87045 LIMOGES Cedex
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DX³ MCB 25kA up to 63A (1,5 modules per pole)

Cat N°(s): 4 097 20 to 4 098 95

CONTENTS PAGES

1. DESCRIPTION - USE

Thermo-magnetic circuit breaker with positive contact indication for control, protection and isolation of electrical circuits.

Symbol:

Technology:
. Current limiting device.
. 1,5 module (26,7 mm) per pole.
. Trip free mechanism.

2. RANGE

Number of Poles:
. 1P / 2P / 3P / 4P.

Rated current In:
. 32 / 40 / 50 / 63 B and C curves.
. 16 / 20 / 25 / 32 / 40 / 50 / 63 D curve.
. 12,5 / 16 / 25 / 40 / 63 MA curve.

Tripping characteristics and magnetic tripping calibrations:
. B curve (between 3 and 5 In).
. C curve (between 5 and 10 In).
. D curve (between 10 and 14 In).
. MA curve (between 12 and 14 In).

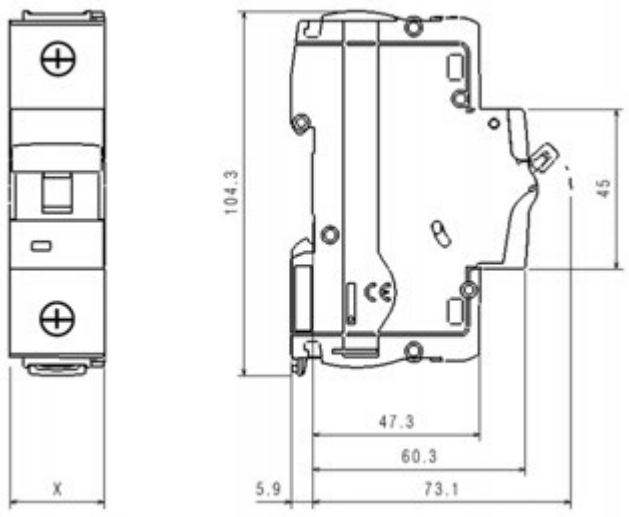
Thermal threshold:
. Non operating current (Inf): 1,05 In.
. Operating current (If): 1,3 In.

Rated Voltage / Frequency:
. 230 / 400 V ~, 50 / 60 Hz with standard tolerances.
. 240 / 415 V ~, 50 / 60 Hz with standard tolerances.
. 125 V per pole in direct current.

Maximum operating voltage:
. 500 V ~, 50 / 60 Hz with derating of breaking capacity.

Breaking capacity:
. 25 kA according to IEC/EN/NF 60947-2

3. OVERALL DIMENSIONS

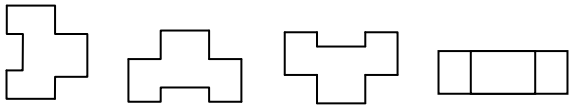


N° of poles	"X" (mm)
1P	**26,7 mm**
2P	**53,4 mm**
3P	**80,1 mm**
4P	**106,8 mm**

4. PREPARATION - CONNECTION

Fixing:
. On symmetric rail EN/IEC 60715 or DIN 35.

Operating position:
. Vertical Horizontal Upside down on the side



4. PREPARATION – CONNECTION *(continued)*

Supply:
. Either from the top or from the bottom.

Terminal depth:
. 19 mm.
. It is possible to separate the terminals by retractable insulation shields.

Stripping length recommended:
. 17 mm for main terminals.

Screw head:
. Mixed, slotted and Pozidriv n°2.

Tightening torque:
. Recommended: 3 Nm.
. Mini 2,5 Nm.
. Maxi 3,5 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:

	Copper cable	
	Without ferrule	Without ferrule
Rigid cable	**1 x 1,5mm² to 50mm²** **2 x 1,5mm² to 16mm²**	-
Flexible cable	**1 x 1,5mm² to 35mm²** **2 x 1,5mm² to 10mm²**	**1 x 1,5mm² to 35mm²**

Manual actuation of the MCB:
. Ergonomic 2 position handle:
0 / OFF: Device open.
I / ON: Device closed.

Contact status display:
. By marking of the associated m.c.b. handle:
"O-Off" white on a green background = contacts opened.
"I-On" white on a red background = contacts closed.
. By mechanical indicator on front face:
Green = contacts opened.
Red = contacts closed.

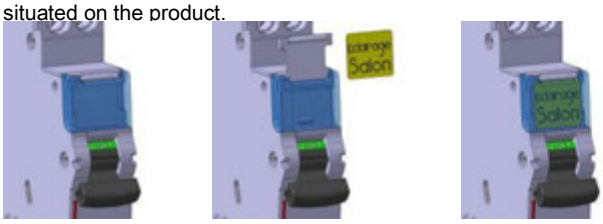
Sealing:
. Possible in "Open" position (OFF) or "Close" position (ON).

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

Consignment:
. On site padlocking system, possible only open circuit - 0 / OFF handle position - with 1,5mm² stripped wire for example or 2,4mm wide colring.

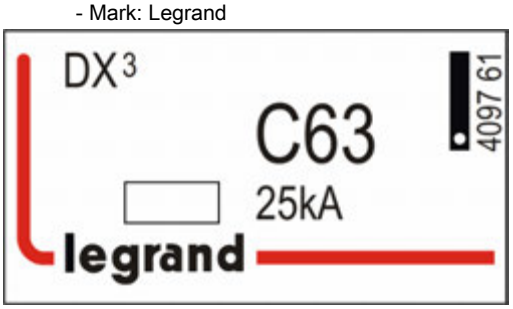
4. PREPARATION – CONNECTION *(continued)*

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



5. GENERAL CHARACTERISTICS

Front side marking:
. By permanent ink pad printing showing:
- Trade name: DX³
- Breaking curve
- Rated current (in A)
- Icu in kA, Breaking capacity according to IEC/ EN 60947-2 standard (25kA)
- Catalogue number and logo
- Mark: Legrand



Short-circuit breaking capacity:
. Alternate current 50/60Hz, single-phase or three-phase network, according to IEC 60947-2. B, C, D and MA curves

Un		1P	2P	3P / 4P
110 V~	Icu	**36 kA**	**72 kA**	**-**
230 V~		**25 kA**	**50 kA**	**50 kA**
400 V~		**-**	**25 kA**	**25 kA**
440 V~		**-**	**20 kA**	**20 kA**
500 V~		**-**	**10 kA**	**10 kA**

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

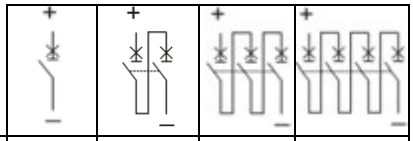
Short-circuit breaking capacity of only one pole:
. Three-phase network 220 / 380 V~ to 240 / 415 V~
- In TN neutral system, Icn1 = 25 kA (under 220 to 240 V~)
- In IT neutral system, Iit = 6,25 kA (under 380 to 415 V~)

. Three-phase network 110 / 220 V~ to 120 / 240 V~
- In TN neutral system, Icn1 = 50 kA (under 110 to 127 V~)
- In IT neutral system, Iit = 12,5 kA (under 220 to 240 V~)

5. GENERAL CHARACTERISTICS *(continued)*

Short-circuit breaking capacity: *(continued)*

. Direct current according to standard IEC 60947-2



Un		1P	2P	3P	4P
24 ÷ 48 V d.c.	Icu	**25 kA**	**25 kA**	-	-
110 V d.c.		-	**25 kA**	**25 kA**	-
230 V d.c.		-	-	-	**25 kA**

24 ÷ 48 V d.c.	Ics	**25 kA**	**25 kA**	-	-
110 V d.c.		-	**25 kA**	**25 kA**	-
230 V d.c.		-	-	-	**25 kA**

Minimum operating voltage :

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

Pulse rated voltage:

. Uimp = 6 kV (wave 1.5 / 50 μs).

Insulation rated voltage:

. Ui = 500 V.

Pollution degree::

. 3.

Dielectric strength:

. 2500 V.

Operation at 400Hz:

. The magnetic thresholds increase by 45%.

Load to close and to open of a pole trough the handle:

. 0,17 Nm per pole to close.
. 0,09 Nm per pole to open.

Mechanical endurance according to IEC 60947-2 :

. 20 000 operations without load
. 10 000 operations with load (under In x Cos φ=0.9)
. 2 000 operations with load (under In in DC current)

Enclosure material:

. Polyester.
. Characteristics of this material: self extinguishing, heat and fire resistant according to EN 60898-1, glow-wire test at 960°C for external parts made of insulating material necessary to retain in position current-carrying parts and parts of protective circuit (650°C for all other external parts made of insulating material).

5. GENERAL CHARACTERISTICS *(continued)*

Average weight per pole:

. 0,220 kg.

Volume when packed:

	Volume (dm^3)
Single pole	**0,36**
Double pole	**0,63**
Triple / Four pole	**1,14**

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).

Resistance to sinusoidal vibrations:

. According to IEC 60068-2-35.
. 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/s^2)

Recognition:

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

Power dissipated per pole at In (in W) :

. mcbs B, C and D curves

In	16 A	20 A	25 A	32 A	40 A	50 A	63 A
1P ÷ 4P	**2,75**	**4,72**	**2,8**	**4,4**	**4,6**	**4,32**	**6,05**

. mcb MA curve

In	12,5 A	16 A	25 A	40 A	63 A
2P ÷ 4P	**2,2**	**2,75**	**2,8**	**4,6**	**6,05**

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

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: 40°C according IEC/EN 60947-2.

	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
16	**21.9**	**20.0**	**18.7**	**18.0**	**17.3**	**16.6**	**16.0**	**15.4**	**14.7**	**14.1**
20	**27.7**	**25.0**	**23.2**	**22.4**	**21.6**	**20.8**	**20.0**	**19.2**	**18.4**	**17.6**
25	**34.5**	**31.5**	**29.5**	**28.3**	**27.2**	**26.0**	**25.0**	**24.0**	**22.7**	**21.7**
30	**41.7**	**38.3**	**36.0**	**34.5**	**33.0**	**31.5**	**30.0**	**28.8**	**27.3**	**26.1**
32	**45.8**	**41.0**	**37.8**	**36.5**	**34.9**	**33.3**	**32.0**	**30.7**	**29.1**	**27.8**
40	**55.5**	**51.0**	**48.0**	**46.0**	**44.0**	**42.0**	**40.0**	**38.0**	**36.0**	**34.0**
50	**70.0**	**64.0**	**60.0**	**57.5**	**55.0**	**52.5**	**50.0**	**47.5**	**45.0**	**42.5**
63	**88.1**	**80.6**	**75.6**	**72.5**	**69.9**	**66.1**	**63.0**	**59.8**	**56.1**	**52.9**

Derating of MCB for use with fluorescent lights:

Ferromagnetic and electronic ballasts have a high inrush current for a short time. These currents can cause the tripping of circuit breakers. At the time of the installation, it should take into account the maximum number of ballasts per circuit breaker that the manufacturers of lamps and ballasts indicate in their catalogues.

Influence of the altitude:

	≤2000 m	3000 m	4000 m	5000 m
Dielectric holding	**3000 V**	**2500 V**	**2000 V**	**1500 V**
Max operational Voltage	**400 V**	**400 V**	**400 V**	**400 V**
Derating at 40°C	**none**	**none**	**none**	**none**

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

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

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

These values are given by the recommendation of IEC 60439-1, NF C 63421 and EN 60439-1 standards.
To avoid to have to use these coefficients, it is necessary to allow a good ventilation and to separate the devices with 0.5 module spacing elements (cat. N° 4 063 07).

5. GENERAL CHARACTERISTICS *(continued):*

MCB's back-up protection in three-phase network (+ neutal) 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.

		Fuse upstream									
		gG type									
m.c.b. downstream		≤20A	25A	32A	40A	50A	63A	80A	100A	125A	160A
DX³ 25kA B, C and D curves	16A	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**
	20A	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**
	25A	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**
	32A	-	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**
	40A	-	-	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**
	50A	-	-	-	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**
	63A	-	-	-	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**

		Fuse upstream									
		aM type									
m.c.b. downstream		≤20A	25A	32A	40A	50A	63A	80A	100A	125A	160A
DX³ 25kA B, C and D curves	16A	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**
	20A	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**
	25A	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**
	32A	-	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**
	40A	-	-	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**
	50A	-	-	-	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**
	63A	-	-	-	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**

All these values are also valid for circuit breakers associated to differential blocks.
According to the curves and ratings of circuit breakers, attention to the magnetic threshold and to the size of upstream circuit breakers which must necessarily be higher.

5. GENERAL CHARACTERISTICS *(continued):*

MCB's back-up protection in three-phase network (+ neutal) 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										
		DX³ 36kA						DX³ 50kA				
		C curve						B, C and D curves				
m.c.b. downstream		≤25A	32A	40A	50A	63A	80A	≤25A	32A	40A	50A	63A
DX³ 25kA B and C curves	32A	-	-	**36kA**	**36kA**	**36kA**	**36kA**	-	-	**50kA**	**50kA**	**50kA**
	40A	-	-	-	**36kA**	**36kA**	**36kA**	-	-	-	**50kA**	**50kA**
	50A	-	-	-	-	**36kA**	**36kA**	-	-	-	-	**50kA**
	63A	-	-	-	-	-	**36kA**	-	-	-	-	-

		m.c.b. upstream										
		DX³ 36kA						DX³ 50kA				
		C curve						B and C curves				
m.c.b. downstream		≤25A	32A	40A	50A	63A	80A	≤25A	32A	40A	50A	63A
DX³ 25kA D curve	16A	-	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	-	**50kA**	**50kA**	**50kA**	**50kA**
	20A	-	-	**36kA**	**36kA**	**36kA**	**36kA**	-	-	**50kA**	**50kA**	**50kA**
	25A	-	-	-	**36kA**	**36kA**	**36kA**	-	-	-	**50kA**	**50kA**
	32A	-	-	-	-	**36kA**	**36kA**	-	-	-	-	**50kA**
	40A	-	-	-	-	-	**36kA**	-	-	-	-	-
	50A	-	-	-	-	-	-	-	-	-	-	-
	63A	-	-	-	-	-	-	-	-	-	-	-

		m.c.b. upstream				
		DX³ 50kA				
		D curve				
m.c.b. downstream		≤25A	32A	40A	50A	63A
DX³ 25kA D curve	16A	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**
	20A	**50kA**	**50kA**	**50kA**	**50kA**	**50kA**
	25A	-	**50kA**	**50kA**	**50kA**	**50kA**
	32A	-	-	**50kA**	**50kA**	**50kA**
	40A	-	-	-	**50kA**	**50kA**
	50A	-	-	-	-	**50kA**
	63A	-	-	-	-	-

All these values are also valid for circuit breakers associated to differential blocks.
According to the curves and ratings of circuit breakers, attention to the magnetic threshold and to the size of upstream circuit breakers which must necessarily be higher.

5. GENERAL CHARACTERISTICS *(continued):*

MCB's back-up protection in three-phase network (+ neutal) 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 125						DPX³ 160 / DPX³ 160 + diff.							
		36kA						50kA							
m.c.b. downstream		16A	25A	40A	63A	100A	125A	16A	25A	40A	63A	80A	100A	125A	160A
DX³ 25kA B, C and D curves	16A	-	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	-	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	20A	-	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	-	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	25A	-	-	**30kA**	**30kA**	**30kA**	**30kA**	-	-	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	32A	-	-	**30kA**	**30kA**	**30kA**	**30kA**	-	-	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	40A	-	-	-	**30kA**	**30kA**	**30kA**	-	-	-	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	50A	-	-	-	**30kA**	**30kA**	**30kA**	-	-	-	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	63A	-	-	-	-	**30kA**	**30kA**	-	-	-	-	**36kA**	**36kA**	**36kA**	**36kA**

		m.c.c.b. upstream											
		DPX 160					DPX 250ER			DPX 250ER AB			
		36 - 50kA					36 - 50kA			36kA			
m.c.b. downstream		25A	40A	63A	100A	125A	100A	160A	250A	90A	130A	170A	240A
DX³ 25kA B, C and D curves	16A	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**
	20A	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**
	25A	-	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**
	32A	-	-	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**
	40A	-	-	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**
	50A	-	-	-	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**
	63A	-		-	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**

All these values are also valid for circuit breakers associated to differential blocks.
According to the curves and ratings of circuit breakers, attention to the magnetic threshold and to the size of upstream circuit breakers which must necessarily be higher.

5. GENERAL CHARACTERISTICS *(continued):*

MCB's back-up protection in three-phase network (+ neutal) 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					
		DPX³250 / DPX³250+diff.				DPX 400AB	
		36 - 70kA				36kA	
m.c.b. downstream		100A	160A	200A	250A	320A	400A
DX³ 25kA B, C and D curves	16A	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	20A	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	25A	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	32A	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	40A	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	50A	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	63A	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**

All these values are also valid for circuit breakers associated to differential blocks.
According to the curves and ratings of circuit breakers, attention to the magnetic threshold and to the size of upstream circuit breakers which must necessarily be higher.

5. GENERAL CHARACTERISTICS *(continued):*

MCB's back-up protection in three-phase network (+ neutal) 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						DPX / DPXH / DPXL 630MT				
		36 – 70 – 100kA						36 – 70 – 100kA				
m.c.b. downstream		25A	40A	63A	100A	160A	250A	250A	320A	400A	500A	630A
DX³ 25kA B and C curves	32A	-	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	40A	-	-	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	50A	-	-	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	63A	-	-	-	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**

		m.c.c.b. upstream										
		DPX / H / L 250						DPX / DPXH / DPXL 630MT				
		36 – 70 – 100kA						36 – 70 – 100kA				
m.c.b. downstream		25A	40A	63A	100A	160A	250A	250A	320A	400A	500A	630A
DX³ 25kA D curve	16A	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	20A	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	25A	-	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	32A	-	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	40A	-	-	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	50A	-	-	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	63A	-	-	-	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**

		m.c.c.b. upstream													
		DPX 125						DPX³ 160 / DPX³ 160 + diff.							
		36kA						50kA							
m.c.b. downstream		16A	25A	40A	63A	100A	125A	16A	25A	40A	63A	80A	100A	125A	160A
DX³ 25kA MA curve	12,5A	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	16A	-	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	-	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	25A	-	-	**30kA**	**30kA**	**30kA**	**30kA**	-	-	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	40A	-	-	-	**30kA**	**30kA**	**30kA**	-	-	-	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	63A	-	-	-	-	**30kA**	**30kA**	-	-	-	-	**36kA**	**36kA**	**36kA**	**36kA**

All these values are also valid for circuit breakers associated to differential blocks.
According to the curves and ratings of circuit breakers, attention to the magnetic threshold and to the size of upstream circuit breakers which must necessarily be higher.

5. GENERAL CHARACTERISTICS *(continued):*

MCB's back-up protection in three-phase network (+ neutal) 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 160					DPX 250ER			DPX 250ER AB			
		36 - 50kA					36 - 50kA			36kA			
m.c.b. downstream		25A	40A	63A	100A	125A	100A	160A	250A	90A	130A	170A	240A
DX³ 25kA MA curve	12,5A	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**
	16A	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**
	25A	-	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**
	40A	-	-	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**
	63A	-	-	-	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**	**30kA**

		m.c.c.b. upstream											
		DPX³250 / DPX³250+diff.				DPX / H / L 250						DPX 400AB	
		36 - 70kA				36 – 70 – 100kA						36kA	
m.c.b. downstream		100A	160A	200A	250A	25A	40A	63A	100A	160A	250A	320A	400A
DX³ 25kA MA curve	12,5A	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	16A	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	25A	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	40A	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	63A	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**

		m.c.c.b. upstream				
		DPX / DPXH / DPXL 630MT				
		36 – 70 – 100kA				
m.c.b. downstream		250A	320A	400A	500A	630A
DX³ 25kA MA curve	12,5A	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	16A	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	25A	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	40A	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**
	63A	**36kA**	**36kA**	**36kA**	**36kA**	**36kA**

All these values are also valid for circuit breakers associated to differential blocks.
According to the curves and ratings of circuit breakers, attention to the magnetic threshold and to the size of upstream circuit breakers which must necessarily be higher.

5. GENERAL CHARACTERISTICS *(continued):*

MCB's back-up protection in three-phase network (+ neutal) 230 / 240 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
DX³ 25kA B, C and D curves	16A	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**
	20A	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**
	25A	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**
	32A	-	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**
	40A	-	-	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**
	50A	-	-	-	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**
	63A	-	-	-	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**

		Fuse upstream									
		aM type									
m.c.b. downstream		≤20A	25A	32A	40A	50A	63A	80A	100A	125A	160A
DX³ 25kA B, C and D curves	16A	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**
	20A	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**
	25A	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**
	32A	-	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**
	40A	-	-	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**	**100kA**
	50A	-	-	-	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**
	63A	-	-	-	-	-	-	**100kA**	**100kA**	**100kA**	**100kA**

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

		m.c.b. upstream										
		DX³ 36kA						DX³ 50kA				
		C curve						B, C and D curves				
m.c.b. downstream		≤25A	32A	40A	50A	63A	80A	≤25A	32A	40A	50A	63A
DX³ 25kA B and C curves	32A	-	-	**60kA**	**60kA**	**60kA**	**60kA**	-	-	**70kA**	**70kA**	**70kA**
	40A	-	-	-	**60kA**	**60kA**	**60kA**	-	-	-	**70kA**	**70kA**
	50A	-	-	-	-	**60kA**	**60kA**	-	-	-	-	**70kA**
	63A	-	-	-	-	-	**60kA**	-	-	-	-	-

All these values are also valid for circuit breakers associated to differential blocks.
According to the curves and ratings of circuit breakers, attention to the magnetic threshold and to the size of upstream circuit breakers which must necessarily be higher.

5. GENERAL CHARACTERISTICS *(continued)*

MCB's back-up protection in three-phase network (+ neutal) 230 / 240 V~ according to IEC/EN 60947-2:

		m.c.b. upstream										
		DX³ 36kA						DX³ 50kA				
		C Curve						B and C curves				
m.c.b. downstream		≤25A	32A	40A	50A	63A	80A	≤25A	32A	40A	50A	63A
DX³ 25kA Curve D	16A	-	**60kA**	**60kA**	**60kA**	**60kA**	**60kA**	-	**70kA**	**70kA**	**70kA**	**70kA**
	20A	-	-	**60kA**	**60kA**	**60kA**	**60kA**	-	-	**70kA**	**70kA**	**70kA**
	25A	-	-	-	**60kA**	**60kA**	**60kA**	-	-	-	**70kA**	**70kA**
	32A	-	-	-	-	**60kA**	**60kA**	-	-	-	-	**70kA**
	40A	-	-	-	-	-	**60kA**	-	-	-	-	-
	50A	-	-	-	-	-	-	-	-	-	-	-
	63A	-	-	-	-	-	-	-	-	-	-	-

		m.c.b. upstream				
		DX³ 50kA				
		D curve				
m.c.b. downstream		≤25A	32A	40A	50A	63A
DX³ 25kA D curve	16A	**70kA**	**70kA**	**70kA**	**70kA**	**70kA**
	20A	**70kA**	**70kA**	**70kA**	**70kA**	**70kA**
	25A	-	**70kA**	**70kA**	**70kA**	**70kA**
	32A	-	-	**70kA**	**70kA**	**70kA**
	40A	-	-	-	**70kA**	**70kA**
	50A	-	-	-	-	**70kA**
	63A	-	-	-	-	-

All these values are also valid for circuit breakers associated to differential blocks.
According to the curves and ratings of circuit breakers, attention to the magnetic threshold and to the size of upstream circuit breakers which must necessarily be higher.

5. GENERAL CHARACTERISTICS *(continued)*

MCB's back-up protection in three-phase network (+ neutal) 230 / 240 V~ according to IEC/EN 60947-2:

		m.c.c.b. upstream							
		DPX³ 160 / DPX³ 160 + diff.							
		50kA							
m.c.b. downstream		16A	25A	40A	63A	80A	100A	125A	160A
DX³ 25kA B and C Curves	32A	-	-	**65kA**	**65kA**	**65kA**	**65kA**	**65kA**	**65kA**
	40A	-	-	-	**65kA**	**65kA**	**65kA**	**65kA**	**65kA**
	50A	-	-	-	**65kA**	**65kA**	**65kA**	**65kA**	**65kA**
	63A	-	-	-	-	**65kA**	**65kA**	**65kA**	**65kA**

		m.c.c.b. upstream							
		DPX³ 160 / DPX³ 160 + diff.							
		50kA							
m.c.b. downstream		16A	25A	40A	63A	80A	100A	125A	160A
DX³ 25kA D curve	16A	-	**65kA**	**65kA**	**65kA**	**65kA**	**65kA**	**65kA**	**65kA**
	20A	-	**65kA**	**65kA**	**65kA**	**65kA**	**65kA**	**65kA**	**65kA**
	25A	-	-	**65kA**	**65kA**	**65kA**	**65kA**	**65kA**	**65kA**
	32A	-	-	**65kA**	**65kA**	**65kA**	**65kA**	**65kA**	**65kA**
	40A	-	-	-	**65kA**	**65kA**	**65kA**	**65kA**	**65kA**
	50A	-	-	-	**65kA**	**65kA**	**65kA**	**65kA**	**65kA**
	63A	-	-	-	-	**65kA**	**65kA**	**65kA**	**65kA**

		m.c.c.b. upstream											
		DPX 160					DPX 250ER			DPX³ 250 / DPX³ 250 + diff.			
		50kA					50kA			70kA			
m.c.b. downstream		25A	40A	63A	100A	125A	100A	160A	250A	100A	160A	200A	250A
DX³ 25kA B, C and D curves	16A	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	**60kA**	**60kA**	**60kA**	**60kA**
	20A	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	**60kA**	**60kA**	**60kA**	**60kA**
	25A	-	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	**60kA**	**60kA**	**60kA**	**60kA**
	32A	-	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	**60kA**	**60kA**	**60kA**	**60kA**
	40A	-	-	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	**60kA**	**60kA**	**60kA**	**60kA**
	50A	-	-	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	**60kA**	**60kA**	**60kA**	**60kA**
	63A	-	-	-	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	**60kA**	**60kA**	**60kA**	**60kA**

All these values are also valid for circuit breakers associated to differential blocks.
According to the curves and ratings of circuit breakers, attention to the threshold and size of upstream fuse which must necessarily be higher

5. GENERAL CHARACTERISTICS *(continued)*

MCB's back-up protection in three-phase network (+ neutal) 230 / 240 V~ according to IEC/EN 60947-2:

		m.c.c.b. upstream											
		DPX 250						DPX H / L 250					
		36kA						70 – 100kA					
m.c.b. downstream		25A	40A	63A	100A	160A	250A	25A	40A	63A	100A	160A	250A
DX³ 25kA B, C and D curves	16A	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	**60kA**	**60kA**	**60kA**	**60kA**	**60kA**	**60kA**
	20A	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	**60kA**	**60kA**	**60kA**	**60kA**	**60kA**	**60kA**
	25A	-	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	-	**60kA**	**60kA**	**60kA**	**60kA**	**60kA**
	32A	-	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	-	**60kA**	**60kA**	**60kA**	**60kA**	**60kA**
	40A	-	-	**55kA**	**55kA**	**55kA**	**55kA**	-	-	**60kA**	**60kA**	**60kA**	**60kA**
	50A	-	-	**55kA**	**55kA**	**55kA**	**55kA**	-	-	**60kA**	**60kA**	**60kA**	**60kA**
	63A	-	-	-	**55kA**	**55kA**	**55kA**	-		-	**60kA**	**60kA**	**60kA**

		m.c.c.b. upstream											
		DPX 630MT						DPX H / L 630					
		36kA						70 – 100kA					
m.c.b. downstream		25A	40A	63A	100A	160A	250A	25A	40A	63A	100A	160A	250A
DX³ 25kA B, C and D curves	16A	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	**60kA**	**60kA**	**60kA**	**60kA**	**60kA**	**60kA**
	20A	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	**60kA**	**60kA**	**60kA**	**60kA**	**60kA**	**60kA**
	25A	-	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	-	**60kA**	**60kA**	**60kA**	**60kA**	**60kA**
	32A	-	**55kA**	**55kA**	**55kA**	**55kA**	**55kA**	-	**60kA**	**60kA**	**60kA**	**60kA**	**60kA**
	40A	-	-	**55kA**	**55kA**	**55kA**	**55kA**	-	-	**60kA**	**60kA**	**60kA**	**60kA**
	50A	-	-	**55kA**	**55kA**	**55kA**	**55kA**	-	-	**60kA**	**60kA**	**60kA**	**60kA**
	63A	-	-	-	**55kA**	**55kA**	**55kA**	-		-	**60kA**	**60kA**	**60kA**

All these values are also valid for circuit breakers associated to differential blocks.
According to the curves and ratings of circuit breakers, attention to the magnetic threshold and to the size of upstream circuit breakers which must necessarily be higher.

5. GENERAL CHARACTERISTICS *(continued)*

Selectivity between two levels of protection

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

Selectivity between modular circuit breakers and fuses:

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

		Fuse upstream							
		gG type							
m.c.b. downstream		32A	40A	50A	63A	80A	100A	125A	160A
DX³ 25kA B and C curves	32A	-	-	1200	1700	1900	3500	4500	8000
	40A	-	-	-	-	1700	3000	4000	6000
	50A	-	-	-	-	1600	2600	3500	5000
	63A	-	-	-	-	-	2400	3300	5000
DX³ 25kA D curve	16A	-	1400	1800	2600	3000	5600	8000	15000
	20A	-	1200	1500	2200	2500	4600	6300	10000
	25A	-	-	1200	1800	2100	3700	5000	6000
	32A	-	-	-	1500	1800	3000	4000	5000
	40A	-	-	-	-	1700	2600	3500	4500
	50A	-	-	-	-	1400	2000	3000	4000
	63A	-	-	-	-	-	2000	3000	4000

		Fuse upstream								
		aM type								
m.c.b. downstream		25A	32A	40A	50A	63A	80A	100A	125A	160A
DX³ 25kA B and C curves	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 25kA D curve	16A	-	1000	1400	2100	4000	6000	9000	21000	25000
	20A	-	-	1300	1800	3400	5100	7000	14000	20000
	25A	-	-	1000	1500	2700	4000	5500	9000	12000
	32A	-	-	-	1100	2100	3500	4700	7500	10000
	40A	-	-	-	-	1800	2800	4000	6000	7000
	50A	-	-	-	-	1800	2500	3500	5500	6000
	63A	-	-	-	-	-	2500	3500	5500	6000

5. GENERAL CHARACTERISTICS *(continued)*

Selectivity between modular circuit breakers:

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

		m.c.b. upstream							
		DX³ 50kA							
		C curve							
m.c.b. downstream		10A	16A	20A	25A	32A	40A	50A	63A
DX³ 25kA B and C curves	32A	-	-	-	-	-	**300**	**500**	**600**
	40A	-	-	-	-	-	-	**400**	**600**
	50A	-	-	-	-	-	-	-	**500**
	63A	-	-	-	-	-	-	-	-

DX³ 25kA D curve	16A	-	-	-	-	**300**	**500**	**700**	**1300**
	20A	-	-	-	-	-	**400**	**500**	**1000**
	25A	-	-	-	-	-	-	**500**	**800**
	32A	-	-	-	-	-	-	-	**600**
	40A	-	-	-	-	-	-	-	-
	50A	-	-	-	-	-	-	-	-
	63A	-	-	-	-	-	-	-	-

		m.c.b. upstream							
		DX³ 50kA							
		D curve							
m.c.b. downstream		10A	16A	20A	25A	32A	40A	50A	63A
DX³ 25kA B, C and D curves	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	-	-	-	-	-	-	-	-

5. GENERAL CHARACTERISTICS *(continued)*

Selectivity between modular circuit breakers and M.C.C.B.s:

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

		m.c.c.b. upstream												
		DPX³160E / B / N DPX³160E / B / N + diff.								DPX 160				
		16 - 25 - 50kA								25 – 36 – 50kA				
m.c.b. downstream		16A	25A	40A	63A	80A	100A	125A	160A	25A	40A	63A	100A	160A
DX³ 25kA B and C curves	32A	-	-	-	T	T	T	T	T	-	-	2000	3500	7000
	40A	-	-	-	T	T	T	T	T	-	-	2000	2500	6000
	50A	-	-	-	4000	4000	5000	10000	10000	-	-	-	2000	5500
	63A	-	-	-	-	3000	5000	10000	10000	-	-	-	2000	5000
DX³ 25kA D curve	16A	-	T	T	T	T	T	T	T	6000	6000	6000	6000	T
	20A	-	-	T	T	T	T	T	T	-	5000	5000	5000	18000
	25A	-	-	T	T	T	T	T	T	-	3500	4500	4500	8500
	32A	-	-	-	T	T	T	T	T	-	-	4000	4000	7000
	40A	-	-	-	T	T	T	T	T	-	-	3000	3000	6000
	50A	-	-	-	-	4000	5000	10000	10000	-	-	-	3000	5500
	63A	-	-	-	-	3000	5000	10000	10000	-	-	-	3000	5000
DX³ 25kA MA curve	12,5A	T	T	T	T	T	T	T	T	7000	7000	7500	7500	T
	16A	-	T	T	T	T	T	T	T	6000	6000	6000	6000	T
	25A	-	-	T	T	T	T	T	T	-	3500	4500	4500	8500
	40A	-	-	-	T	T	T	T	T	-	-	3000	3000	6000
	63A	-	-	-	-	3000	5000	10000	10000	-	-	-	3000	6000

5. GENERAL CHARACTERISTICS *(continued)*

Selectivity between modular circuit breakers and M.C.C.B.s:

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

		m.c.c.b. upstream												
		DPX 250ER			DPX 250ER AB				DPX 250 / H / L					
		25 – 36 – 50kA			36kA				25 - 70 - 100kA					
m.c.b. downstream		100A	160A	250A	90A	130A	170A	240A	25A	40A	63A	100A	160A	250A
DX³ 25kA B and C curves	32A	**4000**	**7000**	**T**	**T**	**T**	**T**	**T**	**-**	**-**	**2000**	**5000**	**T**	**T**
	40A	**3500**	**6000**	**T**	**8**	**T**	**T**	**T**	**-**	**-**	**2000**	**5000**	**10000**	**T**
	50A	**2000**	**5500**	**7000**	**4500**	**4500**	**T**	**T**	**-**	**-**	**-**	**4000**	**8000**	**T**
	63A	**2000**	**5000**	**5000**	**4500**	**4500**	**T**	**T**	**-**	**-**	**-**	**4000**	**8000**	**T**
DX³ 25kA D curve	16A	**6000**	**T**	**T**	**T**	**T**	**T**	**T**	**-**	**4000**	**4000**	**10000**	**T**	**T**
	20A	**6000**	**T**	**T**	**T**	**T**	**T**	**T**	**-**	**4000**	**4000**	**8000**	**T**	**T**
	25A	**5500**	**8500**	**T**	**T**	**T**	**T**	**T**	**-**	**-**	**3000**	**6000**	**T**	**T**
	32A	**4500**	**7000**	**T**	**T**	**T**	**T**	**T**	**-**	**-**	**2000**	**5000**	**T**	**T**
	40A	**4500**	**6000**	**T**	**8000**	**T**	**T**	**T**	**-**	**-**	**-**	**5000**	**10000**	**T**
	50A	**3500**	**5500**	**T**	**4000**	**4000**	**T**	**T**	**-**	**-**	**-**	**4000**	**8000**	**T**
	63A	**3500**	**5000**	**6000**	**4000**	**4000**	**T**	**T**	**-**	**-**	**-**	**4000**	**8000**	**T**
DX³ 25kA MA curve	12,5A	**T**	**T**	**T**	**T**	**T**	**T**	**T**	**5000**	**5000**	**5000**	**T**	**T**	**T**
	16A	**6000**	**T**	**T**	**T**	**T**	**T**	**T**	**-**	**4000**	**4000**	**10000**	**T**	**T**
	25A	**5500**	**8500**	**T**	**T**	**T**	**T**	**T**	**-**	**-**	**3000**	**6000**	**T**	**T**
	40A	**4500**	**6000**	**T**	**4500**	**T**	**T**	**T**	**-**	**-**	**-**	**5000**	**10000**	**T**
	63A	**3500**	**5000**	**6000**	**3500**	**3500**	**T**	**T**	**-**	**-**	**-**	**4000**	**8000**	**T**

5. GENERAL CHARACTERISTICS *(continued)*

Selectivity between modular circuit breakers and M.C.C.B.s:

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

		m.c.c.b. upstream					
		DPX³ 250 DPX³ 250 + diff.				DPX 400AB	
		25 - 36 - 70kA				36kA	
m.c.b. downstream		100A	160A	200A	250A	320A	400A
DX³ 25kA B and C curves	32A	T	T	T	T	T	T
	40A	T	T	T	T	T	T
	50A	20000	T	T	T	T	T
	63A	15000	T	T	T	T	T
DX³ 25kA D curve	16A	T	T	T	T	T	T
	20A	T	T	T	T	T	T
	25A	T	T	T	T	T	T
	32A	T	T	T	T	T	T
	40A	T	T	T	T	T	T
	50A	20000	T	T	T	T	T
	63A	15000	T	T	T	T	T
DX³ 25kA MA curve	12,5A	T	T	T	T	T	T
	16A	T	T	T	T	T	T
	25A	T	T	T	T	T	T
	40A	T	T	T	T	T	T
	63A	-	T	T	T	T	T

6. CONFORMITIES AND APPROVALS

Compliance to standards:

. Standard reference: IEC/EN 60947-2 with 25 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 called "RoHS" which provides for the banning of hazardous substances such as lead, mercury, cadmium, hexavalent chromium, brominated flame retardants polybrominated biphenyls (PBBs) and polybrominated diphenyl ethers (PBDEs) from 1st July 2006
. Compliance with Directive 91/338/CEE of 18/06/91 and Decree 94-647 of 27/07/04

Plastic materials :

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

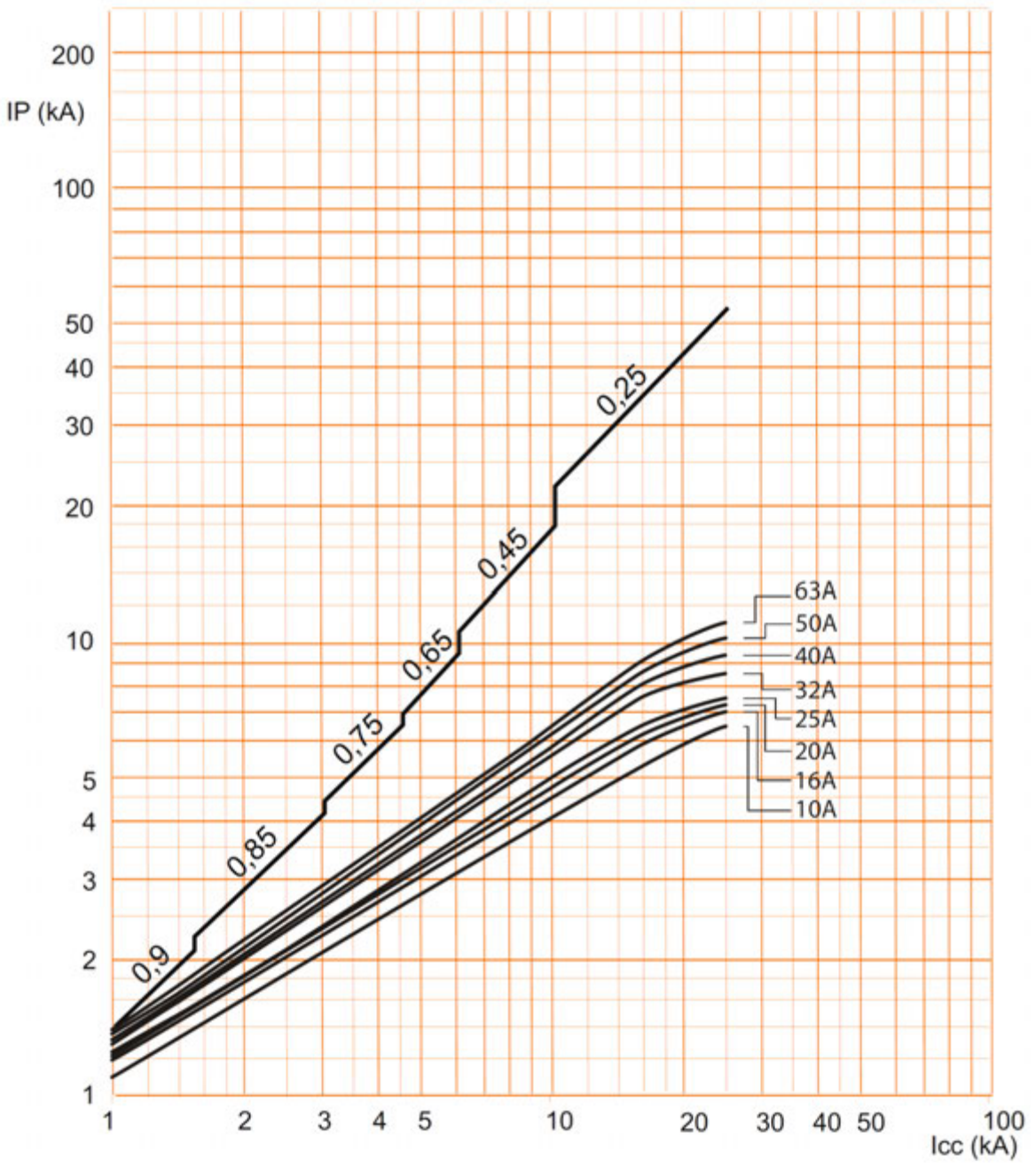
Packaging:

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

7. CURVES

Current limiting curves:

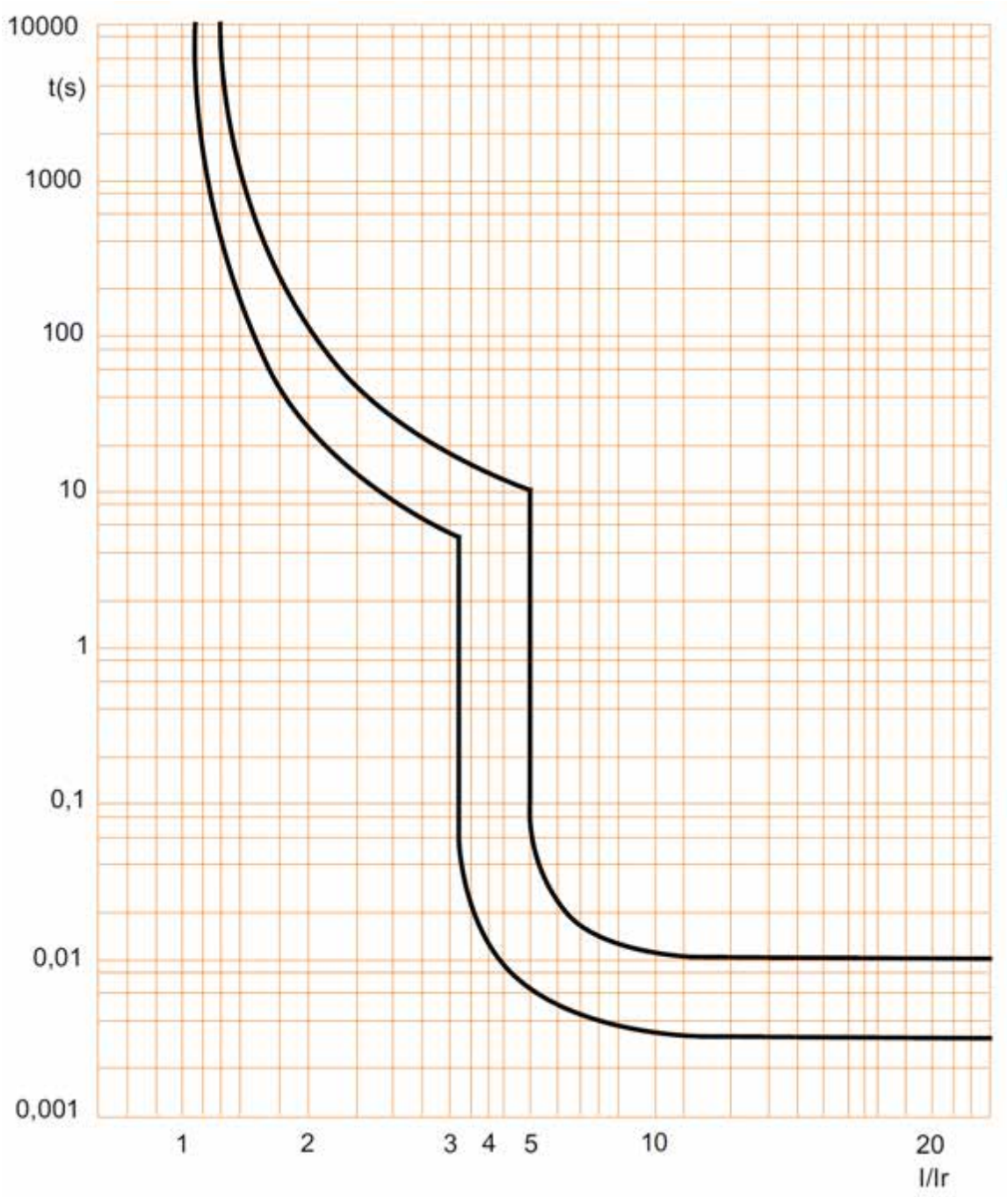
.B, C, D, and MA curves



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

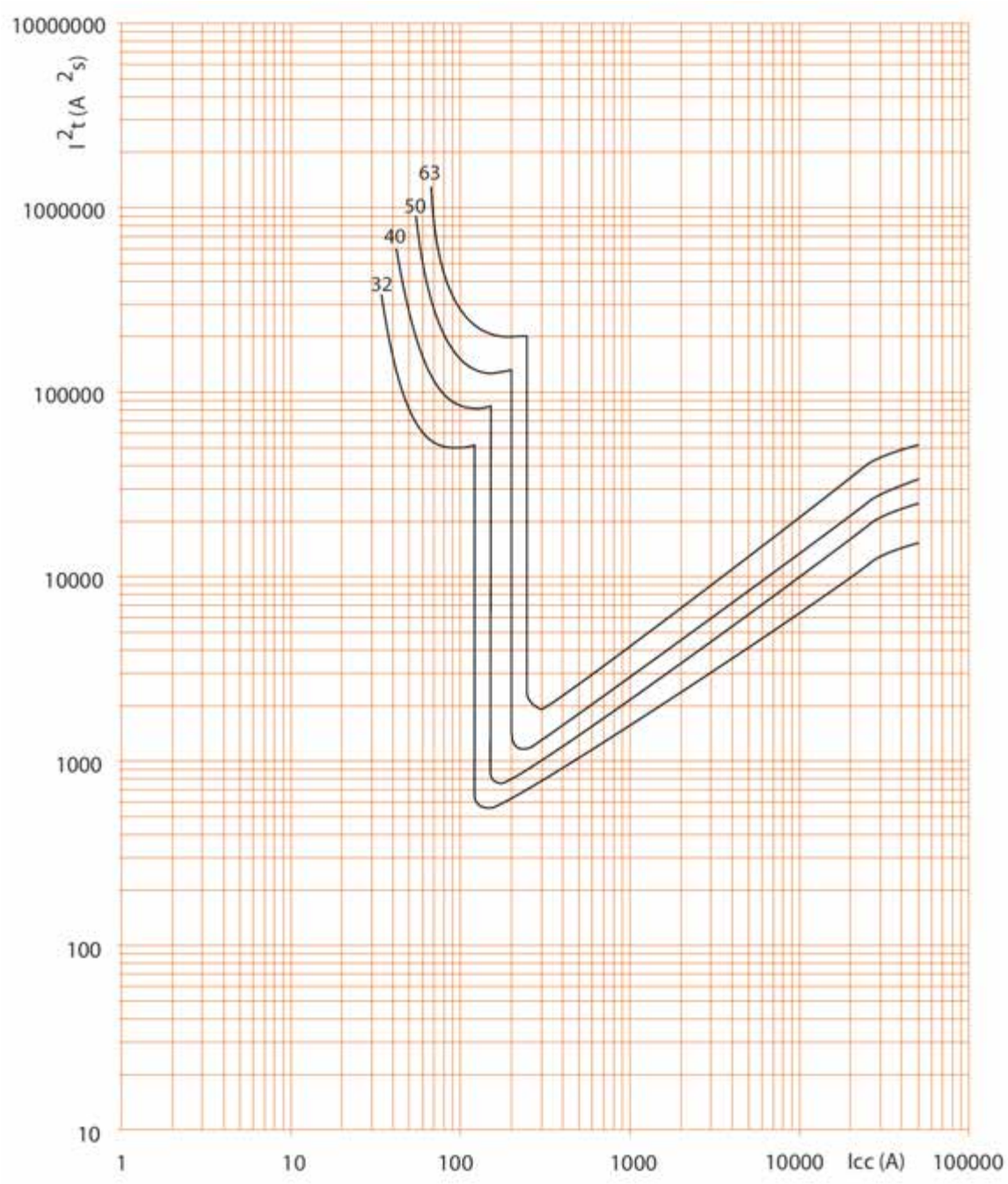
7. CURVES *(continued)*

Operating characteristic of circuit breakers B curve :



7. CURVES *(continued)*

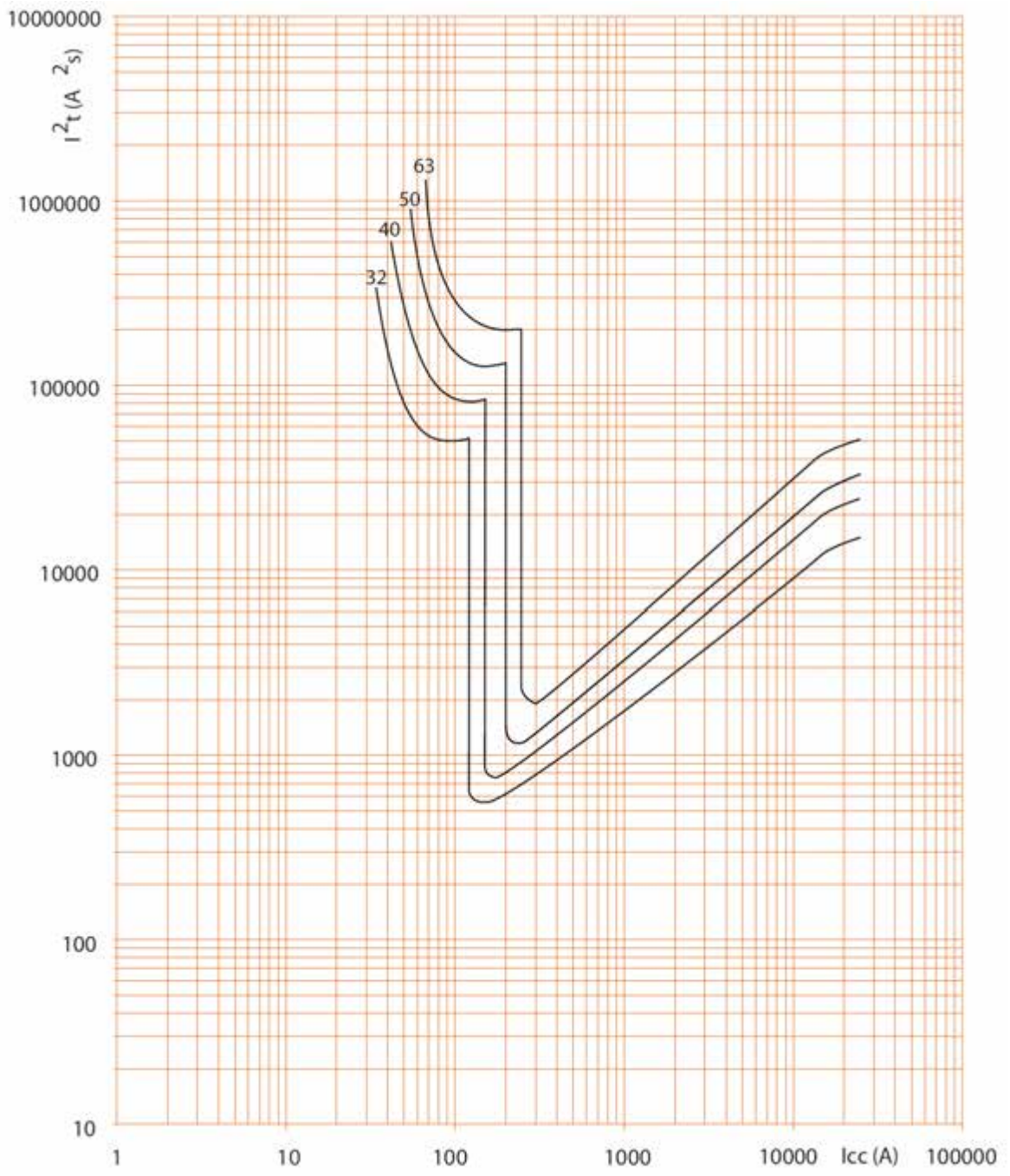
. Thermal energy limiting curves of circuit breakers B curve, 2P (230V~ / 50Hz) :



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

7. CURVES *(continued)*

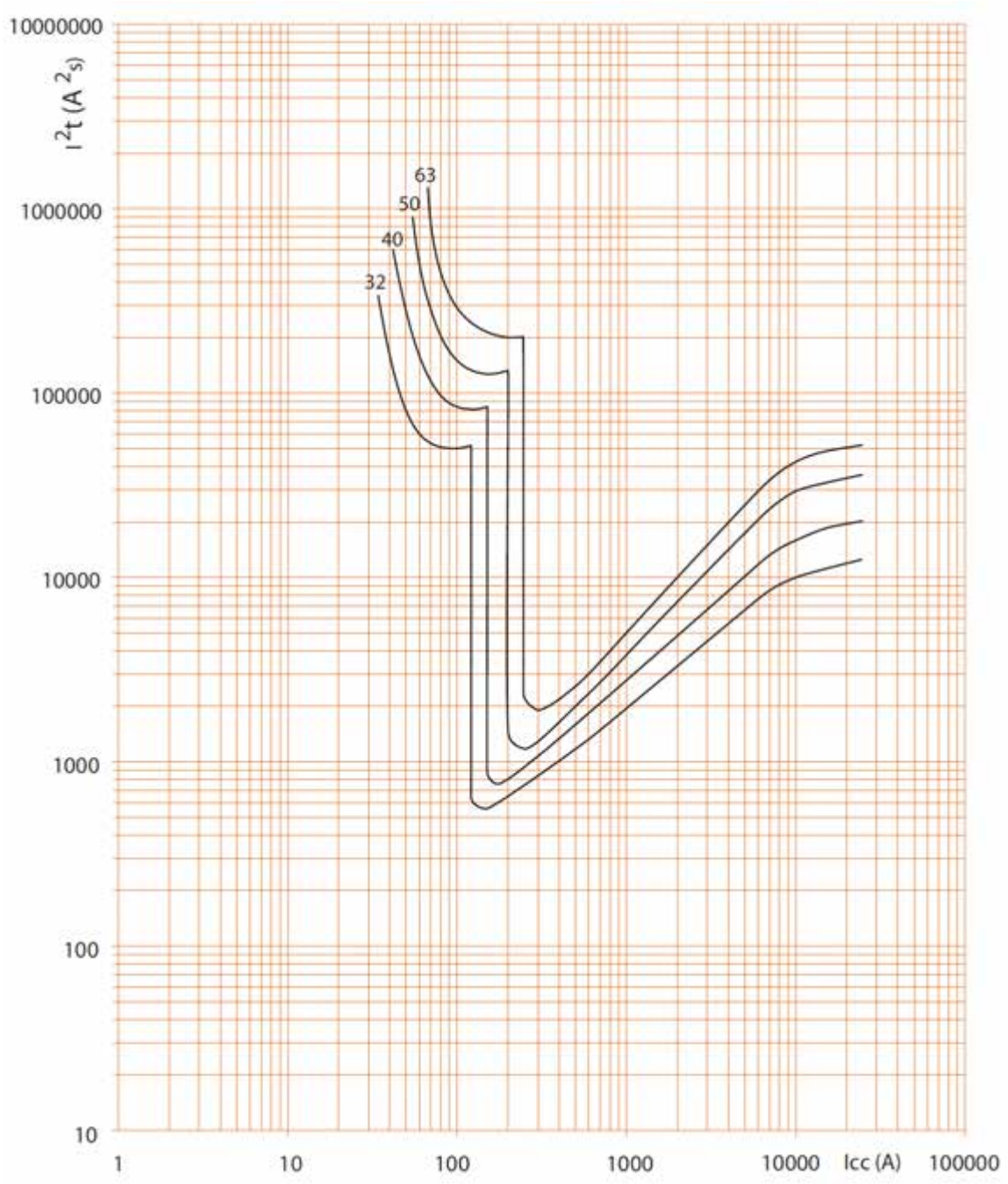
. Thermal energy limiting curves of circuit breakers B curve, 2P (400V~ / 50Hz) :



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

7. CURVES *(continued)*

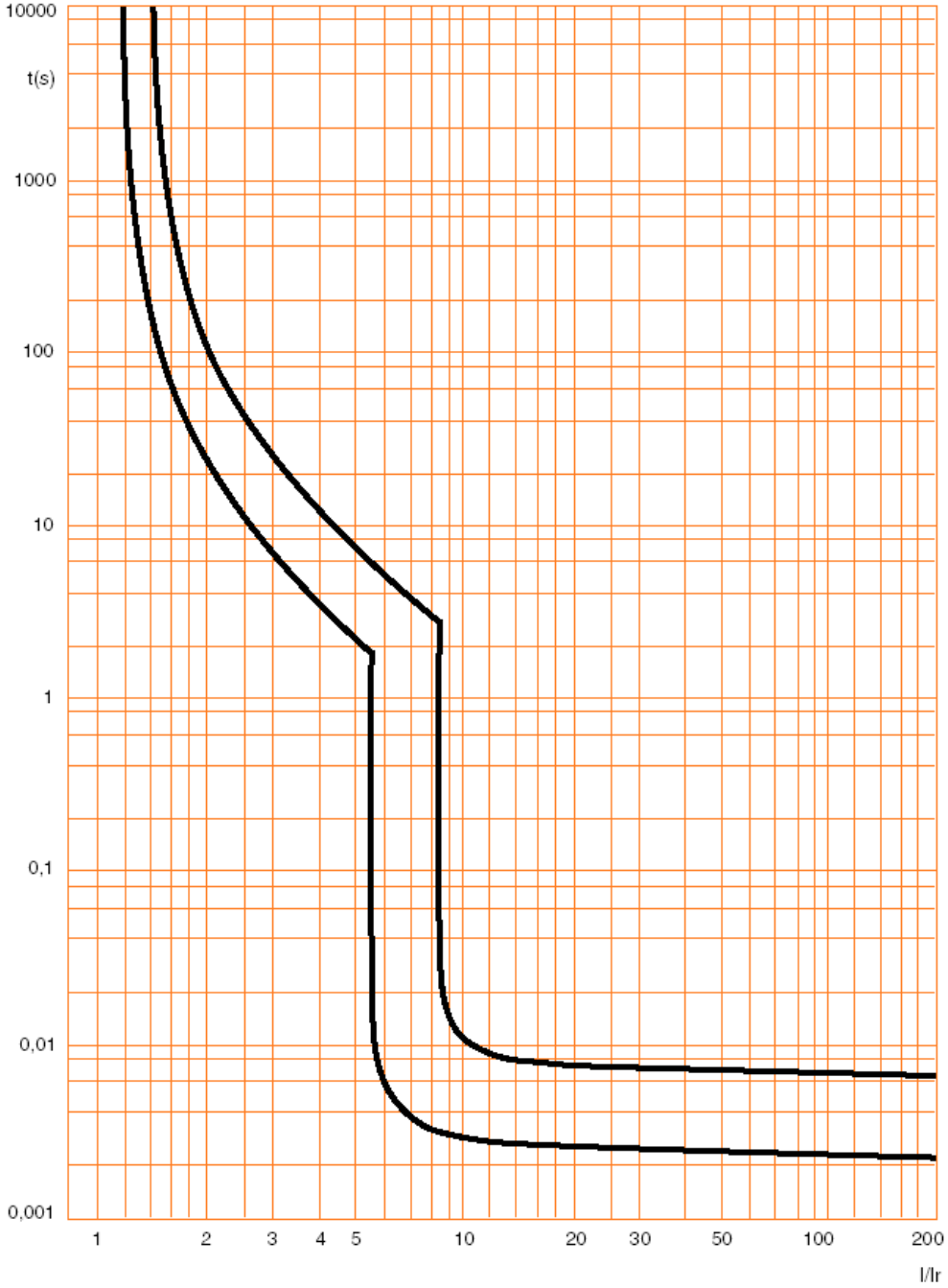
. Thermal energy limiting curves of circuit breakers B curve, 3P / 4P (400V~ / 50Hz) :



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

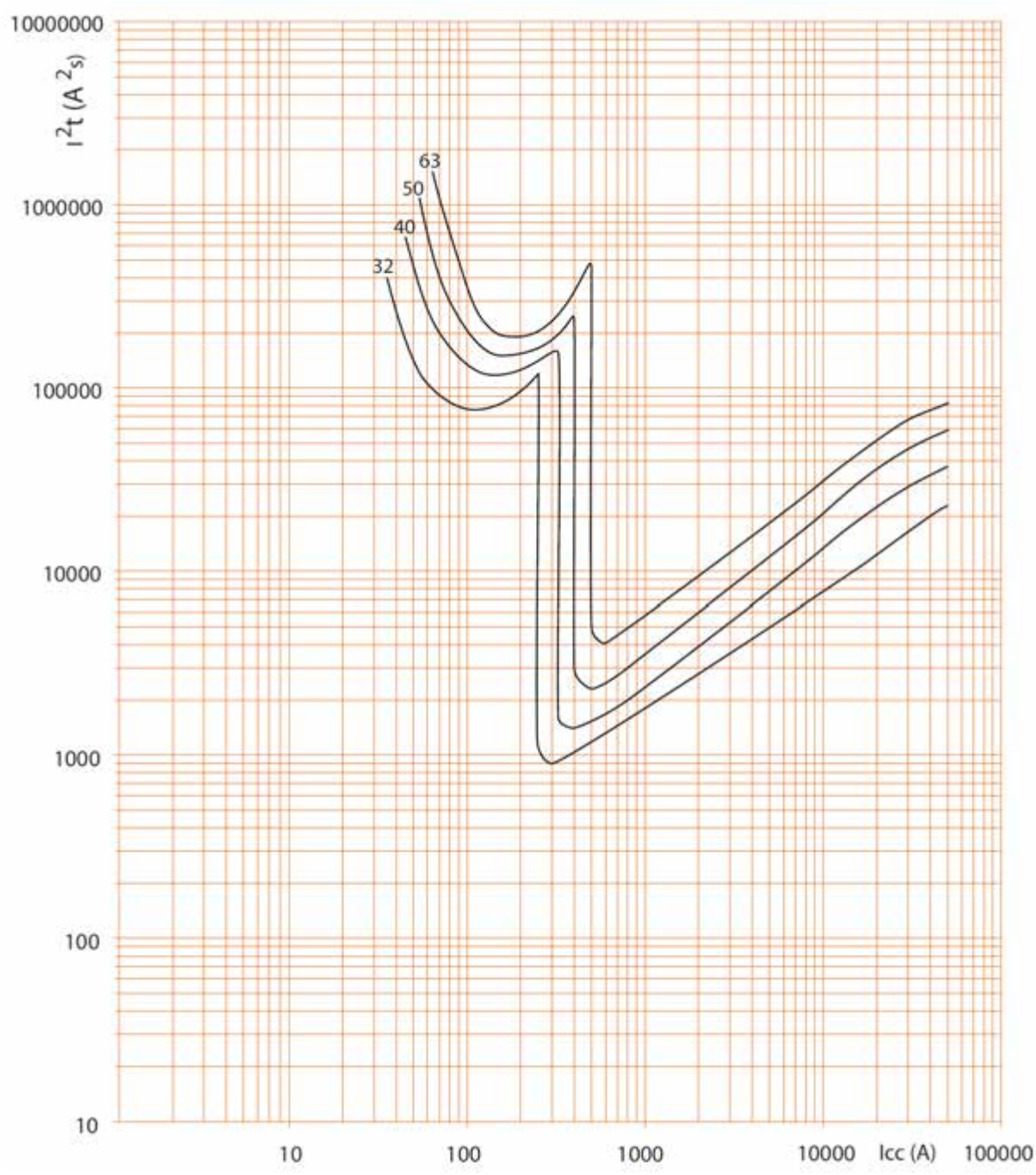
7. CURVES *(continued)*

Operating characteristic of circuit breakers C curve:



7. CURVES *(continued)*

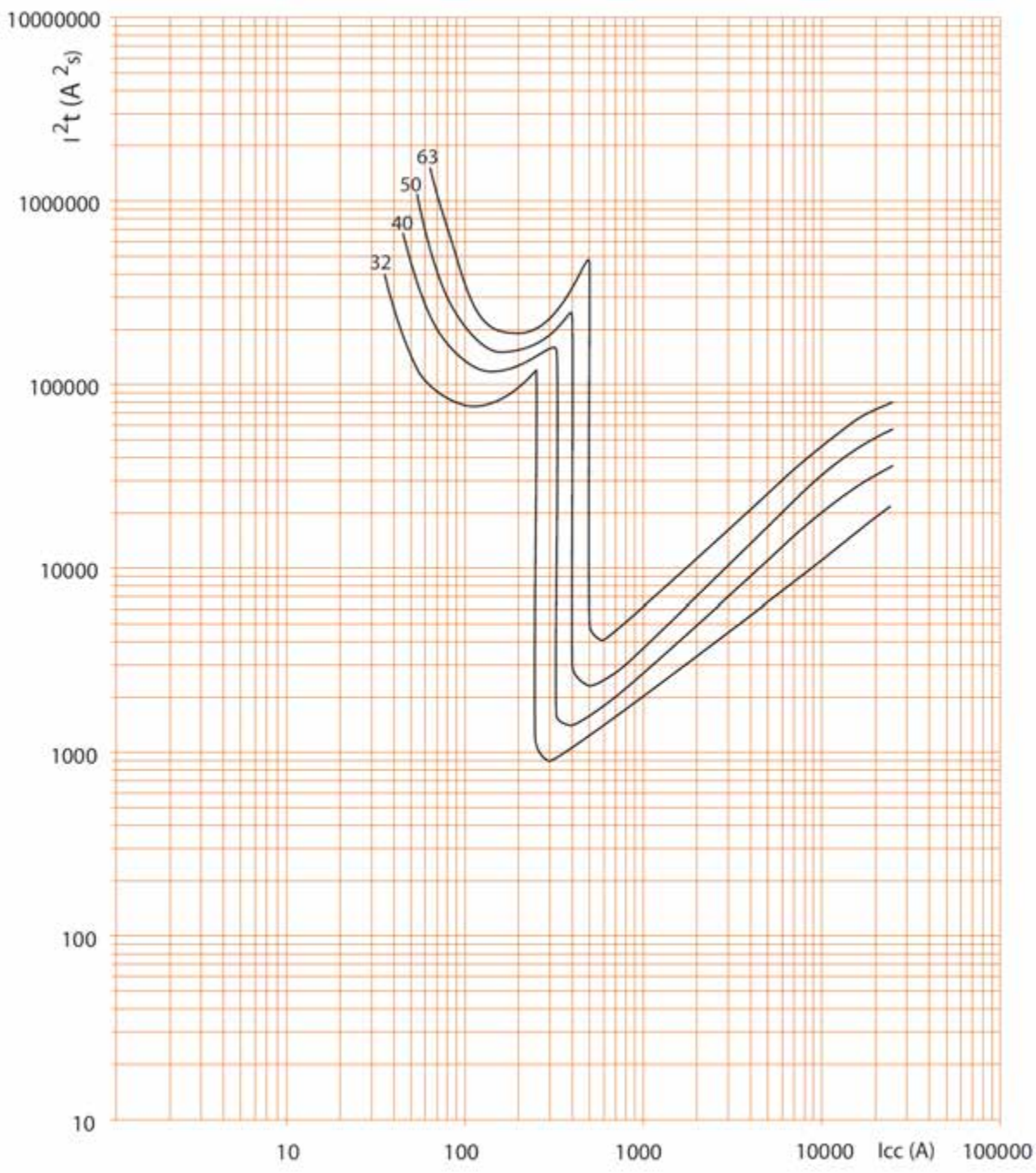
. Thermal energy limiting curves of circuit breakers C curve , 2P (230V~ / 50Hz) :



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

7. CURVES *(continued)*

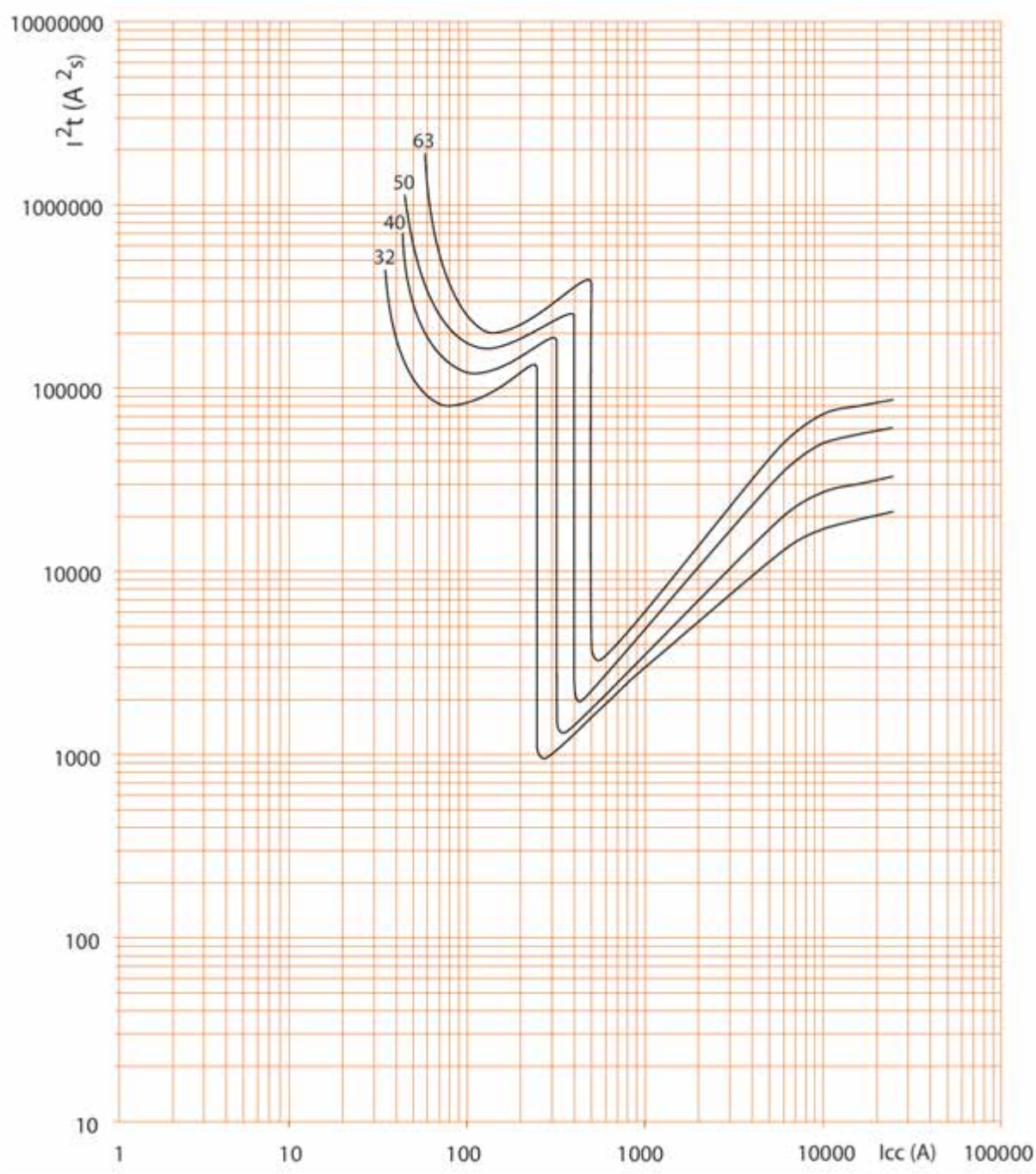
. Thermal energy limiting curves of circuit breakers C curve, 2P (400V~ / 50Hz) :



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

7. CURVES *(continued)*

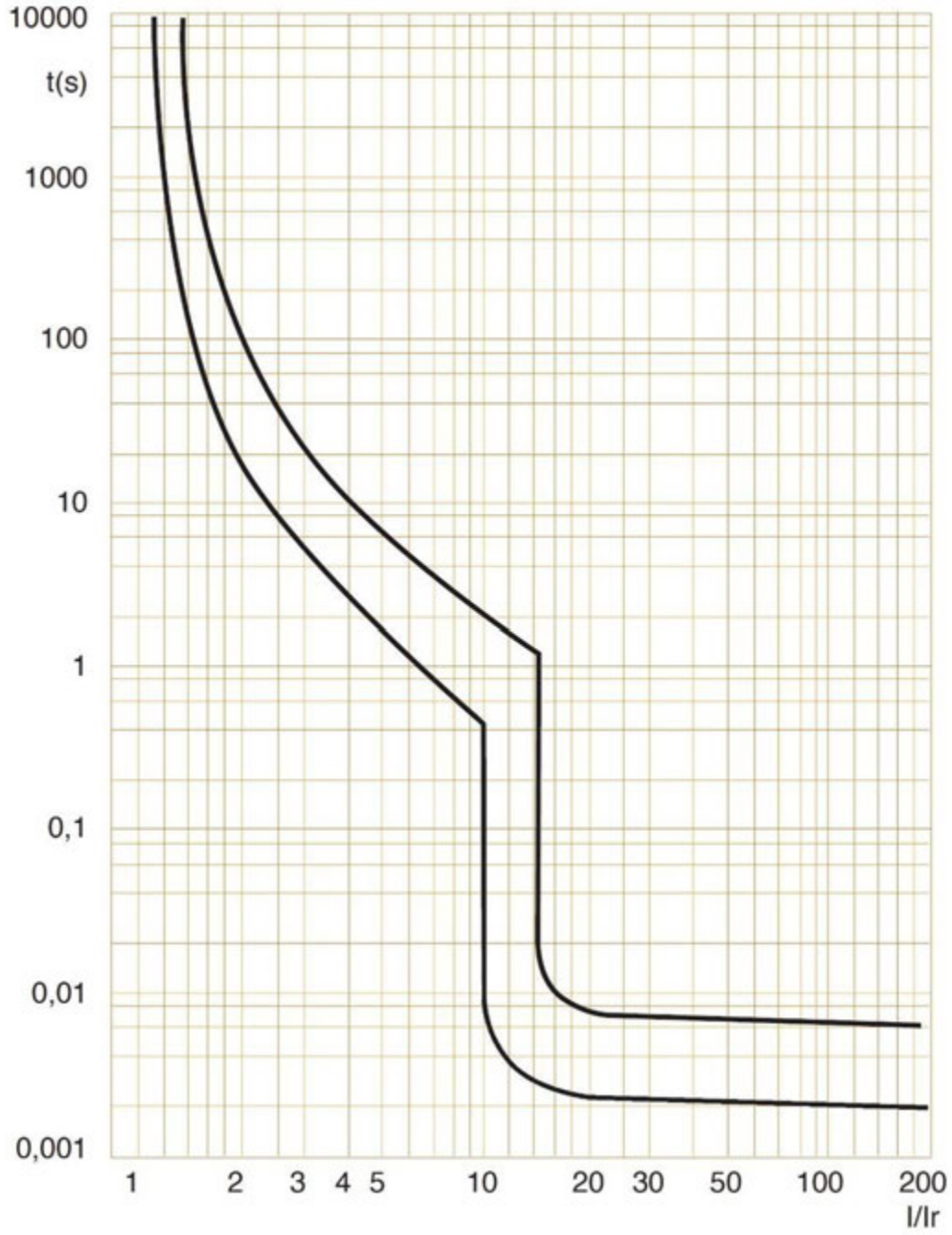
. Thermal energy limiting curves of circuit breakers C curve, 1P / 3P / 4P (400V~ / 50Hz) :



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

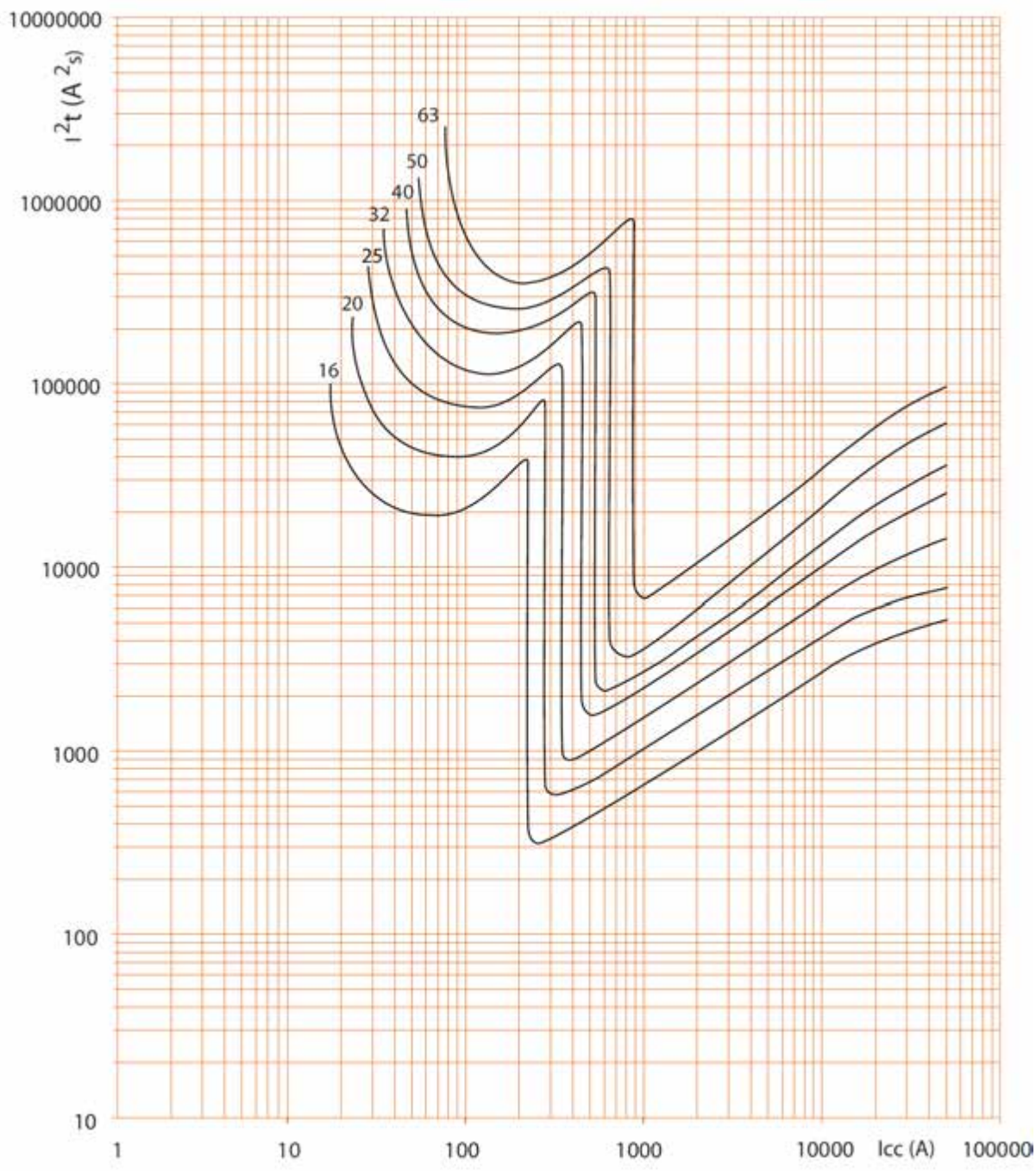
7. CURVES *(continued)*

Operating characteristic of circuit breakers D curve:



7. CURVES *(continued)*

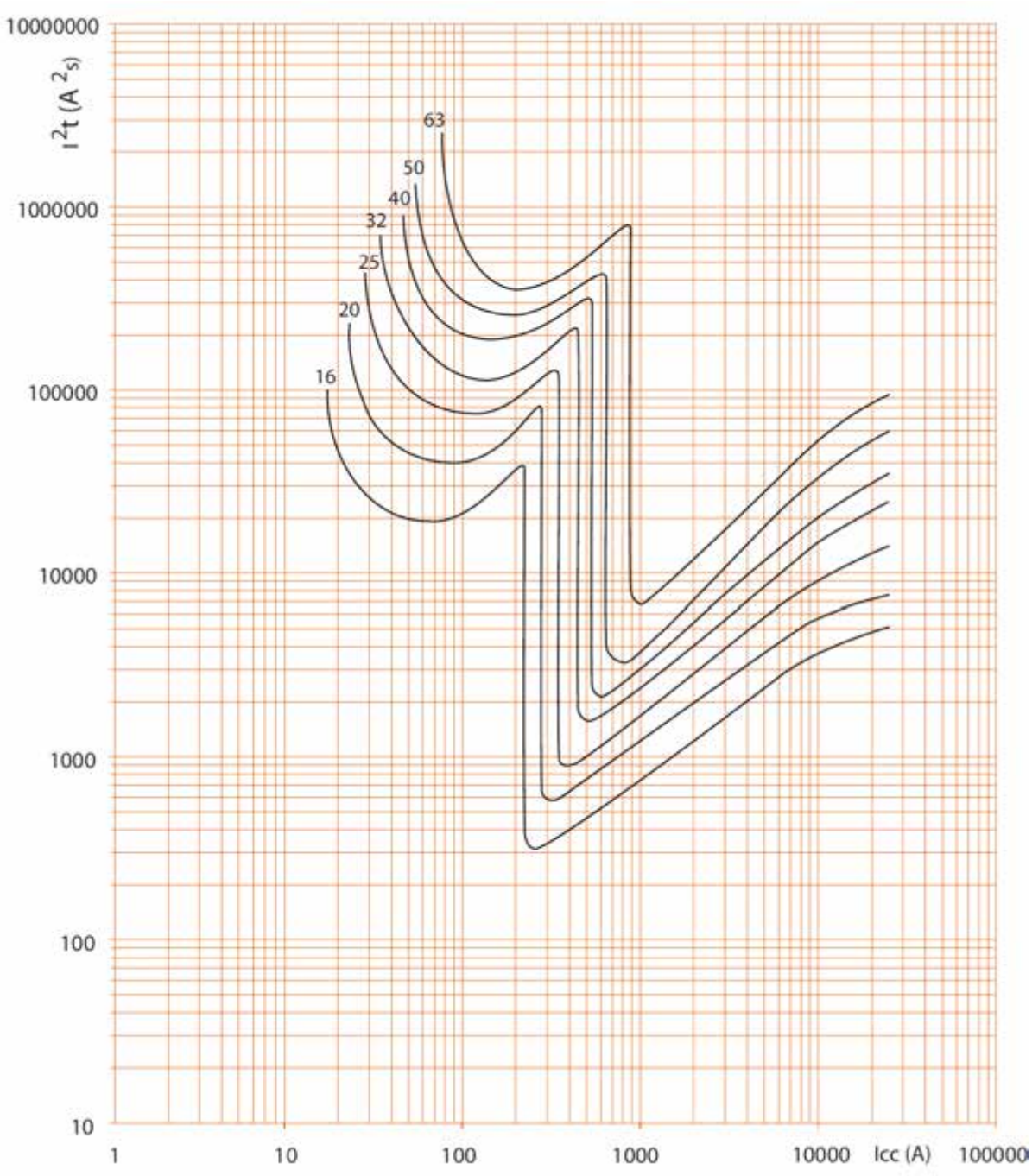
. Thermal energy limiting curves of circuit breakers D curve, 2P (230V~ / 50Hz) :



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

7. CURVES *(continued)*

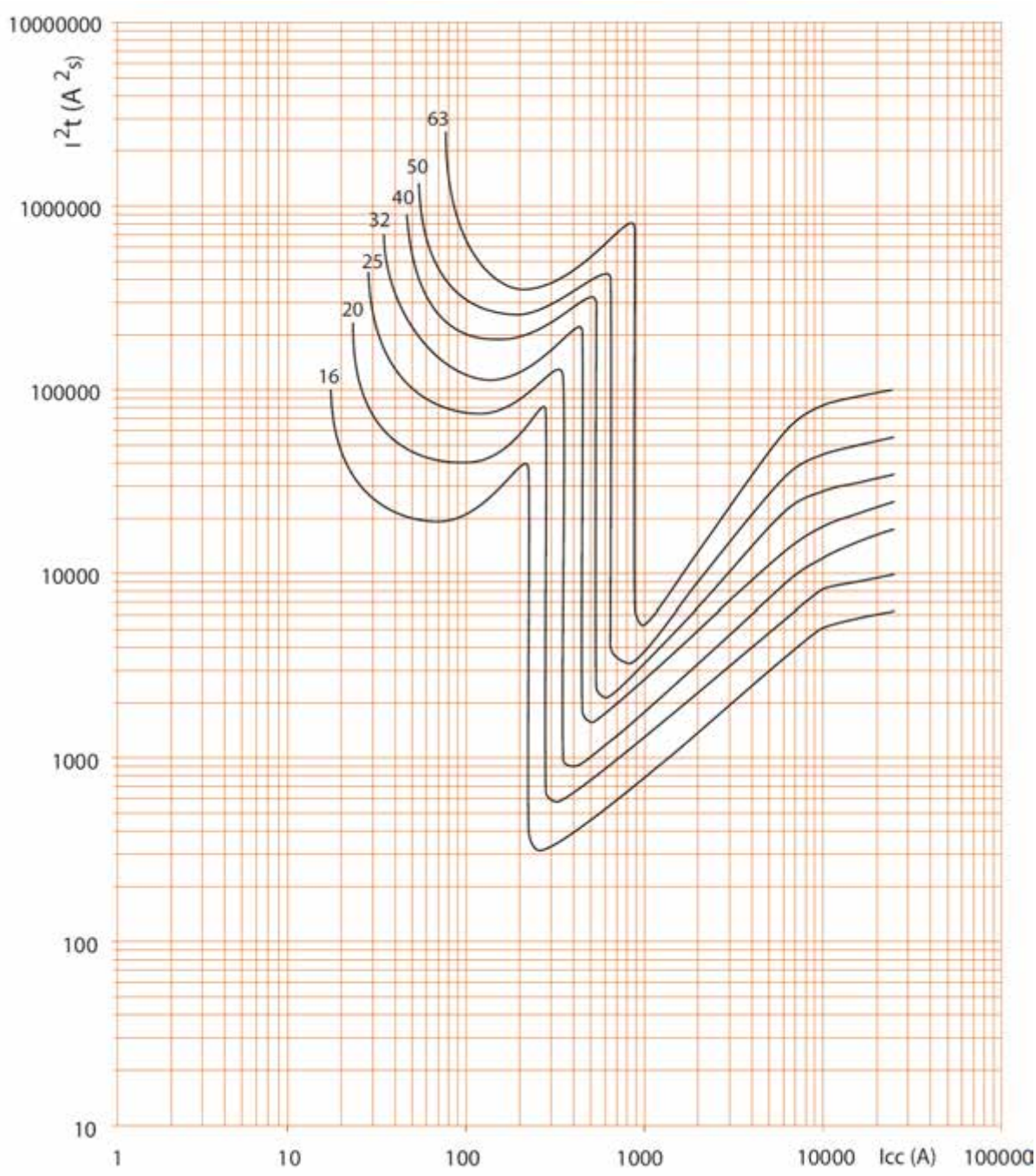
. Thermal energy limiting curves of circuit breakers D curve, 2P (400V~ / 50Hz) :



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

7. CURVES *(continued)*

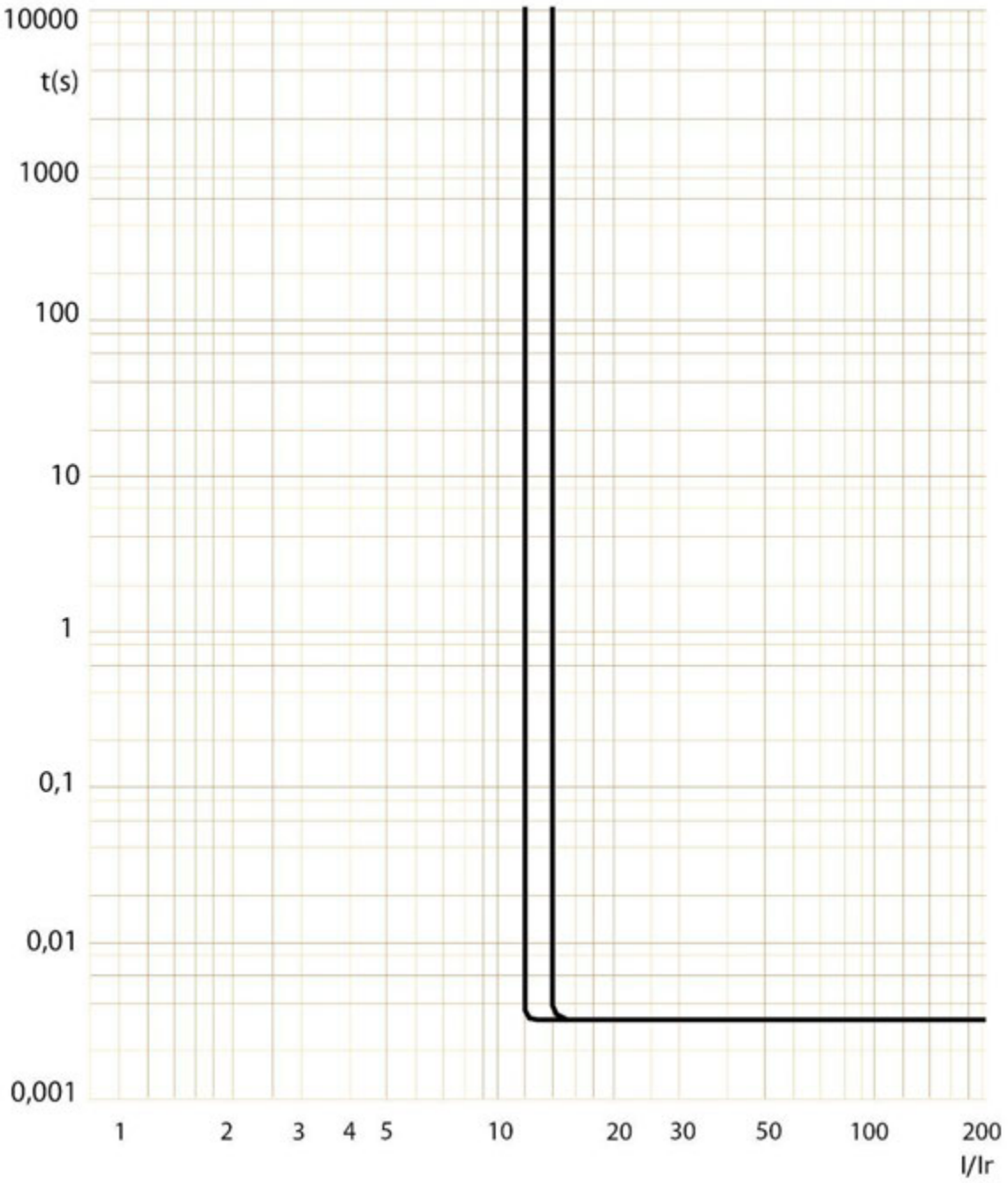
. Thermal energy limiting curves of circuit breakers D curve, 1P / 3P / 4P (400V~ / 50Hz) :



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

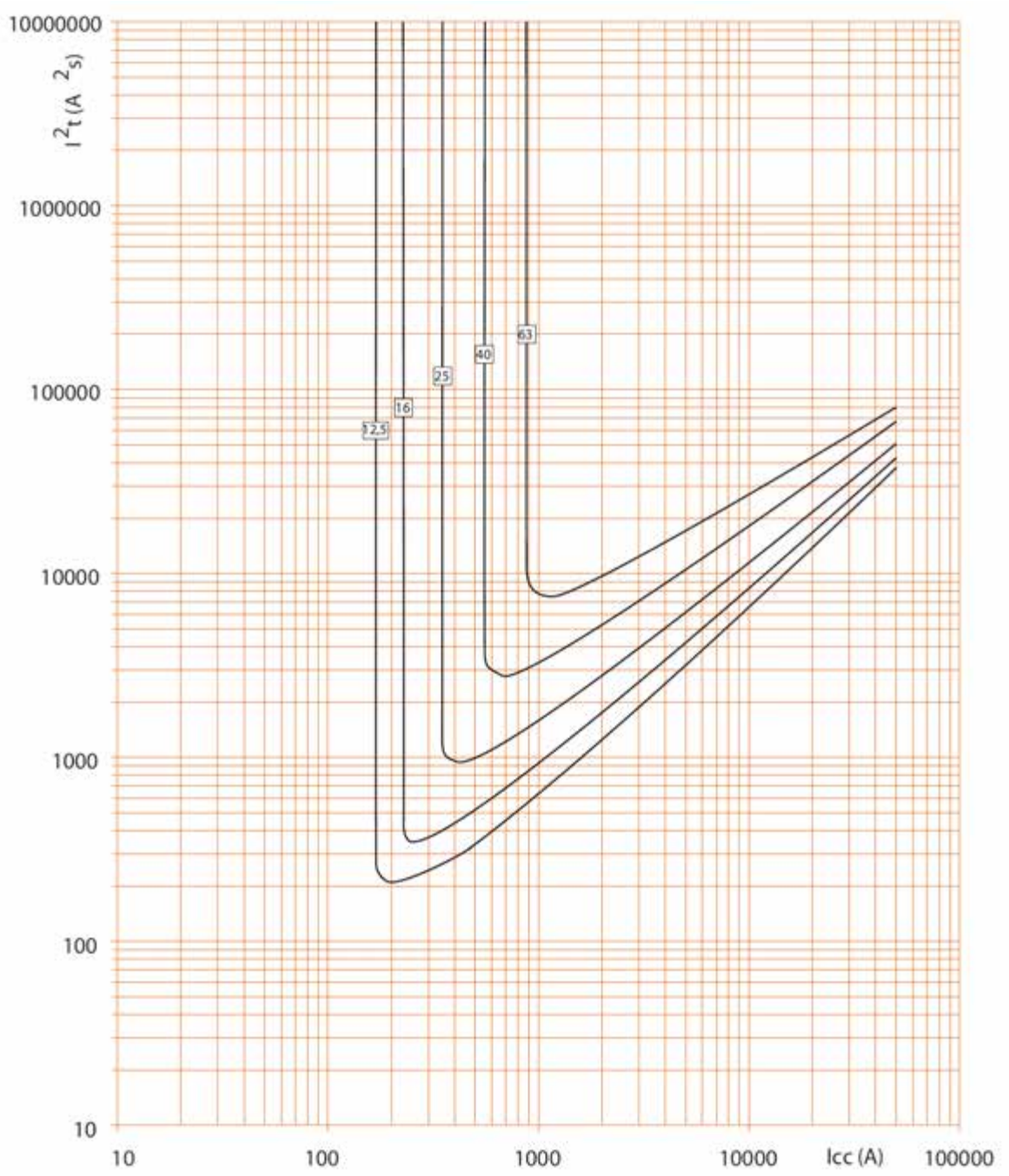
7. CURVES *(continued)*

Operating characteristic of circuit breakers MA curve:



7. CURVES *(continued)*

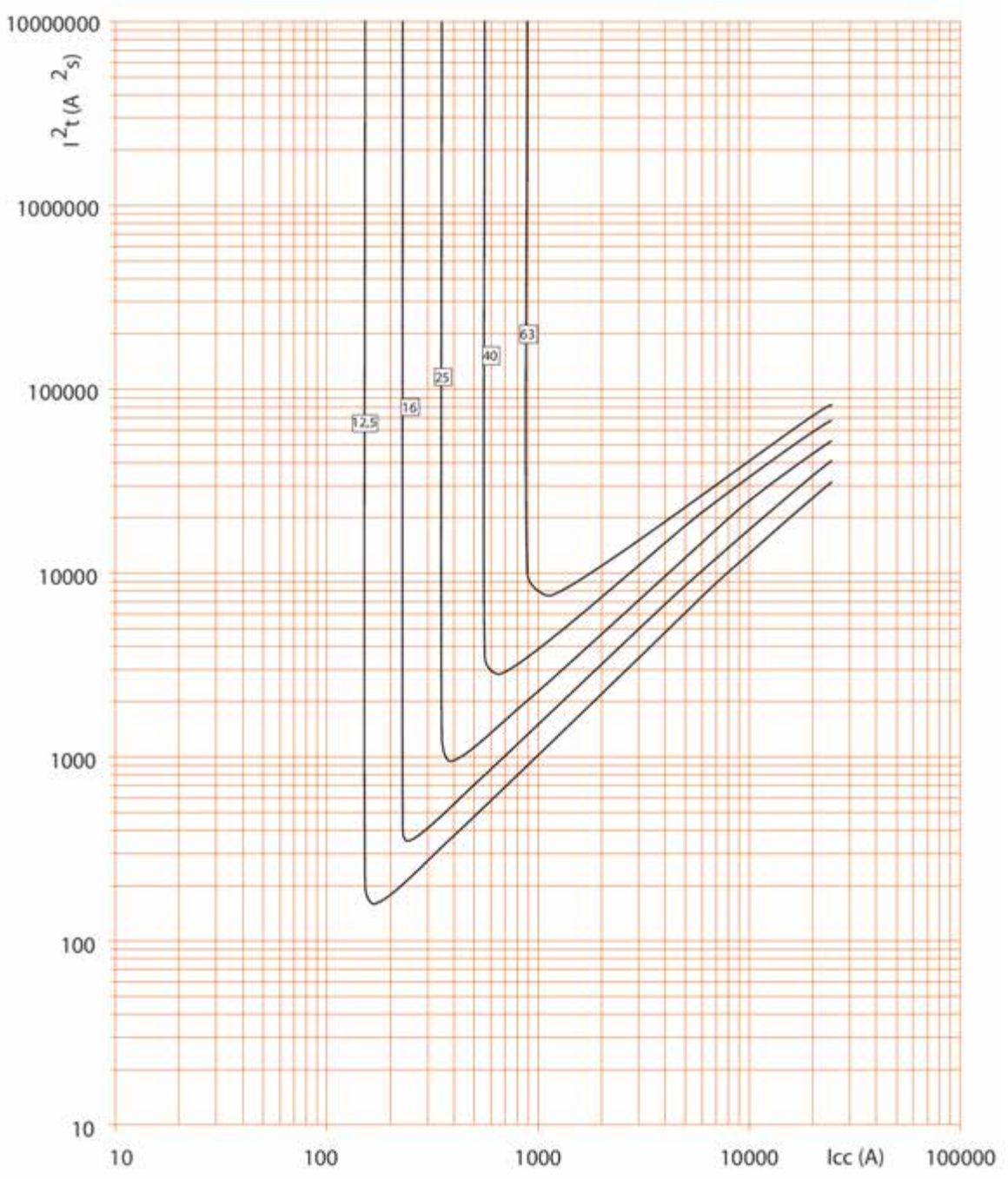
. Thermal energy limiting curves of circuit breakers MA curve, 2P (230V~ / 50Hz) :



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

7. CURVES *(continued)*

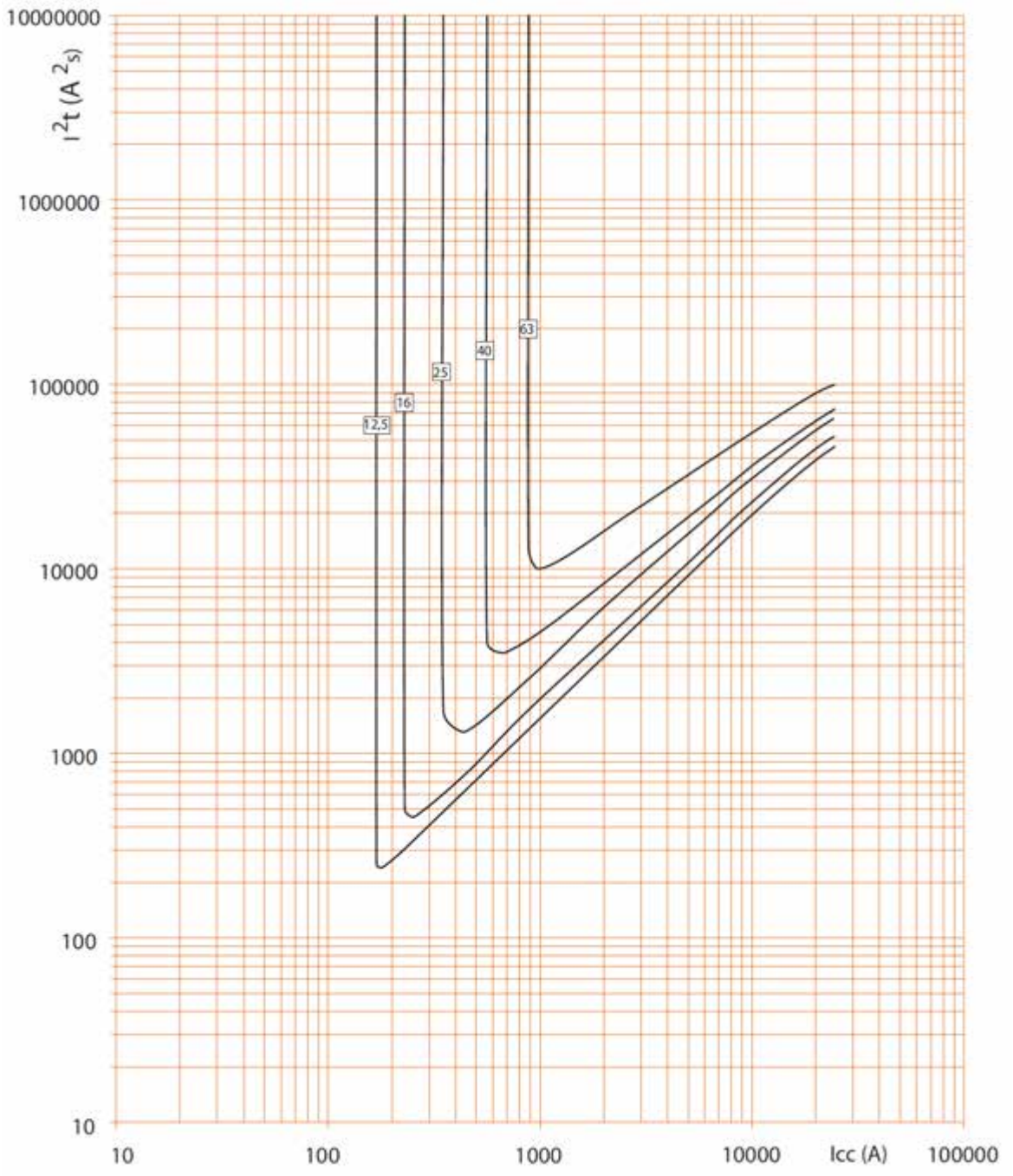
. Thermal energy limiting curves of circuit breakers MA curve, 2P (400V~ / 50Hz) :



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

7. CURVES *(continued)*

. Thermal energy limiting curves of circuit breakers MA curve, 3P / 4P (400V~ / 50Hz) :



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

8. AUXILIARIES AND ACCESSORIES

Add-on modules 63A:

	Add on module		
mcb	2P	3P	4P
2P	X	-	-
3P	-	X	-
4P	-	-	X

Wiring accessories:

. Sealable screw cover (cat n° 4 063 06).
. Insulating shields (cat n° 4 063 12)
. Aluminium terminals 50mm² max (cat. N° 4 063 10

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 87).

Possible combinations of auxiliaries and MCBs:

. The auxiliaries are installed to the left of the MCBs
. Maximum number of auxiliaries = 3.
. Maximum number of 1 module signalling auxiliaries = 2.
. Maximum number of control auxiliairies (Cat. N°. 4 063 76 to 4 062 87) = 1.
. The control auxiliary (Cat.N°. 4 062 76 to 4 062 87 must mandatorily be placed to the left of the signalling auxiliaries (Cat. N°. 4 062 58 to 4 052 66) where the auxiliaries from these 2 families are connected to the same MCB.

Sealing:

. Possible in ″Open″ mode (OFF) or ″Close″ mode (ON).

Locking options:

. By padlock (Cat.N°. 4 063 13 or 0 227 97), whit padlock support (Cat.N°. 4 063 03).

Installation software:

. XL PRO³