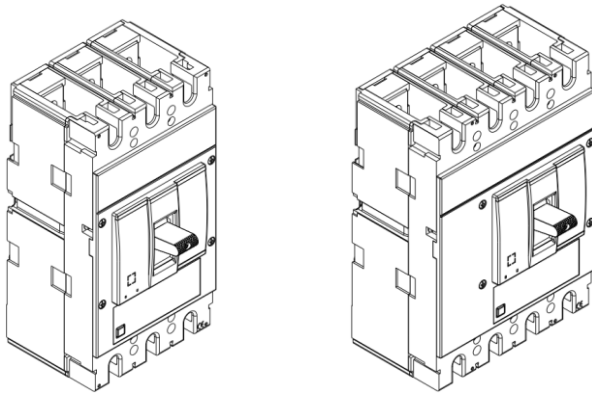


**DRX 630**
**References: 272 34 / 35 / 36 / 37 / 38 / 39 / 40 / 41 / 42 / 43 / 44 / 45 / 46 / 47 / 48 / 49**
**Circuit breaker (not adjustable)**


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7. NORMATIVE	4
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**1. USE**

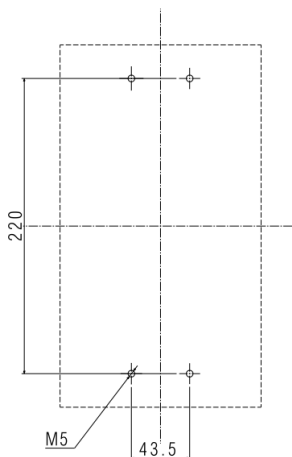
DRX is the range of not adjustable breakers for all the applications of the tertiary and industrial sector including also large assortment of accessories of easy and fast assemblage.

**2. RANGE**

<i>In \ Icu</i>	3P		4P	
	36kA	50kA	36kA	50kA
320A	272 34	272 42	272 38	272 46
400A	272 35	272 43	272 39	272 47
500A	272 36	272 44	272 40	272 48
630A	272 37	272 45	272 41	272 49

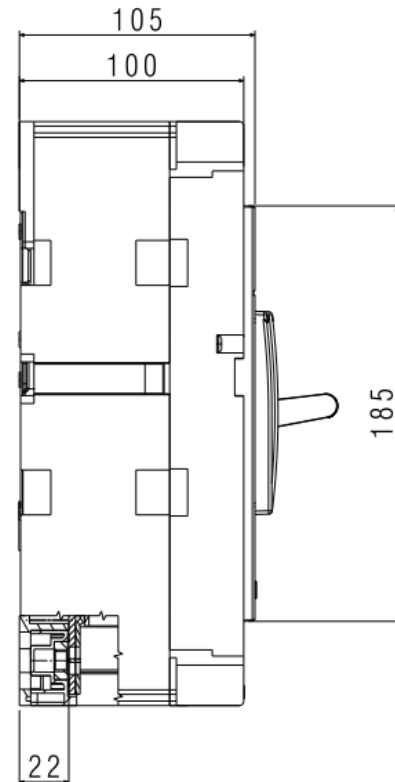
**3. DIMENSIONS**

Fixing on Plate:  
FRONTAL



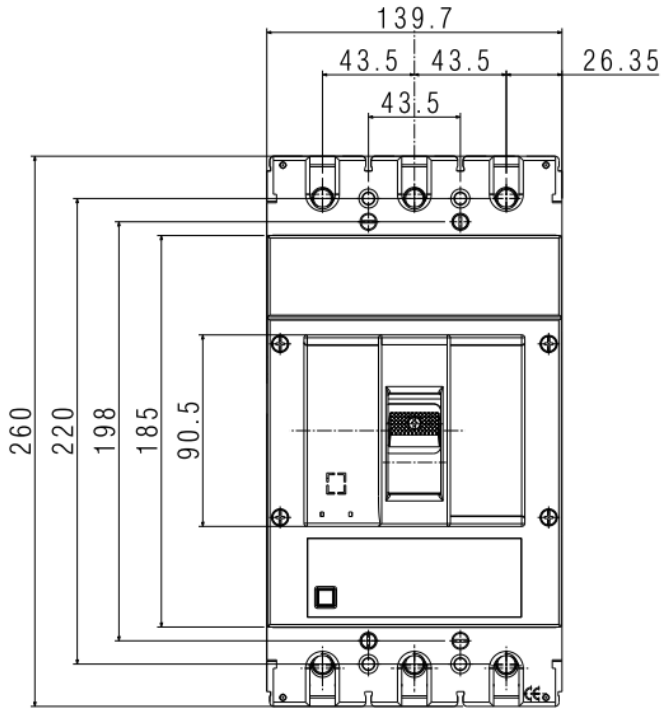
Dimensions :

LATERAL

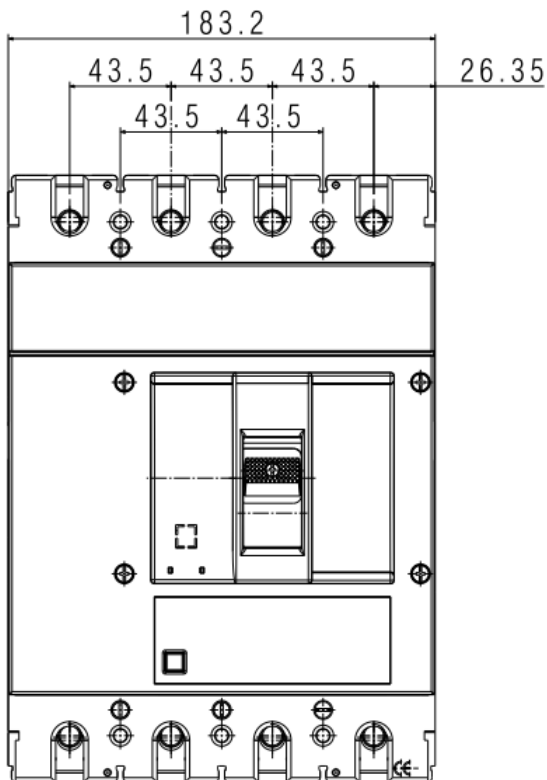


FRONTAL

3P

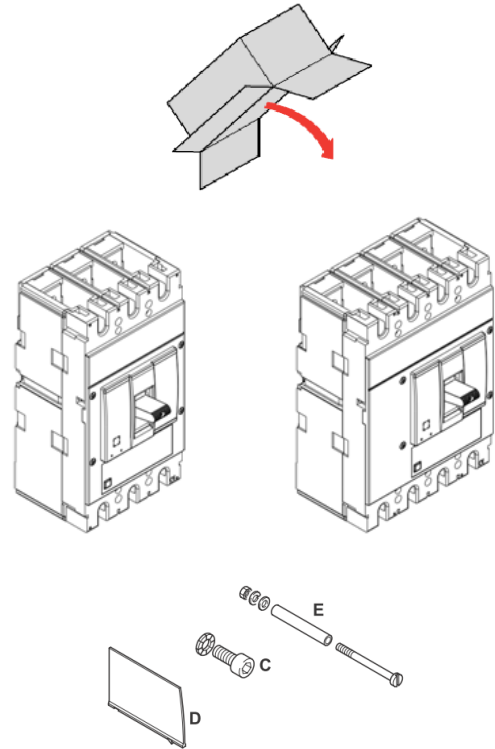


4P



4. MOUNTING

4.1 Delivery



Quantity of accessories (included in the package)

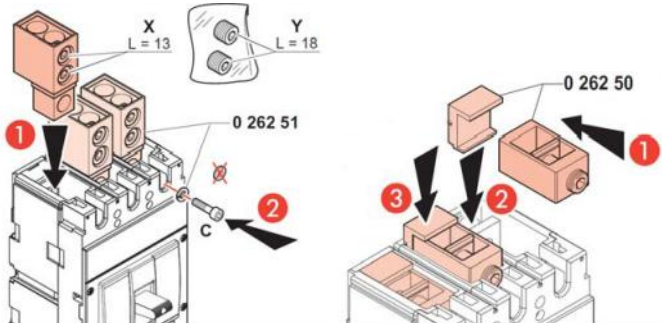
	3P	4P
C	6	8
D	2	3
E	4	4

4.2 Possible way to mount

- On plate :
- Vertical
- Horizontal

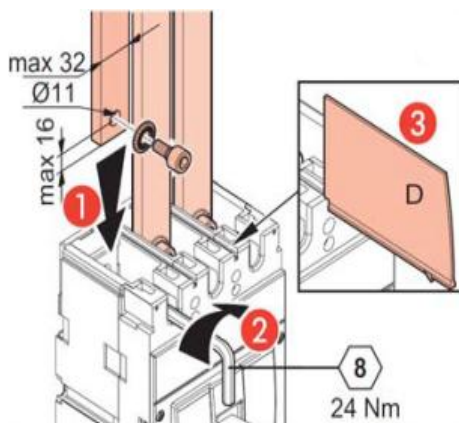
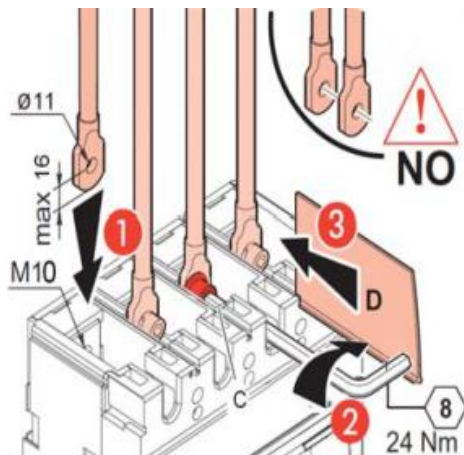
5. CABLING

Cables : Set of 4 standard (ref. 026250) or High-capacity (ref. 026251)



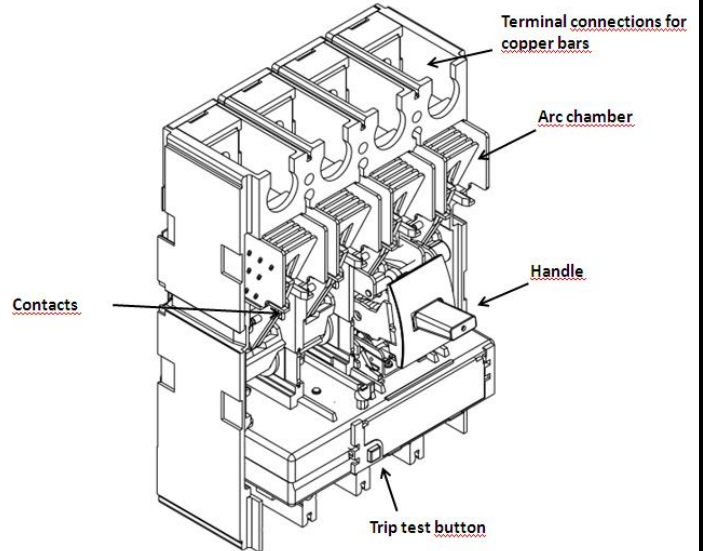
Bars :

BUSBAR CONNECTION - Al/Cu bars



6. ELECTRIC AND MECHANICAL FEATURES

6.1 Main pieces constituting the breaker



6.2 Breaking capacity (kA)

	Breaking capacity (Icu) ad Ics		
	Ue/Icu	3P & 4P	
		F	N
IEC	110/130V ac	85	100
	220/240V ac	85	100
	277V ac	75	85
	380/415V ac	36	50
	440V ac	30	40
	460V ac	30	40
	480/550V ac	25	30
	125V dc *	32	34
NEMA	220/240V ac	85	100
	480/550V ac	25	30
	Ics (%Icu)	50	50

\*2 poles in series

# DRX 630

## Circuit breaker (not adjustable)

References: 272 34 / 35 / 36 / 37 / 38 / 39 / 40 / 41 / 42 / 43 / 44 / 45 / 46 / 47 / 48 / 49

### 6.3 General Features

Breaker	DRX 630 (36-50kA)
Nominal current	320-630
Poles	3-4
Rated insulation voltage $U_i$	800
Rated operating voltage (50/60Hz) $U_e$ (V)	550
Rated impulse withstand current $I_{imp}$ (kV)	8
Nominal frequency (Hz)	50-60
Temperature of functioning (°C)	40-50
Endurance (cycles) mechanical	6000
Endurance (cycles) electrical at $I_n$	2000
Endurance (cycles) electrical at 0,5 $I_n$	4000
Utilization category	A
Suitable for isolation	Yes
Type of protection	Thermal-magnetic
Magnetic adjustable	No
Thermic adjustable	No
Dimensions (wxhxd) (mm)	43,5(xP)x260x105
Neutral protection for 4P version (%Ith)	100

#### Magnetic limit $I_{sd}$ (A)

$I_n$ (A)	320	400	500	630
$I_{sd}(1 \times I_n)$	10	10	10	10
$I_{sd}$ (A)	3200	4000	5000	6300

### 6.4 Power dissipated by pole under $I_n$

$I_n$ (A)	320	400	500	630
$E_n$ (W)	16,4	25,6	23,6	37,3

### 6.5 Functioning in particular condition

#### 6.5.1 Temperature

°C	10	20	30	40/50	60	70
$I_n$ (A)						
320	416	384	352	320	288	256
400	475	460	425	400	360	320
500	600	550	525	500	455	410
630	700	683	650	630	580	530

#### 6.5.2 Altitude

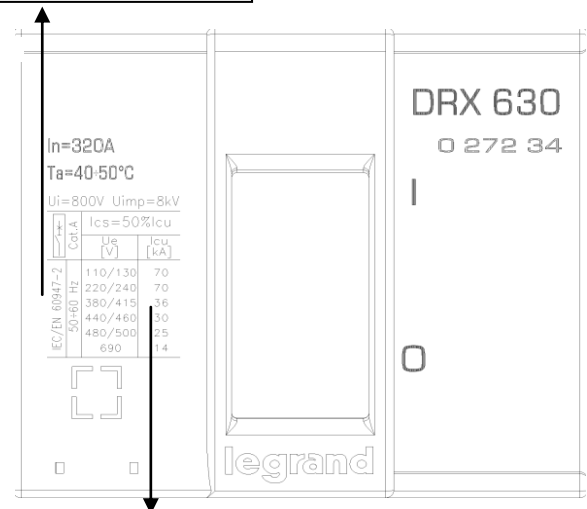
Altitude (m)	2000	3000	4000	5000
Rated current (A)	$1 \times I_n$	$0,98 \times I_n$	$0,93 \times I_n$	$0,9 \times I_n$
Rated voltage (V)	690	590	520	460

## 7. NORMATIVE

IEC 60947-2 → LOVAG Certification → CB Scheme Certification  
In compliance with NEMA standards

### 7.1 MARKING

Références normatives



Identification of the breaking capacity

"Tropicalisation" :

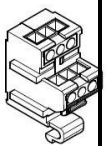
exécution II (tous climats) selon guide UTE C63100

## 8. ACCESSORIES

### 8.1 Auxiliary and Alarm Contacts :

Auxiliary + Alarm Contact

ref. 421011



### 8.2 Shunt Trips: shunt inrush power 300V

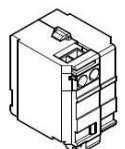
24 V = and ~ ref. 422 239

48 V = and ~ ref. 422 240

230 V = and ~ ref. 422 241

230 V = and ~ ref. 422 242

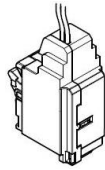
400 V = and ~ ref. 422 243



**8.3 Undervoltage Releases:**

**undervoltage power consumption 5V ~**

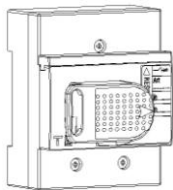
- 24 V = *ref. 422 244*
- 24V ~ *ref. 422 245*
- 48 V = and ~ *ref. 422 246*
- 110 V = and ~ *ref. 422 247*
- 230 V = and ~ *ref. 422 248*
- 400 V = and ~ *ref. 422 249*



**8.4 Rotary handle :**

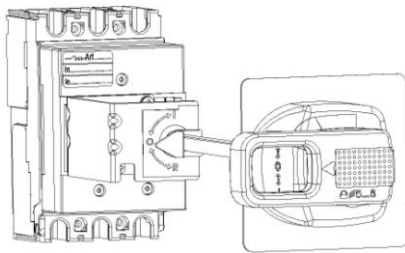
Direct

*ref. 272 50*



Vary-depth

*ref. 272 51*



**8.5 Cage Terminals :**

Capacity:

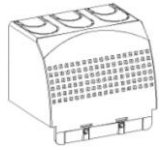
- Flexible cable → from 185mm<sup>2</sup> to 240mm<sup>2</sup>(high capacity to standard)
- Solid cable → from 300mm<sup>2</sup> to 240mm<sup>2</sup> (high capacity to standard)

- Set :** 4 standard cage terminals for DRX630 *ref. 262 50*
- 4 high-capacity cage terminals for DRX630 *ref. 262 51*



**8.6 Sealable terminal shields**

- Set of 2 insulating shield for 3P version *ref. 262 44*
- Set of 2 insulating shield for 4P version *ref. 262 45*

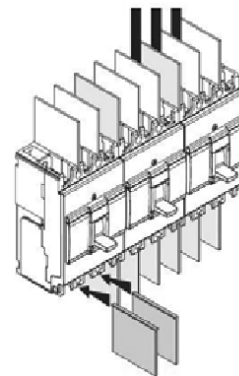


**8.7 Padlock device**

- For locking on "OFF" position *ref. 271 80*

**8.8 Insulating Shields**

- Used to isolate the connection between each pole
- Set of 2 *ref. 262 30*



**8.9 IP 20 Terminal covers**

- Set of 2 terminal covers for 3P version *ref. 422 234*
- Set of 2 terminal covers for 4P version *ref. 422 235*

**8.10 Connection accessories**

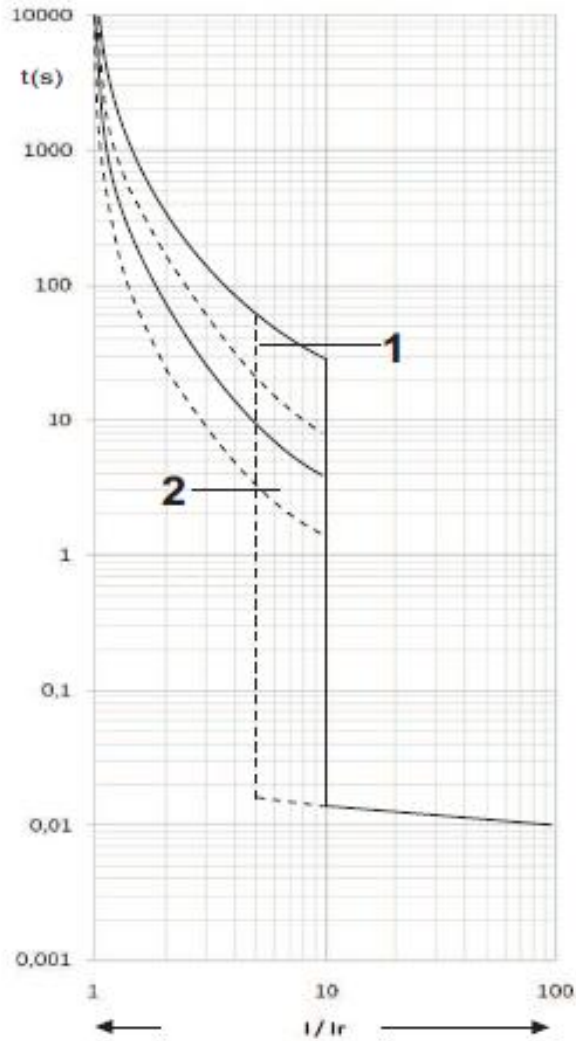
- Set of 4 extended front terminals *ref. 262 47*
- Set of 3 incoming or outgoing spreaders *ref. 262 48*
- Set of 4 incoming or outgoing spreaders *ref. 262 49*
- Set of 3 incoming or outgoing flat terminals *ref. 263 52*
- Set of 4 incoming or outgoing flat terminals *ref. 263 53*

Circuit breaker (not adjustable)

9. CURVES

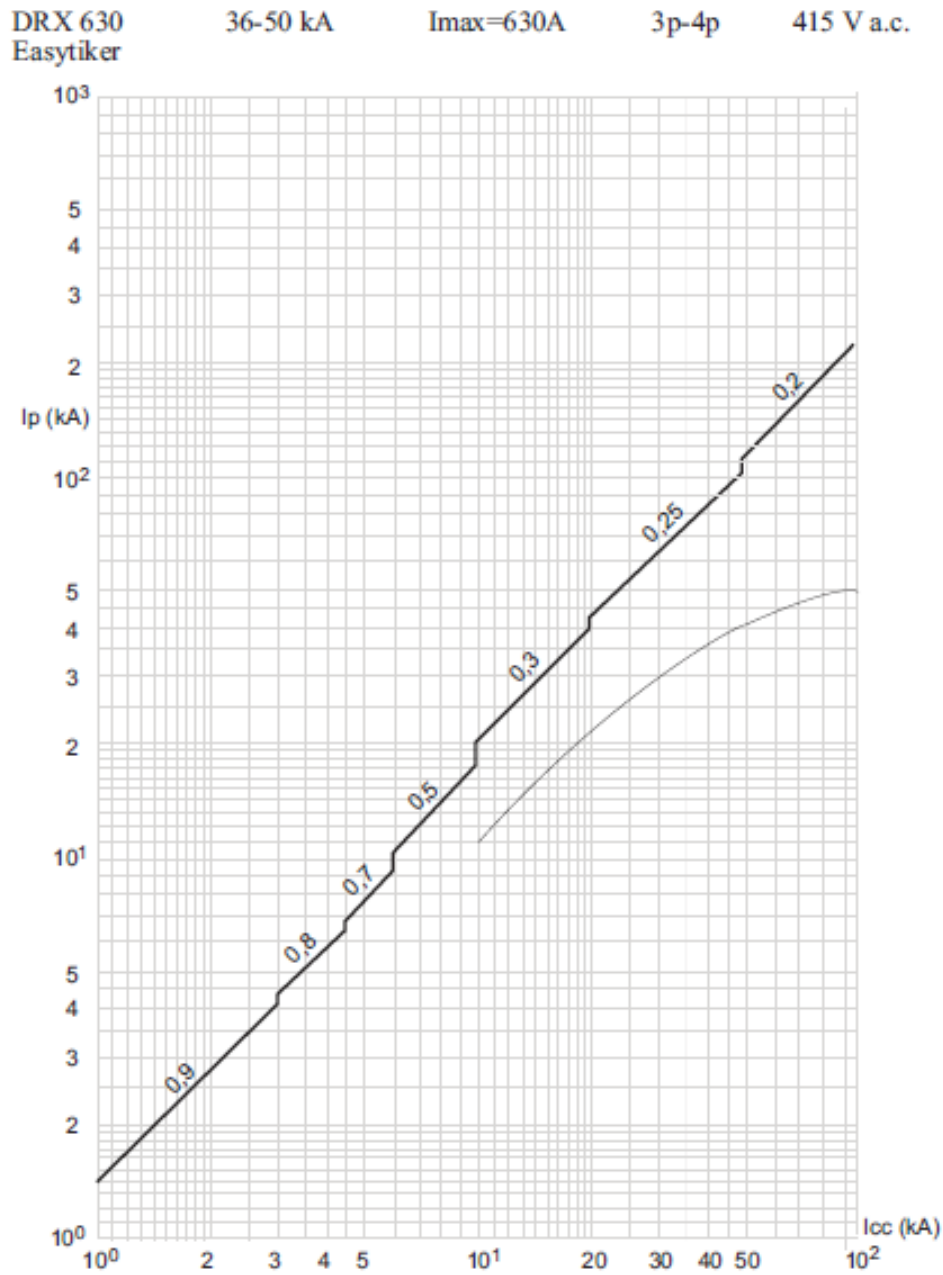
9.1 Thermal magnetic intervention characteristic Curve

DRX 630      36-50 kA       $I_{max}=630A$       3p-4p



t = time  
 I = rated current  
 Ir = setting current  
 curve number 1 = characteristic with cold start  
 curve number 2 = characteristic with hot start

9.2 Cut-off peak current characteristic curve



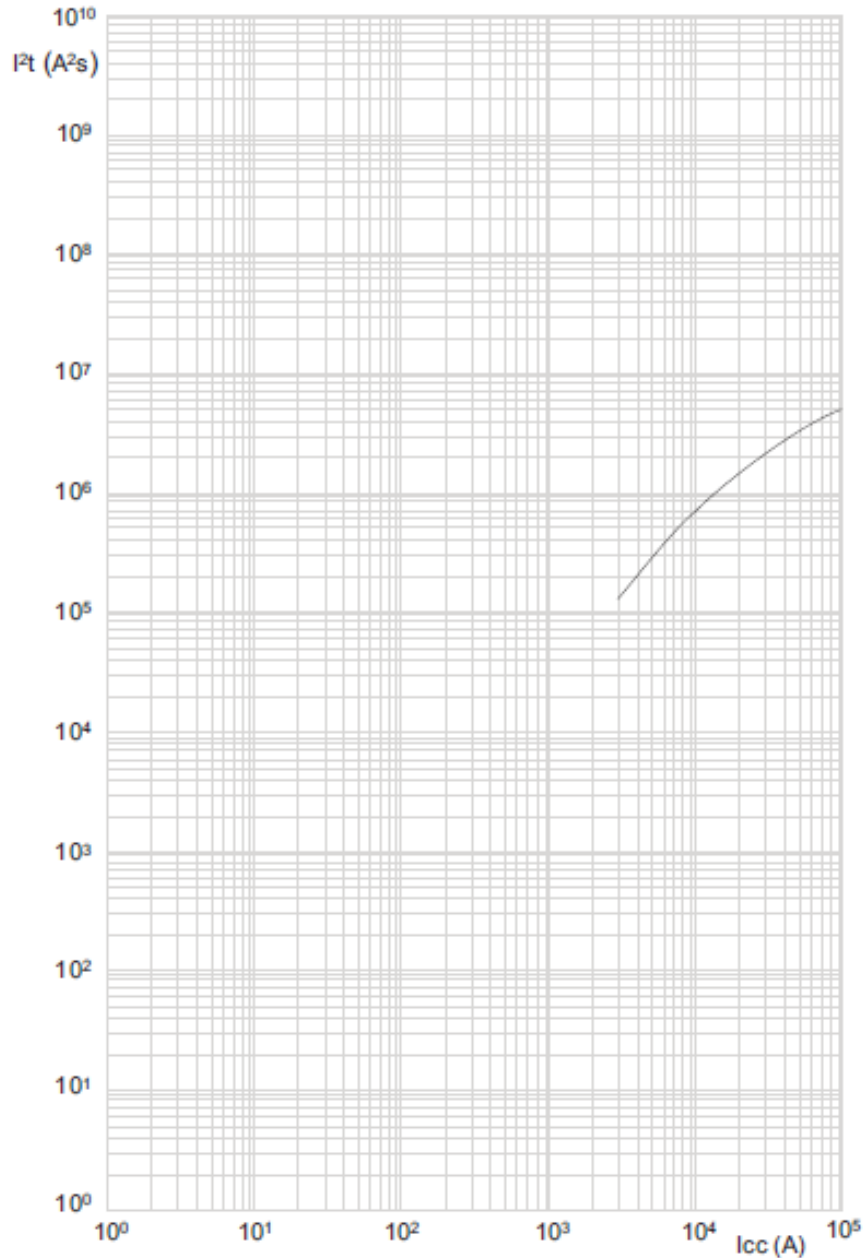
$I_{cc}$  = estimated short circuit symmetrical current (RMS value)  
 $I_p$  = maximum short circuit peak current  
 ——— maximum prospective short circuit peak current corresponding at the power factor  
 ——— maximum real peak short circuit current



9.3 Pass-through specific energy characteristic curve

$I_{cc}$  = estimated short circuit symmetrical current (RMS value)  
 $I^2t$  (A<sup>2</sup>s) = pass-through specific energy

DRX 630      36-50 kA       $I_{max}=630A$       3p-4p



$I_{cc}$  = estimated short circuit symmetrical current (RMS value)  
 $I^2t$  (A<sup>2</sup>s) = pass-through specific energy