

DPX³ 160 HP thermal magnetic circuit breakers

DPX³-I 160 HP trip-free switches

Cat.Nos:

4 237 20 - 4 237 21 - 4 237 25 - 4 237 26

4 237 30 - 4 237 35 - 4 237 36 - 4 237 88 - 4 237 89



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1. USE

DPX³ HP platform has been developed to give a new solution of protection devices for a more precise approach in power installations in order to offer the correct answer for different project needs.

DPX³ HP platform provide a complete project approach in premium market segment, offering a range completely suitable for high power application with high performance breakers in compact dimensions and at a competitive costs.

2. RANGE

■ 2.1 DPX³ 160 HP thermal magnetic circuit breaker

| Icu | 36 kA | | 50 kA | |
|--------|----------|----------|----------|----------|
| In (A) | 3P | 4P | 3P | 4P |
| 160 | 4 237 20 | 4 237 21 | 4 237 25 | 4 237 26 |

| Icu | 70 kA | | 100 kA | |
|--------|----------|----------|----------|----------|
| In (A) | 3P | 4P | 3P | 4P |
| 160 | 4 237 30 | 4 237 31 | 4 237 35 | 4 237 36 |

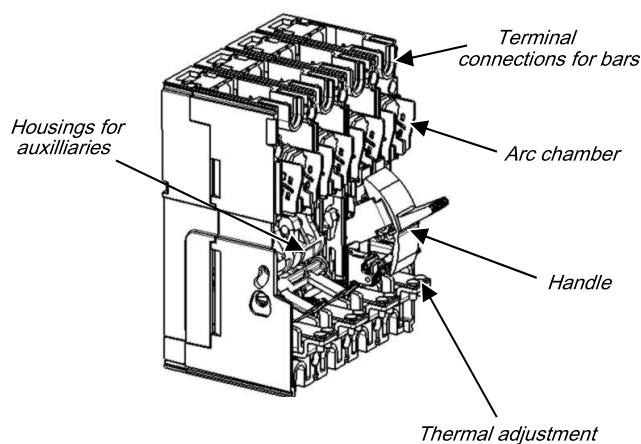
■ 2.2 DPX³-I 160 HP trip-free switch

| In (A) | 3P | 4P |
|--------|----------|----------|
| 160 | 4 231 88 | 4 231 89 |

■ 2.3 Composition

DPX³ 160 HP thermal magnetic is supplied with:

- fixing screws (2 for 3P, and 4 for 4P)
- screws for connections (6 for 3P, and 8 for 4P)
- phase insulators (2 for 3P, and 3 for 4P)



3. TECHNICAL CHARACTERISTICS

■ 3.1 Electrical characteristics

| DPX ³ 160 HP thermal magnetic circuit breakers | |
|---|------------------------------|
| Rated current | 160 A |
| Poles | 3P - 4P |
| Pole pitch | 25 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 |
| Utilization category | A |
| Suitable for isolation | Yes |
| Type of protection | Thermal-magnetic |
| Thermal adjustment Ir | 0.8 - 0.9 - 1 x In |
| Magnetic adjustment Ii (A) | In = 1600 A (not adjustable) |
| Neutral protection for 4P (%Ith of phase pole) | 100 |
| Reverse feed | Yes |

3. TECHNICAL CHARACTERISTICS (continued)**■ 3.1 Electrical characteristics (continued)**

| DPX ³ -I 160 HP trip-free switches | |
|---|-----------------|
| Uninterrupted nominal current I _e | 160 A |
| Short-time resistive current I _{cs} for 1s | 1.5 kA |
| Rated short-circuit making capacity I _{cm} | 2.5 kA |
| Rated insulation voltage U _i | 800 V~ |
| Maximum rated operating voltage U _e | 690 V~ |
| Rated impulse withstand voltage U _{imp} | 8 kV |
| Utilisation category | AC23A |
| Suitable for isolation | Yes |
| Rated frequency (Hz) | 50 Hz - 60 Hz |
| Operating temperature | -25 °C to 70 °C |
| Electrical endurance at I _n (cycles) | 8000 |
| Reverse feed | Yes |

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

Trip-free switches category (for use in DC)

| | 1P* | 2P in series* | 3P in series* | 4P in series* |
|--------------------|------|---------------|---------------|---------------|
| I _n (A) | 60 V | 110 V | 250 V | 500 V |
| 125 | DC23 | | | |

*See page 6 for Connection modality of the DC trip-free switches

Breaking capacity (3P and 4P)

| Breaking capacity (kA) & Ics | | | | | | |
|------------------------------|---|-------|-------|-------|--------|--|
| IEC 60947-2 | Ue | Icu | | | | |
| | | 36 kA | 50 kA | 70 kA | 100 kA | |
| | 240 V~ | 70 | 90 | 100 | 150 | |
| | 415 V~ | 36 | 50 | 70 | 100 | |
| | 500 V~ | 12 | 16 | 20 | 25 | |
| | 690 V~ | 5 | 6 | 10 | 12 | |
| | 250 V= | 10 | | | | |
| | Ics (% Icu) | 100 | | | | |
| | Rated making capacity under short circuit Icm | | | | | |
| | Icm (kA) at 415 V | 76.5 | 105 | 154 | 220 | |

Breaking capacity in DC (kA) (estimated values)

| Breaking capacity in kA, (estimated value) | | | | | | | | |
|--|--------------------|------|----------------|-------|-------|----------------|-------|-------|
| | | 1P* | 2P in series * | | | 3P in series * | | |
| I _{cu} | I _n (A) | 60 V | 60 V | 110 V | 250 V | 110 V | 250 V | 500 V |
| 36 kA | 160 | 35 | 50 | 35 | 10 | 35 | 20 | 10 |
| 50 kA | | | | | | | | |

*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_n) at 40 °C / 50 °C

| Phases limit trip current | | | | |
|---------------------------|----------------------|--------------------|----------------------------|------|
| Thermal (I _r) | | | Magnetic (I _i) | |
| I _n (A) | 0.8 x I _n | 1 x I _n | Min. | Max. |
| 160 | 128 | 160 | 1600 | 1600 |

■ 3.2 Mechanical characteristics

Mechanical endurance (cycles): 20000

Load operations

| | Force on handle (N) |
|-------------------|---------------------|
| Opening operation | 40 |
| Closing operation | 40 |
| Restore operation | 53 |

■ 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 _{cc} (kA) | Maximum distance (mm) |
|----------------------|-----------------------|
| 36 | 350 |
| 50 | 300 |
| 70 | 250 |
| 100 | 200 |

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_n (W)

| Circuit breakers (I _{cu} ≤ 50 kA) | |
|--|-------|
| I _n (A) | 160 |
| Lugs | 15.62 |
| Cage terminals | 16.94 |
| External terminals | 16.94 |
| Spreaders | 16.94 |
| Rear terminals | 16.94 |
| Plug-in version | 28.42 |

| Circuit breakers (I _{cu} > 50 kA) | |
|--|-------|
| I _n (A) | 160 |
| Lugs | 16.64 |
| Cage terminals | 18.05 |
| External terminals | 18.05 |
| Spreaders | 18.05 |
| Rear terminals | 18.05 |
| Plug-in version | 29.44 |

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.

3. TECHNICAL CHARACTERISTICS (continued)**■ 3.4 Power losses per pole under I_n (W) (continued)**

| Trip-free switches | |
|--------------------|-------|
| I_n (A) | 160 |
| Lugs | 12.80 |
| Cage terminals | 13.89 |
| External terminals | 13.89 |
| Spreaders | 13.89 |
| Rear terminals | 13.89 |
| Plug-in version | 25.60 |

Note: power loss in the table above are referred and measured as described in the standard IEC 60947-3 for trip-free switches. Values in the table are referred to a single phase.

4. INSTALLATION RULES

According to IEC/EN 60947-1.

Temperature deratings

Rated current and its 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 T_a (°C) | | | | | | | | | | | |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| I_n (A) | -20 | -10 | -5 | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 |
| 160 | 201 | 193 | 189 | 187 | 179 | 173 | 166 | 160 | 160 | 146 | 138 |

For derating temperature with other configurations, see table below.

| Ambient temperature | 30 °C | | 40 °C | | 50 °C | | 60 °C | | 70 °C | |
|--------------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|
| | I_{max} (A) | I_r / I_n | I_{max} (A) | I_r / I_n | I_{max} (A) | I_r / I_n | I_{max} (A) | I_r / I_n | I_{max} (A) | I_r / I_n |
| Cage terminals, flexible/rigid cable | 166 | 1.04 | 160 | 1 | 160 | 1 | 146 | 0.91 | 138 | 0.86 |
| Lugs, flexible/rigid cable | | | | | | | | | | |
| Spreaders, flexible/rigid cable | | | | | | | | | | |
| Rear terminals, flexible cable | | | | | | | | | | |

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.

Electromagnetic disturbances (EMC): for DPX³ 160 HP circuit breakers, according to IEC/EN 60947-2 Annex F.

Pollution degree: for DPX³ 160 HP circuit breakers, degree 3, according to IEC/EN 60947-2.

Altitude

Altitude derating for DPX³ and DPX³-I

| Altitude (m) | 2000 | 3000 | 4000 | 5000 |
|---|----------------|-------------------|-------------------|------------------|
| U_e (V) | 690 | 590 | 520 | 460 |
| I_n (A) ($T_a = 40\text{ °C} / 50\text{ °C}$) | $1 \times I_n$ | $0.98 \times I_n$ | $0.93 \times I_n$ | $0.9 \times I_n$ |

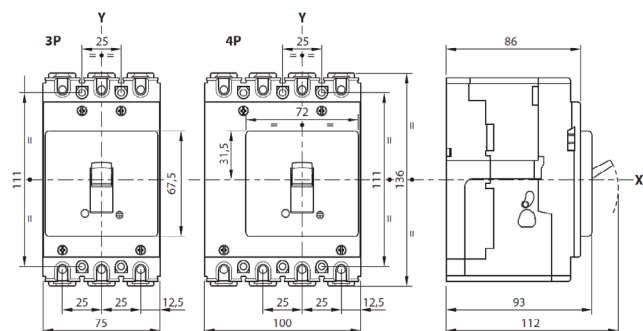
5. DIMENSIONS AND WEIGHT

■ 5.1 Dimensions (mm)

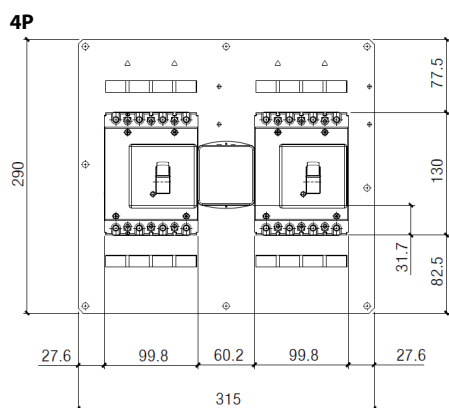
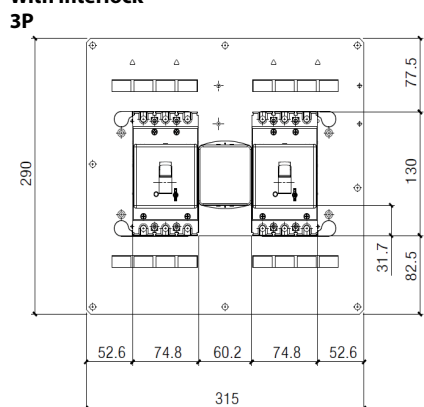
3P (W x H x D): 75 x 135 x 86

4P (W x H x D): 100 x 135 x 86

Device without accessories

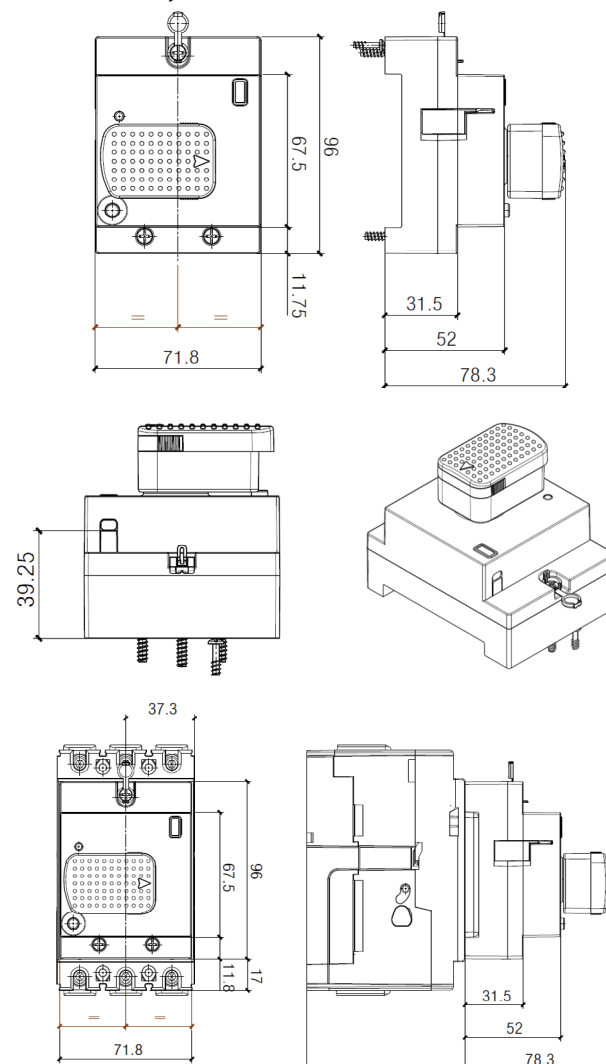


With interlock

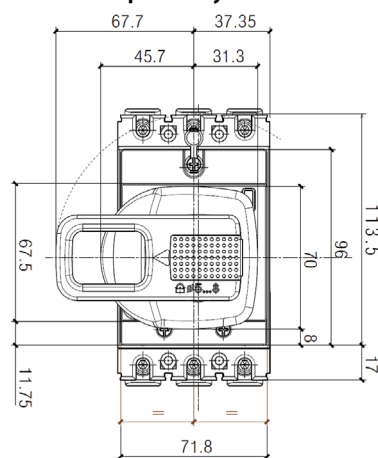


For rear plate interlock dimension, see relative instruction sheet.

With direct rotary handle



With vari-depth rotary handle

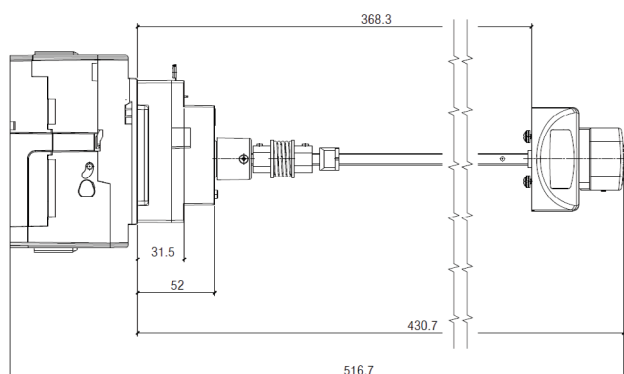


DPX³-I 160 HP trip-free switches

4 237 20 - 4 237 21 - 4 237 25 - 4 237 26

4 237 30 - 4 237 35 - 4 237 36 - 4 237 88 - 4 237 89

■ 5.1 Dimensions (continued)

[illegible]

Technical drawing of the 'Kryl' door system, showing front and side views with dimensions.

Front View Dimensions:

- Top section height: 11
- Upper panel height: 10.2
- Lower panel height: 28.5
- Bottom section height: 11
- Bottom panel width: 22
- Bottom panel height: 22
- Bottom panel width: 35.7
- Bottom panel height: 35.7
- Bottom panel width: 93.4
- Bottom panel height: 32.2
- Bottom panel width: 118.4
- Bottom panel height: 32.2

Side View Dimensions:

- Side panel width: 24
- Side panel height: 2

[illegible]

| Configuration | 3P | 4P |
|----------------------------------|-------|-------|
| Circuit breaker/trip-free switch | 0.95 | 1.2 |
| Direct rotary handle* | 0.18 | |
| Vari depth rotary handle* | 0.55 | |
| Interlock* | 0.35 | |
| Spreader* | 0.135 | 0.175 |

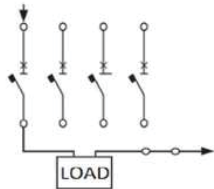
1 pole

2 poles in series

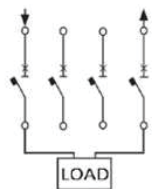
3 poles in series

6. CONNECTIONS (continued)

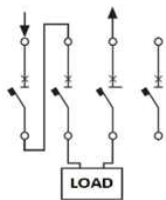
DC connections modality for trip-free switches (polarity can be inverted)



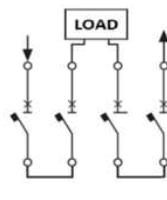
1 pole



2 poles in series

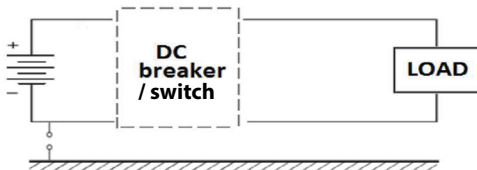


3 poles in series



4 poles in series

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 DPX³ 125/160/250 HP and DPX³ 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 | |
| Undervoltage releases can be used on DPX ³ 125/160/250 HP starting from batch 19W15. | |

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 |

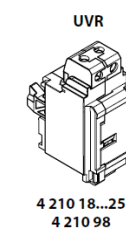
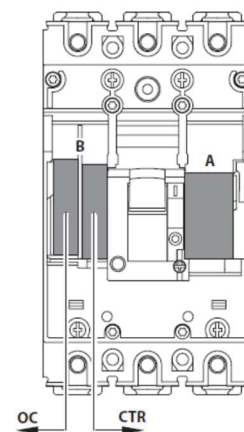
7.2 Auxiliary contacts

It is used to show the state of the contacts or opening of the DPX³/DPX³-I and DPX³ HP/DPX³-I HP on a fault.

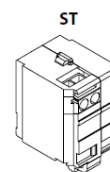
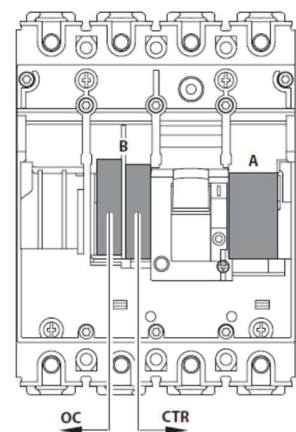
Standard auxiliary contact (OC) / Fault signal (CTR) Cat.No 4 210 11

| 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 |

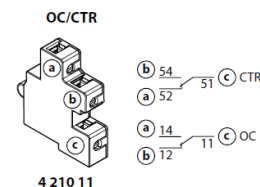
Configurations



4 210 18...25
4 210 98



4 210 12...17



4 210 11

In the space A, it is possible to insert 1 shunt release, or alternatively 1 undervoltage release. The space B can only receive a standard auxiliary contact (OC) or a fault signal (CTR).

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

7. EQUIPMENTS AND ACCESSORIES (continued)**■ 7.3 Universal keylocks**

These keylocks must be used on rotaty handle, that is the only accessory that can be locked on DPX³ 160 HP.

For each of these, the specific accessory (indicated in the specific section of this data sheet) must be added in order to get the complete locking kits for the specific application.

| | |
|--|-----------------|
| - 1 lock + 1 flat key with random mapping | Cat.No 4 238 80 |
| - 1 lock + 1 flat key with fixed mapping (EL43525) | Cat.No 4 238 81 |
| - 1 lock + 1 flat key with fixed mapping (EL43363) | Cat.No 4 238 82 |
| - 1 lock + 1 star key with random mapping | Cat.No 4 238 83 |

■ 7.4 Rotary handles

There are 2 types of suited rotary handles:

Direct on DPX³ (with auxiliary option)

| | |
|------------------------------------|-----------------|
| - Standard (black) | Cat.No 4 238 70 |
| - For emergency use (red / yellow) | Cat.No 4 238 71 |

Vari-depth handle IP55 (with auxiliary option)

| | |
|------------------------------------|-----------------|
| - Standard (black) | Cat.No 4 238 72 |
| - For emergency use (red / yellow) | Cat.No 4 238 73 |

Direct on DPX³ (general purpose)

| | |
|----------------------------------|-----------------|
| - Standard (black) | Cat.No 4 238 10 |
| - For emergency use (red/yellow) | Cat.No 4 238 11 |

Vary depth handle IP55 (general purpose)

| | |
|----------------------------------|-----------------|
| - Standard (black) | Cat.No 4 238 12 |
| - For emergency use (red/yellow) | Cat.No 4 238 13 |

Locking accessories for rotary handle with auxiliary option

| | |
|---|-----------------|
| - Key lock accessory for vari-depth rotary handle, also compatible with DPX ³ 125/250 HP thermal magnetic. | Cat.No 4 238 05 |
|---|-----------------|

Cat.No 4 238 05 must be used with universal keylocks to get the complete locking kit for rotary handle.

■ 7.5 Mechanical accessories

| | |
|--|-----------------|
| Padlock (for locking in "OPEN" position) | Cat.No 4 210 49 |
| Cat.No 4 210 49 is compatible with DPX ³ 125/160/250 HP and DPX ³ 160/250. | |

Sealable terminal shields

| | |
|---------------------|-----------------|
| - Set of 2 (for 3P) | Cat.No 4 238 93 |
| - Set of 3 (for 4P) | Cat.No 4 238 94 |

Insulated shields

| | |
|--|-----------------|
| - Set of 2 (for 3P) | Cat.No 4 238 34 |
| - Set of 3 (for 4P) | Cat.No 4 238 35 |
| (Cat.Nos 4 238 34/35 are also compatible with DPX ³ 250 HP) | |

■ 7.6 Connection accessories**Cage terminals**

| | |
|---|-----------------|
| - Set of 3 standard terminals for 1x95 mm ² max (rigid) or 1x70 mm ² max (flexible) Cu/Al cables (for Al cables In max 80A) | Cat.No 4 238 84 |
|---|-----------------|

| | |
|---|-----------------|
| - Set of 4 standard terminals for 1x95 mm ² max (rigid) or 1x70 mm ² max (flexible) Cu/Al cables (for Al cables In max 80A) | Cat.No 4 238 85 |
|---|-----------------|

| | |
|---|-----------------|
| - Set of 3 high capacity terminals for 1x 120 mm ² max (rigid) or 1x95 mm ² max (flexible) Cu/Al cables | Cat.No 4 238 76 |
|---|-----------------|

| | |
|---|-----------------|
| - Set of 4 high capacity terminals for 1x 120 mm ² max (rigid) or 1x95 mm ² max (flexible) Cu/Al cables | Cat.No 4 238 77 |
|---|-----------------|

Cage terminal use specifications

| Cable standard suggested cross-section (mm ²)* | | | |
|--|--------|-----|-----|
| Standard cage terminals Cat.Nos 4 238 84 / 4 238 85 | 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 | - |
| | 125 | 50 | - |
| | 160 | 70 | - |
| High capacity cage terminals Cat.Nos 4 238 76 / 4 238 77 | 80 | 25 | 35 |
| | 100 | 35 | 50 |
| | 125 | 50 | 70 |
| | 160 | 70 | 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 4 238 84 / 4 238 85 | Min. cross-section (mm ²) | | Max. cross-section (mm ²) | |
|--|---------------------------------------|-------|---------------------------------------|-------|
| | Flexible | Rigid | Flexible | Rigid |
| | 2.5 | 4 | 70 | 95 |
| High capacity cage terminals Cat.Nos 4 238 76 / 4 238 77 | Min. cross-section (mm ²) | | Max. cross-section (mm ²) | |
| | Flexible | Rigid | Flexible | Rigid |
| | 35 | | 95 | 120 |

Note : when the cross-section exceeds the maximum value specified for the material in the table, the allowable current is limited to the indicated value.

Spreaders (incoming or outgoing)

| | |
|---------------------|-----------------|
| - Set of 3 (for 3P) | Cat.No 4 238 88 |
| - Set of 4 (for 4P) | Cat.No 4 238 89 |

Rear terminals (incoming or outgoing)

| | |
|---------------------|-----------------|
| - Set of 3 (for 3P) | Cat.No 4 238 91 |
| - Set of 4 (for 4P) | Cat.No 4 238 92 |

7. EQUIPMENTS AND ACCESSORIES (continued)

7.7 Interlock mechanism

It is used for interlocking 2 DPX³ 160 HP, either with another DPX³ 160 HP or with a DPX³ 125 HP.

It is not possible to use other accessories than those recommended below for interlocking DPX³ 160 HP circuit breakers.

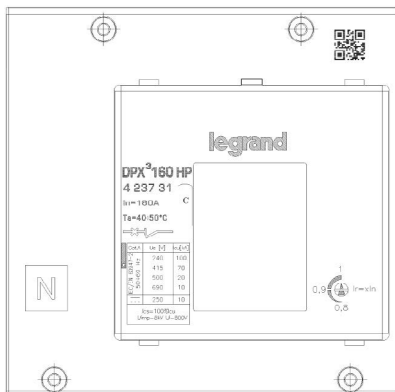
- Interlock mechanism – standard version (for fixed version) Cat.No 4 238 27
- Interlock mechanism – for electronic module (for fixed version) Cat.No 4 238 28
- Interlock plate Cat.No 4 238 25

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):

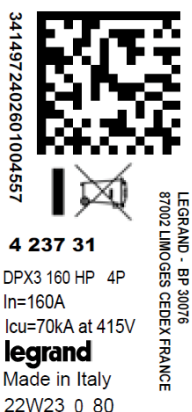
Product laser label on front

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



Product sticker label on side

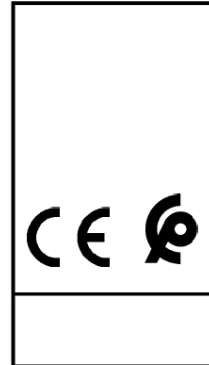
- Manufacturer responsible
- Denomination and type product
- Standard conformity
- Mark/Licence (if any)
- Directive requirements
- Bar code identification product
- Manufacturing Country



Mark sticker label on side

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

4 237 31



Packaging sticker label

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

1 DPX³ HP 4 237 31

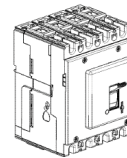


Made in Italy

Design and Quality by LEGRAND (France)

LEGRAND - Pro and Consumer Service - BP 30076

87002 LIMOGES CEDEX FRANCE - www.legrand.com



- Disjoncteur
- Circuit Breaker
- Interruptor automático
- Автоматический выкл.
- 热磁式塑壳断路器
- قاطع الدارة

In=160A 4P Icu 70kA
IEC/EN 60947-2

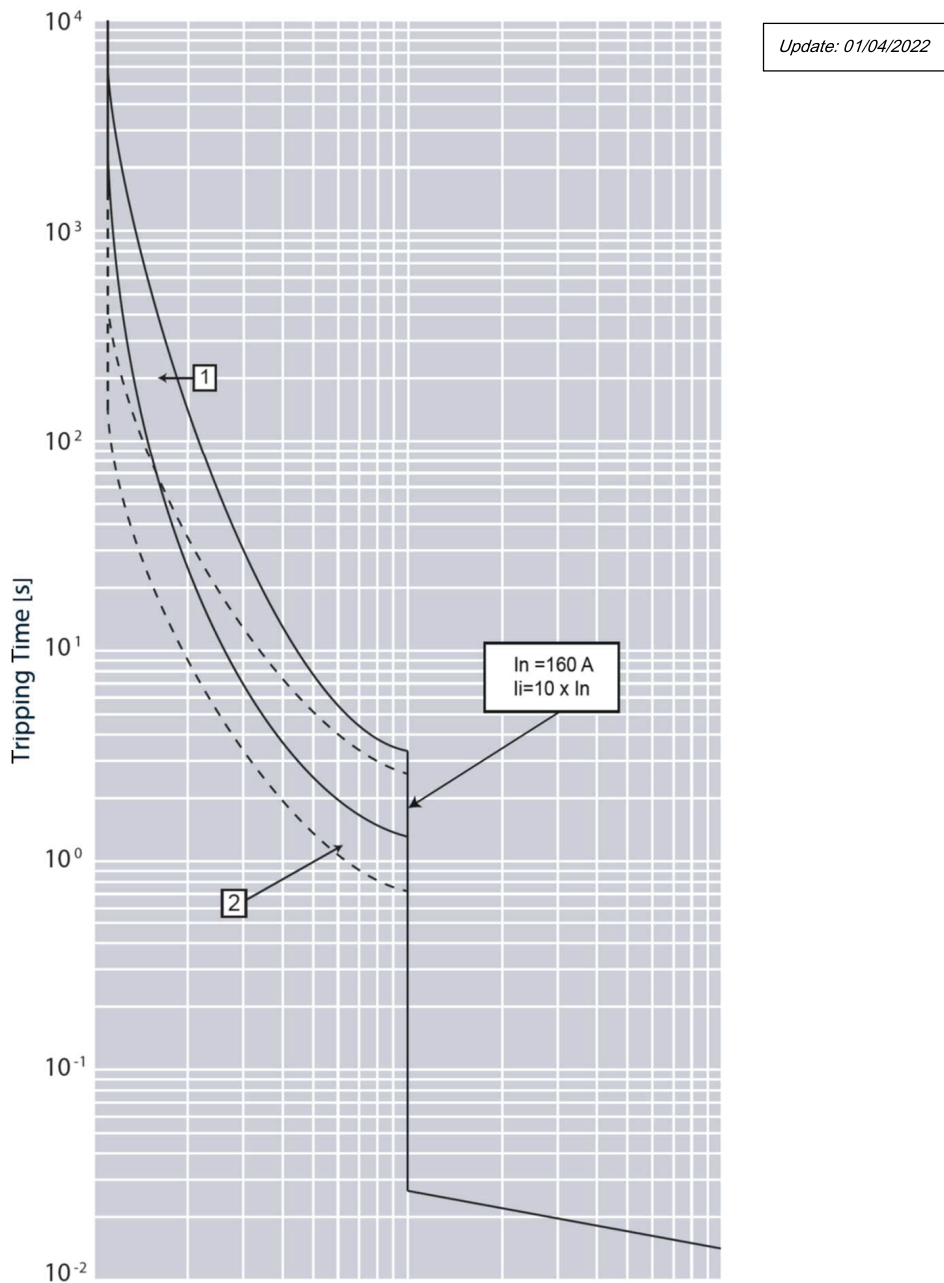


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9. CURVES

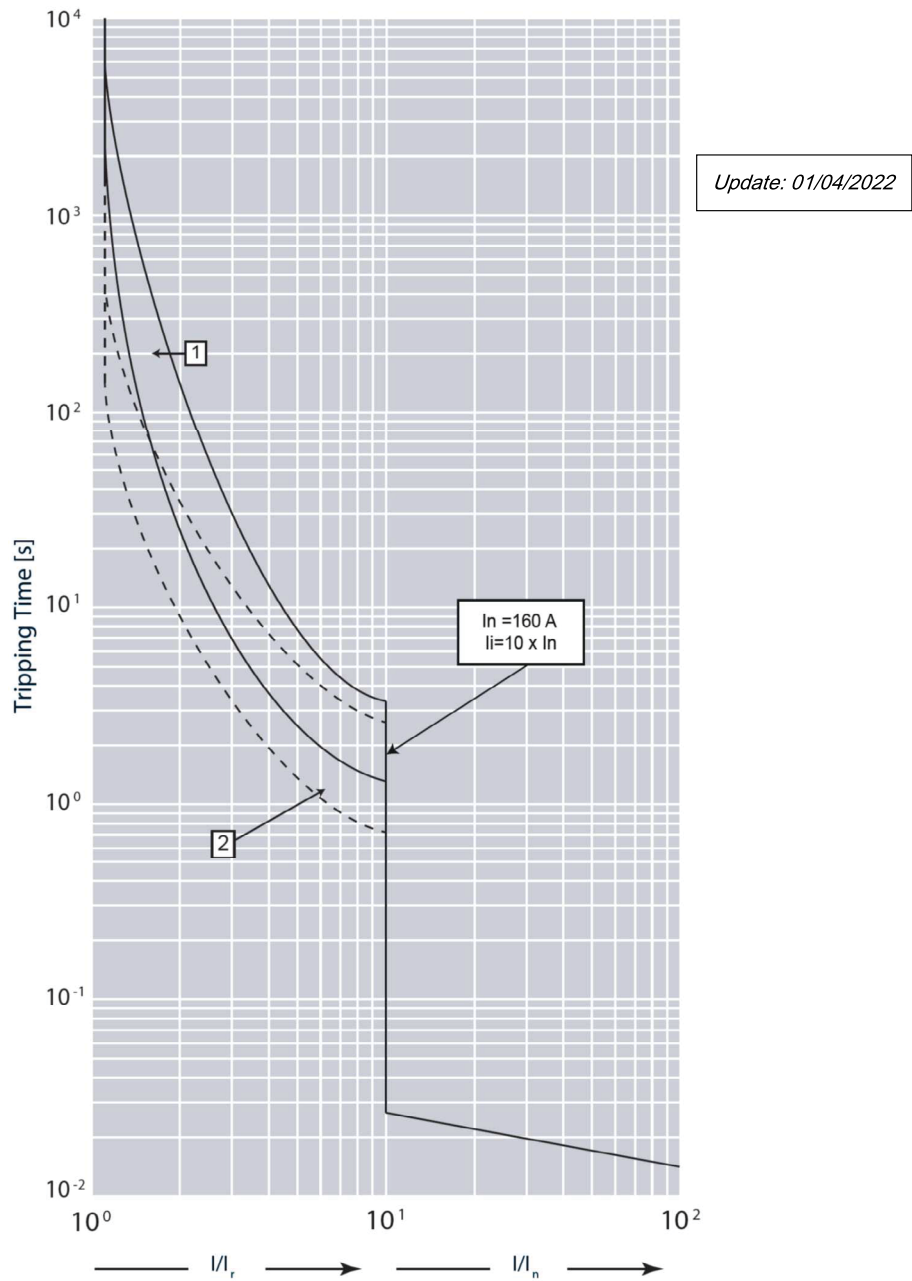
■ 9.1 Thermal magnetic tripping curve (rated current $I_n \leq 50\text{ A}$)



| $I_{cu} = 36\text{--}50\text{ kA}$ | $I_{max} = 160\text{ A}$ | 3-4 P | $U_e = 415\text{ V}\sim$ (IEC/EN 60947-2) |
|------------------------------------|--------------------------------|-------|---|
| Value | Description | | |
| t | Time | | |
| I | Current | | |
| I_n | Rated current | | |
| I_r | Long time setting current | | |
| Curve 1 | Characteristic with cold start | | |
| Curve 2 | Characteristic with hot start | | |

9. CURVES (continued)

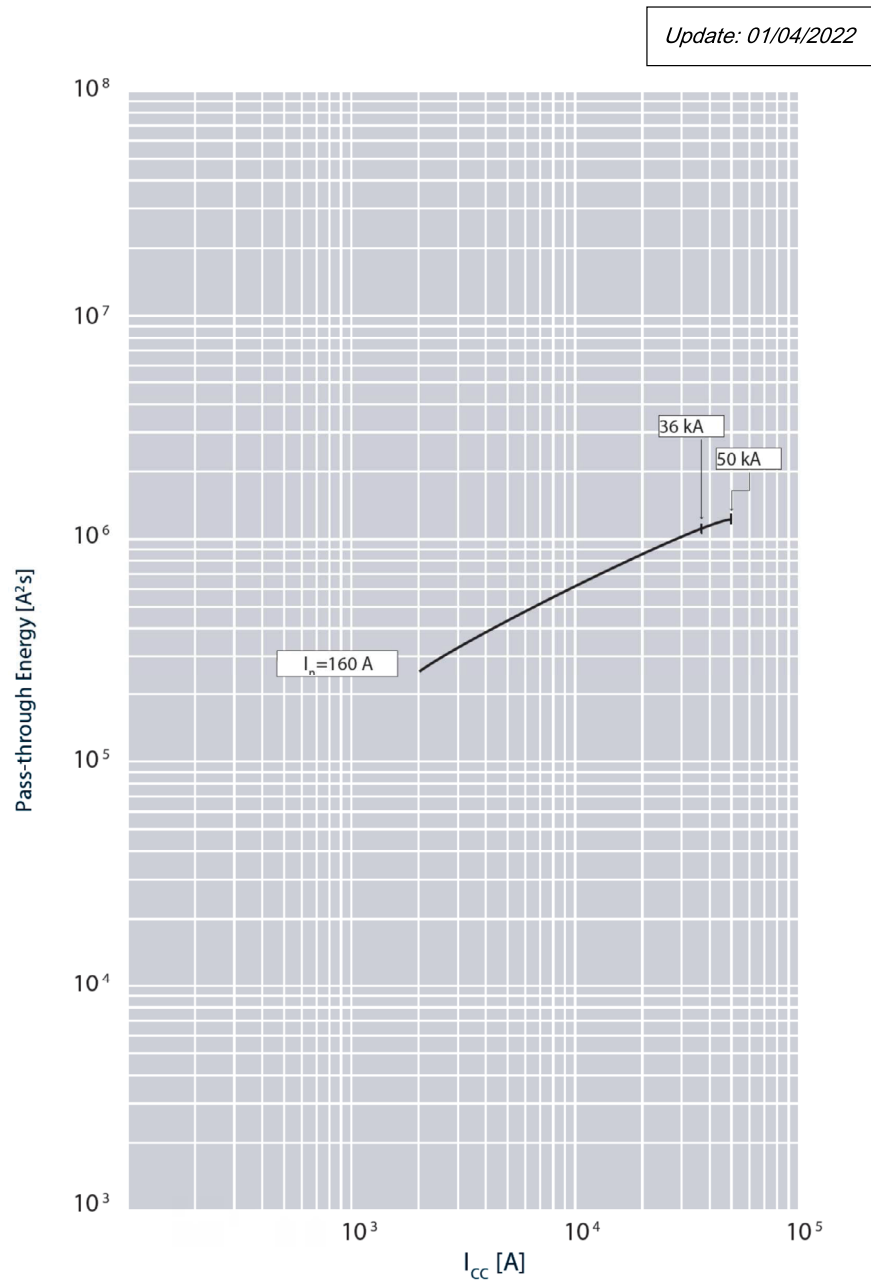
■ 9.2 Thermal magnetic tripping curve (rated current $I_n > 50\text{A}$)



| $I_{cu} = 70\text{-}100\text{ kA}$ $I_{max} = 160\text{ A}$ 3-4 P $U_e = 415\text{ V}\sim$ (IEC/EN 60947-2) | |
|---|--------------------------------|
| Value | Description |
| t | Time |
| I | Current |
| I_n | Rated current |
| I_r | Long time setting current |
| Curve 1 | Characteristic with cold start |
| Curve 2 | Characteristic with hot start |

9. CURVES (continued)

9.3 Pass-through specific energy characteristic curve (breaking capacity I_{cu} ≤ 50kA)

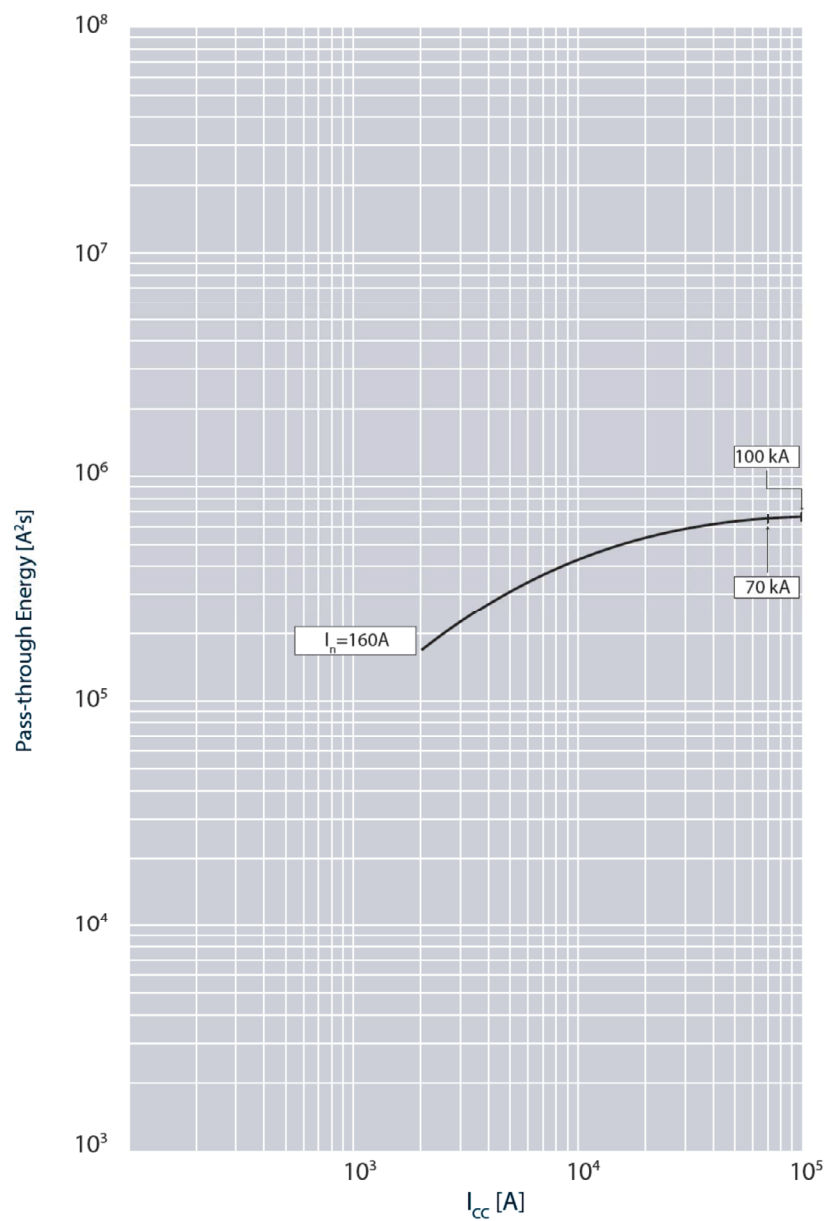


| Icu = 36-50 kA | Imax = 160 A | 3-4 P | Ue = 415 V~ (IEC/EN 60947-2) |
|----------------|--------------|------------------------------|------------------------------|
| Value | | Description | |
| Icc | | Short circuit current | |
| I²t (A²s) | | Pass-through specific energy | |

9. CURVES (continued)

9.4 Pass-through specific energy characteristic curve (breaking capacity I_{cu} > 50kA)

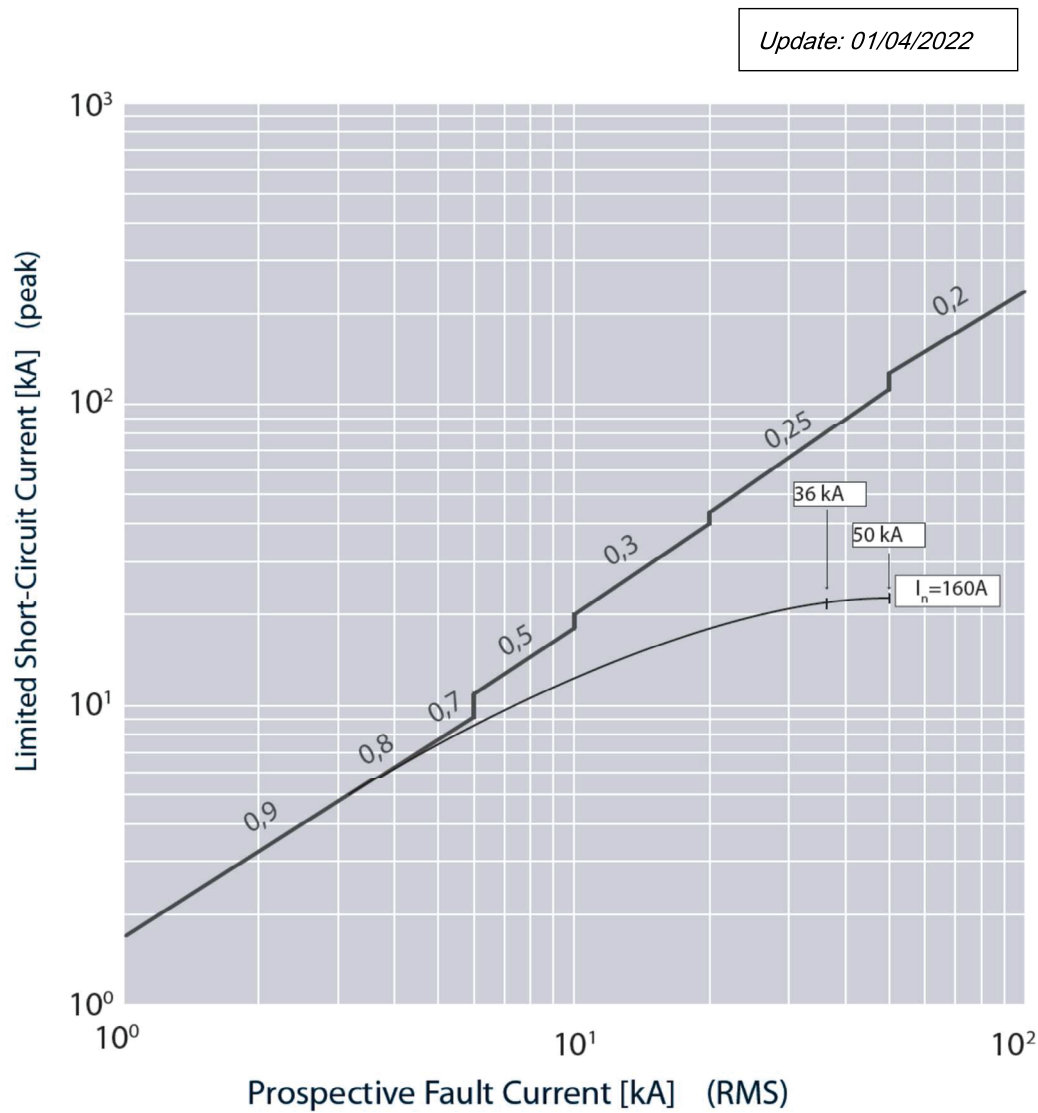
Update: 01/04/2022



| I _{cu} = 36-50 kA | I _{max} = 160 A | 3-4 P | U _e = 415 V~ (IEC/EN 60947-2) |
|----------------------------|--------------------------|------------------------------|--|
| Value | | Description | |
| I _{cc} | | Short circuit current | |
| I²t (A²s) | | Pass-through specific energy | |

9. CURVES (continued)

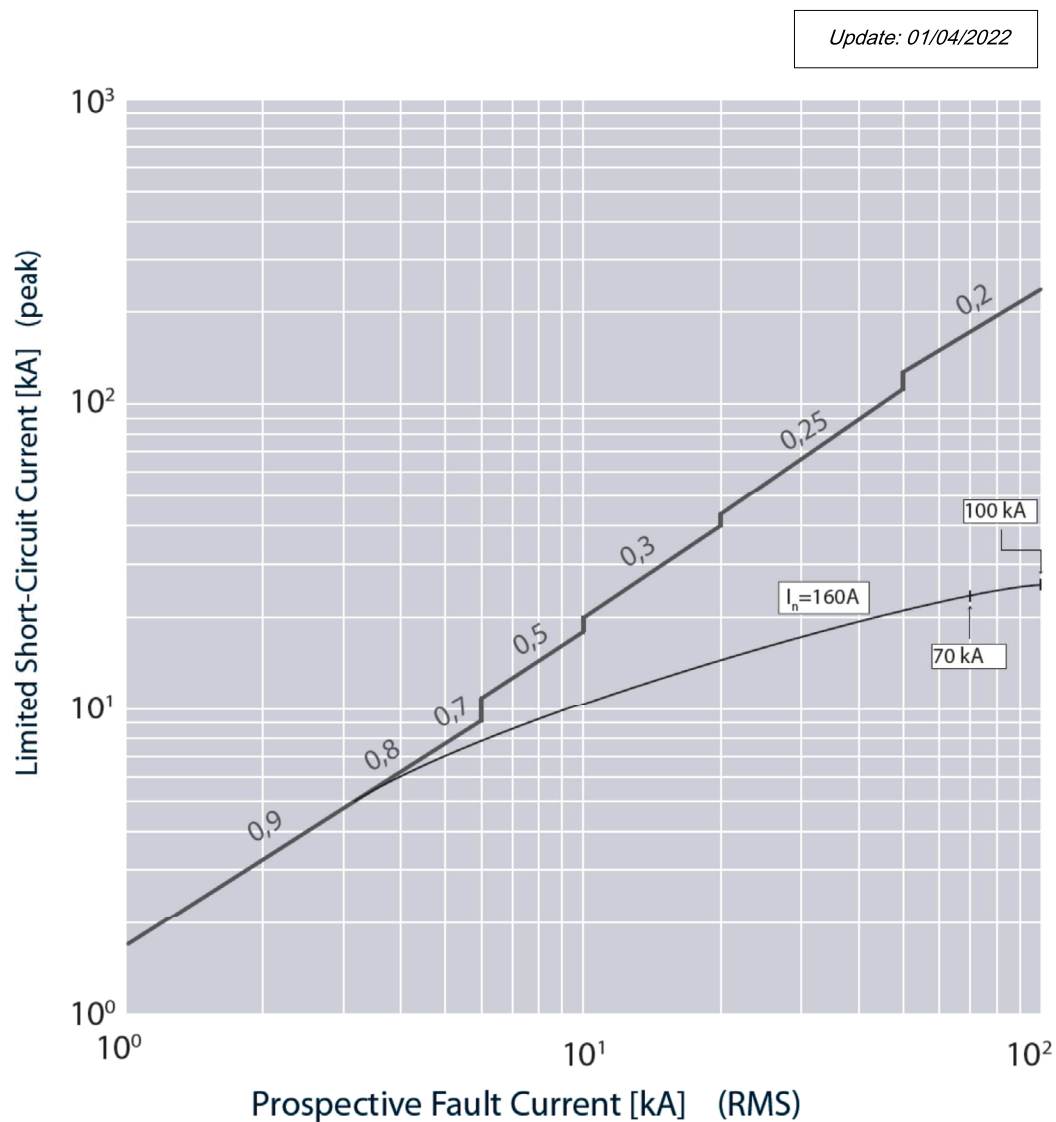
■ 9.5 Cut-off peak current characteristic curve (kA) (breaking capacity I_{cu} ≤ 50kA)



| I _{cu} = 36-50 kA | I _{max} = 160 A | 3-4 P | U _e = 415 V~ (IEC/EN 60947-2) |
|----------------------------|--------------------------|---|--|
| Value | | Description | |
| I _{cc} | | Estimated short circuit symmetrical current (RMS value) | |
| I _p | | Maximum short circuit peak current | |

9. CURVES (continued)

9.6 Cut-off peak current characteristic curve (kA) (breaking capacity I_{cu} > 50kA)



| I _{cu} = 70-100 kA | | I _{max} = 160 A | 3-4 P | U _e = 415 V~ (IEC/EN 60947-2) |
|-----------------------------|--|---|-------|--|
| Value | | Description | | |
| I _{cc} | | Estimated short circuit symmetrical current (RMS value) | | |
| I _p | | Maximum short circuit peak current | | |

10. STANDARDS AND REGULATIONS

DPX³ HP range of product concerning circuit-breakers and trip-free switches exceeds compliance with the IEC/EN standard 60947-2 and 60947-3 respectively.

Certification available by IECEE CB-scheme or LOVAG Compliance scheme. DPX³ HP range respects the European Directives :

RoHS: Compliance with the 2011/65/EU Directive (RoHS), as modified by the 2015/863/EU Delegated Directive, on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

REACH: The substances identified as SVHC (Substances of Very High Concern) according to the REACH Regulation (1907/2006), if present in the products at a concentration above 0.1% weight by weight, are declared inside the European SCIP database. At the date of publication of this document none of the substance listed in the annex XIV is found in this product.

WEEE: WEEE Directive (2012/19/EU): the sale of this product includes a contribution to the appointed environmental bodies of each European country in charge of handling, at the end of their life, the products falling within the scope of the EU Directive on Electrical and Electronic Equipment Waste.

Packaging : Design and manufacture of packaging compliant with European Directive 94/62/CE

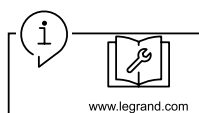
For specific information, please contact Legrand support.

11. OTHER INFORMATION

XLPro³ 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

XLPro³ Tool Selectivity 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.

XLPro³ 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.