

DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

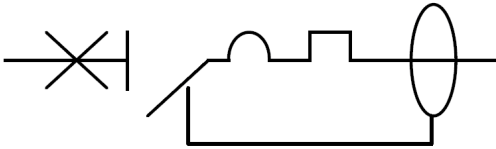


CONTENTS	PAGE
1. Description - Use	1
2. Range	1
3. Overall dimensions	1
4. Preparation – Connection	2
5. General characteristics	2
6. Conformities and approvals	30
7. Characteristic curves	31
8. Auxiliaries and accessories	38

1. DESCRIPTION - USE

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. RANGE

Number of poles:

- . 2 poles, 4 poles.

Width:

- . Double pole – 4 modules (4 x 17.8 mm = 71.2 mm).
- . Four pole – 7 modules (7 x 17.8 mm = 124.6 mm).

Rated currents:

- . Double pole – 10 / 16 / 20 / 25 / 32 / 40 / 50 / 63 A.
- . Four pole – 40 / 50 / 63 A.

Tripping characteristics and magnetic tripping calibrations:

- . Curve C (between 5 and 10 In)

Thermal threshold:

- . Non operating current (I_{nf}): 1.05 I_n.
- . Operating current (I_f): 1.3 I_n.

Sensitivity - Operating time:

- . 10 mA instantaneous
- . 30 mA instantaneous.
- . 300 mA instantaneous.

1. DESCRIPTION – USE (continued)

Type :

- . AC (sinusoidal AC fault currents).

Rated Voltage / Frequency:

- . 230 / 400 V ~, 50 Hz with standard tolerances.

Maximum operating voltage:

- . 440 V ~, 50 Hz with standard tolerances.

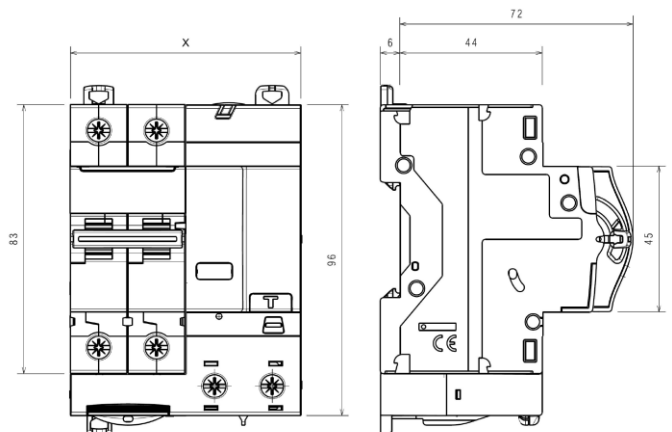
Minimum operating voltage:

- . 170 V ~, 50 Hz.

Breaking capacity:

- . 6000 A according to IEC/EN/NF 60898-1
- . 10 kA according to IEC/EN/NF 60947-2

3. OVERALL DIMENSIONS



N° of poles	"X"
2P	71.2 mm
4P	124.6 mm

DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

4. PREPARATION - CONNECTION

Fixing:

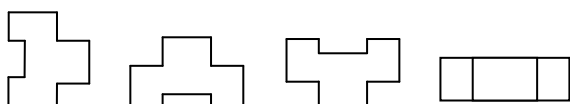
- . On symmetric rail EN/IEC 60715 or DIN 35.

Supply:

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

Operating position:

- . Vertical, Horizontal, backwards, on the side



Screw terminals:

- . Terminals protected against accidental contact (IP20).
- . Cage terminals, with release and captive screw
- . The screw terminals of the differential block are separated by built-in shields.
- . The screw terminals of the m.c.b. can be separated by Insulating shields (cat n°. 406 305).

Terminal depth :

- . 14 mm.

Stripping length recommended:

- . 11 mm.

Screw head:

- . Mixed, slotted and Pozidriv n°2

Tightening torque:

- . Recommended: 2.5 Nm.
- . Min: 2 Nm. Max: 3 Nm.

Connectable section:

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

Tools required:

- . For the terminals: screwdriver Pozidriv n°2 or flat screwdriver 5,5 mm (6,5 mm maximum).
- . For fixing: flat screwdriver 5,5 mm (6 mm maximum).

Manual actuation of the circuit-breaker:

- . By the 2-position ergonomic handle of the associated m.c.b.:
I / ON: Closed circuit.
0 / OFF: Opened circuit.

Display of contact status:

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

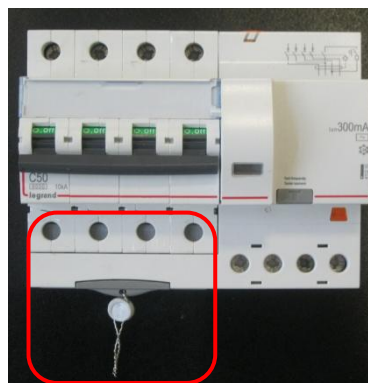
4. PREPARATION - CONNECTION (continued)

Display of differential fault trip:

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

Sealing:

- . Possible in "Open" position (OFF) or "Close" position (ON).
- . The screw cover sealed, locks the access of downstream screws of the breaker.



Lockout:

- . By 5 mm padlock (cat. N° 406313) or 6 mm padlock (cat. N° 227 97) with padlock support (cat. N° 044 42)

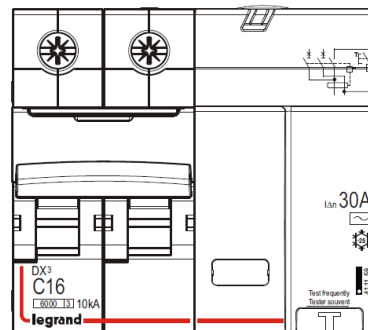
Labelling:

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

5. GENERAL CHARACTERISTICS

Front side marking:

- . By permanent ink pad printing.



DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

5. GENERAL CHARACTERISTICS (continued)

Short-circuit breaking capacity:

. single-phase or three-phase network (50/60 Hz AC)

According to IEC 60947-2

Un		2P	4P
110 V~	Icu	32 kA	-
230 V~		25 kA	25 kA
400 V~		10 kA	10 kA
440 V~		8 kA	8 kA

Un	Ics	75% of Icu	75% of Icu
110 V~	Ics	75% of Icu	75% of Icu
230 V~			
400 V~			
440 V~			

Breaking capacity of a single pole:

- . In three-phase network 220 / 380 V~ to 240 / 415 V~
 - for TN neutral system, I_{cn1} = 10 kA (under 220 to 240 V~)
 - for IT neutral system, I_{it} = 3 kA (under 380 to 415 V~)
- . In three-phase network 110 / 220 V~ to 120 / 240 V~
 - for TN neutral system, I_{cn1} = 25 kA (under 110 to 127 V~)
 - for IT neutral system, I_{it} = 6 kA (under 220 to 240 V~)

Residual breaking capacity I Δ m:

- . According to EN 61009-1 § 9.12.11.4d (I Δ m: short-circuit to ground)
- I Δ m = 3.6 kA (60% of I_{cu} of the associated m.c.b.)

"Test" key operating voltages:

U min	170 V ~
U max	440 V ~

This voltage range gives the possibility to use double-pole differential blocks in 230 V or 400 V, and triple / four pole differential blocks in three phase network with or without neutral 230 V and 400 V. For the wiring of a four-pole differential block in a three phase network without neutral, make sure to properly wired three consecutive poles to supply the test key.

Neutral system:

. IT – TT – TN.

Insulation rated voltage:

. U_i = 500 V according to IEC/EN 61009-1

Pollution degree:

. 2.

Dielectric strength:

. 2500 V

Pulse rated voltage:

. U_{imp} = 4 kV (wave 1.5 / 50 μ s).

Operation at 400Hz:

- . The magnetic threshold increases by 45%.
- . The value of the threshold varies with frequency; see curve on page 37.

5. GENERAL CHARACTERISTICS (continued)

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.

Protection against unwanted tripping:

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

Resistance to sinusoidal vibrations:

- . According to 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)

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

Power dissipated and impedance per device at I_n:

I _n	Double pole		Four pole	
	Z (m Ω)	P (W)	Z (m Ω)	P (W)
10 A	29,0	2,9	–	–
16 A	14,5	3,7	–	–
20 A	10,3	4,1	–	–
25 A	8,8	5,5	–	–
32 A	6,7	6,9	–	–
40 A	5,3	8,5	10,4	16,6
50 A	3,8	9,5	7,4	18,6
63 A	2,9	11,5	5,7	22,6

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).

Packed volume:

- . Double pole: 1 dm³ per device.
- . Four pole: 1,58 dm³ per device.

DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

5. GENERAL CHARACTERISTICS *(continued)*

Average weight per device:

- . Double pole: 0,5 kg
- . Four pole: 0,97 kg

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
10	12.5	11.5	11.1	10.7	10.3	10.0	9.7	9.3	9.0	8.7
13	16.3	15.0	14.3	13.9	13.4	13.0	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
30	38.3	36.0	34.5	33.0	31.5	30.0	28.8	27.3	26.1	24.9
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

. **Variation of the sensitivity of the residual current device according to the ambient temperature inside the cabinet or the enclosure where the RCBO is located.**

. No derating of the differential block depending on the ambient temperature between - 25 ° C and +40 ° C.

. Derating between + 40 ° C to + 70 ° C :

Temperature	40 °C	50 °C	60 °C	70 °C
% of I _Δ	100 %	95 %	90 %	85 %

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 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 keep the devices apart with 0.5 module spacing elements (cat. N° 406 307).

DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

5. GENERAL CHARACTERISTICS *(continued)*

Coordination between RCBOs 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 230/400V.

r.c.b.o. downstream		Fuse upstream										
		gG Type										
		≤20A	25A	32A	40A	50A	63A	80A	100A	125A	160A	
DX ³ 6000/10kA Curve C	10A	100kA	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	40kA

r.c.b.o. downstream		Fuse upstream										
		aM Type										
		≤20A	25A	32A	40A	50A	63A	80A	100A	125A	160A	
DX ³ 6000/10kA Curve C	10A	100kA	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	40kA

DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

5. GENERAL CHARACTERISTICS *(continued)*

Coordination between RCBOs and MCBs, 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 230/400V.

		m.c.b. upstream							
		DX ³ 10000/16kA							
		Curves B, C							
r.c.b.o. downstream		≤25A	32A	40A	50A	63A	80A	100A	125A
DX ³ 6000/10kA Curve C	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

		m.c.b. upstream							
		DX ³ 10000/16kA							
		Curve D							
r.c.b.o. downstream		≤25A	32A	40A	50A	63A	80A	100A	125A
DX ³ 6000/10kA Curve C	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

DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

5. GENERAL CHARACTERISTICS *(continued)*

Coordination between RCBOs and MCBs, 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 230/400V.

		m.c.b. upstream							
		DX ³ 25kA							
		Curves B, C							
r.c.b.o. downstream		≤25A	32A	40A	50A	63A	80A	100A	125A
DX ³ 6000/10kA Curve C	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							
		DX ³ 25kA							
		Curve D							
r.c.b.o. downstream		≤25A	32A	40A	50A	63A	80A	100A	125A
DX ³ 6000/10kA Curve C	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

DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

5. GENERAL CHARACTERISTICS *(continued)*

Coordination between RCBOs and MCBs, 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 230/400V.

r.c.b.o. downstream		m.c.b. upstream										
		DX ³ 36kA						DX ³ 50kA				
		Curve C						Curves B, C et D				
		≤25A	32A	40A	50A	63A	80A	≤25A	32A	40A	50A	63A
DX ³ 6000/10kA Curve C	10A	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	-	-	-	-	-

DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

5. GENERAL CHARACTERISTICS *(continued)*

Coordination between RCBOs and MCCBs, 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 230/400V.

r.c.b.o. downstream		m.c.c.b. upstream											
		DPX 125						DPX 125					
		16kA						25kA					
		16A	25A	40A	63A	100A	125A	16A	25A	40A	63A	100A	125A
DX ³ 6000/10kA Curve C	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

r.c.b.o. downstream		m.c.c.b. upstream													
		DPX 125							DPX ³ 160 / DPX ³ 160 + diff.						
		36kA							16kA						
		16A	25A	40A	63A	100A	125A	16A	25A	40A	63A	80A	100A	125A	160A
DX ³ 6000/10kA Curve C	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

DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

5. GENERAL CHARACTERISTICS *(continued)*

Coordination between RCBOs and MCCBs, 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 230/400V.

		m.c.c.b. upstream												
		DPX ³ 160 / DPX ³ 160 + diff.								DPX 160				
		25 - 36 - 50kA								25 - 36 - 50kA				
r.c.b.o. downstream		16A	25A	40A	63A	80A	100A	125A	160A	25A	40A	63A	100A	125A
DX ³ 6000/10kA Curve C	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												
		DPX 250ER			DPX 250ER AB				DPX ³ 250 / DPX ³ 250+diff. (Thermo-Magnetic & electronic)				DPX 400AB	
		25 - 36 - 50kA			36kA				25 - 36 - 50 - 70kA				36kA	
r.c.b.o. downstream		100A	160A	250A	90A	130A	170A	240A	100A	160A	200A	250A	320A	400A
DX ³ 6000/10kA Curve C	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	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	25kA
	32A	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA
	40A	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	20kA	20kA
	50A	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	25kA	16kA	16kA
	63A	20kA	20kA	20kA	20kA	20kA	20kA	20kA	25kA	25kA	25kA	25kA	16kA	16kA

DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

5. GENERAL CHARACTERISTICS *(continued)*

Coordination between RCBOs and MCCBs, 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 230/400V.

		m.c.c.b. upstream										
		DPX / H / L 250 (Thermo-Magnetic & electronic)						DPX / H / L 630 (Thermo-Magnetic & electronic)				
		36 – 70 – 100kA						36 – 70 – 100kA				
r.c.b.o. downstream		25A	40A	63A	100A	160A	250A	250A	320A	400A	500A	630A
DX ³ 6000/10kA Curve C	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	25kA	20kA	20kA	20kA	20kA
	50A	-	-	25kA	25kA	25kA	25kA	25kA	16kA	16kA	16kA	16kA
	63A	-	-	20kA	20kA	20kA	20kA	20kA	16kA	16kA	16kA	16kA

		m.c.c.b. upstream	
		DPX / H / L 1250 (Thermo-Magnetic)	DPX / H 1600 (electronic)
		50 – 70 - 100kA	36 – 70kA
r.c.b.o. downstream		500 à 1250A	630 à 1600A
DX ³ 6000/10kA Curve C	10A	25kA	25kA
	16A	25kA	25kA
	20A	25kA	25kA
	25A	20kA	20kA
	32A	15kA	15kA
	40A	15kA	15kA
	50A	12,5	12,5
	63A	12,5	12,5

DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

5. GENERAL CHARACTERISTICS *(continued)*

Coordination between RCBOs and fuses, three-phase network (+ neutral) 230 / 240 V~ according to IEC/EN 60947-2:5.

		Fuse upstream									
		gG Type									
r.c.b.o. downstream		≤20A	25A	32A	40A	50A	63A	80A	100A	125A	160A
DX ³ 6000/10kA Curve C	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	40kA

		Fuse upstream									
		aM Type									
r.c.b.o. downstream		≤20A	25A	32A	40A	50A	63A	80A	100A	125A	160A
DX ³ 6000/10kA Curve C	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	40kA

DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

5. GENERAL CHARACTERISTICS *(continued)*

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

		m.c.b. upstream							
		DX ³ 10000/16kA							
		Curves B, C							
r.c.b.o. downstream		≤25A	32A	40A	50A	63A	80A	100A	125A
DX ³ 6000/10kA Curve C	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

		m.c.b. upstream							
		DX ³ 10000/16kA							
		Curve D							
r.c.b.o. downstream		≤25A	32A	40A	50A	63A	80A	100A	125A
DX ³ 6000/10kA Curve C	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

DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

5. GENERAL CHARACTERISTICS *(continued)*

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

		m.c.b. upstream							
		DX ³ 25kA							
		Curves B, C							
r.c.b.o. downstream		≤25A	32A	40A	50A	63A	80A	100A	125A
DX ³ 6000/10kA Curve C	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							
		DX ³ 25kA							
		Curve D							
r.c.b.o. downstream		≤25A	32A	40A	50A	63A	80A	100A	125A
DX ³ 6000/10kA Curve C	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

DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

5. GENERAL CHARACTERISTICS *(continued)*

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

		m.c.b. upstream										
		DX ³ 36kA						DX ³ 50kA				
		Curve C						Curves B, C et D				
r.c.b.o. downstream		≤25A	32A	40A	50A	63A	80A	≤25A	32A	40A	50A	63A
DX ³ 6000/10kA Curve C	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
	32A	-	-	50kA	50kA	50kA	50kA	-	-	50kA	50kA	50kA
	40A	-	-	-	50kA	50kA	50kA	-	-	-	50kA	50kA
	50A	-	-	-	-	50kA	50kA	-	-	-	-	50kA
	63A	-	-	-	-	-	50kA	-	-	-	-	-

DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

5. GENERAL CHARACTERISTICS *(continued)*

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

r.c.b.o. downstream		m.c.c.b. upstream													
		DPX 125						DPX 125							
		25kA						36kA							
		16A	25A	40A	63A	100A	125A	16A	25A	40A	63A	100A	125A		
DX ³ 6000/10kA Curve C	10A	35kA	35kA	35kA	35kA	35kA	35kA	35kA	35kA	40kA	40kA	40kA	40kA	40kA	40kA
	16A		35kA	35kA	35kA	35kA	35kA			40kA	40kA	40kA	40kA	40kA	40kA
	20A		35kA	35kA	35kA	35kA	35kA			40kA	40kA	40kA	40kA	40kA	40kA
	25A			35kA	35kA	35kA	35kA				40kA	40kA	40kA	40kA	40kA
	32A			35kA	35kA	35kA	35kA				40kA	40kA	40kA	40kA	40kA
	40A				35kA	35kA	35kA					40kA	40kA	40kA	40kA
	50A					25kA	25kA	25kA					25kA	25kA	25kA
	63A						25kA	25kA						25kA	25kA

r.c.b.o. downstream		m.c.c.b. upstream							
		DPX ³ 160 / DPX ³ 160 + diff.							
		16kA							
		16A	25A	40A	63A	80A	100A	125A	160A
DX ³ 6000/10kA Curve C	10A	28kA	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
	63A						28kA	28kA	28kA

DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

5. GENERAL CHARACTERISTICS *(continued)*

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

		m.c.c.b. upstream							
		DPX ³ 160 / DPX ³ 160 + diff.							
		25kA							
r.c.b.o. downstream		16A	25A	40A	63A	80A	100A	125A	160A
DX ³ 6000/10kA Curve C	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							
		DPX ³ 160 / DPX ³ 160 + diff.							
		36 - 50kA							
r.c.b.o. downstream		16A	25A	40A	63A	80A	100A	125A	160A
DX ³ 6000/10kA Curve C	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

DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

5. GENERAL CHARACTERISTICS *(continued)*

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

		m.c.c.b. upstream									
		DPX 160					DPX 160				
		25kA					36 - 50kA				
r.c.b.o. downstream		25A	40A	63A	100A	125A	25A	40A	63A	100A	125A
DX ³ 6000/10kA Curve C	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.c.b. upstream									
		DPX 250ER			DPX 250ER			DPX 250ER AB			
		25kA			36 - 50kA			36kA			
r.c.b.o. downstream		100A	160A	250A	100A	160A	250A	90A	130A	170A	240A
DX ³ 6000/10kA Curve C	10A	40kA	40kA	40kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA
	16A	40kA	40kA	40kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA
	20A	40kA	40kA	40kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA
	25A	40kA	40kA	40kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA
	32A	40kA	40kA	40kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA
	40A	40kA	40kA	40kA	50kA	50kA	50kA	50kA	50kA	50kA	50kA
	50A	36kA	36kA	36kA	36kA	36kA	36kA	36kA	36kA	36kA	36kA
	63A	30kA	30kA	30kA	30kA	30kA	30kA	30kA	30kA	30kA	30kA

DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

5. GENERAL CHARACTERISTICS *(continued)*

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

		m.c.c.b. upstream									
		DPX ³ 250 / DPX ³ 250+diff. (Thermo-Magnetic & electronic)				DPX ³ 250 / DPX ³ 250+diff. (Thermo-Magnetic & electronic)				DPX 400AB	
		25kA				36 - 50 - 70kA				36kA	
r.c.b.o. downstream		100A	160A	200A	250A	100A	160A	200A	250A	320A	400A
DX ³ 6000/10kA Curve C	10A	40kA	40kA	40kA	40kA	50kA	50kA	50kA	50kA	50kA	50kA
	16A	40kA	40kA	40kA	40kA	50kA	50kA	50kA	50kA	50kA	50kA
	20A	40kA	40kA	40kA	40kA	50kA	50kA	50kA	50kA	50kA	50kA
	25A	40kA	40kA	40kA	40kA	50kA	50kA	50kA	50kA	50kA	50kA
	32A	40kA	40kA	40kA	40kA	50kA	50kA	50kA	50kA	50kA	50kA
	40A	40kA	40kA	40kA	40kA	50kA	50kA	50kA	50kA	50kA	50kA
	50A	40kA	40kA	40kA	40kA	50kA	50kA	50kA	50kA	30kA	30kA
	63A	40kA	40kA	40kA	40kA	50kA	50kA	50kA	50kA	30kA	30kA

		m.c.c.b. upstream										
		DPX / H / L 250 (Thermo-Magnetic & electronic)						DPX / H / L 630 (Thermo-Magnetic & electronic)				
		36 - 70 - 100kA						36 - 70 - 100kA				
r.c.b.o. downstream		25A	40A	63A	100A	160A	250A	250A	320A	400A	500A	630A
DX ³ 6000/10kA Curve C	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	-	-	30kA	30kA	30kA	30kA	30kA	30kA	30kA	30kA	30kA
	63A	-	-	-	30kA	30kA	30kA	30kA	30kA	30kA	30kA	30kA

DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

5. GENERAL CHARACTERISTICS *(continued)*

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

		m.c.c.b. upstream	
		DPX / H / L 1250 (Thermo-Magnetic)	DPX / H 1600 (electronic)
		50 – 70 - 100kA	36 – 70kA
r.c.b.o. downstream		500 à 1250A	630 à 1600A
DX ³ 6000/10kA Curve C	10A	50kA	50kA
	16A	50kA	50kA
	20A	50kA	50kA
	25A	50kA	50kA
	32A	50kA	50kA
	40A	50kA	50kA
	50A	25kA	25kA
	63A	25kA	25kA

DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

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 RCBOs and fuses:

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

		Fuse upstream						
		gG Type						
r.c.b.o. downstream		40A	50A	63A	80A	100A	125A	160A
DX ³ 6000/10kA Curve C	10A	1600	2200	3200	3600	7000	T	T
	16A	1400	1800	2600	3000	5600	8000	T
	20A	1200	1500	2200	2500	4600	6300	T
	25A	-	1300	2000	2200	4100	5500	9000
	32A	-	1200	1700	1900	3500	4500	8000
	40A	-	-	-	1700	3000	4000	6000
	50A	-	-	-	1600	2600	3500	5000
	63A	-	-	-	-	2400	3300	5000

		Fuse upstream							
		aM Type							
r.c.b.o. downstream		32A	40A	50A	63A	80A	100A	125A	160A
DX ³ 6000/10kA Curve C	10A	1100	1700	2500	5000	7800	T	T	T
	16A	1000	1400	2100	4000	6000	9000	T	T
	20A	-	1300	1800	3400	5100	7000	T	T
	25A	-	1100	1600	3000	4500	6000	9300	T
	32A	-	-	1300	2400	3800	5000	7700	9000
	40A	-	-	-	2100	3100	4200	6400	7000
	50A	-	-	-	2000	2900	3700	6000	6000
	63A	-	-	-	-	2800	3500	5500	6000

DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

5. GENERAL CHARACTERISTICS *(continued)*

Selectivity between RCBOs and MCBs:

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

		m.c.b. upstream									
		DX ³ 10000/16kA									
		Curve B									
r.c.b.o. downstream		16A	20A	≤25A	32A	40A	50A	63A	80A	100A	125A
DX ³ 6000/10kA Curve C	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	-	-	-	-	-	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									
		DX ³ 10000/16kA									
		Curve C									
r.c.b.o. downstream		16A	20A	≤25A	32A	40A	50A	63A	80A	100A	125A
DX ³ 6000/10kA Curve C	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

DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

5. GENERAL CHARACTERISTICS *(continued)*

Selectivity between RCBOs and MCBs:

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

		m.c.b. upstream									
		DX ³ 10000/16kA									
		Curve D									
r.c.b.o. downstream		16A	20A	≤25A	32A	40A	50A	63A	80A	100A	125A
DX ³ 6000/10kA Curve C	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									
		DX ³ 25kA									
		Curve B									
r.c.b.o. downstream		16A	20A	≤25A	32A	40A	50A	63A	80A	100A	125A
DX ³ 6000/10kA Curve C	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

DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

5. GENERAL CHARACTERISTICS *(continued)*

Selectivity between RCBOs and MCBs:

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

		m.c.b. upstream									
		DX ³ 25kA									
		Curve C									
r.c.b.o. downstream		16A	20A	≤25A	32A	40A	50A	63A	80A	100A	125A
DX ³ 6000/10kA Curve C	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

		m.c.b. upstream									
		DX ³ 25kA									
		Curve D									
r.c.b.o. downstream		16A	20A	≤25A	32A	40A	50A	63A	80A	100A	125A
DX ³ 6000/10kA Curve C	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

DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

5. GENERAL CHARACTERISTICS *(continued)*

Selectivity between RCBOs and MCBs:

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

		m.c.b. upstream							
		DX ³ 36kA							
		Curve C							
r.c.b.o. downstream		16A	20A	≤25A	32A	40A	50A	63A	80A
DX ³ 6000/10kA Curve C	10A	120	150	210	500	700	1000	1800	3000
	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

		m.c.b. upstream						
		DX ³ 50kA						
		Curve B						
r.c.b.o. downstream		16A	20A	≤25A	32A	40A	50A	63A
DX ³ 6000/10kA Curve C	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	-	-	-	-	-	-	-

DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

5. GENERAL CHARACTERISTICS *(continued)*

Selectivity between RCBOs and MCBs:

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

		m.c.b. upstream						
		DX ³ 50kA						
		Curve C						
r.c.b.o. downstream		16A	20A	≤25A	32A	40A	50A	63A
DX ³ 6000/10kA Curve C	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						
		DX ³ 50kA						
		Curve D						
r.c.b.o. downstream		16A	20A	≤25A	32A	40A	50A	63A
DX ³ 6000/10kA Curve C	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	-	-	-	-	-	-	-

DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

5. GENERAL CHARACTERISTICS *(continued)*

Selectivity between RCBOs and MCCBs:

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

		m.c.c.b. upstream										
		DPX 125						DPX 160				
		16 - 25 - 36kA						25 - 36 - 50kA				
r.c.b.o. downstream		16A	25A	40A	63A	100A	125A	25A	40A	63A	100A	160A
DX ³ 6000/10kA Curve C	10A	5000	5000	5000	5000	6000	6000	7500	7500	7500	7000	T
	16A	-	4000	4000	4000	6000	6000	6000	6000	6000	6000	T
	20A	-	4000	4000	4000	5000	5000	-	5000	5000	5000	T
	25A	-	-	3000	3000	4500	4500	-	3500	3500	4000	8500
	32A	-	-	3000	3000	4000	4000	-	-	2000	3500	7000
	40A	-	-	-	3000	3000	3000	-	-	2000	2500	6000
	50A	-	-	-	-	3000	3000	-	-	-	2000	5500
	63A	-	-	-	-	3000	3000	-	-	-	2000	5000

DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

5. GENERAL CHARACTERISTICS *(continued)*

Selectivity between RCBOs and MCCBs:

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

		m.c.c.b. upstream										
		DPX ³ 160 DPX ³ 160 + diff.							DPX 250ER			
		16 - 25 - 36 - 50kA							25 - 39 - 50kA			
r.c.b.o. downstream		16A	25A	40A	63A	80A	100A	125A	160A	100A	160A	250A
DX ³ 6000/10kA Curve C	10A	5000	T	T	T	T	T	T	T	T	T	T
	16A	-	T	T	T	T	T	T	T	T	T	T
	20A	-	5000	5000	5000	5000	6000	T	T	8000	T	T
	25A	-	-	4500	4500	4500	4500	T	T	6000	8500	T
	32A	-	-	-	3000	4000	4000	T	T	5000	7000	T
	40A	-	-	-	3000	3000	3000	T	T	4000	6000	T
	50A	-	-	-	-	3000	3000	5500	7000	4000	5500	7000
	63A	-	-	-	-	3000	3000	5000	6000	3000	5000	6000

		m.c.c.b. upstream									
		DPX 250ER AB					DPX 250 / H / L (Thermo-Magnetic & electronic)				
		25kA					36 - 70 - 100kA				
r.c.b.o. downstream		90A	130A	170A	240A	25A	40A	63A	100A	160A	250A
DX ³ 6000/10kA Curve C	10A	T	T	T	T	5,000	5,000	5,000	T	T	T
	16A	T	T	T	T	4,000	4,000	4,000	T	T	T
	20A	T	T	T	T	-	4,000	4,000	8,000	T	T
	25A	T	T	T	T	-	3,000	3,000	6,000	T	T
	32A	T	T	T	T	-	-	2,000	5,000	T	T
	40A	4000	T	T	T	-	-	2,000	5,000	T	T
	50A	4000	4000	T	T	-	-	-	4,000	8,000	T
	63A	3000	3000	T	T	-	-	-	4,000	8,000	T

DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

5. GENERAL CHARACTERISTICS *(continued)*

Selectivity between RCBOs and MCCBs:

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

		m.c.c.b. upstream						
		DPX ³ 250 DPX ³ 250 + diff (Thermo-Magnetic & electronic)				DPX 400AB		DPX / H / L 630 (Thermo-Magnetic & electronic)
		25 - 36 - 50 - 70kA				36kA		36 - 70 - 100kA
r.c.b.o. downstream		100A	160A	200A	250A	320A	400A	250 à 630A
DX ³ 6000/10kA Curve C	10A	T	T	T	T	T	T	T
	16A	T	T	T	T	T	T	T
	20A	8000	T	T	T	T	T	T
	25A	6000	T	T	T	T	T	T
	32A	5000	T	T	T	T	T	T
	40A	5000	T	T	T	T	T	T
	50A	4000	8000	T	T	T	T	T
	63A	4000	8000	T	T	T	T	T

		m.c.c.b. upstream	
		DPX / H / L 1250 (Thermo-Magnetic)	DPX / H 1600 (electronic)
		50 - 70 - 100kA	36 - 70kA
r.c.b.o. downstream		500 à 1250A	630 à 1600A
DX ³ 6000/10kA Curve C	10A	T	T
	16A	T	T
	20A	T	T
	25A	T	T
	32A	T	T
	40A	T	T
	50A	T	T
	63A	T	T

6. CONFORMITIES AND APPROVALS**Compliance to standards:**

- . Standard reference: IEC/EN 61009-1 with 6000A breaking capacity
- . Standard reference: 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 IEC 60068-2-52

Respect of the environment – Compliance with CEE directives:

- . Compliance with Directive 2002/95/EC of 27/01/03 known as "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
- . Compliance with Directives 83/336/CEE, 92/31/EEC and 93/68/EEC (EMC).

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 of 07.20.98 and Directive 94/62/EC

Approvals obtained:

- . NF (France)
- . LOVAG

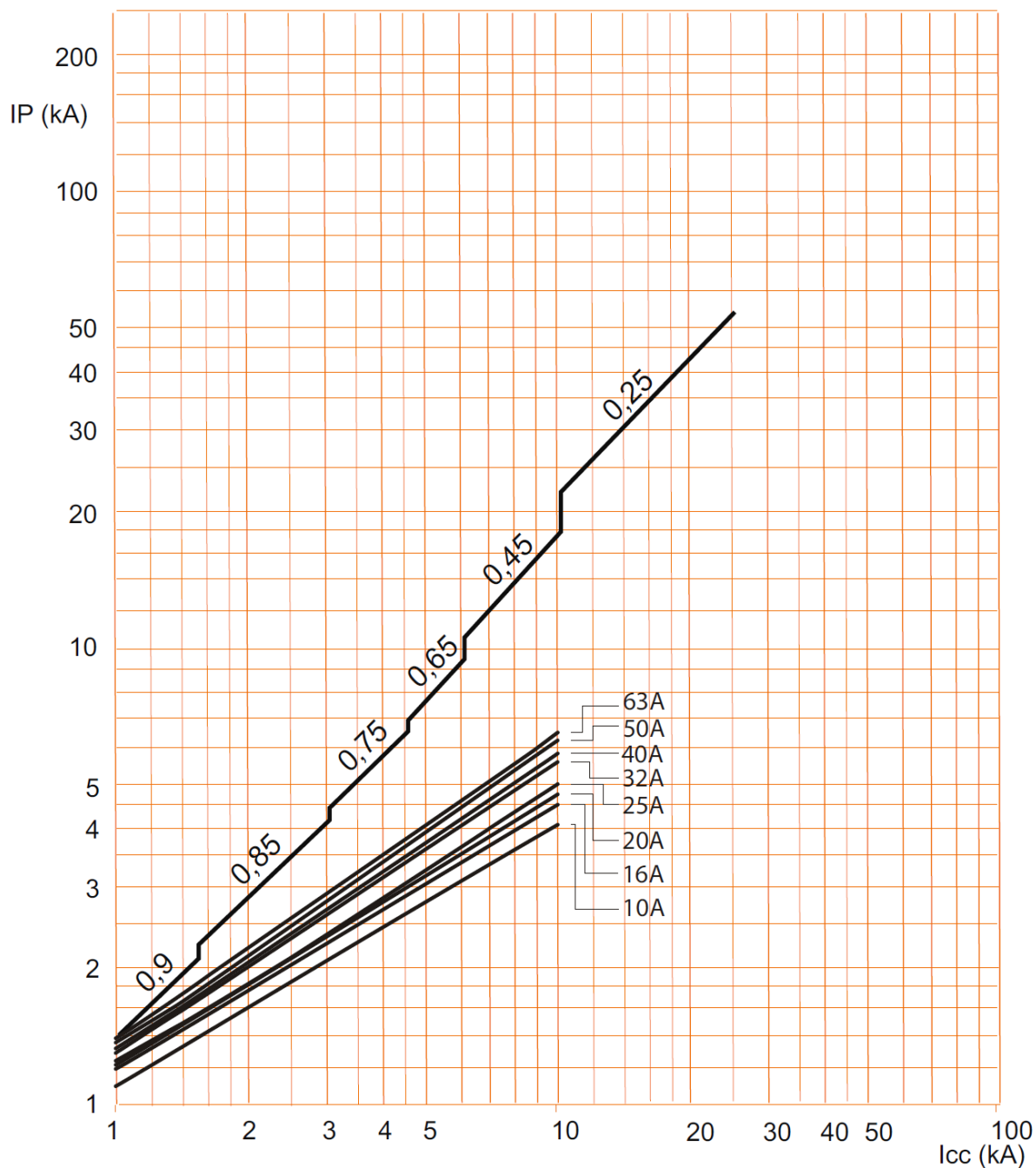
DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

7. CHARACTERISTIC CURVES

Limiting current curve: circuit breakers curve C



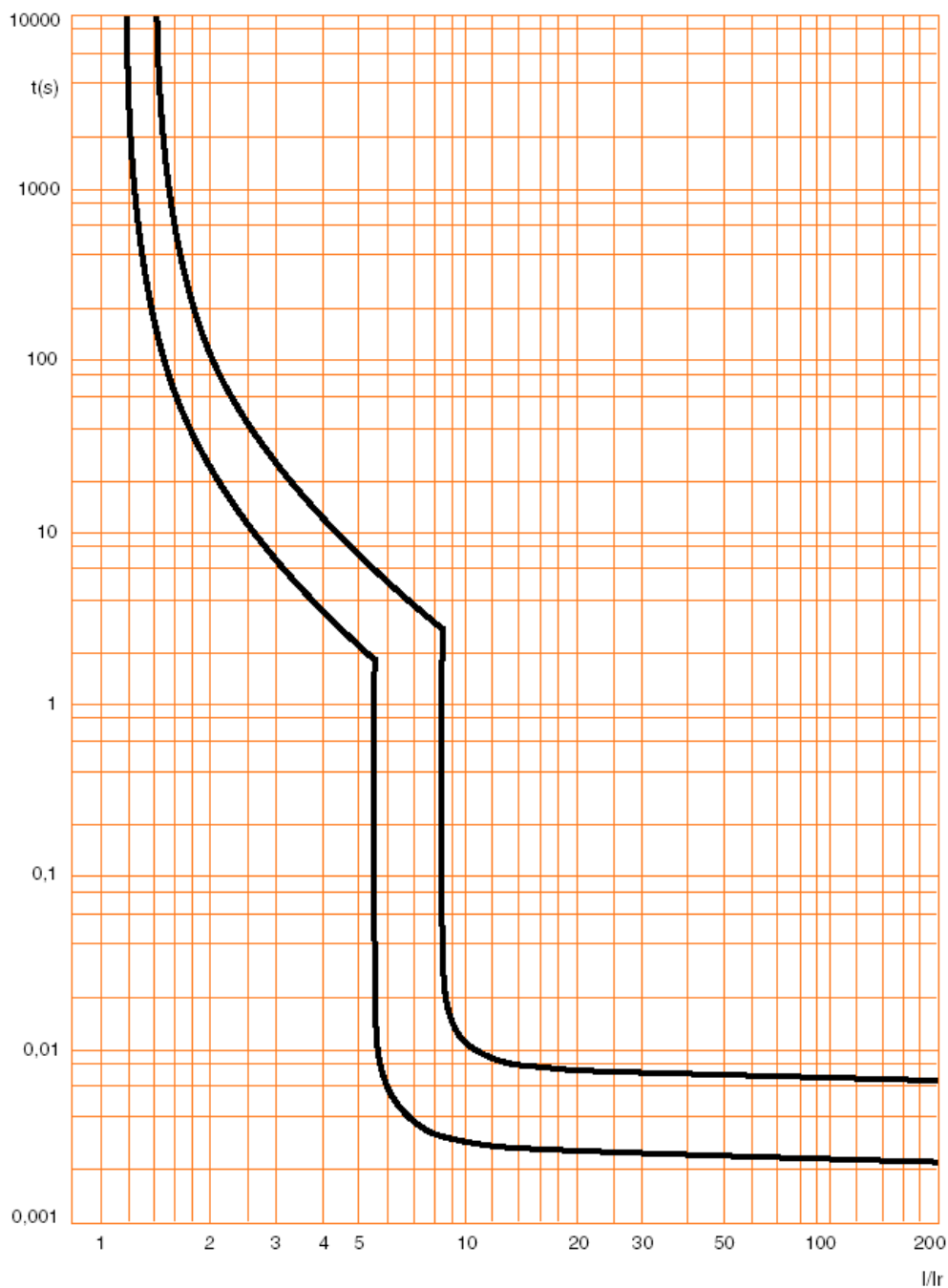
. Icc = Square value of symmetric component of the short circuit current (kA).
. IP = Max peak value (kA)

DX³ RCBO 6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

7. CHARACTERISTIC CURVES *(continued)*

Operating characteristic of circuit breakers curve C :



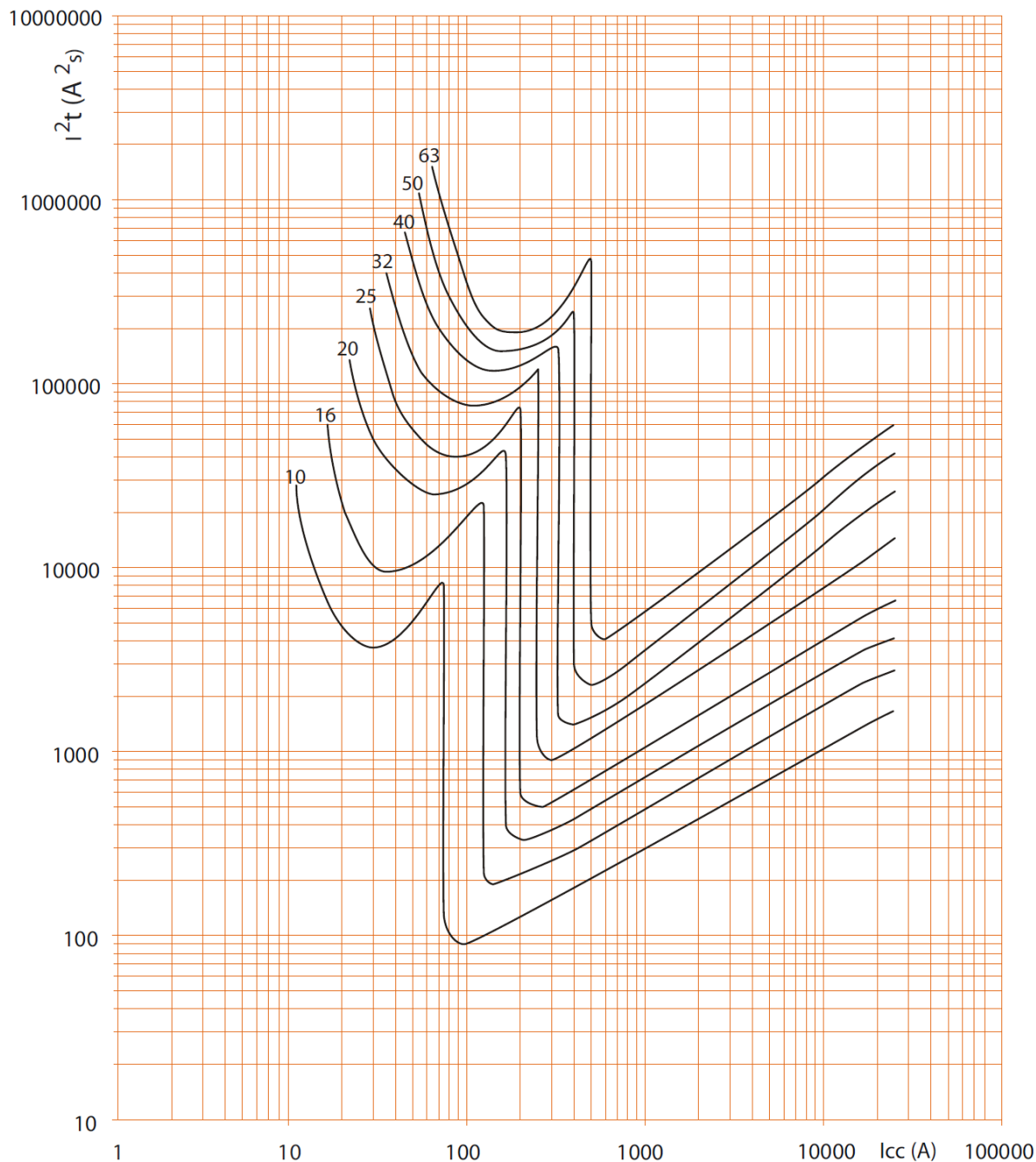
DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

7. CHARACTERISTIC (continued)

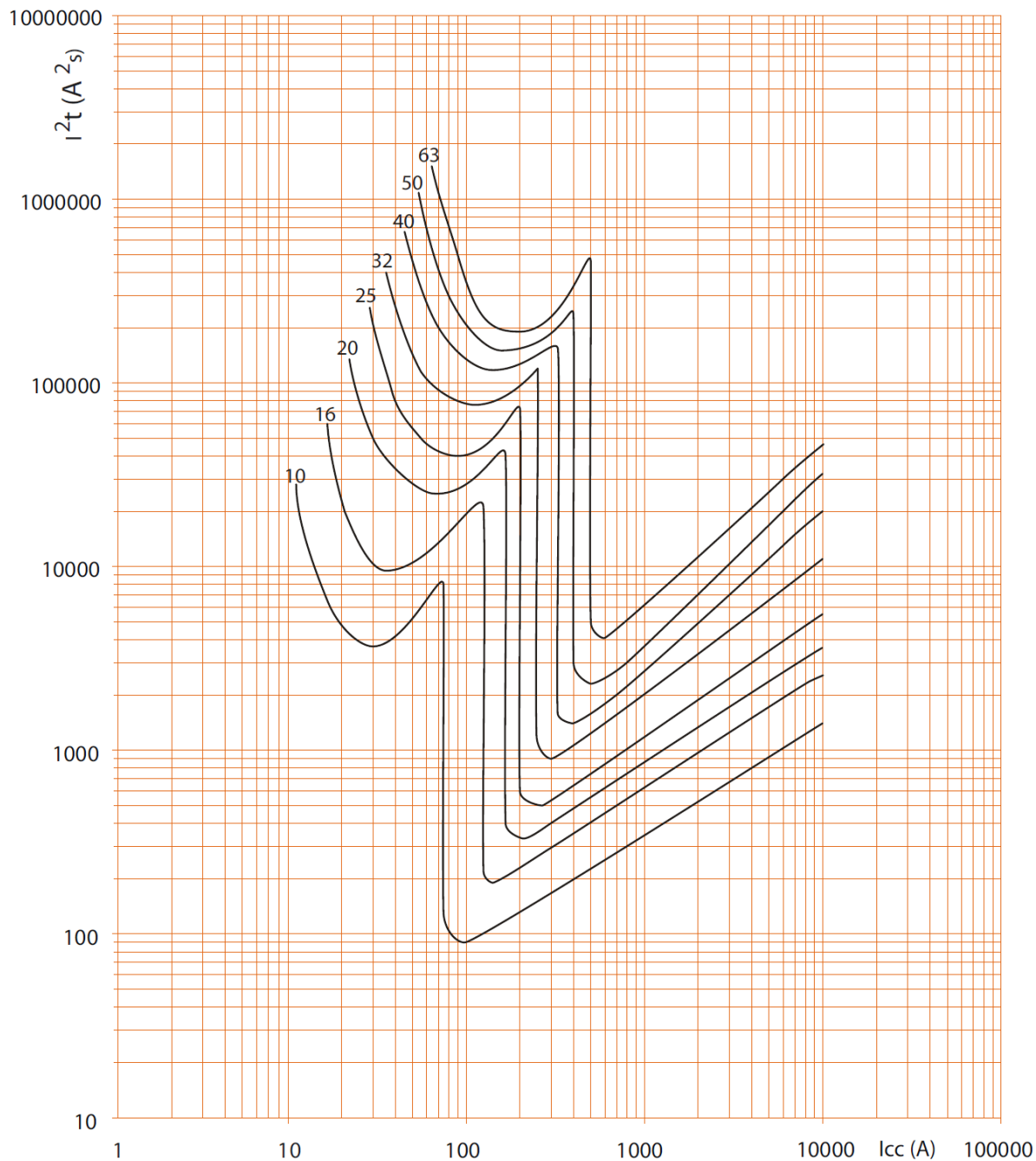
. Limiting thermal energy curve of circuit breakers curve C, 2P (230V~ / 50Hz) :



. Icc = Square value of symmetric component of the short circuit current (kA).
. I²t = Thermal energy limited (A²s).

7. CHARACTERISTIC CURVES *(continued)*

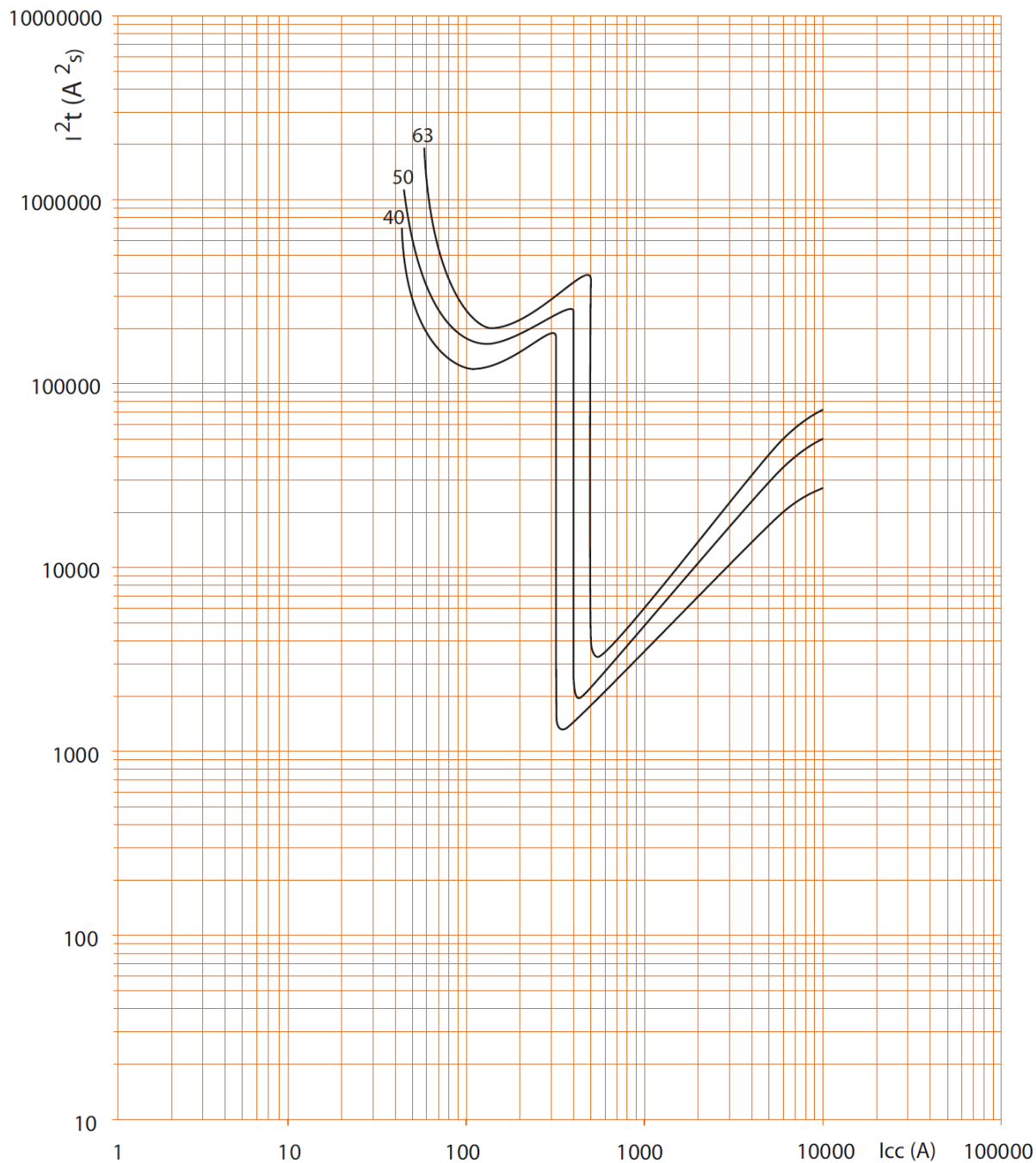
. Limiting thermal energy curve of circuit breakers curve C, 2P (400V~ / 50Hz) :



. I_{cc} = Square value of symmetric component of the short circuit current (kA).
 . I^2t = Thermal energy limited (A^2s).

7. CHARACTERISTIC CURVES *(continued)*

. Limiting thermal energy curve of circuit breakers curve C, 4P (400V~ / 50Hz) :

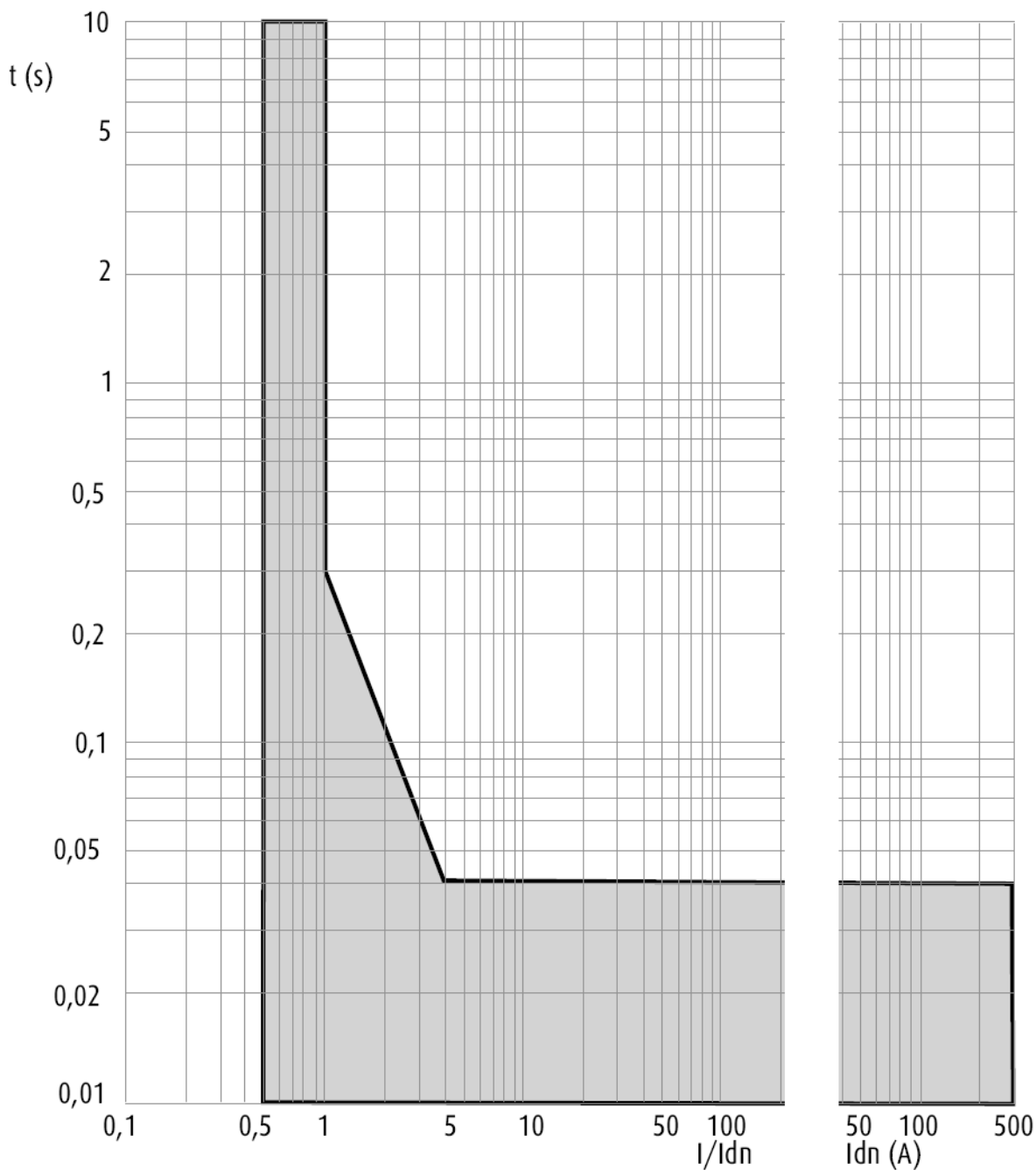


. Icc = Square value of symmetric component of the short circuit current (kA).
 . I²t = Thermal energy limited (A²s).

7. CURVES (continued)

Residual current operating characteristic

- . Average tripping time depending on the intensity of the fault current.
- . Sensitivities 10 mA, 30 mA and 300 mA instantaneous AC type.

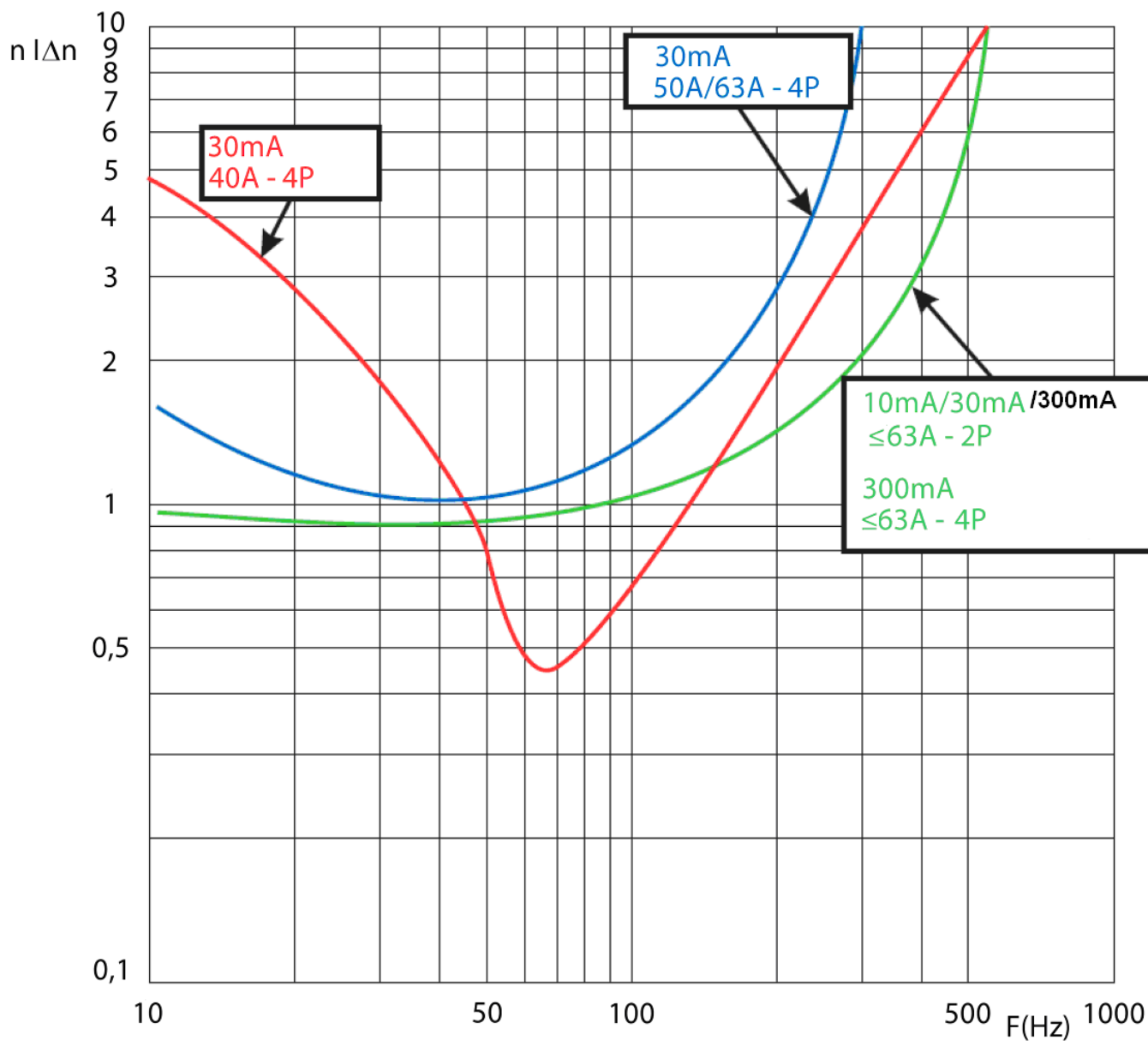


6000 / 10kA up to 63 A (2P / 4P)

7. CURVES *(continued)*

Curves of variation of tripping threshold according to the frequency

. Sensitivity 10 mA, 30 mA and 300 mA type AC.



DX³ RCBO

6000 / 10kA up to 63 A (2P / 4P)

Cat N°(s): 4 111 49 to 64, 4 111 71 to 78, 4 111 90 to 92,
4 112 09 to 11

8. AUXILIARIES AND ACCESSORIES

Wiring accessories:

- . Pin busbar HX³ traditional.
- . Sealable screw cover (cat n° 4 063 04).
- . Insulating shields (cat n° 4 063 05)
- . Dispatcher row Lexiclic
- . Dispatcher row HX³.

Signalling auxiliaries:

- . 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).
- . Autonomous shunt trip for NC push-button (1 module - cat n° 4 062 84).
- . Power Overvoltage Protection (1 module – cat n° 4 062 86)

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)

Automatic resetting module STOP & GO :

- . Automatic resetting module Stop & Go (2 modules – cat n° 4 062 88)
- . Automatic resetting module Stop & Go with self-test (2 modules – cat n° 4 062 89)

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° 4 062 58 / 60 / 62 / 66).
- . Only one control auxiliary (cat. n° 4 062 76 / 78 / 80 / 82 / 84).
- . 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 (ref. 4 062 5x / 6x).

8. AUXILIARIES AND ACCESSORIES *(continued)*

Sealing:

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

Lockout:

- . By padlock (using ref. 4 063 13 or 0 227 97), whit support for padlock (using ref. 4 063 03) in "Open" mode (OFF).

Installation software:

- . XL PRO³