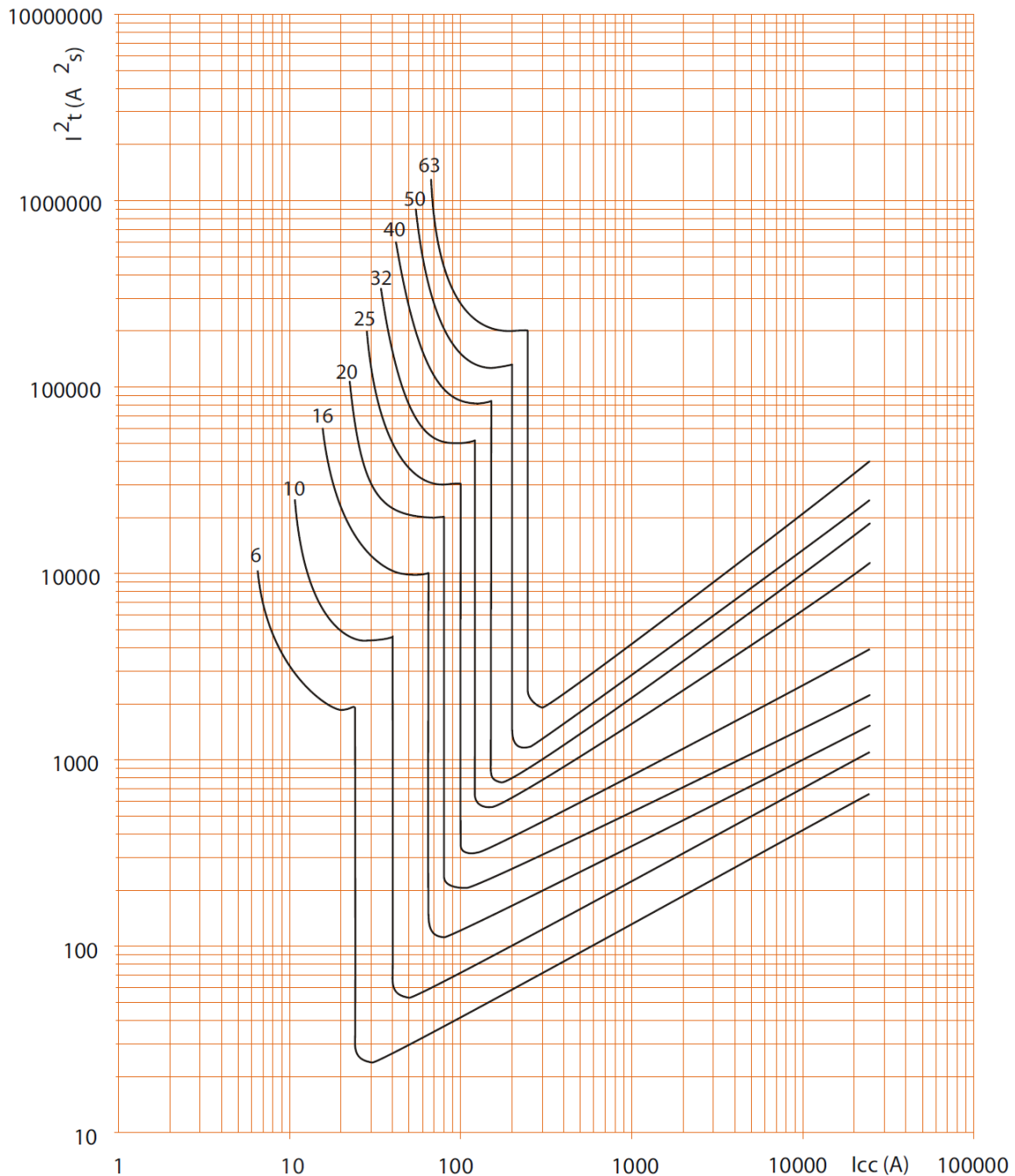


Circuit breaker TX³ 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77,
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

7. CHARACTERISTIC CURVES *(continued)*

. Limiting thermal energy curve of circuit breakers B curve , 2P (240V~ / 50Hz):



. Icc = Square value of symmetric component of the short circuit current (kA).

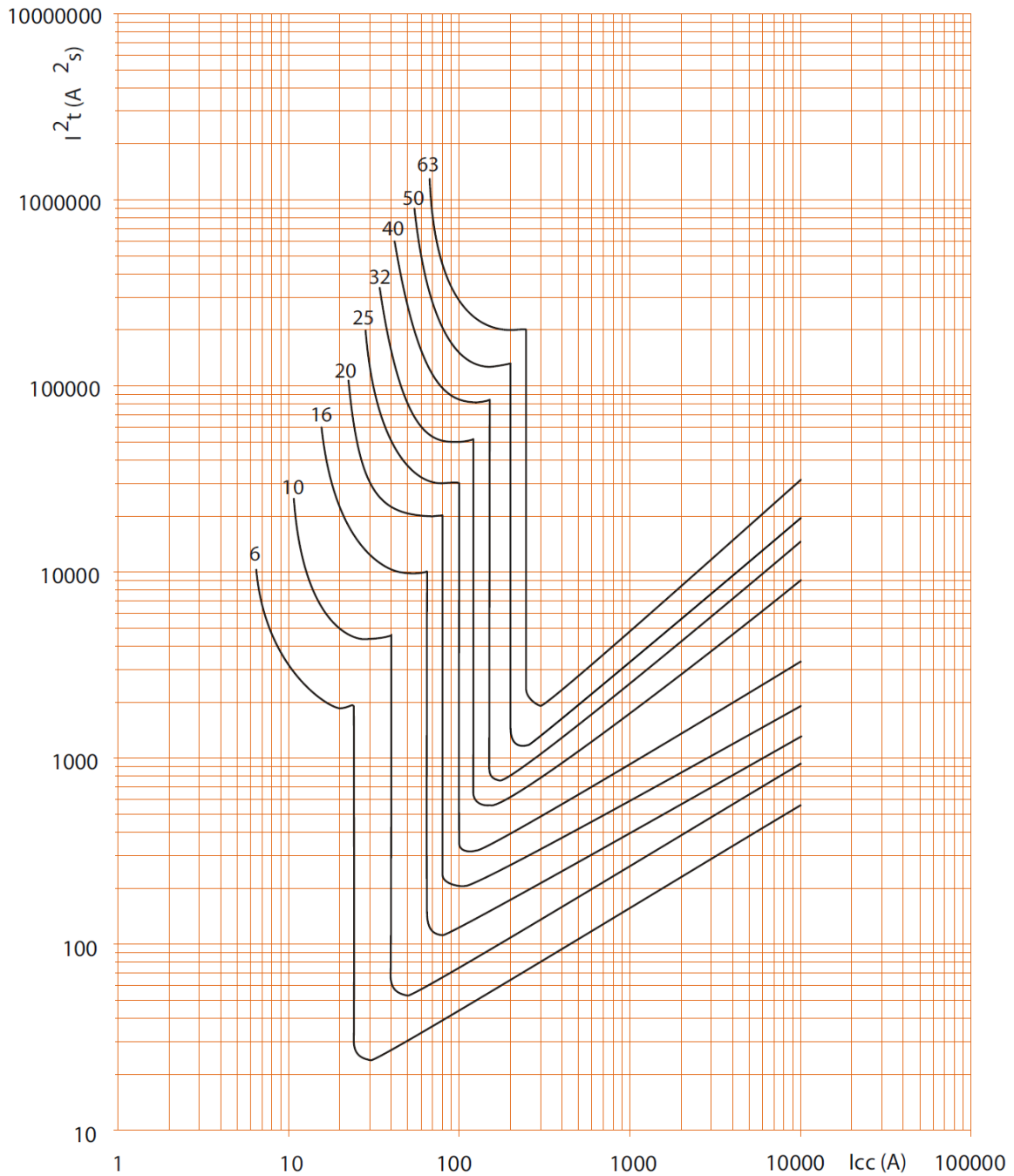
. I²t = Thermal energy limited (A²s).

Circuit breaker TX³ 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77,
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

7. CHARACTERISTIC CURVES *(continued)*

. Limiting thermal energy curve of circuit breakers B curve, 2P (415V~ / 50Hz) :



. I_{cc} = Square value of symmetric component of the short circuit current (kA).

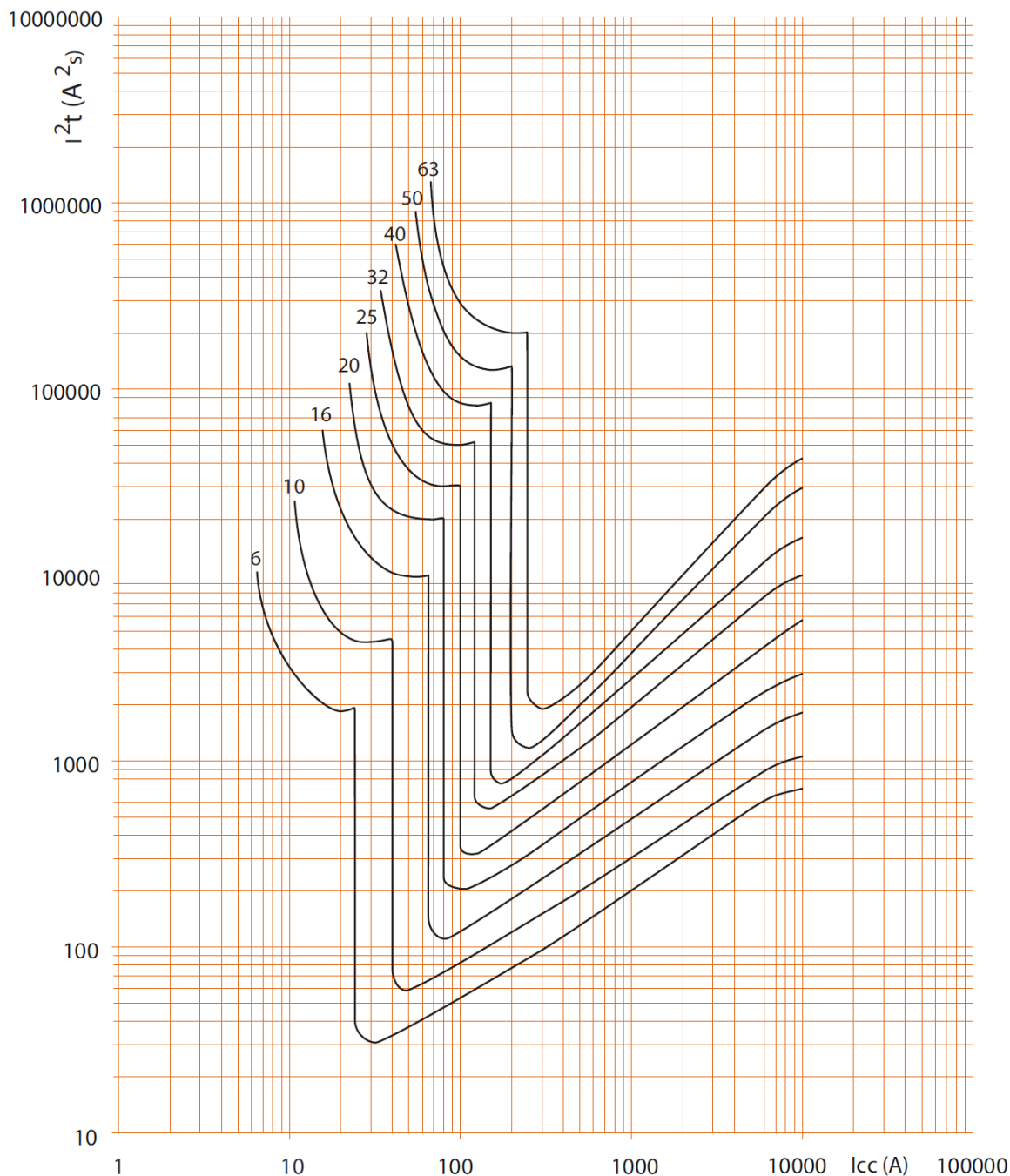
. I^2t = Thermal energy limited (A^2s).

Circuit breaker TX³ 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77,
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

7. CHARACTERISTIC CURVES *(continued)*

. Limiting thermal energy curve of circuit breakers B curve , 1P / 3P / 4P (415V~ / 50Hz) :



. I_{cc} = Square value of symmetric component of the short circuit current (kA).

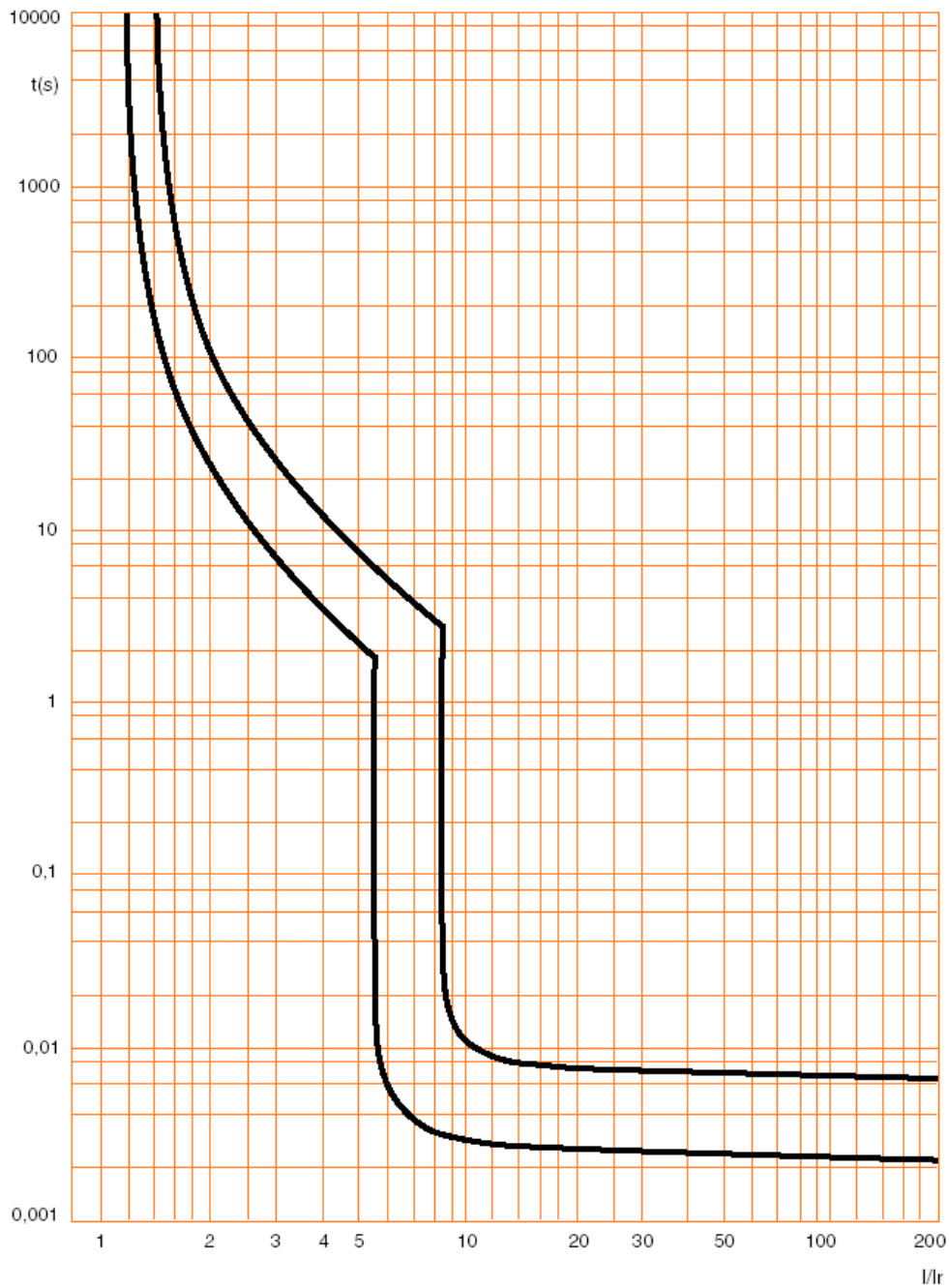
. I^2t = Thermal energy limited (A²s).

Circuit breaker TX³ 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77,
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

7. CHARACTERISTIC CURVES *(continued)*

Operating characteristic of circuit breakers C curve :

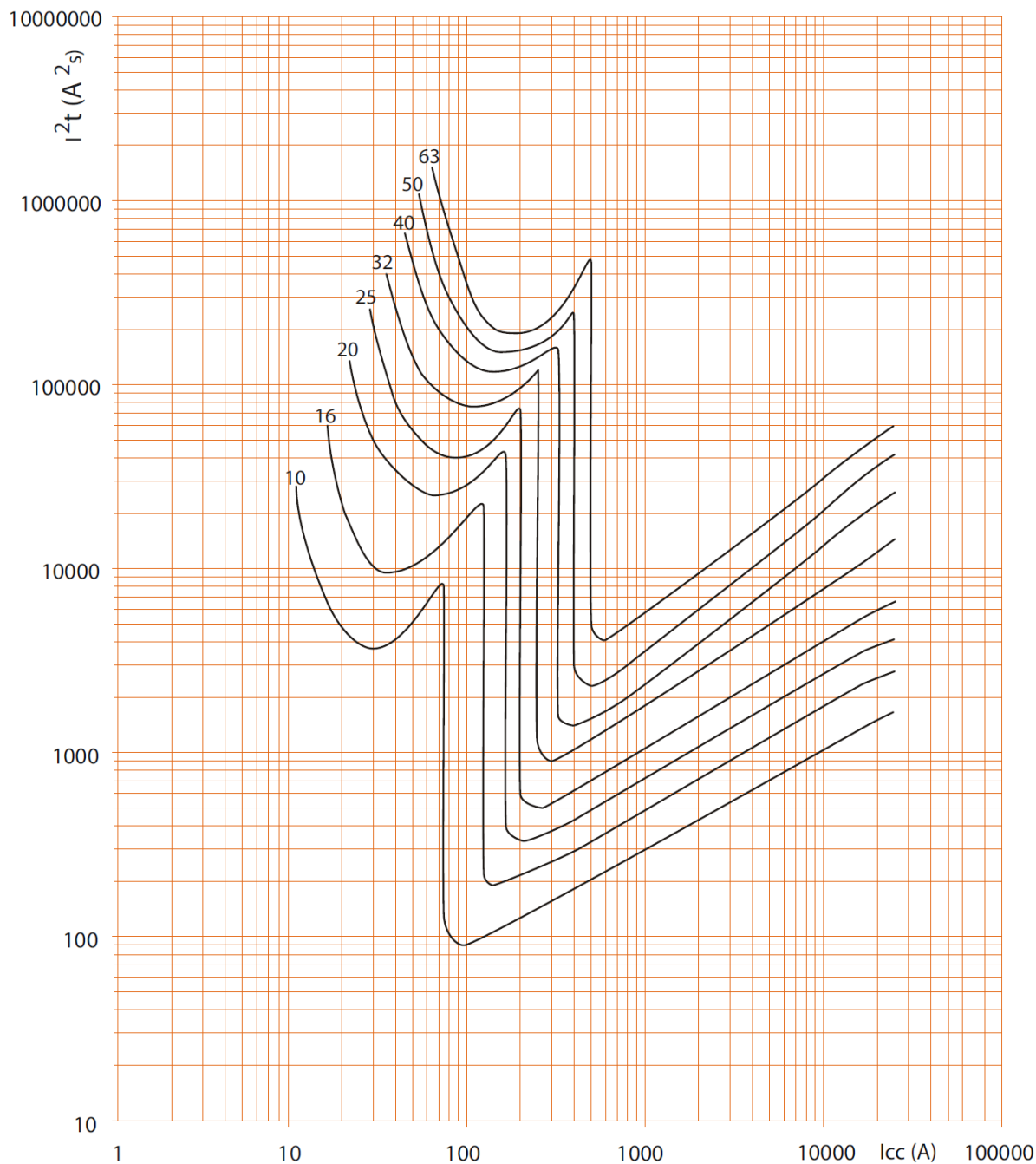


Circuit breaker TX³ 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77,
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

7. CHARACTERISTIC CURVES *(continued)*

. Limiting thermal energy curve of circuit breakers C curve , 2P (240V~ / 50Hz) :



. I_{cc} = Square value of symmetric component of the short circuit current (kA).

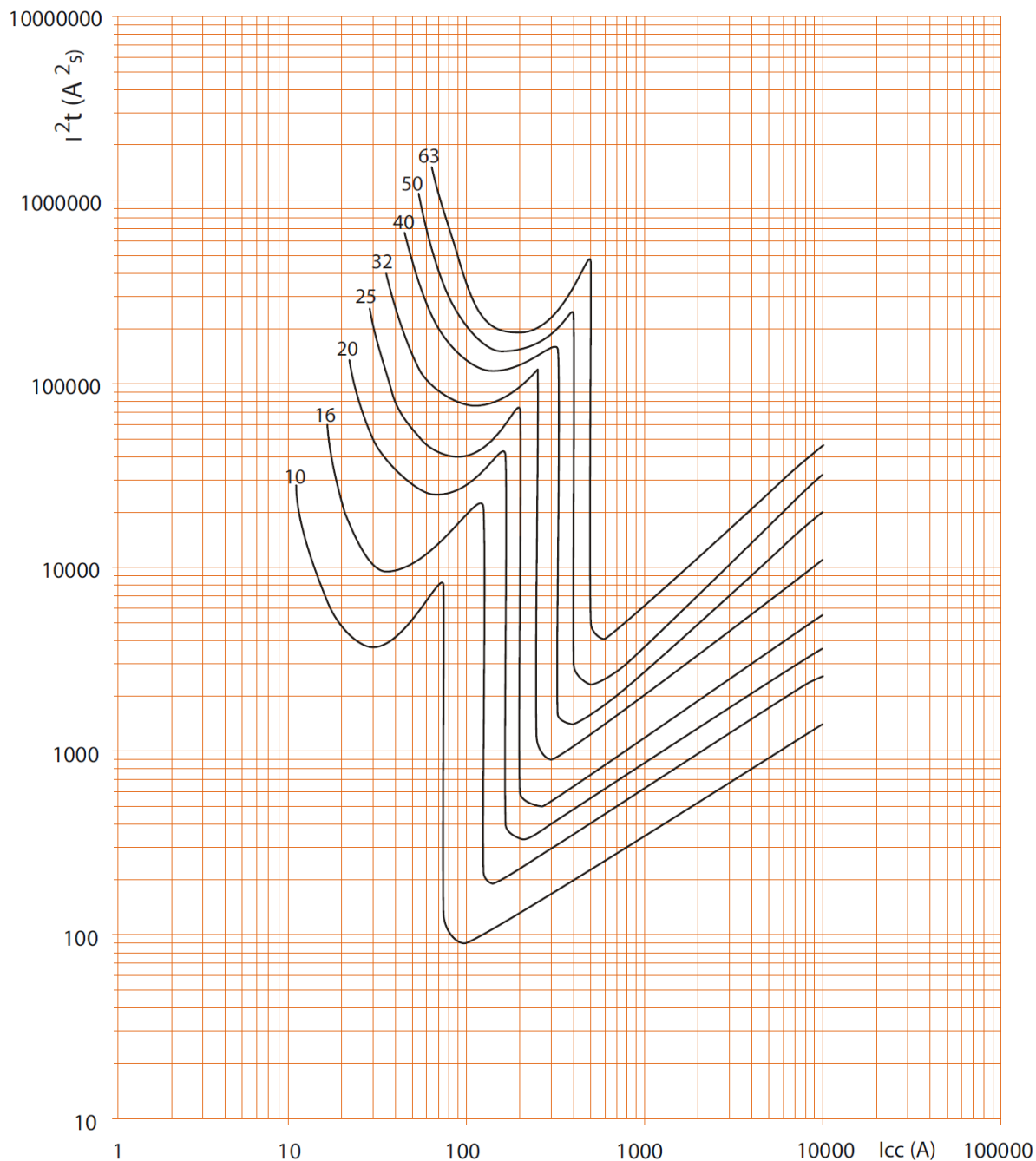
. I²t = Thermal energy limited (A²s).

Circuit breaker TX³ 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77,
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

7. CHARACTERISTIC CURVES *(continued)*

. Limiting thermal energy curve of circuit breakers C curve , 2P (415V~ / 50Hz) :



. I_{cc} = Square value of symmetric component of the short circuit current (kA).

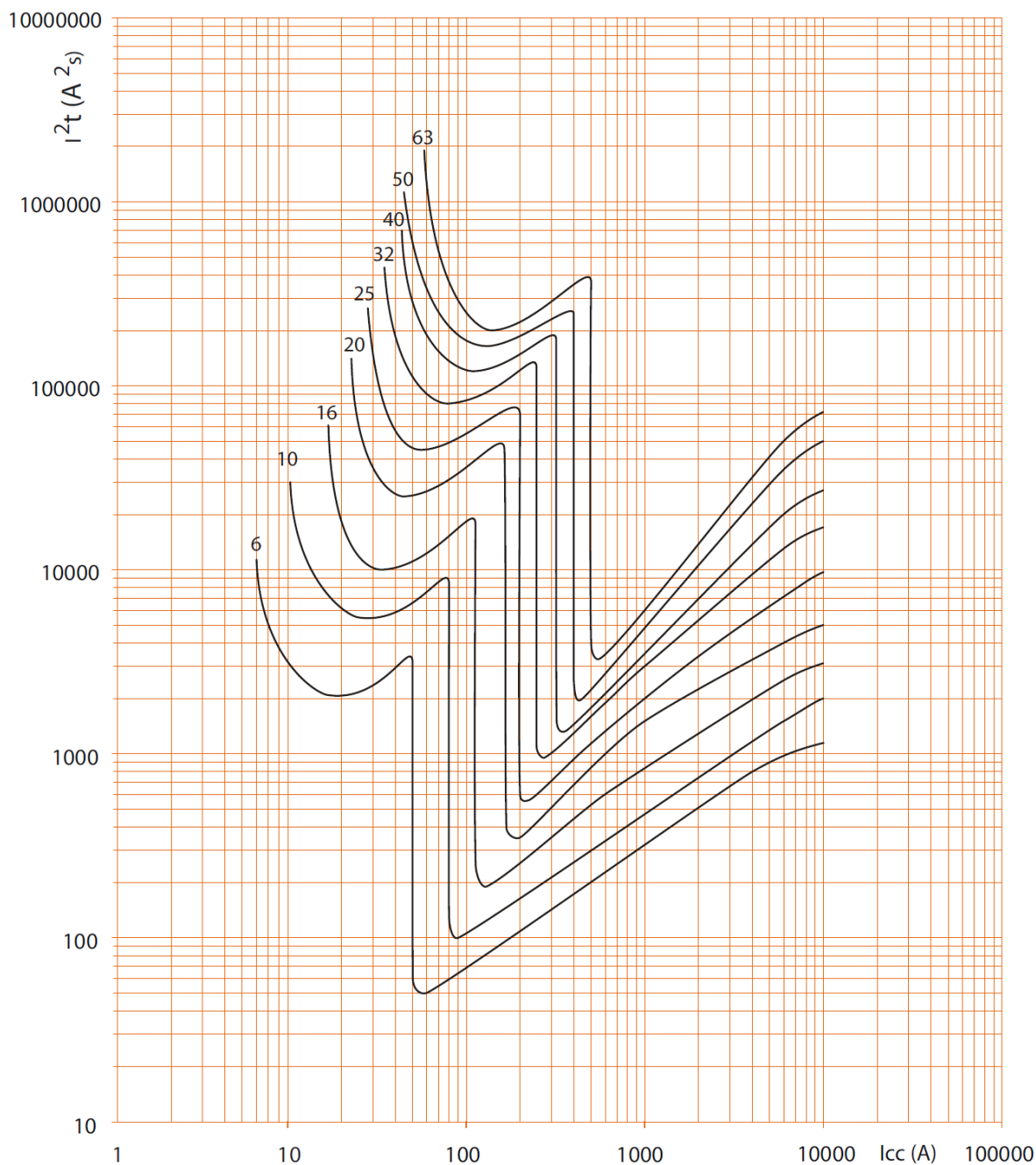
. I^2t = Thermal energy limited (A²s).

Circuit breaker TX³ 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77,
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

7. CHARACTERISTIC CURVES *(continued)*

. Limiting thermal energy curve of circuit breakers C curve , 1P / 3P / 4P (415V~ / 50Hz) :



. I_{cc} = Square value of symmetric component of the short circuit current (kA).

. I^2t = Thermal energy limited (A^2s).

Circuit breaker TX³ 10000 A up to 63A (1 module per pole)

Cat N°(s): 4 040 77 to 4 041 60, 4 04162 to 67, 4 041 69 to 77,
4 041 81, 4 041 84, 4 041 86 to 94, 4 041 96 to 4 042 01,
4 042 03 to 11, 4 042 13 to 18, 4 042 20 to 28, 4 042 32,
4 042 35, 4 042 37 to 45, 4 042 47 to 52, 4 042 54 to 62

8. AUXILIARIES AND ACCESSORIES

Wiring accessories:

- . Fork busbar or prong busbar
- . Sealable screw cover (cat n° 4 063 04).
- . Dispatcher row Lexiclic
- . Dispatcher row HX³.

Signalling auxiliaries - fork busbar adapted:

- . Auxiliary contact (½ module – cat n° 4 062 50).
- . Fault signalling changeover switch (½ module – cat n° 4 062 52).
- . Auxiliary contact modifiable in default signal (½ module – cat n° 4 062 56).
- . Auxiliary contact + fault signalling switch - can be modified to 2 auxiliary contacts (1 module - cat n° 4 062 64).

Signalling auxiliaries - prong busbar adapted:

- . Auxiliary contact (½ module – cat n° 4 062 58).
- . Fault signalling changeover switch (½ module – cat n° 4 062 60).
- . Auxiliary contact modifiable in default signal (½ module – cat n° 4 062 62).
- . Auxiliary contact + fault signalling switch - can be modified to 2 auxiliary contacts (1 module - cat n° 4 062 66).

Control auxiliaries:

- . Shunt releases (1 module - cat n°. 4 062 76 /78).
- . Under voltage release (1 module - cat n° 4 062 80 /82).
- . Overvoltage release POP (1 module - cat n° 4 062 86)
- . Autonomous shunt trip for NC push-button (1 module - cat n°. 4 062 84 / 87).

Motor driven control modules

- . Motor driven control module (1 module – cat n° 4 062 91)
- . Motor driven control module with automatic resetting integrated (2 modules – cat n° 4 062 93 /95)

Front external rotary handle

- . Black handle (cat n° 4 063 19)
- . Yellow and red handle (cat n° 4 063 20)

Possible combinations of m.c.b and auxiliaries:

- . Only the association of an MCB with signal auxiliaries guarantees the functionality of the "Great Dispatcher" DIN rail clamp.
- . Auxiliaries are clipped on the left of the m.c.b.
- . Maximum number of auxiliaries for one circuit-breaker: 3.
- . Two signalling auxiliaries max. (cat. n° 4 062 50 /52 /56 /64).
- . Only one control auxiliary (cat. n° 4 062 76 / 78 / 80 / 82 / 84 / 86 /87).
- . One remote control or Stop & Go motor driven remote control
- . 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

Sealing:

- . Possible in "Open" position (OFF) or "Close" position (ON).

Locking:

- . By 5 mm padlock (cat. N° 4 063 13) or 6 mm padlock (cat. n° 0 227 97) with padlock support (cat. n° 4 063 03) in "Open" position (OFF).

Installation software:

- . XL PRO³

