

DX³ RCBO 6000 / 6 kA
Phase + Neutral, neutral on left

Cat. N°(s):
4 107 80, 81, 91, 92, 93, 94, 95, 96, 97;
4 108 19, 20, 21, 22, 23, 24, 25,

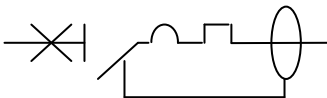


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1. DESCRIPTION - USE

Residual Current Circuit Breaker with Overload (RCBO) with positive contact indication for control, protection against short-circuits and overloads, and isolation of electrical circuits, protecting people from direct and indirect contact and protecting installations from insulation faults.

Symbol:



Technology:

- . Limiting device
- . The Neutral contact closes before and opens after the Phase contact
- . The phase pole provides protection and isolation for the phase circuit
- . The neutral pole provides isolation for the neutral circuit

2. RANGE

Polarity:

- . 2 poles including 1 protected pole and 1 neutral pole

Width:

- . 2 modules (2 x 17.8 mm)

Rated current In:

- . 6 – 10 – 16 – 20 – 25 – 32 – 40 A

Magnetic tripping curve:

- . C curve (between 5 In and 10 In)

Type:

- . AC (sinusoidal differential alternating current)

Sensitivity:

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

Rated voltage and frequency:

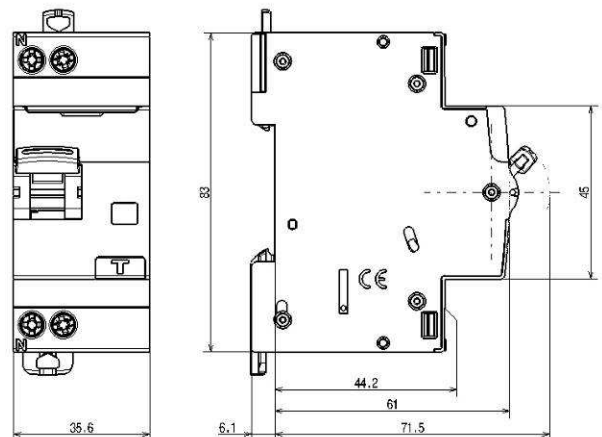
- . 230 V~, 50 Hz with standard tolerances
- . 240 V~, 50 Hz with standard tolerances

2. RANGE (continued)

Breaking capacity:

- . Icn = 6000 A in accordance with standard EN/IEC 61009-1
- . Icu = 6 kA in accordance with standard EN/IEC 60947-2

3. OVERALL DIMENSIONS



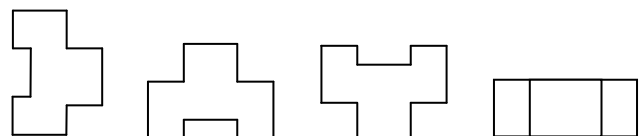
4. PREPARATION - CONNECTION

Mounting:

- . On symmetrical rail EN 60715 or DIN 35 rail

Operating positions:

- Vertical Horizontal Upside down On the side



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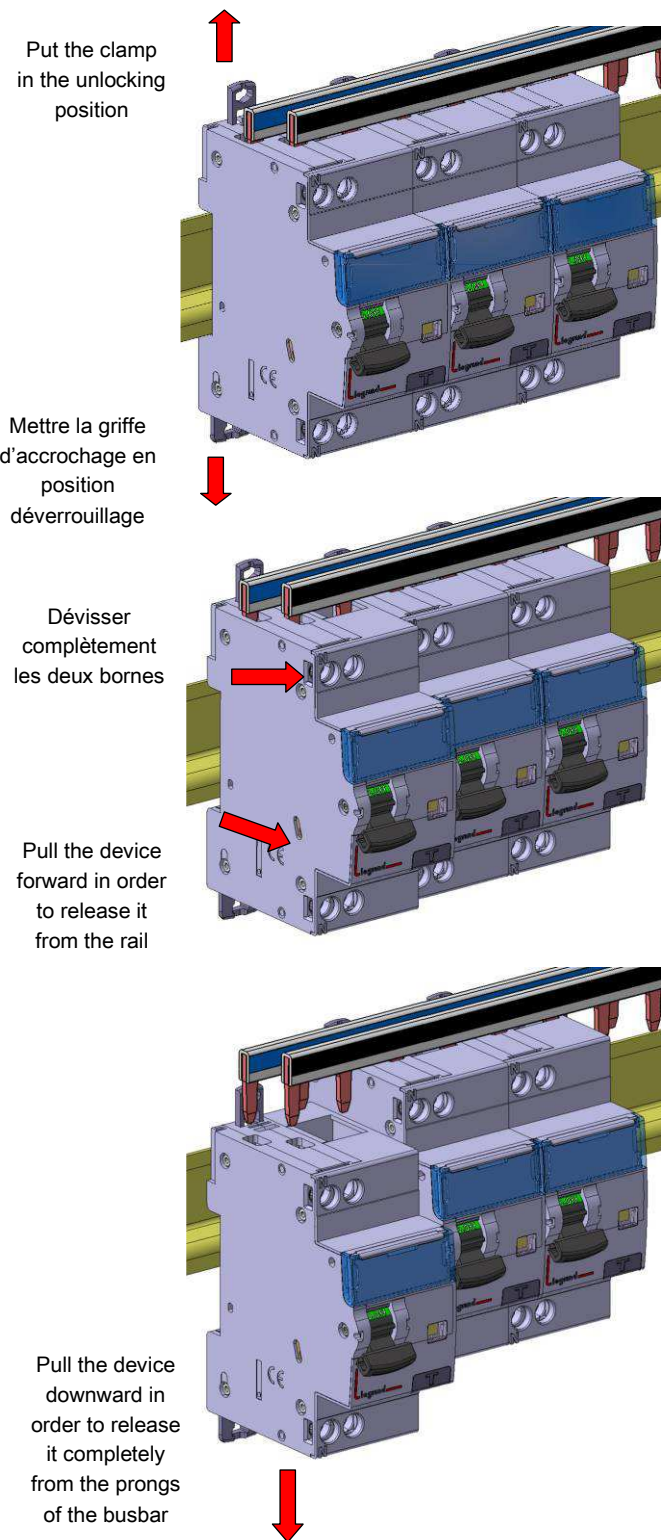
4. POSITIONING - CONNECTION *(continued)*

Power supply:

- . Either from the top or the bottom

Module maintenance:

- . A RCBO may be replaced in the middle of a row of supplied with busbars without disconnecting the other products.



4. POSITIONING - CONNECTION *(continued)*

Connection:

- . Terminals protected against direct finger contact IP20 when wired device
- . Cage terminals, with release and captive screws
- . Terminals fitted with shutters preventing a cable being placed under the terminal, with the terminal partly open or closed
- . Alignment and spacing of the terminals permitting connection with the other products in the range via prong supply busbars
- . Terminal depth: 14 mm at the top and 13 mm at the bottom
- . Screw head: mixed, slotted and Pozidriv no. 2
- . Tightening torques:
 - Recommended: 1.6 to 2 Nm
 - Min.: 1.2 Nm
 - Max.: 2.8 Nm

Conductor type:

- . Copper cable at the top and bottom of the product
- . Cable cross-section

| | Without ferrule | With ferrule |
|----------------|---|--|
| Rigid cable | 1 x 0.75 mm ² to 16 mm ² 2 x 0.75 mm ² to 6 mm ² | - |
| Flexible cable | 1 x 0.75 mm ² to 10 mm ² 2 x 0.75 mm ² to 4 mm ² | 1 x 0.75 mm ² to 10 mm ² |

- . Prong busbar, alone or with a 10 mm² flexible wire (without ferrule) or a connection terminal in the same terminal.

Recommended tools:

- . For the terminals, screwdriver with 5.5 mm blade or Pozidriv no. 2 screwdriver
- . For attaching or removing the DIN rail, screwdriver with 5.5 mm blade or Pozidriv no. 2 screwdriver

Manual actuation of the RCBO:

- . Ergonomic 2-position handle
 - "O-OFF" : device open
 - "I-ON" : device closed

Contact status display:

- . By marking of the handle
 - "O-OFF" in white on a green background = contacts open
 - "I-ON" in white on a red background = contacts closed

Trip indication on residual current fault:

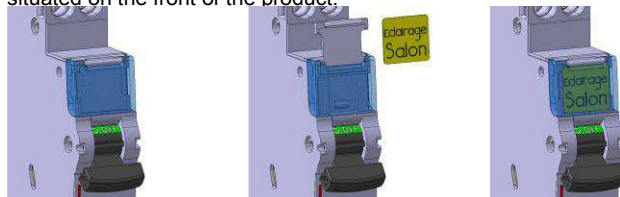
- . Yellow indicator on the front

Locking:

- . Padlocks possible in the open and closed positions with padlock support (Cat. No. 4 063 03) and Ø 5 mm padlock (Cat. No. 4 063 13) or Ø 6 mm padlock (Cat. No. 0 227 97)
- . Sealing possible in the open and closed positions

Labelling:

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



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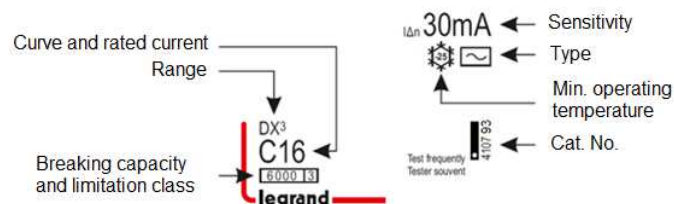
5. GENERAL CHARACTERISTICS

Neutral earthing system:

. IT, TT, TN

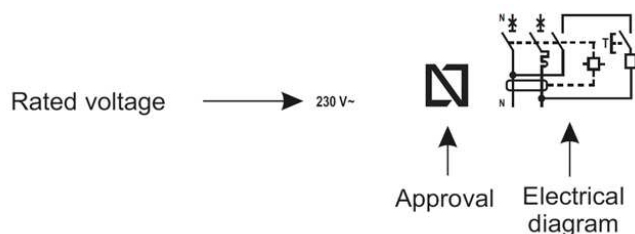
Marking on the front side:

. By permanent ink pad printing



Marking on the upper panel:

. By permanent ink pad printing



. The terminals upstream and downstream of the neutral pole are marked with an "N" moulded close to the screw heads.

Maximum operating voltage:

. U = 250 V

Minimum operating voltage (circuit test):

| | | | |
|--------------|---------|---------|---------|
| I Δ n | 10 mA | 30 mA | 300 mA |
| U mini | 110 V ~ | 110 V ~ | 170 V ~ |

Breaking capacity:

. With a single-phase network (with alternating current 50 Hz)

| Standard | Breaking capacity | Voltage between poles | Breaking capacity |
|----------------|-------------------|-----------------------|-----------------------|
| EN/IEC 61009-1 | I _{cs} | 127 V | 10 kA |
| | I _{cn} | | 10 kA |
| | I _{cs} | 230 V | 6 kA |
| | I _{cn} | | 6 kA |
| EN/IEC 60947-2 | I _{cu} | 230 V | 6 kA |
| | I _{cs} | | 100 % I _{cu} |

Breaking capacity on one single pole (phase pole):

. In accordance with I_{IT} EN60947-2 – Appendix H (double fault in IT system): 1.5 kA at 400 V~ and 3 kA at 230 V~

. In accordance with I_{cn1} EN60898-1: 4.5 kA at 230 V~ and 10 kA at 127V~

5. GENERAL CHARACTERISTICS (continued)

Residual breaking capacity:

. In accordance with standard EN/IEC 61009-1 section 9.12.11.4d (I Δ m: short-circuit to earth) I Δ m = 3 kA

Isolation distance:

. The distance between the contacts is greater than 5.5 mm with the handle in the open position.
 . The RCBO is suitable for isolation in accordance with standard EN/IEC 61009-1.

Insulation voltage:

. U_i = 250 V in accordance with standard EN/IEC 61009-1

Degree of pollution:

. 2 in accordance with standard EN/IEC 61009-1.

Dielectric strength:

. 2,000 V

Rated impulse withstand voltage

. U_{imp} = 4 kV (wave 1.2/50 μ s)

Protection from false tripping:

. 8/20 μ s wave resistance:
 250 A for AC type
 . 0.5 μ s/100 kHz damped recurring wave resistance:
 200 A for AC type

Degree or class of protection:

. Terminals protected against direct contact, class of protection against solid objects and liquids (wired device): IP20 in accordance with standards IEC 529 / EN 60529 and NF 20-010
 . Front side protected against direct contact: IP40
 . Class II in relation to metallic conductive parts
 . Class of protection against mechanical impacts IK02 in accordance with standard EN 62262.

Plastic materials:

. Polyamide and P.B.T.

Enclosure heat and fire resistance:

. Resistance to glow wire tests at 960°C, in accordance with standard EN/IEC 61009-1
 . Classification V2, in accordance with standard UL94

Higher heating potential:

. The heat potential is assessed at: 2.1MJ

Closing and opening force via the handle:

. 4 N on opening
 . 10 N on closing

Mechanical endurance:

. Compliant with standard EN/IEC 61009-1
 . Tested with 20,000 operations with no load

Electrical endurance:

. Compliant with standard EN/IEC 61009-1
 . Tested with 10,000 operations with load (at I_n x Cos ϕ 0.9)
 . Tested with 2,000 residual current trip operations using the Test button or the fault current

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5. GENERAL CHARACTERISTICS (continued)

Sinusoidal vibration resistance (in accordance with IEC 68.2.6):

- . Axes: x – y – z
- . Frequency: 10 to 55 Hz
- . Acceleration: 3g (1g = 9.81 m.s⁻²)

Resistance to tremors:

- . In accordance with standard NF EN 61009-1

Ambient temperature:

- . Operation:
- . For the AC type from - 25°C to + 70°C
- . Storage: from - 40°C to +70°C

DC operation:

- . No

Frequency:

- . Operation at 400Hz: No

Packaged volume and quantity:

| | Volume (dm ³) | Packaging |
|-----------------|---------------------------|--------------|
| For all ratings | 0.4 | Per 1 |

Derating of RCBOs function of the number of devices placed side by side:

When several RCBOs are installed side by side and operate simultaneously, the heat dissipation of one pole is limited. This results in an increased operating temperature for RCBOs which may cause false tripping. Applying the following coefficients to the operating currents is recommended.

| Number of RCBOs side by side | Coefficient |
|------------------------------|-------------|
| 2 - 3 | 0.9 |
| 4 - 5 | 0.8 |
| 6 - 9 | 0.7 |
| ≥ 10 | 0.6 |

These values are provided by recommendation IEC 60439-1 and the standards NF C 63421 and EN 60439-1.

In order to avoid having to use these coefficients there must be good ventilation and the devices must be kept apart using the spacing elements Cat. No. 4 063 07 (0.5 module).

Derating of RCBOs in the event of use with fluorescent tubes:

Electronic or ferromagnetic ballasts provide a high inrush current for a very short time. These currents are liable to cause tripping of the RCBOs.

The maximum number of ballasts per RCBO stated by the lamp and ballast manufacturers in their catalogues should be taken into account during installation.

5. GENERAL CHARACTERISTICS (continued)

Impact of height:

| | ≤ 2000 m | 3,000 m | 4,000 m | 5,000 m |
|---------------------------|----------------|----------------|----------------|----------------|
| Dielectric strength | 2,000 V | 1,750 V | 1,500 V | 1,250 V |
| Maximum operating voltage | 230 V | 230 V | 230 V | 230 V |
| Derating at 30°C | none | none | none | none |

Product weight:

| Catalogue Number | Description | Weight (kg) |
|------------------|-------------------|-------------|
| 4 107 80 | C10 type AC 10mA | 0,18 |
| 4 107 81 | C16 type AC 10mA | 0,18 |
| 4 107 91 | C6 type AC 30mA | 0,17 |
| 4 107 92 | C10 type AC 30mA | 0,17 |
| 4 107 93 | C16 type AC 30mA | 0,17 |
| 4 107 94 | C20 type AC 30mA | 0,17 |
| 4 107 95 | C25 type AC 30mA | 0,18 |
| 4 107 96 | C32 type AC 30mA | 0,19 |
| 4 107 97 | C40 type AC 30mA | 0,19 |
| 4 108 19 | C6 type AC 300mA | 0,17 |
| 4 108 20 | C10 type AC 300mA | 0,17 |
| 4 108 21 | C16 type AC 300mA | 0,17 |
| 4 108 22 | C20 type AC 300mA | 0,18 |
| 4 108 23 | C25 type AC 300mA | 0,18 |
| 4 108 24 | C32 type AC 300mA | 0,18 |
| 4 108 25 | C40 type AC 300mA | 0,18 |

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5. GENERAL CHARACTERISTICS *(continued)*

Dissipated power (W):

. C curve RCBOs in In/Un

| RATED CURRENT | 6 A | 10 A | 16 A | 20 A | 25 A | 32 A | 40 A |
|------------------------|-------|-------|-------|-------|-------|-------|-------|
| Power (W) Phase pole | 2.5 W | 2.1 W | 3.3 W | 4.3 W | 4.3 W | 5.3 W | 7 W |
| Power (W) Neutral pole | 0.3 W | 0.8 W | 1.9 W | 2.6 W | 3.8 W | 3.4 W | 5.4 W |

Derating of RCBOs depending on the ambient temperature:

. The nominal characteristics of a circuit breaker are modified depending on the ambient temperature which prevails in the cabinet or enclosure where the RCBO is located.

. Reference temperature: 30°C in accordance with standard EN/IEC 61009-1.

| 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 | 7.2 | 6.9 | 6.6 | 6.3 | 6 | 5.7 | 5.4 | 5.1 | 4.8 |
| 10 | 12.5 | 12 | 11.5 | 11 | 10.5 | 10 | 9.5 | 9 | 8.5 | 8 |
| 16 | 20 | 19.2 | 18.4 | 17.6 | 16.8 | 16 | 15.2 | 14.4 | 13.6 | 12.8 |
| 20 | 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 |
| 25 | 31 | 30 | 28.7 | 27.5 | 26.2 | 25 | 23.7 | 22.5 | 21.2 | 20 |
| 32 | 40 | 38 | 36.8 | 35.2 | 33.6 | 32 | 30.4 | 28.8 | 27.2 | 25.6 |
| 40 | 50 | 48 | 46 | 44 | 42 | 40 | 38 | 36 | 34 | 32 |

Association and coordination of an RCBO with a protective device located upstream:

This association allows a device's breaking capacity to be increased by combining it with another protective device placed upstream.

This combination makes it possible to use a downstream device with a breaking capacity which is lower than the maximum prospective short-circuit current at its installation point.

Association and coordination with upstream fuses:

. Three-phase network (+N) 230/400 V or 240/415 V in accordance with standard EN/IEC 60947-2

. TT neutral earthing or TNS system

| | | Upstream fuse | | | | | | | | | |
|---------------------------------------|-------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | gG and aM types | | | | | | | | | |
| Downstream RCBO Ph+N | | ≤20 A | 25 A | 32 A | 40 A | 50 A | 63 A | 80 A | 100 A | 125 A | 160 A |
| DX ³ 6000 / 6kA C curve | ≤ 6 A | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA |
| | 10 A | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA |
| | 16 A | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA |
| | 20 A | - | 50 kA | 50 kA | 50 kA | 50 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA |
| | 25 A | - | - | 50 kA | 50 kA | 50 kA | 25 kA | 25 kA | 25 kA | 25 kA | 16 kA |
| | 32 A | - | - | - | 50 kA | 50 kA | 25 kA | 25 kA | 25 kA | 25 kA | 16 kA |
| | 40 A | - | - | - | - | 50 kA | 25 kA | 25 kA | 25 kA | 25 kA | 16 kA |

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5. GENERAL CHARACTERISTICS *(continued)*

Association and coordination with upstream MCBs:

- . Three-phase network (+N) 230/400 V or 240/415 V in accordance with standard EN/IEC 60947-2
- . TT neutral earthing or TNS system

| | | Upstream MCB | | | | |
|---------------------------------------|-------|--|---|-------|-------|-------|
| | | Ph+N (mod) DX ³ 10000 / 16 kA C curve | DX ³ 6000 / 10 kA B, C and D curves | | | |
| Downstream RCBO Ph+N | | ≤20 A | ≤32 A | 40 A | 50 A | 63 A |
| DX ³ 6000 / 6kA C curve | ≤ 6 A | 16 kA | 25 kA | 25 kA | 25 kA | 25 kA |
| | 10 A | 16 kA | 25 kA | 25 kA | 25 kA | 25 kA |
| | 16 A | 16 kA | 25 kA | 25 kA | 25 kA | 25 kA |
| | 20 A | - | 25 kA | 25 kA | 25 kA | 25 kA |
| | 25 A | - | 25 kA | 25 kA | 25 kA | 25 kA |
| | 32 A | - | - | 25 kA | 25 kA | 25 kA |
| | 40 A | - | - | - | 25 kA | 25 kA |

| | | Upstream MCB | | | | | | | |
|---------------------------------------|-------|--|-------|-------|-------|-------|-------|-------|-------|
| | | DX ³ 10000 / 16 kA B, C and D curves | | | | | | | |
| Downstream RCBO Ph+N | | ≤ 25 A | 32 A | 40 A | 50 A | 63 A | 80 A | 100 A | 125 A |
| DX ³ 6000 / 6kA C curve | ≤ 6 A | 32 kA | 32 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA |
| | 10 A | 32 kA | 32 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA |
| | 16 A | 32 kA | 32 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA |
| | 20 A | 32 kA | 32 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA |
| | 25 A | - | 32 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA |
| | 32 A | - | - | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA |
| | 40 A | - | - | - | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA |

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Association and coordination with upstream MCBs:

- . Three-phase network (+N) 230/400 V or 240/415 V in accordance with standard EN/IEC 60947-2
- . TT neutral earthing or TNS system

| | | Upstream MCB | | | | | | | |
|---------------------------------------|-------|--|-------|-------|-------|-------|-------|-------|-------|
| | | DX ³ 25 kA B, C and D curves | | | | | | | |
| Downstream RCBO Ph+N | | ≤ 25 A | 32 A | 40 A | 50 A | 63 A | 80 A | 100 A | 125 A |
| DX ³ 6000 / 6kA C curve | ≤ 6 A | 50 kA | 50 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA |
| | 10 A | 50 kA | 50 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA |
| | 16 A | 50 kA | 50 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA |
| | 20 A | 50 kA | 50 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA |
| | 25 A | - | 50 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA |
| | 32 A | - | - | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA |
| | 40 A | - | - | - | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA |

| | | Upstream MCB | | | | | |
|---------------------------------------|-------|----------------------------------|-------|-------|-------|-------|-------|
| | | DX ³ 36 kA C curve | | | | | |
| Downstream RCBO Ph+N | | ≤ 25 A | 32 A | 40 A | 50 A | 63 A | 80 A |
| DX ³ 6000 / 6kA C curve | ≤ 6 A | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA |
| | 10 A | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA |
| | 16 A | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA |
| | 20 A | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA |
| | 25 A | - | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA |
| | 32 A | - | - | 50 kA | 50 kA | 50 kA | 50 kA |
| | 40 A | - | - | - | 50 kA | 50 kA | 50 kA |

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Association and coordination with upstream MCBs:

- . Three-phase network (+N) 230/400 V or 240/415 V in accordance with standard EN/IEC 60947-2
- . TT neutral earthing or TNS system

| | | Upstream MCB | | | | | | | | | |
|---------------------------------------|-------|---|-------|-------|-------|-------|----------------------------------|-------|-------|-------|-------|
| | | DX ³ 50 kA B and C curves | | | | | DX ³ 50 kA D curve | | | | |
| Downstream RCBO Ph+N | | ≤ 25 A | 32 A | 40 A | 50 A | 63 A | ≤ 25 A | 32 A | 40 A | 50 A | 63 A |
| DX ³ 6000 / 6kA C curve | ≤ 6 A | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA |
| | 10 A | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA |
| | 16 A | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA | 50 kA |
| | 20 A | 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 |
| | 32 A | - | - | 50 kA | 50 kA | 50 kA | - | - | - | - | 50 kA |
| | 40 A | - | - | - | 50 kA | 50 kA | - | - | - | - | - |

Association and coordination with upstream Moulded Case Circuit Breakers (MCCBs):

- . Three-phase network (+N) 230/400 V or 240/415 V in accordance with standard EN/IEC 60947-2
- . TT neutral earthing or TNS system

| | | Upstream MCCB | | | | | | | |
|---------------------------------------|-------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|
| | | DPX ³ 160 16 kA | | | | | | | |
| Downstream RCBO Ph+N | | 16 A | 25 A | 40 A | 63 A | 80 A | 100 A | 125 A | 160 A |
| DX ³ 6000 / 6kA C curve | ≤ 6 A | 22 kA | 22 kA | 22 kA | 22 kA | 22 kA | 22 kA | 22 kA | 22 kA |
| | 10 A | 22 kA | 22 kA | 22 kA | 22 kA | 22 kA | 22 kA | 22 kA | 22 kA |
| | 16 A | - | 22 kA | 22 kA | 22 kA | 22 kA | 22 kA | 22 kA | 22 kA |
| | 20 A | - | 22 kA | 22 kA | 22 kA | 22 kA | 22 kA | 22 kA | 22 kA |
| | 25 A | - | - | 22 kA | 22 kA | 22 kA | 22 kA | 22 kA | 22 kA |
| | 32 A | - | - | 16 kA | 16 kA | 16 kA | 16 kA | 16 kA | 16 kA |
| | 40 A | - | - | - | 16 kA | 16 kA | 16 kA | 16 kA | 16 kA |

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Association and coordination with upstream Moulded Case Circuit Breakers (MCCBs):

- . Three-phase network (+N) 230/400 V or 240/415 V in accordance with standard EN/IEC 60947-2
- . TT neutral earthing or TNS system

| | | Upstream MCCB | | | | | | | |
|---------------------------------------|-------|---|-------|-------|-------|-------|-------|-------|-------|
| | | DPX ³ 160 25 kA / 36 kA & 50 kA | | | | | | | |
| Downstream RCBO Ph+N | | 16 A | 25 A | 40 A | 63 A | 80 A | 100 A | 125 A | 160 A |
| DX ³ 6000 / 6kA C curve | ≤ 6 A | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA |
| | 10 A | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA |
| | 16 A | - | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA |
| | 20 A | - | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA |
| | 25 A | - | - | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA |
| | 32 A | - | - | 16 kA | 16 kA | 16 kA | 16 kA | 16 kA | 16 kA |
| | 40 A | - | - | - | 16 kA | 16 kA | 16 kA | 16 kA | 16 kA |

| | | Upstream MCCB | | | | | | |
|---------------------------------------|-------|-----------------------|-------|-------|------------------------|-------|-------|-------|
| | | DPX 250 ER ≤ 50 kA | | | DPX 250 ER AB 36 kA | | | |
| Downstream RCBO Ph+N | | 100 A | 160 A | 250 A | 90 A | 130 A | 170 A | 240 A |
| DX ³ 6000 / 6kA C curve | ≤ 6 A | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA |
| | 10 A | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA |
| | 16 A | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA |
| | 20 A | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA |
| | 25 A | 20 kA | 20 kA | 20 kA | 20 kA | 20 kA | 20 kA | 20 kA |
| | 32 A | 10 kA | 10 kA | 10 kA | 10 kA | 10 kA | 10 kA | 10 kA |
| | 40 A | 10 kA | 10 kA | 10 kA | 10 kA | 10 kA | 10 kA | 10 kA |

DX³ RCBO 6000 / 6 kA

Phase + Neutral, neutral on left

Cat. N°(s):
 4 107 80, 81, 91, 92, 93, 94, 95, 96, 97;
 4 108 19, 20, 21, 22, 23, 24, 25,

5. GENERAL CHARACTERISTICS *(continued)*

Association and coordination with upstream Moulded Case Circuit Breakers (MCCBs):

- . Three-phase network (+N) 230/400 V or 240/415 V in accordance with standard EN/IEC 60947-2
- . TT neutral earthing or TNS system

| | | Upstream MCCB | | | | | | | |
|---------------------------------------|-------|--|-------|-------|-------|--|-------|-------|-------|
| | | DPX ³ 250 ≤ 70 kA thermal-magnetic | | | | DPX ³ 250 ≤ 70 kA electronic | | | |
| Downstream RCBO Ph+N | | 100 A | 160 A | 200 A | 250 A | 40 A | 100 A | 160 A | 250 A |
| DX ³ 6000 / 6kA C curve | ≤ 6 A | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA |
| | 10 A | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA |
| | 16 A | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA |
| | 20 A | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA |
| | 25 A | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA |
| | 32 A | 16 kA | 16 kA | 16 kA | 16 kA | 16 kA | 16 kA | 16 kA | 16 kA |
| | 40 A | 16 kA | 16 kA | 16 kA | 16 kA | 16 kA | - | 16 kA | 16 kA |

| | | Upstream MCCB | | | | | | | | | |
|---------------------------------------|-------|--|-------|-------|-------|-------|-------|---|-------|-------|-------|
| | | DPX 250 36 kA / DPX -H 250 70 kA / DPX -L 250 100 kA thermal-magnetic | | | | | | DPX 250 36 kA / DPX -H 250 70 kA / DPX -L 250 100 kA electronic | | | |
| Downstream RCBO Ph+N | | 25 A | 40 A | 63 A | 100 A | 160 A | 250 A | 40 A | 100 A | 160 A | 250 A |
| DX ³ 6000 / 6kA C curve | ≤ 6 A | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA |
| | 10 A | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA |
| | 16 A | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA |
| | 20 A | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA | 30 kA |
| | 25 A | - | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA |
| | 32 A | - | 16 kA | 16 kA | 16 kA | 16 kA | 16 kA | 16 kA | 16 kA | 16 kA | 16 kA |
| | 40 A | - | - | 16 kA | 16 kA | 16 kA | 16 kA | 16 kA | - | 16 kA | 16 kA |

DX³ RCBO 6000 / 6 kA

Phase + Neutral, neutral on left

Cat. N°(s):
 4 107 80, 81, 91, 92, 93, 94, 95, 96, 97;
 4 108 19, 20, 21, 22, 23, 24, 25,

5. GENERAL CHARACTERISTICS *(continued)*

Association and coordination with upstream Moulded Case Circuit Breakers (MCCBs):

- . Three-phase network (+N) 230/400 V or 240/415 V in accordance with standard EN/IEC 60947-2
- . TT neutral earthing or TNS system

| | | Upstream MCCB | |
|---------------------------------------|-------|---------------------|-------|
| | | DPX 400 AB 36 kA | |
| Downstream RCBO Ph+N | | 320 A | 400 A |
| DX ³ 6000 / 6kA C curve | ≤ 6 A | 25 kA | 25 kA |
| | 10 A | 25 kA | 25 kA |
| | 16 A | 25 kA | 25 kA |
| | 20 A | 25 kA | 25 kA |
| | 25 A | 20 kA | 20 kA |
| | 32 A | 10 kA | 10 kA |
| | 40 A | 10 kA | 10 kA |

| | | Upstream MCCB | | | | | | | | |
|---------------------------------------|-------|---|-------|-------|-------|-------|---|-------|-------|-------|
| | | DPX 630 36 kA / DPX -H 630 70 kA / DPX -L 630 100 kA thermal-magnetic | | | | | DPX 630 36 kA / DPX -H 630 70 kA / DPX -L 630 100 kA electronic | | | |
| Downstream RCBO Ph+N | | 250 A | 320 A | 400 A | 500 A | 630 A | 160 A | 250 A | 400 A | 630 A |
| DX ³ 6000 / 6kA C curve | ≤ 6 A | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA |
| | 10 A | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA |
| | 16 A | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA |
| | 20 A | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA | 25 kA |
| | 25 A | 20 kA | 20 kA | 20 kA | 20 kA | 20 kA | 20 kA | 20 kA | 20 kA | 20 kA |
| | 32 A | 10 kA | 10 kA | 10 kA | 10 kA | 10 kA | 10 kA | 10 kA | 10 kA | 10 kA |
| | 40 A | 10 kA | 10 kA | 10 kA | 10 kA | 10 kA | 10 kA | 10 kA | 10 kA | 10 kA |

DX³ RCBO 6000 / 6 kA

Phase + Neutral, neutral on left

Cat. N°(s):
 4 107 80, 81, 91, 92, 93, 94, 95, 96, 97;
 4 108 19, 20, 21, 22, 23, 24, 25,

5. GENERAL CHARACTERISTICS *(continued)*

Association and coordination with upstream Moulded Case Circuit Breakers (MCCBs):

- . Three-phase network (+N) 230/400 V or 240/415 V in accordance with standard EN/IEC 60947-2
- . TT neutral earthing or TNS system

| | | Upstream MCCB | |
|---------------------------------------|-------|--|--|
| | | DPX 1250 50 kA / DPX -H 1250 70 kA / DPX -L 1250 100 kA | DPX 1600 36 kA / DPX -H 1600 70 kA electronic |
| Downstream RCBO Ph+N | | 500 A à 1250 A | 630 A à 1600 A |
| DX ³ 6000 / 6kA C curve | ≤ 6 A | 25 kA | 25 kA |
| | 10 A | 25 kA | 25 kA |
| | 16 A | 25 kA | 25 kA |
| | 20 A | 25 kA | 25 kA |
| | 25 A | 20 kA | 20 kA |
| | 32 A | 10 kA | 10 kA |
| | 40 A | 10 kA | 10 kA |

Selectivity between two levels of protection

- . The downstream RCBO must always have a magnetic threshold and a rated current lower than those of the upstream protection.
- . Selectivity or Discrimination is said to be total (T) if there is discrimination up to the value of breaking capacity (in accordance standard with EN/IEC 60947-2) of the downstream RCBO.

Discrimination with upstream fuses:

- . Discrimination limit with a voltage of 230 V ~ (Values in A)

| | | Upstream fuse cartridge | | | | | | | |
|---------------------------------------|-------|-------------------------|------|------|------|------|-------|-------|-------|
| | | gG cartridge | | | | | | | |
| Downstream RCBO Ph+N | | 32 A | 40 A | 50 A | 63 A | 80 A | 100 A | 125 A | 160 A |
| DX ³ 6000 / 6kA C curve | ≤ 6 A | 1300 | 1900 | 2500 | 4000 | 4600 | T | T | T |
| | 10 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 | 10000 |
| | 25 A | - | - | 1300 | 2000 | 2200 | 4100 | 5500 | 9000 |
| | 32 A | - | - | 1200 | 1700 | 1900 | 3500 | 4500 | 8000 |
| | 40 A | - | - | - | - | 1700 | 3000 | 4000 | 6000 |

- . T = Total discrimination

DX³ RCBO 6000 / 6 kA

Phase + Neutral, neutral on left

Cat. N°(s):
 4 107 80, 81, 91, 92, 93, 94, 95, 96, 97;
 4 108 19, 20, 21, 22, 23, 24, 25,

5. GENERAL CHARACTERISTICS *(continued)*

Discrimination with upstream fuses:

. Discrimination limit with a voltage of 230 V ~ (Values in A)

| | | Upstream fuse cartridge | | | | | | | | |
|---------------------------------------|-------|-------------------------|------|------|------|------|-------|-------|-------|-------|
| | | aM cartridge | | | | | | | | |
| Downstream RCBO Ph+N | | 25 A | 32 A | 40 A | 50 A | 63 A | 80 A | 100 A | 125 A | 160 A |
| DX ³ 6000 / 6kA C curve | ≤ 6 A | 1000 | 1600 | 2100 | 3200 | 6200 | T | T | T | T |
| | 10 A | - | 1100 | 1700 | 2500 | 5000 | 7,800 | 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 | 9000 |
| | 40 A | - | - | - | - | 2100 | 3100 | 4200 | 6400 | 7000 |

Discrimination with upstream modular MCBs:

. Discrimination limit with a voltage of 230 V ~ (Values in A)

| | | Upstream MCB | | | | | | | | | | | |
|---------------------------------------|-------|--|------|------|------|------|------|------|------|------|------|-------|-------|
| | | DX ³ 4500 / 6 kA - DX ³ 6000 / 10 kA - DX ³ 10000 / 16 kA | | | | | | | | | | | |
| Downstream RCBO Ph+N | | B curve | | | | | | | | | | | |
| | | 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 ³ 6000 / 6kA C curve | ≤ 6 A | - | 52 | 64 | 80 | 100 | 128 | 160 | 200 | 252 | 4000 | T | T |
| | 10 A | - | - | - | 80 | 100 | 128 | 160 | 200 | 252 | 3000 | 5000 | T |
| | 16 A | - | - | - | - | - | 128 | 160 | 200 | 252 | 2000 | 3600 | 5500 |
| | 20 A | - | - | - | - | - | - | 160 | 200 | 252 | 1600 | 3000 | 4000 |
| | 25 A | - | - | - | - | - | - | - | 200 | 252 | 1300 | 2400 | 3300 |
| | 32 A | - | - | - | - | - | - | - | - | 252 | 1000 | 1800 | 2700 |
| | 40 A | - | - | - | - | - | - | - | - | - | 800 | 1600 | 2400 |

. T = Total discrimination

DX³ RCBO 6000 / 6 kA

Phase + Neutral, neutral on left

Cat. N°(s):
4 107 80, 81, 91, 92, 93, 94, 95, 96, 97;
4 108 19, 20, 21, 22, 23, 24, 25,

5. GENERAL CHARACTERISTICS *(continued)*

Discrimination with upstream modular MCBs:

Discrimination limit with a voltage of 230 V ~ (Values in A)

| Downstream RCBO Ph+N | | Upstream MCB | | | | | | | | | | | |
|---------------------------------------|-------|---|------|------|------|------|------|------|------|------|-------|-------|-------|
| | | DX ³ 3000 - DX ³ 4500 / 4,5 kA - DX ³ 4500 / 6 kA - DX ³ 6000 / 10 kA - DX ³ 10000 / 16 kA | | | | | | | | | | | |
| | | C curve | | | | | | | | | | | |
| | | 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 ³ 6000 / 6kA C curve | ≤ 6 A | 75 | 98 | 120 | 150 | 187 | 240 | 300 | 375 | 472 | 4000* | T* | T* |
| | 10 A | - | 98 | 120 | 150 | 187 | 240 | 300 | 375 | 472 | 3000 | 5000* | T* |
| | 16 A | - | - | - | 150 | 187 | 240 | 300 | 375 | 472 | 2000 | 3600* | 5500* |
| | 20 A | - | - | - | - | 187 | 240 | 300 | 375 | 472 | 1600 | 3000 | 4000* |
| | 25 A | - | - | - | - | - | 240 | 300 | 375 | 472 | 1300 | 2400 | 3300* |
| | 32 A | - | - | - | - | - | - | 300 | 375 | 472 | 1000 | 1800 | 2700 |
| | 40 A | - | - | - | - | - | - | - | 375 | 472 | 800 | 1600 | 2400 |

| Downstream RCBO Ph+N | | Upstream MCB | | | | | | | | | | | |
|---------------------------------------|-------|--|------|------|------|------|------|------|------|------|------|-------|-------|
| | | DX ³ 4500 / 6 kA - DX ³ 6000A - DX ³ 6000 / 10 kA - DX ³ 10000 / 16 kA | | | | | | | | | | | |
| | | D curve | | | | | | | | | | | |
| | | 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 ³ 6000 / 6kA C curve | ≤ 6 A | 120 | 156 | 192 | 240 | 300 | 384 | 480 | 600 | 756 | 4000 | T | T |
| | 10 A | - | - | 192 | 240 | 300 | 384 | 480 | 600 | 756 | 3000 | 5000 | T |
| | 16 A | - | - | - | 240 | 300 | 384 | 480 | 600 | 756 | 2000 | 3600 | 5500 |
| | 20 A | - | - | - | - | 300 | 384 | 480 | 600 | 756 | 1600 | 3000 | 4000 |
| | 25 A | - | - | - | - | - | 384 | 480 | 600 | 756 | 1300 | 2400 | 3300 |
| | 32 A | - | - | - | - | - | - | 480 | 600 | 756 | 1100 | 1450 | 2700 |
| | 40 A | - | - | - | - | - | - | - | 600 | 756 | 1000 | 1250 | 2400 |

. T = Total discrimination

. *: If the discrimination value stated in the table is greater than the breaking capacity of the upstream RCBO then the breaking capacity of the upstream device must be taken as the discrimination value (the discrimination value may not exceed the breaking capacity of the upstream device).

DX³ RCBO 6000 / 6 kA
Phase + Neutral, neutral on left

Cat. N°(s):
 4 107 80, 81, 91, 92, 93, 94, 95, 96, 97;
 4 108 19, 20, 21, 22, 23, 24, 25,

5. GENERAL CHARACTERISTICS *(continued)*

Discrimination with upstream modular MCBs:

. Discrimination limit with a voltage of 230 V ~ (Values in A)

| | | Upstream MCB | | | | | | | | | | |
|---------------------------------------|-------|-----------------------|-----------|-----------|------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | | DX ³ 25 kA | | | | | | | | | | |
| | | B curve | | | | | | | | | | |
| Downstream RCBO Ph+N | | 10 A | 16 A | 20 A | 25 A | 32 A | 40 A | 50 A | 63 A | 80 A | 100 A | 125 A |
| DX ³ 6000 / 6kA C curve | ≤ 6 A | - | 64 | 80 | 100 | 700 | 1200 | 1500 | 3000 | 4000 | T | T |
| | 10 A | - | - | 80 | 100 | 500 | 700 | 1000 | 1800 | 3000 | 5000 | T |
| | 16 A | - | - | - | - | 300 | 500 | 700 | 1300 | 2000 | 3600 | 5500 |
| | 20 A | - | - | - | - | - | 400 | 500 | 1000 | 1600 | 3000 | 4000 |
| | 25 A | - | - | - | - | - | - | 500 | 800 | 1300 | 2400 | 3300 |
| | 32 A | - | - | - | - | - | - | 500 | 600 | 1000 | 1800 | 2700 |
| | 40 A | - | - | - | - | - | - | - | 600 | 800 | 1600 | 2400 |

| | | Upstream MCB | | | | | | | | | | |
|---------------------------------------|-------|-----------------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | | DX ³ 25 kA | | | | | | | | | | |
| | | C curve | | | | | | | | | | |
| Downstream RCBO Ph+N | | 10 A | 16 A | 20 A | 25 A | 32 A | 40 A | 50 A | 63 A | 80 A | 100 A | 125 A |
| DX ³ 6000 / 6kA C curve | ≤ 6 A | 75 | 120 | 150 | 187 | 700 | 1200 | 1500 | 3000 | 4000 | T | T |
| | 10 A | - | 120 | 150 | 187 | 500 | 700 | 1000 | 1800 | 3000 | 5000 | T |
| | 16 A | - | - | 150 | 187 | 300 | 500 | 700 | 1300 | 2000 | 3600 | 5500 |
| | 20 A | - | - | - | 187 | 300 | 400 | 500 | 1000 | 1600 | 3000 | 4000 |
| | 25 A | - | - | - | - | 240 | 400 | 500 | 800 | 1300 | 2400 | 3300 |
| | 32 A | - | - | - | - | - | 300 | 500 | 600 | 1000 | 1800 | 2700 |
| | 40 A | - | - | - | - | - | - | 400 | 600 | 800 | 1600 | 2400 |

. T = Total discrimination

DX³ RCBO 6000 / 6 kA

Phase + Neutral, neutral on left

Cat. N°(s):
4 107 80, 81, 91, 92, 93, 94, 95, 96, 97;
4 108 19, 20, 21, 22, 23, 24, 25,

5. GENERAL CHARACTERISTICS *(continued)*

Discrimination with upstream modular MCBs:

. Discrimination limit with a voltage of 230 V ~ (Values in A)

| Downstream RCBO Ph+N | | Upstream MCB | | | | | | | | | | |
|---------------------------------------|-------|-----------------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | | DX ³ 25 kA | | | | | | | | | | |
| | | D curve | | | | | | | | | | |
| | | 10 A | 16 A | 20 A | 25 A | 32 A | 40 A | 50 A | 63 A | 80 A | 100 A | 125 A |
| DX ³ 6000 / 6kA C curve | ≤ 6 A | 120 | 192 | 240 | 500 | 700 | 1200 | 1500 | 3000 | 4000 | T | T |
| | 10 A | - | 192 | 240 | 300 | 500 | 700 | 1000 | 1800 | 3000 | 5000 | T |
| | 16 A | - | - | 240 | 300 | 384 | 500 | 700 | 1300 | 2000 | 3600 | 5500 |
| | 20 A | - | - | - | 300 | 384 | 480 | 600 | 1000 | 1600 | 3000 | 4000 |
| | 25 A | - | - | - | - | 384 | 480 | 600 | 800 | 1300 | 2400 | 3300 |
| | 32 A | - | - | - | - | - | 480 | 600 | 756 | 1100 | 1450 | 2700 |
| | 40 A | - | - | - | - | - | - | 600 | 756 | 1000 | 1250 | 2400 |

| Downstream RCBO Ph+N | | Upstream MCB | | | | | | | |
|---------------------------------------|-------|-----------------------|-----------|------------|------------|------------|-------------|-------------|-------------|
| | | DX ³ 50 kA | | | | | | | |
| | | B curve | | | | | | | |
| | | 10 A | 16 A | 20 A | 25 A | 32 A | 40 A | 50 A | 63 A |
| DX ³ 6000 / 6kA C curve | ≤ 6 A | - | 64 | 170 | 500 | 700 | 1200 | 1500 | 3000 |
| | 10 A | - | - | 150 | 210 | 500 | 700 | 1000 | 1800 |
| | 16 A | - | - | - | - | 300 | 500 | 700 | 1300 |
| | 20 A | - | - | - | - | - | 400 | 500 | 1000 |
| | 25 A | - | - | - | - | - | - | 500 | 800 |
| | 32 A | - | - | - | - | - | - | 500 | 600 |
| | 40 A | - | - | - | - | - | - | - | 600 |

. T = Total discrimination

DX³ RCBO 6000 / 6 kA

Phase + Neutral, neutral on left

Cat. N°(s):
 4 107 80, 81, 91, 92, 93, 94, 95, 96, 97;
 4 108 19, 20, 21, 22, 23, 24, 25,

5. GENERAL CHARACTERISTICS *(continued)*

Discrimination with upstream modular MCBs:

. Discrimination limit with a voltage of 230 V ~ (Values in A)

| | | Upstream MCB | | | | | | | | |
|---------------------------------------|-------|----------------------------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|
| | | DX ³ 50 kA C curve | | | | | | | | |
| Downstream RCBO Ph+N | | 10 A | 16 A | 20 A | 25 A | 32 A | 40 A | 50 A | 63 A | 80 A |
| DX ³ 6000 / 6kA C curve | ≤ 6 A | 75 | 120 | 170 | 500 | 700 | 1200 | 1500 | 3000 | 4000 |
| | 10 A | - | 120 | 150 | 210 | 500 | 700 | 1000 | 1800 | 3000 |
| | 16 A | - | - | 150 | 187 | 300 | 500 | 700 | 1300 | 2000 |
| | 20 A | - | - | - | 187 | 300 | 400 | 500 | 1000 | 1600 |
| | 25 A | - | - | - | - | 240 | 400 | 500 | 800 | 1300 |
| | 32 A | - | - | - | - | - | 300 | 500 | 600 | 1000 |
| | 40 A | - | - | - | - | - | - | 400 | 600 | 800 |

| | | Upstream MCB | | | | | | | | |
|---------------------------------------|-------|----------------------------------|------------|------------|------------|------------|-------------|-------------|-------------|--|
| | | DX ³ 50 kA D curve | | | | | | | | |
| Downstream RCBO Ph+N | | 10 A | 16 A | 20 A | 25 A | 32 A | 40 A | 50 A | 63 A | |
| DX ³ 6000 / 6kA C curve | ≤ 6 A | 120 | 192 | 240 | 500 | 700 | 1200 | 1500 | 3000 | |
| | 10 A | - | 192 | 240 | 300 | 500 | 700 | 1000 | 1800 | |
| | 16 A | - | - | 240 | 300 | 384 | 500 | 700 | 1300 | |
| | 20 A | - | - | - | 300 | 384 | 480 | 600 | 1000 | |
| | 25 A | - | - | - | - | 384 | 480 | 600 | 800 | |
| | 32 A | - | - | - | - | - | 480 | 600 | 756 | |
| | 40 A | - | - | - | - | - | - | 600 | 756 | |

Discrimination with upstream MCCBs:

. Discrimination limit with a voltage of 230 V ~ (Values in A)

| Downstream RCBO Ph+N | Upstream MCCB | |
|--|--|--|
| DX ³ 6000 / 6kA C curve ≤ 40A | DPX and DPX ³ all models all ratings | DMX ³ all models all ratings |
| | T | T |

. T = Total discrimination

DX³ RCBO 6000 / 6 kA

Phase + Neutral, neutral on left

Cat. N°(s):

4 107 80, 81, 91, 92, 93, 94, 95, 96, 97;

4 108 19, 20, 21, 22, 23, 24, 25,

6. COMPLIANCE AND APPROVALS

In accordance with standard:

. EN/IEC 61009-1

Usage in special conditions:

. Category C compliant (testing temperature range from -25°C to +70°C, resistant to salt spray) in accordance with the classification defined in Appendix Q of standard IEC/EN 60947-1

Respect for the environment – Compliance with European Union Directives:

. Compliance with Directive 2002/95/EC of 27/01/03 known as "RoHS" which provides for a restriction on the use of dangerous substances such as lead, mercury, cadmium, hexavalent chromium and polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE) brominated flame retardants from 1st July 2006

. Compliance with the Directive 91/338/EEC of 18/06/91 and decree 94-647 of 27/07/04

Plastic materials:

. Halogen free plastic materials.

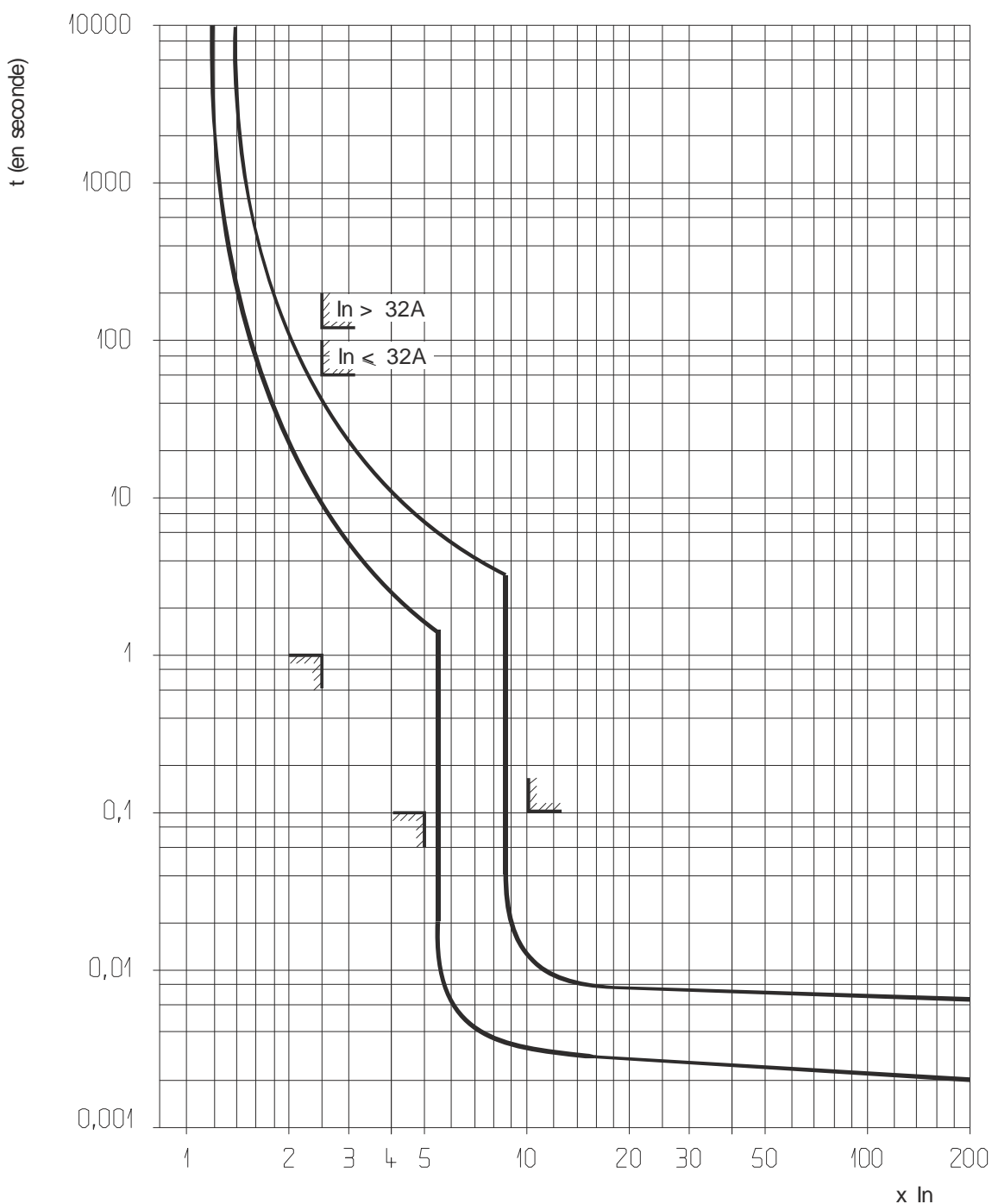
. Labelling of parts compliant with ISO 11469 and ISO 1043.

Packaging:

. Design and manufacture of packaging compliant with decree 98-638 of 20/07/98 and Directive 94/62/EC

7. CURVES

Thermal-magnetic tripping range typical of C curve RCBOs:



Standard limits

Thermal tripping at ambient temperature = 30°C

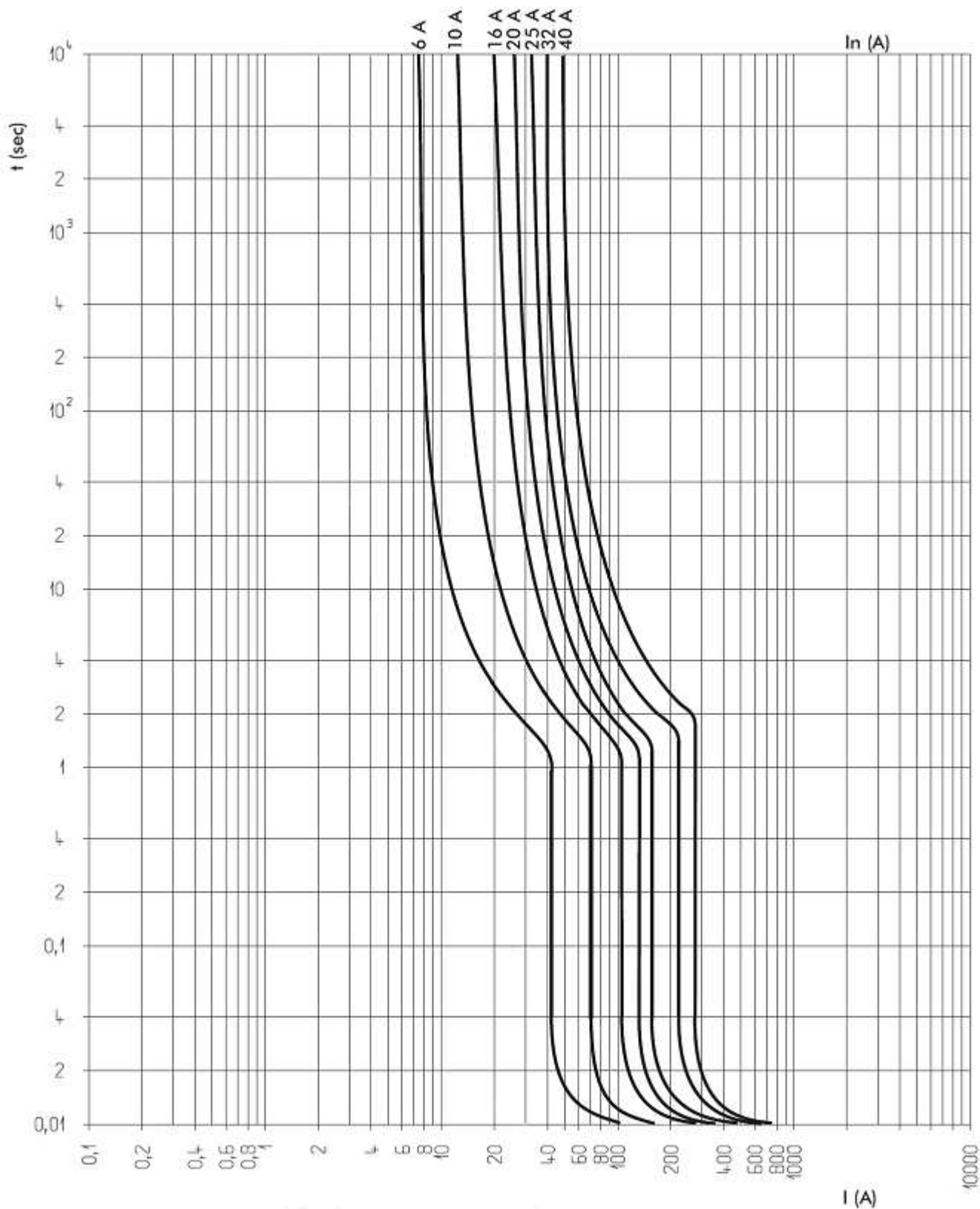
In = RCBO rated current

DX³ RCBO 6000 / 6 kA
Phase + Neutral, neutral on left

Cat. N°(s):
 4 107 80, 81, 91, 92, 93, 94, 95, 96, 97;
 4 108 19, 20, 21, 22, 23, 24, 25,

7. CURVES (continued)

Average thermal-magnetic tripping curves range typical of C curve RCBOs:



DX³ RCBO 6000 / 6 kA

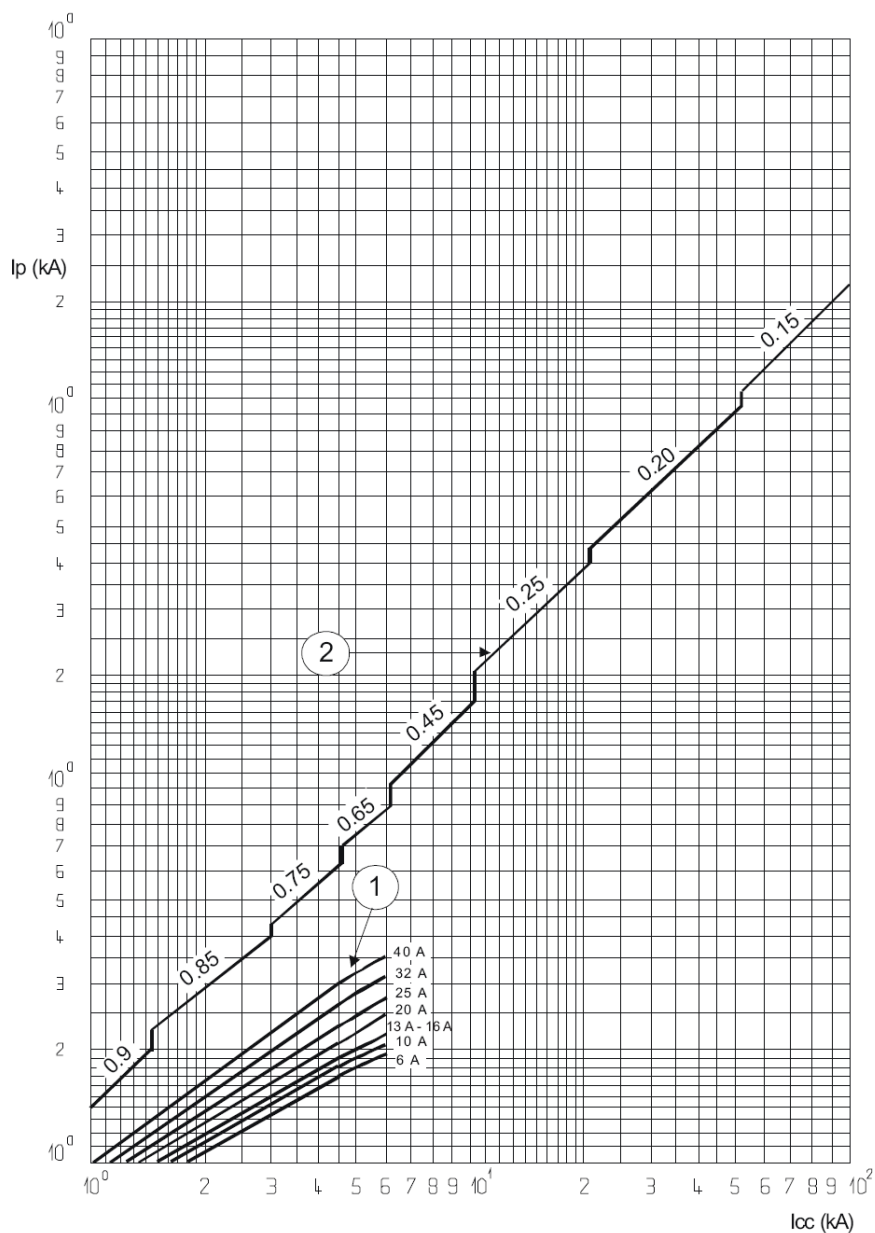
Phase + Neutral, neutral on left

Cat. N°(s):
 4 107 80, 81, 91, 92, 93, 94, 95, 96, 97;
 4 108 19, 20, 21, 22, 23, 24, 25,

7. CURVES (continued)

Current limiting curves:

. C curve RCBOs from 6 A to 40 A



I_{cc} = courant symétrique de court-circuit présumé (valeur efficace en KA)

I_p = valeur maximale de crête (en KA)

- ① = courants, crête maxi, de court-circuit effectif.
- ② = courants crête non limité (maxi), correspondant aux facteurs de puissance indiqués ci-dessus (0.15 à 0.9)

DX³ RCBO 6000 / 6 kA

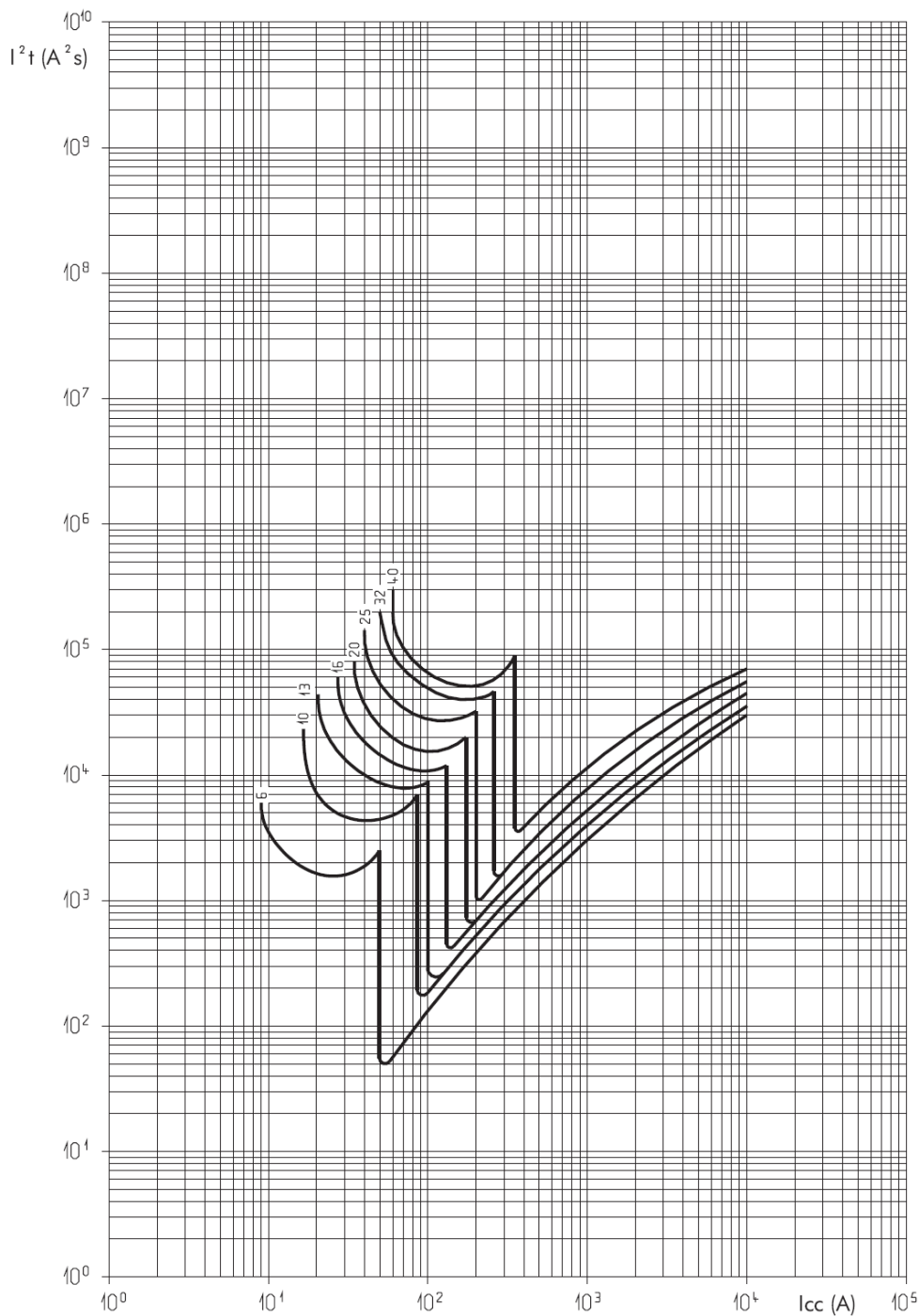
Phase + Neutral, neutral on left

Cat. N°(s):
 4 107 80, 81, 91, 92, 93, 94, 95, 96, 97;
 4 108 19, 20, 21, 22, 23, 24, 25,

7. CURVES (continued)

Thermal stress limiting curves:

. C curve RCBOs (230V/50Hz)



I_{cc} = Prospective short-circuit symmetrical current (rms value in A)

I^2t = Limited thermal stress (in A^2s)

DX³ RCBO 6000 / 6 kA

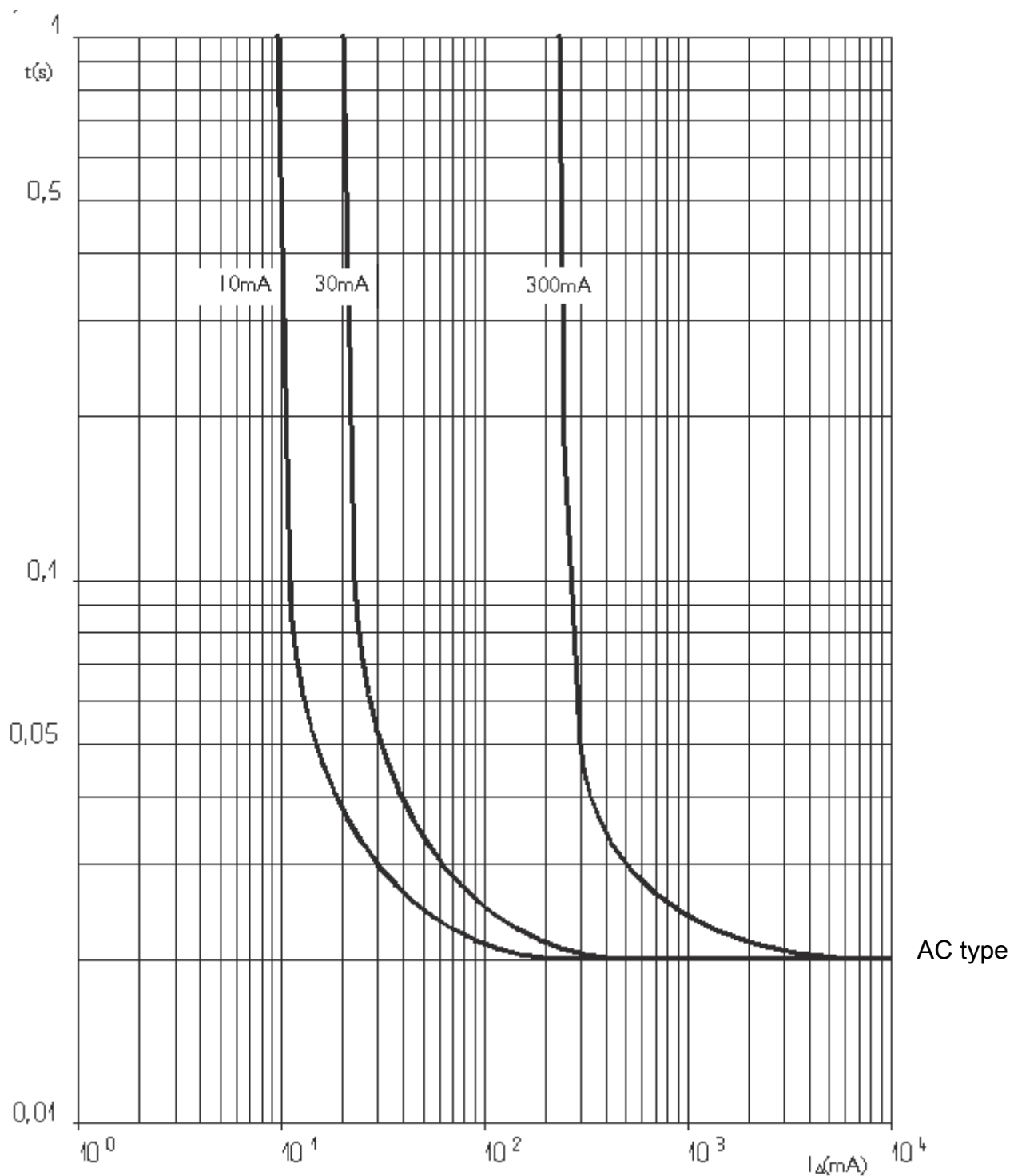
Phase + Neutral, neutral on left

Cat. N°(s):
4 107 80, 81, 91, 92, 93, 94, 95, 96, 97;
4 108 19, 20, 21, 22, 23, 24, 25,

7. CURVES (continued)

Tripping current curves:

. Tripping time curve depending on the value of the fault current:



DX³ RCBO 6000 / 6 kA

Phase + Neutral, neutral on left

Cat. N°(s):

4 107 80, 81, 91, 92, 93, 94, 95, 96, 97;

4 108 19, 20, 21, 22, 23, 24, 25,

8. AUXILIARIES AND ACCESSORIES

Wiring accessories:

- . Supply busbar:
 - Single-pole universal supply busbar (Cat. No. 4 049 26 / 37)
 - 4-pole "screw" supply busbar (Cat. No. 4 052 10) and 4-pole "head of group" supply busbar (Cat. No. 4 052 00 / 01 / 02)
- . Connection terminals (Cat. No. 4 049 05)
- . Sealable screw cover (Cat. No. 4 063 04)

Signalling auxiliaries:

- . Auxiliary contact (0.5 module, Cat. No. 4 062 58)
- . Fault signalling contact (0.5 module, Cat. No. 4 062 60)
- . Auxiliary contact that can be changed into fault signalling contact (0.5 module, Cat. No. 4 062 62)
- . Auxiliary contact + fault signalling contact that can be changed into 2 auxiliary contacts (1 module, Cat. No. 4 062 66)

Control auxiliaries:

- . Shunt trip (1 module, Cat. No. 4 062 76 / 78)
- . Autonomous shunt trip release (1 module, Cat. No. 4 062 80 / 82)
- . Stand-alone release for N/C push-button (1.5 module, Cat. No. 4 062 87)
- . Power Overvoltage Protection (1 module, Cat. No. 4 062 86)

Motor-driven control modules:

- . Motor-driven control module (1 module, Cat. No. 4 062 91)
- . Motor-driven control module with integrated automatic reset. (2 modules, Cat. Nos. 4 062 93, 4 062 95)

STOP&GO automatic resetting modules:

- . STOP&GO automatic resetting module (2 modules, Cat. No. 4 062 88)
- . STOP&GO automatic resetting module with auto-test (2 modules, Cat. Nos. 4 062 89)

Possible combinations of auxiliaries and RCBOs:

- . The auxiliaries are installed to the left of the RCBOs
- . Maximum number of auxiliaries = 3
- . Maximum number of 1 module signalling auxiliaries = 2
- . Maximum number of control auxiliaries (Cat. Nos. 4 062 76 to 4 062 87) = 1
- . The control auxiliary trip (Cat. Nos. 4 062 76 to 4 062 87) must mandatorily be placed to the left of the signalling auxiliaries (Cat. Nos. 4 062 58 to 4 062 66) where the auxiliaries from these 2 families are connected to the same RCBO

Sealing:

- . Possible in the open or closed positions

Locking options:

- . Via padlock 5 mm in diameter (Cat. No. 4 063 13) or padlock 6 mm in diameter (Cat. No. 0 227 97) and padlock support (Cat. No. 4 063 03)

Installation software:

- . XL PRO³

9. SAFETY:

For your safety your electrical installation is equipped with residual current protection which must be tested periodically.

In the absence of any national regulations on the time period required for this, Legrand recommends that this test be carried out every month:

press the "T" test button, the device should trip. Please call an electrician immediately if this does not happen as the safety level of your installation has been reduced.

The presence of residual current protection does not remove the need to observe all the precautions associated with using electrical energy.