

## DPX<sup>3</sup> 630 thermal magnetic circuit breakers

## DPX<sup>3</sup>-I 630 trip-free switches

Cat.Nos:

4 220 00 to 4 220 55

4 222 16 - 4 222 17 - 4 222 18 - 4 222 19



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### 1. USE

DPX<sup>3</sup> range, for premium segment, is able to cover extended ranges in terms of breaking capacities and rated currents, make protection suitable for different levels of power involved in installations.

DPX<sup>3</sup> range provide easy assembly procedures during the phase of installation and mounting of accessories, suitable for professional use.

### 2. RANGE

#### ■ 2.1 DPX<sup>3</sup> 630 thermal magnetic circuit breakers

Icu	36 kA			50 kA		
In (A)	3P	4P	3P + N/2	3P	4P	3P + N/2
250	4 220 00	4 220 05	-	4 220 14	4 220 19	-
320	4 220 01	4 220 06	4 220 10	4 220 15	4 220 20	4 220 24
400	4 220 02	4 220 07	4 220 11	4 220 16	4 220 21	4 220 25
500	4 220 03	4 220 08	4 220 12	4 220 17	4 220 22	4 220 26
630	4 220 04	4 220 09	4 220 13	4 220 18	4 220 23	4 220 27

Icu	70 kA			100 kA		
In (A)	3P	4P	3P + N/2	3P	4P	3P + N/2
250	4 220 28	4 220 33	-	4 220 42	4 220 47	-
320	4 220 29	4 220 34	4 220 38	4 220 43	4 220 48	4 220 52
400	4 220 30	4 220 35	4 220 39	4 220 44	4 220 49	4 220 53
500	4 220 31	4 220 36	4 220 40	4 220 45	4 220 50	4 220 54
630	4 220 32	4 220 37	4 220 41	4 220 46	4 220 51	4 220 55

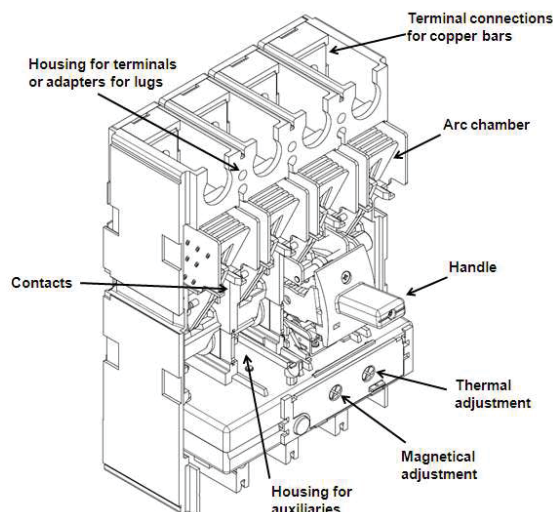
#### ■ 2.2 DPX<sup>3</sup>-I 630 trip-free switches

In (A)	3P	4P
400	4 222 16	4 222 18
630	4 222 17	4 222 19

#### ■ 2.3 Composition

DPX<sup>3</sup> 630 thermal magnetic is supplied with:

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



### 3. TECHNICAL CHARACTERISTICS

#### ■ 3.1 Electrical characteristics

DPX <sup>3</sup> 630 thermal magnetic circuit breakers	
Rated current	250 A, 320 A, 400 A, 500 A, 630 A
Poles	3P - 4P
Pole pitch	42 mm
Rated insulation voltage (50/60Hz) Ui	800 V
Rated operating voltage (50/60Hz) Ue	690 V
Rated impulse withstand current Uimp	8 kV
Rated frequency	50 Hz - 60 Hz
Reference ambient temperature	40 °C - 50 °C
Operating temperature	-25 °C to 70 °C
Electrical endurance at In (cycles)	4000
Electrical endurance at 0.5 x In (cycles)	8000
Utilization category	A
Suitable for isolation	Yes
Type of protection	Thermal-magnetic
Thermal adjustment Ir	(0.8 ÷ 1) x In
Magnetic adjustment Ii (A)	5 ÷ 10 x In
Neutral protection for 4P (%th of phase pole)	100
Neutral protection for N/2 (A)	200 (In= 320A); 250 (In= 400A); 320 (In= 500A); 400 (In= 630A)
Reverse feed	Yes

#### DPX<sup>3</sup>-I 630 trip-free switches

Uninterrupted nominal current Ie	400 A - 630 A
Short-time resistive current Icw for 1s	5 kA (400 A) 8 kA (630 A)
Rated short-circuit making capacity Icm	8 kA (400 A) 14 kA (630 A)
Rated insulation voltage Ui	800 V~
Maximum rated operating voltage Ue	690 V~
Rated impulse withstand voltage Uimp	8 kV
Utilisation category	AC23A (400 A) AC22A (630 A)
Suitable for isolation	Yes
Rated frequency (Hz)	50 Hz - 60 Hz
Operating temperature	-25 °C to 70 °C
Electrical endurance at In (cycles)	4000
Electrical endurance at 0.5 x In (cycles)	8000
Reverse feed	Yes

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

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

	1P*	2P in series*		3P in series*	4P in series*
In (A)	60 V	110 V	250 V	500 V	750 V
400	DC23				
630					

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

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

Breaking capacity (kA) and Ics					
IEC 60947-2	Ue	Icu			
		36 kA	50 kA	70 kA	100 kA
	240 V~	70	100	105	150
	415 V~	36	50	70	100
	500 V~	25	30	40	50
	690 V~	14	18	20	22
	250 V=	35	35	35	35
	Ics (% Icu)	100			70
	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	In (A)	60V	60V	110V	250V	110V	250V	500V	
36	250 to 630	35							
50		50							
70		70							
100		100	100	100	70	100	70	70	

\*See page 6 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

Phases limit trip current				
Thermal (Ir)			Magnetic (Ii)	
In (A)	0.8 x In	1 x In	5 x In	10 x In
250	200	250	1250	2500
320	256	320	1600	3200
400	320	400	2000	4000
500	400	500	2500	5000
630	504	630	3150	6300

#### ■ 3.2 Mechanical characteristics

Mechanical endurance (cycles): 20000

Mechanical endurance with motor control (cycles): 10000

#### Load operations

	Force on handles (N)	
Rated current	In ≤ 400A	In ≥ 500A
Opening operation	80	130
Closing operation	180	210
Restore operation	145	200

**3. TECHNICAL CHARACTERISTICS (continued)****■ 3.3 Electrodynamic forces**

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

I <sub>cc</sub> (kA)	Maximum distance (mm)
36	350
50	300
70	250
100	200

According to conductor type and bar system (except Legrand bar kits), the choice of the distance to keep is to be calibrated by the installer.

Also, the installer must take into account the weight of the conductors so that it does not affect the electrical junction between the conductor itself and the connection point.

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

DPX <sup>3</sup> 630 Thermal magnetic circuit breakers										
In (A)	250		320		400		500		630	
	Phase	Neutral	Phase	Neutral	Phase	Neutral	Phase	Neutral	Phase	Neutral
Lugs	19.2	19.2	16.4	16.5	25.6	18.9	23.6	28.7	37.3	21.2
Cage terminals	19.2	19.2	16.4	16.5	25.6	18.9	23.6	28.7	37.3	21.2
High capacity cage terminals	19.9	19.9	17.6	16.8	27.5	19.7	26.6	30.0	42.1	23.1
Spreaders	20.6	20.6	18.8	17.1	29.3	20.4	28.2	30.6	44.7	24.1
Rear terminals	20.4	20.4	18.4	17.0	28.7	20.2	28.5	30.7	45.0	24.3
Plug-in version	26.7	26.7	28.8	19.6	44.9	26.5	53.9	41.1	85.3	40.5
Circuit breaker + RCD	22.3	22.3	21.5	17.7	33.6	22.1	36.1	33.8	57.2	29.2

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.

DPX <sup>3</sup> -I 630 trip-free switches				
In (A)	400		630	
	Phase	Neutral	Phase	Neutral
Lugs	25.6	25.6	37.3	37.3
Cage terminals	25.6	25.6	37.3	37.3
High capacity cage terminals	27.5	27.5	42.1	42.1
Spreaders	29.3	29.3	44.7	44.7
Rear terminals	28.7	28.7	45.0	45.0
Plug-in version	44.9	44.9	85.3	85.3
Circuit breaker + RCD	33.6	33.6	57.2	57.2

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

#### 4. INSTALLATION RULES

According to IEC/EN 60947-1.

##### Temperature deratings

Rated current and 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)	10	20	30	40	50	60	70
250	336	307	279	250	250	222	193
320	416	384	352	320	320	288	256
400	475	460	425	400	400	360	320
500	600	550	525	500	500	455	410
630	700	683	650	630	630	580	530

For derating temperature with other configurations, see table below.

Ambient temperature	30 °C		40 °C		50 °C		60 °C		65 °C		70 °C	
	I <sub>max</sub> (A)	I <sub>r</sub> / I <sub>n</sub>	I <sub>max</sub> (A)	I <sub>r</sub> / I <sub>n</sub>	I <sub>max</sub> (A)	I <sub>r</sub> / I <sub>n</sub>	I <sub>max</sub> (A)	I <sub>r</sub> / I <sub>n</sub>	I <sub>max</sub> (A)	I <sub>r</sub> / I <sub>n</sub>	I <sub>max</sub> (A)	I <sub>r</sub> / I <sub>n</sub>
DPX <sup>3</sup> 630 fixed												
Cage terminals, flexible cable	630	1	630	1	630	1	599	0.95	567	0.90	536	0.85
Lugs, flexible/ rigid cable	630	1	630	1	630	1	599	0.95	567	0.90	536	0.85
Spreaders, flexible cable	630	1	630	1	630	1	599	0.95	504	0.80	473	0.75
Spreaders, Cu bars	630	1	630	1	630	1	567	0.90	536	0.85	504	0.80
Rear flat staggered terminals, flexible cable	630	1	630	1	630	1	599	0.95	504	0.80	473	0.75
Rear flat staggered terminals, Cu bars vertical	630	1	630	1	630	1	567	0.90	536	0.85	504	0.80
DPX <sup>3</sup> 630 fixed + RCD												
Cage terminals, flexible cable +RCD	599	0.95	567	0.90	567	0.90	504	0.8	473	0.75	441	0.70
Lugs, flexible/ rigid cable +RCD	599	0.95	567	0.90	567	0.90	504	0.80	473	0.75	441	0.70
Spreaders, flexible cable +RCD	536	0.85	536	0.85	536	0.85	473	0.75	410	0.65	378	0.60
Spreaders, Cu bars +RCD	567	0.90	536	0.85	536	0.85	504	0.80	441	0.70	378	0.60
Rear flat staggered terminals, flexible cable +RCD	567	0.90	567	0.90	567	0.90	473	0.75	410	0.65	378	0.60
Rear flat staggered terminals, Cu bars, vertical +RCD	567	0.90	567	0.90	567	0.90	504	0.8	441	0.70	378	0.60
DPX <sup>3</sup> 630 draw-out												
Cage terminals, flexible cable	599	0.95	567	0.90	536	0.85	504	0.80	473	0.75	441	0.70
Rear flat terminals, flexible cable												
Rear flat terminals, Cu bars, vertical												
DPX <sup>3</sup> 630 draw-out + RCD												
Cage terminals, flexible cable + RCD	536	0.85	504	0.80	473	0.75	441	0.70	410	0.65	378	0.60
Cage terminals, Cu bars + RCD												
Rear flat terminals, flexible cable + RCD												
Rear flat terminals, Cu bars, vertical + RCD												

For further technical information, please contact Legrand technical support.

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

**Electromagnetic disturbances (EMC):** for DPX<sup>3</sup> 630 circuit breakers, according to IEC/EN 60947-2 Annex F.

**Pollution degree:** for DPX<sup>3</sup> 630 circuit breakers, degree 3, according to IEC/EN 60947-2.

**DPX<sup>3</sup> 630 thermal magnetic circuit breakers**  
**DPX<sup>3</sup>-I 630 trip-free switches**

**Cat.Nos:**  
**4 220 00 to 4 220 55**  
**4 222 16 - 4 222 17 - 4 222 18 - 4 222 19**

**4. INSTALLATION RULES (continued)**

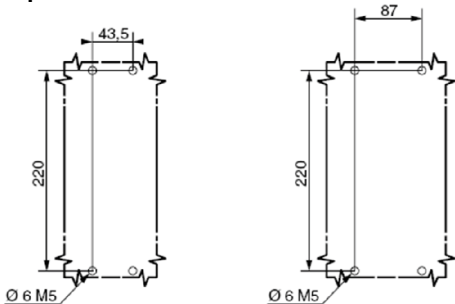
**Altitude**  
 Altitude derating for DPX<sup>3</sup> and DPX<sup>3</sup>-I

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

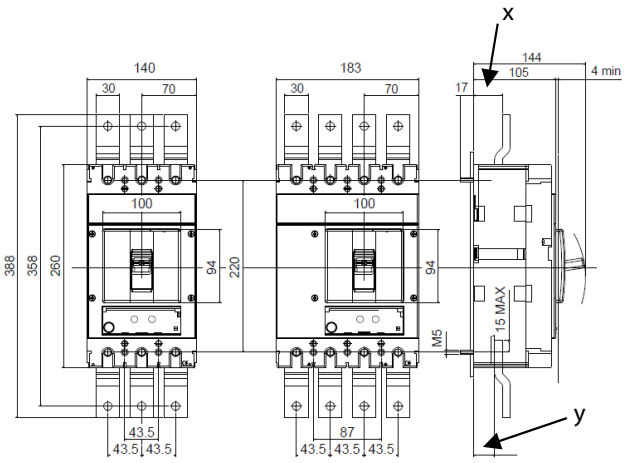
**5. DIMENSIONS AND WEIGHT**

■ **5.1 Dimensions (mm)**  
 3P (W x H x D): 140 x 260 x 105  
 4P (W x H x D): 183 x 260 x 105

**Implantation**

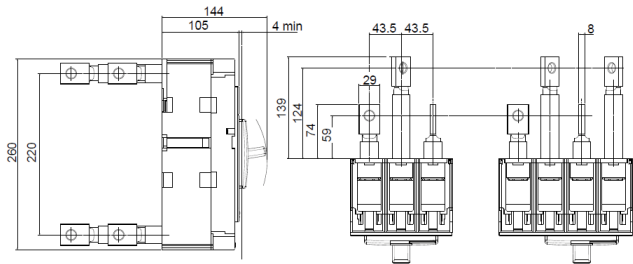


**Fixed version**  
 - with front terminals

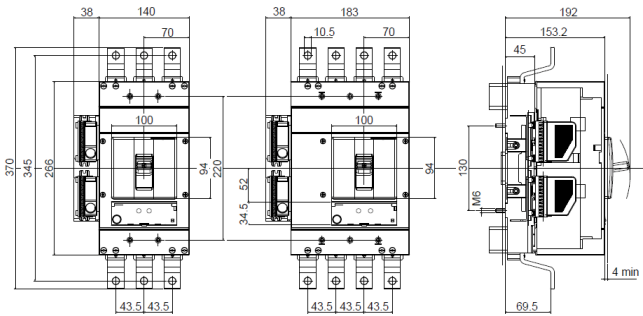


	In < 400	In ≥ 500A
x	37	39
y	27	29

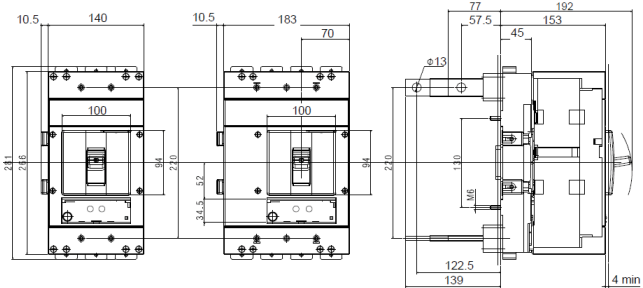
- with flat rear terminals



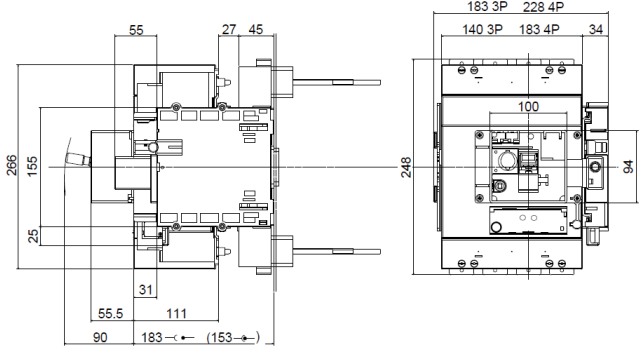
**Plug-in version**  
 - with cage terminals



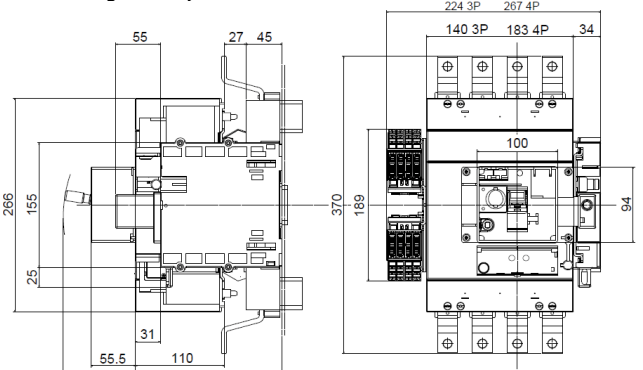
- without front terminals



**Draw out version**  
 - with flat rear terminals



- with sliding auxiliary contacts



DPX<sup>3</sup> 630 thermal magnetic circuit breakers

DPX<sup>3</sup>-I 630 trip-free switches

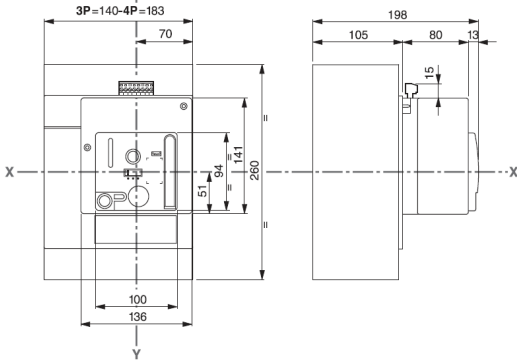
Cat.Nos:  
4 220 00 to 4 220 55  
4 222 16 - 4 222 17 - 4 222 18 - 4 222 19

5. DIMENSIONS AND WEIGHT (continued)

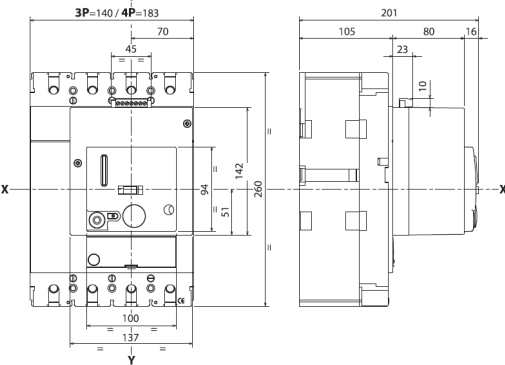
5.1 Dimensions (continued)

Motor operator

- for synchronized operations (energy storage type)



- for general purpose operations (direct action type)



5.2 Weight

Weight (kg)				
Configuration	3P		4P	
In (A)	≤ 400	≥ 500	≤ 400	≥ 500
Circuit breaker (fixed version)	5.20	5.40	6.55	6.85
Switch disconnector (fixed version)	5.00	5.25	6.40	6.68
Plug-in (with front terminals)*	3.35	3.35	4.29	4.49
Plug-in (with rear terminals)*	3.55	3.55	4.79	4.79
Draw-out *	2.3	2.3	5.5	5.5

\* to add to device weight



6. CONNECTIONS

Possible way of assembly on DIN rail:

- vertical
- horizontal

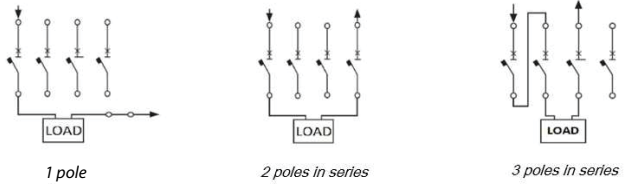
To ensure the circuit breaker's connection, it is possible to use:

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

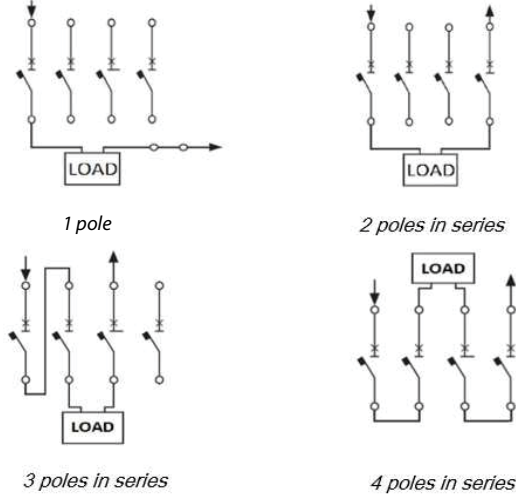
Ferrule size		
Flexible cables	120 to 185 mm <sup>2</sup>	50 to 95 mm <sup>2</sup>
Rigid cables	150 to 240 mm <sup>2</sup>	70 to 120 mm <sup>2</sup>

For detailed mounting procedures, see instruction sheet.

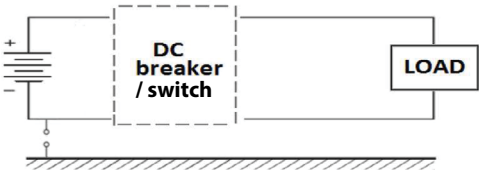
DC connections modality for breakers



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



Applied to DC breaker/switch networks insulated from the ground



7. EQUIPMENTS AND ACCESSORIES

7.1 Earth leakage modules

There are two types of leakage modules:

Standard

In ≤ 400A	3P	Cat.No 0 260 60
	4P	Cat.No 0 260 61
In = 500A-630A	3P	Cat.No 0 260 64
	4P	Cat.No 0 260 65

LED version

In ≤ 400A	4P	Cat.No 0 260 63
In = 500A-630A	4P	Cat.No 0 260 67

**7. EQUIPMENTS AND ACCESSORIES (continued)****■ 7.1 Earth leakage module (continued)**

	Standard	With LED
Type	A - S	A - S
Uninterrupted nominal current I <sub>n</sub> (A)	Up to 630	Up to 630
Rated isolated voltage U <sub>i</sub> (V AC)	500	500
Rated operating voltage U <sub>e</sub> (V AC) (50-60Hz)	500	500
Operating voltage (V AC) (50-60Hz)	230 to 500	110 to 500
Nominal frequency (Hz)	50 - 60	50 - 60
Operating temperature (°C)	-25 to 70	-25 to 70
Trip	Electronic	Electronic
Earth leakage time adjustments (s)	0 - 0.3 - 1 - 3	0 - 0.3 - 1 - 3
Earth leakage breaking capacity I <sub>dm</sub> (% I <sub>cu</sub> )	60	60
Earth leakage protection adjustments I <sub>Δn</sub> (A)	0.03 to 3	0.03 to 3
Side-by-side mounting	No	No
Underneath mounting	Yes	Yes
50% Earth fault detection contact I <sub>Δn</sub>	No	Yes
Clip on rail DIN 35	No	No
Dimensions (W x H x D) (mm) for 4P	183 x 152 x 105	183 x 152 x 106

**■ 7.2 Releases**

There are 3 types of releases (suitable for DPX<sup>3</sup> 630/1600):

**Shunt releases with voltage**

24V ~ / ∞	Cat.No 4 222 39
48V ~ / ∞	Cat.No 4 222 40
110 to 130V ~ / ∞	Cat.No 4 222 41
220 to 250V ~ / ∞	Cat.No 4 222 42
380 to 440V ~ / ∞	Cat.No 4 222 43

Rated voltage (U <sub>c</sub> )	Both ~ / ∞ : 24V / 48V / 110 to 130V / 220 to 250V / 380 to 440V
Voltage range (%U <sub>c</sub> )	70 to 110
Intervention time (ms)	≤ 50
Power consumption (W/VA)	300
Minimum opening time (ms)	50
Insulation voltage (kV)	2,5

**Undervoltage releases with voltage:**

24V ∞	Cat.No 4 222 44
24V ~	Cat.No 4 222 45
48V ∞	Cat.No 4 222 46
110 to 125V ~	Cat.No 4 222 47
220 to 240V ~	Cat.No 4 222 48
380 to 415V ~	Cat.No 4 222 49

Rated voltage (U <sub>c</sub> )	~ : 24V / 110 to 125V / 220 to 240V 380 to 415V / ∞ : 24V/48V
Voltage range (%U <sub>c</sub> )	85 to 110
Power consumption (W/VA)	1.6 / 5
Minimum opening time (ms)	50

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

Time-lag modules with voltage:

230 V ~	Cat.No 0 261 90
400 V ~	Cat.No 0 261 91
Universal Release (to be equipped with a time-lag module Cat.Nos 0 261 90/91)	Cat.No 4 226 23

**■ 7.3 Auxiliary contacts**

The auxiliary contacts are suited for DPX<sup>3</sup> 630/DPX<sup>3</sup> 1600.

Changeover switch 3A – 250V ~ Cat.No 4 210 11

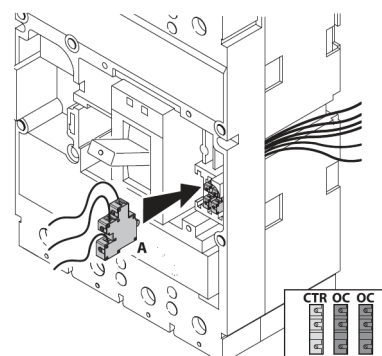
To show the state of the contacts or opening of DPX<sup>3</sup>/DPX<sup>3</sup>-I on a fault:

- an auxiliary contact (standard): OC
- a fault signal: CTR

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

**Configurations**

DPX<sup>3</sup> 630 → 2 auxiliary contacts + 1 fault signal + 1 release



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

**■ 7.4 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 datasheet) 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

**■ 7.5 Rotary handles**

There are many types of suited rotary handles:

**Direct on DPX<sup>3</sup> (with auxiliary option)**

- Standard (black)	Cat.No 0 262 41
- For emergency use (red / yellow) adapting on standard handle	Cat.No 4 222 38

**7. EQUIPMENTS AND ACCESSORIES (continued)****■ 7.5 Rotary handles (continued)****Direct on DPX<sup>3</sup> (no auxiliary option and door defeat function)**

- Standard (black) Cat.No 4 201 62

- For emergency use (red / yellow) adapting on standard handle Cat.No 4 201 65

**Vary depth handle IP55 (with auxiliary option)**

- Standard (black) Cat.No 0 262 81

- For emergency use (red / yellow) adapting on standard handle Cat.No 0 262 82

**Vary depth handle IP55 (no auxiliary option and door defeat function)**

- Standard (black) Cat.No 4 201 63

- For emergency use (red / yellow) adapting on standard handle Cat.No 4 201 76

They can be locked with:

**Locking accessories (for vary depth handle with auxiliary option)**

Key lock accessory for vary depth rotary handle Cat.No 4 228 07

Which must be used with universal keylocks to get the complete locking kit for rotary handle.

**Locking accessories (for direct handle)**

Key barrel and flat key Cat.No 0 262 25

**■ 7.6 Motor operators (front operated)**

There are two types of motor operators:

**For general purpose operations (direct action type):**

- 230V ~ Cat.No 4 226 30

**For synchronized operations (energy storage type):**

- 24V ~/- Cat.No 0 261 40

- 48V ~/- Cat.No 0 261 41

- 110V ~ Cat.No 0 261 42

- 110V = Cat.No 4 226 26

- 230V ~ Cat.No 0 261 44

- 230V = Cat.No 0 261 48

Type	Direct drive		Energy storage	
Rated operating voltage (Uc) ~	230V ~ 50-60 Hz		24 - 48 - 230	
Rated operating voltage (Uc) =	230V ~ 50-60 Hz		24 - 48 - 230	
Voltage range (%Uc)	85 to 110		85 to 110	
	Ope-ning	Clo-sing	Ope-ning	Clo-sing
Pick-up consumption (W/VA)	240	200	300	300
Hold consumption (W/A)	80	120	300	300
Operating time/complete electric operation (ms)	450	550	2000	100
Operating time/main contacts change position (ms)	270	550	-	-
Mechanical endurance (O-C cycles) In = 630A	10000		-	
Electrical endurance (O-C cycles) In = 630A	4000		4000	
Cycles/minutes	Up to 8 automatic open/close operations in a row		10	4

- Mechanical support Cat.No 4 228 06

Which must be used with universal keylocks to get the complete locking kit for motor operator.

**■ 7.7 Mechanical accessories**

There are many types of mechanical accessories:

- Padlock (for locking in "OPEN" position) Cat.No 0 262 40

- Insulated shields (phase insulators) Cat.No 0 262 30

- Sealable terminal shields:

Set of 2 (for 3P) Cat.No 0 262 44

Set of 3 (for 4P) Cat.No 0 262 45

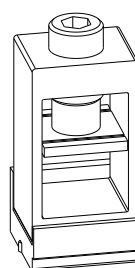
- Terminal covers to guarantee IP20:

Set of 2 (for 3P) Cat.No 0 262 34

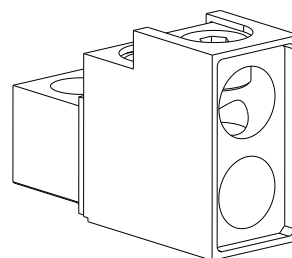
Set of 3 (for 4P) Cat.No 0 262 35

**■ 7.8 Connection accessories****Cage terminals**

- Set of 4 terminals for cables 300 mm<sup>2</sup> max (rigid) Cat.No 0 262 50  
or 240 mm<sup>2</sup> max (flexible) Cu/Al



- Set of 4 high-capacity terminals for cables Cat.No 0 262 51  
2 x 240mm<sup>2</sup> max (rigid) or 2 x 185mm<sup>2</sup> max (flexible) Cu/Al



Type of cage terminal	Cable standard suggested cross section (mm <sup>2</sup> )*		
	In(A)	Cu	Al
Standard Cat.No 0 262 50	250	120	185
	320	185	-
	400	240	-
	500	-	-
	630	-	-
High capacity Cat.No 0 262 51	250	120	185
	320	185	2x120
	400	240	2x150
	500	2x150	2x240
	630	2x185	-

\* The suggested cross section are in compliance with standard IEC60947-1 (ed.6 2020/04) and IEC60947-2 (ed.5.1 2019/07)

DPX<sup>3</sup> 630 thermal magnetic circuit breakers  
DPX<sup>3</sup>-I 630 trip-free switches

Cat.Nos:  
4 220 00 to 4 220 55  
4 222 16 - 4 222 17 - 4 222 18 - 4 222 19

7. EQUIPMENTS AND ACCESSORIES (continued)

■ 7.8 Connection accessories (continued)

Cage terminals (continued)

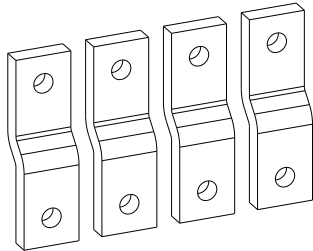
Type of cage terminal	Dimensions limits of cable for cage terminals	
	Min / Max cross section (mm <sup>2</sup> )	
	Flexible	Rigid
Standard Cat.No 0 262 50	6mm <sup>2</sup> / 240mm <sup>2</sup>	4mm <sup>2</sup> / 300mm <sup>2</sup>
High capacity Cat.No 0 262 51	70mm <sup>2</sup> / 185mm <sup>2</sup>	35mm <sup>2</sup> / 240mm <sup>2</sup>

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.

Extended front terminals

- Set of 4

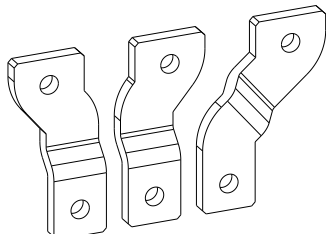
Cat.No 0 262 47



Spreaders (incoming or outgoing):

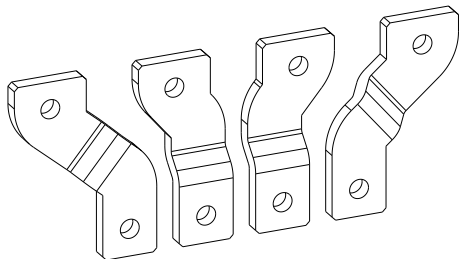
- Set of 2 (for 3P)

Cat.No 0 262 48



- Set of 3 (for 4P)

Cat.No 0 262 49

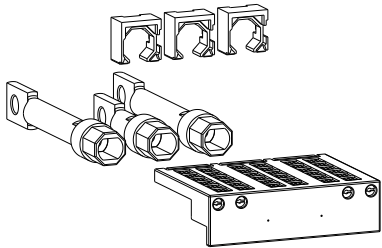


Rear terminals (incoming or outgoing):

They are used to convert the fixed version with front terminals into the fixed version with rear terminals:

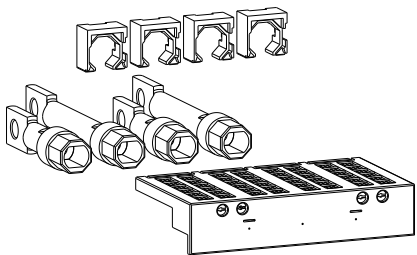
- for 3P

Cat.No 0 263 52



- for 4P

Cat.No 0 263 53

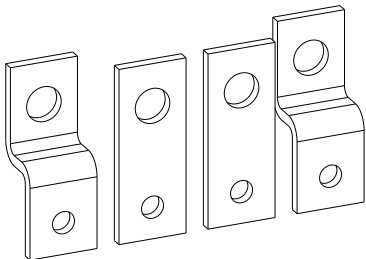


Adaptor for lug

They are used for connecting bare cables with lugs.

Set of 4 adaptors + insulated shields

Cat.No 0 262 46



■ 7.9 Plug-in version

A plug-in is a DPX<sup>3</sup> fitted with special terminals and mounted on a plug-in base.

Special terminals for plug-in / draw-out base

They are suited for incoming and outgoing terminals.

- Set of 6 terminals (3P)

Cat.No 4 222 20

- Set of 8 terminals (4P)

Cat.No 4 222 21

Bases

Bases accept DPX<sup>3</sup>/DPX<sup>3</sup>-I fitted with special terminals.

- Front terminal mounting base for 3P

Cat.No 4 222 22

- Front terminal mounting base for 4P

Cat.No 4 222 23

- Flat rear terminal mounting base for 3P

Cat.No 4 222 24

- Flat rear terminal mounting base for 4P

Cat.No 4 222 25

Bases for breakers with mounted earth leakage module

- Front terminal mounting base for 4P

Cat.No 4 222 26

- Flat rear terminal mounting base for 4P

Cat.No 4 222 27

Accessories

- Set of 2 extractor handle

Cat.No 4 222 28

- Set of connectors (24-pin)

Cat.No 4 222 29

## 7. EQUIPMENTS AND ACCESSORIES (continued)

### ■ 7.10 Draw-out version

A DPX<sup>3</sup> draw-out version is a plug-in DPX<sup>3</sup> fitted with a «Debro-lift» mechanism which can be used to withdraw the DPX<sup>3</sup> while keeping it on its base.

#### “Debro-lift” mechanism

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

- for base only (3P) Cat.No 4 222 31
- for base only (4P) Cat.No 4 222 32
- for base with earth leakage module (4P) Cat.No 4 222 33

#### Keylock for “Debro-lift” mechanism

It enables locking in drawn-out position

- Mechanical support for locking DPX<sup>3</sup> with motor-driven handle or with rotary handle Cat.No 4 228 08
  - Mechanical support for locking DPX<sup>3</sup> only Cat.No 4 228 10
- Cat.Nos 4 228 08 and 4 228 10 must be used with universal keylocks to get the complete locking kit for draw-out version

#### Accessories for “Debro-lift” mechanism

- Signalling contact (plugged-in / draw-out) Cat.No 0 265 74
- Handle for drawing - out Cat.No 0 265 75

#### Auxiliary contacts

Automatic auxiliary contacts for draw-out version Cat.No 4 222 30  
(up to 2 contacts per DPX<sup>3</sup>)

#### Plate for transfer switches (factory assembled)

A transfer switch plate is composed of one plate with interlock for 2 devices.

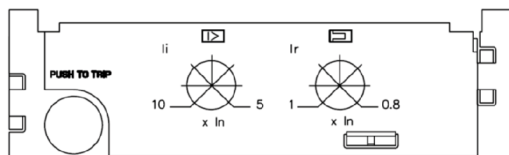
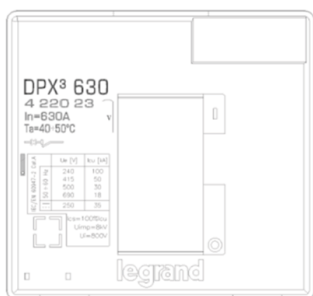
- Plate for breaker or trip-free switch fixed version Cat.No 0 264 09
- Plate for breaker or trip-free switch plug-in and draw-out version. Cat.No 0 264 04

## 8. MARKING

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

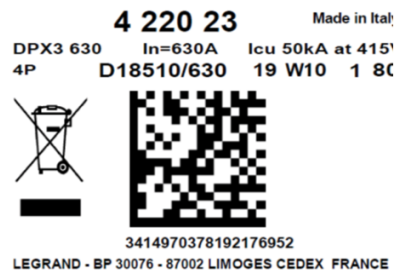
#### Product laser label on front

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



#### Product sticker label on side

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



#### Mark sticker label on side

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

4 220 23

NEMA AB1 (AC breaking capacity)	
Voltage	Current
220/240V	100 kA
480/500V	30 kA
690V	18 kA
 ГОСТ Р.50030.2	
 GB/T 14048.2 40°C 50Hz	

#### Packaging sticker label

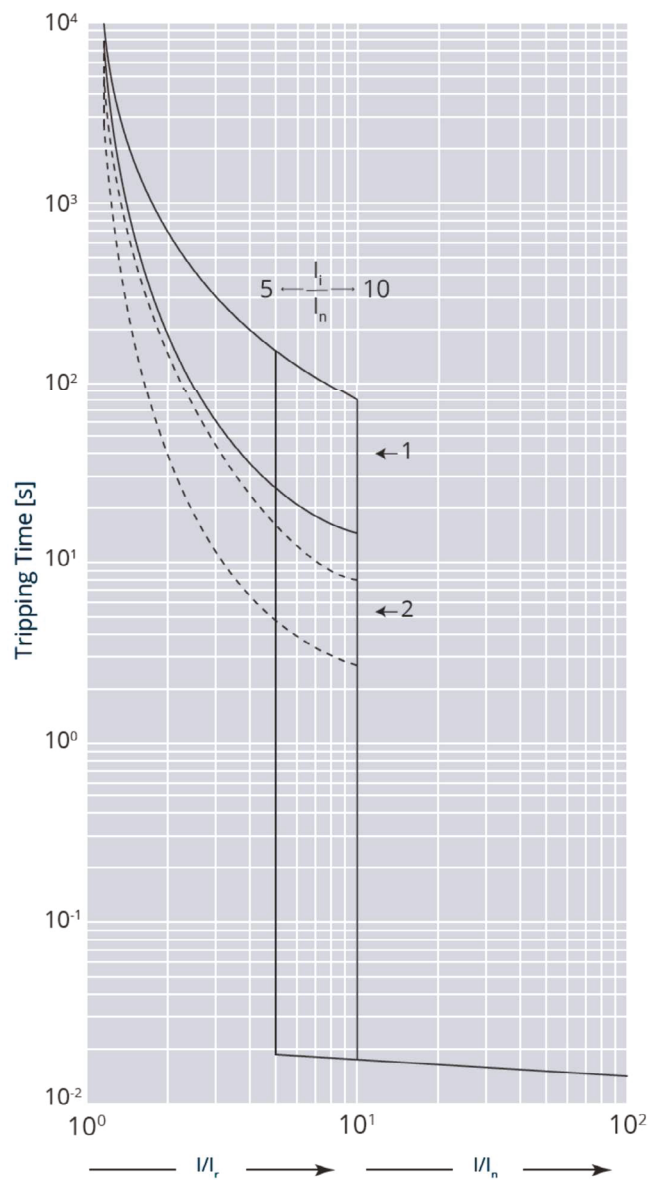
- Manufacturer responsible
- Denomination and type product
- Mark/Licence (if any)
- Directive requirements
- Bar code identification product



9. CURVES

9.1 Thermal magnetic tripping curve

Update: 02/07/2018



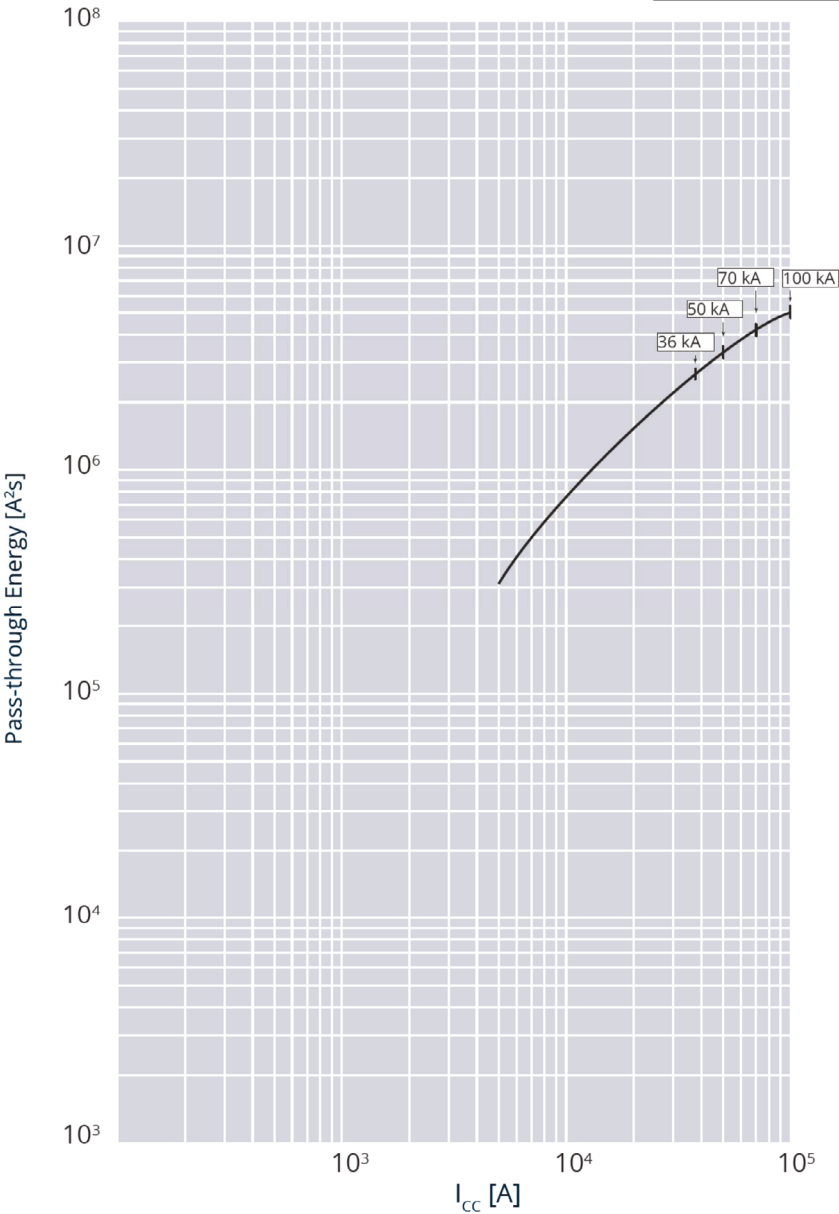
Icu = 36-50-70-100 kA    I<sub>max</sub> = 630 A    3-4 P    U<sub>e</sub> = 415 V~    (IEC/EN 60947-2)

Value	Description
t	Time
I	Current
I <sub>n</sub>	Rated current
I <sub>r</sub>	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: 03/07/2018

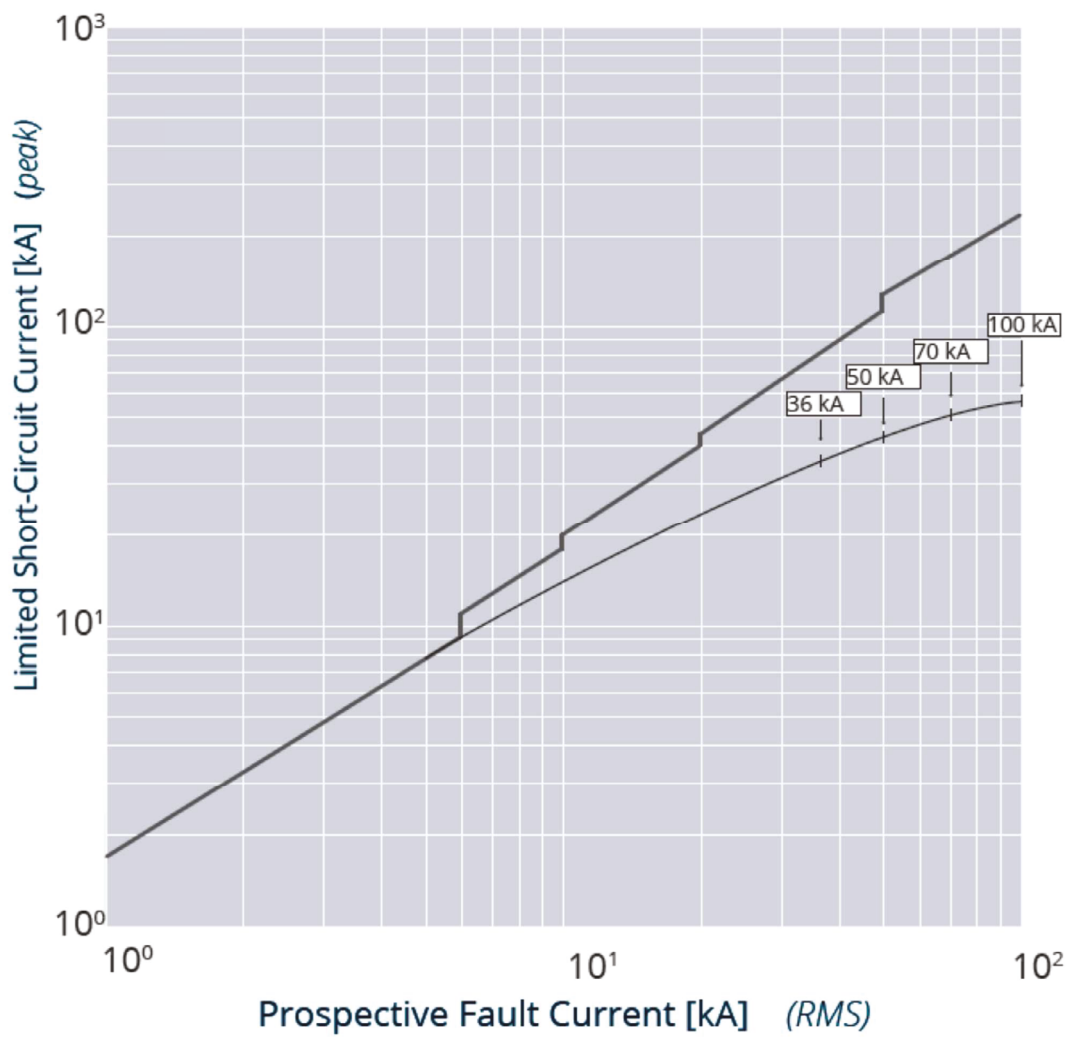


Icu = 36-50-70-100 kA		I <sub>max</sub> = 630 A	3-4 P	U <sub>e</sub> = 415 V~	(IEC/EN 60947-2)
Value		Description			
I <sub>cc</sub>		Short circuit current			
I²t (A²s)		Pass-through specific energy			

9. CURVES (continued)

9.3 Cut-off peak current characteristic curve (kA)

Update: 02/07/2018



Icu = 36-50-70-100 kA		Imax = 630 A	3-4 P	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

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

DPX<sup>3</sup> range respects the European Directives:

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

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

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

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

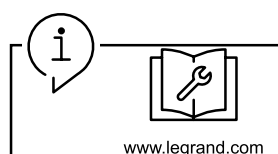
For specific information, please contact Legrand support.

## 11. OTHER INFORMATION

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

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

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



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

**Instruction sheet :** detailed installation information available in 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.