

Reference(s) :

 from 4 236 00 to 4 236 19; from 4 236 40 to 4 236 59;  
 from 4 236 80 to 4 236 99; from 4 237 00 to 4 237 19;  
 4 231 84; 4 231 85;

# DPX<sup>3</sup> 125 HP thermal magnetic circuit breakers

## DPX<sup>3</sup>-I 125 HP switch disconnectors



### CONTENTS

	PAGES
1. USE	1
2. RANGE	1
3. DIMENSIONS AND WEIGHTS	1
4. OVERVIEW	4
5. ELECTRICAL CONNECTIONS	4
6. ELECTRICAL AND MECHANICAL CHARACTERISTICS	6
7. CONFORMITY	8
8. EQUIPMENTS AND ACCESSORIES	9
9. CURVES	11

### 1. USE

DPX<sup>3</sup> 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.

DPX<sup>3</sup> 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

Circuit breakers

I <sub>n</sub> (A)	DPX <sup>3</sup> 125 HP							
	36 kA		50 kA		70 kA		100 kA	
	3P	4P	3P	4P	3P	4P	3P	4P
16	423600	423610	423640	423650	423680	423690	423700	423710
20	423601	423611	423641	423651	423681	423691	423701	423711
25	423602	423612	423642	423652	423682	423692	423702	423712
32	423603	423613	423643	423653	423683	423693	423703	423713
40	423604	423614	423644	423654	423684	423694	423704	423714
50	423605	423615	423645	423655	423685	423695	423705	423715
63	423606	423616	423646	423656	423686	423696	423706	423716
80	423607	423617	423647	423657	423687	423697	423707	423717
100	423608	423618	423648	423658	423688	423698	423708	423718
125	423609	423619	423649	423659	423689	423699	423709	423719

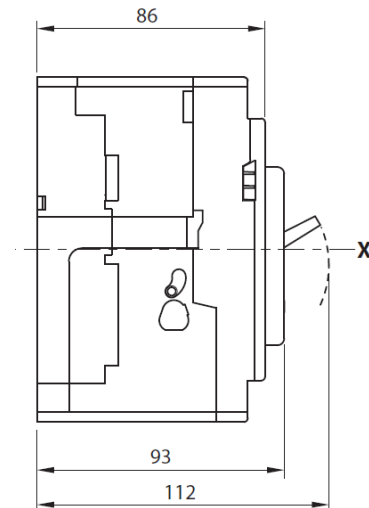
Switch disconnectors

DPX <sup>3</sup> -I 125 HP		
I <sub>n</sub> (A)	3P	4P
125	423184	423185

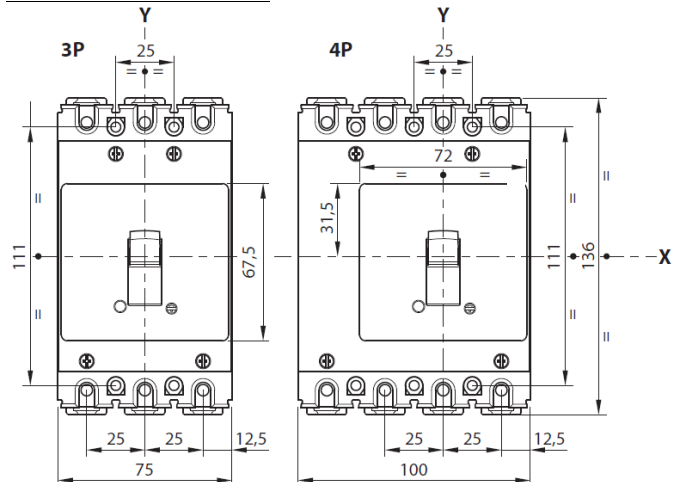
### 3. DIMENSIONS AND WEIGHTS

#### 3.1 Dimensions

Lateral view



Frontal view (3 and 4 poles)



# DPX<sup>3</sup> 125 HP thermal magnetic circuit breakers

## DPX<sup>3</sup>-I 125 HP switch disconnectors

Reference(s) :

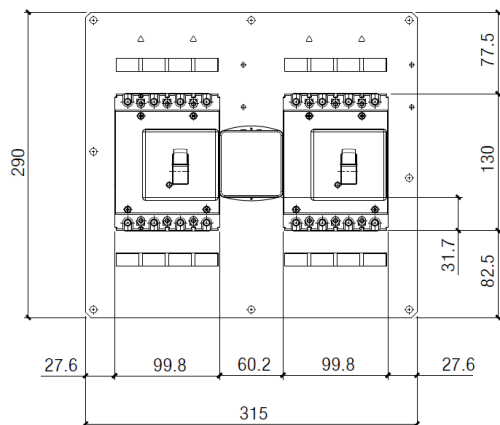
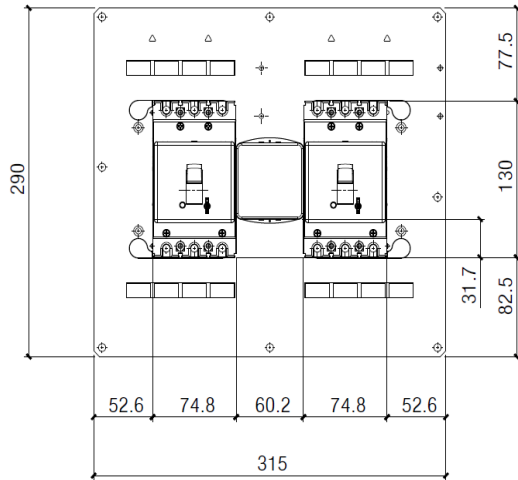
from 4 236 00 to 4 236 19; from 4 236 40 to 4 236 59;

from 4 236 80 to 4 236 99; from 4 237 00 to 4 237 19;

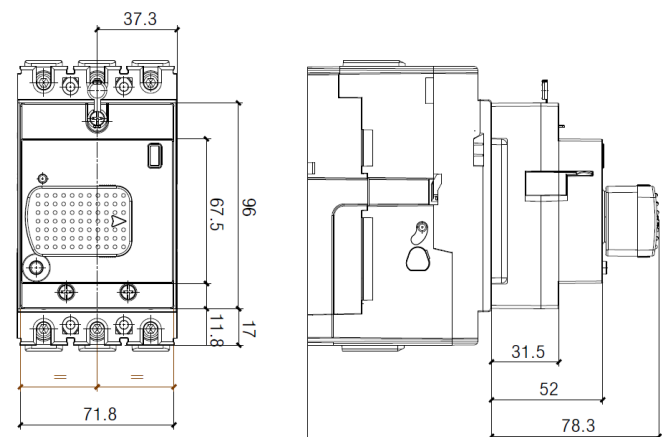
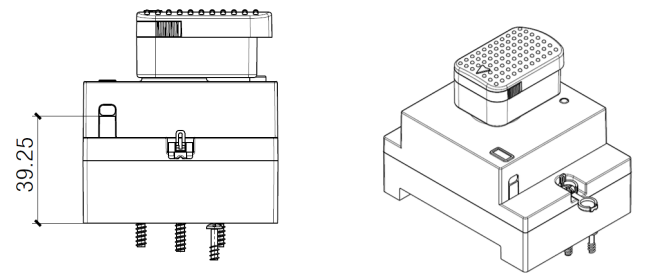
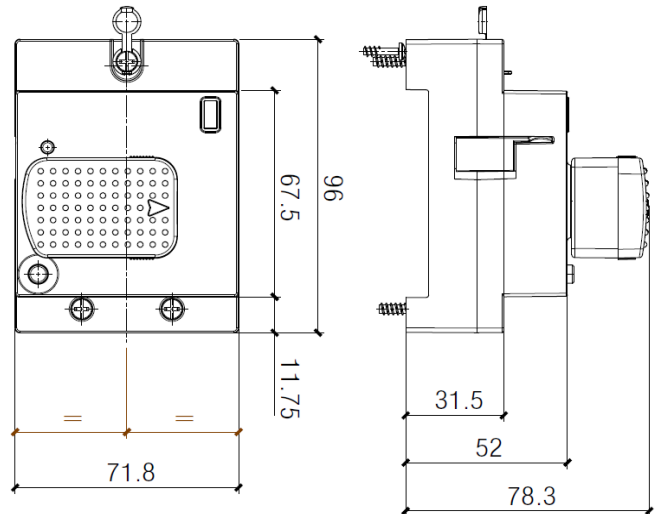
4 231 84; 4 231 85;

### Interlock

(for rear plate interlock dimension, see relative instruction sheet)



### Direct rotary handle



# DPX<sup>3</sup> 125 HP thermal magnetic circuit breakers

## DPX<sup>3</sup>-I 125 HP switch disconnectors

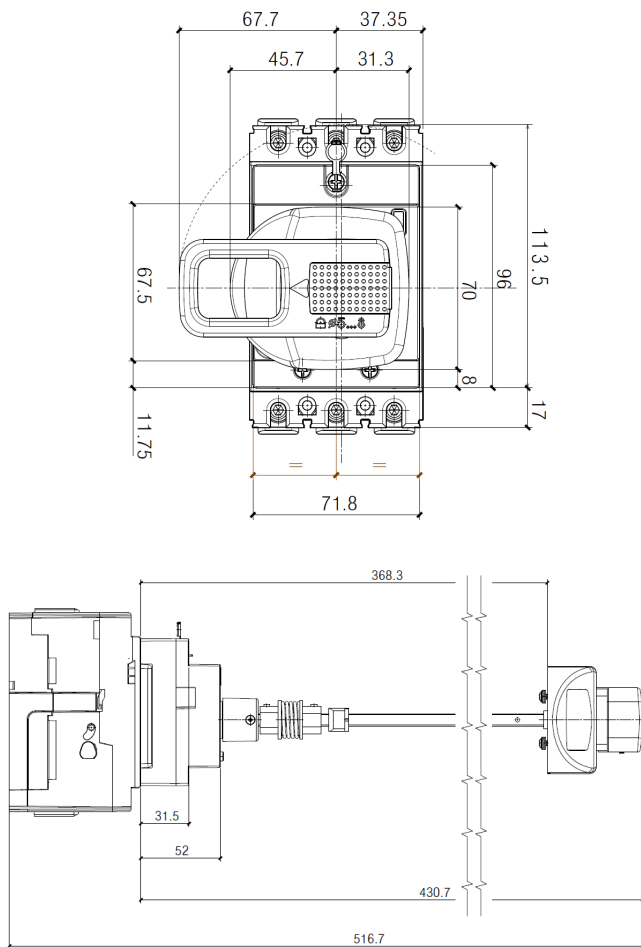
Reference(s) :

from 4 236 00 to 4 236 19; from 4 236 40 to 4 236 59;

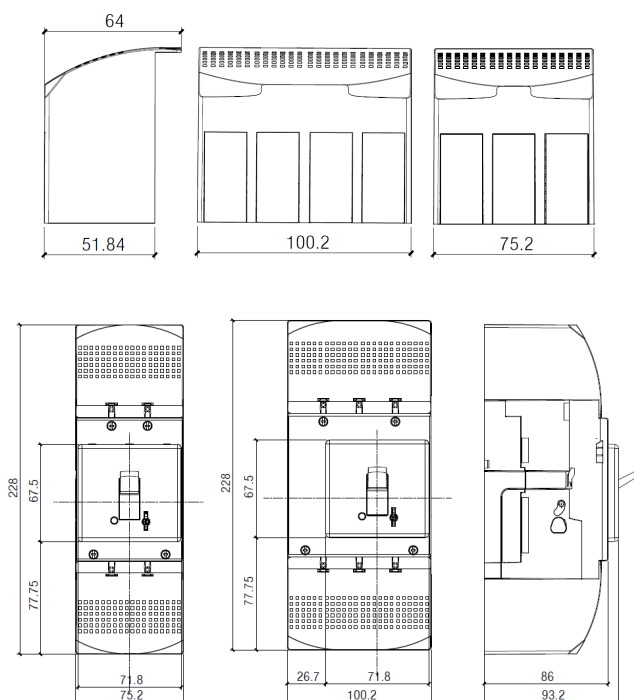
from 4 236 80 to 4 236 99; from 4 237 00 to 4 237 19;

4 231 84; 4 231 85;

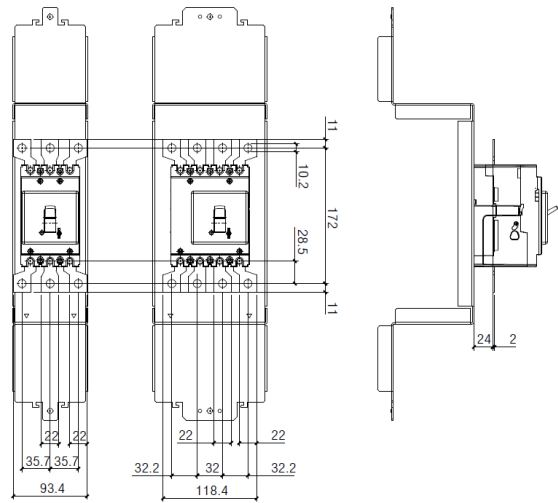
### Vari-depth rotary handle



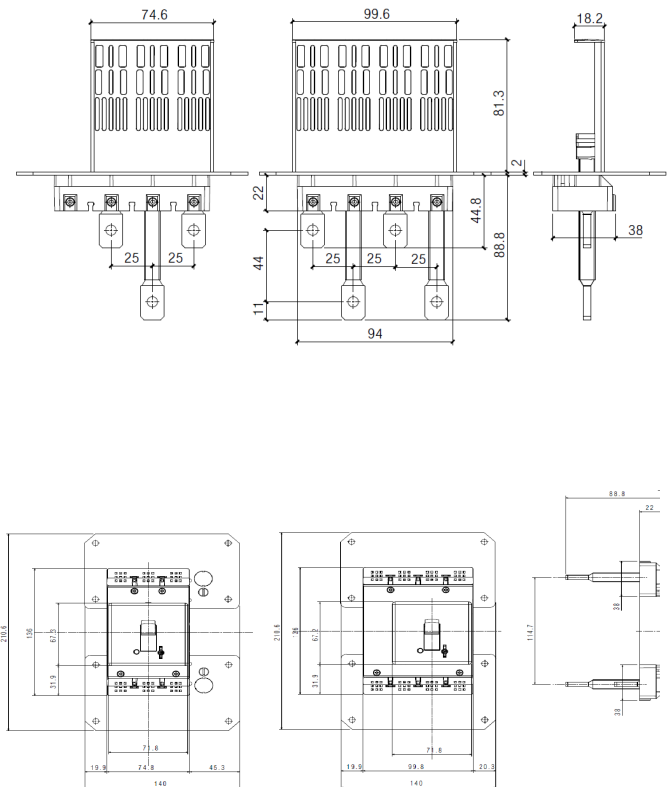
### Sealable terminal shields



### Spreaders



### Rear terminals



# DPX<sup>3</sup> 125 HP thermal magnetic circuit breakers

## DPX<sup>3</sup>-I 125 HP switch disconnectors

Reference(s) :

from 4 236 00 to 4 236 19; from 4 236 40 to 4 236 59;  
 from 4 236 80 to 4 236 99; from 4 237 00 to 4 237 19;  
 4 231 84; 4 231 85;

### 3.2 Weights

Configuration	Weights (Kg)	
	3P	4P
Circuit breaker/switch disconnector	0.95	1.2
Direct rotary handle*	0.18	
Vari depth rotary handle*	0.55	
Interlock*	0.35	
Spreader*	0.135	0.175

\* to add to device weight

## 4. OVERVIEW

### 4.1 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)

## 5. ELECTRICAL CONNECTIONS

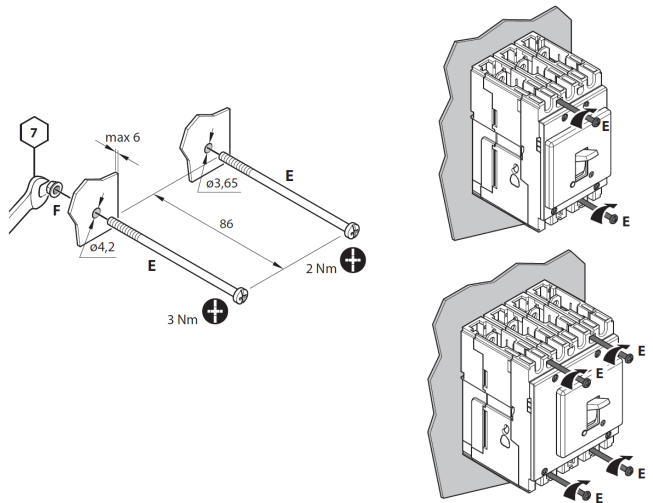
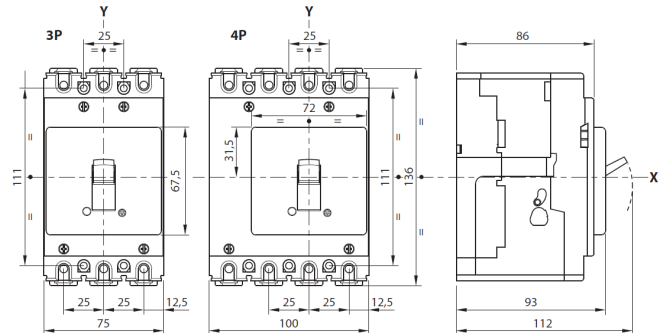
### 5.1 Mounting possibilities

On plate:

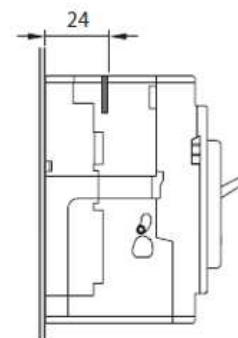
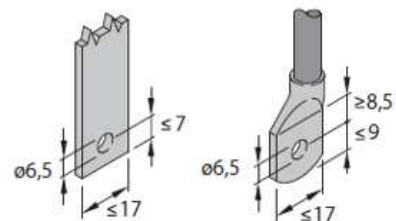
- Vertical
- Horizontal
- Supply inverter type

### 5.2 Mounting

(see instruction sheet for detailed mounting procedures)



Busbars/cable lugs:



# DPX<sup>3</sup> 125 HP thermal magnetic circuit breakers

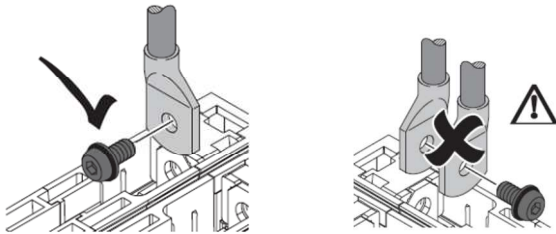
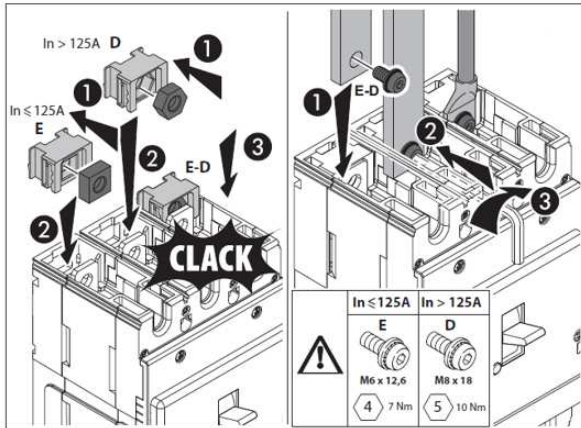
## DPX<sup>3</sup>-I 125 HP switch disconnectors

Reference(s) :

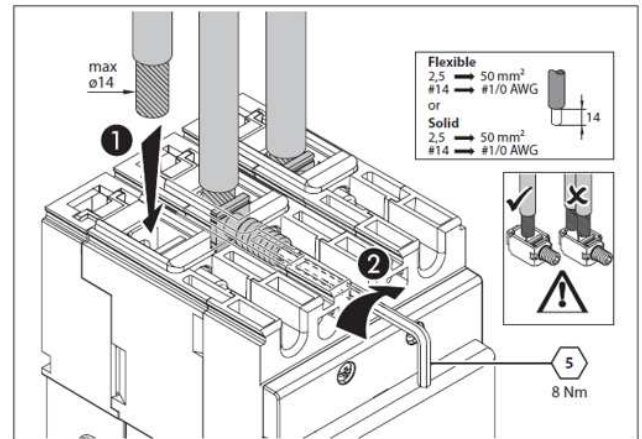
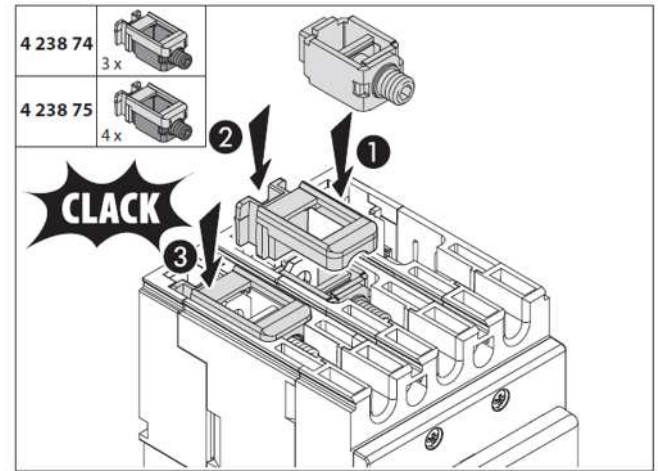
from 4 236 00 to 4 236 19; from 4 236 40 to 4 236 59;

from 4 236 80 to 4 236 99; from 4 237 00 to 4 237 19;

4 231 84; 4 231 85;



### Cables:



# DPX<sup>3</sup> 125 HP thermal magnetic circuit breakers

## DPX<sup>3</sup>-I 125 HP switch disconnectors

Reference(s) :

from 4 236 00 to 4 236 19; from 4 236 40 to 4 236 59;  
from 4 236 80 to 4 236 99; from 4 237 00 to 4 237 19;  
4 231 84; 4 231 85;

### 6. ELECTRICAL AND MECHANICAL CHARACTERISTICS

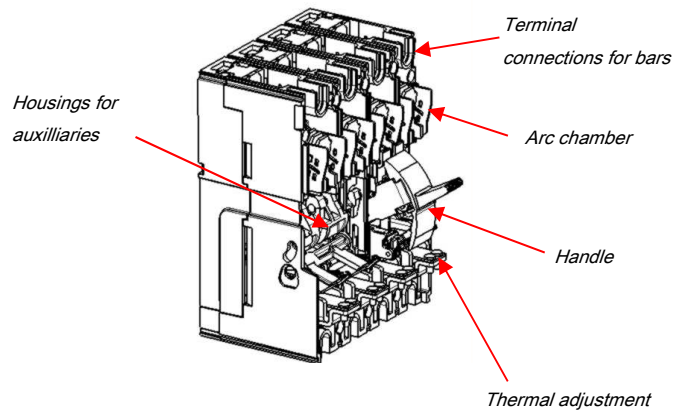
Circuit breaker

Circuit Breaker	DPX <sup>3</sup> 125 HP F/N/H/L (36kA, 50kA, 70kA, 100kA)
Rated current (A)	16-20-25-32-40-50-63-80-100-125
Poles	3 - 4
Pole pitch (mm)	25
Rated insulation voltage (50/60Hz) U <sub>i</sub> (V)	800
Rated operating voltage (50/60Hz) U <sub>o</sub> (V)	690
Rated impulse withstand current U <sub>imp</sub> (kV)	8
Rated frequency (Hz)	50 - 60
Reference ambient temperature(°C)	40 - 50
Operating temperature (°C)	-25 + 70
Mechanical endurance (cycles)	20000
Electrical endurance at I <sub>n</sub> (cycles)	8000
Utilization category	A
Suitable for isolation	Yes
Type of protection	Thermal-magnetic
Thermal adjustment I <sub>t</sub>	0,8 - 0,9 - 1 x I <sub>n</sub>
Magnetic adjustment I <sub>t</sub> (A)	400 A up to I <sub>n</sub> =40A (not adjustable) 10 x I <sub>n</sub> up to I <sub>n</sub> =125A (not adjustable)
Neutral protection for 4P (%k <sub>h</sub> of phase pole)	100
Dimensions (W x H x D) (mm)	75 x 135 x 86 (3P) 100 x 135 x 86 (4P)

Switch disconnectors

Switch	DPX <sup>3</sup> -I 125 HP
Uninterrupted nominal current I <sub>b</sub> (A)	125
Short-time resistive current I <sub>cs</sub> (kA) for 1s	1.5
Rated short-circuit making capacity I <sub>cm</sub> (kA)	2.5
Rated insulation voltage U <sub>i</sub> (V AC)	800
Maximum rated operating voltage U <sub>o</sub> (V AC)	690
Rated impulse withstand voltage U <sub>imp</sub> (kV)	8
Utilisation category	AC23A
Suitable for isolation	Yes
Nominal frequency (Hz)	50-60
Operating temperature (°C)	-25 + 70
Mechanical endurance (cycles)	20000
Electrical endurance at I <sub>n</sub> (cycles)	8000
Dimensions (W x H x D) (mm)	75 x 135 x 86 (3P) 100 x 135 x 86 (4P)

### 6.1 Main parts constituting the circuit breaker



### 6.2 Breaking capacity (kA)

		Breaking capacity (kA) & I <sub>cs</sub>			
		3P-4P			
IEC 60947-2	U <sub>e</sub> /I <sub>cu</sub> (I <sub>cu</sub> letter)	36kA (F)	50kA (N)	70kA (H)	100kA (L)
		240 V AC	70	90	100
	415 V AC	36	50	70	100
	500 V AC	12	16	20	25
	690V AC	5	6	10	12
	250 V DC	10	10	10	10
	I <sub>cs</sub> (% I <sub>cu</sub> )	100	100	100	100
		Rated making capacity under short circuit I <sub>cm</sub>			
	I <sub>cm</sub> (kA) at 415V	76.5	105	154	220
NEMA AB-1	240 V AC	70	90	100	150
	500 V AC	12	16	20	25
	690 V AC	5	6	10	12

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

I <sub>n</sub> (A)	Phases limit trip current			
	thermal (I <sub>t</sub> )		magnetic (I <sub>t</sub> )	
	0.8 x I <sub>n</sub>	1 x I <sub>n</sub>	min	max
16	13	16	400	400
20	16	20	400	400
25	20	25	400	400
32	26	32	400	400
40	32	40	400	400
50	40	50	500	500
63	51	63	630	630
80	64	80	800	800
100	80	100	1000	1000
125	100	125	1250	1250

### 6.3 Load operations

Force on handle	N
Opening operation	40
Closing operation	40
Restore operation	53

### 6.4 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

# DPX<sup>3</sup> 125 HP thermal magnetic circuit breakers

## DPX<sup>3</sup>-I 125 HP switch disconnectors

Reference(s) :

from 4 236 00 to 4 236 19; from 4 236 40 to 4 236 59;

from 4 236 80 to 4 236 99; from 4 237 00 to 4 237 19;

4 231 84; 4 231 85;

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 recommended the use of isolators suitable for the type of conductor used and the operating voltage.

I <sub>cc</sub> (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 installer must take into account the weight of the conductors so that this does not affect the electrical junction between the conductor itself and the connection point.

### 6.5 Power losses per pole under I<sub>n</sub>

Circuit breaker (I<sub>cu</sub> ≤ 50kA)

In (A)	Power losses per pole (W)									
	16	20	25	32	40	50	63	80	100	125
Lugs	3.46	4.80	7.50	2.92	4.32	6.75	6.37	6.02	9.40	9.69
Spreaders	3.48	4.84	7.56	3.02	4.48	7.00	6.77	6.66	10.40	11.25
Rear terminals	3.55	4.94	7.72	3.28	4.88	7.63	7.76	8.26	12.90	15.16

Circuit breaker (I<sub>cu</sub> > 50kA)

In (A)	Power losses per pole (W)									
	16	20	25	32	40	50	63	80	100	125
Lugs	3.51	4.89	7.64	3.15	4.69	7.33	7.28	7.49	11.70	13.28
Spreaders	3.54	4.93	7.71	3.26	4.85	7.58	7.68	8.13	12.70	14.84
Rear terminals	3.60	5.03	7.86	3.51	5.25	8.20	8.67	9.73	15.20	18.75

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.

Switch disconnectors

	Power losses per pole (W)
	I <sub>n</sub> (A)
	125
Lugs	7,81
Spreaders	9,38
Rear terminals	13.28

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

### 6.6 DERATINGS

according to IEC/EN 60947-1

#### 6.6.1 Temperature

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.

I <sub>n</sub> (A)	Temperature Ta (°C)										
	-20	-10	-5	0	10	20	30	40	50	60	70
16	20	20	19	19	18	17	17	16	16	15	14
20	25	24	24	23	23	21	21	20	20	18	17
25	31	30	30	29	28	27	26	25	25	23	22
32	40	39	38	37	36	35	33	32	32	29	28
40	50	49	48	47	45	43	42	40	40	37	35
50	62	61	59	58	56	54	52	50	50	45	43
63	79	77	75	74	71	68	65	63	63	57	54
80	100	97	95	93	90	86	83	80	80	73	69
100	125	121	119	117	112	108	104	100	100	91	86
125	157	151	148	146	140	135	130	125	125	114	108

For derating temperature with other configurations, see table A.

#### 6.6.2 Specific condition use

Climatic conditions

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

Pollution degree

for DPX<sup>3</sup> 125 HP circuit breakers, degree 3, according to IEC/EN 60947-2

#### 6.6.3 Altitude

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

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



# DPX<sup>3</sup> 125 HP thermal magnetic circuit breakers

## DPX<sup>3</sup>-I 125 HP switch disconnectors

Reference(s) :

from 4 236 00 to 4 236 19; from 4 236 40 to 4 236 59;  
from 4 236 80 to 4 236 99; from 4 237 00 to 4 237 19;  
4 231 84; 4 231 85;

### 7. CONFORMITY

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

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

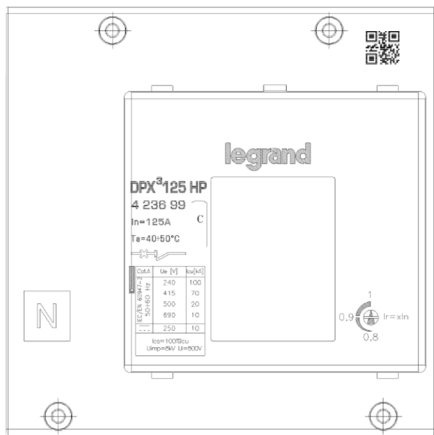
*For specific information, please contact Legrand support.*

### 7.1 Marking

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

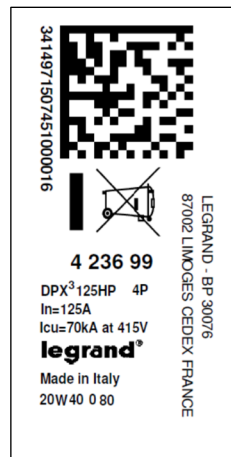
#### Product laser label on front

- Manufacturer responsible
- Denomination, type product, code
- Standard conformity
- Standard characteristics declared
- Coloured identification of I<sub>cu</sub> at 415V



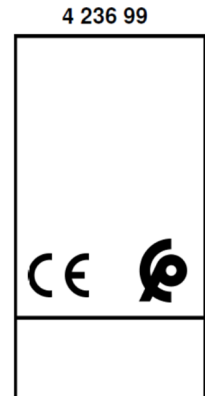
#### Product sticker label on side

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



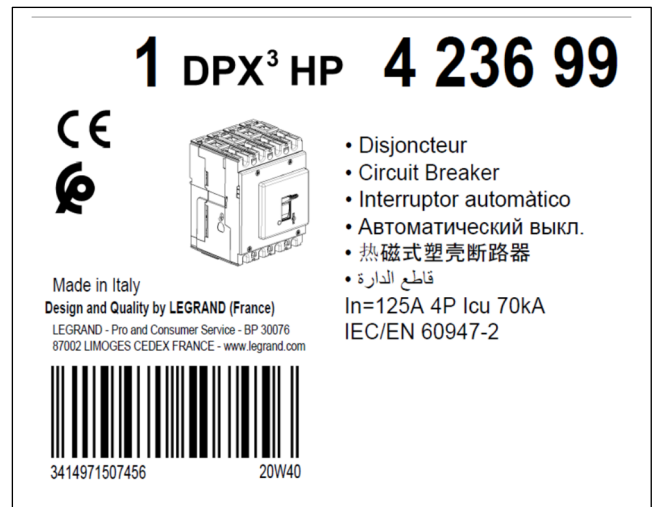
#### Mark sticker label on side

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



#### Packaging sticker label

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





# DPX<sup>3</sup> 125 HP thermal magnetic circuit breakers

## DPX<sup>3</sup>-I 125 HP switch disconnectors

Reference(s) :

from 4 236 00 to 4 236 19; from 4 236 40 to 4 236 59;  
 from 4 236 80 to 4 236 99; from 4 237 00 to 4 237 19;  
 4 231 84; 4 231 85;

### 8. EQUIPMENTS AND ACCESSORIES

#### 8.1 Releases (for DPX<sup>3</sup> 125/250 HP and DPX<sup>3</sup> 160/250)

- shunt releases with voltage:
 

12 Vac and dc	ref. 4 210 12
24 Vac and dc	ref. 4 210 13
48 Vac and dc	ref. 4 210 14
110÷130 Vac	ref. 4 210 15
220÷277 Vac	ref. 4 210 16
380÷480 Vac	ref. 4 210 17

Maximum power = 400 VA / W

- undervoltage releases with voltage:
 

12 Vac and dc	ref. 4 210 18
24 Vac and dc	ref. 4 210 19
48 Vac and dc	ref. 4 210 20
110÷130 Vac and dc	ref. 4 210 21
220÷240 Vac	ref. 4 210 22
277 Vac	ref. 4 210 23
380÷415 Vac	ref. 4 210 24
440÷480 Vac	ref. 4 210 25

Maximum power = 4 VA  
 Circuit breaker opening time < 50 ms

UVR releases can be used on DPX<sup>3</sup> 125/250 HP starting from batch 19W15

- time-lag undervoltage releases (800 ms)  
*Time-lag modules with voltage:*

230 V ac	ref. 0 261 90
400 V ac	ref. 0 261 91

Release (to be equipped with a time-lag module 0 261 90/91) ref. 4 210 98

#### 8.2 Auxiliary contacts (for DPX<sup>3</sup> 125/250 HP and DPX<sup>3</sup> 160/250)

Changeover switch 3A – 250 VAC ref. 4 210 11

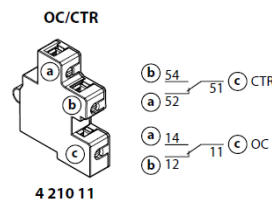
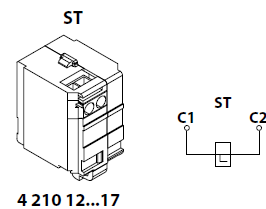
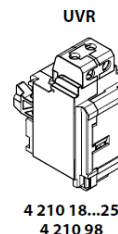
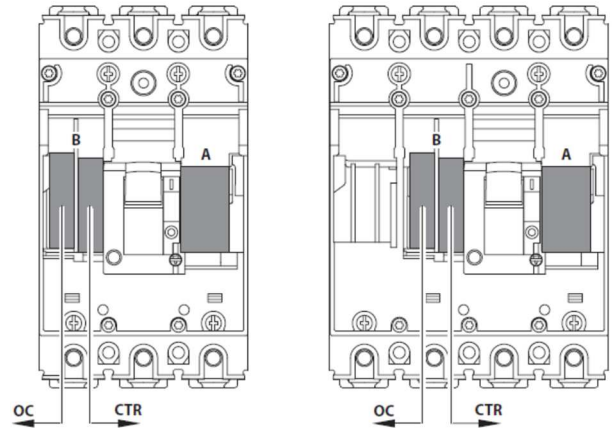
To show the state of the contacts or opening of the DPX<sup>3</sup>/DPX<sup>3</sup>-I and DPX<sup>3</sup> HP/DPX<sup>3</sup>-I HP on a fault:

- Auxiliary contact (standard) **OC**
- Fault signal **CTR**

Auxiliary contact electrical characteristics		
Rated voltage (V <sub>n</sub> )	V (ac or dc)	24 to 250
Intensity (A)	24 V dc	5
	48 V dc	1.7
	110 V dc	0.5
	230 V dc	0.25
	110 V ac	4
	230/250 V ac	3

Configurations:

DPX<sup>3</sup> 125 HP → 1 auxiliary contacts + 1 fault signal



	B	A
UVR	✗	✓
ST	✗	✓
OC/CTR	✓	✗

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

#### 8.3 Universal keylocks

These keylocks must be used for all the accessories that can be locked:

- rotary handle

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

- 1 lock + 1 flat key with random mapping ref. 4 238 80
- 1 lock + 1 flat key with fixed mapping (EL43525) ref. 4 238 81
- 1 lock + 1 flat key with fixed mapping (EL43363) ref. 4 238 82
- 1 lock + 1 star key with random mapping ref. 4 238 83

# DPX<sup>3</sup> 125 HP thermal magnetic circuit breakers

## DPX<sup>3</sup>-I 125 HP switch disconnectors

Reference(s) :

from 4 236 00 to 4 236 19; from 4 236 40 to 4 236 59;  
from 4 236 80 to 4 236 99; from 4 237 00 to 4 237 19;  
4 231 84; 4 231 85;

### 8.4 Rotary handles

*Direct on DPX<sup>3</sup>*

- Standard (black) *ref. 4 238 70*
- For emergency use (red / yellow) *ref. 4 238 71*

*Vari-depth handle IP55 (with auxiliary option)*

- Standard (black) *ref. 4 238 72*
- For emergency use (red / yellow) *ref. 4 238 73*

*Locking accessories (for rotary handle)*

- Key lock accessory for vari-depth rotary handle *ref. 4 238 05*  
*(ref. 4 238 05 is compatible with DPX<sup>3</sup> 250 HP also)*

*Ref. 4 238 05 must be used with universal keylocks to get the complete locking kit for rotary handle*

### 8.5 Mechanical accessories

- Padlock (for locking in "OPEN" position) *ref. 4 210 49*  
*(ref. 4 210 49 is compatible with DPX<sup>3</sup> 250 HP and DPX<sup>3</sup> 160/250)*
- Sealable terminal shields:
  - Set of 2 (for 3P) *ref. 4 238 93*
  - Set of 3 (for 4P) *ref. 4 238 94*
- Insulated shields:
  - Set of 2 (for 3P) *ref. 4 238 34*
  - Set of 3 (for 4P) *ref. 4 238 35**(ref. 4 238 34/35 are compatible with DPX<sup>3</sup> 250 HP)*

### 8.6 Connection accessories

***Cage terminals***

- Set of 3 terminals for cables 50 mm<sup>2</sup> max (solid) *ref. 4 238 74*  
or 50 mm<sup>2</sup> max (flexible) Cu/Al
- Set of 4 terminals for cables 50 mm<sup>2</sup> max (rigid) *ref. 4 238 75*  
or 50 mm<sup>2</sup> max (flexible) Cu/Al
- Set of 3 terminals (high capacity) *ref. 4 238 76*  
for cables 70 mm<sup>2</sup> max for Cu and 95 mm<sup>2</sup> max for Al  
*Section relative to maximum current is 70 mm<sup>2</sup> (for Al)*
- Set of 4 terminals (high capacity) *ref. 4 238 77*  
for cables 70 mm<sup>2</sup> max for Cu and 95 mm<sup>2</sup> max for Al  
*Section relative to maximum current is 70 mm<sup>2</sup> (for Al)*

***Spreaders (incoming or outgoing):***

- Set of 3 (for 3P) *ref. 6 238 88*
- Set of 4 (for 4P) *ref. 6 238 89*

***Rear terminals (incoming or outgoing):***

- Set of 3 (for 3P) *ref. 4 238 91*
- Set of 4 (for 4P) *ref. 4 238 92*

### 8.7 Interlock mechanism

(for interlocking 2 DPX<sup>3</sup> 125 HP or 2 DPX<sup>3</sup> 250 HP breakers)

No frame mixing in interlock mechanism

- Interlock mechanism – standard version *ref. 4 238 27*  
(for fixed version DPX<sup>3</sup> 125 HP and DPX<sup>3</sup> 250 HP)
- Interlock mechanism – for electronic module *ref. 4 238 28*  
(for fixed version DPX<sup>3</sup> 125 HP and DPX<sup>3</sup> 250 HP)
- Interlock plate for DPX<sup>3</sup> 125 HP *ref. 4 238 25*

# DPX<sup>3</sup> 125 HP thermal magnetic circuit breakers

## DPX<sup>3</sup>-I 125 HP switch disconnectors

Reference(s) :

from 4 236 00 to 4 236 19; from 4 236 40 to 4 236 59;

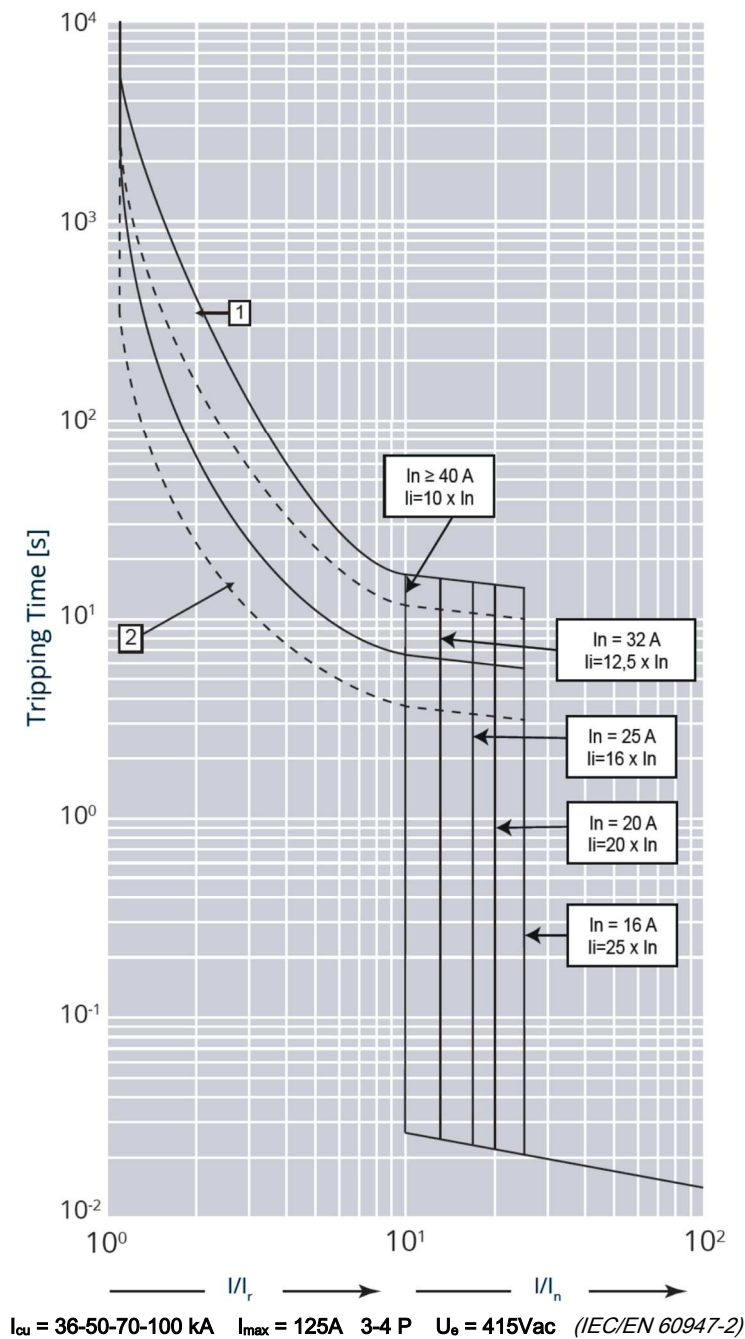
from 4 236 80 to 4 236 99; from 4 237 00 to 4 237 19;

4 231 84; 4 231 85;

### 9. CURVES

#### 9.1.1 Thermal magnetic tripping curve (rated current $I_n \leq 80A$ )

Update: 11/06/2019

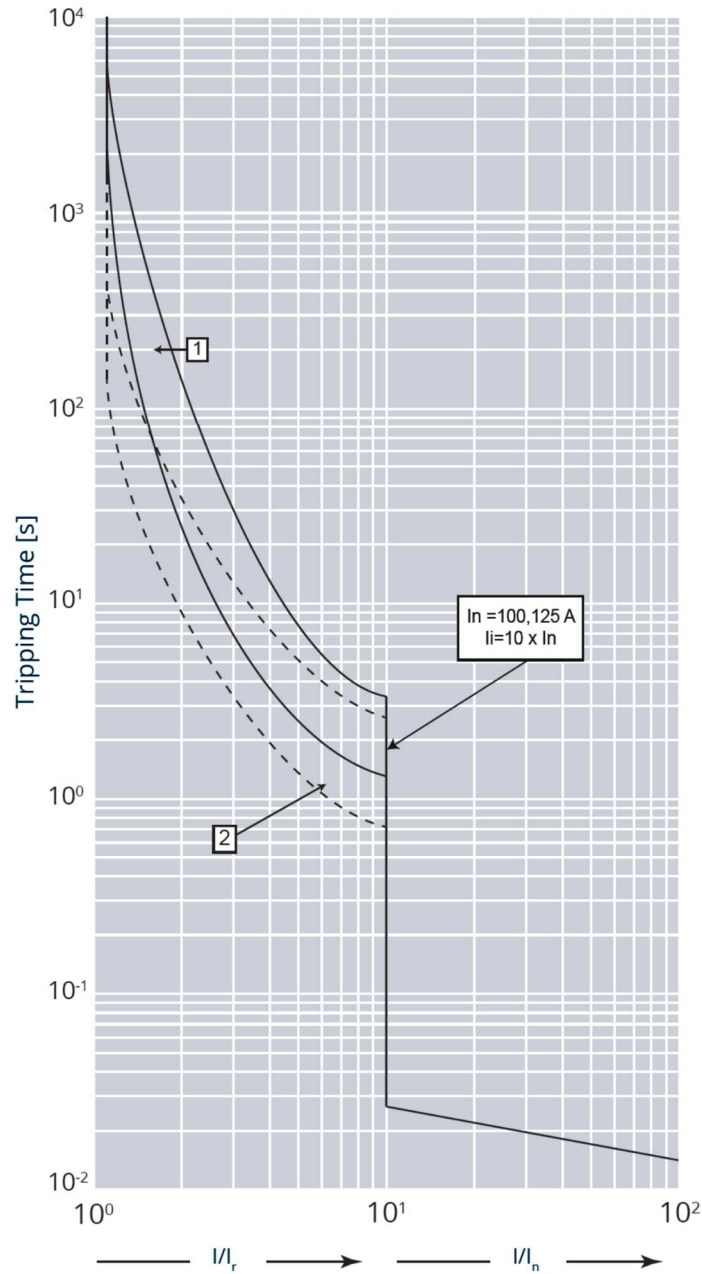


Value	Description
t	time
I	current
$I_n$	rated current
$I_r$	long time setting current
curve 1	characteristic with cold start
curve 2	characteristic with hot start

**DPX<sup>3</sup> 125 HP thermal magnetic circuit breakers**  
**DPX<sup>3</sup>-I 125 HP switch disconnectors**

Reference(s) :  
 from 4 236 00 to 4 236 19; from 4 236 40 to 4 236 59;  
 from 4 236 80 to 4 236 99; from 4 237 00 to 4 237 19;  
 4 231 84; 4 231 85;

9.1.2 Thermal magnetic tripping curve (rated current  $I_n > 80A$ )



$I_{cu} = 36-50-70-100 \text{ kA}$     $I_{max} = 125A$    3-4 P    $U_o = 415V_{ac}$  (IEC/EN 60947-2)

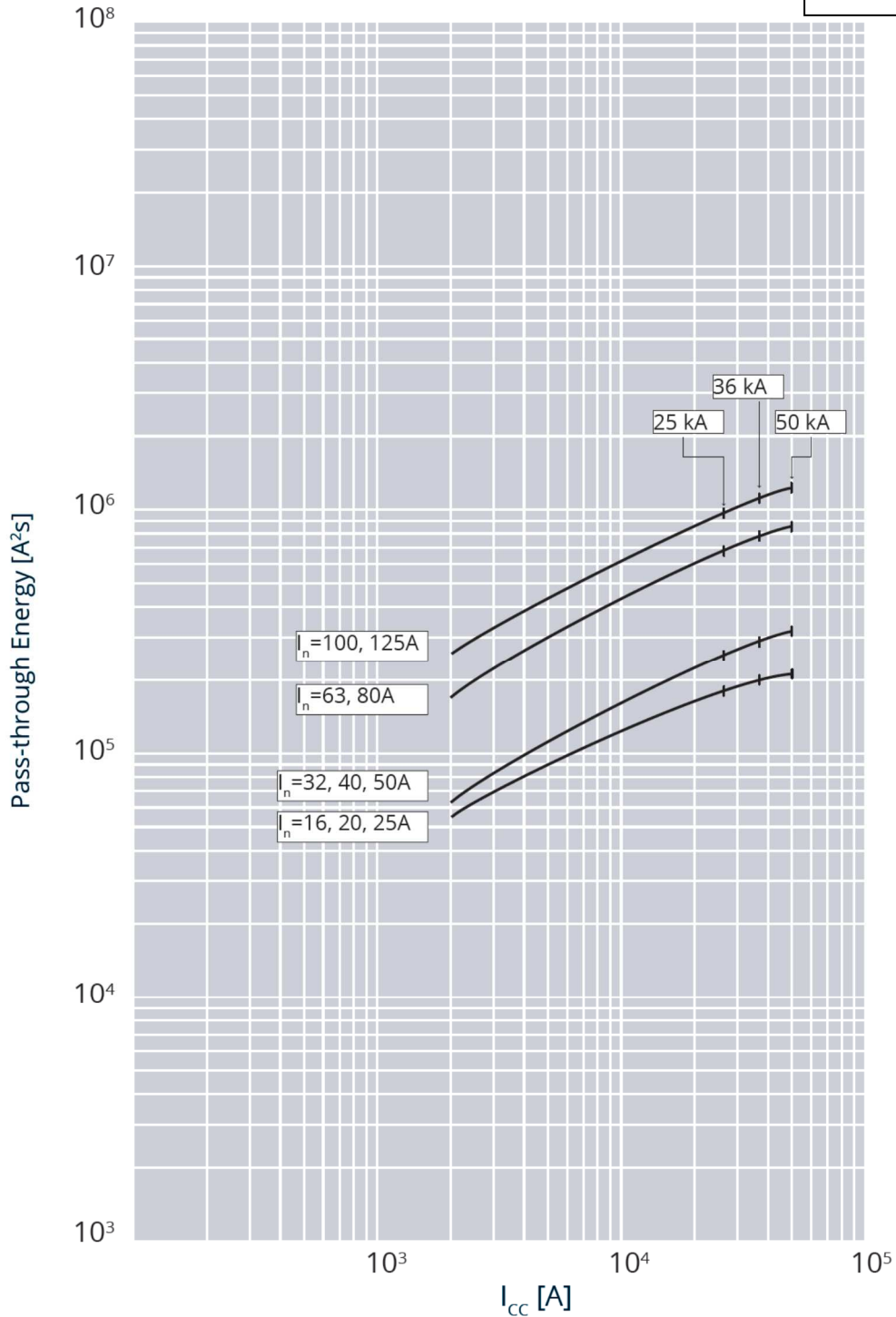
Value	Description
t	time
I	current
$I_n$	rated current
$I_r$	long time setting current
curve 1	characteristic with cold start
curve 2	characteristic with hot start

**DPX<sup>3</sup> 125 HP thermal magnetic circuit breakers**  
**DPX<sup>3</sup>-I 125 HP switch disconnectors**

Reference(s) :  
 from 4 236 00 to 4 236 19; from 4 236 40 to 4 236 59;  
 from 4 236 80 to 4 236 99; from 4 237 00 to 4 237 19;  
 4 231 84; 4 231 85;

9.2.1 Pass-through specific energy characteristic curve (breaking capacity  $I_{cu} \leq 50\text{kA}$ )

Update: 04/09/2019



$I_{cu} = 36-50-70-100\text{ kA}$   $I_{max} = 125\text{A}$  3-4 P  $U_o = 415\text{Vac}$  (IEC/EN 60947-2)

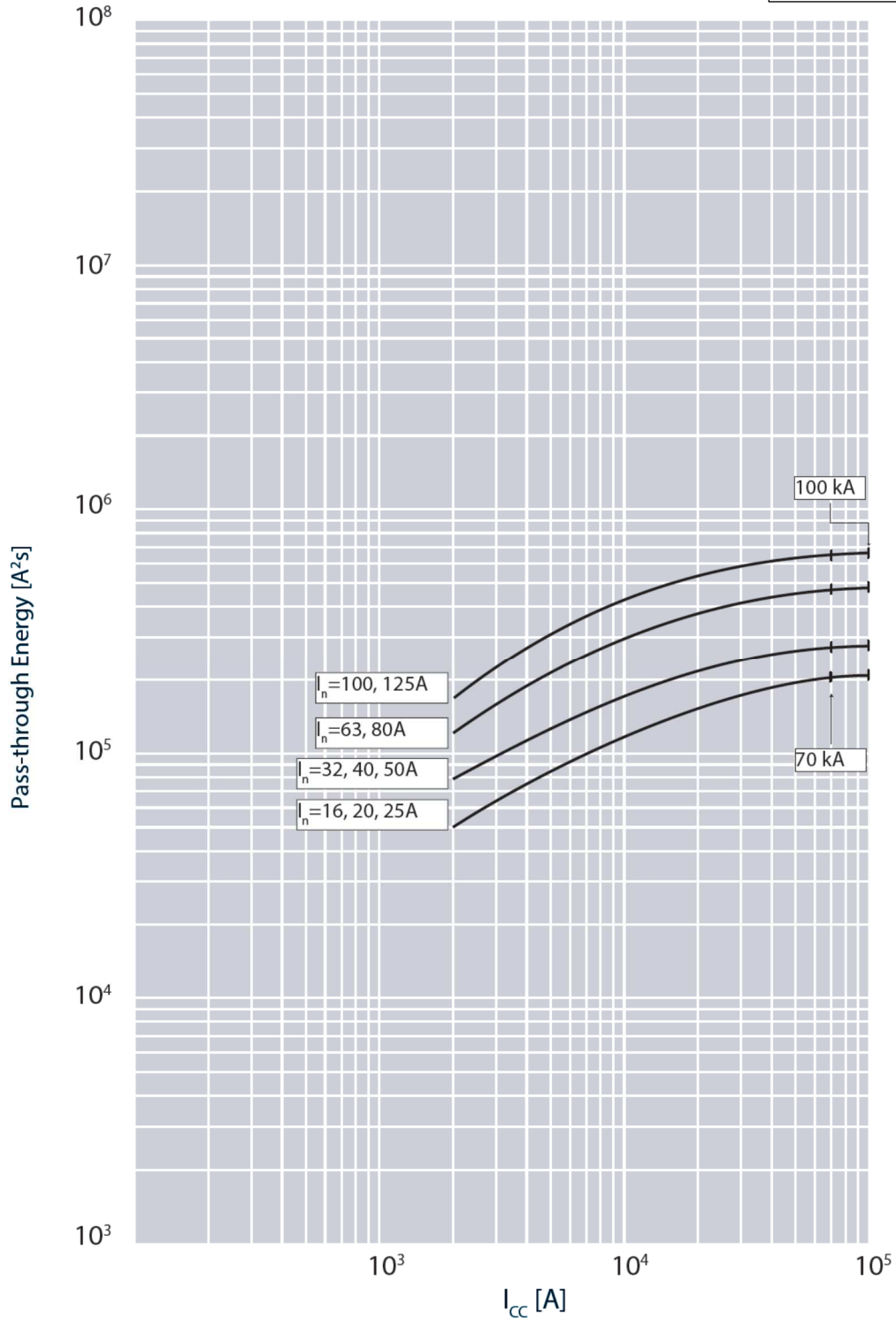
Value	Description
$I_{cc}$	short circuit current
$I^2t$ (A <sup>2</sup> s)	pass-through specific energy

**DPX<sup>3</sup> 125 HP thermal magnetic circuit breakers**  
**DPX<sup>3</sup>-I 125 HP switch disconnectors**

Reference(s) :  
 from 4 236 00 to 4 236 19; from 4 236 40 to 4 236 59;  
 from 4 236 80 to 4 236 99; from 4 237 00 to 4 237 19;  
 4 231 84; 4 231 85;

9.2.2 Pass-through specific energy characteristic curve (breaking capacity  $I_{cu} > 50\text{kA}$ )

Update: 04/09/2019



$I_{cu} = 36-50-70-100 \text{ kA}$   $I_{max} = 125\text{A}$  3-4 P  $U_o = 415\text{Vac}$  (IEC/EN 60947-2)

Value	Description
$I_{cc}$	short circuit current
$I^2t$ ( $A^2s$ )	pass-through specific energy

**DPX<sup>3</sup> 125 HP thermal magnetic circuit breakers**  
**DPX<sup>3</sup>-I 125 HP switch disconnectors**

Reference(s) :

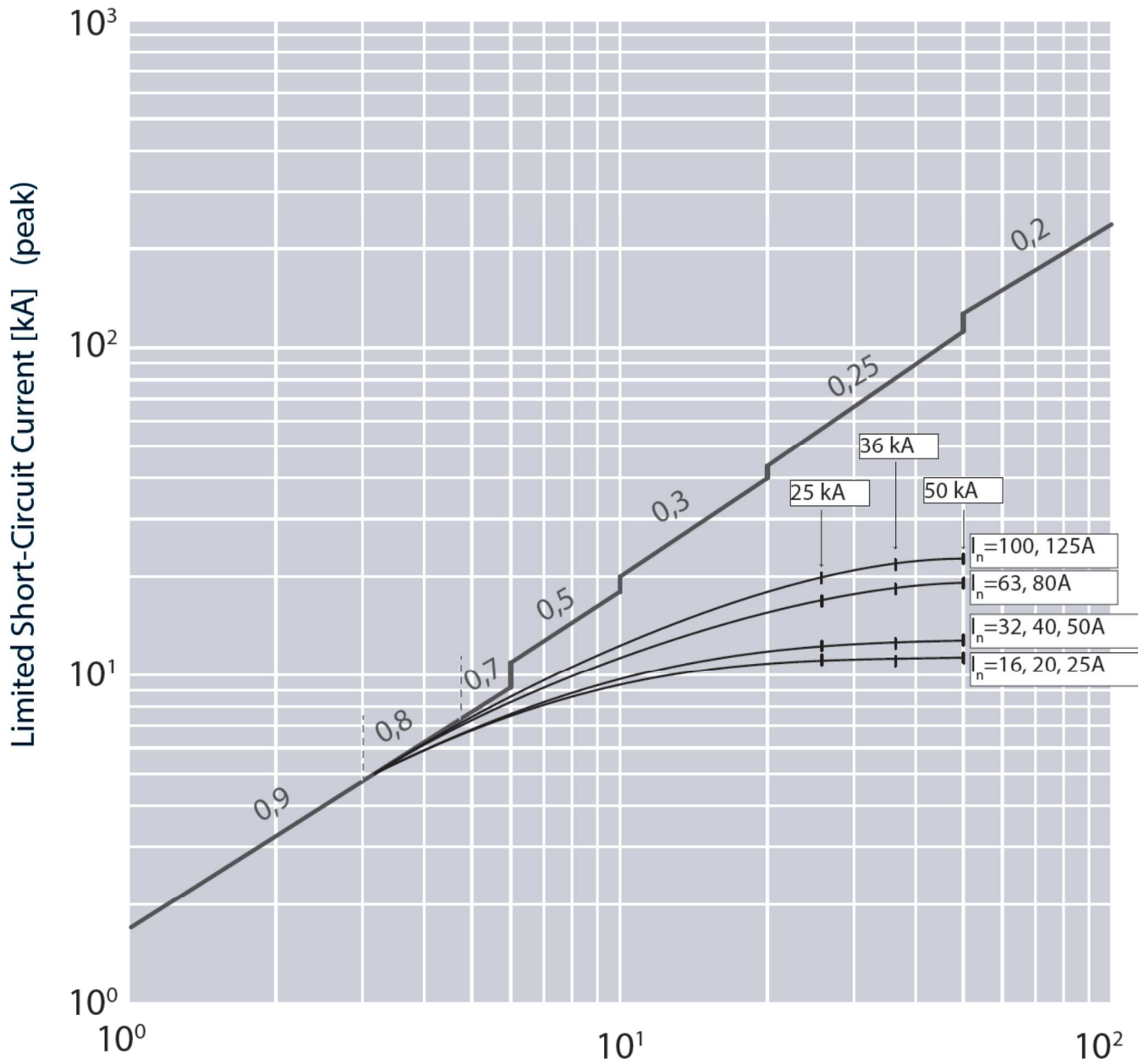
from 4 236 00 to 4 236 19; from 4 236 40 to 4 236 59;

from 4 236 80 to 4 236 99; from 4 237 00 to 4 237 19;

4 231 84; 4 231 85;

9.3.1 Cut-off peak current characteristic curve (kA) (breaking capacity  $I_{cu} \leq 50\text{kA}$ )

Update: 04/02/2020



**Prospective Fault Current [kA] (RMS)**

$I_{cu} = 36\text{-}50\text{-}70\text{-}100\text{ kA}$   $I_{max} = 125\text{A}$  3-4 P  $U_o = 415\text{Vac}$  (IEC/EN 60947-2)

Value	Description
$I_{cc}$	estimated short circuit symmetrical current (RMS value)
$I_p$	maximum short circuit peak current
	maximum prospective short circuit peak current corresponding at the power factor
	maximum real peak short circuit current



**DPX<sup>3</sup> 125 HP thermal magnetic circuit breakers**  
**DPX<sup>3</sup>-I 125 HP switch disconnectors**

Reference(s) :

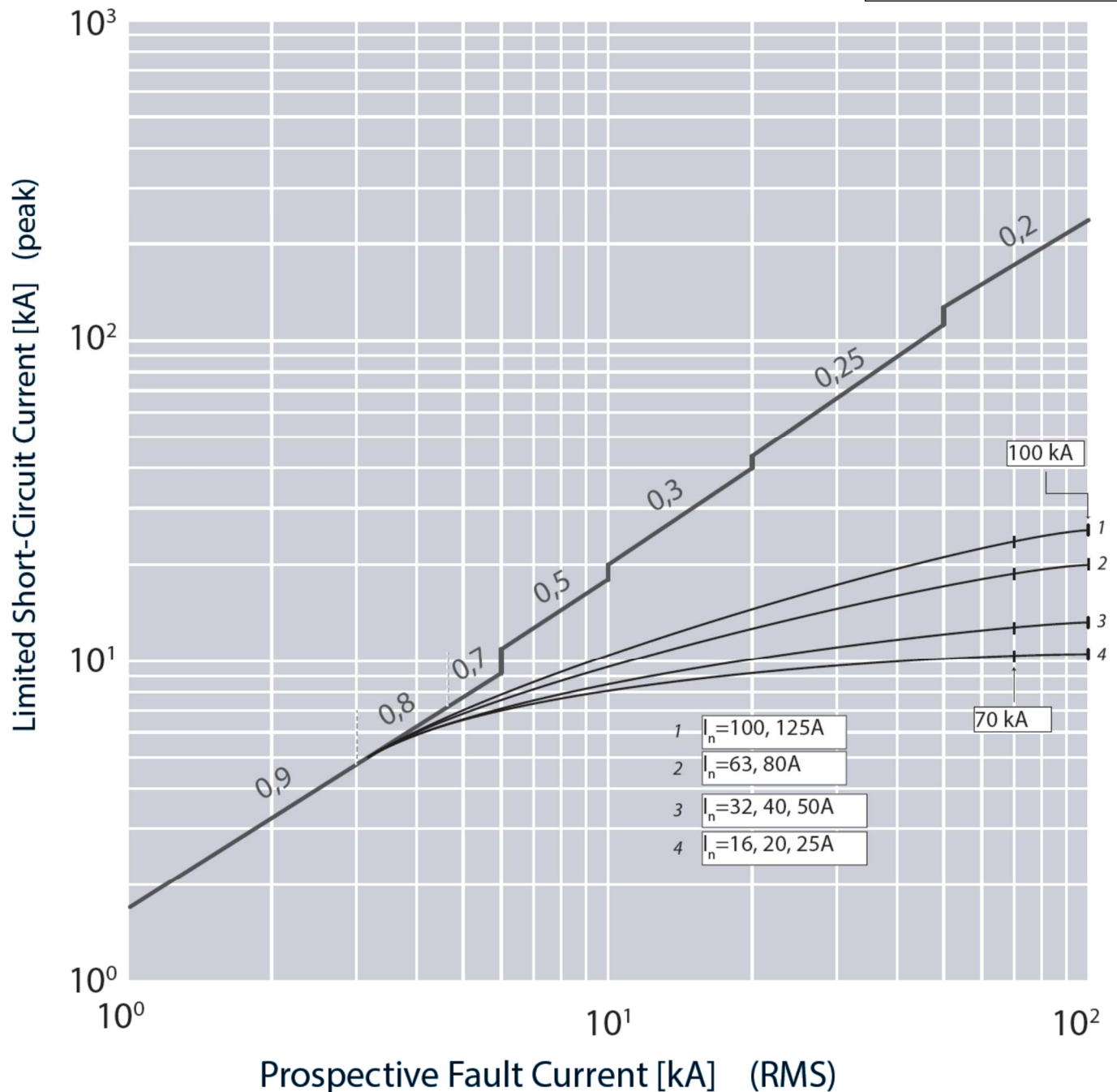
from 4 236 00 to 4 236 19; from 4 236 40 to 4 236 59;

from 4 236 80 to 4 236 99; from 4 237 00 to 4 237 19;

4 231 84; 4 231 85;

9.3.2 Cut-off peak current characteristic curve (kA) (breaking capacity  $I_{cu} > 50\text{kA}$ )

Update: 04/02/2020



$I_{cu} = 36-50-70-100\text{ kA}$   $I_{max} = 125\text{ 3-4 P}$   $U_e = 415\text{Vac}$  (IEC/EN 60947-2)

Value	Description
$I_{cc}$	estimated short circuit symmetrical current (RMS value)
$I_p$	maximum short circuit peak current
	maximum prospective short circuit peak current corresponding at the power factor
	maximum real peak short circuit current

# DPX<sup>3</sup> 125 HP thermal magnetic circuit breakers

## DPX<sup>3</sup>-I 125 HP switch disconnectors

Reference(s) :

from 4 236 00 to 4 236 19; from 4 236 40 to 4 236 59;

from 4 236 80 to 4 236 99; from 4 237 00 to 4 237 19;

4 231 84; 4 231 85;

### A) Derating Temperature and configurations

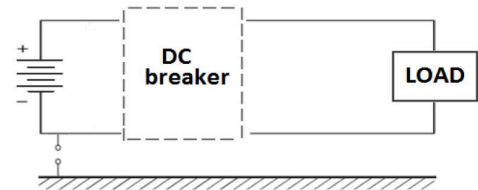
	Ambient temperature									
	30 °C		40 °C		50 °C		60 °C		70 °C	
Fixed version	$I_{max}$ (A)	$I_r / I_n$	$I_{max}$ (A)	$I_r / I_n$	$I_{max}$ (A)	$I_r / I_n$	$I_{max}$ (A)	$I_r / I_n$	$I_{max}$ (A)	$I_r / I_n$
Cage terminals, flexible cable	130	1.04	125	1	125	1	114	0.91	108	0.86
Cage terminals, rigid cable	130	1.04	125	1	125	1	114	0.91	108	0.86
Lugs, flexible cable	130	1.04	125	1	125	1	114	0.91	108	0.86
Lugs, rigid cable	130	1.04	125	1	125	1	114	0.91	108	0.86
Spreaders, flexible cable	130	1.04	125	1	125	1	114	0.91	108	0.86
Spreaders, rigid cable	130	1.04	125	1	125	1	114	0.91	108	0.86
Rear flat terminals, flexible cable	130	1.04	125	1	125	1	114	0.91	108	0.86

For further technical information, please contact Legrand technical support.

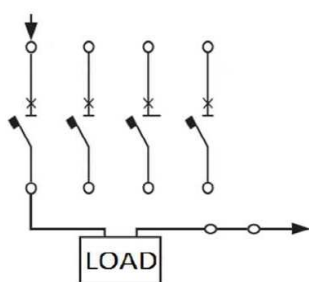
### B) Breaking capacity in DC (kA)

$I_{cu}$ (kA)	$I_n$ (A)	1 pole *		2 poles in series *			3 poles in series *		
		60 V	60 V	60 V	110 V	250 V	110 V	250 V	500 V
36	16 ÷ 125	35	36	35	10	35	10	10	
50	16 ÷ 125	35	50	35	10	35	10	10	
70	16 ÷ 125	35	50	35	10	35	10	10	
100	16 ÷ 125	35	50	35	10	35	10	10	

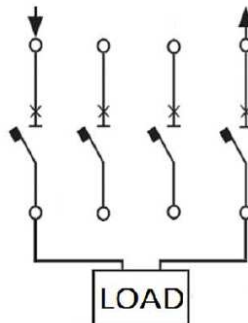
These values are applied to DC networks insulated from the ground (*this diagram applies to both 3P and 4P circuit breakers*):



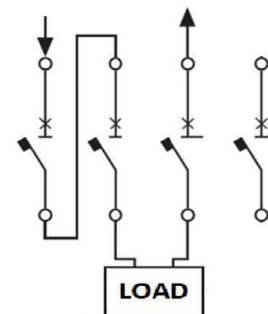
\* Connection modality of the DC breaker:



1 pole



2 poles in series



3 poles in series