

## DPX<sup>3</sup> 250 thermal magnetic circuit breakers

## DPX<sup>3</sup>-I 250 trip-free switches

Cat.Nos:

4 202 05 - 4 202 07 - 4 202 08 - 4 202 09 - 4 202 15 - 4 202 17  
4 202 18 - 4 202 19 - 4 202 35 - 4 202 37 - 4 202 38 - 4 202 39  
4 202 45 - 4 202 47 - 4 202 48 - 4 202 49 - 4 202 65 - 4 202 67  
4 202 68 - 4 202 69 - 4 202 75 - 4 202 77 - 4 202 78 - 4 202 79  
4 202 99 - 4 203 00



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### 1. USE

DPX<sup>3</sup> platform has been developed to give a new solution of protection devices for a more precise approach in flow installations in order to offer the correct answer for different project needs.

DPX<sup>3</sup> platform provides a complete project approach in premium market segment, offering a range completely suitable for medium power application with high performance breakers in compact dimensions and at a competitive costs.

### 2. RANGE

#### ■ 2.1 DPX<sup>3</sup> 250 thermal magnetic circuit breaker

| Icu    | 25 kA    |          | 36 kA    |          | 50 kA    |          |
|--------|----------|----------|----------|----------|----------|----------|
| In (A) | 3P       | 4P       | 3P       | 4P       | 3P       | 4P       |
| 100    | 4 202 05 | 4 202 15 | 4 202 35 | 4 202 45 | 4 202 65 | 4 202 75 |
| 160    | 4 202 07 | 4 202 17 | 4 202 37 | 4 202 47 | 4 202 67 | 4 202 77 |
| 200    | 4 202 08 | 4 202 18 | 4 202 38 | 4 202 48 | 4 202 68 | 4 202 78 |
| 250    | 4 202 09 | 4 202 19 | 4 202 39 | 4 202 49 | 4 202 69 | 4 202 79 |

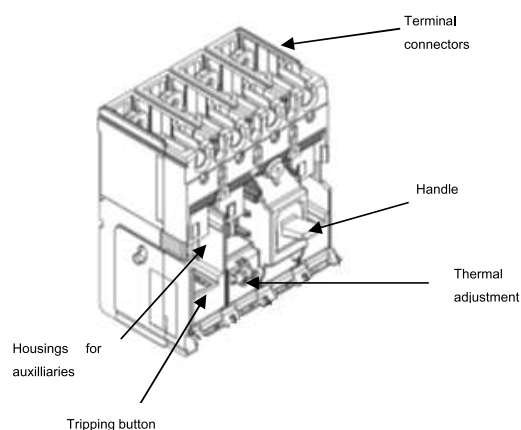
#### ■ 2.2 DPX<sup>3</sup>-I 250 trip-free switch

| In (A) | 3P       | 4P       |
|--------|----------|----------|
| 250    | 4 202 99 | 4 203 00 |

#### ■ 2.3 Composition

DPX<sup>3</sup> 250 thermal magnetic is supplied with:

- fixing screws
- connection plates for bars and cable lugs
- insulating shields (phase barrier)



### 3. TECHNICAL CHARACTERISTICS

#### ■ 3.1 Electrical characteristics

| DPX <sup>3</sup> 250 thermal magnetic circuit breakers |                            |
|--------------------------------------------------------|----------------------------|
| Rated current                                          | 100 A, 160 A, 200 A, 250 A |
| Poles                                                  | 3P - 4P                    |
| Pole pitch                                             | 35 mm                      |
| Rated insulation voltage (50/60Hz) Ui                  | 800 V                      |
| Rated operating voltage (50/60Hz) Ue                   | 690 V                      |
| Rated impulse withstand current Uimp                   | 8 kV                       |
| Rated frequency                                        | 50 Hz - 60 Hz              |
| Reference ambient temperature                          | 40 °C - 50 °C              |
| Operating temperature                                  | -25 °C to 70 °C            |
| Electrical endurance at In (cycles)                    | 8000                       |
| Electrical endurance at 0.5 x In (cycles)              | 10000                      |
| Utilization category                                   | A                          |
| Suitable for isolation                                 | Yes                        |
| Type of protection                                     | Thermal-magnetic           |
| Thermal adjustment Ir                                  | (0.8 ÷ 1) x In             |
| Magnetic adjustment li (A)                             | 5 - 10 x In                |
| Neutral protection for 4P (%Ith of phase pole)         | 100                        |
| Reverse feed                                           | Yes                        |

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### 3. TECHNICAL CHARACTERISTICS (continued)

#### ■ 3.1 Electrical characteristics (continued)

| DPX <sup>3</sup> -I 250 trip-free switches            |                 |
|-------------------------------------------------------|-----------------|
| Uninterrupted nominal current I <sub>e</sub>          | 250 A           |
| Short-time resistive current I <sub>cs</sub> for 1s   | 3 kA            |
| Rated short-circuit making capacity I <sub>cm</sub>   | 4.5 kA          |
| Rated insulation voltage U <sub>i</sub>               | 800 V~          |
| Maximum rated operating voltage U <sub>e</sub>        | 690 V~/=        |
| Rated impulse withstand voltage U <sub>imp</sub>      | 8 kV            |
| Utilisation category                                  | AC22-23A        |
| Suitable for isolation                                | Yes             |
| Rated frequency (Hz)                                  | 50 Hz - 60 Hz   |
| Operating temperature                                 | -25 °C to 70 °C |
| Electrical endurance at I <sub>n</sub> (cycles)       | 8000            |
| Electrical endurance at 0.5 x I <sub>n</sub> (cycles) | 10000           |
| Reverse feed                                          | Yes             |

The maximum temperature allowed on power terminals is 125 °C (absolute). For details, see IEC 60947-1 and 60947-2.

#### Switch disconnectors category (for use in DC)

|                    | 1P*  | 2P in series* | 3P in series* | 4P in series* |
|--------------------|------|---------------|---------------|---------------|
| I <sub>n</sub> (A) | 60 V | 110 V         | 250 V         | 500 V         |
| 250                | DC23 |               |               |               |

\*See page 5 for Connection modality of the DC trip-free switches

#### Breaking capacity (3P and 4P)

| Breaking capacity (kA) & Ics |                                               |       |       |       |  |
|------------------------------|-----------------------------------------------|-------|-------|-------|--|
| IEC 60947-2                  | Ue                                            | Icu   |       |       |  |
|                              |                                               | 25 kA | 36 kA | 50 kA |  |
|                              | 220/240 V~                                    | 40    | 60    | 80    |  |
|                              | 380/415 V~                                    | 25    | 36    | 50    |  |
|                              | 440/460 V~                                    | 20    | 30    | 40    |  |
|                              | 480/500 V~                                    | 10    | 25    | 30    |  |
|                              | 480/550 V~                                    | 9     | 20    | 22    |  |
|                              | 600 V~                                        | 9     | 20    | 22    |  |
|                              | 690 V~                                        | 8     | 16    | 18    |  |
|                              | Ics (% Icu)                                   | 100   |       |       |  |
|                              | Rated making capacity under short circuit Icm |       |       |       |  |
|                              | Icm (kA) at 415 V                             | 52.5  | 75.6  | 105   |  |

#### Breaking capacity in DC (kA) (estimated values)

|                 |                    | 1P*  | 2P in series * |       |       | 3P in series * |       |       |
|-----------------|--------------------|------|----------------|-------|-------|----------------|-------|-------|
| I <sub>cu</sub> | I <sub>n</sub> (A) | 60 V | 60 V           | 110 V | 250 V | 110 V          | 250 V | 500 V |
| 25 kA           | 100                | 25   | 25             | 25    |       | 25             | 12    |       |
| 36 kA           | to                 | 35   | 36             | 35    | 10    | 36             | 16    | 10    |
| 50 kA           | 250                | 35   | 50             | 35    |       | 50             | 20    |       |

\*See page 5 for Connection modality of the DC breaker.

DC breaking capacity in the table respect the standards.

The positive tolerance is between 0 % to 5 % of voltage status

#### Rated current (I<sub>n</sub>) at 40 °C / 50 °C

| Phases limit trip current |              |   |                            |   |
|---------------------------|--------------|---|----------------------------|---|
| Thermal (I <sub>r</sub> ) |              |   | Magnetic (I <sub>i</sub> ) |   |
| I <sub>n</sub> (A)        | L1 - L2 - L3 | N | L1 - L2 - L3               | N |
| 100                       | 100          |   | 1000                       |   |
| 160                       | 160          |   | 1600                       |   |
| 200                       | 200          |   | 2000                       |   |
| 250                       | 250          |   | 2500                       |   |

#### ■ 3.2 Mechanical characteristics

Mechanical endurance (cycles): 20000

Mechanical endurance with motor control (cycles): 20000

#### Load operations

|                   | Force on handle (N) |
|-------------------|---------------------|
| Opening operation | 45                  |
| Closing operation | 78                  |
| Restore operation | 75                  |

#### ■ 3.3 Electrodynamic forces

The table below shows an indication of suggested distances to keep between the breaker and the first fixing point of the conductor and bars in order to reduce the effects of the electrodynamic stresses that may be created during a short circuit. In the realization of anchorage system it is recommend the use of isolators suitable for the type of conductor used and the operating voltage.

| I <sub>cc</sub> (kA) | Maximum distance (mm) |
|----------------------|-----------------------|
| 25                   | 400                   |
| 36                   | 350                   |
| 50                   | 300                   |

According to conductor type and bar system (except Legrand bar kits), the choice of the distance to keep is to be calibrated by the installer. Also, the installer must take into account the weight of the conductors so that it does not affect the electrical junction between the conductor itself and the connection point.

#### ■ 3.4 Power losses per pole under I<sub>n</sub> (W)

| Circuit breakers   |     |      |      |      |
|--------------------|-----|------|------|------|
| I <sub>n</sub> (A) | 100 | 160  | 200  | 250  |
| Lugs               | 7.0 | 12.5 | 15.1 | 19.1 |

Note: power losses in the table above are referred and measured as described in the standard IEC 60947-2 (Annex G) for circuit-breakers. Values in the table are referred to a single phase.

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### 4. INSTALLATION RULES

According to IEC/EN 60947-1.

#### Temperature deratings

Rated current and his adjustment has to be considered relating to a rise or fall of ambient temperature and to a different version or installation conditions. The table below indicates the maximum long-time (LT) protection setting depending on the ambient temperature.

| Temperature Ta (°C) |     |     |     |     |     |     |     |     |     |     |     |     |
|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| In (A)              | -25 | -20 | -10 | -5  | 0   | 10  | 20  | 30  | 40  | 50  | 60  | 70  |
| 100                 | 135 | 132 | 128 | 126 | 123 | 120 | 112 | 102 | 100 | 100 | 90  | 84  |
| 160                 | 216 | 211 | 205 | 201 | 197 | 192 | 179 | 163 | 160 | 160 | 143 | 134 |
| 200                 | 270 | 264 | 256 | 251 | 246 | 240 | 224 | 203 | 200 | 200 | 179 | 168 |
| 250                 | 338 | 330 | 320 | 314 | 308 | 300 | 280 | 254 | 250 | 250 | 224 | 210 |

For derating temperature with other configurations, see table below.

| Ambient temperature                                                      | 30 °C                |                                 | 40 °C                |                                 | 50 °C                |                                 | 60 °C                |                                 | 70 °C                |                                 |
|--------------------------------------------------------------------------|----------------------|---------------------------------|----------------------|---------------------------------|----------------------|---------------------------------|----------------------|---------------------------------|----------------------|---------------------------------|
|                                                                          | I <sub>max</sub> (A) | I <sub>r</sub> / I <sub>n</sub> | I <sub>max</sub> (A) | I <sub>r</sub> / I <sub>n</sub> | I <sub>max</sub> (A) | I <sub>r</sub> / I <sub>n</sub> | I <sub>max</sub> (A) | I <sub>r</sub> / I <sub>n</sub> | I <sub>max</sub> (A) | I <sub>r</sub> / I <sub>n</sub> |
| Fixed version - vertical installation                                    |                      |                                 |                      |                                 |                      |                                 |                      |                                 |                      |                                 |
| Cage terminals, flexible cable                                           | 263                  | 1.05                            | 250                  | 1                               | 250                  | 1                               | 225                  | 0.9                             | 213                  | 0.85                            |
| Lugs, flexible cable                                                     | 250                  | 1                               | 250                  | 1                               | 250                  | 1                               | 238                  | 0.95                            | 225                  | 0.9                             |
| Lugs, flexible cable + sealable terminal shields                         |                      |                                 |                      |                                 |                      |                                 |                      |                                 |                      |                                 |
| Spreaders, flexible cable                                                |                      |                                 |                      |                                 |                      |                                 |                      |                                 |                      |                                 |
| Rear flat staggered terminal, flexible cable + sealable terminal shields |                      |                                 |                      |                                 |                      |                                 |                      |                                 |                      |                                 |
| Fixed version - horizontal installation                                  |                      |                                 |                      |                                 |                      |                                 |                      |                                 |                      |                                 |
| Cage terminals, flexible cable                                           | 263                  | 1.05                            | 250                  | 1                               | 250                  | 1                               | 225                  | 0.9                             | 213                  | 0.85                            |
| Lugs, flexible cable                                                     | 250                  | 1                               | 250                  | 1                               | 250                  | 1                               | 238                  | 0.95                            | 225                  | 0.9                             |
| Lugs, flexible cable + sealable terminal shields                         |                      |                                 |                      |                                 |                      |                                 |                      |                                 |                      |                                 |
| Spreaders, flexible cable                                                |                      |                                 |                      |                                 |                      |                                 |                      |                                 |                      |                                 |
| Rear flat staggered terminal, flexible cable + sealable terminal shields |                      |                                 |                      |                                 |                      |                                 |                      |                                 |                      |                                 |

For further technical information, please contact Legrand technical support.

**Climatic conditions:** according to IEC/EN 60947-1 Annex Q, Cat. F subject to temperature, humidity, vibration, shock and salt mist.

**Pollution degree:** for DPX<sup>3</sup> 250 circuit breakers, degree 3, according to IEC/EN 60947-2.

#### Altitude

Altitude derating for DPX<sup>3</sup> and DPX<sup>3</sup>-I

| Altitude (m)                            | 2000               | 3000                  | 4000                  | 5000                 |
|-----------------------------------------|--------------------|-----------------------|-----------------------|----------------------|
| U <sub>e</sub> (V)                      | 690                | 590                   | 520                   | 460                  |
| I <sub>n</sub> (A) (Ta = 40 °C / 50 °C) | 1 x I <sub>n</sub> | 0.98 x I <sub>n</sub> | 0.93 x I <sub>n</sub> | 0.9 x I <sub>n</sub> |

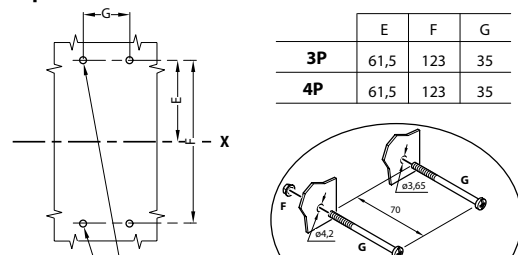
### 5. DIMENSIONS AND WEIGHT

#### ■ 5.1 Dimensions (mm)

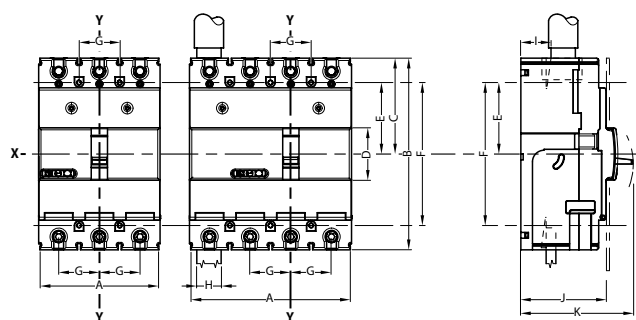
3P (W x H x D): 105 x 165 x 100

4P (W x H x D): 140 x 165 x 100

#### Implantation



#### Fixed version Device without accessories



|    | A   | B   | C    | D  | E    | F   |
|----|-----|-----|------|----|------|-----|
| 3P | 105 | 165 | 82.5 | 45 | 61.5 | 123 |
| 4P | 140 | 165 | 82.5 | 45 | 61.5 | 123 |

|    | G  | H    | I  | J  | K  |
|----|----|------|----|----|----|
| 3P | 35 | 28.5 | 18 | 74 | 97 |
| 4P | 35 | 28.5 | 18 | 74 | 97 |

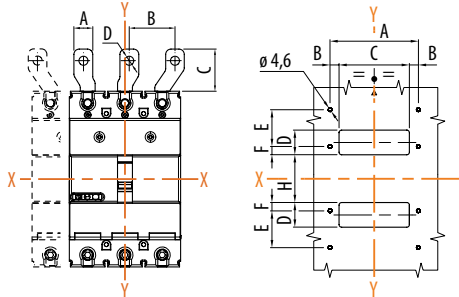
DPX<sup>3</sup> 250 thermal magnetic circuit breakers  
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5. DIMENSIONS AND WEIGHT (continued)

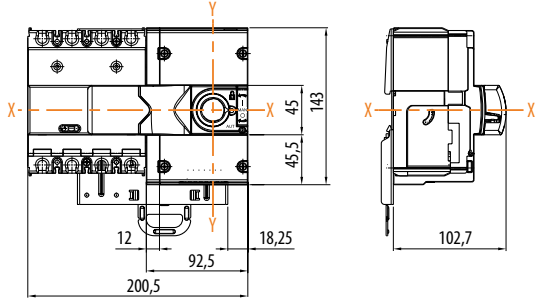
■ 5.1 Dimensions (mm) (continued)

With front terminal

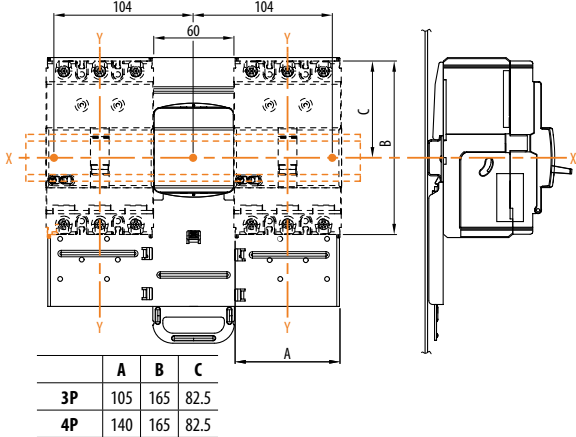


| A  | B    | C     | D  |
|----|------|-------|----|
| 33 | 48.5 | 54.75 | 13 |

With motor operator

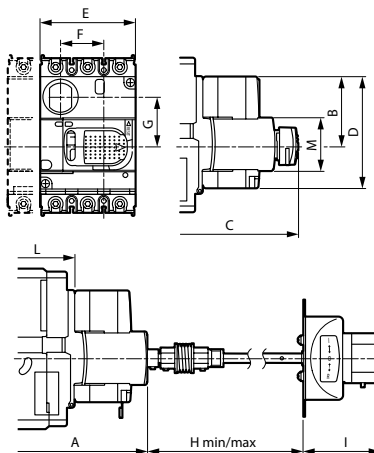


With mechanical interlock



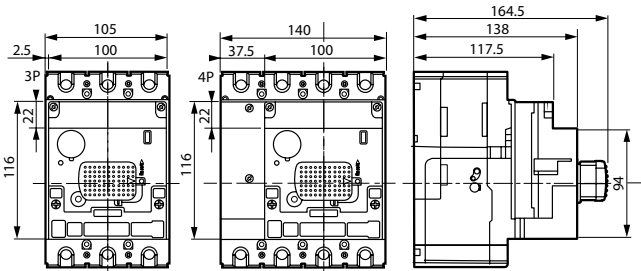
|    | A   | B   | C    |
|----|-----|-----|------|
| 3P | 105 | 165 | 82.5 |
| 4P | 140 | 165 | 82.5 |

With rotary handle

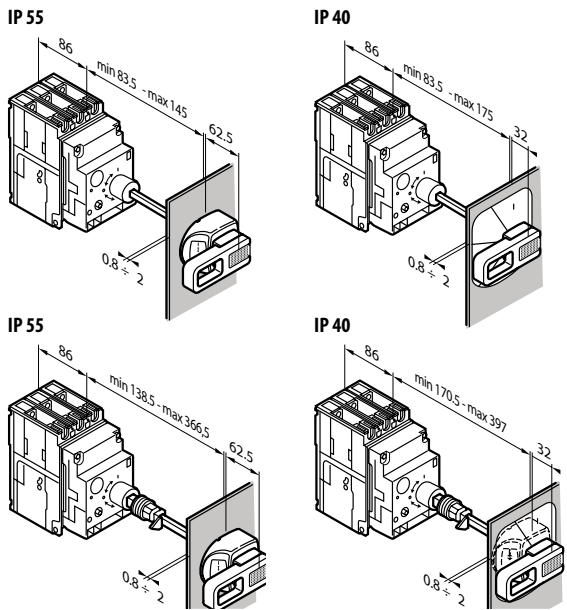


| A    | B      | C      | D  | E    | F    |
|------|--------|--------|----|------|------|
| 122  | 57     | 155    | 94 | 80.5 | 40.5 |
| G    | H min. | H max. | I  | L    | M    |
| 41.7 | 132    | 361    | 62 | 74   | 45   |

With direct rotary handle



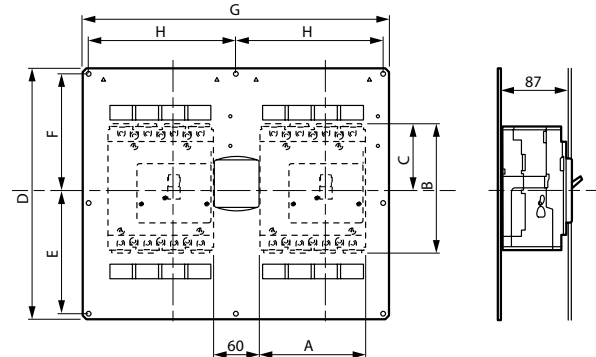
With vary depth rotary handle



### 5. DIMENSIONS AND WEIGHT (continued)

#### 5.1 Dimensions (mm) (continued)

With interlock mechanism



|    | A   | B   | C    | D   | E   | F   | G   | H   |
|----|-----|-----|------|-----|-----|-----|-----|-----|
| 3P | 105 | 165 | 82.5 | 340 | 165 | 160 | 415 | 200 |
| 4P | 140 | 165 | 82.5 | 340 | 165 | 160 | 415 | 200 |

#### 5.2 Weight

| Weight (kg)                      |      |      |
|----------------------------------|------|------|
| Configuration                    | 3P   | 4P   |
| Circuit breaker/trip-free switch | 1.9  | 2.4  |
| Direct rotary handle*            | 0.30 |      |
| Vari depth rotary handle*        | 0.27 |      |
| Motor operator*                  | 1.22 |      |
| Interlock*                       | 1.08 |      |
| Spreader*                        | 0.26 | 0.35 |

\* to add to device weight

### 6. CONNECTIONS

Possible way of assembly on DIN rail:

- vertical
- horizontal

It is possible to use:

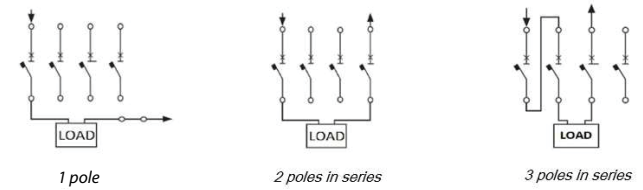
- busbars;
- cables lugs;
- cables;
- cage terminals;

| Cage terminals capacity |                                                     |
|-------------------------|-----------------------------------------------------|
| Bars                    | 28.5 mm wide max.                                   |
| Flexible cables         | 1.5 mm <sup>2</sup> min. / 120 mm <sup>2</sup> max. |
| Rigid cables            | 1.5 mm <sup>2</sup> min. / 150 mm <sup>2</sup> max. |

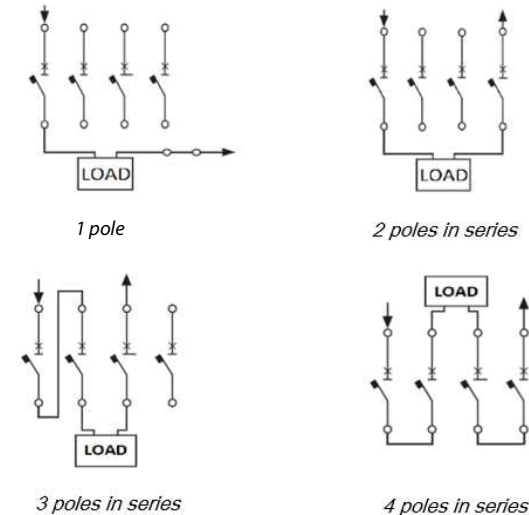
to ensure the circuit breaker's connection.

For detailed mounting procedures, see instruction sheet.

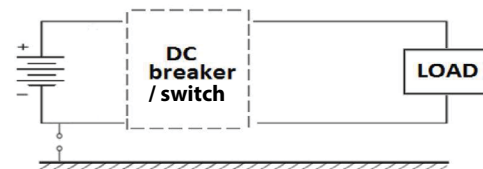
#### DC connections modality for breakers



#### DC connections modality for trip-free switches (polarity can be inverted)



#### Applied to DC breaker/switch networks insulated from the ground



### 7. EQUIPMENTS AND ACCESSORIES

#### 7.1 Releases

There are 3 types of releases (suitable for DPX<sup>3</sup> 125/160/250 HP and DPX<sup>3</sup> 160/250):

##### Shunt releases (ST)

|               |                 |
|---------------|-----------------|
| 12 V~/=       | Cat.No 4 210 12 |
| 24 V~/=       | Cat.No 4 210 13 |
| 48 V~/=       | Cat.No 4 210 14 |
| 110 to 130 V~ | Cat.No 4 210 15 |
| 220 to 277 V~ | Cat.No 4 210 16 |
| 380 to 480 V~ | Cat.No 4 210 17 |

Maximum power = 400 VA / W

##### Undervoltage releases (UVR)

|                 |                 |
|-----------------|-----------------|
| 12 V~/=         | Cat.No 4 210 18 |
| 24 V~/=         | Cat.No 4 210 19 |
| 48 V~/=         | Cat.No 4 210 20 |
| 110 to 130 V~/= | Cat.No 4 210 21 |
| 220 to 240 V~   | Cat.No 4 210 22 |
| 277 V~          | Cat.No 4 210 23 |
| 380 to 415 V~   | Cat.No 4 210 24 |
| 440 to 480 V~   | Cat.No 4 210 25 |

Maximum power = 4 VA

Circuit breaker opening time < 50 ms

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### 7. EQUIPMENTS AND ACCESSORIES (continued)

#### ■ 7.1 Releases (continued)

##### Time-lag undervoltage releases (800 ms)

|                                        |                 |
|----------------------------------------|-----------------|
| - Release                              | Cat.No 4 210 98 |
| to be equipped with a time-lag module: |                 |
| - 230 V~                               | Cat.No 0 261 90 |
| - 400 V~                               | Cat.No 0 261 91 |

#### ■ 7.2 Auxiliary contacts

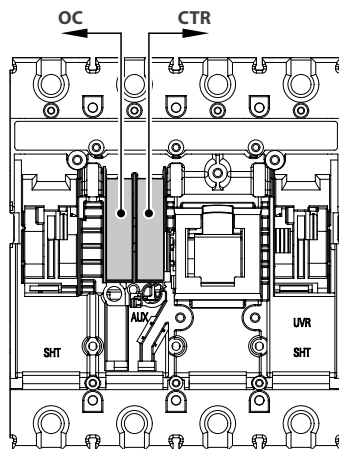
It is used to show the state of the contacts or opening of the DPX<sup>3</sup> on a fault.

Standard auxiliary contact (OC) / Fault signal (CTR) Cat.No 4 210 11

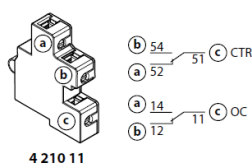
| Rated voltage (Vn) | Intensity (A) |
|--------------------|---------------|
| 24 V~              | 5             |
| 48 V~              | 1.7           |
| 110 V~             | 0.5           |
| 230 V~             | 0.25          |
| 110 V~             | 4             |
| 230/250 V~         | 3             |

|                                            |                 |
|--------------------------------------------|-----------------|
| - Set of connectors for auxiliary contacts | Cat.No 4 210 44 |
| - Auxiliary contacts (1NC and 1 NO)        | Cat.No 4 210 10 |
| - Signalling contact plugged-in version    | Cat.No 4 210 48 |

Configurations



OC/CTR



To get more information on auxiliary mounting procedures, please refer to product instruction sheet.

#### ■ 7.3 Rotary handles

There are 4 types of suited rotary handles (also compatible with DPX<sup>3</sup> 160):

##### Direct on DPX<sup>3</sup> (with auxiliary option and compatible with XL<sup>3</sup>)

|                                    |                 |
|------------------------------------|-----------------|
| - Standard (black)                 | Cat.No 4 210 00 |
| - For emergency use (red / yellow) | Cat.No 4 210 02 |

##### Vary depth handle IP55 (with auxiliary option and compatible with XL<sup>3</sup>)

|                                  |                 |
|----------------------------------|-----------------|
| - Standard (black)               | Cat.No 4 210 04 |
| - For emergency use (red/yellow) | Cat.No 4 210 05 |

#### Locking accessories (for rotary handle with auxiliary option)

For direct rotary handle:

|                                           |                 |
|-------------------------------------------|-----------------|
| - Key barrel and flat key N° ABA90GEL6149 | Cat.No 4 210 06 |
| - Key barrel and star key N° HBA90GPS6149 | Cat.No 4 210 07 |

For vary depth rotary handle:

|                                           |                 |
|-------------------------------------------|-----------------|
| - Key barrel and flat key N° ABA90GEL6149 | Cat.No 4 210 08 |
| - Key barrel and star key N° HBA90GPS6149 | Cat.No 4 210 09 |

#### Direct on DPX<sup>3</sup> (general purpose)

|                                  |                 |
|----------------------------------|-----------------|
| - Standard (black)               | Cat.No 4 201 60 |
| - For emergency use (red/yellow) | Cat.No 4 201 73 |

#### Vary depth handle IP55 (general purpose)

|                                  |                 |
|----------------------------------|-----------------|
| - Standard (black)               | Cat.No 4 201 61 |
| - For emergency use (red/yellow) | Cat.No 4 201 74 |

#### Locking accessories (for general purpose rotary handle)

Key barrel and flat key:

|                                              |                 |
|----------------------------------------------|-----------------|
| - For direct rotary handles (random marking) | Cat.No 4 201 64 |
| - For direct handles (EL43525 marking)       | Cat.No 4 201 65 |
| - For direct handles (EL43363 marking)       | Cat.No 4 201 66 |
| - For vary depth handles (random marking)    | Cat.No 4 201 67 |
| - For vary depth handles (EL43525 marking)   | Cat.No 4 201 68 |
| - For vary depth handles (EL43363 marking)   | Cat.No 4 201 69 |

#### ■ 7.4 Motor operators

|                                   |                 |
|-----------------------------------|-----------------|
| Side motor operator 24 - 230 V~/~ | Cat.No 4 210 60 |
|-----------------------------------|-----------------|

#### Locking accessories for side motor operator

|                                                                   |                 |
|-------------------------------------------------------------------|-----------------|
| - Key barrel and N° ABA90GEL6149 for side motor operator          | Cat.No 4 210 65 |
| - Key barrel and star key N° HBA90GPS6149 for side motor operator | Cat.No 4 210 66 |
| - Padlock for side motor operator                                 | Cat.No 4 210 67 |

#### ■ 7.5 Mechanical accessories

##### Padlocks (for locking in "open" position)

|                                                                                                  |                 |
|--------------------------------------------------------------------------------------------------|-----------------|
| DPX <sup>3</sup> padlock accessory for handle                                                    | Cat.No 4 210 49 |
| Cat.No 4 210 49 is compatible with DPX <sup>3</sup> 125/160/250 HP and DPX <sup>3</sup> 160/250. |                 |

##### Insulated shields (phase barriers)

|           |                 |
|-----------|-----------------|
| Set of 36 | Cat.No 4 210 70 |
|-----------|-----------------|

##### Sealable terminal shields

|                          |                 |
|--------------------------|-----------------|
| - for front terminals 3P | Cat.No 4 210 56 |
| - for front terminals 4P | Cat.No 4 210 57 |

##### Fixing plates for transfer switches

Plate for mounting and interlocking 2 DPX<sup>3</sup>.

It can be either 2 DPX<sup>3</sup> 160 ; 2 DPX<sup>3</sup> 250; or 1 DPX<sup>3</sup> 160 and 1 DPX<sup>3</sup> 250.

|                   |                 |
|-------------------|-----------------|
| For fixed version | Cat.No 4 210 58 |
|-------------------|-----------------|

##### Fixing plates

For fixing DPX<sup>3</sup> 250 on DIN rail or on plate

|                                                                |                 |
|----------------------------------------------------------------|-----------------|
| - For DPX <sup>3</sup> 250 3P/4P                               | Cat.No 4 210 72 |
| - DPX <sup>3</sup> 250 3P/4P with side mounting motor operator | Cat.No 4 210 69 |

#### ■ 7.6 Connection accessories

##### Front spreaders

|                                                                        |                 |
|------------------------------------------------------------------------|-----------------|
| - Set of 3 (for 3P)                                                    | Cat.No 4 238 34 |
| - Set of 4 (for 4P)                                                    | Cat.No 4 238 35 |
| (Cat.Nos 4 238 34/35 are also compatible with DPX <sup>3</sup> 250 HP) |                 |

DPX<sup>3</sup> 250 thermal magnetic circuit breakers

DPX<sup>3</sup>-I 250 trip-free switches

Cat.Nos:

4 202 05 - 4 202 07 - 4 202 08 - 4 202 09 - 4 202 15 - 4 202 17

4 202 18 - 4 202 19 - 4 202 35 - 4 202 37 - 4 202 38 - 4 202 39

4 202 45 - 4 202 47 - 4 202 48 - 4 202 49 - 4 202 65 - 4 202 67

4 202 68 - 4 202 69 - 4 202 75 - 4 202 77 - 4 202 78 - 4 202 79

4 202 99 - 4 203 00

7. EQUIPMENTS AND ACCESSORIES (continued)

■ 7.6 Connection accessories (continued)

Cage terminals

- Set of 3 standard terminals for Cat.No 4 210 30  
1x150 mm<sup>2</sup> max (rigid) or 1x120 mm<sup>2</sup> (flexible) Cu/Al bar/cable lug  
(for Al cables In max 125 A)

- Set of 4 standard terminals for Cat.No 4 210 31  
1x150 mm<sup>2</sup> max (rigid) or 1x120 mm<sup>2</sup> max (flexible) Cu/Al bar/cable lug  
(for Al cables In max 125 A)

- Screw terminals for bar connections (3P) Cat.No 4 210 79  
- Screw terminals for bar connections (4P) Cat.No 4 210 80

Cage terminal use specifications

| Cable standard suggested cross-section (mm <sup>2</sup> )* |        |     |    |
|------------------------------------------------------------|--------|-----|----|
| Standard cage terminals Cat.Nos 4 210 30/ 4 210 31         | In (A) | Cu  | Al |
|                                                            | 16     | 2.5 | 4  |
|                                                            | 20     | 2.5 | 4  |
|                                                            | 25     | 4   | 6  |
|                                                            | 32     | 6   | 10 |
|                                                            | 40     | 10  | 16 |
|                                                            | 50     | 10  | 16 |
|                                                            | 63     | 16  | 25 |
|                                                            | 80     | 25  | 35 |
|                                                            | 100    | 35  | 50 |
|                                                            | 125    | 50  | 70 |
|                                                            | 160    | 70  | -  |
|                                                            | 200    | 95  | -  |
|                                                            | 250    | 120 | -  |

\* The suggested cross-section are in compliance with standard IEC 60947-1 (ed.6 2020/04) and IEC 60947-2 (ed.5.1 2019/07)

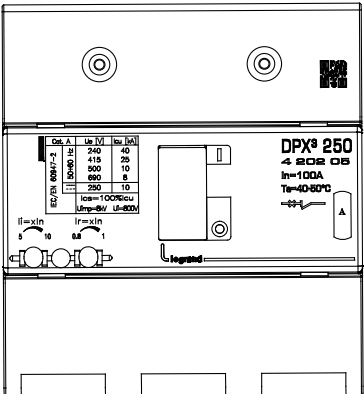
| Dimensions limits of cable for cage terminals      |                                       |       |                                       |       |
|----------------------------------------------------|---------------------------------------|-------|---------------------------------------|-------|
| Standard cage terminals Cat.Nos 4 210 30/ 4 210 31 | Min. cross-section (mm <sup>2</sup> ) |       | Max. cross-section (mm <sup>2</sup> ) |       |
|                                                    | Flexible                              | Rigid | Flexible                              | Rigid |
|                                                    | 2.5                                   | 4     | 120                                   | 150   |

8. MARKING

Product (both circuit breakers and trip-free switches) are provided with labelling in full conformity to the referred standard and directives requirements by laser or sticker labels (for illustrative purposes only):

Product laser label on front

- Manufacturer responsible
- Denomination, type product, code
- Standard conformity
- Standard characteristics declared
- Coloured identification of Icu at 415 V



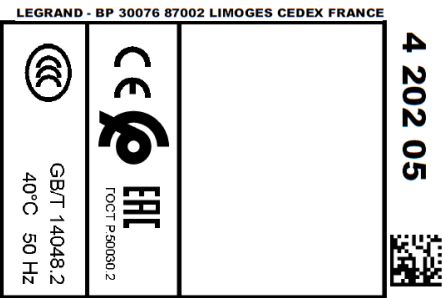
Product sticker label on side

- Manufacturer responsible
- Denomination and type product
- Standard conformity
- Mark/Licence (if any)
- Directive requirements
- Bar code identification product
- Manufacturing Country



Mark sticker label on side

- Product code
- Mark/Licence (if any)
- Country deviation, if any



## DPX<sup>3</sup> 250 thermal magnetic circuit breakers

## DPX<sup>3</sup>-I 250 trip-free switches

Cat.Nos:

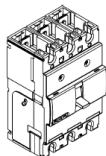
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4 202 18 - 4 202 19 - 4 202 35 - 4 202 37 - 4 202 38 - 4 202 39  
4 202 45 - 4 202 47 - 4 202 48 - 4 202 49 - 4 202 65 - 4 202 67  
4 202 68 - 4 202 69 - 4 202 75 - 4 202 77 - 4 202 78 - 4 202 79  
4 202 99 - 4 203 00

### 8. MARKING (continued)

#### Packaging sticker label

- Manufacturer responsible
- Denomination and type product
- Mark/Licence (if any)
- Directive requirements
- Bar code identification product

1 DPX<sup>3</sup> 4 202 05



- Disjoncteur
- MCCB
- Interruptores automáticos
- Автоматический выкл.
- 塑料外壳式断路器
- قاطع الدارة

In=100A 3P Icu 25kA  
IEC/EN 60947-2

Made in Italy  
Design and Quality by LEGRAND (France)  
LEGRAND - Pro and Consumer Service - BP 30076  
87002 LIMOGES CEDEX FRANCE - www.legrand.com



3245064202053

22W17

DPX<sup>3</sup> 250 thermal magnetic circuit breakers

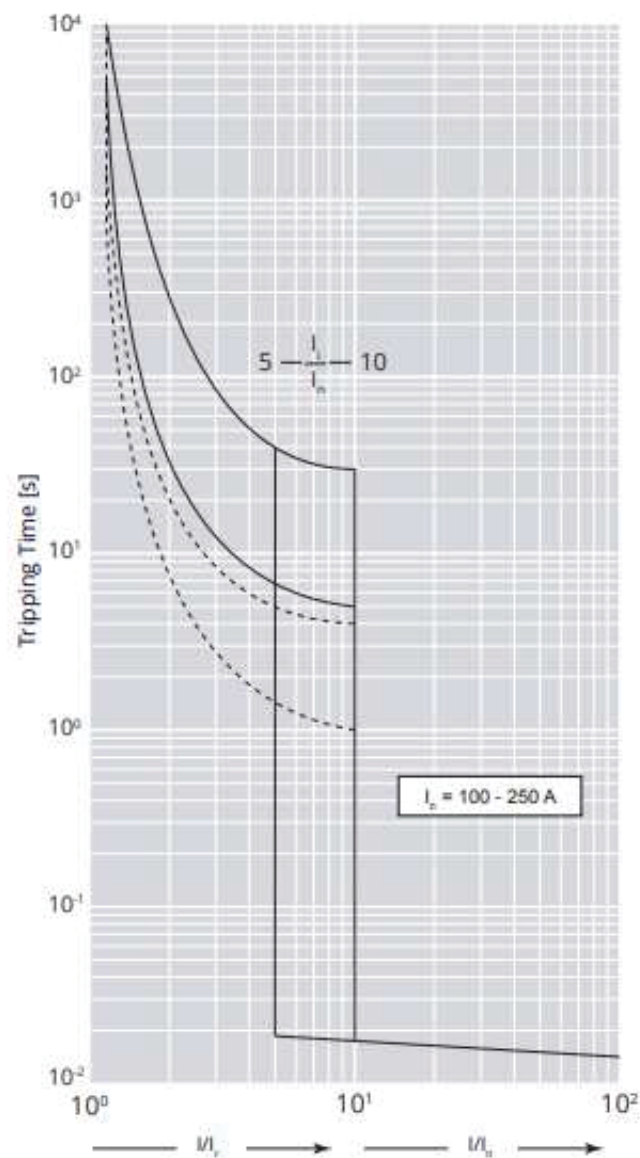
DPX<sup>3</sup>-I 250 trip-free switches

Cat.Nos:  
4 202 05 - 4 202 07 - 4 202 08 - 4 202 09 - 4 202 15 - 4 202 17  
4 202 18 - 4 202 19 - 4 202 35 - 4 202 37 - 4 202 38 - 4 202 39  
4 202 45 - 4 202 47 - 4 202 48 - 4 202 49 - 4 202 65 - 4 202 67  
4 202 68 - 4 202 69 - 4 202 75 - 4 202 77 - 4 202 78 - 4 202 79  
4 202 99 - 4 203 00

9. CURVES

9.1 Thermal magnetic tripping curve

Update: 19/04/2018



| Icu = 25-36-50 kA | Imax = 250 A                   | 3-4 P | Ue = 415 V~ |
|-------------------|--------------------------------|-------|-------------|
| Value             | Description                    |       |             |
| t                 | Time                           |       |             |
| I                 | Current                        |       |             |
| In                | Rated current                  |       |             |
| Ir                | Long time setting current      |       |             |
| Curve 1           | Characteristic with cold start |       |             |
| Curve 2           | Characteristic with hot start  |       |             |

DPX<sup>3</sup> 250 thermal magnetic circuit breakers

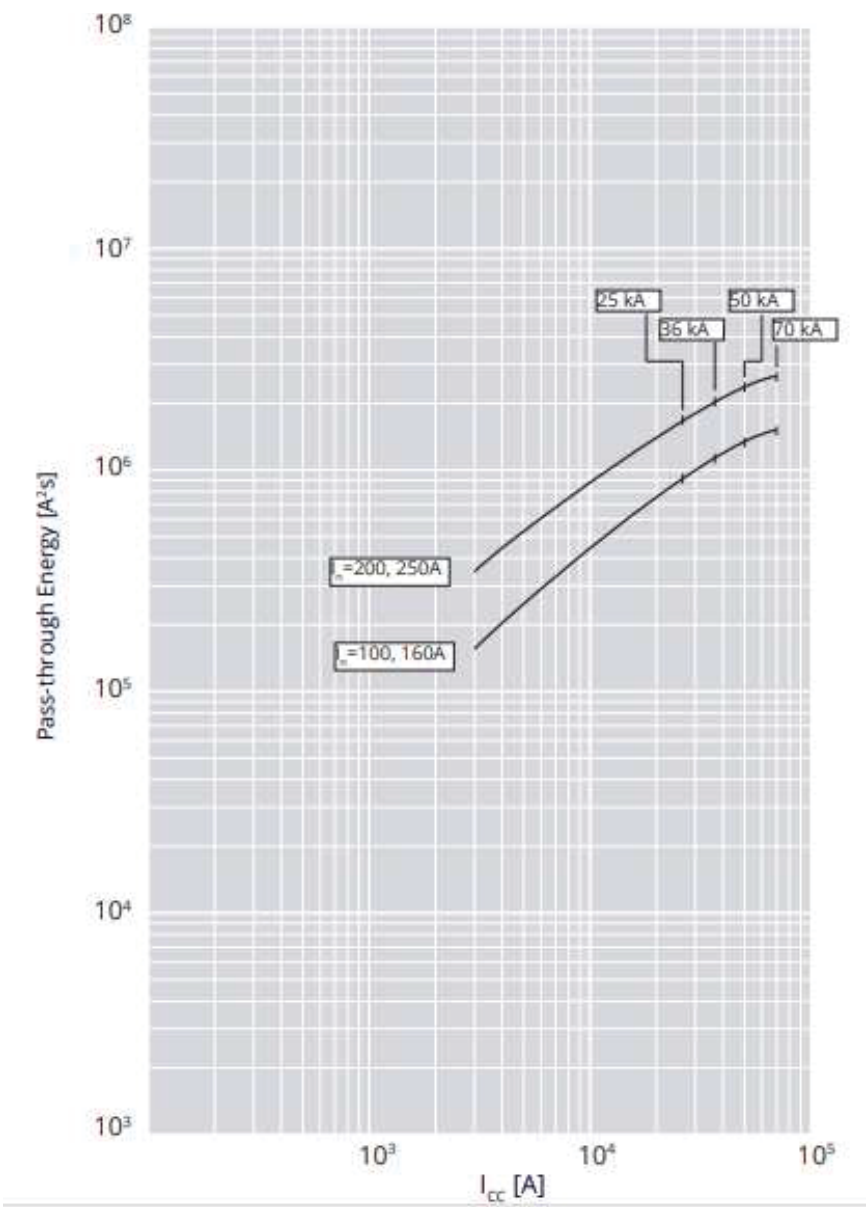
DPX<sup>3</sup>-I 250 trip-free switches

Cat.Nos:  
4 202 05 - 4 202 07 - 4 202 08 - 4 202 09 - 4 202 15 - 4 202 17  
4 202 18 - 4 202 19 - 4 202 35 - 4 202 37 - 4 202 38 - 4 202 39  
4 202 45 - 4 202 47 - 4 202 48 - 4 202 49 - 4 202 65 - 4 202 67  
4 202 68 - 4 202 69 - 4 202 75 - 4 202 77 - 4 202 78 - 4 202 79  
4 202 99 - 4 203 00

9. CURVES (continued)

9.2 Pass-through specific energy characteristic curve

Update: 24/04/2018



I<sub>cu</sub> = 25-36-50 kA    I<sub>max</sub> = 250 A    3-4 P    U<sub>e</sub> = 415 V~

| Value           | Description                  |
|-----------------|------------------------------|
| I <sub>cc</sub> | Short circuit current        |
| I²t (A²s)       | Pass-through specific energy |

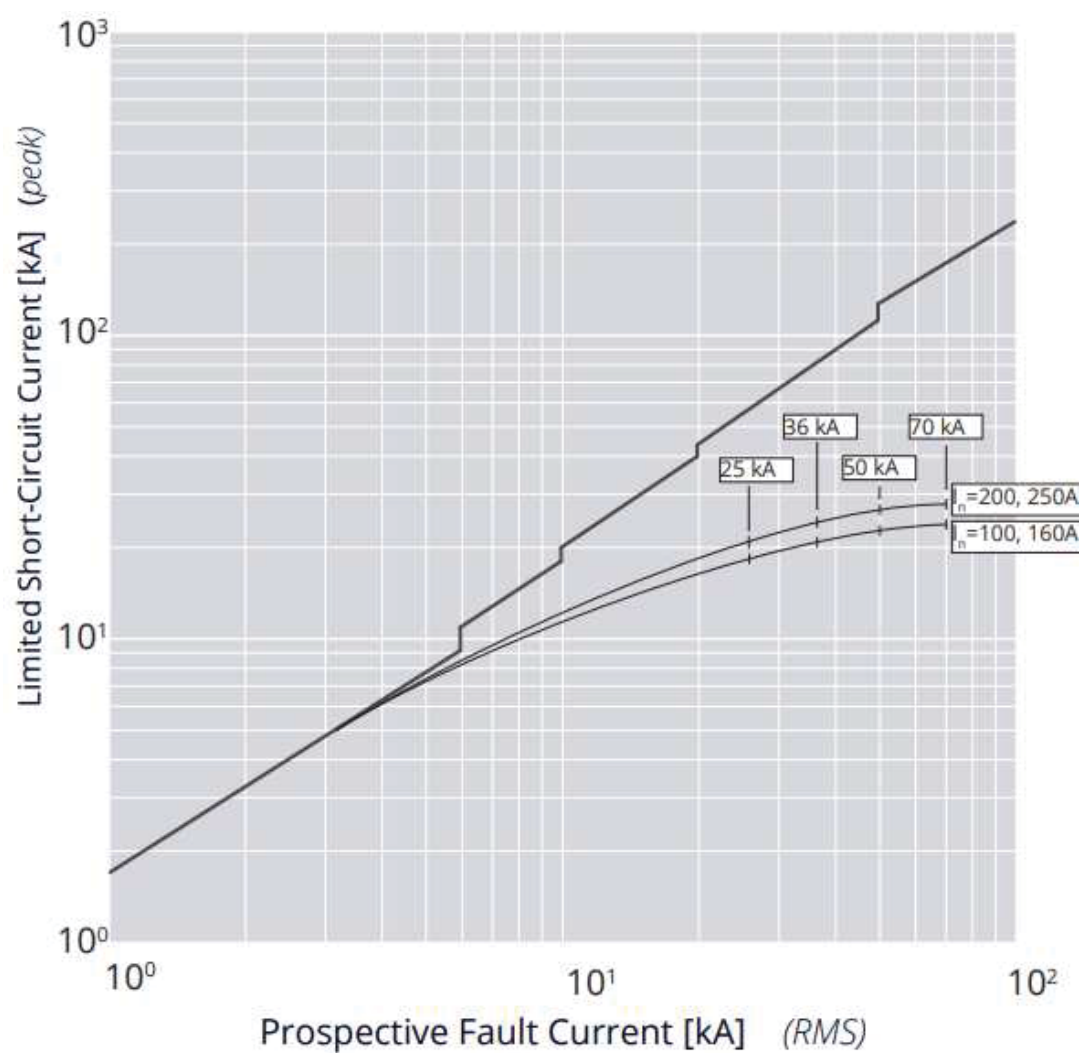
DPX<sup>3</sup> 250 thermal magnetic circuit breakers  
DPX<sup>3</sup>-I 250 trip-free switches

Cat.Nos:  
4 202 05 - 4 202 07 - 4 202 08 - 4 202 09 - 4 202 15 - 4 202 17  
4 202 18 - 4 202 19 - 4 202 35 - 4 202 37 - 4 202 38 - 4 202 39  
4 202 45 - 4 202 47 - 4 202 48 - 4 202 49 - 4 202 65 - 4 202 67  
4 202 68 - 4 202 69 - 4 202 75 - 4 202 77 - 4 202 78 - 4 202 79  
4 202 99 - 4 203 00

9. CURVES (continued)

9.3 Cut-off peak current characteristic curve (kA)

Update: 07/05/2018



Icu = 25-36-50 kA    Imax = 250 A    3-4 P    Ue = 415 V~

| Value | Description                                             |
|-------|---------------------------------------------------------|
| Icc   | Estimated short circuit symmetrical current (RMS value) |
| Ip    | Maximum short circuit peak current                      |

## 10. STANDARDS AND REGULATIONS

DPX<sup>3</sup> range of product concerning circuit-breakers and trip-free switch exceed compliance with the IEC/EN standard 60947-2 and 60947-3 respectively. Certification available by IECEE CB-scheme or LOVAG Compliance scheme.

DPX<sup>3</sup> respect the European Directives REACH, RoHS, RAEE.

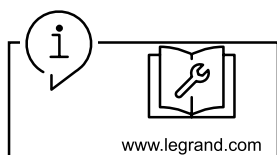
For specific information, please contact Legrand support.

## 11. OTHER INFORMATION

**XLPro Calcul:** Calculation notes creation software, addressed to installers, design office and maintenance operators. Definition of the electrical characteristics of a low voltage installation in compliance with the applicable standards

**XLPro<sup>3</sup> Tool Selectivity and backup/ Legrand Selectivity and backup:** Software dedicated to installers, panelbuilders and design offices. Definition of the selectivity and backup values of an association of electrical devices and obtention of the tripping curves of the selected products.

**XLPro Panels:** Distribution panel design software, addressed to panelbuilders and electrical panel designers. Design of the electrical distribution of the panel, production of electrical diagrams, establishment of products and overall costing of the project.



**Workshop book:** mounting informations, equipments, accessories and spare parts available on e-catalog.

**Instruction sheet:** detailed mounting procedures, available on e-catalog.

**PEP:** available on e-catalog.

For further technical information, please contact Legrand technical support.

Unless otherwise indicated, data reported in this document refers exclusively to test conditions according to product standards.

For different conditions of use of the product, inside electrical equipment or in any different installation context, refer to the regulatory requirements of the equipment, local regulations and design specifications of the system.