

DPX³ 250 HP thermal magnetic with earth leakage circuit breakers

DPX³-I 250 HP trip-free switches with earth leakage

Cat.Nos:
 from 4 230 45 to 4 230 57;
 from 4 231 05 to 4 231 17;
 4 231 83;



CONTENT	Page
1. Use	1
2. Range	1
3. Technical characteristics	1
4. Installation rules	4
5. Dimensions and weight	5
6. Connections	8
7. Equipments and accessories	8
8. Marking	11
9. Curves	12
10. Standards and regulations	16
11. Other information	16

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 250 HP thermal magnetic circuit breakers

Icu	36 kA	50 kA
In (A)	4P	
16	4 230 45	4 231 05
20	4 230 46	4 231 06
25	4 230 47	4 231 07
32	4 230 48	4 231 08
40	4 230 49	4 231 09
50	4 230 50	4 231 10
63	4 230 51	4 231 11
80	4 230 52	4 231 12
100	4 230 53	4 231 13
125	4 230 54	4 231 14
160	4 230 55	4 231 15
200	4 230 56	4 231 16
250	4 230 57	4 231 17

■ 2.2 DPX³-I 250 HP trip-free switches

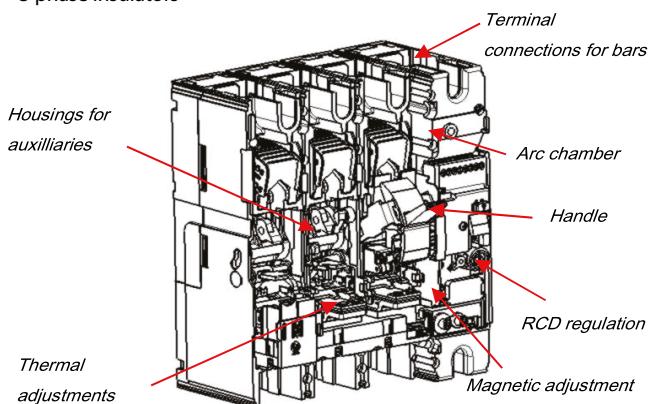
In (A)	4P
250	4 231 83

■ 2.3 Composition

Main parts constituting the circuit breaker

DPX³ 250 HP thermal magnetic with earth leakage circuit breakers is supplied with:

- 4 fixing screws
- 8 screws for connections
- 3 phase insulators



3. TECHNICAL CHARACTERISTICS

■ 3.1 Electrical characteristics

DPX3 250 HP thermal magnetic circuit breakers with earth leakage

Rated current (A)	16 A -20 A -25 A -32 A - 40 A -50 A -63 A -80 A - 100 A -125 A -160 A - 200 A -250 A
Poles	4P
Pole pitch	35 mm
Rated insulation voltage (50/60Hz) Ui	500 V
Rated operating voltage (50/60Hz) Ue	500 V
Rated impulse withstand current Uimp	6 kV
Rated frequency	50 Hz to 60 Hz
Reference ambient temperature (°C)	40 °C to 50 °C
Operating temperature (°C)	-25 °C to 70 °C
Electrical endurance at In (cycles)	6000
Electrical endurance at 0.5 In (cycles)	6000

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3. TECHNICAL CHARACTERISTICS (continued)

■ 3.1 Electrical characteristics (continued)

DPX3 250 HP thermal magnetic circuit breakers with earth leakage	
Utilization category	A
Suitable for isolation	Yes
Type of protection	Thermal-magnetic
Thermal adjustment I_{tr}	0,8 - 0,9 - 1 x I_{n}
Magnetic adjustment I_{li} (A)	400 A up to I_{n} =40A (not adjustable); 6,5-10-13 x I_{n} for I_{n} =50A; 5-7,5-10 x I_{n} up to =250A;
Neutral protection for 4P (% I_{n} th of phase pole)	100
Earth leakage type	A - Integrated
Adjustable sensitivity (A)	0.03- 0.3 - 1 - 3
Adjustable tripping (s)	0 - 0.3 - 1 - 3 (with 0.03 possible only 0s)
Reverse feed	Yes

DPX3-I 250 HP thermal magnetic trip-free switches with earth leakage	
Uninterrupted nominal current I_{e} (A)	250 A
Short-time resistive current I_{cw} (kA) for 1s	3 kA
Rated short-circuit making capacity I_{cm} (kA)	4.3 kA
Rated insulation voltage U_i (V AC)	500 V
Maximum rated operating voltage U_{e} (V AC)	500 (I_{n} =160 A - 200 A - 250 A) - 415 (I_{n} =225 A)
Rated impulse withstand voltage U_{imp} (kV)	8 kV
Utilisation category	AC22A (I_{n} =250A)
Suitable for isolation	Yes
Rated frequency	50 Hz to 60 Hz
Operating temperature (°C)	-25 °C to 70 °C
Electrical endurance at I_{n} (cycles)	6000
Electrical endurance at 0.5 I_{n} (cycles)	6000
Reverse feed	Yes

The maximum admissible (absolute) temperature is 125°C (for detail, see IEC 60947-1 and 60947-2).

Breaking capacity

IEC 60947-2	U _e	Breaking capacity (kA) & I_{cs}	
		I _{cu}	
		36 kA	50 kA
	220/240 V~	70	90
	380/415 V~	36	50
	440/460 V~	25	30
	480/500 V~	16	18
	I _{cs} (% I _{cu})	100	
	I _{cm} (kA) at 415 V	76.5	105

Rated current (I_{n}) at 40 °C / 50 °C

In (A)	Thermal (I_{tr})		Magnetic (I_{sd})	
	0.8 x In	1 x In	MIN	MAX
16	13	16	400	400
20	16	20		
25	20	25		
32	26	32		
40	32	40		
50	40	50	325	650
63	51	63	315	630
80	64	80	400	800
100	80	100	500	1 000
125	100	125	625	1 250
160	128	160	800	1 600
200	160	200	1 000	2 000
250	200	250	1 250	2 500

For neutral adjustment, please consider the values ratios 100% on set currents.

■ 3.2 Mechanical characteristics

Mechanical endurance (cycles): 12000

Mechanical endurance with motor control (cycles): 12000

Load operations

	Force on handle (N)
Opening operation	63.5
Closing operation	66
Restore operation	86.5

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3. TECHNICAL CHARACTERISTICS (continued)

■ 3.3 Electrodynanic 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 electrodynanic 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

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)

I _n (A)	Circuit breaker												
	16	20	25	32	40	50	63	80	100	125	160	200	250
Lugs	2.89	4.37	5.24	4.82	7.47	5.55	9.13	7.04	7.50	7.97	11.52	14.40	20.00
Cage terminals	2.90	4.38	5.26	4.85	7.52	5.62	9.24	7.21	7.77	8.39	12.22	15.49	21.70
Spreaders	2.90	4.38	5.26	4.86	7.52	5.63	9.26	7.24	7.82	8.47	12.34	15.68	22.00
Rear terminals	2.90	4.38	5.26	4.86	7.52	5.63	9.26	7.24	7.82	8.47	12.34	15.68	22.00

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.

Trip-free switches	
In(A)	250
Cage terminals	14.58
Lugs	15.82
Spreaders	16.04
Rear terminals	16.04
Plug-in version	34.58

Note: power losses 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.

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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)	0	10	20	30	40	50	60	70
16	18	17	17	16	16	16	15	14
20	22	22	21	20	20	20	19	17
25	28	27	26	26	25	25	23	21
32	35	35	35	33	32	32	30	27
40	44	43	42	41	40	40	37	34
50	55	54	53	51	50	50	47	43
63	69	68	67	64	63	63	59	54
80	88	86	86	82	80	80	74	68
100	110	108	105	102	100	100	93	85
125	138	135	131	128	125	125	116	106
160	176	173	168	163	160	160	149	136
200	258	244	230	215	200	200	180	170
250	322	305	287	269	250	250	225	213

For derating temperature with other configurations, see table below.

Derating temperature and configurations

	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
Fixed version										
Cage terminals, flexible cable	250	1	250	1	250	1	225	0.90	213	0.85
Lugs, flexible cable							238	0.95	255	0.90
Spreaders, flexible cable										
Draw-out version										
Cage terminals, flexible cable	250	1	255	0.90	255	0.90	213	0.85	188	0.7

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 DPX³ 250 HP circuit breakers, degree 3, according to IEC/EN 60947-2

Electromagnetic disturbances (EMC): for Megatiker DPX³ 250 HP circuit breakers, according to IEC/EN 60947-2 Annex B

Altitude

Altitude derating for DPX³ and DPX³-I

Altitude (m)	2000	3000	4000	5000
U _e (V)	500	430	380	330
I _n (A) (Ta = 40°C/50°C)	1 x I _n	0.98 x I _n	0.93 x I _n	0.9 x I _n

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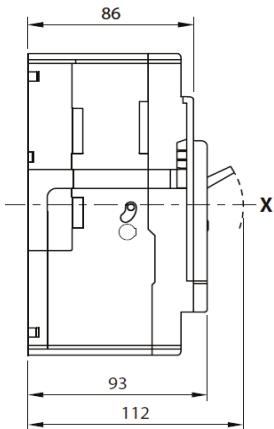
Cat.Nos:
from 4 230 45 to 4 230 57;
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4 231 83;

5. DIMENSIONS AND WEIGHT

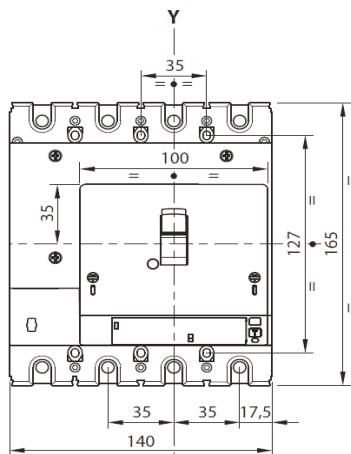
5.1 Dimensions (mm)

4P (W x H x D): 140 x 165 x 86

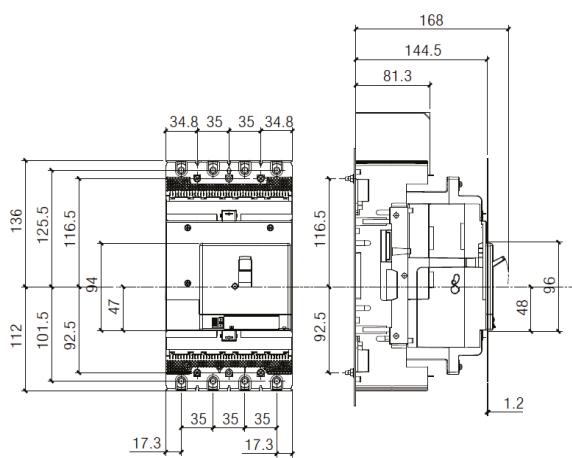
Lateral view



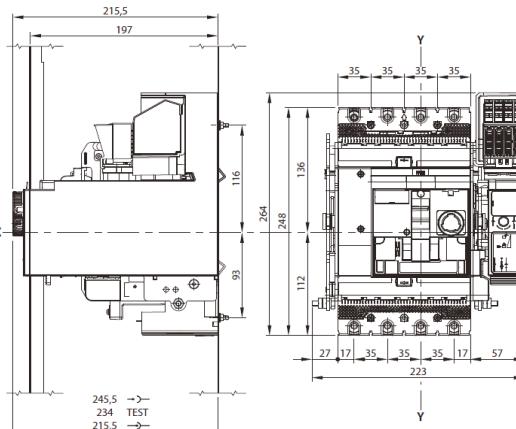
Frontal view



Plug-in version

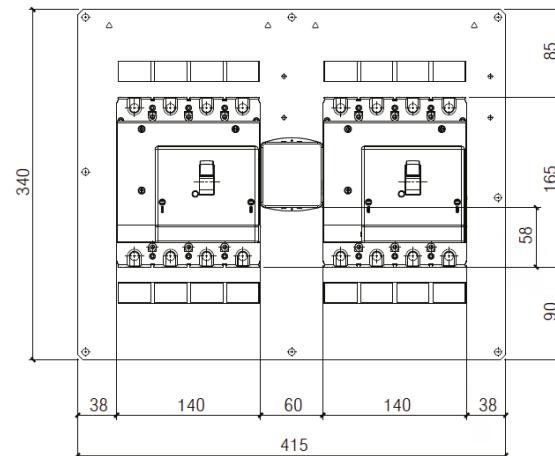


Draw-out version

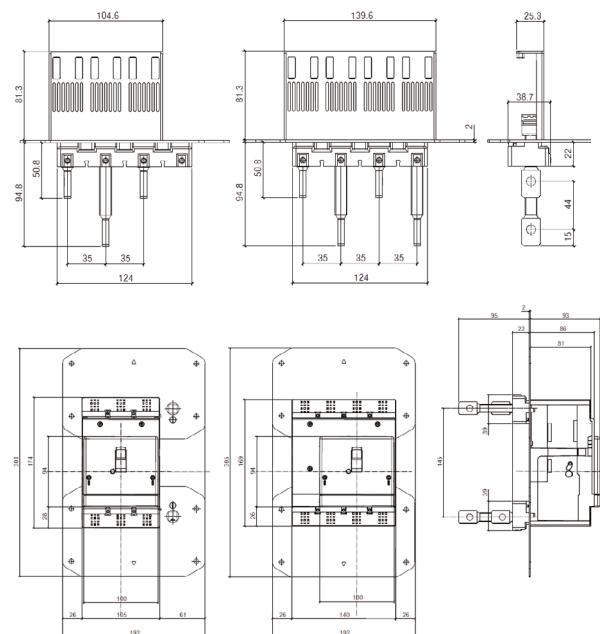


Interlock

For rear plate interlock dimension, see relative instruction sheet.



Rear terminals



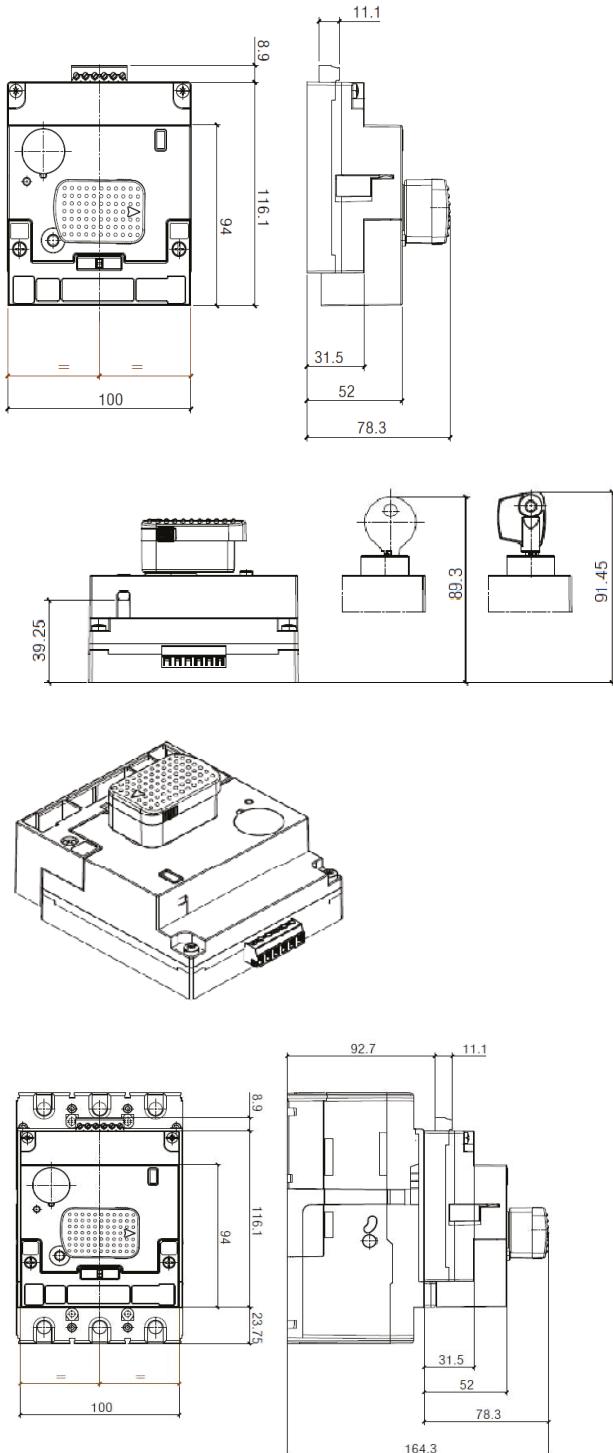
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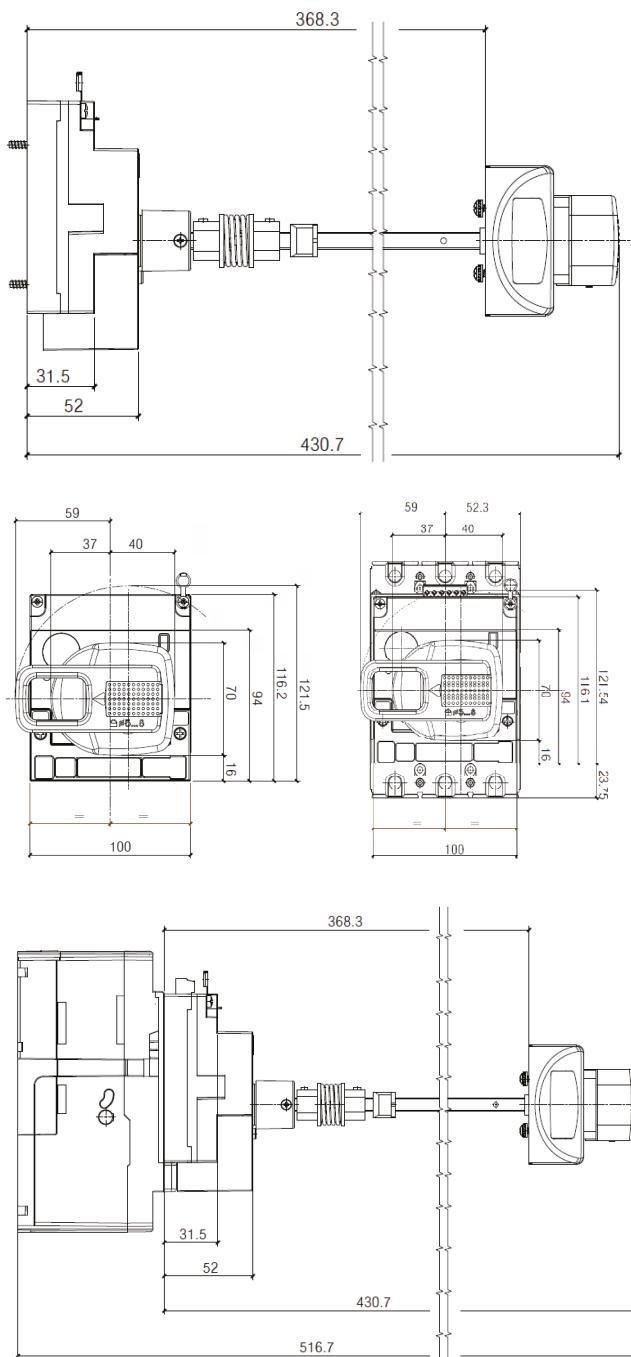
5. DIMENSIONS AND WEIGHT (continued)

■ 5.1 Dimensions (mm) (continued)

With direct rotary handle



With vary depth rotary handle



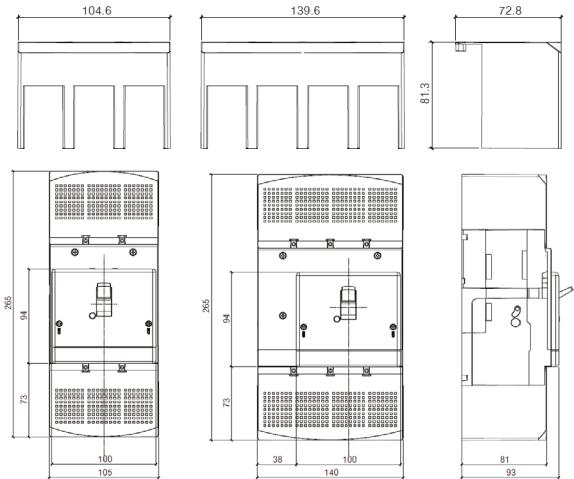
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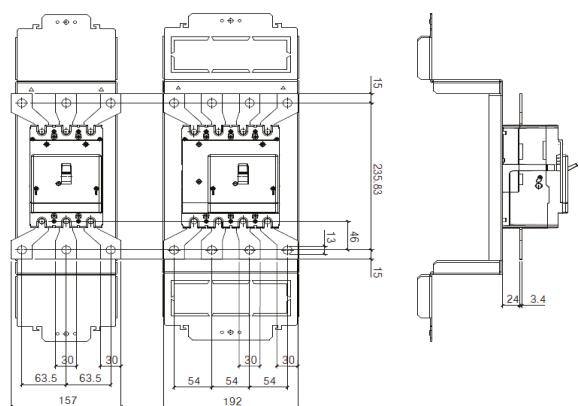
5. DIMENSIONS AND WEIGHT (continued)

■ 5.1 Dimensions (mm) (continued)

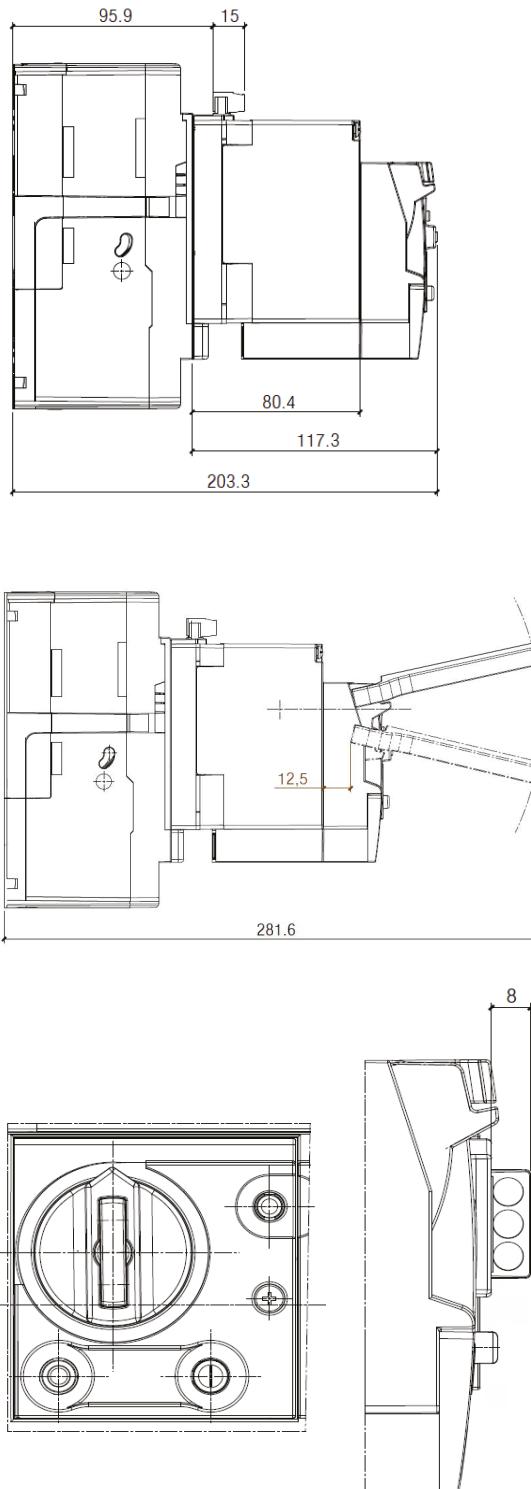
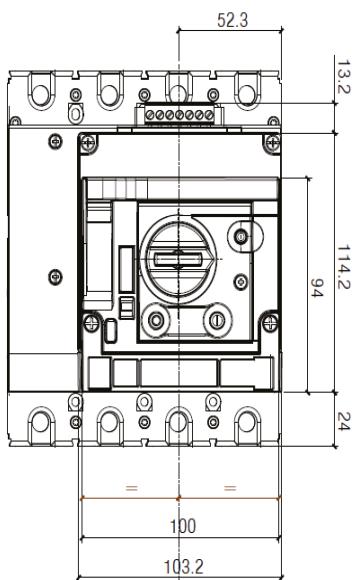
With sealable terminal shields



With spreaders



With motor operator



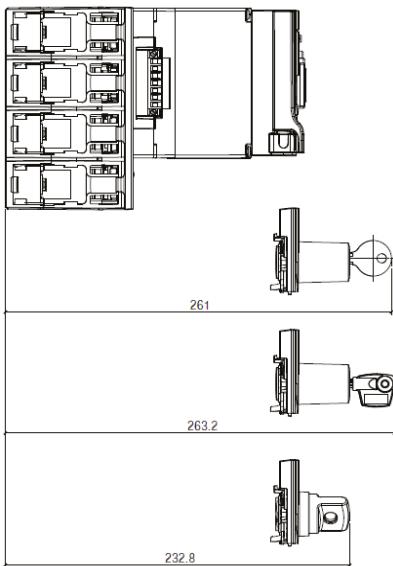
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5. DIMENSIONS AND WEIGHT (continued)

■ 5.1 Dimensions (mm) (continued)

With motor operator (continued)



■ 5.2 Weights

Weights (kg)	
Configuration	4P
Circuit breaker	2.6
Plug-in*	3.5
Draw-out**	2.5
Interlock*	0.35
Rear interlock (for plug-in/draw-out version)*	5
Motor operator*	1

* to add to device weight

** to add to device and plug-in weights

6. CONNECTIONS

Possible way of assembly on plate:

- vertical
- horizontal

To ensure the circuit breaker's connection, it is possible to use:

- busbars;
- cables lugs;
- spreaders;
- cage terminals.

For detailed mounting procedures, see instruction sheet.

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 with voltage (ST)

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

Maximum power = 400 VA/W

Undervoltage releases with voltage (UVR)

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

Maximum power = 4 VA

Circuit breaker opening time < 50 ms

Undervoltage releases can be used on DPX³ 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

Auxiliary contacts are used to show the state of the contacts or opening of the DPX³/DPX³-I and

DPX³ HP/DPX³-I HP on a fault, using :

- Auxiliary contact (standard) OC
- Fault signal CTR

Auxiliary contacts assembly		
Voltage (Uc)	AC/DC	Current (A)
24	DC	5
48	DC	1.7
110	DC	0.5
110	AC	4
230	DC	0.25
230 ÷ 250	AC	3

DPX³ 250 HP thermal magnetic with earth leakage circuit breakers

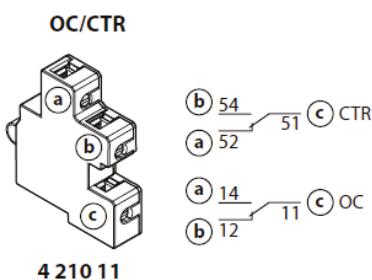
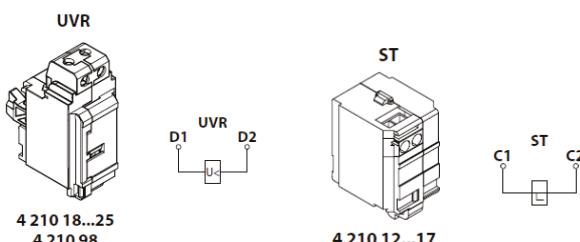
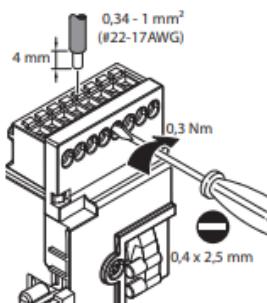
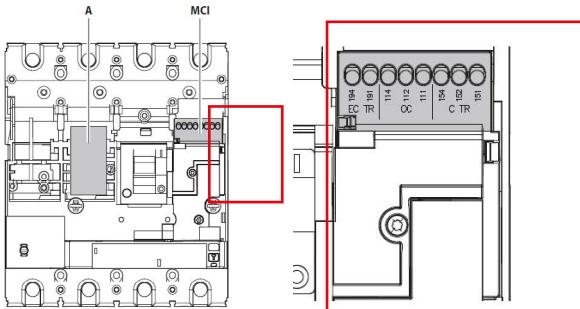
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7. EQUIPMENTS AND ACCESSORIES (continued)

■ 7.2 Auxiliary contacts (continued)

Wiring diagrams to get to the auxiliary functionality:



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

■ 7.3 Universal keylocks

These keylocks must be used for all the accessories that can be locked:
- rotary handle
- motor operator
- plug-in mechanism
- draw-out mechanism

For each of these, a 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 four types of suited rotary handles:

Direct on DPX³ (with auxiliary option and compatible XL³)

- Standard (black) Cat.No 4 238 00
- For emergency use (red / yellow) Cat.No 4 238 01

Vary depth handle IP55 (with auxiliary option and compatible XL³)

- Standard (black) Cat.No 4 238 02
- For emergency use (red / yellow) Cat.No 4 238 03

Direct on DPX³ (general purpose)

- Standard (black) Cat.No 4 238 14
- For emergency use (red/yellow) Cat.No 4 238 15

Vary depth handle IP55 (general purpose)

- Standard (black) Cat.No 4 238 16
- For emergency use (red/yellow) Cat.No 4 238 17

Locking accessories (for rotary handle with auxiliary option)

- Key lock accessory for direct rotary handle Cat.No 4 238 04
- Key lock accessory for vary depth Cat.No 4 238 05

rotary handle, also compatible with DPX³ 125/160 HP

Cat.Nos 4 238 04 and 4 238 05 must be used with universal keylocks to get the complete locking kit for rotary handle.

■ 7.5 Motor operators

For synchronized operations (energy storage type):

- 24 V \sim /= Cat.No 4 238 40
- 48 V \sim /= Cat.No 4 238 41
- 110 V \sim Cat.No 4 238 42
- 230 V \sim Cat.No 4 238 43

Technical parameters:

Voltage	Property	Alternative current		Direct current	
		Opening	Closing	Opening	Closing
24 V \sim /=	Maximum inrush power (VA)	75	430	55	320
	Rated power (VA)	45	-	20	-
	Absorption time (s)	2.8	0.01	3.3	0.01
	Operating current time (s)	1.1	0.03	1.2	0.03
48 V \sim /=	Maximum inrush power (VA)	85	1000	70	690
	Rated power (VA)	65	-	15	-
	Absorption time (s)	3.3	0.006	3.8	0.006
	Operating current time (s)	1.1	0.02	1.3	0.02

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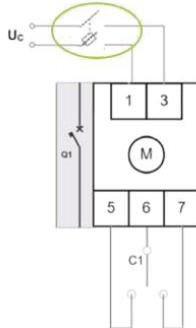
7. EQUIPMENTS AND ACCESSORIES (continued)

■ 7.5 Motor operator (continued)

Voltage	Property	Alternative current		Direct current	
		Opening	Closing	Opening	Closing
110 V~	Maximum inrush power (VA)	95	600	-	-
	Rated power (VA)	60	-	-	-
	Absorption time (s)	3	0.02	-	-
	Operating current time (s)	0.1	0.03	-	-
230 V~	Maximum inrush power (VA)	125	460	-	-
	Rated power (VA)	70	-	-	-
	Absorption time (s)	2.5	0.08	-	-
	Operating current time (s)	0.9	0.03	-	-

It is necessary to foresee a protection device (for example fuse) on the motor operator power line. Fuse characteristics depend on the motor version and on the number of users.

Schematic example:



Locking accessory (for motor operator)

- Padlock (for motor operator locking) Cat.No 4 238 46
- Key lock accessory for motor operator Cat.No 4 238 45

Cat.No 4 238 45 must be used with universal keylocks to get the complete locking kit for motor operator.

■ 7.6 Mechanical accessories

- Padlock (for locking in "OPEN" position) Cat.No 4 210 49
Cat.No 4 210 49 is compatible with DPX³ 125/160 HP and DPX³ 160/250.
- Sealable terminal shields
- Set of 3 (for 4P) Cat.No 4 238 24
- Insulated shields
- Set of 3 (for 4P) Cat.No 4 238 35
Cat.No 4 238 35 is also compatible with DPX³ 125/160 HP.

■ 7.7 Connection accessories

Cage terminals

- Set of 4 terminals for 150 mm² max (rigid) or 120 mm² max (flexible) Cu/Al cables Cat.No 4 238 31

Cage terminal use specifications

Cable standard suggested cross section (mm²)*

	In (A)	Cu	Al
	16	2.5	4
Cage terminals Cat.No 4 238 31	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 IEC60947-1 (ed.6 2020/04) and IEC60947-2 (ed.5.1 2019/07)

Dimensions limits of cable for cage terminals

Cage terminals Cat.No 4 238 31	Min cross section (mm ²)		Max cross section (mm ²)	
	Flexible	Rigid	Flexible	Rigid
	2.5	4	120	150

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 4 (for 4P) Cat.No 6 250 18

Rear terminals (incoming or outgoing)

- Set of 4 (for 4P) Cat.No 4 238 22

■ 7.8 Plug-in version

A plug-in is a DPX³ 250 HP fitted with special terminals and mounted on a plug-in base.

Bases

For plug-in and draw-out versions for DPX³ 250 HP and DPX³-I 250 HP.

- Plug-in/draw-out base for 4P Cat.No 4 238 51
- Plug-in/draw-out mobile part kit for 4P Cat.No 4 238 53

Plug-in accessories

Locking accessory (for plug-in)

- Key lock accessory for plug-in Cat.No 4 238 63
- Cat.No 4 238 63 must be used with universal keylocks to get the complete locking kit for plug-in version.

■ 7.9 Draw-out version

A DPX³ 250 HP draw-out version is a plug-in DPX³ 250 HP fitted with a "Debro-lift" mechanism which can be used to withdraw the breaker while keeping it on its base.

"Debro-lift" mechanism

Supplied with a rigid slide and handle for drawing-out.

- Transformation kit for 4P Cat.No 4 238 61

DPX³ 250 HP thermal magnetic with earth leakage circuit breakers

DPX³-I 250 HP trip-free switches with earth leakage

Cat.Nos:
from 4 230 45 to 4 230 57;
from 4 231 05 to 4 231 17;
4 231 83;

7. EQUIPMENTS AND ACCESSORIES (continued)

Frontal masks for draw-out version

When using a "Debro-lift" mechanism, add the correct frontal mask according to the accessories associated with the "Debro-lift".

- Frontal module, with frontal mask (3P and 4P) Cat.No 4 238 55
(if motor operator or rotary handle is not fitted)
- Frontal mask for motor operator (3P and 4P) Cat.No 4 238 56

Locking accessory (for draw-out)

- Padlock for draw-out position Cat.No 4 238 64
- Key lock accessory for draw-out Cat.No 4 238 62

Cat.No 4 238 62 must be used with universal keylocks to get the complete locking kit for draw-out version.

Auxiliary contacts

- Automatic auxiliary contacts for draw-out version Cat.No 4 222 30
- 6 contact connectors (under sliding contacts) Cat.No 0 098 19

Cat.No 0 098 19 can be used with both plug-in and draw-out version.

■ 7.10 Interlock mechanism

It is used for interlocking 2 DPX³ 250 HP circuit breakers.

It is not possible to use other accessories than those recommended below for interlocking 2 DPX³ 250 HP.

- Interlock mechanism – standard version Cat.No 4 238 27
(for fixed version DPX³ 250 HP)

- Interlock mechanism – for electronic module Cat.No 4 238 28
(for fixed version DPX³ 250 HP)

- Interlock plate for DPX³ 250 HP Cat.No 4 238 26

- Rear interlock mechanism Cat.No 4 238 29
for DPX³ 250 HP plug-in and/or draw-out version

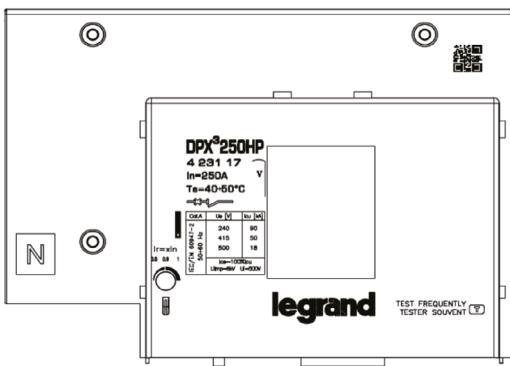
When using a rear interlocking mechanism, use a maximum of 1 set of contact connectors Cat.No 0 098 19.

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

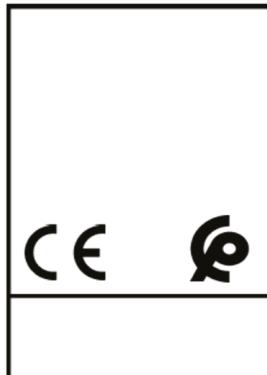
- Manufacturer responsible
- Denomination and type product
- Mark/Licence (if any)
- Directive requirements
- Bar code identification product
- Manufacturing Country



Mark sticker label on side

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

4 231 17



Packaging sticker label

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

1 DPX³ HP 4 231 17



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



3414971049154 20W40

- Disjoncteur + diff
- Circ.breaker +earth leak.
- Interrupt.automát.+diff
- Дифференциальный авт.вык
- 具有剩余电流保护的断路器
- قاطع الدائرة + تسرب الارض
- In=250A 4P Icu 50kA
- IEC/EN 60947-2

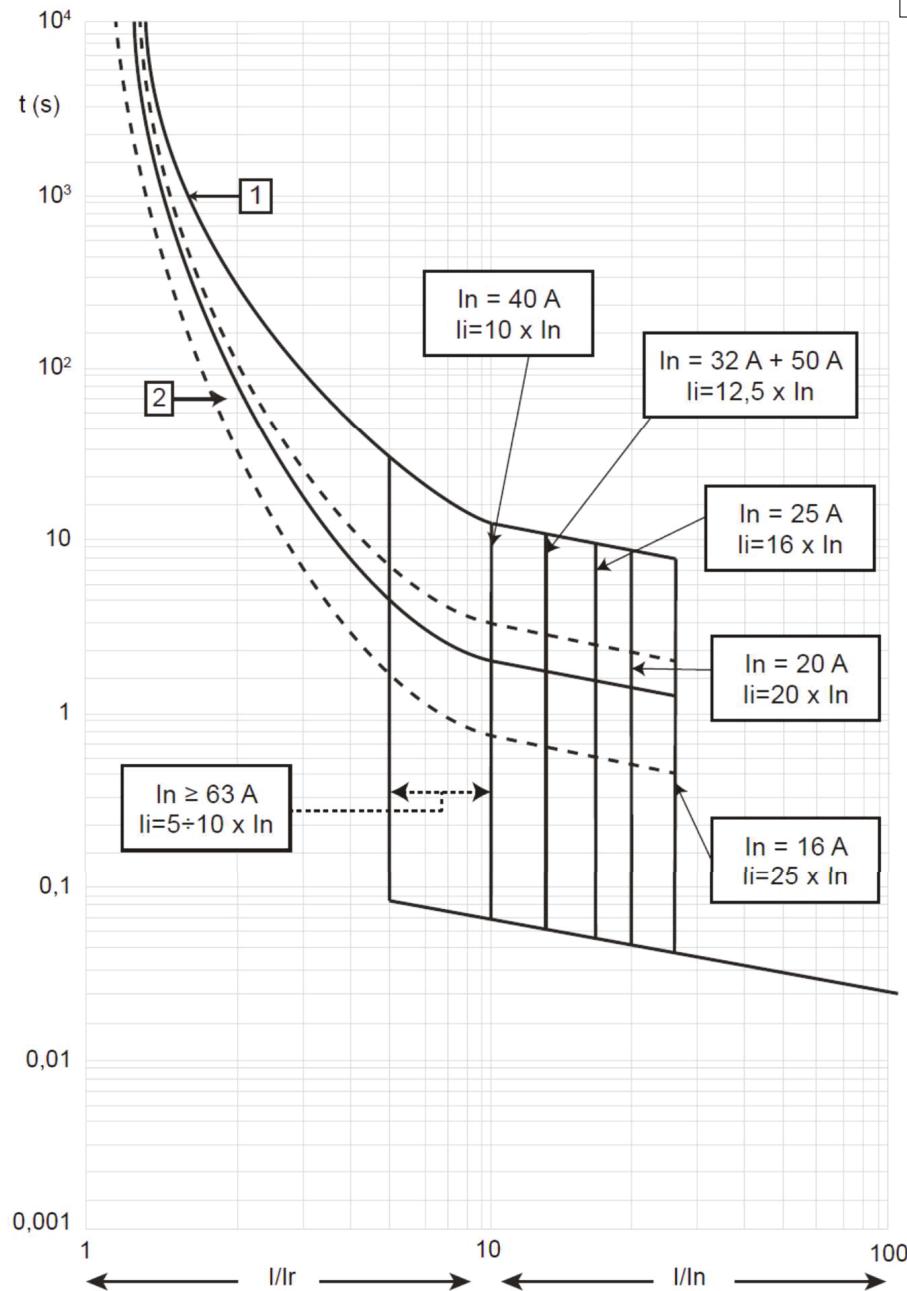
**DPX³ 250 HP thermal magnetic with earth leakage circuit breakers
DPX³-I 250 HP trip-free switches with earth leakage**

Cat.Nos:
from 4 230 45 to 4 230 57;
from 4 231 05 to 4 231 17;
4 231 83;

9. CURVES

■ 9.1 Thermal magnetic tripping curve

Update: 11/06/2019



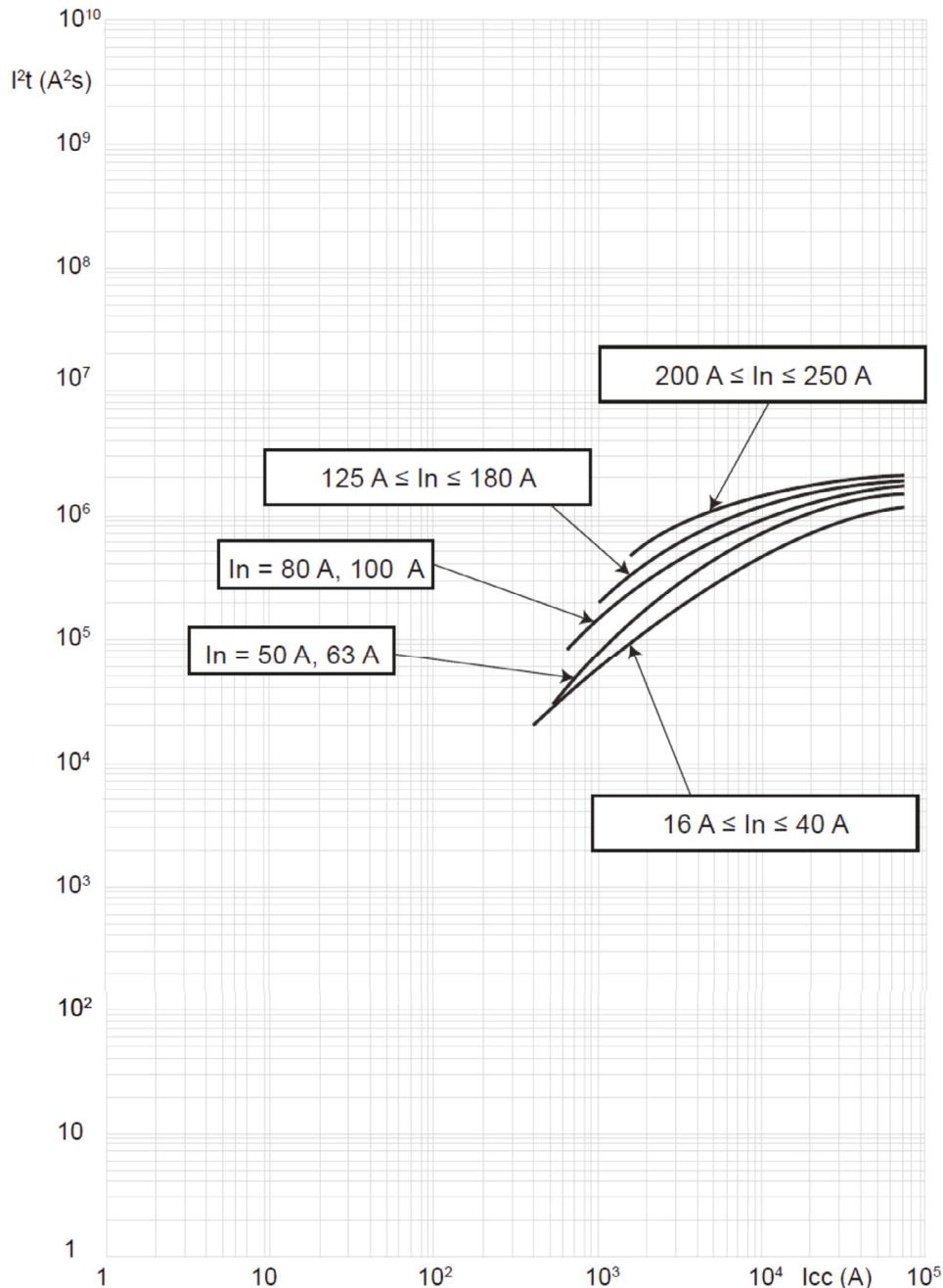
Icu = 36-50-70-100 kA Imax = 250 A 4P Ue = 415 V \sim (IEC/EN 60947-2)

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

9. CURVES (continued)

■ **9.2 Pass-through specific energy characteristic curve**

Update: 11/06/2019



Icu = 36-50 kA

Imax = 250 A

4P

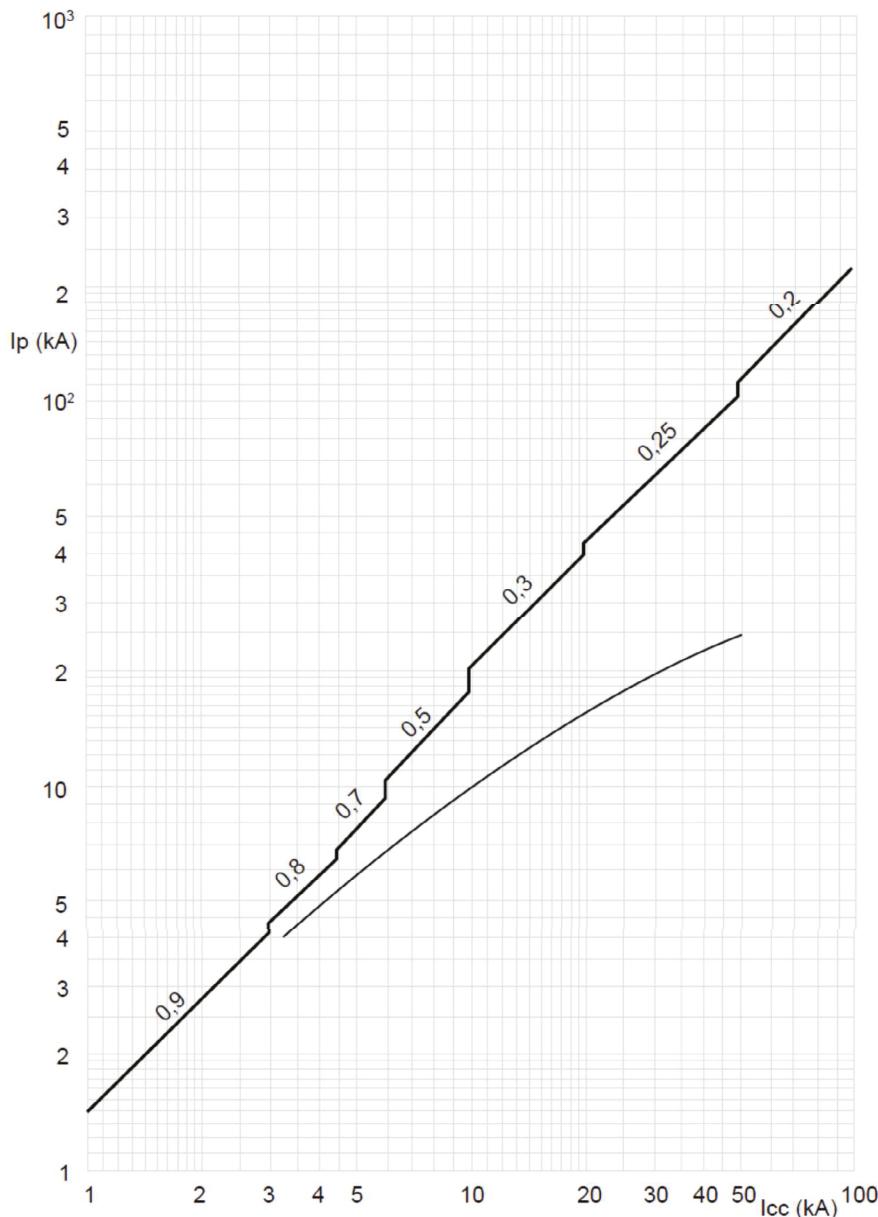
Ue = 415 V~ (IEC/EN 60947-2)

Value	Description
Icc	short circuit current
I ² t (A ² s)	pass-through specific energy

9. CURVES (continued)

■ 9.3 Cut-off peak current characteristic curve

Update: 30/08/2019



Icu = 36-50 kA

Imax = 250 A

3P-4P

Ue = 415 V \sim (IEC/EN 60947-2)

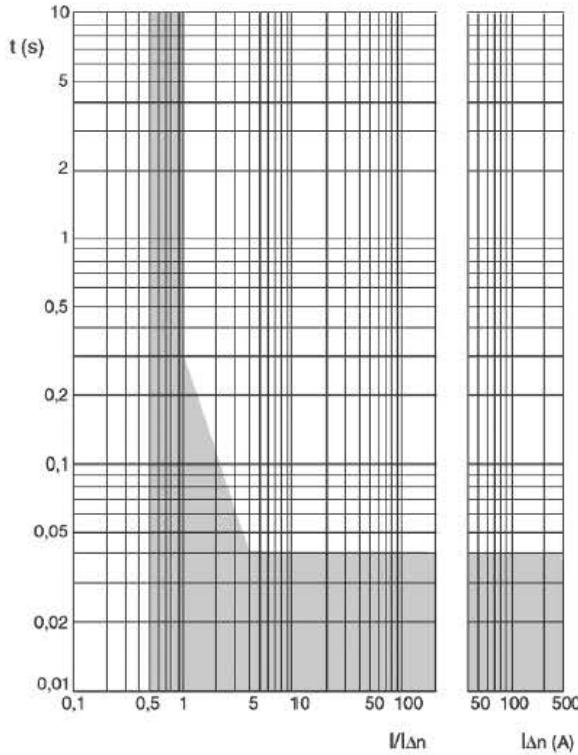
Value	Description
Icc	estimated short circuit symmetrical current (RMS value)
Ip	maximum short circuit peak current

**DPX³ 250 HP thermal magnetic with earth leakage circuit breakers
DPX³-I 250 HP trip-free switches with earth leakage**

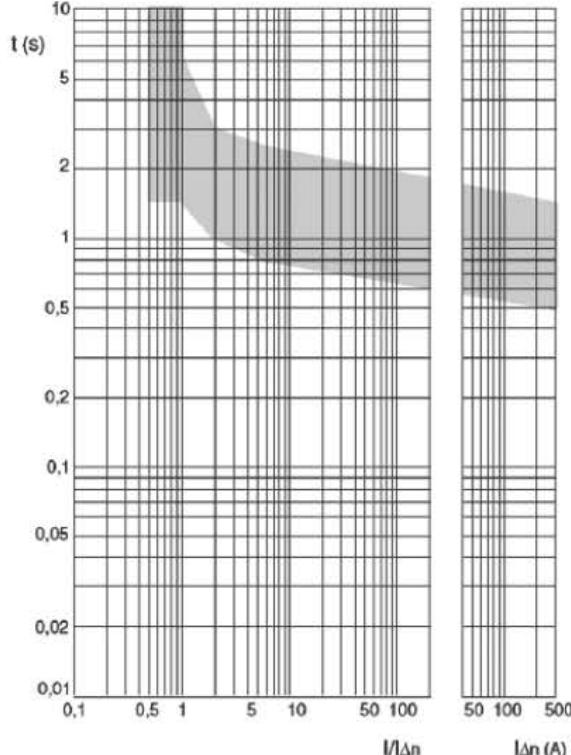
Cat.Nos:
from 4 230 45 to 4 230 57;
from 4 231 05 to 4 231 17;
4 231 83;

9. CURVES (continued)

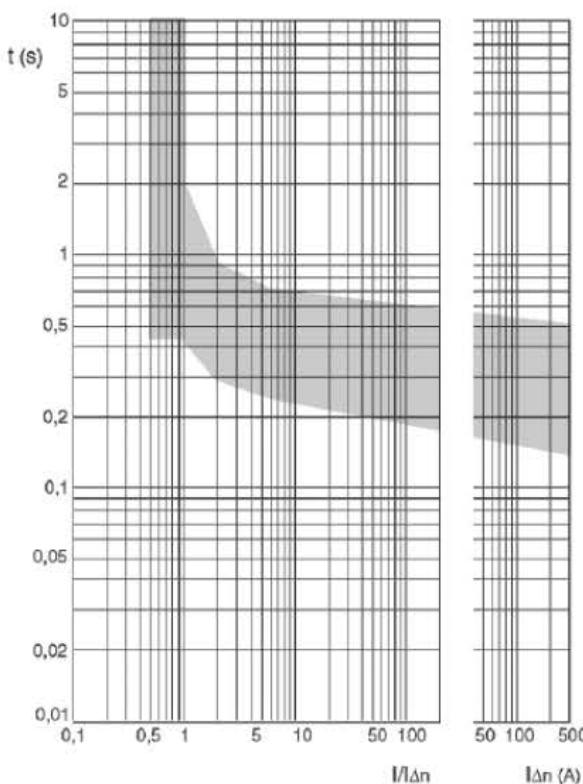
■ 9.4 Earth leakage curves, instantaneous



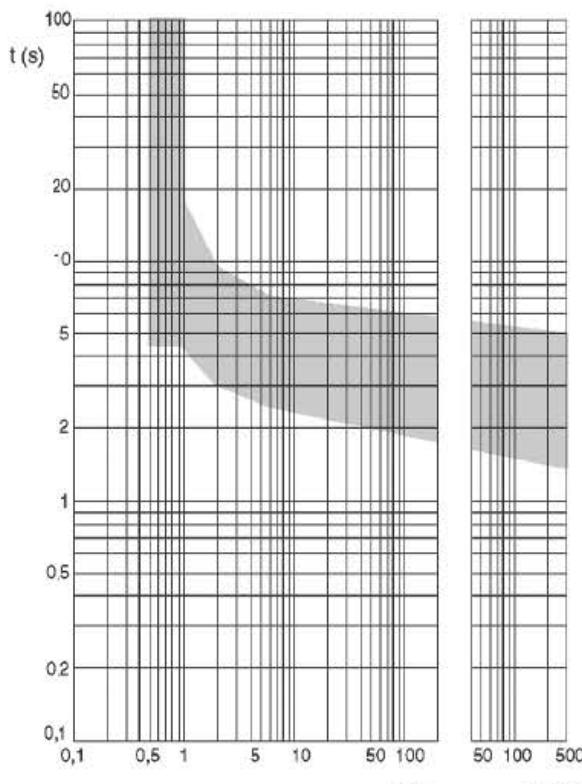
■ 9.6 Earth leakage curves, time delay = 1 S



■ 9.5 Earth leakage curves, time delay = 0.3 S



■ 9.7 Earth leakage curves, time delay = 3 S



10. STANDARDS AND REGULATIONS

DPX3 HP 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.

They respect 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.

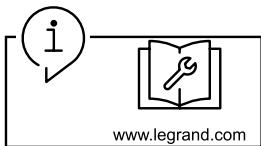
For specific information, please contact Legrand support.

11. OTHER INFORMATION

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

XLPro3 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.