128, av. du Maréchal-de-Lattre-de-Tassigny - 87045 LIMOGES Cedex
Tél. : +33(0)5 55 06 87 87
www.legrand.com

DPX³ 250 HP thermal magnetic circuit breakers
DPX³-I 250 HP trip-free switches

Cat.Nos:
from 4 230 00 to 4 230 12; from 4 230 15 to 4 230 27;
from 4 230 60 to 4 230 72; from 4 230 75 to 4 230 87;
from 4 231 20 to 4 231 32; from 4 231 35 to 4 231 47;
from 4 231 50 to 4 231 62; from 4 231 65 to 4 231 77;
4 231 80; 4 231 81;


CONTENT **Page**

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)	3P	4P	3P	4P
16	4 230 00	4 230 15	4 230 60	4 230 75
20	4 230 01	4 230 16	4 230 61	4 230 76
25	4 230 02	4 230 17	4 230 62	4 230 77
32	4 230 03	4 230 18	4 230 63	4 230 78
40	4 230 04	4 230 19	4 230 19	4 230 19
50	4 230 05	4 230 20	4 230 65	4 230 80
63	4 230 06	4 230 21	4 230 66	4 230 81
80	4 230 07	4 230 22	4 230 67	4 230 82
100	4 230 08	4 230 23	4 230 68	4 230 83
125	4 230 09	4 230 24	4 230 69	4 230 84
160	4 230 10	4 230 25	4 230 70	4 230 85
200	4 230 11	4 230 26	4 230 71	4 230 86
250	4 230 12	4 230 27	4 230 72	4 230 87

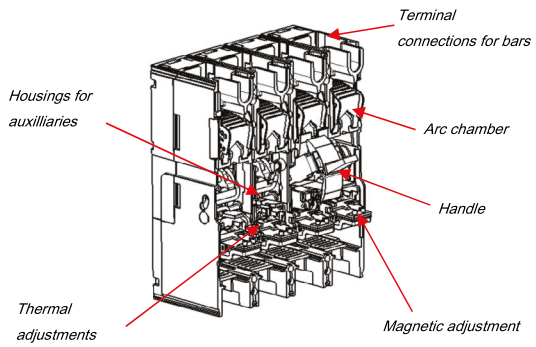
Icu	70 kA		100 kA	
In (A)	3P	4P	3P	4P
16	4 231 20	4 231 35	4 231 50	4 231 65
20	4 231 21	4 231 36	4 231 51	4 231 66
25	4 231 22	4 231 37	4 231 52	4 231 67
32	4 231 23	4 231 38	4 231 53	4 231 68
40	4 231 24	4 231 39	4 231 54	4 231 69
50	4 231 25	4 231 40	4 231 55	4 231 70
63	4 231 26	4 231 41	4 231 56	4 231 71
80	4 231 27	4 231 42	4 231 57	4 231 72
100	4 231 28	4 231 43	4 231 58	4 231 73
125	4 231 29	4 231 44	4 231 59	4 231 74
160	4 231 30	4 231 45	4 231 60	4 231 75
200	4 231 31	4 231 46	4 231 61	4 231 76
250	4 231 32	4 231 47	4 231 62	4 231 77

2.2 DPX³-I 250 HP trip-free switch

In (A)	3P	4P
250	4 231 80	4 231 81

2.3 Composition

DPX³ 250 HP thermal magnetic circuit breakers 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

Circuit Breaker DPX³ 250 HP	
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	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 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
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)	400 A up to In=40A (not adjustable); 6,5-10-13 x In for In=50A; 5-7,5-10 x In up to =250A;
Neutral protection for 4P (%Ith of phase pole)	100
Reverse feed	Yes
DPX³-I 250 HP trip-free switches	
Uninterrupted nominal current Ie (A)	250 A
Short-time resistive current Icw(kA) for 1s	3 kA
Rated short-circuit making capacity Icm (kA)	4.3 kA
Rated insulation voltage Ui (V AC)	800 Ui
Maximum rated operating voltage Ue (V AC)	690 (In=160 A - 200 A - 250 A) - 415 (In=225 A)
Rated impulse withstand voltage Uimp (kV)	8 kV
Utilisation category	AC23A (In ≤ 225A) - AC22A (In=250A)
Suitable for isolation	Yes
Rated frequency	50 Hz to 60 Hz
Operating temperature (°C)	-25 °C to 70 °C
Electrical endurance at In (cycles)	6000
Electrical endurance at 0.5 In (cycles)	6000
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 switch category (for use in DC)

	1P *	2P in series*		3P in series*		4P in series*
In (A)	**60 V**	**110 V**	**250 V**	**250 V**	**500 V**	**750 V**
250	DC23					

See page 8 for Connection modality of the DC trip-free switches.

Breaking capacity (3P and 4P)

Breaking capacity (kA) & Ics					
	Ue	Icu			
		36 kA	50 kA	70 kA	100 kA
IEC 60947-2	220/240 V~	70	90	100	150
	380/415 V~	36	50	70	100
	440/460 V~	25	30	40	50
	480/500 V~	16	18	30	35
	550 V~	10	12	22	25
	690 V~	7	8	20	12
	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)

		1P *	2P in series *			3P in series *		
Icu (kA)	**In (A)**	**60 V**	**60 V**	**110 V**	**250 V**	**110 V**	**250 V**	**500 V**
36	**16 ÷ 250**	35	36	35	10	36	16	10
50			50			50	20	

See page 8 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 (In) at 40 °C / 50 °C

	Thermal (Ir)		Magnetic (Isd)	
In (A)	**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. TECHNICAL CHARACTERISTICS *(continued)*

■ 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

■ 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.

Icc (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 In (W)

	Circuit breaker												
In (A)	**16**	**20**	**25**	**32**	**40**	**50**	**63**	**80**	**100**	**125**	**160**	**200**	**250**
Lugs	2.73	4.08	4.88	4.56	7.01	5.26	8.63	6.59	7.10	7.50	10.78	13.60	19.38
Cage terminals	2.74	4.09	4.89	4.59	7.05	5.32	8.73	6.76	7.36	7.91	11.45	14.65	21.02
Spreaders	2.4	4.09	4.90	4.59	7.06	5.34	8.75	6.79	7.41	7.98	11.57	14.84	21.31
Rear terminals	2.74	4.09	4.90	4.59	7.06	5.34	8.75	6.79	7.41	7.98	11.57	14.84	21.31
Plug-in version	2.81	4.21	5.08	4.89	7.52	6.06	9.90	8.64	10.30	12.50	18.97	26.40	39.38

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**
Lugs	13.56
Cage terminals	14.72
Spreaders	14.92
Rear terminals	14.92
Plug-in version	33.56

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.

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**
16	22	23	22	21	21	20	18	17	16	16	14	14
20	29	29	27	26	26	24	23	21	20	20	18	17
25	37	36	34	33	32	30	29	27	25	25	23	21
32	47	46	44	42	41	39	37	34	32	32	29	27
40	59	57	54	53	52	49	46	43	40	40	36	34
50	74	72	68	66	64	61	57	54	50	50	45	43
63	93	90	86	83	81	77	72	68	63	63	57	54
80	118	114	109	106	103	98	92	86	80	80	72	68
100	147	143	136	132	129	122	115	107	100	100	90	85
125	184	179	170	166	161	152	143	134	125	125	113	106
160	235	229	218	212	206	195	184	172	160	160	144	136
200	294	286	272	265	258	244	230	215	200	200	180	170
250	368	358	340	331	332	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**	
	Imax (A)	**Ir / In**	**Imax (A)**	**Ir / In**	**Imax (A)**	**Ir / In**	**Imax (A)**	**Ir / In**	**Imax (A)**	**Ir / In**
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										
Plug-in/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 F

Altitude

Altitude derating for DPX³ and DPX³-I

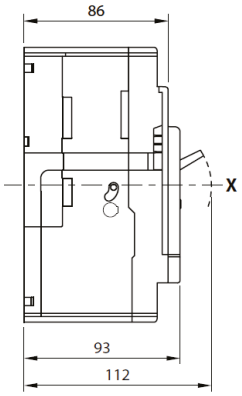
Altitude (m)	**2000**	**3000**	**4000**	**5000**
Ue (V)	690	590	520	460
In (A) (Ta = 40°C/50°C)	1 x In	0.98 x In	0.93 x In	0.9 x In

5. DIMENSIONS AND WEIGHT

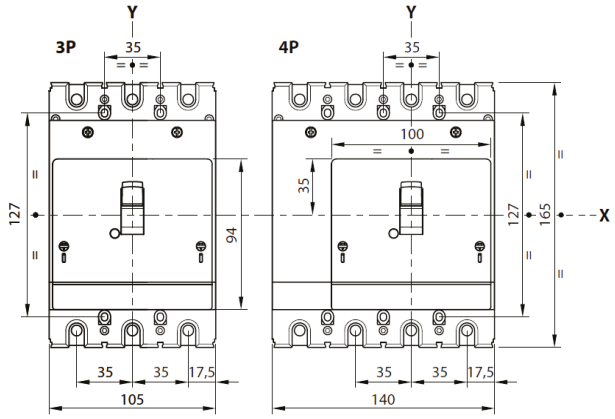
5.1 Dimensions (mm)

3P (W x H x D): 105 x 165 x 86
4P (W x H x D): 140 x 165 x 86

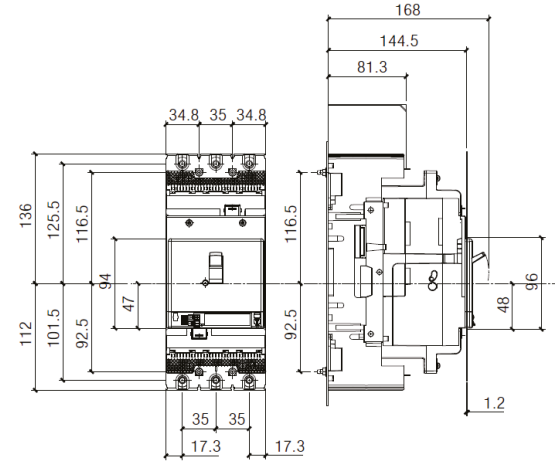
Lateral view



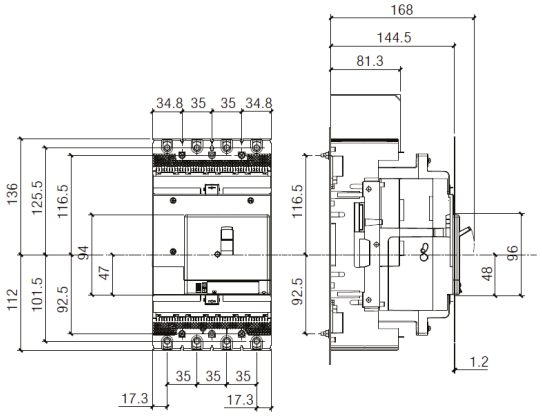
Frontal view (3P and 4P)



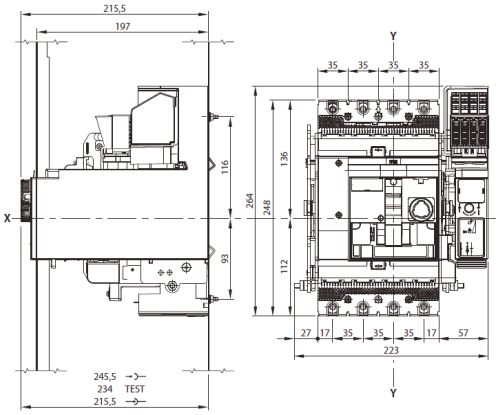
Plug-in version (3P)



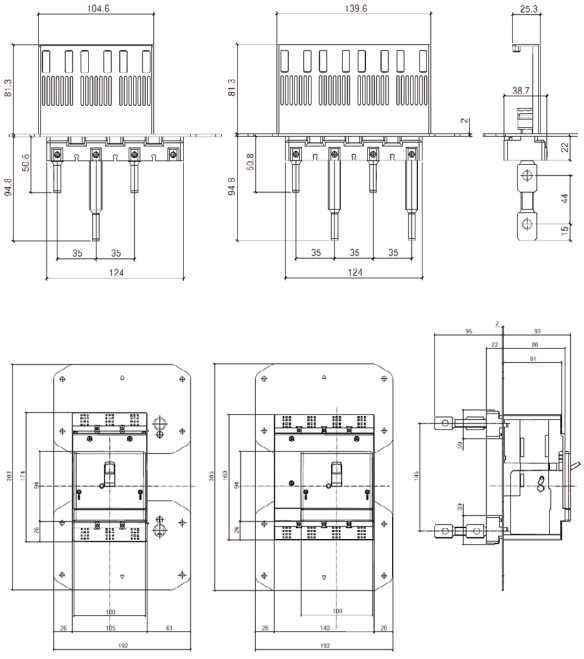
Plug-in version (4P)



Draw-out version



Rear terminals

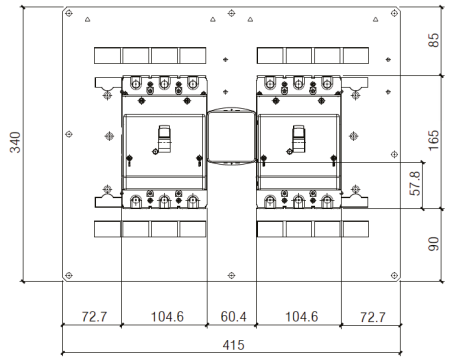


5. DIMENSIONS AND WEIGHT *(continued)*

■ 5.1 Dimensions (mm) *(continued)*

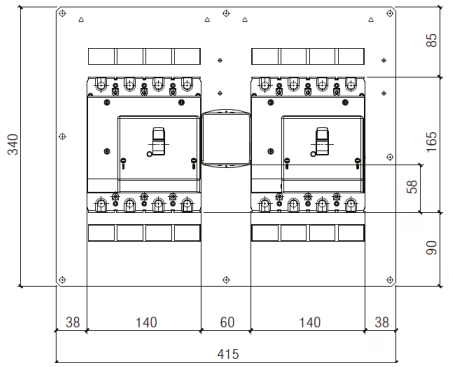
With interlock (3P)

For rear plate interlock dimension, see relative instruction sheet.

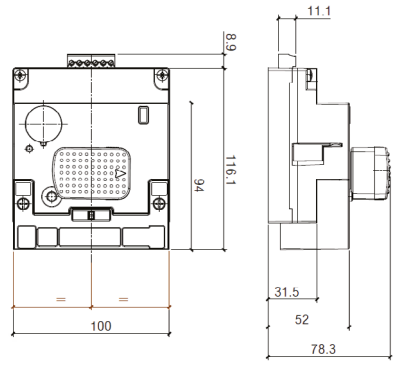


With interlock (4P)

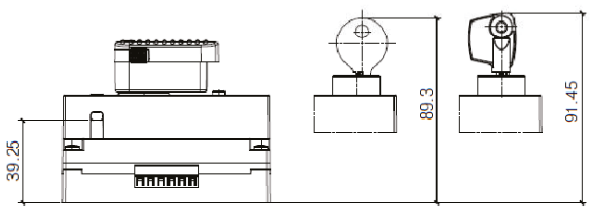
For rear plate interlock dimension, see relative instruction sheet.

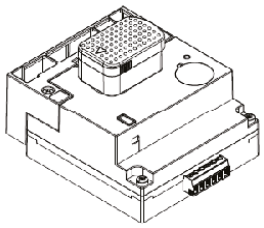


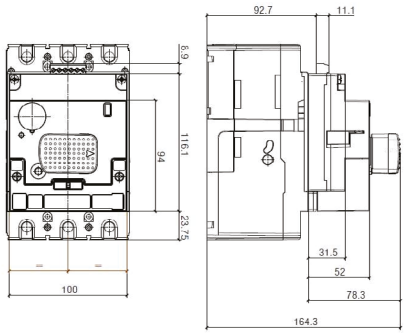
With direct rotary handle

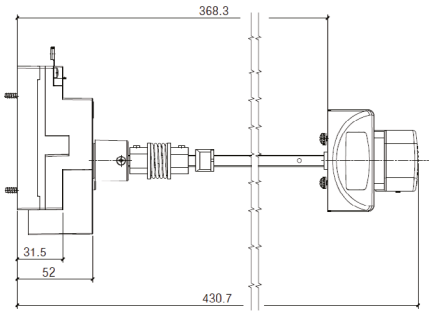


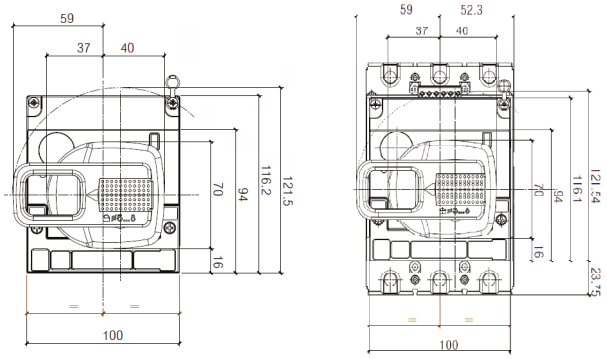
With vary depth rotary handle

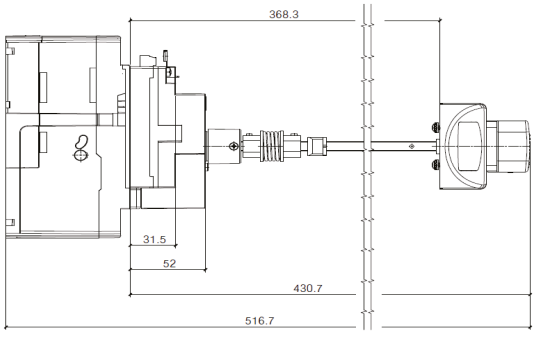








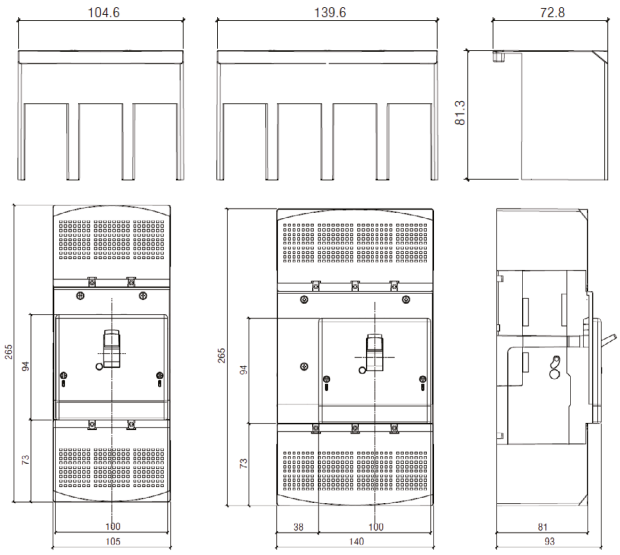




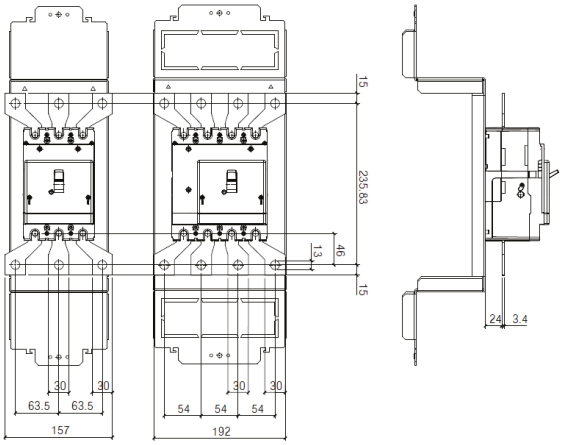
5. DIMENSIONS AND WEIGHT *(continued)*

5.1 Dimensions (mm) *(continued)*

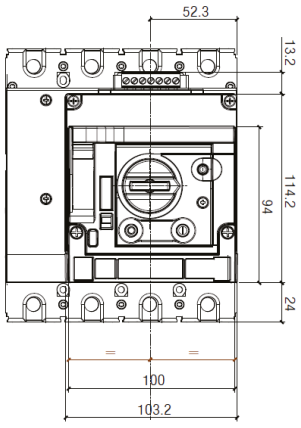
With sealable terminal shields

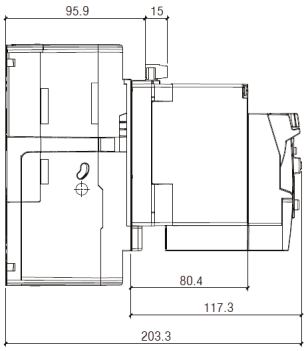


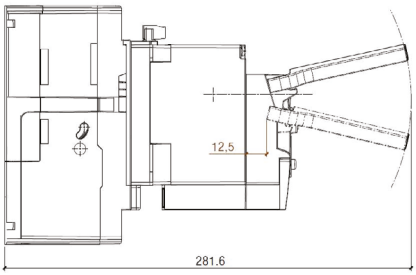
With spreaders

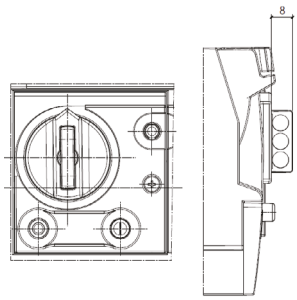


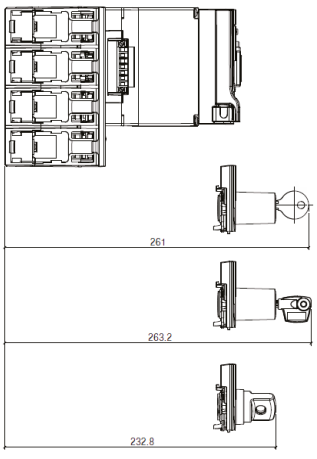
With motor operator











5. DIMENSIONS AND WEIGHT *(continued)*

■ 5.2 Weights

Weights (kg)		
Configuration	**3P**	**4P**
Circuit breaker	1.5	1.9
Plug-in*	3.5	4.5
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

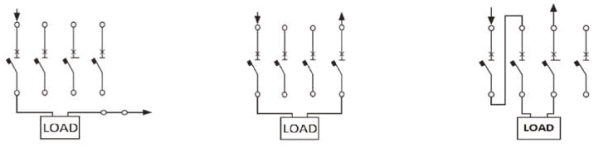
6. CONNECTIONS

Possible way of assembly on plate:
- vertical
- horizontal

To unsure the circuit breaker's connection, it is possible to use:
- busbars;
- cables lugs;
- spreaders;
- cage terminals.

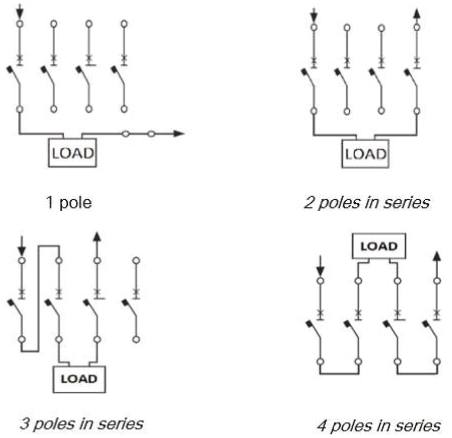
For detailed mounting procedures, see instruction sheet.

DC connections modality for breakers



1 pole — *2 poles in series* — *3 poles in series*

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 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

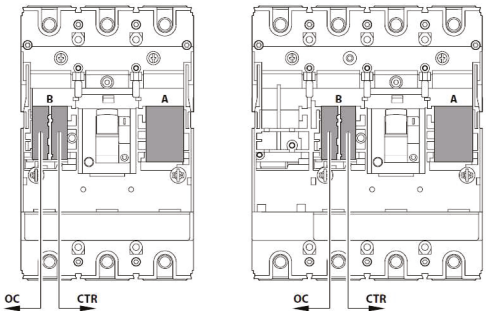
■ 7.2 Auxiliary contacts

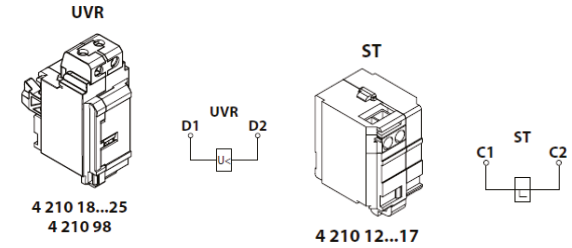
Auxilary contacts are used to show the state of the contacts or opening of the DPX³/DPX³ -I and
DPX³ HP/DPX³-I HP on a fault, using :
- Auxiliary contact (standard) OC
- Fault signal CTR

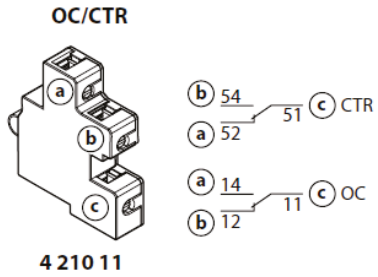
Auxiliary contacts assembly		
Voltage (Uc)	**AC/DC**	**Current (A)**
24	DC	5
48	DC	1.7
110	DC	0.5
110	AC	4
230	DC	0.25
230 ÷ 250	AC	3

7. EQUIPMENTS AND ACCESSORIES *(continued)*

Wiring diagrams to get to the auxiliary functionality:







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.

■ 7.3 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 rotary handle, also compatible with DPX³ 125/160HP	Cat.No 4 238 05

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~/⎓	Cat.No 4 238 40
- 48 V~/⎓	Cat.No 4 238 41
- 110 V~	Cat.No 4 238 42
- 230 V~	Cat.No 4 238 43

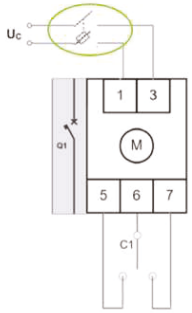
Technical parameters:

Voltage	Property	Alternative current		Direct current	
		Opening	Closing	Opening	Closing
24 V~/⎓	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~/⎓	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
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.

7. EQUIPMENTS AND ACCESSORIES *(continued)*

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 2 (for 3P) Cat.No 4 238 23
- Set of 3 (for 4P) Cat.No 4 238 24

Insulated shields
- Set of 2 (for 3P) Cat.No 4 238 34
- Set of 3 (for 4P) Cat.No 4 238 35

Cat.No 4 238 34/35 are also compatible with DPX³ 125/160 HP.

■ 7.7 Connection accessories

Cage terminals
- Set of 3 terminals for 150 mm² max (rigid) or 120 mm² max (flexible) Cu/Al cables Cat.No 4 238 30
- 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
Cage terminals Cat.Nos 4 238 30/ 4 238 31	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 IEC60947-1 (ed.6 2020/04) and IEC60947-2 (ed.5.1 2019/07)

Dimensions limits of cable for cage terminals				
Cage terminals Cat.Nos 4 238 30 4 238 31	Min cross section (mm²)		Max cross section (mm²)	
	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 outcoming)
- Set of 3 (for 3P) Cat.No 6 250 14
- Set of 4 (for 4P) Cat.No 6 250 18

Rear terminals (incoming or outcoming)
- Set of 3 (for 3P) Cat.No 4 238 21
- 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 3P Cat.No 4 238 50
- Plug-in/draw-out base for 4P Cat.No 4 238 51
- Plug-in/draw-out mobile part kit for 3P Cat.No 4 238 52
- 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 3P Cat.No 4 238 60
- Transformation kit for 4P Cat.No 4 238 61

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) (if motor operator or rotary handle is not fitted) Cat.No 4 238 55
- 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.

7. EQUIPMENTS AND ACCESSORIES *(continued)*

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

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

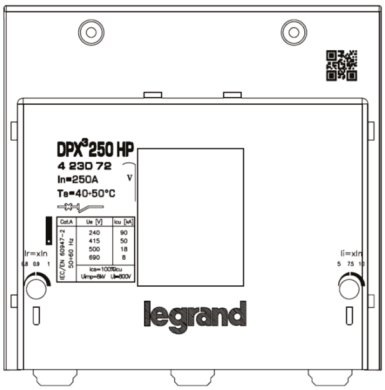
Interlock plate for DPX³ 250 HP — Cat.No 4 238 26

Rear interlock mechanism for DPX³ 250 HP plug-in and/or draw-out version — Cat.No 4 238 29
When using a rear interlocking mechanism, use a maximum of 1 set of contact connectors Cat.No 0 098 19.

8. MARKING

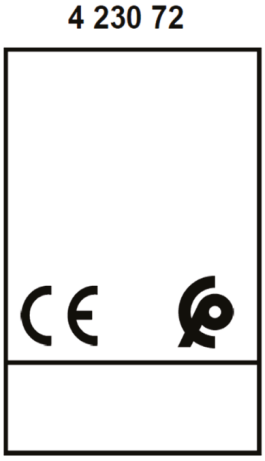
Product (both circuit breakers and trip-free switches) are provided with labelling in full conformity to the referred standard and directives requirements by laser or sticker labels (for illustrative purposes only):

Product laser label on front
- Manufacturer responsible
- Denomination, type product, code
- Standard conformity
- Standard characteristics declared
- Coloured identification of Icu at 415 V

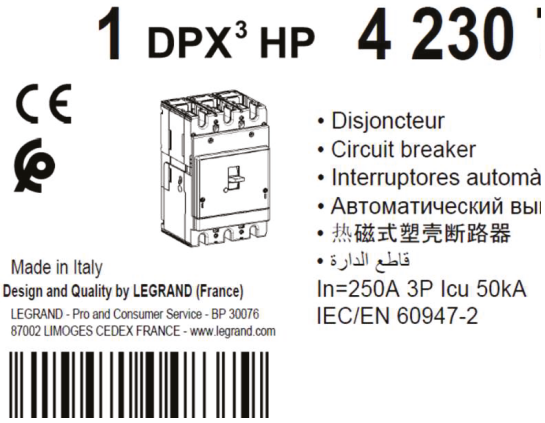


Product sticker label on side
- Manufacturer responsible
- Denomination and type product
- Mark/Licence (if any)
- Directive requirements
- Bar code identification product
- Manufacturing Country

Mark sticker label on side
- Product code
- Mark/Licence (if any)
- Country deviation, if any



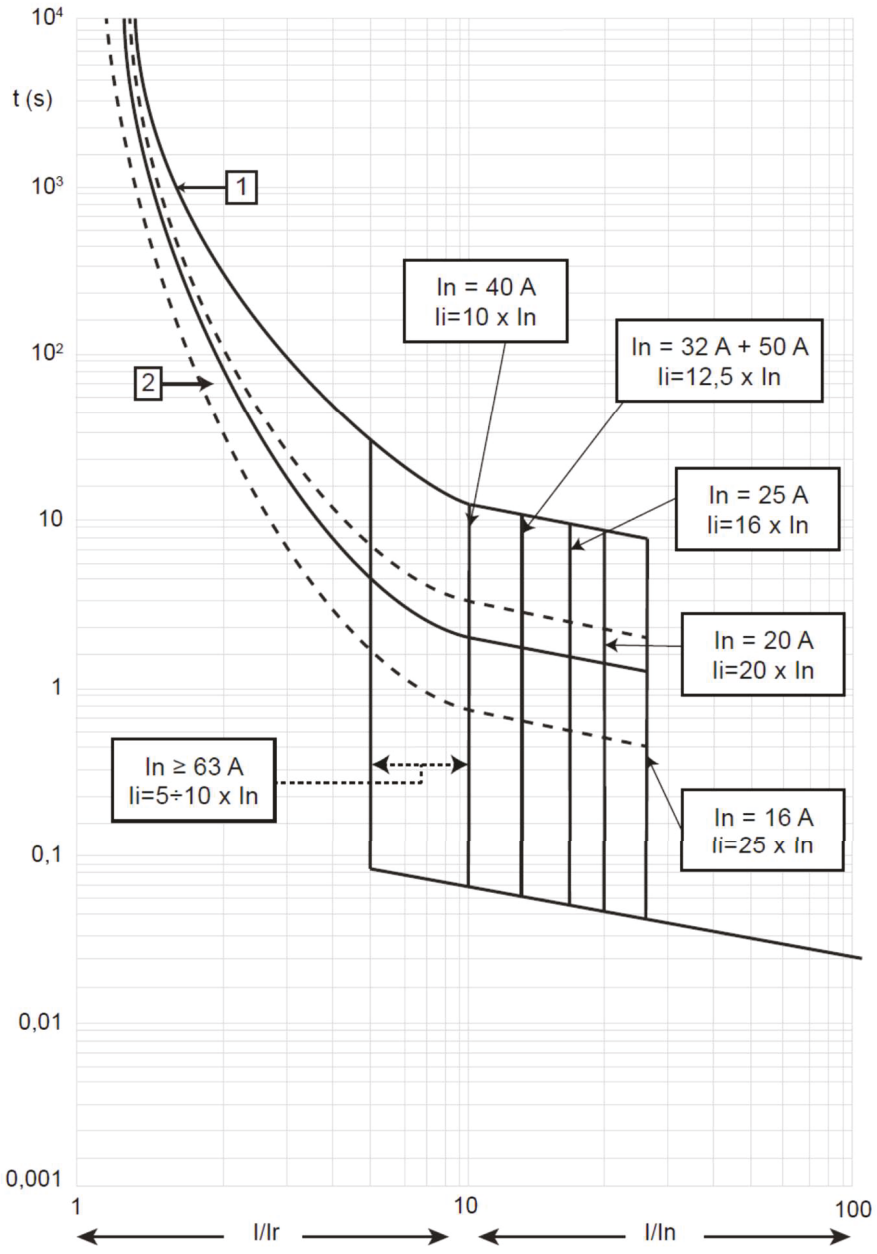
Packaging sticker label
- Manufacturer responsible
- Denomination and type product
- Standard conformity
- Mark/Licence (if any)
- Directive requirements
- Bar code identification product



9. CURVES

■ 9.1 Thermal magnetic tripping curve

Update: 11/06/2019



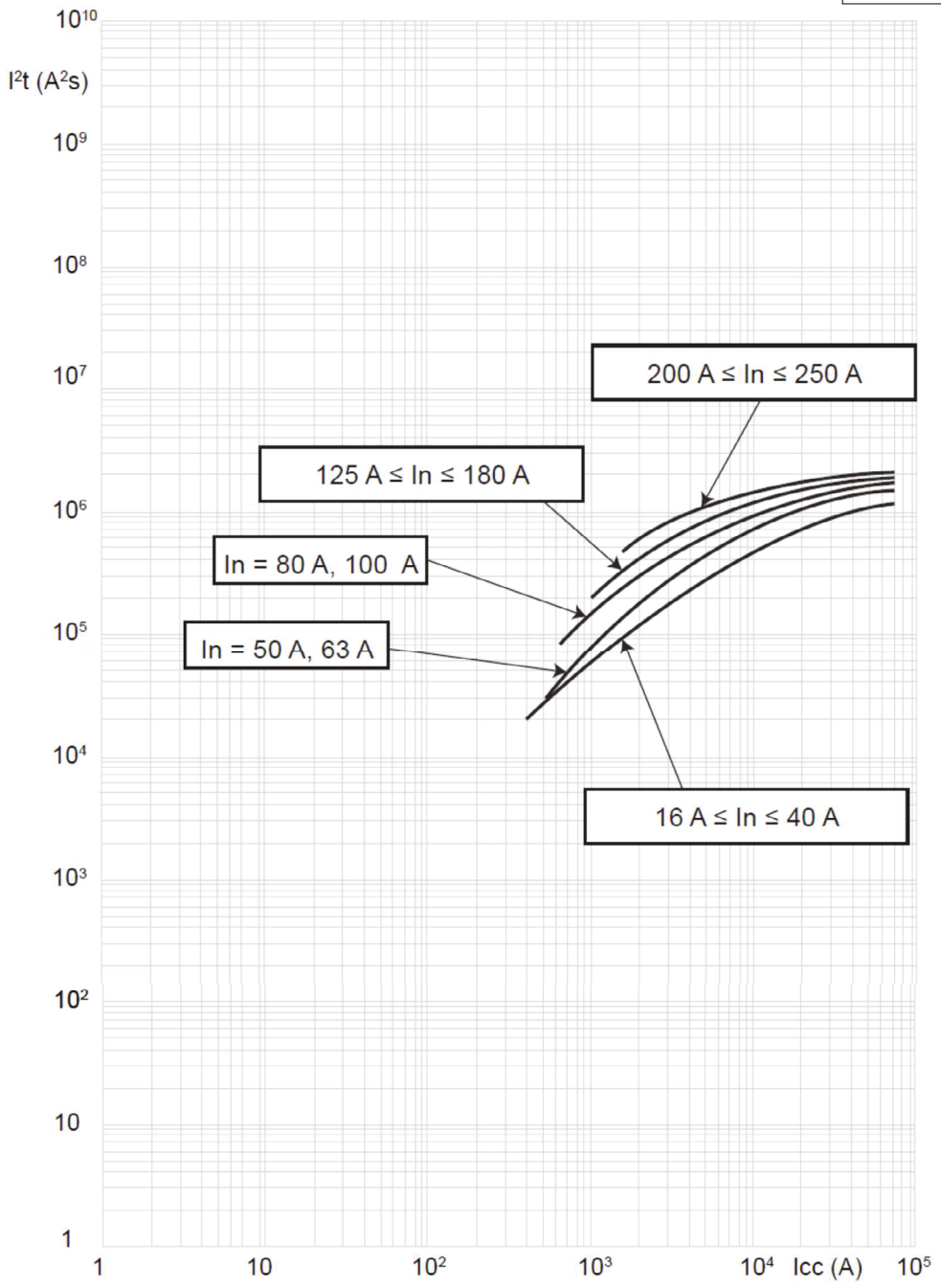
Icu = 36-50-70-100 kA Imax = 250 A 3P-4P Ue = 415 V~ (IEC/EN 60947-2)

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 (breaking capacity Icu ≤ 50 kA)

Update: 11/06/2019



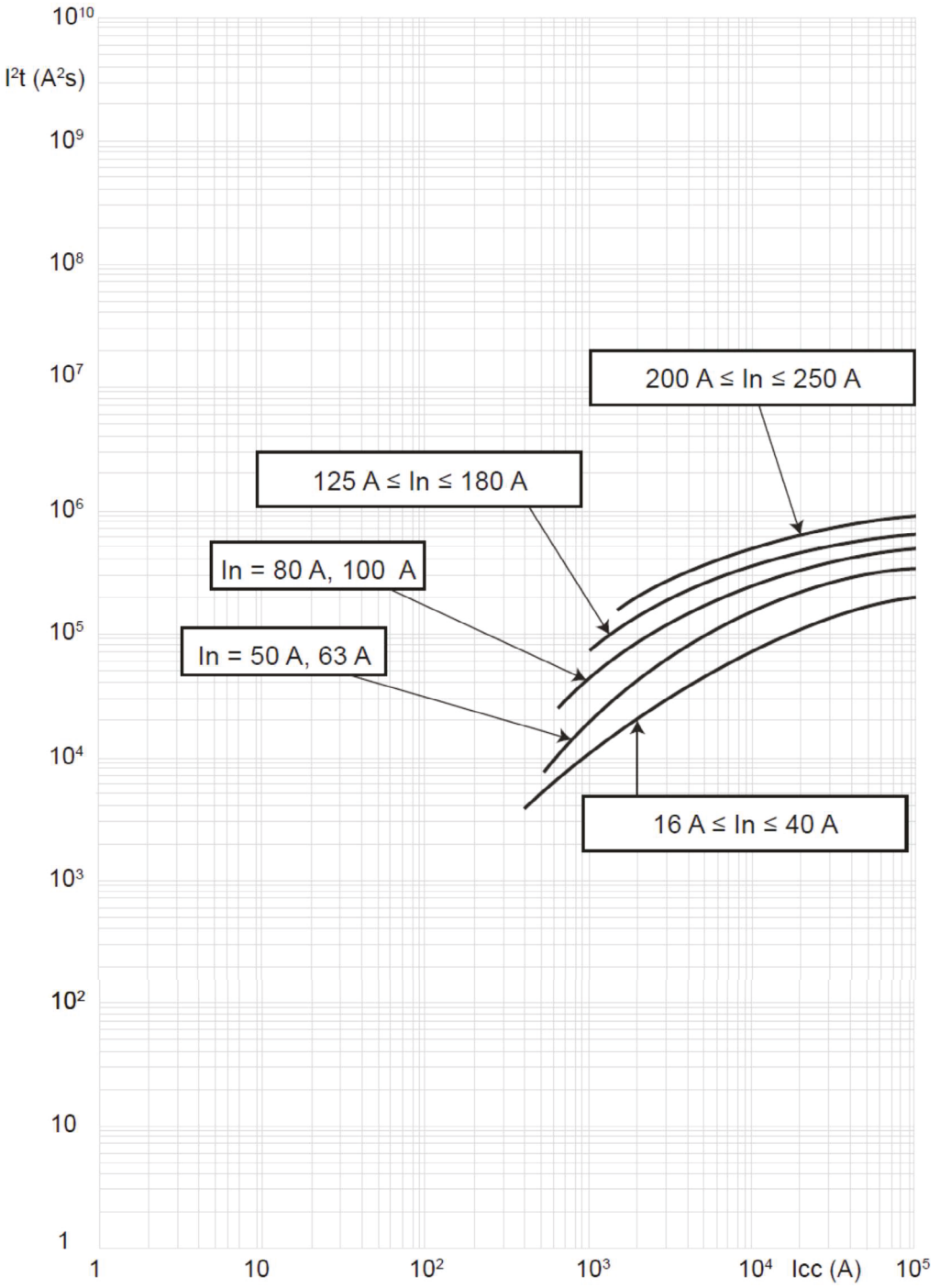
Icu = 36-50 kA | Imax = 250 A | 3P-4P | Ue = 415 V~ (IEC/EN 60947-2)

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

9. CURVES *(continued)*

■ 9.3 Pass-through specific energy characteristic curve (breaking capacity Icu > 50 kA)

Update: 30/08/2019



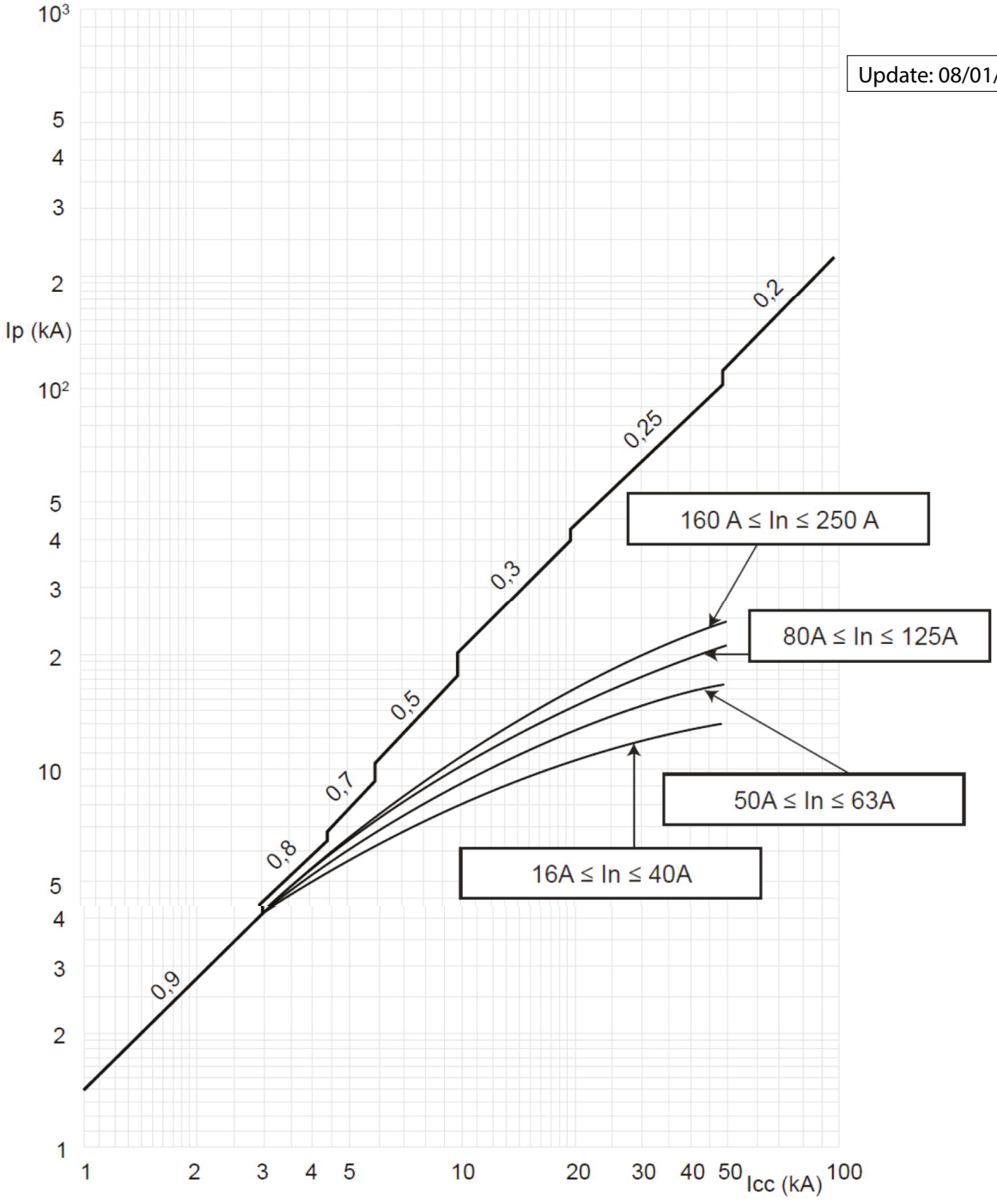
Icu = 70-100 kA | Imax = 250 A | 3P-4P | Ue = 415Vac (IEC/EN 60947-2)

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

9. CURVES *(continued)*

■ 9.3.1 Cut-off peak current characteristic curve (breaking capacity Icu ≤ 50 kA)

Update: 08/01/2021

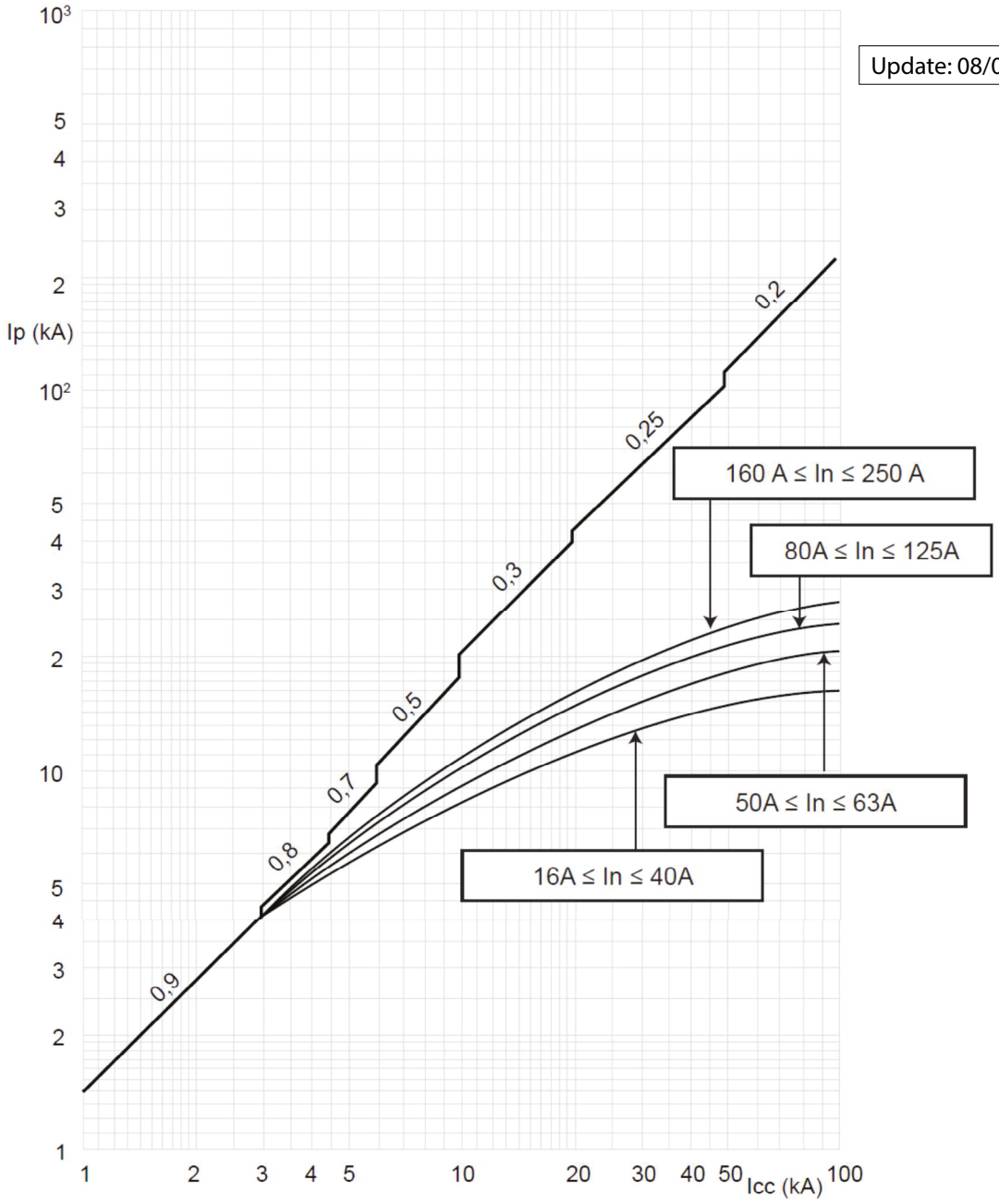


Icu = 36-50 kA | Imax = 250 A | 3P-4P | Ue = 415 V~ (IEC/EN 60947-2)

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

9. CURVES *(continued)*

9.3.2 Cut-off peak current characteristic curve (breaking capacity Icu > 50 kA)



Icu = 70-100 kA | Imax = 250 A | 3P-4P | Ue = 415 V~ (IEC/EN 60947-2)

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

10. STANDARDS AND REGULATIONS

DPX³ 250 HP thermal magnetic range of product concerning circuit-breakers exceed compliance with:
- IEC/EN standard 60947-2.
- 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 Di-rective, 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 Regula-tion (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 sub-stance 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 envi-ronmental 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.

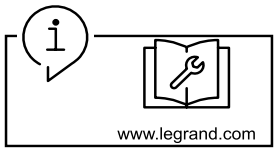
For specific information, please contact BTicino support.

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 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.