87045 LIMOGES Cedex
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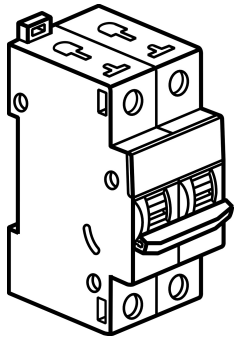
DX Lexic M.C.B. ≤ 63 A
(1 module per pole)

Cat. N°(s) : 0061 52 à 66 - 0063 68 à 82 - 0064 19 à 33 - 0062 39 à 51 - 0064 43 à 54 - 0062 57 à 71 - 0064 58 à 74 - 0062 77 à 91 - 0064 80 à 94 - 0063 31 à 42 - 0065 39 à 49 - 0063 48 à 62 - 0065 55 à 69



CONTENTS PAGES

1. Description, use 1
2. Range 1
3. Overall dimensions 1
4. Preparation and connection 2
5. General characteristics 2
6. Conformities and approvals 16
7. Curves 17
8. Equipment and accessories 28

1. DESCRIPTION - USE

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

Symbol :

Technologie :
. Limiting device
. 1 module (17.8 mm) per pole

2. RANGE

Rated currents :
. 0.5 / 0.8 / 1 / 2 / 3 / 4 / 5 / 6 / 8 / 10 / 13 / 16 / 20 / 25 / 32 / 40 / 50 / 63 A

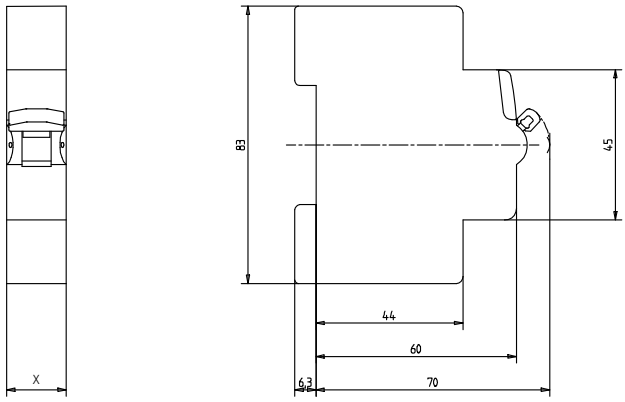
Poles :
. 1P, 1P+N, 2P, 3P, 3P+N, 4P – 1 module (17.7 mm) per pole

Magnetic tripping curves :
. B (between 3 and 5 In)
. C (between 5 and 10 In)

Rated voltage / frequency :
. 230 V ~ / 400 V ~ - 50 / 60 Hz with standard tolerances

Maximum operating voltage :
. 240 V ~ / 415 V ~ ± 10% (10 kA breaking capacity according with IEC 60947-2)
. 440 V ~ ± 10% (6 kA breaking capacity according with IEC 60947-2)

3. OVERALL DIMENSIONS



	X
1 P	**17.7 mm**
1 P+N / 2 P	**35.6 mm**
3 P	**53.4 mm**
3 P+N / 4 P	**71.2 mm**

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4. PREPARATION AND CONNECTION

Fixing :
. On symmetrical rail EN 60.715 or DIN 35

Supply :
. from the top or the bottom

Connection :
. Location of the terminals allowing supply by pin busbar and fork busbar (lower side)
. Terminals protected against direct contact (IP 20 mcb connected)
. Cage terminals, with release and captive screws
. Terminal depth : 14 mm
. Terminal capacity :
- 25 mm² flexible copper cable
- 35 mm² rigid copper cable

. Screw head : slotted and pozidriv n°2
. Recommended tightening torque : 2.5 Nm

Type of wire :
. Copper cables

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

4. PREPARATION AND CONNECTION *(continued)*

Sealing :
. Possible in ON (closed) and OFF (open) position

Locking possibility :
. By 5 mm padlock (cat. N° 044 43) or 6 mm padlock (cat. N° 227 97) with padlock support (cat. N° 044 42)

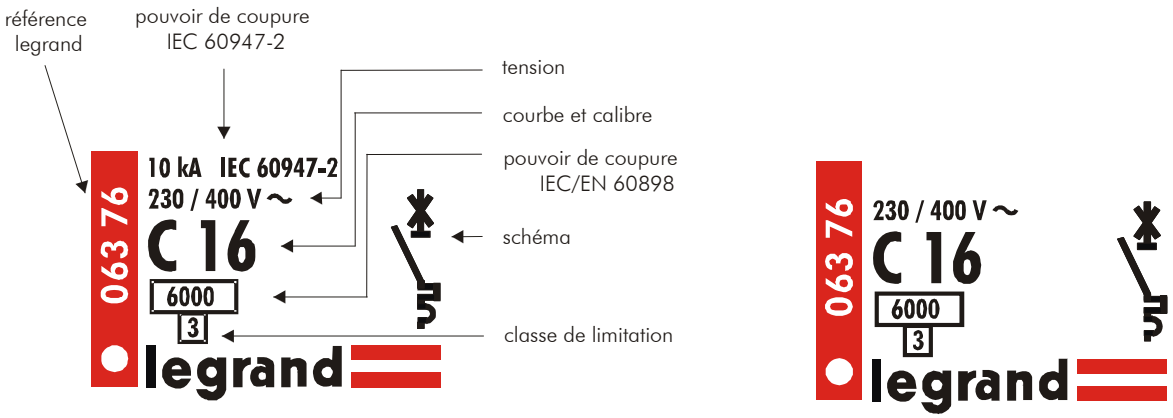
Operation :
. par manette ergonomique 2 positions, I / ON appareil fermé, 0 / OFF appareil ouvert

Display of contacts state :
. By printing on the handle :
- O-OFF in white on green background = contacts open
- I-ON in white on red background = contacts closed

Tools required :
. For terminals : 5.5 mm screwdriver recommended (6.5 mm max)
. For fixing : 5.5 mm screwdriver recommended (6 mm max)

5. GENERAL CHARACTERISTICS

Front face marking :
. By permanent pad printing
. Remark : on MCB's sold in France, short circuit breaking capacity according with IEC 60947-2 is also mentioned



5. GENERAL CHARACTERISTICS *(continued)*

Short-circuit breaking capacity :

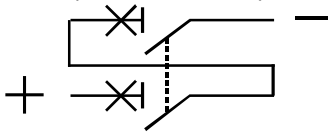
. Single phase or triple phase network (50 / 60 Hz AC).

			Curves B, C	Curves B, C
		Voltage	1P	2P / 3P / 4P
According to EN 60.898	Icn	230 V ~	**6 kA**	**6 kA**
		400 V ~	**-**	**6 kA**
According to IEC 60947.2	Icu	230 V ~	**10 kA**	**25 kA**
		400 V ~	**-**	**10 kA**
	Ics	230 V ~	**100 % Icu**	**100 % Icu**
		400 V ~	**100 % Icu**	**100 % Icu**

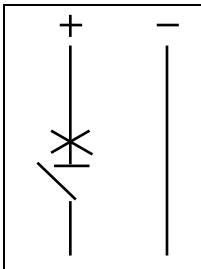
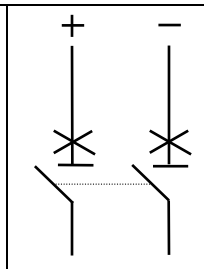
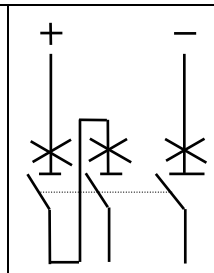
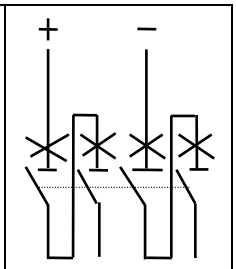
. Icn1 = 6kA. Icn1 : Breaking capacity of one pole for multipole m.c.b's in case of short-circuit to earth
. Breaking capacity of one single pole under 400 V compound voltage (IT network) = 3 kA
. Breaking capacity of one single pole under 230 V compound voltage (IT network) = 6 kA

Operation with DC (direct current) :

. Max operating voltage is 80V per pole with DC. For higher voltages, several poles must be connected in series.
For exemple, if DC voltage = 110 V, use a double pole M.C.B. , the 2 poles being connected in series.



. 40% magnetic threshold increase (multiplied per 1.4)
For exemple, magnetic tripping threshold of a curve C M.C.B. will be between 7 In and 14 In with DC instead of 5 In to 10 In in AC
. Time/current thermal tripping curve remains the same with AC and DC
. Endurance with load (In) = 2000 operations
. Short-circuit breaking capacity
4000A short circuit breaking capacity for a single pole M.C.B. under 80 V DC per pole. Under other voltages, short-circuit breaking capacity is as follows :

						
		Voltage	Single pole	Double pole	Triple pole	Four pole
According to IEC 60947-2	Icu	48 V=	**6 kA**	**6 kA**	**-**	**-**
		110 V=	**-**	**6 kA**	**6 kA**	**-**
		230 V=	**-**	**-**	**-**	**6kA**
	Ics	48 V=	**100% d'Icu**	**100% d'Icu**	**-**	**-**
		110 V=	**-**	**100% d'Icu**	**100% d'Icu**	**-**
		230 V=	**-**	**-**	**-**	**100% d'Icu**

5. GENERAL CHARACTERISTICS *(continued)*

Dissipated power :

. Per pole, under In, in Watts

Calibres	1 A	2 A	3 A	4 A	6 A	10 A	13 A
Curves B, C	**2.1**	**2.1**	**2.4**	**2.5**	**1.1**	**1.1**	**1.3**

Calibres	16 A	20 A	25 A	32 A	40 A	50 A	63 A
Curves B, C	**1.5**	**1.7**	**2.4**	**3.1**	**4**	**4.5**	**5.5**

. Z (impedence in Ohm per pole) = P dissipated / (rated current)²

Minimum operating voltage :

. 12 V AC or DC per pole

Rated voltage of shock withstand:

. Uimp = 4 kV

Isolating voltage :

. Ui = 500 V

Dielectric strength :

. 2 500 V

Operation with 400 Hz :

. 45% magnetic threshold increase

Stength for opening and closing by the handle :

. closing : 0.5 Nm per pole (every rated current)
. opening : 0.3 Nm per pole (every rated current)

Mechanical endurance :

. 20 000 operations without load
. 10 000 operations witha load (In x Cos φ 0.9)
. 2 000 operations with In Direct Current

Isolating distance (distance between contacts) :

. more than 5 mm with the handle in open position O

Plastic material :

. Polyester
. Characteristics of this material : self estinguishing, heat and fire resistant according to EN 60898, glow wire test at à 960 °C (650°C for the handle)

Average weight per pole :

. 0.160 kg per pole

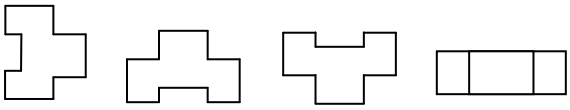
Volume and packaging :

	Volume (dm^3)	Packaging
Single pole	**0.2**	**Par 1**
Single pole	**1.6**	**Par 10**
Double pole	**0.4**	**Par 1**
Double pole	**1.6**	**Par 5**
Triple pole	**0.7**	**Par 1**
Four pole	**0.7**	**Par 1**

5. GENERAL CHARACTERISTICS *(continued)*

Operating position :

. Vertical, horizontal, upside down, on the side



Operating ambient temperature :

. Minimum = -25°C Maximum = +70°C (see derating table)

Stock ambient temperature :

. Minimum = -40°C Maximum = +70°C

Protection degree :

. Ingress protection IP 20 according to IEC 529, EN 60529 and NF C 20-010 standards
. Mechanical shocks protection IK 02 according to EN 50102 and NF C 20-015 (juin 95) standards

Resistance to sinusoidal vibrations (according to IEC 68.2.6 standard) :

. Axis : x, y, z
. Frequency : 10 to 55 Hz during 30 mn
. Acceleration : 3 g (1 g = 9.81 $m.s^{-2}$)

Labelling :

. Indication of the circuits on front face with label holder
. With label design software
. With electronic title printer and ribbon
. With plates of symbols

5. GENERAL CHARACTERISTICS *(continued)*

Derating for use with fluorescent lights :

. Max. number of lights per phase depending on the rated current of the M.C.B. and the type of lights (see table below)

- Non compensated lights : power factor 0.6 – Compensated lights : power factor 0.85

		Supply : Single phase 230 V – Triple phase + Neutral 400 V between phases													
		Rated current, M.C.B. curve C													
Types of lights	Power of lights	1 A	2 A	3 A	4 A	6 A	10A	13A	16A	20A	25A	32A	40A	50A	63A
Mono non compensated	18 W	4	9	14	19	29	49	63	78	98	122	157	196	245	309
	36 W	2	4	7	9	14	24	31	39	49	61	78	98	122	154
	58 W	1	3	4	6	9	15	19	24	30	38	48	60	76	95
Mono compensated	18 W	7	14	21	27	42	70	90	112	140	175	225	281	351	443
	36 W	3	7	10	13	21	35	45	56	70	87	112	140	175	221
	58 W	2	4	6	8	13	21	28	34	43	54	69	87	109	137
Duo compensated	2 x 18 W	3	7	10	13	21	35	45	56	70	87	112	140	175	221
	2 x 36 W	2	3	5	6	10	17	22	28	35	43	56	70	87	110
	2 x 58 W	1	2	3	4	6	10	14	17	21	27	34	43	54	68

- Non compensated lights : power factor 0.6 – Compensated lights : power factor 0.85

		Supply : Triple phase 230 V between phases (U = 230 * √3)													
		Rated current, M.C.B. curve C													
Types of lights	Power of lights	1 A	2 A	3 A	4 A	6 A	10A	13A	16A	20A	25A	32A	40A	50A	63A
Mono non compensated	18 W	2	5	8	11	16	28	36	45	56	70	90	113	141	178
	36 W	1	2	4	5	8	14	18	22	28	35	45	56	70	89
	58 W	0	1	2	3	5	8	11	14	17	21	28	35	45	55
Mono compensated	18 W	4	8	12	16	24	40	52	64	81	101	127	162	203	255
	36 W	2	4	6	8	12	20	26	32	40	50	64	81	101	127
	58 W	1	2	3	4	7	12	16	20	25	31	40	50	63	79
Duo compensated	2 x 18 W	2	4	6	8	12	20	26	32	40	50	64	81	101	127
	2 x 36 W	1	2	3	4	6	10	13	16	20	25	32	40	50	63
	2 x 58 W	0	1	1	2	3	6	8	10	12	15	20	25	31	39

5. GENERAL CHARACTERISTICS *(continued)*

Derating for use with fluorescent lights *(continued)* **:**

. Max. number of lights per phase depending on the rated current of the M.C.B. and the type of lights (see table below)

- Non compensated lights : power factor 0.5

		Supply : Single phase 230 V – Triple phase + Neutral 400 V between phases													
		Rated current, M.C.B. curve C													
Types of lights	Power of light	1 A	2 A	3 A	4 A	6 A	10A	13A	16A	20A	25A	32A	40A	50A	63A
Mono non compensated	18 W	**3**	**7**	**12**	**16**	**24**	**41**	**53**	**65**	**81**	**101**	**131**	**163**	**204**	**257**
	36 W	**1**	**3**	**5**	**8**	**11**	**20**	**26**	**32**	**41**	**51**	**65**	**81**	**101**	**128**
	58 W	**1**	**2**	**3**	**5**	**7**	**12**	**16**	**20**	**25**	**31**	**40**	**50**	**63**	**79**

		Supply : Triple phase 230V between phases - U = 230√3													
		Rated current, M.C.B. curve C													
Types of lights	Power of light	1 A	2 A	3 A	4 A	6 A	10A	13A	16A	20A	25A	32A	40A	50A	63A
Mono non compensated	18 W	**2**	**4**	**6**	**9**	**13**	**23**	**30**	**37**	**46**	**58**	**75**	**94**	**117**	**148**
	36 W	**1**	**1**	**3**	**4**	**6**	**11**	**15**	**18**	**23**	**29**	**37**	**46**	**58**	**74**
	58 W	**0**	**1**	**2**	**2**	**4**	**6**	**9**	**11**	**14**	**17**	**23**	**23**	**36**	**46**

Derating for use with metallic iodide lights (Mercury, Sodium) :

. Max. number of lights per phase depending on the rated current of the M.C.B. and the type of lights (see table below)

- Compensated lights : Power factor 0.85

	Supply : Single phase 230 V – Triple phase + Neutral 400 V between phases													
	Rated current, M.C.B. curve C													
Power of light	1 A	2 A	3 A	4 A	6 A	10A	13A	16A	20A	25A	32A	40A	50A	63A
75 W	**1**	**2**	**4**	**6**	**8**	**13**	**17**	**21**	**26**	**32**	**42**	**52**	**64**	**82**
150 W	**0**	**1**	**2**	**3**	**4**	**7**	**9**	**10**	**13**	**16**	**21**	**26**	**32**	**41**
200 W	**0**	**1**	**1**	**2**	**3**	**5**	**7**	**8**	**10**	**12**	**16**	**20**	**25**	**31**
250 W	**0**	**0**	**1**	**2**	**2**	**4**	**5**	**6**	**8**	**10**	**12**	**16**	**20**	**24**
360 W	**0**	**0**	**0**	**1**	**1**	**3**	**4**	**4**	**6**	**7**	**8**	**12**	**15**	**17**
420 W	**0**	**0**	**0**	**1**	**1**	**2**	**3**	**3**	**4**	**5**	**6**	**8**	**10**	**14**
1000 W	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**1**	**2**	**2**	**3**	**4**	**5**	**6**

5. GENERAL CHARACTERISTICS *(continued)*

Derating for use of other types of lights :

. Halogene 230 V et very low voltage : no derating
. Fluorescent light with electronic ballast : 20% derating of the rated current
. No derating for lights with integrated ballast

Derating of M.C.B. in terms of ambient temperature :

. M.C.B. is set to operate under In at 30°C ambient temperature.
These rated characteristics may change depending on the ambient temperature inside the enclosure where it is installed.

	Ambient temperature / In (in A)									
In	- 25 °C	- 10 °C	0°C	10°C	20°C	30°C	40°C	50°C	60°C	70°C
0.5 A	**0,64**	**0,6**	**0,57**	**0,55**	**0,52**	**0,5**	**0.47**	**0.45**	**0.42**	**0.40**
0.8 A	**1,02**	**0,96**	**0,92**	**0,88**	**0,84**	**0,8**	**0,76**	**0,72**	**0.69**	**0.66**
1 A	**1.25**	**1.17**	**1.1**	**1.07**	**1.03**	**1**	**0.97**	**0.93**	**0.90**	**0.87**
2 A	**2.5**	**2.34**	**2.21**	**2.14**	**2.06**	**2**	**1.94**	**1.86**	**1.80**	**1.74**
3 A	**3.75**	**3.5**	**3.36**	**3.24**	**3.12**	**3**	**2.88**	**2.76**	**2.64**	**2.52**
4 A	**5**	**4.7**	**4.44**	**4.28**	**4.12**	**4**	**3.88**	**3.72**	**3.6**	**3.48**
6 A	**7.5**	**7**	**6.6**	**6.4**	**6.18**	**6**	**5.8**	**5.6**	**5.4**	**5.2**
8 A	**10,2**	**9,6**	**9,2**	**8,8**	**8,4**	**8**	**7,6**	**7,2**	**6,9**	**6,6**
10 A	**12.5**	**11.5**	**11.1**	**10.7**	**10.3**	**10**	**9.7**	**9.3**	**9**	**8.7**
13 A	**16.3**	**15**	**14.3**	**13.9**	**13.4**	**13**	**12.6**	**12.1**	**11.7**	**11.3**
16 A	**20**	**18.7**	**18**	**17.3**	**16.6**	**16**	**15.4**	**14.7**	**14.1**	**13.5**
20 A	**25**	**23.2**	**22.4**	**21.6**	**20.8**	**20**	**19.2**	**18.4**	**17.6**	**16.8**
25 A	**31.5**	**29.5**	**28.3**	**27.2**	**26**	**25**	**24**	**22.7**	**21.7**	**20.7**
32 A	**41**	**37.8**	**36.5**	**34.9**	**33.3**	**32**	**30.7**	**29.1**	**27.8**	**26.5**
40 A	**51**	**48**	**46**	**44**	**42**	**40**	**38**	**36**	**34**	**32**
50 A	**64**	**60**	**57.5**	**55**	**52.5**	**50**	**47.5**	**45**	**42.5**	**40**
63 A	**80.6**	**75.6**	**72.5**	**69.9**	**66.1**	**63**	**59.8**	**56.1**	**52.9**	**50.4**

Rated temperature : 30°C Current : average value in Amps

Derating in terms of numbers m.c.b.'s installed side by side :

. When several MCB's operate at the same time side by side, thermal exhaust may be limited and the temperature of the M.C.B.'s may increase high enough to produce unwanted tripping. Depending on the temperature inside the enclosure, it may be necessary to derate m.c.b.'s according to the table below (standards IEC/EN 60439). Inorder to avoid to use these derating factors, use spacing elements cat. N° 044 40 (0.5 module) or cat. N° 044 41 (1 module)

Number of M .C.B.'s side by side	Factor
2 ou 3	**1**
4 ou 5	**0.8**
6 à 9	**0.7**
Plus de 10	**0.6**

5. GENERAL CHARACTERISTICS *(continued)*

M.C.B.'s back-up protection

. In three phase network (+Neutral) 400 / 415 V according to IEC 60947-2

	in TT or TN network	In IT network
Three phase + Neutral, 400/415 V between phases	**2P** **3P** **4P ou 3P+N**	**2P** **3P** **4P**
Three phase without Neutral, 400/415 V between phases	**1P** **1P+N ou 2P** **3P**	**1P** **2P** **3P**

. These figures may be used except if not allowed by some installation rules and if the short-circuit breaking capacity, Icn1 in TN network or breaking capacity of a single pole in TT network complies with the request.
. In 230/40V TNS or TT network, figures from 230/400V table must be used to know the breaking capacity of a 2 pole (connected between phase and neutral in 230V) or 1Phase +Neutral MCB with back-up protection of a 4 pole or 2 pole MCB upstream.
. These figures may also be used for RCBO's made of a MCB assembled to a RCD add-on module.
. Always check that the magnetic threshold of the upstream MCB is higher than the magnetic threshold of the downstream MCB and that the breaking capacity of the upstream MCB is high enough (at 400V).

		Upstream circuit breaker					
		DX-D Lexic		DX-h Lexic 10000 A 25 to 12.5 kA		DX-L Lexic 25000 A 50 kA	
		15 kA Curve D	25 kA Curve D	Curves B, C		Curves B, C	
Downstream MCB		≤ 32 A*	≤ 32 A	≤ 32 A	40 – 125 A	≤ 32 A	40 – 63 A
DX 6000 A Curves B and C	≤ 20 A	**15 kA**	**25 kA**	**25 kA**	**12.5 kA**	**50 kA**	**25 kA**
	25 A	**15 kA**	**25 kA**	**25 kA**	**12.5 kA**	**50 kA**	**25 kA**
	32 A	**-**	**-**	**-**	**12.5 kA**	**-**	**25 kA**
	40 A	**-**	**-**	**-**	**12.5 kA**	**-**	**25 kA**
	50 A	**-**	**-**	**-**	**-**	**-**	**-**
	63 A	**-**	**-**	**-**	**-**	**-**	**-**

* With DX-h 25 or 32A upstream, check that their breaking capacity with the back-up protection of the upstream breaker is at least 25 kA.

		Upstream fuse				
		Type gG			Type aM	
Downstream MCB		20 – 50 A	63 – 125 A	160 A	20 – 80 A	100 A
DX 6000 A Curves B and C	≤ 20 A	**100 kA**	**100 kA**	**40 kA**	**50 kA**	-
	25 A	**100 kA**	**100 kA**	**40 kA**	**50 kA**	**40 KA**
	32 A	**100 kA**	**100 kA**	**40 kA**	**50 kA**	**40 kA**
	40 A	**100 kA**	**100 kA**	**40 kA**	**50 kA**	**40 kA**
	50 A	**-**	**100 kA**	**40 kA**	**-**	**40 kA**
	63 A	**-**	**100 kA**	**40 kA**	**-**	**40 kA**

5. GENERAL CHARACTERISTICS *(continued)*

M.C.B.'s back-up protection *(continued)*

		Upstream circuit breaker									
		DPX-E 125	DPX 125		DPX 160		DPX 250ER		DPX 250		
		16 kA	25 kA	36 kA	25 kA	50 kA	25 kA	50 kA	36 kA		
Downstream MCB		16 A 125 A	25 A to 125 A	16 A to 125 A	63 A to 160 A	25 A to 160 A	100 A to 250 A	160 A to 250 A	63 to 100 A	160 A	250 A
DX 6000 A Curves B and C	≤ 20 A	**16 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**
	25 A	**16 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**
	32 A	**16 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**
	40 A	**16 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**20 kA**
	50 A	**16 kA**	**25 kA**	**25 kA**	**20 kA**	**20 kA**	**20 kA**	**20 kA**	**25 kA**	**20 kA**	**15 kA**
	63 A	**16 kA**	**25 kA**	**25 kA**	**15 kA**	**15 kA**	**15 kA**	**15 kA**	**20 kA**	**15 kA**	**15 kA**

		Upstream circuit breaker										
		DPX-H 250			DPX 630		DPX-H 630		DPX 1600	DPX-H 1600	DPX	
		70 kA			36 kA		70 kA		50 kA	70 kA	Version EDF	
Downstream MCB		40 A to 100 A	160 A	250 A	250 A to 400 A	500 A to 630 A	250 A to 400 A	500 A to 630 A	630 A to 1600 A	630 A to 1600 A	250-ER AB	400 AB
DX 6000 A Curves B and C	≤ 20 A	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**
	25 A	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**20 kA**	**20 kA**	**25 kA**	**25 kA**
	32 A	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**25 kA**	**15 kA**	**15 kA**	**25 kA**	**25 kA**
	40 A	**25 kA**	**25 kA**	**20 kA**	**20 kA**	**20 kA**	**20 kA**	**20 kA**	**15 kA**	**15 kA**	**25 kA**	**20 kA**
	50 A	**25 kA**	**20 kA**	**15 kA**	**15 kA**	**15 kA**	**15 kA**	**15 kA**	**12.5 kA**	**12.5 kA**	**20 kA**	**15 kA**
	63 A	**20 kA**	**15 kA**	**15 kA**	**15 kA**	**15 kA**	**15 kA**	**15 kA**	**12.5 kA**	**12.5 kA**	**15 kA**	**15 kA**

- In three phase (+Neutral) network 230 / 240 V selon IEC 60947-2.

	in TT or TN network	In IT network
Three phase + Neutral, 230/240 V between phases	**2P** **3P** **4P or 3P+N**	**2P** **3P** **4P**
Three phase without Neutral, 230/240 V between phases	**1P** **1P+N or 2P** **3P**	**1P** **2P** **3P**
Single phase + Neutral 230/240 V downstream a three phase + Neutral network 400/415 V entre phases	**1P** **1P+N or 2P**	**2P**

. These figures may be used except if not allowed by some installation rules and if the short-circuit breaking capacity, Icn1 in TN network or breaking capacity of a single pole in TT network complies with the request.
. In 230/40V TNS or TT network, figures from 230/400V table must be used to know the breaking capacity of a 2 pole (connected between phase and neutral in 230V) or 1Phase +Neutral MCB with back-up protection of a 4 pole or 2 pole MCB upstream.

5. GENERAL CHARACTERISTICS *(continued)*

M.C.B.'s back-up protection *(continued)*

. Always check that the magnetic threshold of the upstream MCB is higher than the magnetic threshold of the downstream MCB and that the breaking capacity of the upstream MCB is high enough (at 230V).

		Upstream circuit breaker					
		DX-D Lexic		DX-h Lexic 10000 A 25 à 12.5 kA		DX-L Lexic 25000 A 50 kA	
		15 kA Curve D	25 kA Curve D	Curves B and C		Curves B and C	
Downstream MCB		≤ 32 A*	≤ 32 A	≤ 32 A	40 – 63 A	≤ 32 A	40 – 63 A
DX 6000 A Curves B and C	≤ 20 A	**25 kA**	**25 kA**	**50 kA**	**25 kA**	**50 kA**	**50 kA**
	25 A	**25 kA**	**25 kA**	**50 kA**	**25 kA**	**50 kA**	**50 kA**
	32 A	**-**	**-**	**-**	**25 kA**	**-**	**50 kA**
	40 A	**-**	**-**	**-**	**25 kA**	**-**	**50 kA**
	50 A	**-**	**-**	**-**	**-**	**-**	**25 kA-**
	63 A	-	-	-	-	-	-

* With DX-h 25 or 32A upstream, check that their breaking capacity with the back-up protection of the upstream breaker is at least 25 kA.

		Upstream fuse				
		Type gG			Type aM	
Downstream MCB		20 – 50 A	63 – 125 A	160 A	20 – 80 A	100 A
DX 6000 A Curves B and C	≤ 20 A	**100 kA**	**100 kA**	**40 kA**	**50 kA**	**-**
	25 A	**100 kA**	**100 kA**	**40 kA**	**50 kA**	**40 kA**
	32 A	**100 kA**	**100 kA**	**40 kA**	**50 kA**	**40 kA**
	40 A	**100 kA**	**100 kA**	**40 kA**	**50 kA**	**40 kA**
	50 A	**-**	**100 kA**	**40 kA**	**-**	**40 kA**
	63 A	**-**	**100 kA**	**40 kA**	**-**	**40 kA**

		Upstream circuit breaker									
		DPX-E 125	DPX 125		DPX 160		DPX 250ER		DPX 250		
		16 kA	25 kA	36 kA	25 kA	50 kA	25 kA	50 kA	36 kA		
Downstream MCB		16 A 125 A	25 A to 125 A	16 A to 125 A	63 A to 160 A	25 A to 160 A	100 A to 250 A	160 A to 250 A	63 to 100 A	160 A	250 A
DX 6000 A Curves B and C	≤ 20 A	**22 kA**	**35 kA**	**40 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**
	25 A	**22 kA**	**35 kA**	**40 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**
	32 A	**22 kA**	**35 kA**	**40 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**
	40 A	**22 kA**	**35 kA**	**40 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**
	50 A	**16 kA**	**25 kA**	**25 kA**	**36 kA**	**36 kA**	**36 kA**	**36 kA**	**45 kA**	**36 kA**	**30 kA**
	63 A	**16 kA**	**25 kA**	**25 kA**	**30 kA**	**30 kA**	**30 kA**	**30 kA**	**30 kA**	**30 kA**	**30 kA**

5. GENERAL CHARACTERISTICS *(continued)*

M.C.B.'s back-up protection *(continued)*

		Upstream circuit breaker										
		DPX-H 250			DPX 630		DPX-H 630		DPX 1600	DPX-H 1600	DPX	
		70 kA			36 kA		70 kA		50 kA	70 kA	Version EDF	
Downstream MCB		40 A to 100 A	160 A	250 A	250 A to 400 A	500 A to 630 A	250 A to 400 A	500 A to 630 A	630 A to 1600 A	630 A to 1600 A	250-ER AB	400 AB
DX 6000 A Curves B and C	≤ 20 A	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**
	25 A	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**
	32 A	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**
	40 A	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**	**50 kA**
	50 A	**45 kA**	**36 kA**	**30 kA**	**30 kA**	**30 kA**	**30 kA**	**30 kA**	**25 kA**	**25 kA**	**36 kA**	**30 kA**
	63 A	**-**	**30 kA**	**30 kA**	**30 kA**	**30 kA**	**30 kA**	**30 kA**	**25 kA**	**25 kA**	**30 kA**	**30 kA**

Selectivity

Selectivity limit in Amps

		Upstream circuit breaker								
		Curvee B DX 6000 A / 10 kA Lexic – DX-h 10000 A / 25 kA Lexic								
Downstream MCB		10 A	13 A	16 A	20 A	25 A	32 A	40 A	50 A	63 A
DX 6000 A Curve B	≤ 6 A	**40**	**52**	**64**	**80**	**100**	**128**	**160**	**200**	**252**
	10 A		**52**	**64**	**80**	**100**	**128**	**160**	**200**	**252**
	13 A			**64**	**80**	**100**	**128**	**160**	**200**	**252**
	16 A				**80**	**100**	**128**	**160**	**200**	**252**
	20 A					**100**	**128**	**160**	**200**	**252**
	25 A						**128**	**160**	**200**	**252**
	32 A							**160**	**200**	**252**
	40 A								**200**	**252**
	50 A									**252**
	63 A									
DX 6000 A Curve C	≤ 6 A			**64**	**80**	**100**	**128**	**160**	**200**	**252**
	10 A					**100**	**128**	**160**	**200**	**252**
	13 A						**128**	**160**	**200**	**252**
	16 A							**160**	**200**	**252**
	20 A								**200**	**252**
	25 A									**252**
	32 A									
	40 A									
	50 A									
	63 A									

5. GENERAL CHARACTERISTICS *(continued)*

Selectivity *(continued)*

Downstream MCB		Upstream circuit breaker											
		Curve C DX 6000 A / 10 kA Lexic – DX-h 10000 A / 25 kA Lexic											
		10 A	13 A	16 A	20 A	25 A	32 A	40 A	50 A	63 A	80 A	100 A	125 A
DX 6000 A Curve B	≤ 4 A	**75**	**90**	**120**	**150**	**187**	**240**	**300**	**375**	**472**	**2500**	**3200**	**4000**
	6 A	**75**	**90**	**120**	**150**	**187**	**240**	**300**	**375**	**472**	**1300**	**1600**	**2000**
	10 A		**90**	**120**	**150**	**187**	**240**	**300**	**375**	**472**	**1150**	**1450**	**1800**
	13 A			**120**	**150**	**187**	**240**	**300**	**375**	**472**	**1000**	**1300**	**1600**
	16 A				**150**	**187**	**240**	**300**	**375**	**472**	**950**	**1200**	**1500**
	20 A					**187**	**240**	**300**	**375**	**472**	**900**	**1100**	**1400**
	25 A						**240**	**300**	**375**	**472**	**850**	**1000**	**1300**
	32 A							**300**	**375**	**472**	**750**	**950**	**1200**
	40 A								**375**	**472**	**700**	**850**	**1100**
	50 A									**472**	**650**	**800**	**1000**
	63 A										**650**	**800**	**1000**
DX 6000 A Curve C	≤ 4 A	**75**	**90**	**120**	**150**	**187**	**240**	**300**	**375**	**472**	**2500**	**3200**	**4000**
	6 A	**75**	**90**	**120**	**150**	**187**	**240**	**300**	**375**	**472**	**1300**	**1600**	**2000**
	10 A		**90**	**120**	**150**	**187**	**240**	**300**	**375**	**472**	**1150**	**1450**	**1800**
	13 A			**120**	**150**	**187**	**240**	**300**	**375**	**472**	**1000**	**1300**	**1600**
	16 A				**150**	**187**	**240**	**300**	**375**	**472**	**950**	**1200**	**1500**
	20 A					**187**	**240**	**300**	**375**	**472**	**900**	**1100**	**1400**
	25 A						**240**	**300**	**375**	**472**	**850**	**1000**	**1300**
	32 A							**300**	**375**	**472**	**750**	**950**	**1200**
	40 A								**375**	**472**	**700**	**850**	**1100**
	50 A									**472**	**650**	**800**	**1000**
	63 A										**650**	**800**	**1000**

5. GENERAL CHARACTERISTICS *(continued)*

Selectivity *(continued)*

		Upstream circuit breaker											
		Curve D DX-D 6000 A / 15 kA, DX-D 25 kA Lexic											
Downstream MCB		10 A	13 A	16 A	20 A	25 A	32 A	40 A	50 A	63 A	80 A	100 A	125 A
DX 6000 A Curve B	≤ 4 A	**120**	**156**	**192**	**240**	**300**	**384**	**480**	**600**	**756**	**3750**	**4800**	**6000**
	6 A	**120**	**156**	**192**	**240**	**300**	**384**	**480**	**600**	**756**	**2000**	**2400**	**3000**
	10 A		**156**	**192**	**240**	**300**	**384**	**480**	**600**	**756**	**1750**	**2150**	**2700**
	13 A			**192**	**240**	**300**	**384**	**480**	**600**	**756**	**1500**	**2000**	**2400**
	16 A				**240**	**300**	**384**	**480**	**600**	**756**	**1400**	**1800**	**2200**
	20 A					**300**	**384**	**480**	**600**	**756**	**1350**	**1650**	**2100**
	25 A						**384**	**480**	**600**	**756**	**1300**	**1500**	**2000**
	32 A							**480**	**600**	**756**	**1100**	**1450**	**1800**
	40 A								**600**	**756**	**1000**	**1250**	**1650**
	50 A									**756**	**950**	**1200**	**1500**
	63 A										**950**	**1200**	**1500**
DX 6000 A Curve C	≤ 4 A	**120**	**156**	**192**	**240**	**300**	**384**	**480**	**600**	**756**	**3750**	**4800**	**6000**
	6 A	**120**	**156**	**192**	**240**	**300**	**384**	**480**	**600**	**756**	**2000**	**2400**	**3000**
	10 A		**156**	**192**	**240**	**300**	**384**	**480**	**600**	**756**	**1750**	**2150**	**2700**
	13 A			**192**	**240**	**300**	**384**	**480**	**600**	**756**	**1500**	**2000**	**2400**
	16 A				**240**	**300**	**384**	**480**	**600**	**756**	**1400**	**1800**	**2200**
	20 A					**300**	**384**	**480**	**600**	**756**	**1350**	**1650**	**2100**
	25 A						**384**	**480**	**600**	**756**	**1300**	**1500**	**2000**
	32 A							**480**	**600**	**756**	**1100**	**1450**	**1800**
	40 A								**600**	**756**	**1000**	**1250**	**1650**
	50 A									**756**	**950**	**1200**	**1500**
	63 A										**950**	**1200**	**1500**

5. GENERAL CHARACTERISTICS *(continued)*

Selectivity *(continued)*

		Upstream circuit breaker									
		DPX-E et DPX 125				DPX 160		DPX ER et DPX-AB 250			
Downstream MCB		40 A	63 A	100 A	125 A	63 A à 100 A	160 A	63 A	100 A	160 A	250 A
DX 6000 A Curve B	≤ 4 A	T	T	T	T	T	T	T	T	T	T
	6 A	6000	6000	T	T	T	T	T	T	T	T
	10 A	5000	5000	7500	7500	7000	T	5000	T	T	T
	13 A	4000	4000	6000	6000	6000	T	4000	T	T	T
	16 A	4000	4000	6000	6000	6000	T	4000	T	T	T
	20 A	3000	3000	5000	5000	5000	T	4000	8000	T	T
	25 A	3000	3000	4500	4500	4000	8500	3000	6000	8500	T
	32 A		2000	4000	4000	4000	7000	2000	5000	7000	T
	40 A		2000	3000	3000	3000	6000	2000	4000	6000	T
	50 A			3000	3000	3000	5500		4000	5500	7000
	63 A			3000	3000	3000	5000		3000	5000	6000
DX 6000 A Curve C	≤ 4 A	T	T	T	T	T	T	T	T	T	T
	6 A	6000	6000	T	T	T	T	T	T	T	T
	10 A	5000	5000	7500	7500	7000	T	5000	T	T	T
	13 A	4000	4000	6000	6000	6000	T	4000	T	T	T
	16 A	4000	4000	6000	6000	6000	T	4000	T	T	T
	20 A	3000	3000	5000	5000	5000	T	4000	8000	T	T
	25 A	3000	3000	4500	4500	4000	8500	3000	6000	8500	T
	32 A		2000	4000	4000	4000	7000	2000	5000	7000	T
	40 A		2000	3000	3000	3000	6000	2000	4000	6000	T
	50 A			3000	3000	3000	5500		4000	5500	7000
	63 A			3000	3000	3000	5000		3000	5000	6000

5. GENERAL CHARACTERISTICS *(continued)*

Selectivity *(continued)*

		Upstream circuit breaker				
		DPX / DPX-H / DPX-L 250				DPX / H / L 400AB, 630, 1250 - 1600
Downstream MCB		63 A	100 A	160 A	250 A	100 à 1600 A
DX 6000 A Curve B	≤ 4 A	T	T	T	T	T
	6 A	6000	T	T	T	T
	10 A	5000	T	T	T	T
	13 A	4000	T	T	T	T
	16 A	4000	T	T	T	T
	20 A	3000	8000	T	T	T
	25 A	3000	6000	T	T	T
	32 A	2000	5000	T	T	T
	40 A	2000	5000	T	T	T
	50 A		4000	8000	T	T
	63 A		4000	8000	T	T
DX 6000 A Curve C	≤ 4 A	T	T	T	T	T
	6 A	6000	T	T	T	T
	10 A	5000	T	T	T	T
	13 A	4000	T	T	T	T
	16 A	4000	T	T	T	T
	20 A	3000	8000	T	T	T
	25 A	3000	6000	T	T	T
	32 A	2000	5000	T	T	T
	40 A	2000	5000	T	T	T
	50 A		4000	8000	T	T
	63 A		4000	8000	T	T

5. GENERAL CHARACTERISTICS *(continued)*

Selectivity *(continued)*

		Upstream fuse								
		Type gG								
Downstream MCB		25 A	32 A	40 A	50 A	63 A	80 A	100 A	125 A	160 A
DX 6000 A Curves B and C	≤ 8 A		1600	1900	2500	4000	4600	T	T	T
	10 A			1600	2200	3200	3600	7000	T	T
	13 A			1600	2200	3200	3600	7000	T	T
	16 A			1400	1800	2600	3000	5600	8000	T
	20 A			1200	1500	2200	2500	4600	6300	T
	25 A				1300	2000	2200	4100	5500	8000
	32 A				1200	1700	1900	3500	4500	7000
	40 A						1700	3000	4000	5000
	50 A						1600	2600	3500	4500
	63 A							2400	3300	4500

		Upstream fuse								
		Type AM								
Downstream MCB		25 A	32 A	40 A	50 A	63 A	80 A	100 A	125 A	160 A
DX 6000 A Curves B and C	≤ 8 A	1000	1300	2100	3200	6200	T	T	T	T
	10 A		1100	1700	2500	5000	7800	T	T	T
	13 A		1100	1700	2500	5000	7800	T	T	T
	16 A		1000	1400	2100	4000	6000	9000	T	T
	20 A			1300	1800	3400	5100	7000	T	T
	25 A			1100	1600	3000	4500	6000	9300	T
	32 A				1300	2400	3800	5000	7700	T
	40 A					2100	3100	4200	6400	8000
	50 A					2000	2900	3700	6000	7000
	63 A						2800	3500	5500	7000

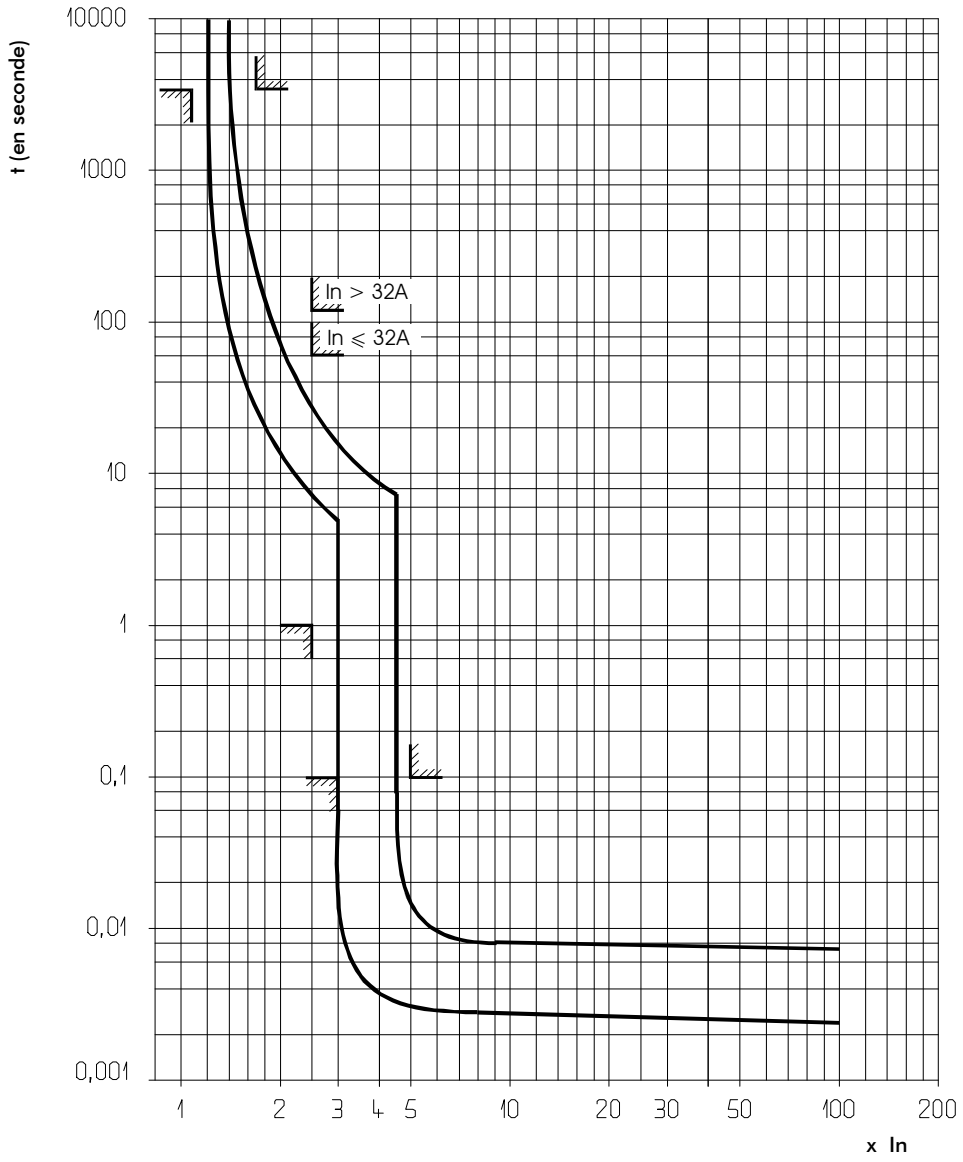
6. CONFORMITIES AND APPROVALS

Compliance with standards :

. EN 60898 / IEC 60898
. IEC 60947-2
. « Tropicalization » : execution II (all climates) according to guide UTE C 63-100 and IEC 68-2 standard (humid heat and salty mist)
. DX Lexic M.C.B.'s do not contain the substances targeted by the European directive 2002/95/CE dated 27 January 2003 relating to the restriction of hazardous substances in electrical and electronical equipment (RoHS).

7. CURVES

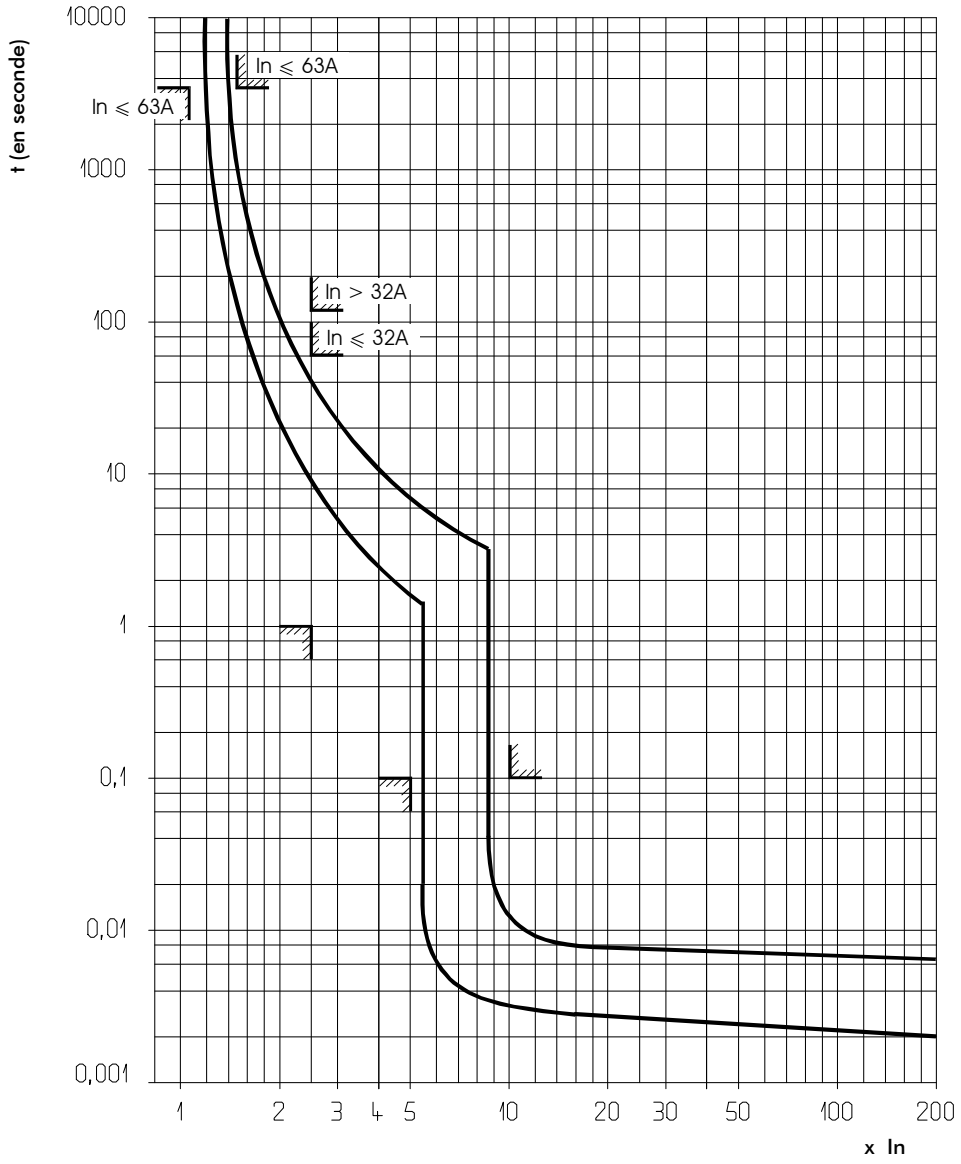
Magneto-thermal tripping zone : M.C.B.'s curve B



Thermal tripping at ambient temperature = 30°C
In = rated current of the m.c.b.

7. CURVES *(continued)*

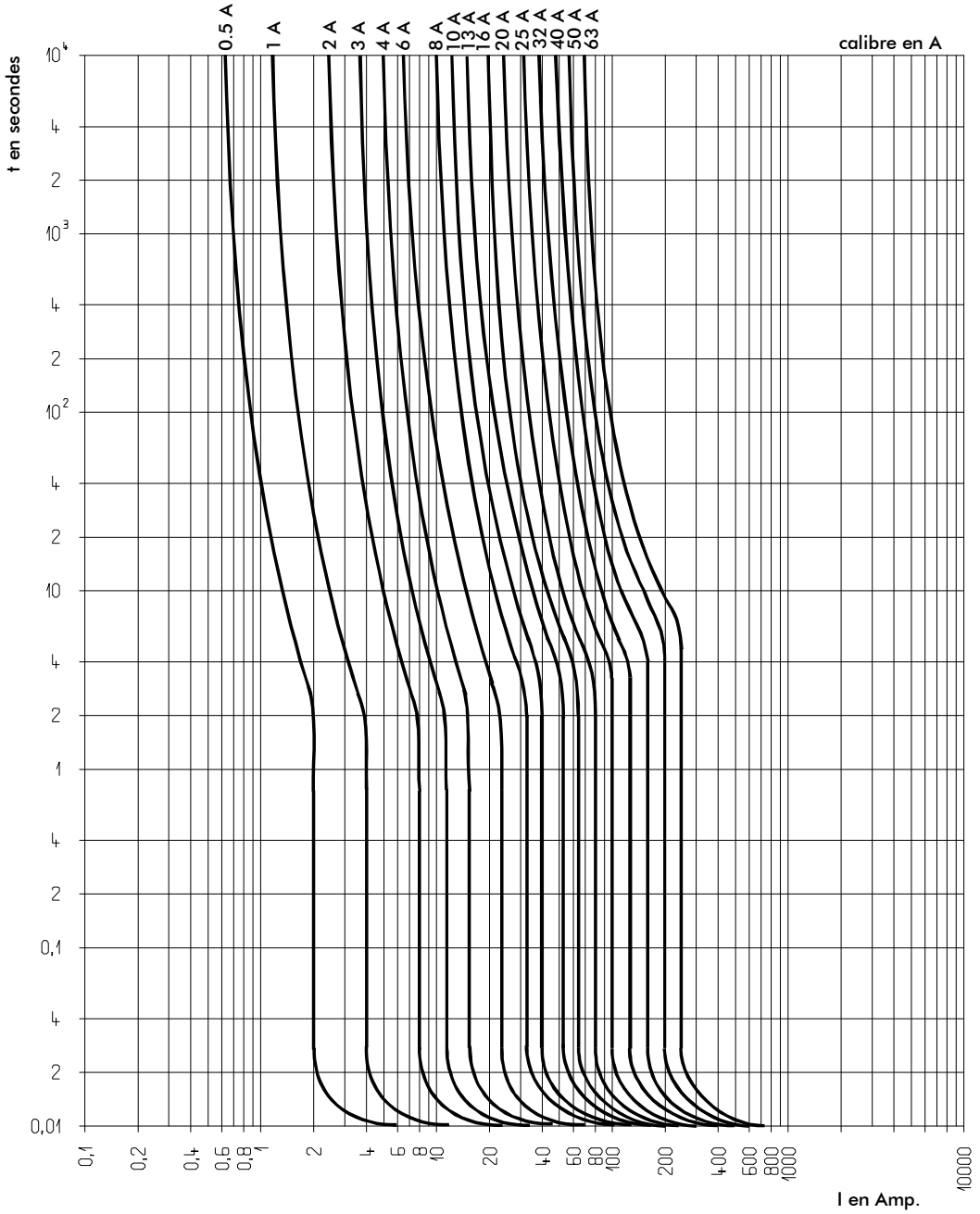
Magneto-thermal tripping zone : M.C.B.'s curve C



Thermal tripping at ambient temperature = 30°C
In = rated current of the M.C.B.

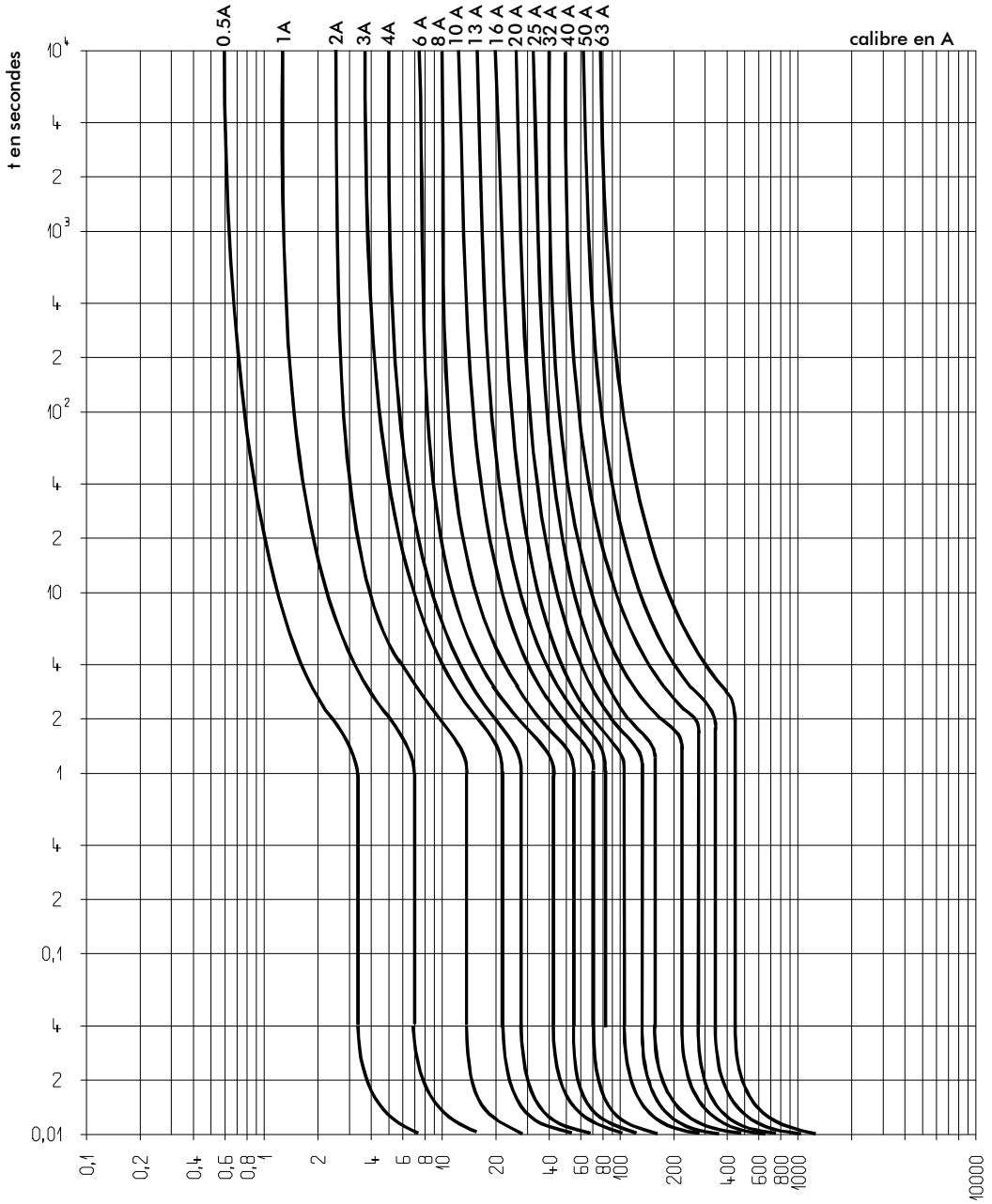
7. CURVES *(continued)*

Typical average tripping curves : M.C.B.'s curve B



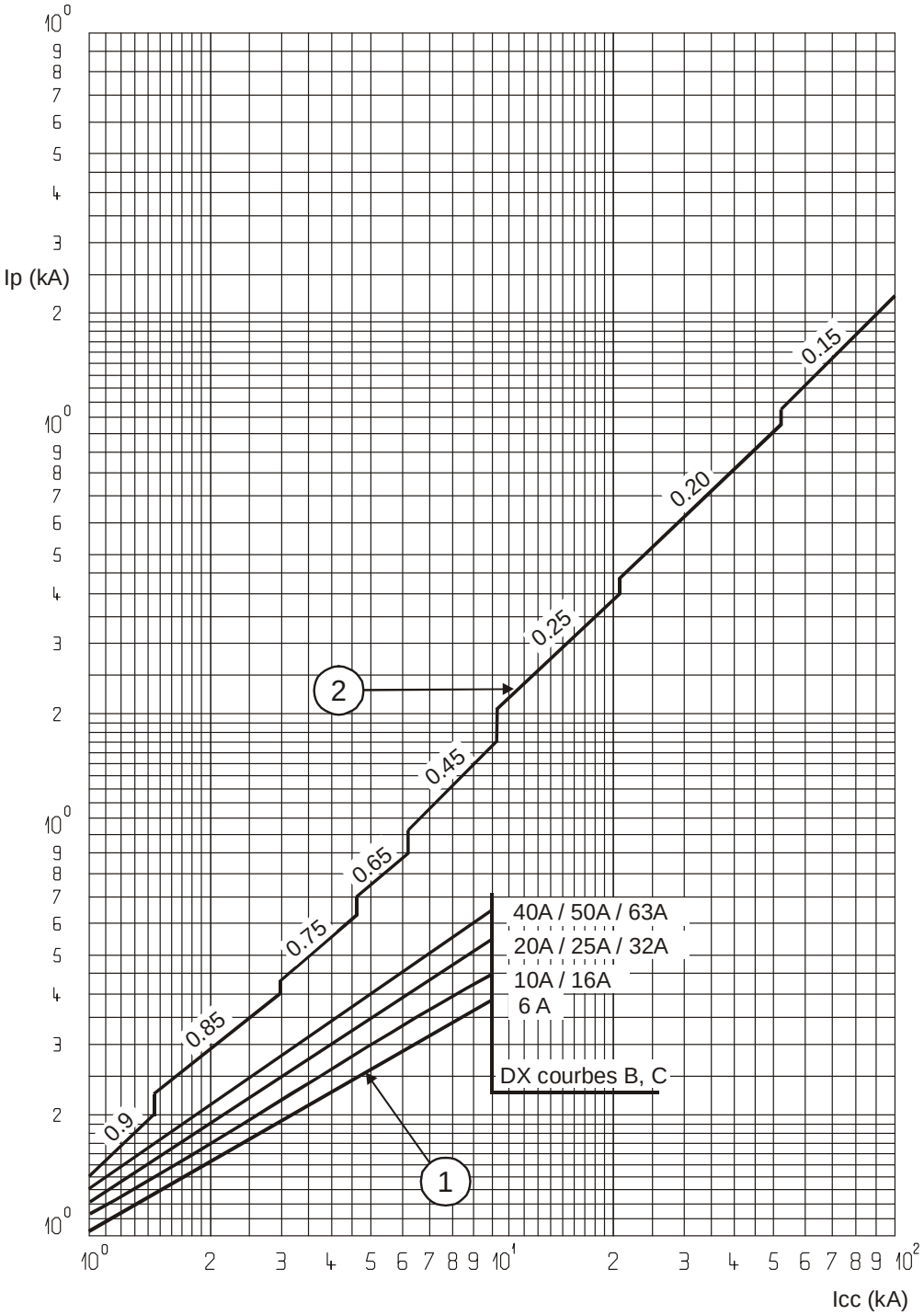
7. CURVES *(continued)*

Typical average tripping curves : M.C.B.'s curve C



7. CURVES *(continued)*

Current limitation curves : M.C.B.'s curves B and C

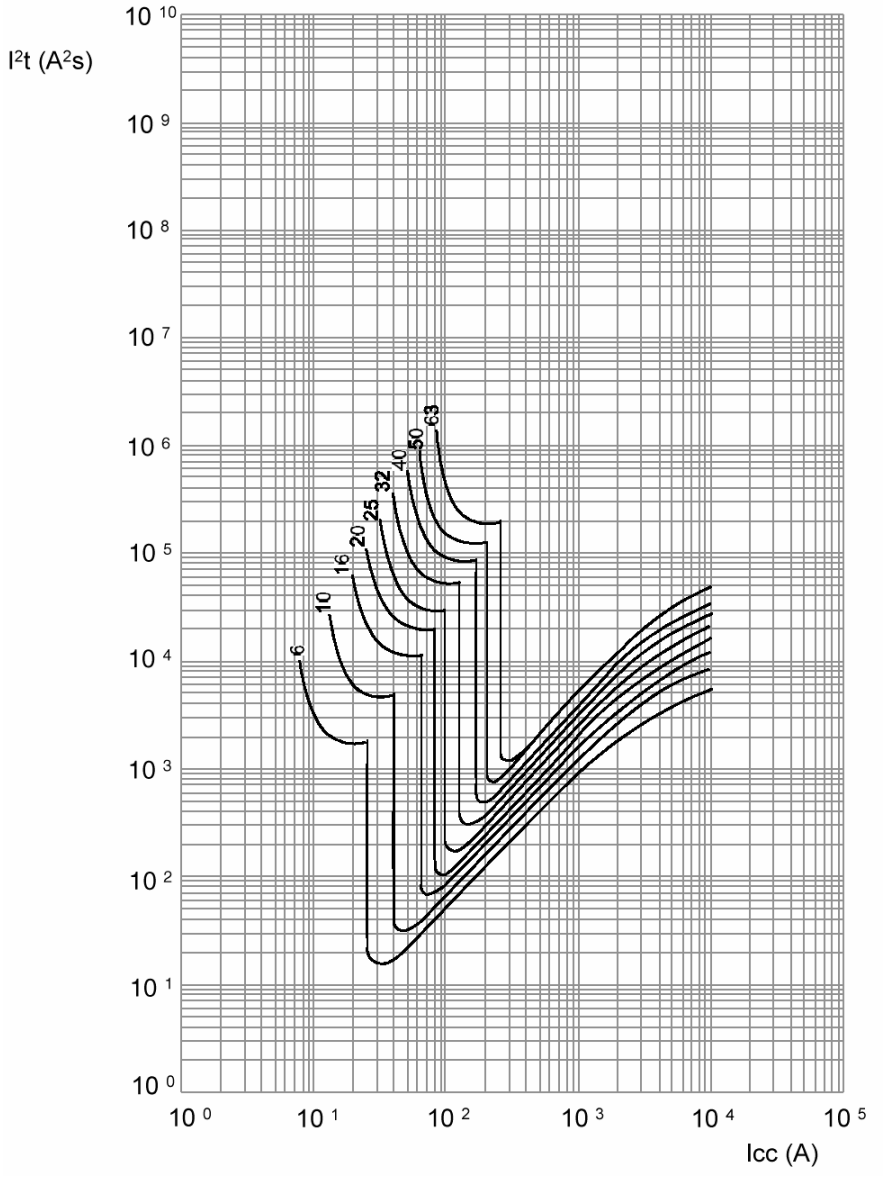


Icc = Propected symmetrical short-circuit current (RMS value in kA)
Ip = Max peak current (in kA)

① = Effective (max peak) short-circuit current
② = Unlimited peak current (max), in accordance with hereabove power factors

7. CURVES *(continued)*

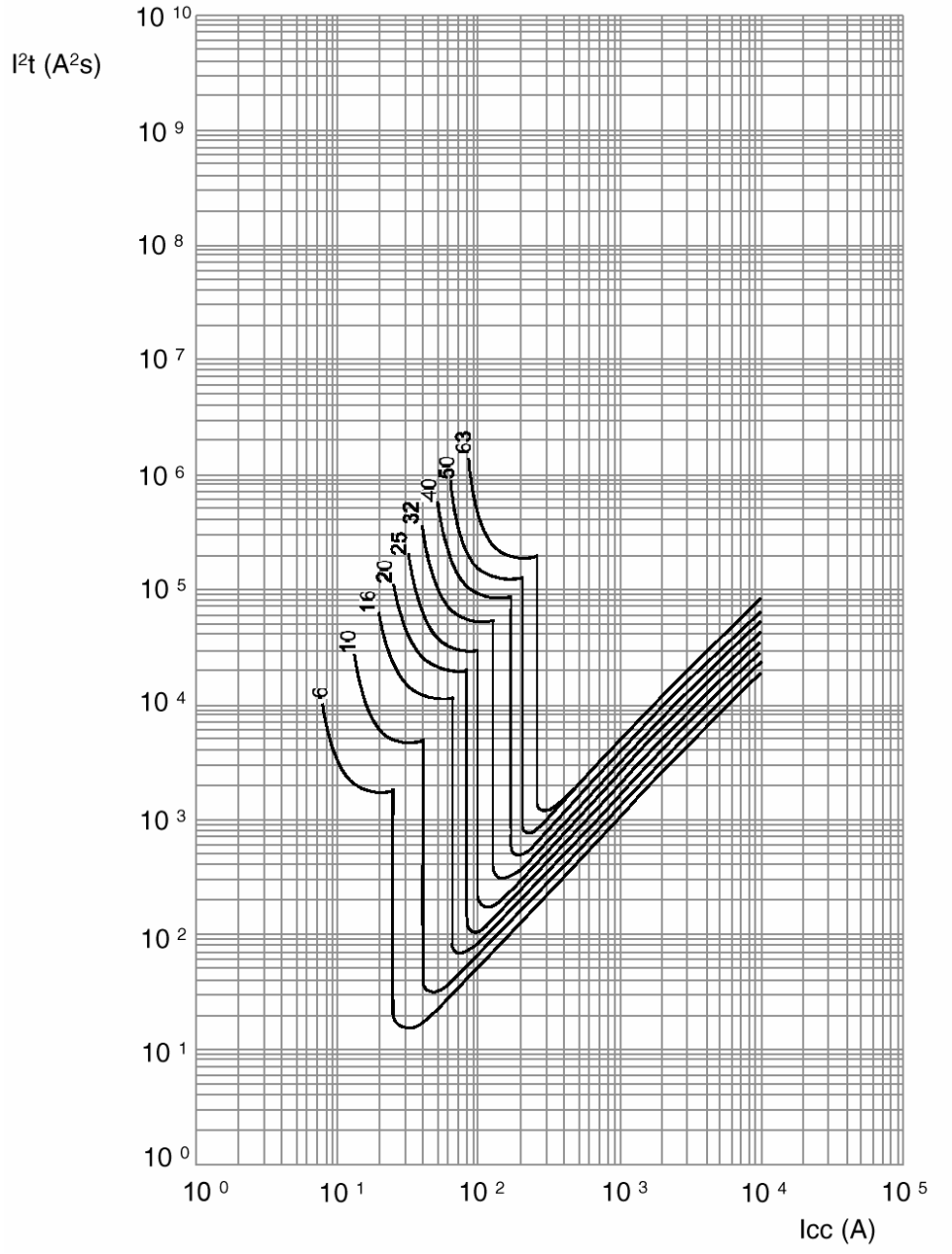
Thermal stress limitation curves : M.C.B. curve B, double pole (230 V / 50 Hz)



Icc = Propected symmetrical short-circuit current (RMS value in kA)
I²t = Limited thermal stress (in A²s)

7. CURVES *(continued)*

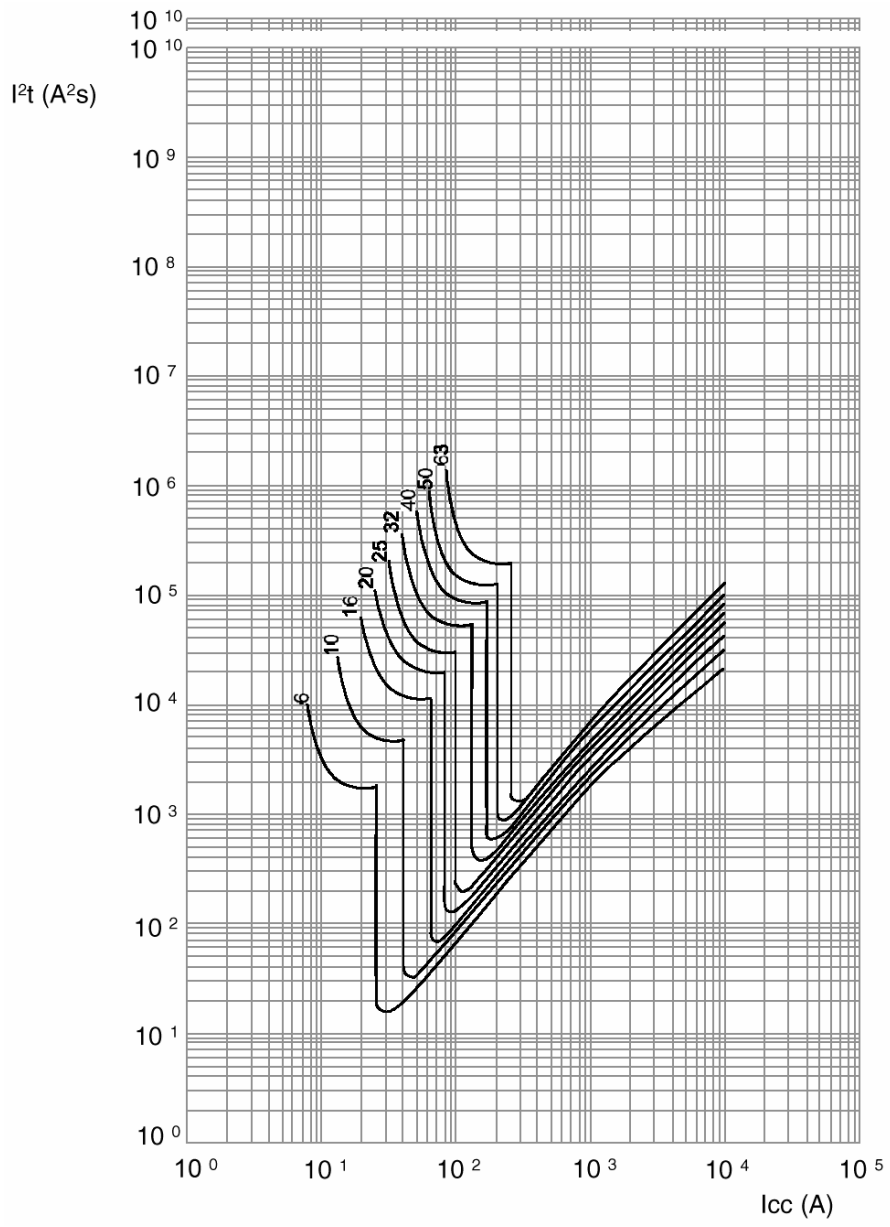
Thermal stress limitation curves : M.C.B. curve B, double pole (400 V / 50 Hz)



Icc = Propected symmetrical short-circuit current (RMS value in kA)
I²t = Limited thermal stress (in A²s)

7. CURVES *(continued)*

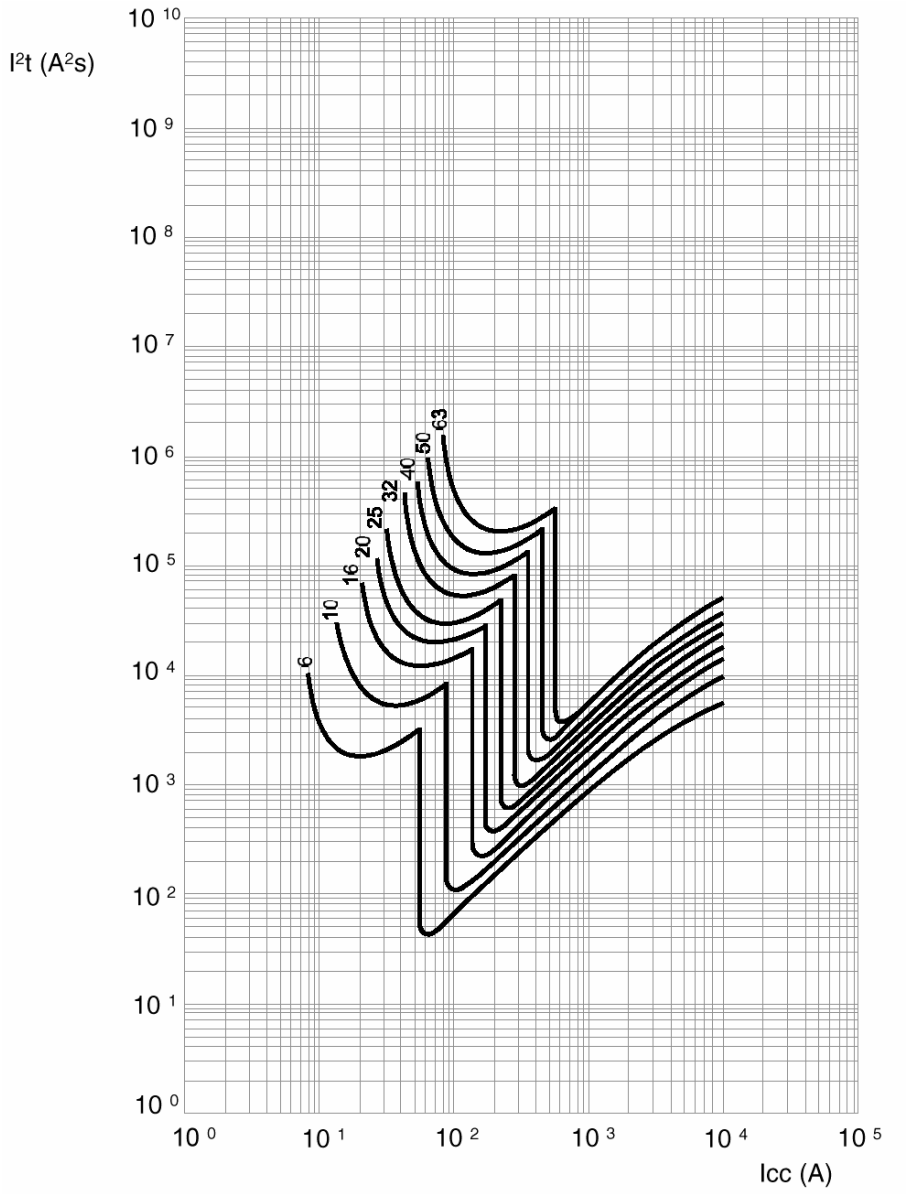
Thermal stress limitation curves : M.C.B. curve B, single pole (230 V / 50 Hz), triple pole and four pole (400V / 50Hz))



Icc = Propected symmetrical short-circuit current (RMS value in kA)
I²t = Limited thermal stress (in A²s)

7. CURVES *(continued)*

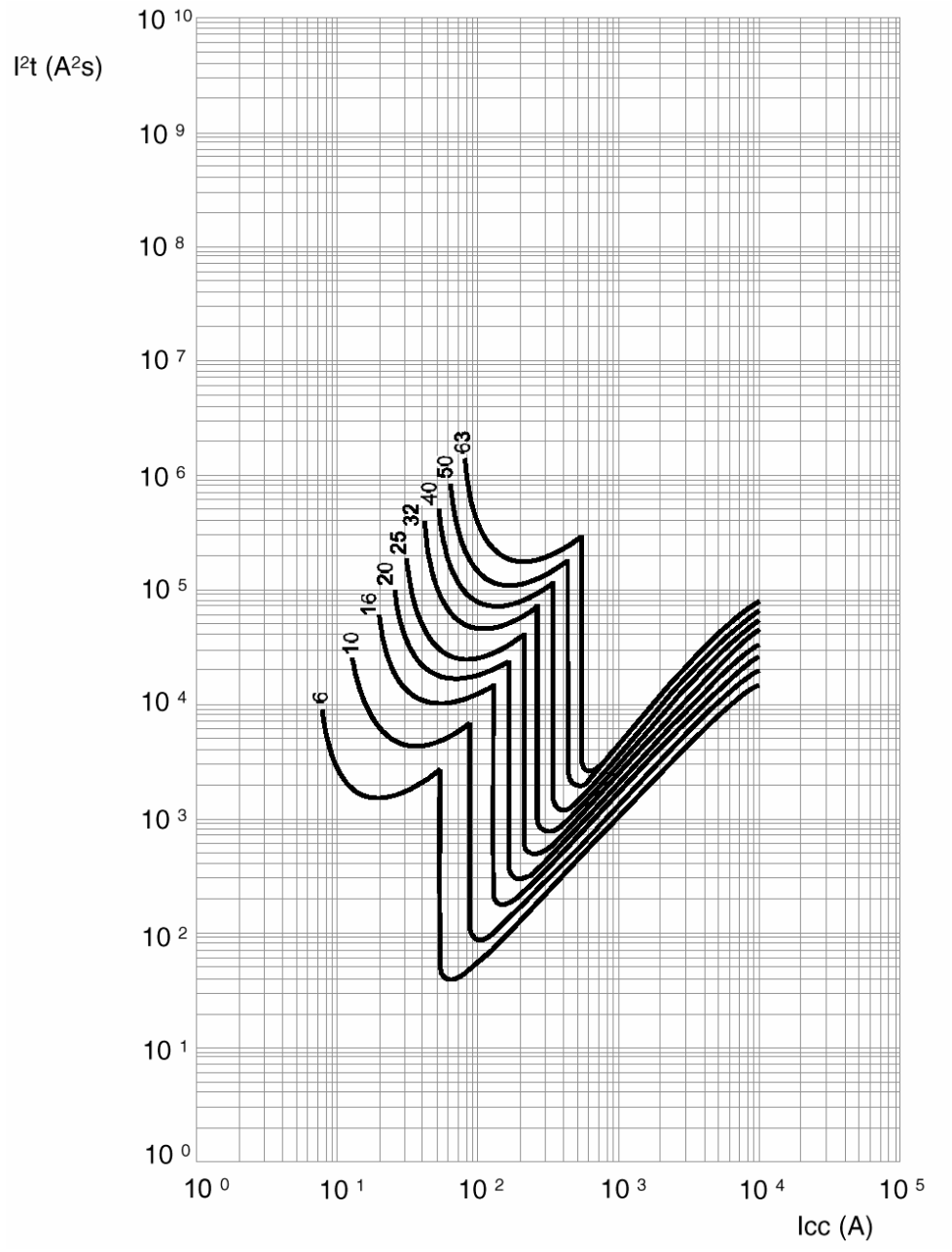
Thermal stress limitation curves : M.C.B. curve C, double pole (230 V / 50 Hz)



Icc = Propected symmetrical short-circuit current (RMS value in kA)
I²t = Limited thermal stress (in A²s)

7. CURVES *(continued)*

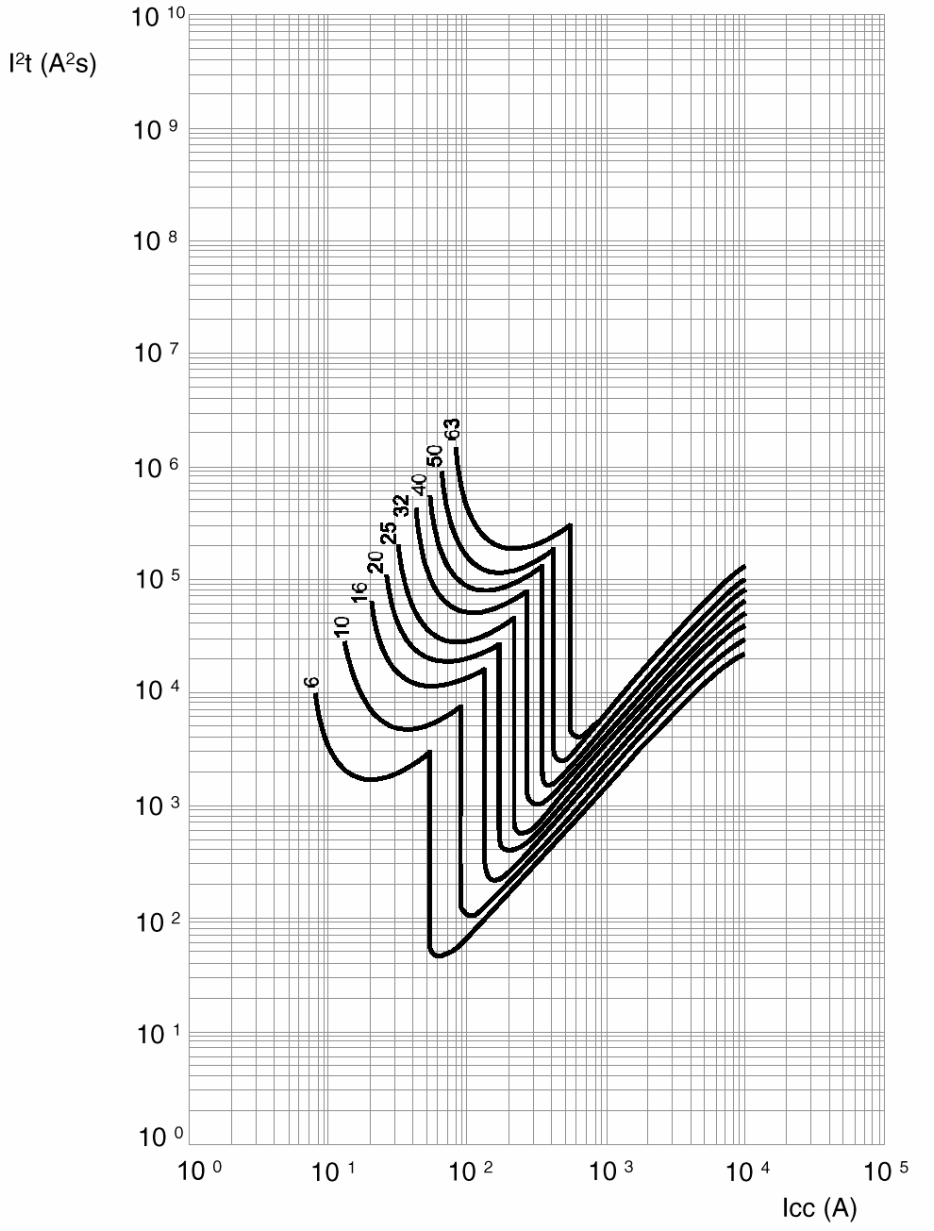
Thermal stress limitation curves : M.C.B. curve C, double pole (400 V / 50 Hz)



Icc = Propected symmetrical short-circuit current (RMS value in kA)
I²t = Limited thermal stress (in A²s)

7. CURVES *(continued)*

Thermal stress limitation curves : M.C.B. curve C, single pole (230 V / 50 Hz), triple pole and four pole (400V / 50Hz)



Icc = Propected symmetrical short-circuit current (RMS value in kA)
I²t = Limited thermal stress (in A²s)

8. EQUIPMENT AND ACCESSORIES

Wiring accessories :

. Supply busbar (cat. N° 049 26/37/55/56/57)
. Sealable screw cover (cat. N° 044 44)
. Insulation shield (cat. N° 044 47)
. Lexiclic distribution blocks (cat. N° 048 70/74) + wires

Installation software :

. XL PRO²

List of auxiliaries :

Signalling auxiliaries :
. Auxiliary changeover switch (cat. N°. 073 50) (0,5 module)
. Fault signalling changeover switch (cat. N° 073 51) (0,5 module)
. Auxiliary changeover switch – can be modified to fault signalling changeover switch (cat. N° 073 53) (0,5 module)
. Auxiliary changeover switch + fault signalling changeover switch – can be modified to 2 auxiliary changeover switches (cat. N° 073 54) (1 module)

Control auxiliaries :
. Shunt trip (cat. N° 073 60 / 61) (1 module)
. Under voltage release (cat. N° 073 65 / 66 / 68) (1 module)
. Remote control with changeover switch and fault signalling changeover switch included (réf. 07370 / 71 / 73) (3 modules)

Auxiliaries are clipped on the left hand side of the m.c.b.

Auxiliaries and m.c.b.'s combinations allowed :

. Maximum number of auxiliaries = 3.
. Maximum number of signalling auxiliaries = 2 (but only 1 half-module wide auxiliary)
. Maximum number of control auxiliaries = 1
. Control auxiliary must be located on the left of signalling auxiliaries in case auxiliaries of these two kinds are used with the same m.c.b.
Nota : *Remote control cannot be used with other control or signalling auxiliaries*.