87045 LIMOGES Cedex
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XS³ MCB 4500 A up to 63A (1 module per pole)

Cat. N° (s) : 4 032 02 to 10, 4 032 15 to 23, 4 032 27 to 35, 4 032 40 to 48



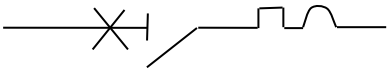
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1. DESCRIPTION - USE:

. Thermal-magnetic circuit breaker (MCB) with positive contact indication for control, protection against short-circuits and overloads, and isolation of electrical circuits.

Symbol:



Technology:

. Limiting device
. 1 Module (17,8 mm) per pole

2. RANGE

Polarity:

. 1P / 3P

Rated currents, In:

. B & C curves 6 / 10 / 16 / 20 / 25 / 32 / 40 / 50 / 63A

Magnetic tripping curves:

. B Curve (between 3 and 5 In)
. C Curve (between 5 and 10 In)

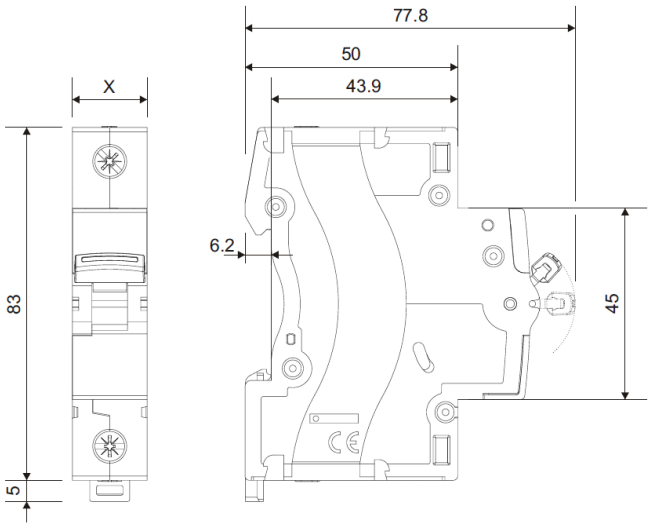
Thermal threshold according to IEC/EN 60898-1:

. Non-operating current (Inf): 1.13 In.
. Operating current (If): 1.45 In.

Breaking capacity and Rated voltage (50/60 Hz):

. 6000 A in accordance with standard EN/IEC 60898-1
. 230 V ~ / 400 V~

3. OVERALL DIMENSIONS:



	X
1P	**17.8 mm**
3P	**53.4 mm**

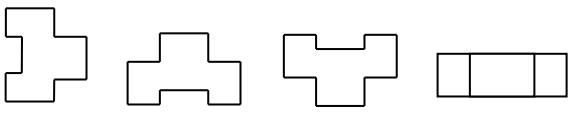
4. PREPARATION - CONNECTION

Fixing:

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

Operating positions:

. Vertical Horizontal Upside down On the side



Power supply:

. From the top or the bottom.

4. PREPARATION - CONNECTION *(continued)*

Connection:
. Inputs and outputs via screw terminals
. The location of the terminals allows supplying by traditional HX³ pin busbar.

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.

Tools required:
. 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).

Connectable section:
. In≤25A

	Copper cables	
	Without ferrule	With ferrule
Rigid cable	**1 x 1.5 mm² to 25 mm²** **2 x 1.5 mm² to 10 mm²**	-
Flexible cable	**1 x 1.5 mm² to 16 mm²** **2 x 1.5 mm² to 10 mm²**	**1 x 1.5 mm² to 16 mm²** **2 x 1.5 mm² to 10 mm²**

. In from 32A up to 63A

	Copper cables	
	Without ferrule	With ferrule
Rigid cable	**1 x 1.5 mm² to 35 mm²** **2 x 1.5 mm² to 16 mm²**	-
Flexible cable	**1 x 1.5 mm² to 25 mm²** **2 x 1.5 mm² to 10 mm²**	**1 x 1.5 mm² to 25 mm²** **2 x 1.5 mm² to 10 mm²**

Manual actuation of the MCB:
. Ergonomic 2-position handle: ON and OFF

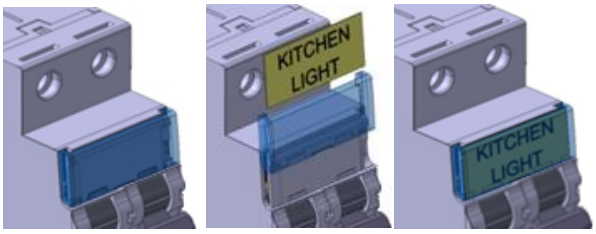
Contact status display:
. By front face marking:
- "O-OFF" = contacts open
- "I-ON" = contacts closed

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° 4 063 03).

4. PREPARATION - CONNECTION *(continued)*

Labelling:
. Circuit identification by way of a label inserted in the label holder situated on the front of the product



5. GENERAL CHARACTERISTICS:

Marking on the front side:
. By permanent ink pad printing:
- Trade name: XG³
- Tripping curve. [W]
- Rated current (in A) [XX]
- Contact status.
- Icn in A rated breaking capacity in accordance with EN/IEC 60898-1 (in a box) [####]
- Limiting class “3” (in a square)
- Mark: Legrand.
- Straight redline.
- Line + dot logo.
- Reference. [YYYY YY]



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

Un		1P	3P
110 V~	**Icn**	**6000 A**	-
230V~		**4500 A**	**6000 A**
400V~		-	**4500 A**

110 V~	**Ics**	**75% of Icn**	**75% of Icn**
230V~			
400V~			

5. GENERAL CHARACTERISTICS *(continued)*

. Alternate current 50/60Hz, single-phase or three-phase network, in accordance with standard: EN/IEC 60947-2

Un		1P	3P
110 V~	Icu	**6 kA**	**-**
230V~		**4,5 kA**	**6 kA**
400V~		**-**	**4,5 kA**

110 V~	Ics	**75% of Icu**	**75% of Icu**
230V~			
400V~			

Short-circuit breaking capacity of only one pole:

. Three-phase network 400 V~
- in TN neutral system, Icn1 = 6 kA
- in IT distribution system, Iit = 3 kA

. Three-phase network 230 V~
- in TN neutral system, Icn1 = 10 kA
- in IT distribution system, Iit = 6 kA

Minimum operating voltage:

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

Pulse rated voltage:

. Uimp = 4 kV

Insulation rated voltage:

. Ui = 500 V

Pollution degree :

. 2 in accordance with standard EN/IEC 60898-1.

Electric strength:

. 2500 V

Operation at 400 Hz:

. The magnetic thresholds increase by 45%.

Load to close and to open a pole trough 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 In*cos φ = 0.9).

5. GENERAL CHARACTERISTICS *(continued)*

Enclosure material:

. Compliance with EN/IEC 60898-1
. Glow-wire test at 960°C in according IEC 60695-2-12
. Halogens-free

Average weight per pole:

. 0.130 kg.

Volume when packed:

	Volume (dm^3)
1P (packed per 12)	**2.0**
3P (packed per 4)	**2.0**

Ambient operating temperature:

. Min. = -25°C. Max. = +70°C

Ambient storage temperature:

. Min. = -40°C. Max. = +70°C

Degree or class of protection:

. Protection index the screw head against solid and liquid bodies:
IP 20, (in accordance with standards IEC/EN 60529).
. Protection index of the box against solid and liquid bodies:
IP 40 (in accordance with standards IEC/EN 60529).
. Protection index against mechanical shocks: IK 02 (in accordance with standards EN 50102 and NF C 20-015).

Sinusoidal vibration resistance 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) : 0,7 (g=9,81 m/s^2)

Power dissipated per pole (W) :

. Circuit breaker B and C curves

In	6A	10A	16A	20A	25A	32A	40A
1P, 3P	**1.1**	**1.8**	**2.2**	**2.4**	**3**	**3.2**	**4**

In	50A	63A
1P, 3P	**4.5**	**5.5**

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

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 in accordance with EN/IEC 60898-1

	Ambient Temperature / In									
In (A)	- 25°C	- 10°C	0°C	10°C	20°C	30°C	40°C	50°C	60°C	70°C
6	**7.5**	**7.0**	**6.6**	**6.4**	**6.2**	**6.0**	**5.8**	**5.6**	**5.4**	**5.3**
10	**12.5**	**11.5**	**11.1**	**10.7**	**10.3**	**10.0**	**9.7**	**9.3**	**9.0**	**8.7**
16	**20.0**	**18.7**	**18.0**	**17.3**	**16.6**	**16.0**	**15.4**	**14.7**	**14.1**	**13.5**
20	**25.0**	**23.2**	**22.4**	**21.6**	**20.8**	**20.0**	**19.2**	**18.4**	**17.6**	**16.8**
25	**31.5**	**29.5**	**28.3**	**27.2**	**26.0**	**25.0**	**24.0**	**22.7**	**21.7**	**20.7**
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
Dielectric holding	**3000 V**	**2500 V**	**2000 V**
Max operational Voltage	**400 V**	**400 V**	**400 V**
Derating at 30°C	**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 61439-1.
To avoid using 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).

5. GENERAL CHARACTERISTICS *(continued):*

Coordination between circuit-breakers and fuses, three-phase network (+ neutral) 400 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 230 V) downstream of a triple-pole circuit-breaker, take the values shown in Tables 230/400 V.

		Fuse upstream									
		gG Type									
m.c.b. downstream		≤20A	25A	32A	40A	50A	63A	80A	100A	125A	160A
XS³ 4500A B & C Curves	≤6A	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**40kA**
	10A	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**40kA**
	16A	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**40kA**
	20A	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**40kA**
	25A	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**40kA**
	32A	-	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**40kA**
	40A	-	-	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**40kA**
	50A	-	-	-	-	-	-	**100kA**	**100kA**	**100kA**	**40kA**
	63A	-	-	-	-	-	-	**100kA**	**100kA**	**100kA**	**40kA**

		Fuse upstream									
		aM Type									
m.c.b. downstream		≤20A	25A	32A	40A	50A	63A	80A	100A	125A	160A
XS³ 4500A B & C Curves	≤6A	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**40kA**
	10A	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**40kA**
	16A	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**40kA**
	20A	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**40kA**
	25A	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**40kA**
	32A	-	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**40kA**
	40A	-	-	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**40kA**
	50A	-	-	-	-	-	-	**100kA**	**100kA**	**100kA**	**40kA**
	63A	-	-	-	-	-	-	**100kA**	**100kA**	**100kA**	**40kA**

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

5. GENERAL CHARACTERISTICS *(continued):*

Coordination between modular circuit-breakers, three-phase network (+ neutral) 400 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 230 V) downstream of a triple-pole circuit-breaker, take the values shown in Tables 230/400 V.

		m.c.b. upstream				
		XG³ 6000A				
		B and C Curves				
m.c.b. downstream		≤25A	32A	40A	50A	63A
XS³ 4500A B & C Curves	≤6A	**6kA**	**6kA**	**6kA**	**6kA**	**6kA**
	10A	**6kA**	**6kA**	**6kA**	**6kA**	**6kA**
	16A	**6kA**	**6kA**	**6kA**	**6kA**	**6kA**
	20A	**6kA**	**6kA**	**6kA**	**6kA**	**6kA**
	25A	-	**6kA**	**6kA**	**6kA**	**6kA**
	32A	-	-	**6kA**	**6kA**	**6kA**
	40A	-	-	-	**6kA**	**6kA**
	50A	-	-	-	-	**6kA**
	63A	-	-	-	-	-

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

5. GENERAL CHARACTERISTICS *(continued)*:

Coordination between modular circuit-breakers, three-phase network (+ neutral) 400 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 230 V) downstream of a triple-pole circuit-breaker, take the values shown in Tables 230/400 V.

		m.c.b. upstream									
		DX³ 6000A/10KA									
		B and C Curves					D Curve				
m.c.b. downstream		≤25A	32A	40A	50A	63A	≤25A	32A	40A	50A	63A
XS³ 4500A B & C Curves	≤6A	**10kA**	**10kA**	**10kA**	**10kA**	**10kA**	**10kA**	**10kA**	**10kA**	**10kA**	**10kA**
	10A	**10kA**	**10kA**	**10kA**	**10kA**	**10kA**	**10kA**	**10kA**	**10kA**	**10kA**	**10kA**
	16A	**10kA**	**10kA**	**10kA**	**10kA**	**10kA**	**10kA**	**10kA**	**10kA**	**10kA**	**10kA**
	20A	**10kA**	**10kA**	**10kA**	**10kA**	**10kA**	**10kA**	**10kA**	**10kA**	**10kA**	**10kA**
	25A	**-**	**10kA**	**10kA**	**10kA**	**10kA**	**-**	**10kA**	**10kA**	**10kA**	**10kA**
	32A	**-**	**-**	**10kA**	**10kA**	**10kA**	**-**	**-**	**10kA**	**10kA**	**10kA**
	40A	**-**	**-**	**-**	**10kA**	**10kA**	**-**	**-**	**-**	**10kA**	**10kA**
	50A	**-**	**-**	**-**	**-**	**10kA**	**-**	**-**	**-**	**-**	**10kA**
	63A	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

		m.c.b. upstream							
		DX³ 10000/16kA							
		B and C Curves							
m.c.b. downstream		≤25A	32A	40A	50A	63A	80A	100A	125A
XS³ 4500A B & C Curves	≤6A	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**
	10A	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**
	16A	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**
	20A	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**
	25A	**-**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**
	32A	**-**	**-**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**
	40A	**-**	**-**	**-**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**
	50A	**-**	**-**	**-**	**-**	**16kA**	**16kA**	**16kA**	**16kA**
	63A	**-**	**-**	**-**	**-**	**-**	**16kA**	**16kA**	**16kA**

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.

5. GENERAL CHARACTERISTICS *(continued)*:

Coordination between modular circuit-breakers, three-phase network (+ neutral) 400 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 230 V) downstream of a triple-pole circuit-breaker, take the values shown in Tables 230/400 V.

		m.c.b. upstream							
		DX³ 25kA							
		B, C and D Curves							
m.c.b. downstream		≤25A	32A	40A	50A	63A	80A	100A	125A
XS³ 4500A B & C Curves	≤6A	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**
	10A	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**
	16A	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**
	20A	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**
	25A	-	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**
	32A	-	-	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**
	40A	-	-	-	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**
	50A	-	-	-	-	**16kA**	**16kA**	**16kA**	**16kA**
	63A	-	-	-	-	-	**16kA**	**16kA**	**16kA**

		m.c.b. upstream					
		DX³ 36kA					
		C Curve					
m.c.b. downstream		≤25A	32A	40A	50A	63A	80A
XS³ 4500A B & C Curves	≤6A	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	10A	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	16A	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	20A	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	25A	-	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	32A	-	-	**25kA**	**25kA**	**25kA**	**25kA**
	40A	-	-	-	**25kA**	**25kA**	**25kA**
	50A	-	-	-	-	**25kA**	**25kA**
	63A	-	-	-	-	-	**25kA**

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.

5. GENERAL CHARACTERISTICS *(continued):*

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

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

		m.c.c.b. upstream							
		DPX³ 160 / DPX³ 160 + RCD							
		16kA							
m.c.b. downstream		16A	25A	40A	63A	80A	100A	125A	160A
XS³ 4500A B & C Curves	≤6A	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**
	10A	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**
	16A	-	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**
	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							
		DPX³ 160 / DPX³ 160 + RCD							
		25 – 36 – 50kA							
m.c.b. downstream		16A	25A	40A	63A	80A	100A	125A	160A
XS³ 4500A B & C Curves	≤6A	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	10A	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	16A	-	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	20A	-	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	25A	-	-	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	32A	-	-	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	40A	-	-	-	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	50A	-	-	-	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	63A	-	-	-	-	**25kA**	**25kA**	**25kA**	**25kA**

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.

5. GENERAL CHARACTERISTICS *(continued):*

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

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

		m.c.c.b. upstream						
		DPX 250ER			DPX³250 / DPX³250+RCD (Thermal-magnetic & electronic)			
		25 - 36 - 50kA			25 - 36 – 50 - 70kA			
m.c.b. downstream		100A	160A	250A	100A	160A	200A	250A
XS³ 4500A B & C Curves	≤6A	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	10A	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	16A	**25kA**	**25kA**	**25kA**	**25kA**	**25k**	**25kA**	**25kA**
	20A	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	25A	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	32A	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	40A	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	50A	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	63A	**20kA**	**20kA**	**20kA**	**25kA**	**25kA**	**25kA**	**25kA**

		m.c.c.b. upstream										
		DPX / H / L 250 (Thermal-magnetic & electronic)						DPX / H / L 630 (Thermal-magnetic & electronic)				
		36 – 70 – 100kA						36 – 70 – 100kA				
m.c.b. downstream		25A	40A	63A	100A	160A	250A	250A	320A	400A	500A	630A
XS³ 4500A B & C Curves	≤6A	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	10A	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	16A	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	20A	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	25A	-	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	32A	-	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	40A	-	-	**25kA**	**25kA**	**25kA**	**25kA**	**20kA**	**20kA**	**20kA**	**20kA**	**20kA**
	50A	-	-	**25kA**	**25kA**	**25kA**	**25kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**
	63A	-	-	**20kA**	**20kA**	**20kA**	**20kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**

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.

5. GENERAL CHARACTERISTICS *(continued):*

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

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

		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
XS³ 4500A B & C Curves	≤6A	**25kA**	**25kA**
	10A	**25kA**	**25kA**
	16A	**25kA**	**25kA**
	20A	**25kA**	**25kA**
	25A	**20kA**	**20kA**
	32A	**15kA**	**15kA**
	40A	**15kA**	**15kA**
	50A	**12.5kA**	**12.5kA**
	63A	**12.5kA**	**12.5kA**

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

5. GENERAL CHARACTERISTICS *(continued):*

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

		Fuse upstream									
		gG Type									
m.c.b. downstream		≤20A	25A	32A	40A	50A	63A	80A	100A	125A	160A
XS³ 4500A B & C Curves	≤6A	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**40kA**
	10A	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**40kA**
	16A	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**40kA**
	20A	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**40kA**
	25A	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**40kA**
	32A	-	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**40kA**
	40A	-	-	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**40kA**
	50A	-	-	-	-	-	-	**100kA**	**100kA**	**100kA**	**40kA**
	63A	-	-	-	-	-	-	**100kA**	**100kA**	**100kA**	**40kA**

		Fuse upstream									
		aM Type									
m.c.b. downstream		≤20A	25A	32A	40A	50A	63A	80A	100A	125A	160A
XS³ 4500A B & C Curves	≤6A	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**40kA**
	10A	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**40kA**
	16A	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**40kA**
	20A	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**40kA**
	25A	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**40kA**
	32A	-	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**40kA**
	40A	-	-	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**40kA**
	50A	-	-	-	-	-	-	**100kA**	**100kA**	**100kA**	**40kA**
	63A	-	-	-	-	-	-	**100kA**	**100kA**	**100kA**	**40kA**

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

5. GENERAL CHARACTERISTICS *(continued):*

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

		m.c.b. upstream				
		XG³ 6000A				
		B and C Curves				
m.c.b. downstream		≤25A	32A	40A	50A	63A
XS³ 4500A B & C Curves	≤6A	**10kA**	**10kA**	**10kA**	**10kA**	**10kA**
	10A	**10kA**	**10kA**	**10kA**	**10kA**	**10kA**
	16A	**10kA**	**10kA**	**10kA**	**10kA**	**10kA**
	20A	**10kA**	**10kA**	**10kA**	**10kA**	**10kA**
	25A	-	**10kA**	**10kA**	**10kA**	**10kA**
	32A	-	-	**10kA**	**10kA**	**10kA**
	40A	-	-	-	**10kA**	**10kA**
	50A	-	-	-	-	**10kA**
	63A	-	-	-	-	-

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

5. GENERAL CHARACTERISTICS *(continued):*

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

		m.c.b. upstream									
		DX³ 6000A/10kA									
		B and C Curves					D Curve				
m.c.b. downstream		≤25A	32A	40A	50A	63A	≤25A	32A	40A	50A	63A
XS³ 4500A B & C Curves	≤6A	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**
	10A	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**
	16A	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**
	20A	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**	**16kA**
	25A	-	**16kA**	**16kA**	**16kA**	**16kA**	-	**16kA**	**16kA**	**16kA**	**16kA**
	32A	-	-	**16kA**	**16kA**	**16kA**	-	-	**16kA**	**16kA**	**16kA**
	40A	-	-	-	**16kA**	**16kA**	-	-	-	**16kA**	**16kA**
	50A	-	-	-	-	**16kA**	-	-	-	-	**16kA**
	63A	-	-	-	-	-	-	-	-	-	-

		m.c.b. upstream							
		DX³ 10000/16kA							
		B and C Curves							
m.c.b. downstream		≤25A	32A	40A	50A	63A	80A	100A	125A
XS³ 4500A B & C Curves	≤6A	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	10A	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	16A	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	20A	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	25A	-	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	32A	-	-	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	40A	-	-	-	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	50A	-	-	-	-	**25kA**	**25kA**	**25kA**	**25kA**
	63A	-	-	-	-	-	**25kA**	**25kA**	**25kA**

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.

5. GENERAL CHARACTERISTICS *(continued):*

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

		m.c.b. upstream							
		DX³ 25kA							
		B, C and D Curves							
m.c.b. downstream		≤25A	32A	40A	50A	63A	80A	100A	125A
XS³ 4500A B & C Curves	≤6A	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	10A	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	16A	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	20A	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	25A	-	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	32A	-	-	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	40A	-	-	-	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	50A	-	-	-	-	**25kA**	**25kA**	**25kA**	**25kA**
	63A	-	-	-	-	-	**25kA**	**25kA**	**25kA**

		m.c.b. upstream					
		DX³ 36kA					
		C Curve					
m.c.b. downstream		≤25A	32A	40A	50A	63A	80A
XS³ 4500A B & C Curves	≤6A	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	10A	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	16A	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	20A	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	25A	-	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	32A	-	-	**36kA**	**36kA**	**36kA**	**36kA**
	40A	-	-	-	**36kA**	**36kA**	**36kA**
	50A	-	-	-	-	**36kA**	**36kA**
	63A	-	-	-	-	-	**36kA**

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.

5. GENERAL CHARACTERISTICS *(continued):*

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

		m.c.c.b. upstream							
		DPX³ 160 / DPX³ 160 + RCD							
		16kA							
m.c.b. downstream		16A	25A	40A	63A	80A	100A	125A	160A
XS³ 4500A B & C Curves	≤6A	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	10A	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	16A	-	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	20A	-	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	25A	-	-	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	32A	-	-	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	40A	-	-	-	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	50A	-	-	-	**25kA**	**25kA**	**25kA**	**25kA**	**25kA**
	63A	-	-	-	-	**25kA**	**25kA**	**25kA**	**25kA**

		m.c.c.b. upstream							
		DPX³ 160 / DPX³ 160 + RCD							
		25kA							
m.c.b. downstream		16A	25A	40A	63A	80A	100A	125A	160A
XS³ 4500A B & C Curves	≤6A	**40kA**	**40kA**	**40kA**	**40kA**	**40kA**	**40kA**	**40kA**	**40kA**
	10A	**40kA**	**40kA**	**40kA**	**40kA**	**40kA**	**40kA**	**40kA**	**40kA**
	16A	-	**40kA**	**40kA**	**40kA**	**40kA**	**40kA**	**40kA**	**40kA**
	20A	-	**40kA**	**40kA**	**40kA**	**40kA**	**40kA**	**40kA**	**40kA**
	25A	-	-	**40kA**	**40kA**	**40kA**	**40kA**	**40kA**	**40kA**
	32A	-	-	**40kA**	**40kA**	**40kA**	**40kA**	**40kA**	**40kA**
	40A	-	-	-	**40kA**	**40kA**	**40kA**	**40kA**	**40kA**
	50A	-	-	-	**40kA**	**40kA**	**40kA**	**40kA**	**40kA**
	63A	-	-	-	-	**40kA**	**40kA**	**40kA**	**40kA**

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.

5. GENERAL CHARACTERISTICS *(continued)*:

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

		m.c.c.b. upstream							
		DPX³ 160 / DPX³ 160 + RCD							
		36 - 50kA							
m.c.b. downstream		16A	25A	40A	63A	80A	100A	125A	160A
XS³ 4500A B & C Curves	≤6A	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**
	10A	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**
	16A	-	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**
	20A	-	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**
	25A	-	-	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**
	32A	-	-	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**
	40A	-	-	-	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**
	50A	-	-	-	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**
	63A	-	-	-	-	**50kA**	**50kA**	**50kA**	**50kA**

		m.c.c.b. upstream					
		DPX 250ER			DPX 250ER		
		25kA			36 - 50kA		
m.c.b. downstream		100A	160A	250A	100A	160A	250A
XS³ 4500A B & C Curves	≤6A	**40kA**	**40kA**	**40kA**	**50kA**	**50kA**	**50kA**
	10A	**40kA**	**40kA**	**40kA**	**50kA**	**50kA**	**50kA**
	16A	**40kA**	**40kA**	**40kA**	**50kA**	**50kA**	**50kA**
	20A	**40kA**	**40kA**	**40kA**	**50kA**	**50kA**	**50kA**
	25A	**40kA**	**40kA**	**40kA**	**50kA**	**50kA**	**50kA**
	32A	**40kA**	**40kA**	**40kA**	**50kA**	**50kA**	**50kA**
	40A	**40kA**	**40kA**	**40kA**	**50kA**	**50kA**	**50kA**
	50A	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	63A	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**

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.

5. GENERAL CHARACTERISTICS *(continued):*

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

		m.c.c.b. upstream							
		DPX³250 / DPX³250+RCD (Thermal-magnetic & electronic)				DPX³250 / DPX³250+RCD (Thermal-magnetic & electronic)			
		25kA				36 – 50 - 70kA			
m.c.b. downstream		100A	160A	200A	250A	100A	160A	200A	250A
XS³ 4500A B & C Curves	≤6A	**40kA**	**40kA**	**40kA**	**40kA**	**50kA**	**50kA**	**50kA**	**50kA**
	10A	**40kA**	**40kA**	**40kA**	**40kA**	**50kA**	**50kA**	**50kA**	**50kA**
	16A	**40kA**	**40kA**	**40kA**	**40kA**	**50kA**	**50kA**	**50kA**	**50kA**
	20A	**40kA**	**40kA**	**40kA**	**40kA**	**50kA**	**50kA**	**50kA**	**50kA**
	25A	**40kA**	**40kA**	**40kA**	**40kA**	**50kA**	**50kA**	**50kA**	**50kA**
	32A	**40kA**	**40kA**	**40kA**	**40kA**	**50kA**	**50kA**	**50kA**	**50kA**
	40A	**40kA**	**40kA**	**40kA**	**40kA**	**50kA**	**50kA**	**50kA**	**50kA**
	50A	**40kA**	**40kA**	**40kA**	**40kA**	**50kA**	**50kA**	**50kA**	**50kA**
	63A	**40kA**	**40kA**	**40kA**	**40kA**	**50kA**	**50kA**	**50kA**	**50kA**

		m.c.c.b. upstream										
		DPX / H / L 250 (Thermal-magnetic & electronic)						DPX / H / L 630 (Thermal-magnetic & electronic)				
		36 - 70 – 100kA						36 - 70 – 100kA				
m.c.b. downstream		25A	40A	63A	100A	160A	250A	250A	320A	400A	500A	630A
XS³ 4500A B & C Curves	≤6A	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**
	10A	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**
	16A	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**
	20A	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**
	25A	-	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**
	32A	-	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**
	40A	-	-	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**
	50A	-	-	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**
	63A	-	-	-	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**

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.

5. GENERAL CHARACTERISTICS *(continued):*

Coordination between modular circuit-breakers and M.C.C.Bs (Moulded Case Circuit Breakers), three-phase network (+ neutral) 230 V~ according to 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
XS³ 4500A B & C Curves	≤6A	**50kA**	**50kA**
	10A	**50kA**	**50kA**
	16A	**50kA**	**50kA**
	20A	**50kA**	**50kA**
	25A	**50kA**	**50kA**
	32A	**50kA**	**50kA**
	40A	**50kA**	**50kA**
	50A	**25kA**	**25kA**
	63A	**25kA**	**25kA**

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

5. GENERAL CHARACTERISTICS *(continued)*

Selectivity between two levels of protection

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

Selectivity between modular circuit breakers and fuses:

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

		Fuse upstream							
		gG Type							
m.c.b. downstream		32A	40A	50A	63A	80A	100A	125A	160A
XS³ 4500A B & C Curves	≤6A	1300	1900	2500	4000	4600	T	T	T
	10A	-	1600	2200	3200	3600	T	T	T
	16A	-	1400	1800	2600	3000	5600	T	T
	20A	-	1200	1500	2200	2500	4600	T	T
	25A	-	-	1300	2000	2200	4100	5500	T
	32A	-	-	1200	1700	1900	3500	4500	T
	40A	-	-	-	-	1700	3000	4000	T
	50A	-	-	-	-	1600	2600	3500	5000
	63A	-	-	-	-	-	2400	3300	5000

		Fuse upstream								
		aM Type								
m.c.b. downstream		25A	32A	40A	50A	63A	80A	100A	125A	160A
XS³ 4500A B & C Curves	≤6A	1000	1600	2100	3200	T	T	T	T	T
	10A	-	1100	1700	2500	5000	T	T	T	T
	16A	-	1000	1400	2100	4000	T	T	T	T
	20A	-	-	1300	1800	3400	5100	T	T	T
	25A	-	-	1100	1600	3000	4500	T	T	T
	32A	-	-	-	1300	2400	3800	5000	T	T
	40A	-	-	-	-	2100	3100	4200	T	T
	50A	-	-	-	-	2000	2900	3700	T	T
	63A	-	-	-	-	-	2800	3500	5500	T

. T = Total discrimination

5. GENERAL CHARACTERISTICS *(continued):*

Selectivity between modular circuit breakers:

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

		m.c.b. upstream							
		DX³ 6000A/10kA							
		B Curve							
m.c.b. downstream		10A	16A	20A	25A	32A	40A	50A	63A
XS³ 4500A B & C Curves	≤6A	-	64	80	100	128	160	200	252
	10A	-	-	80	100	128	160	200	252
	16A	-	-	-	-	128	160	200	252
	20A	-	-	-	-	-	160	200	252
	25A	-	-	-	-	-	160	200	252
	32A	-	-	-	-	-	-	-	252
	40A	-	-	-	-	-	-	-	-
	50A	-	-	-	-	-	-	-	-
	63A	-	-	-	-	-	-	-	-

		m.c.b. upstream							
		DX³ 6000A/10kA							
		C Curve							
m.c.b. downstream		10A	16A	20A	25A	32A	40A	50A	63A
XS³ 4500A B & C Curves	≤6A	75	120	150	187	240	300	375	472
	10A	-	120	150	187	240	300	375	472
	16A	-	-	150	187	240	300	375	472
	20A	-	-	-	187	240	300	375	472
	25A	-	-	-	-	240	300	375	472
	32A	-	-	-	-	-	300	375	472
	40A	-	-	-	-	-	-	375	472
	50A	-	-	-	-	-	-	-	472
	63A	-	-	-	-	-	-	-	-

. T = Total discrimination

5. GENERAL CHARACTERISTICS *(continued):*

Selectivity between modular circuit breakers:

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

		m.c.b. upstream							
		DX³ 6000A/10kA							
		D Curve							
m.c.b. downstream		10A	16A	20A	25A	32A	40A	50A	63A
XS³ 4500A B & C Curves	≤6A	**120**	**192**	**240**	**300**	**384**	**480**	**600**	**756**
	10A	**-**	**192**	**240**	**300**	**384**	**480**	**600**	**756**
	16A	**-**	**-**	**240**	**300**	**384**	**480**	**600**	**756**
	20A	**-**	**-**	**-**	**300**	**384**	**480**	**600**	**756**
	25A	**-**	**-**	**-**	**-**	**384**	**480**	**600**	**756**
	32A	**-**	**-**	**-**	**-**	**-**	**480**	**600**	**756**
	40A	**-**	**-**	**-**	**-**	**-**	**-**	**600**	**756**
	50A	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**756**
	63A	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

		m.c.b. upstream										
		DX³ 10000/16kA										
		B Curve										
m.c.b. downstream		10A	16A	20A	25A	32A	40A	50A	63A	80A	100A	125A
XS³ 4500A B & C Curves	≤6A	**-**	**64**	**80**	**100**	**128**	**160**	**200**	**252**	**800**	**1000**	**1300**
	10A	**-**	**-**	**80**	**100**	**128**	**160**	**200**	**252**	**750**	**960**	**1200**
	16A	**-**	**-**	**-**	**-**	**128**	**160**	**200**	**252**	**630**	**800**	**960**
	20A	**-**	**-**	**-**	**-**	**-**	**160**	**200**	**252**	**600**	**730**	**900**
	25A	**-**	**-**	**-**	**-**	**-**	**160**	**200**	**252**	**560**	**650**	**850**
	32A	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**252**	**500**	**630**	**800**
	40A	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**460**	**560**	**700**
	50A	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**430**	**500**	**650**
	63A	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**500**	**650**

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5. GENERAL CHARACTERISTICS *(continued):*

Selectivity between modular circuit breakers:

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

		m.c.b. upstream										
		DX³ 10000/16kA										
		C Curve										
m.c.b. downstream		10A	16A	20A	25A	32A	40A	50A	63A	80A	100A	125A
XS³ 4500A B & C Curves	≤6A	**75**	**120**	**150**	**187**	**240**	**300**	**375**	**472**	**1300**	**1600**	**2000**
	10A	**-**	**120**	**150**	**187**	**240**	**300**	**375**	**472**	**1150**	**1450**	**1800**
	16A	**-**	**-**	**150**	**187**	**240**	**300**	**375**	**472**	**950**	**1200**	**1500**
	20A	**-**	**-**	**-**	**187**	**240**	**300**	**375**	**472**	**900**	**1100**	**1400**
	25A	**-**	**-**	**-**	**-**	**240**	**300**	**375**	**472**	**850**	**1000**	**1300**
	32A	**-**	**-**	**-**	**-**	**-**	**300**	**375**	**472**	**750**	**950**	**1200**
	40A	**-**	**-**	**-**	**-**	**-**	**-**	**375**	**472**	**700**	**850**	**1100**
	50A	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**472**	**650**	**800**	**1000**
	63A	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**650**	**800**	**1000**

		m.c.b. upstream										
		DX³ 25kA										
		B Curve										
m.c.b. downstream		10A	16A	20A	25A	32A	40A	50A	63A	80A	100A	125A
XS³ 4500A B & C Curves	≤6A	**-**	**64**	**80**	**100**	**128**	**160**	**200**	**252**	**800**	**1000**	**1300**
	10A	**-**	**-**	**80**	**100**	**128**	**160**	**200**	**252**	**750**	**960**	**1200**
	16A	**-**	**-**	**-**	**-**	**128**	**160**	**200**	**252**	**630**	**800**	**960**
	20A	**-**	**-**	**-**	**-**	**-**	**160**	**200**	**252**	**600**	**730**	**900**
	25A	**-**	**-**	**-**	**-**	**-**	**-**	**200**	**252**	**560**	**650**	**850**
	32A	**-**	**-**	**-**	**-**	**-**	**-**	**200**	**252**	**500**	**630**	**800**
	40A	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**252**	**460**	**560**	**700**
	50A	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**430**	**500**	**650**
	63A	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**500**	**600**

5. GENERAL CHARACTERISTICS *(continued):*

Selectivity between modular circuit breakers:

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

		m.c.b. upstream										
		DX³ 25kA										
		C Curve										
m.c.b. downstream		10A	16A	20A	25A	32A	40A	50A	63A	80A	100A	125A
XS³ 4500A B & C Curves	≤6A	**75**	**120**	**150**	**187**	**240**	**300**	**375**	**472**	**1300**	**1600**	**2000**
	10A	**-**	**120**	**150**	**187**	**240**	**300**	**375**	**472**	**1150**	**1450**	**1800**
	16A	**-**	**-**	**150**	**187**	**240**	**300**	**375**	**472**	**950**	**1200**	**1500**
	20A	**-**	**-**	**-**	**187**	**240**	**300**	**375**	**472**	**900**	**1100**	**1400**
	25A	**-**	**-**	**-**	**-**	**240**	**300**	**375**	**472**	**850**	**1000**	**1300**
	32A	**-**	**-**	**-**	**-**	**-**	**300**	**375**	**472**	**750**	**950**	**1200**
	40A	**-**	**-**	**-**	**-**	**-**	**-**	**375**	**472**	**700**	**850**	**1100**
	50A	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**472**	**650**	**800**	**1000**
	63A	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**650**	**800**	**1000**

		m.c.b. upstream										
		DX³ 25kA										
		D Curve										
m.c.b. downstream		10A	16A	20A	25A	32A	40A	50A	63A	80A	100A	125A
XS³ 4500A B & C Curves	≤6A	**120**	**192**	**240**	**300**	**384**	**480**	**600**	**756**	**2000**	**2400**	**3000**
	10A	**-**	**192**	**240**	**300**	**384**	**480**	**600**	**756**	**1750**	**2150**	**2700**
	16A	**-**	**-**	**240**	**300**	**384**	**480**	**600**	**756**	**1400**	**1800**	**2200**
	20A	**-**	**-**	**-**	**300**	**384**	**480**	**600**	**756**	**1350**	**1650**	**2100**
	25A	**-**	**-**	**-**	**-**	**384**	**480**	**600**	**756**	**1300**	**1500**	**2000**
	32A	**-**	**-**	**-**	**-**	**-**	**480**	**600**	**756**	**1100**	**1450**	**1800**
	40A	**-**	**-**	**-**	**-**	**-**	**-**	**600**	**756**	**1000**	**1250**	**1650**
	50A	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**756**	**950**	**1200**	**1500**
	63A	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**950**	**1200**	**1500**

5. GENERAL CHARACTERISTICS *(continued):*

Selectivity between modular circuit breakers:

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

		m.c.b. upstream								
		DX³ 36kA								
		C Curve								
m.c.b. downstream		10A	16A	20A	25A	32A	40A	50A	63A	80A
XS³ 4500A B & C Curves	≤6A	**75**	**120**	**150**	**187**	**240**	**300**	**375**	**472**	**1300**
	10A	**-**	**120**	**150**	**187**	**240**	**300**	**375**	**472**	**1150**
	16A	**-**	**-**	**150**	**187**	**240**	**300**	**375**	**472**	**950**
	20A	**-**	**-**	**-**	**187**	**240**	**300**	**375**	**472**	**900**
	25A	**-**	**-**	**-**	**-**	**240**	**300**	**375**	**472**	**850**
	32A	**-**	**-**	**-**	**-**	**-**	**300**	**375**	**472**	**750**
	40A	**-**	**-**	**-**	**-**	**-**	**-**	**375**	**472**	**700**
	50A	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**472**	**650**
	63A	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**650**

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		m.c.c.b. upstream										
		DPX³160 DPX³160 + 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
XS³ 4500A B & C Curves	≤6A	**T**	**T**	**T**	**T**	**T**	**T**	**T**	**T**	**T**	**T**	**T**
	10A	**T**	**T**	**T**	**T**	**T**	**T**	**T**	**T**	**T**	**T**	**T**
	16A	**-**	**T**	**T**	**T**	**T**	**T**	**T**	**T**	**T**	**T**	**T**
	20A	**-**	**T**	**T**	**T**	**T**	**T**	**T**	**T**	**T**	**T**	**T**
	25A	**-**	**-**	**3500**	**3500**	**T**	**T**	**T**	**T**	**T**	**T**	**T**
	32A	**-**	**-**	**-**	**3000**	**4000**	**4000**	**T**	**T**	**4000**	**T**	**T**
	40A	**-**	**-**	**-**	**3000**	**3000**	**3000**	**T**	**T**	**3500**	**T**	**T**
	50A	**-**	**-**	**-**	**-**	**3000**	**3000**	**T**	**T**	**3000**	**T**	**T**
	63A	**-**	**-**	**-**	**-**	**3000**	**3000**	**T**	**T**	**2000**	**T**	**T**

. T = Total discrimination

5. GENERAL CHARACTERISTICS *(continued):*

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

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

		m.c.c.b. upstream					
		DPX 250 / H / L (Thermal-Magnetic & electronic)					
		36 - 70 - 100kA					
m.c.b. downstream		25A	40A	63A	100A	160A	250A
XS³ 4500A B & C Curves	≤6A	**T**	**T**	**T**	**T**	**T**	**T**
	10A	**T**	**T**	**T**	**T**	**T**	**T**
	16A	**4000**	**4000**	**4000**	**T**	**T**	**T**
	20A	**-**	**4000**	**4000**	**T**	**T**	**T**
	25A	**-**	**3000**	**3000**	**T**	**T**	**T**
	32A	**-**	**-**	**2000**	**T**	**T**	**T**
	40A	**-**	**-**	**2000**	**T**	**T**	**T**
	50A	**-**	**-**	**-**	**4000**	**T**	**T**
	63A	**-**	**-**	**-**	**4000**	**T**	**T**

		m.c.c.b. upstream						
		DPX³ 250 DPX³ 250 + diff (Thermal-Magnetic & electronic)				DPX / H / L 630 (Thermal-Magnetic & electronic)	DPX / H / L 1250	DPX / H 1600 (electronic)
		25 - 36 – 50 - 70kA				36 – 70 - 100kA	36 – 70 - 100kA	36 – 70kA
m.c.b. downstream		100A	160A	200A	250A	160 to 630A	500 to 1250A	630 to 1600A
XS³ 4500A B & C Curves	≤6A	**T**	**T**	**T**	**T**	**T**	**T**	**T**
	10A	**T**	**T**	**T**	**T**	**T**	**T**	**T**
	16A	**T**	**T**	**T**	**T**	**T**	**T**	**T**
	20A	**T**	**T**	**T**	**T**	**T**	**T**	**T**
	25A	**T**	**T**	**T**	**T**	**T**	**T**	**T**
	32A	**T**	**T**	**T**	**T**	**T**	**T**	**T**
	40A	**T**	**T**	**T**	**T**	**T**	**T**	**T**
	50A	**4000**	**T**	**T**	**T**	**T**	**T**	**T**
	63A	**4000**	**T**	**T**	**T**	**T**	**T**	**T**

. T = Total discrimination.

6. COMPLIANCE AND APPROVALS

In accordance with standards:

. EN/IEC 60898-1 with 6000 A breaking capacity
. EU guidelines: 2014/35/EU + 2014/30/EU
. Legrand circuit-breakers can be used under the conditions of use as defined by EN/IEC 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

Environment respect – Compliance with EU directives:

. Compliance with Directive 2011/65/EU of 08/06/11 (RoHS) and subsequent modifications and integrations.

Precious metal:

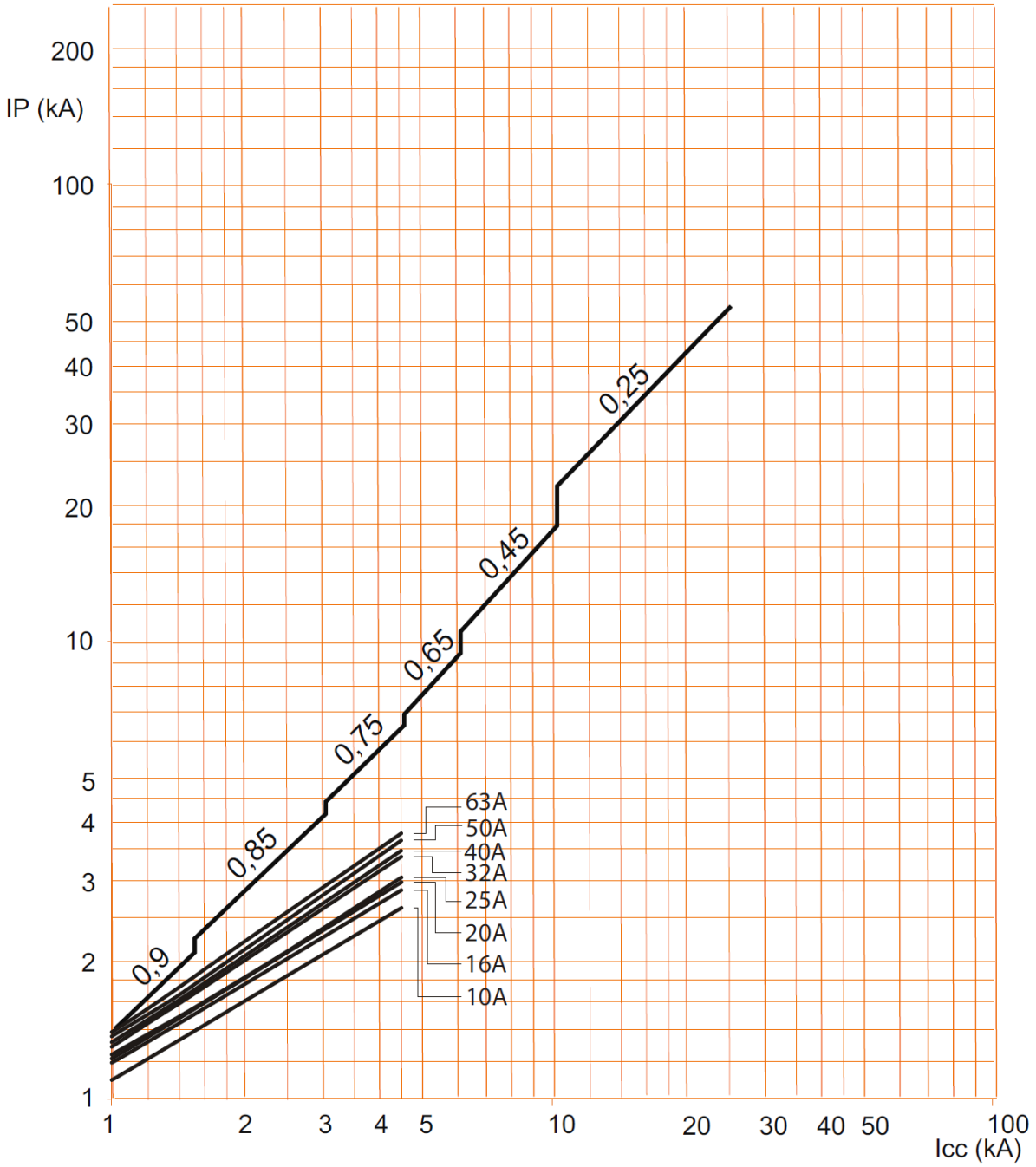
. Silver: 0,04 g per pole In ≤ 32 A; 0.08 g per pole In ≥ 40 A
. No gold

Packaging:

. Design and manufacture of packaging in accordance with Directive 94/62/EC

7. CHARACTERISTIC CURVES

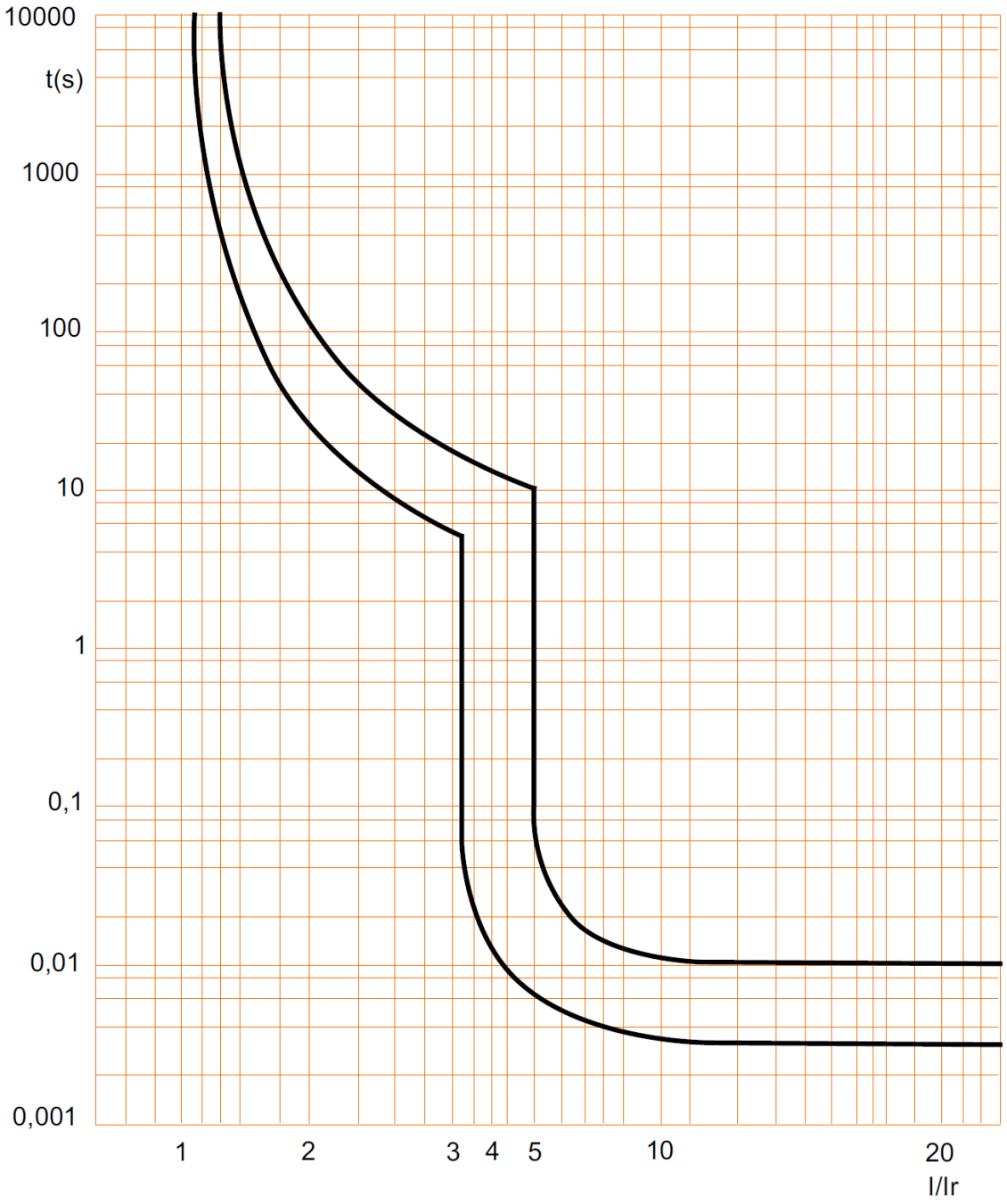
Limiting current curve: circuit breakers B & C curve:



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

7. CHARACTERISTIC CURVES

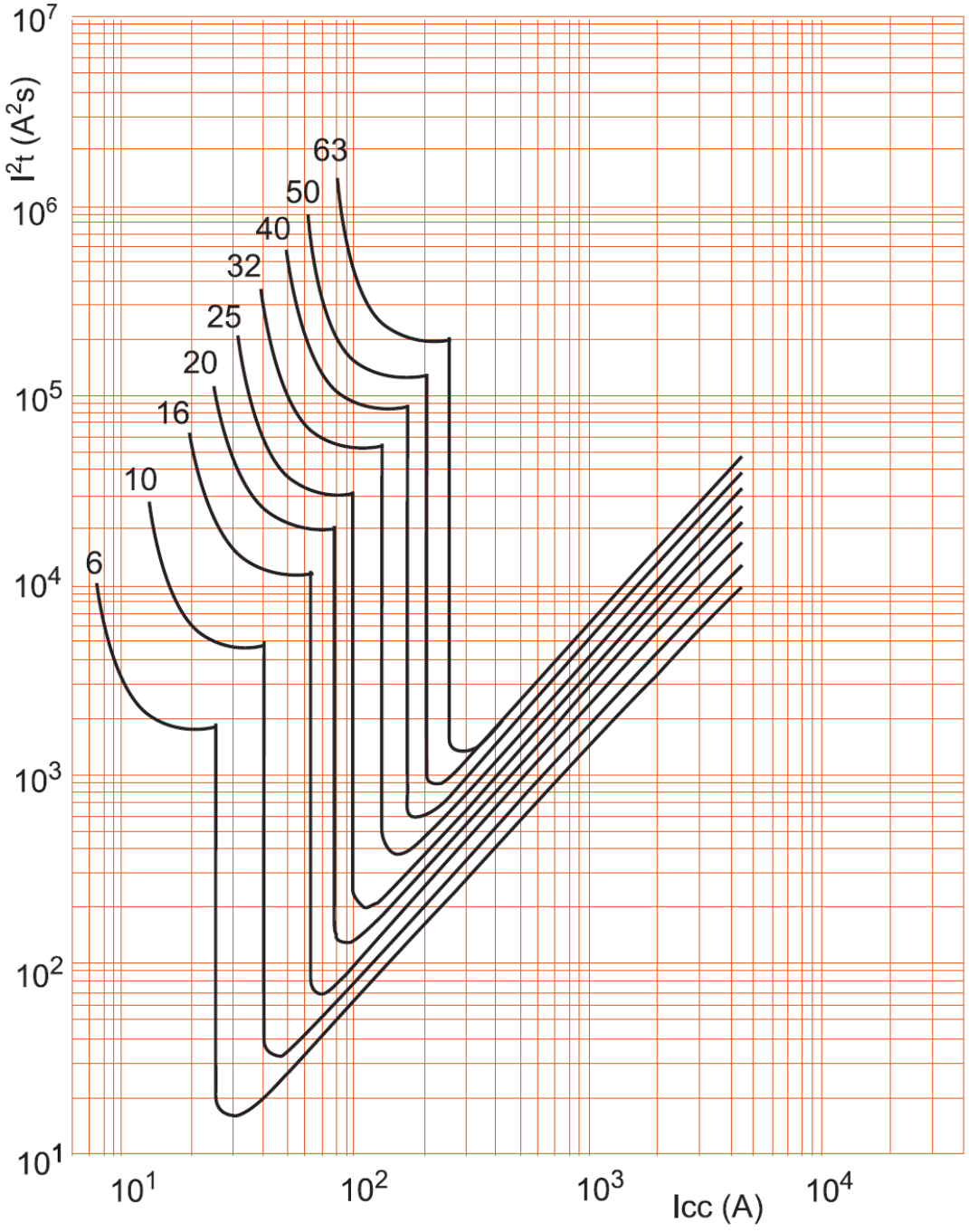
Limiting current curve: circuit breakers B curve:



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

7. CHARACTERISTIC CURVES *(continued)*

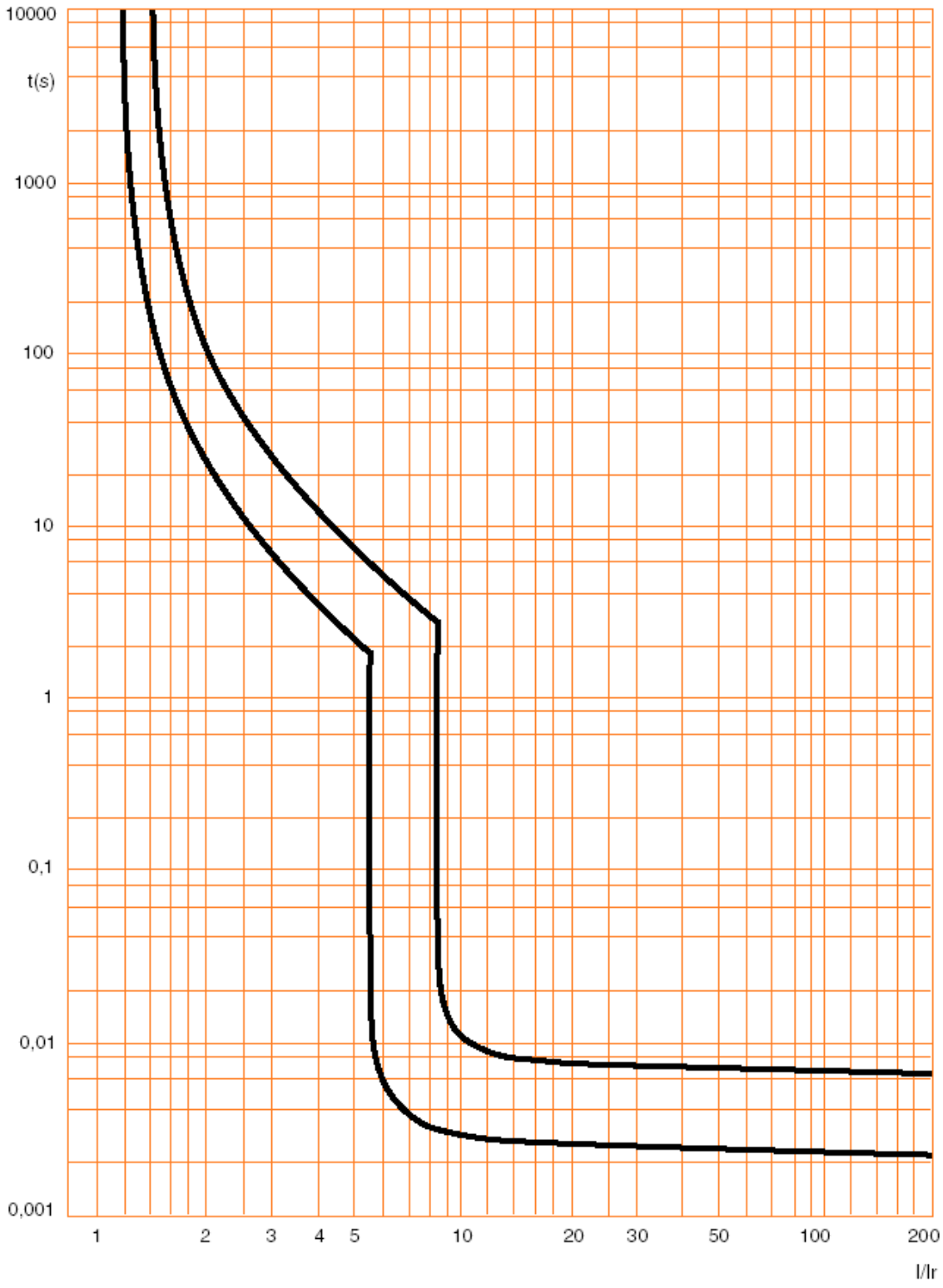
. Limiting thermal energy curve of circuit breakers B curve, 1P / 3P (400 V~ / 50 Hz) :



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

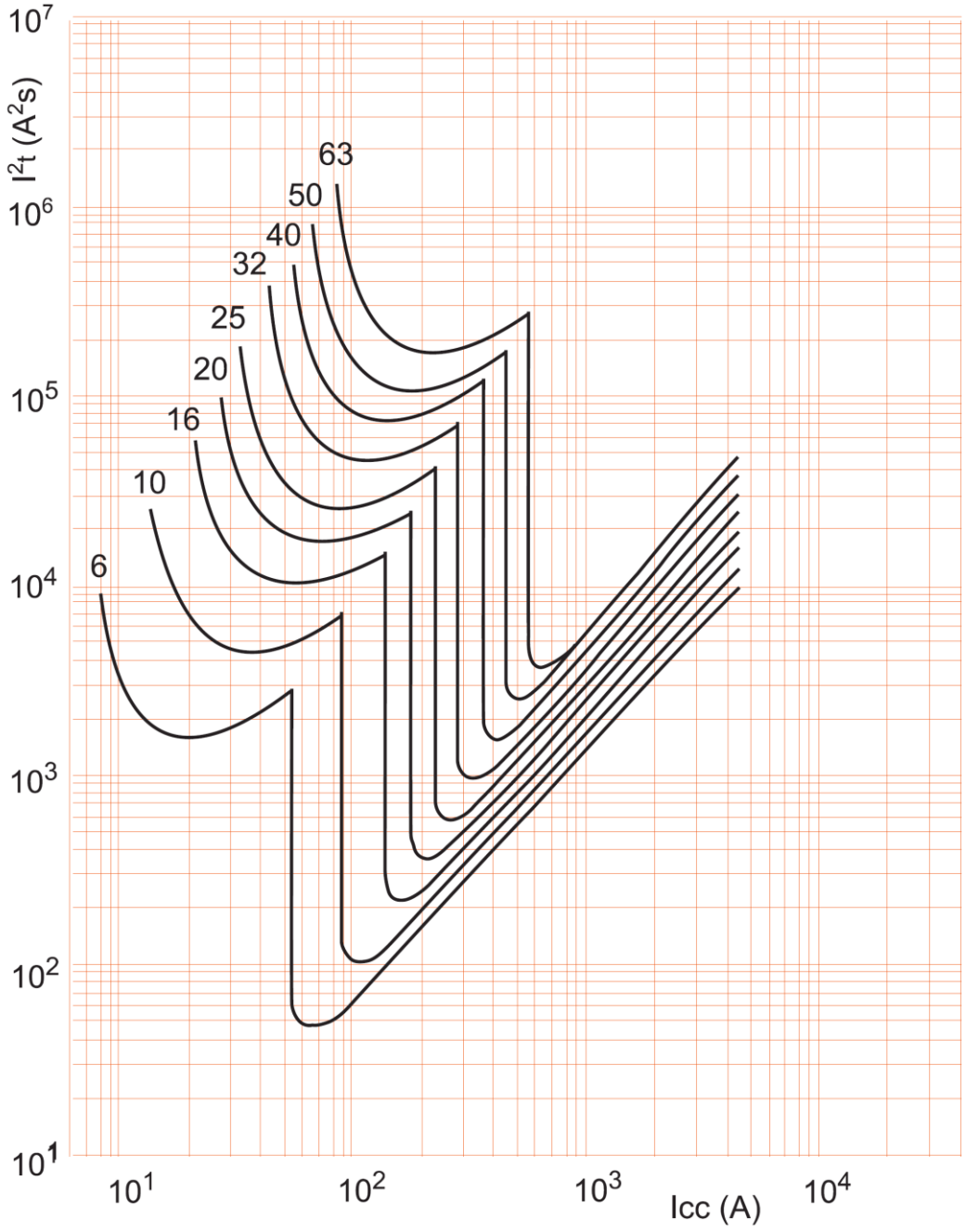
7. CHARACTERISTIC CURVES *(continued)*

Operating characteristic of circuit breakers C curve:



7. CHARACTERISTIC CURVES *(continued)*

. Limiting thermal energy curve of circuit breakers C curve, 1P / 3P (400 V~ / 50 Hz) :



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

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

Signal 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)

Possible combinations of m.c.b and auxiliaries:

. 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 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

Installation software:

. XL PRO³