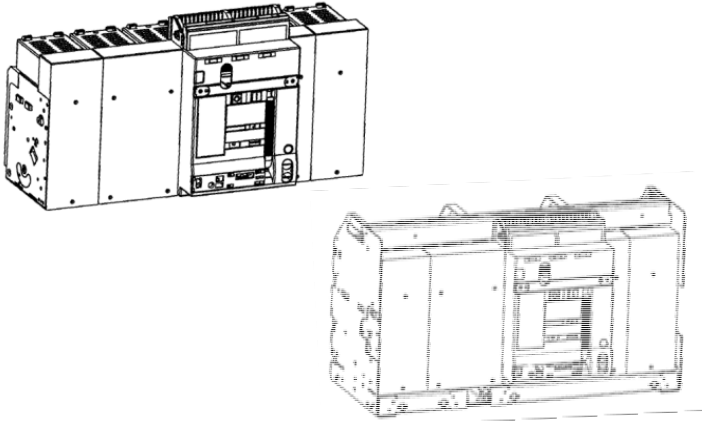


DMX³ 6300 circuit breakers

DMX³-I 6300 switch disconnectors

References: 0 289 50 / 51 / 52 / 53 / 60 / 61 / 62 / 63 / 70 / 71 / 77 / 78



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Full technical sheet Y2958H

1. USE

DMX³ air circuit breakers offer optimal solutions to answer to protection requirements on the origin of the low voltage electrical installation (IEC/EN 60364-1) up to 6300A. Their electric and mechanical robustness, in addition to breaking capacity and chances of accessorizing, are perfectly suited for these requirements.

DMX³ offer a series of air switch-disconnector (I series) also, with high performances of insulation, robustness, closing and withstand capability.

Both series are furthermore developed for increase continuity service looking at the plant energy efficiency and in respect of "green aspects" (see item 7-Conformity).

2. RANGE

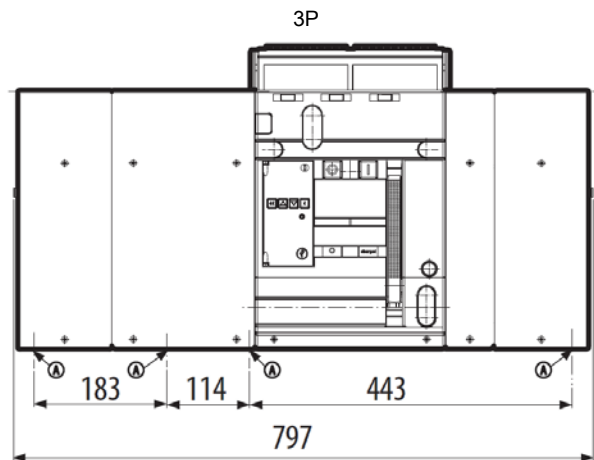
DMX ³ 6300 circuit breakers			
Fixed version			
100kA			
I _n (A)	3P	4P	
5000	0 289 50	0 289 60	
6300	0 289 51	0 289 61	
Draw-out version			
100kA			
I _n (A)	3P	4P	
5000	0 289 70	0 289 77	
6300	0 289 71	0 289 78	

DMX ³ -I 6300 switch disconnectors				
Fixed version		Draw-out version		
I _n (A)	3P	4P	3P	4P
6300	0 289 70	0 289 71	0 289 77	0 289 78

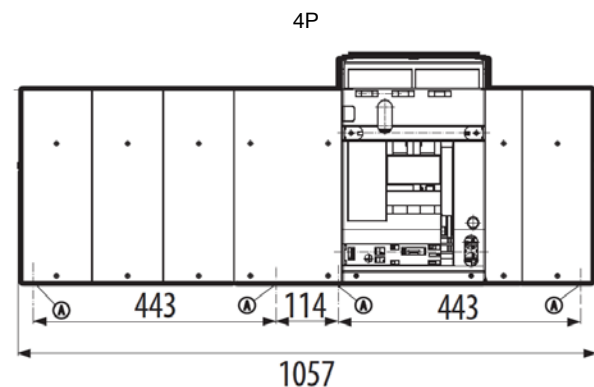
3. DIMENSIONS

3.1 Fixed version

Frontal view



A = fixing point on plate of enclosure



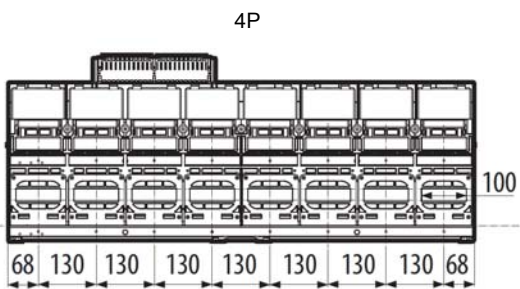
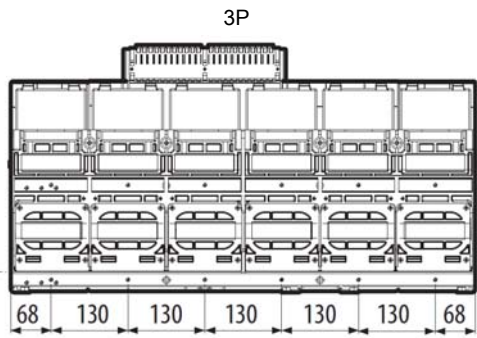
A = fixing point on plate of enclosure

DMX³ 6300 circuit breakers

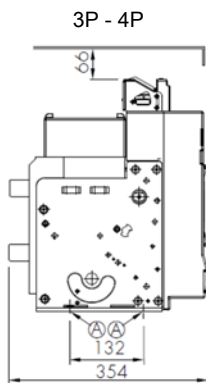
DMX³-I 6300 switch disconnectors

References: 0 289 50 / 51 / 52 / 53 / 60 / 61 / 62 / 63 / 70/
71/ 77/ 78

Rear view



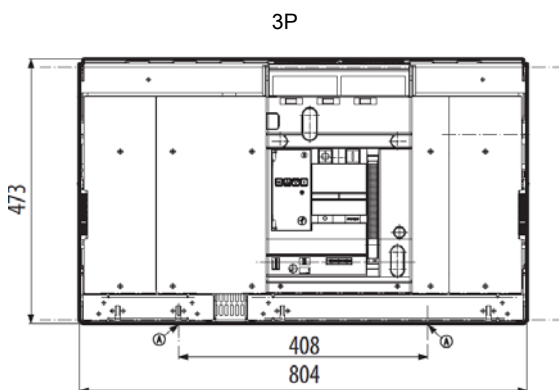
Lateral view



A = fixing point on plate of enclosure

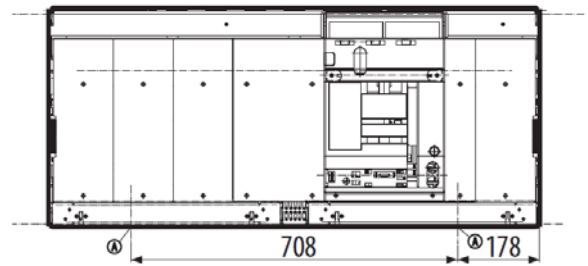
3.2 Draw-out version

Frontal view



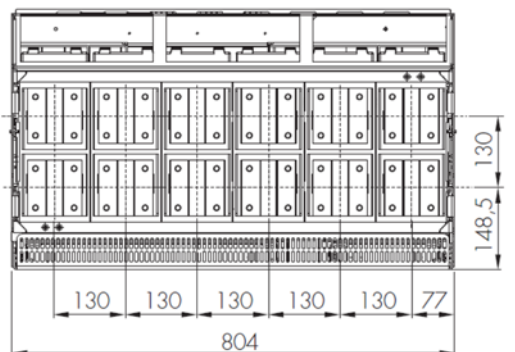
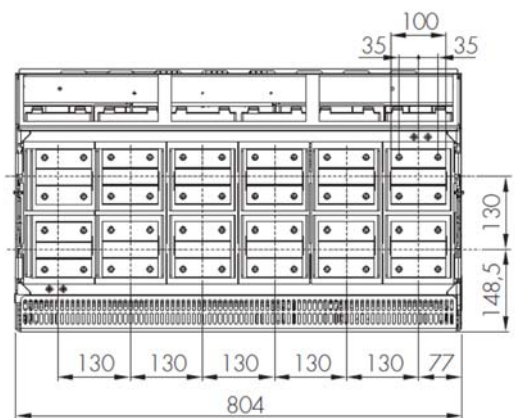
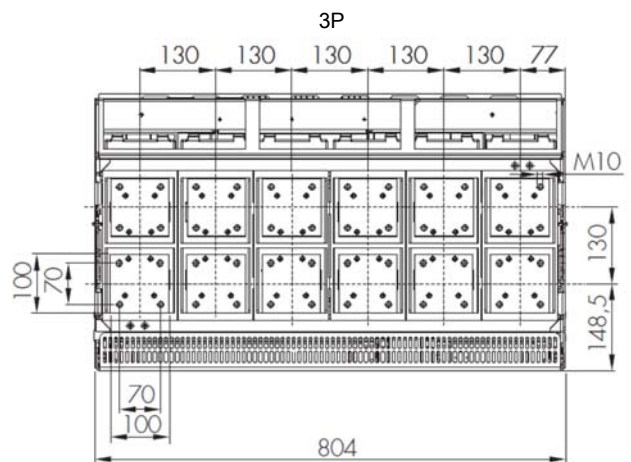
A = fixing point on plate of enclosure

4P



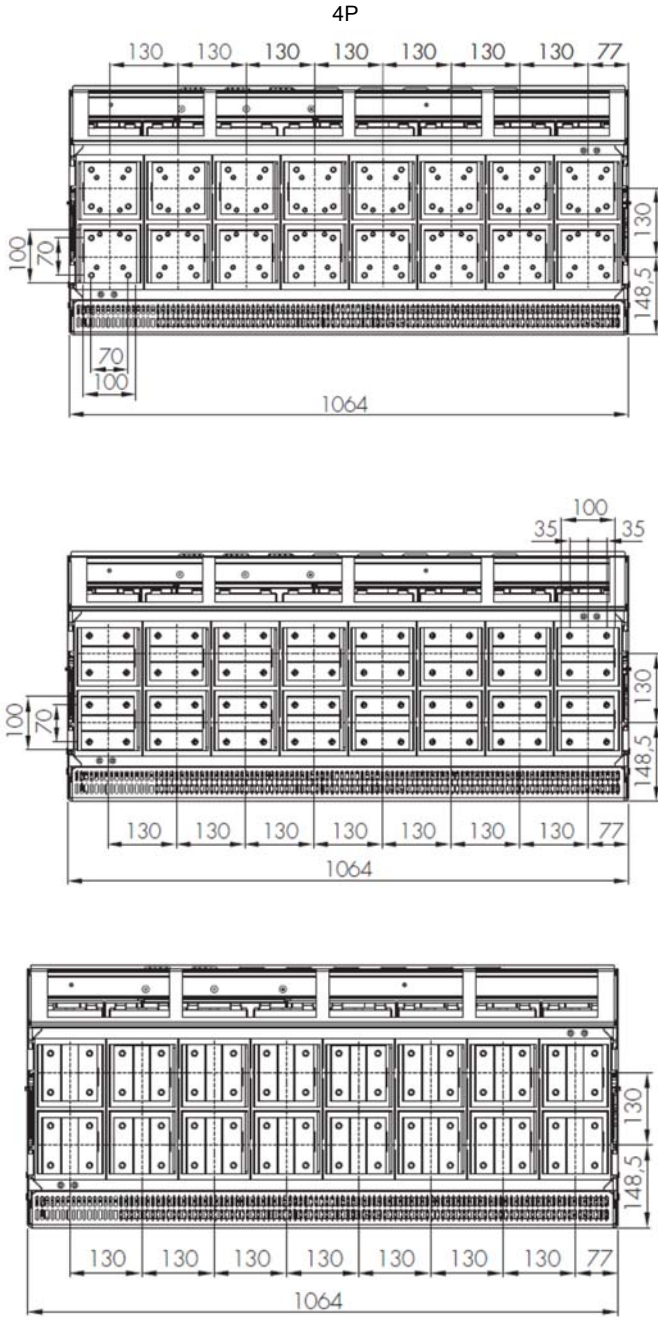
A = fixing point on plate of enclosure

Rear view

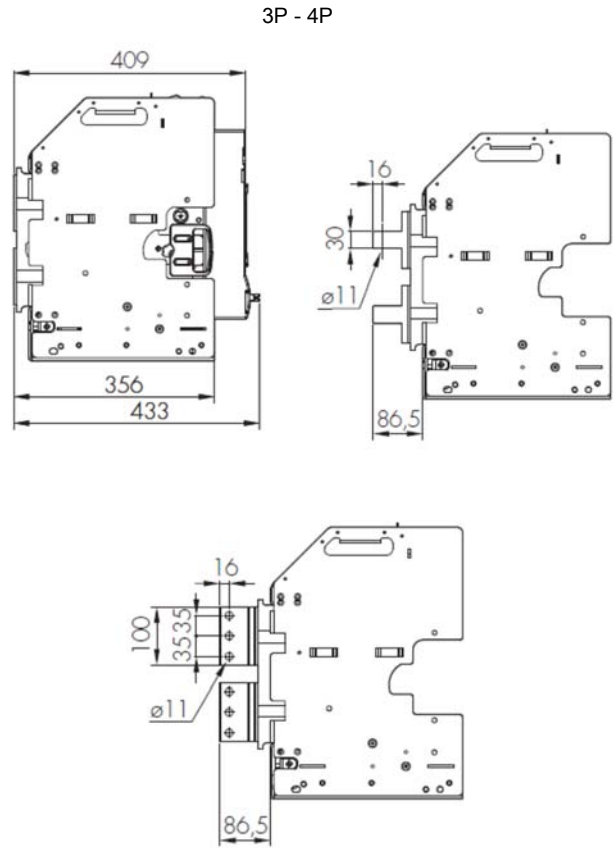


DMX³ 6300 circuit breakers
DMX³-I 6300 switch disconnectors

References: 0 289 50 / 51 / 52 / 53 / 60 / 61 / 62 / 63 / 70/
 71/ 77/ 78

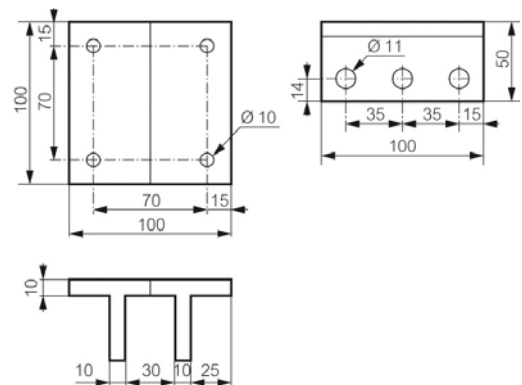
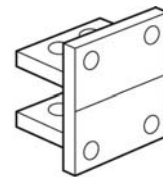


Lateral view



3.3 Rear terminals for fixed version – Flat connection

References	
3P	4P
0 288 92	0 288 93

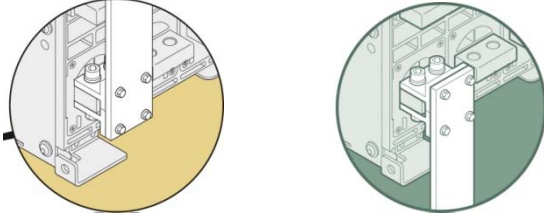


DMX³ 6300 circuit breakers

DMX³-I 6300 switch disconnectors

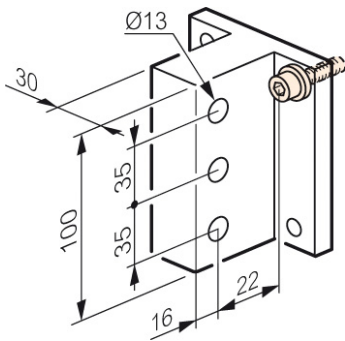
References: 0 289 50 / 51 / 52 / 53 / 60 / 61 / 62 / 63 / 70 / 71 / 77 / 78

Mounting examples:

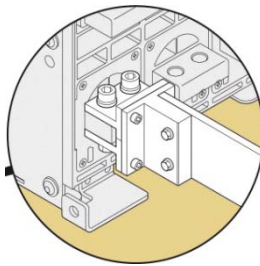


3.4 Rear terminals for fixed version – Vertical connection

References	
3P	4P
0 288 94	0 288 95

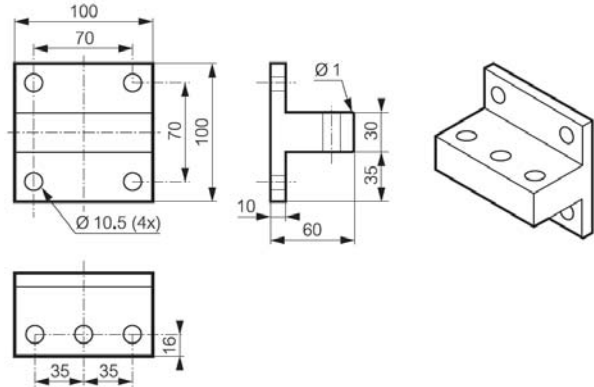


Mounting example:

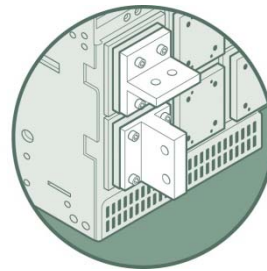


3.5 Rear terminals for Draw-out version – Flat/vertical connection

References	
3P	4P
0 288 94	0 288 95

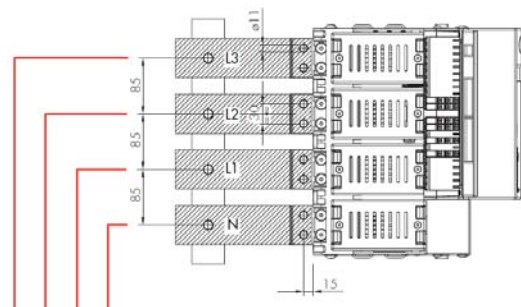
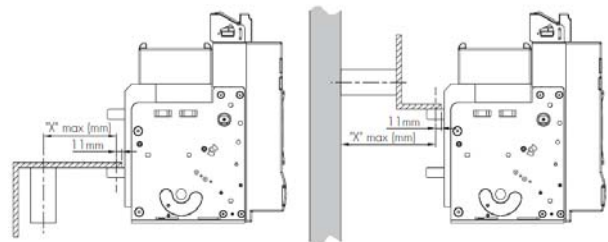


Mounting example:



3.6 Terminations support distances – Fixed version

I_{cc} (kA)	≤ 100
"X" max (mm)	150



DMX³ 6300 circuit breakers

DMX³-I 6300 switch disconnectors

References: 0 289 50 / 51 / 52 / 53 / 60 / 61 / 62 / 63 / 70 / 71 / 77 / 78

4. OVERVIEW

4.1 Supplied with

ACBs are equipped with auxiliary contacts (4 NO/NC, expandable up to 10) and doorframe; besides:

- Fixed version: equipped with rear terminals for horizontal connections with bars.
- Draw-out version: equipped with flat rear terminals for connections with bars and delivered with base equipped with extraction crank and isolating components.
- Door sealing.

5. ELECTRICAL CONNECTIONS

Use only as a general guideline to select products. Due to extensive variety of switchgear installation shapes and conditions of use, the solution used must always be verified. If inter-poles air distance is less than 20mm, it's recommended use of phase insulators or insulated bars.

Minimum cross section of COPPER busbars per pole

. DMX³ and DMX³-I fixed and draw-out versions

Rated current (A)	Vertical bars (mm)	Horizontal bars (mm)
5000	6 bars 100 x 10	6 bars 100 x 10
6300	7 bars 100 x 10	7 bars 100 x 10

Minimum cross section of ALUMINIUM busbars per pole

. DMX³ and DMX³-I fixed and draw-out versions

Rated current (A)	Vertical bars (mm)	Horizontal bars (mm)
5000	6 bars 100 x 10	6 bars 100 x 10
6300	7 bars 100 x 10	7 bars 100 x 10

6. ELECTRICAL AND MECHANICAL CHARACTERISTICS

Circuit breaker

Electrical data refers to IEC/EN 60947-2 standard

		DMX ³ 6300
		DMX ³ L
		100kA
Frame current (A)		6300
Number of poles		3P - 4P
Rated current I _n (A)		5000 / 6300
Release type		electronic
Rated insulation voltage U _i (V)		1000
Rated impulse withstand voltage U _{imp} (kV)		12
Rated operational voltage (50/60Hz) U _e (V)		690
Category of use		B
Rated ultimate short-circuit breaking capacity I _{cu} (kA)	220 / 240 V AC	100
	380 / 415 V AC	100
	440 / 460 V AC	100
	480 / 500 V AC	100
	600 V AC	75
	690 V AC	65
Rated service short-circuit breaking capacity I _{cs} (% I _{cu})		100%
Rated short-circuit making capacity I _{cm} (kA)	220 / 240 V AC	220
	380 / 415 V AC	220
	440 / 460 V AC	220
	480 / 500 V AC	220
	600 V AC	165
	690 V AC	143
Rated short time withstand current I _{cs} (kA) for t = 1s	220 / 240 V AC	100
	380 / 415 V AC	100
	440 / 460 V AC	100
	480 / 500 V AC	100
	600 V AC	75
	690 V AC	65
Rated short time withstand current I _{cs} (kA) for t = 3s	220 / 240 V AC	85
	380 / 415 V AC	85
	440 / 460 V AC	85
	480 / 500 V AC	85
	600 V AC	75
	690 V AC	65
Individual pole short-circuit current I _{IT} (kA)	220 / 240 V AC	1.2 times the maximum setting of the definite time delay release tripping current (I _{sd}) ⁽¹⁾
	380 / 415 V AC	
	440 / 460 V AC	
	480 / 500 V AC	
	600 V AC	
	690 V AC	
Suitable for insulation		Yes
Neutral protection (% I _n)		0 - 50 - 100
Endurance (cycles)	mechanical	5000 (w/o maint.); 10000 (with maint.)
	electrical	5000 (w/o maint.)
Weight (Kg)	3P - Fixed	100
	3P - Drawout ⁽²⁾	150
	4P - Fixed	200
	4P - Drawout ⁽²⁾	250
Height (mm)	3P - Fixed	419
	3P - Drawout	473
	4P - Fixed	419
	4P - Drawout	473
Depth (mm)	3P - Fixed	354
	3P - Drawout	433
	4P - Fixed	354
	4P - Drawout	433
Width (mm)	3P - Fixed	786
	3P - Drawout	1046
	4P - Fixed	804
	4P - Drawout	1064
Temperature	operation	-25°C to +70°C
	storage	-25°C to +85°C
Maintenance		Yes (see specific guide)

⁽¹⁾ For more details, please consult Legrand

⁽²⁾ Weights for draw-out releases are to be intended with base

DMX³ 6300 circuit breakers

DMX³-I 6300 switch disconnectors

References: 0 289 50 / 51 / 52 / 53 / 60 / 61 / 62 / 63 / 70/
71 / 77 / 78

Switch disconnector

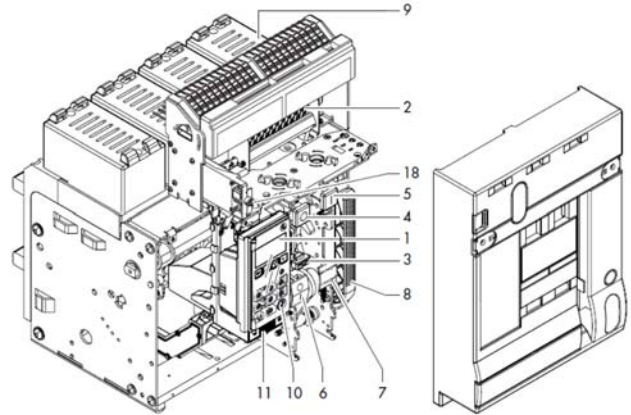
Electrical data refers to IEC/EN 60947-3 standard

		DMX ³ -I 6300
Frame current (A)		6300
Number of poles		3P - 4P
Rated current I _e (A)		6300
Rated insulation voltage U _i (V)		1000
Rated impulse withstand voltage U _{imp} (kV)		12
Rated operational voltage (50/60Hz) U _e (V)		690
Category of use		AC23A
Rated short circuit making capacity I _{cm} (kA)	220 / 240 V AC	220
	380 / 415 V AC	220
	440 / 460 V AC	220
	480 / 500 V AC	220
	600 V AC	165
Rated short time withstand current I _{cw} (kA) for t = 1s	690 V AC	143
	220 / 240 V AC	100
	380 / 415 V AC	100
	480 / 500 V AC	100
Rated short time withstand current I _{cw} (kA) for t = 3s	600 V AC	75
	690 V AC	65
	220 / 240 V AC	85
	380 / 415 V AC	85
Suitable for insulation	480 / 500 V AC	85
	600 V AC	75
	690 V AC	65
Endurance (cycles)	mechanical	5000 (w/o maint.); 10000 (with maint.)
	electrical	5000 (w/o maint.)
Weight (Kg)	3P - Fixed	100
	3P - Drawout ⁽¹⁾	150
	4P - Fixed	200
	4P - Drawout ⁽¹⁾	250
Height (mm)	3P - Fixed	419
	3P - Drawout	473
	4P - Fixed	419
	4P - Drawout	473
Depth (mm)	3P - Fixed	354
	3P - Drawout	433
	4P - Fixed	354
Width (mm)	4P - Drawout	433
	3P - Fixed	786
	3P - Drawout	1046
Temperature	operation	-25°C to +70°C
	storage	-25°C to +85°C
Maintenance		Yes (see specific guide)

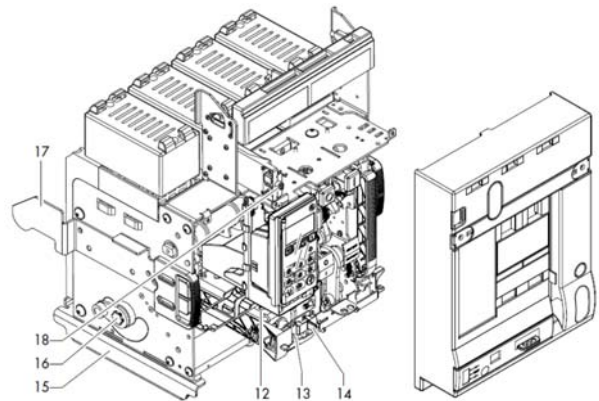
⁽¹⁾ Weights for draw-out releases are to be intended with base

6.1 Main parts constituting the circuit breaker

Fixed version



Draw-out version



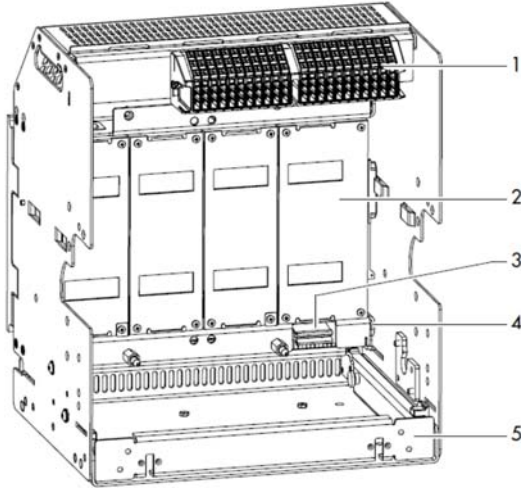
1. Protection Unit
2. Auxiliary Contacts
3. Reset button
4. OFF button
5. ON button
6. ON-OFF Indication
7. Spring Status Indication
8. Charging handle
9. Dejon cell
10. Mini USB cover
11. Battery cover
12. Draw-out mechanism
13. Draw-out bar insertion
14. Racking shutter
15. Support to place the breaker in draw-out cassette
16. Draw-out main shaft
17. Insertion guide
18. Dielectric test selector (if present)

DMX³ 6300 circuit breakers

DMX³-I 6300 switch disconnectors

References: 0 289 50 / 51 / 52 / 53 / 60 / 61 / 62 / 63 / 70 / 71 / 77 / 78

Draw-out base



1. Aux terminal block
2. Safety shutter
3. Earth connection
4. Earth terminal
5. Removable cassette

6.2 Regulated ranges

I _n (A)	Phases			
	I _r		I _{sd}	
	0.4 x I _n	1 x I _n	1.5 x I _{r min}	10 x I _{r max}
5000	2000	5000	3000	50000
6300	2520	6300	3780	63000

* For neutral adjustment, as explained in technical sheet, please consider the values ratios 0%, 50% and 100% on set currents.

6.3 Power losses per pole at I_n / I_e

Power losses for DMX³

Power Losses (W) DMX ³ 6300			
Version	Fixed	Draw-out	
Rated current I _n (A)	5000	150.0	275.0
	6300	238.1	436.6

Note: power loss 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.

Power losses for DMX³-I

Power Losses (W) DMX ³ -I 6300			
Version	Fixed	Draw-out	
Rated current I _e (A)	6300	238.1	436.6

Note: power loss in the table above are referred and measured as described in the standard IEC 60947-1 for switches. Values in the table are referred to a single phase.

6.4 Deratings

6.4.1 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.

Temperature deratings for DMX³ fixed version - horizontal terminals

Temperature	Fixed version									
	up to 40°C		50°C		60°C		65°C		70°C	
	I _{max} (A)	I _r / I _n	I _{max} (A)	I _r / I _n	I _{max} (A)	I _r / I _n	I _{max} (A)	I _r / I _n	I _{max} (A)	I _r / I _n
DMX ³ 6300	5000	1	5000	1	5000	1	5000	1	5000	1
	6300	1	6300	1	6048	0.96	5796	0.92	5544	0.88

Temperature deratings for draw-out versions - horizontal terminals

Temperature	Draw-out version									
	up to 40°C		50°C		60°C		65°C		70°C	
	I _{max} (A)	I _r / I _n	I _{max} (A)	I _r / I _n	I _{max} (A)	I _r / I _n	I _{max} (A)	I _r / I _n	I _{max} (A)	I _r / I _n
DMX ³ 6300	5000	1	5000	1	5000	1	5000	1	5000	1
	6300	1	6300	1	5985	0.95	5796	0.92	5292	0.84

6.4.2 Specific conditions use

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 DMX³ 6300 according to IEC/EN 60947-2 Annex F.

6.4.3 Altitude

Altitude derating for DMX³ and DMX³-I

Altitude (m)	< 2000	3000	4000	5000
Rated current (A)	I _n	0.98 x I _n	0.94 x I _n	0.9 x I _n
Rated voltage U _e (V)	690	600	500	440
Rated insulation voltage U _i (V)	1000	900	750	600
Dielectric withstand (V)	3500	3200	2500	2000

DMX³ 6300 circuit breakers

DMX³-I 6300 switch disconnectors

References: 0 289 50 / 51 / 52 / 53 / 60 / 61 / 62 / 63 / 70 / 71 / 77 / 78

6.5 Electronic protection unit

All DMX³ 6300 can be equipped by an MP4 or MP6 electronic protection unit which main characteristics are:

-Adjustments accomplished by selector switches (MP4) or touchscreen (MP6)

-Long delay (I_r) threshold based on true RMS value of the current

-Integrated LCD screen display electrical values, settings and logs (only for MP4 release)

-Integrated 3.5" colour touchscreen to display electrical values, settings, logs and measures (only for MP4 release)

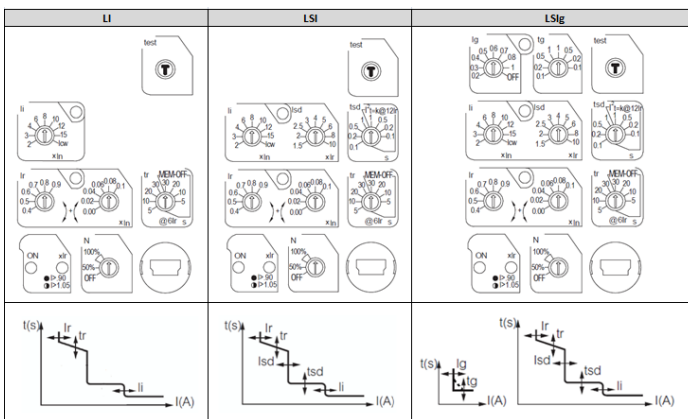
All protection units have onboard a mini USB type "B" socket for maintenance purposes.

6.5.1 Protection unit types

Protection unit are available in MP4 and MP6 type as following

Type	Function	Data		Reference
		visualization	adjustment	
MP4	LI	on LCD screen	knob	0 288 00
	LSI	on LCD screen	knob	0 288 01
	LSIg	on LCD screen	knob	0 288 02
MP6	LSI	on screen	touch	0 288 03
	LSIg	on screen	touch	0 288 04

MP4 detail



Protective functions

- I_r : against overloads with long inverse time delay trip
- t_r : long inverse time delay trip
- I_{sd} : against short-circuits
- t_{sd} : independent time delay ($t=k$)
: inverse short time delay ($I^2t=k$)
- I_l : against short-circuits with adjustable threshold
- I_{ov} : against short-circuit with fixed threshold (factory imposed)
- I_g : against earth fault
- t_g : independent time delay ($t=k$) or inverse short time delay ($I^2t=k$)

6.5.2 Trip threshold (and maximum setting range)

MP4 protection unit

	LI	LSI	LSIg	Maximum possible range of setting	Tolerance
I_r	$0.4 \div 1 \times I_n$	$0.4 \div 1 \times I_n$	$0.4 \div 1 \times I_n$	1 st selector $0.4 \div 0.9 \times I_n$ (step 0.1) 2 nd selector $0.00 \div 0.1 \times I_n$ (step 0.02)	$\pm 20\%$
t_r	$5 \div 30s$	$5 \div 30s$	$5 \div 30s$	at $6 \times I_r$, MEM ON (5-10-20-30s)	-
	$5 \div 30s$	$5 \div 30s$	$5 \div 30s$	at $6 \times I_r$, MEM OFF (5-10-20-30s)	
I_{sd}	$10 \times I_r$	$1.5 \div 10 \times I_r$	$1.5 \div 10 \times I_r$	$1.5-2-2.5-3-4-5-6-8-10 \times I_r$	$\pm 20\%$
t_{sd}	$1s$	$0.1 \div 1s$	$0.1 \div 1s$	$t = k (0.1-0.2-0.5-1s)$ $I^2t = k (0.3-0.2-0.1-0.01s)$	-
I_l	$2 \div 15 \times I_n$	$2 \div 15 \times I_n$	$2 \div 15 \times I_n$	$2-3-4-6-8-10-12-15 \times I_n$	$\pm 10\%$
I_{ov}	I_{cw}/U_e	I_{cw}/U_e	I_{cw}/U_e	override instantaneous fixed threshold	$\pm 10\%$
I_g	N/A	N/A	$0.2 \div 1 \times I_n$	$0.2-0.3-0.4-0.5-0.6-0.7-0.8-1$	$\pm 20\%$
t_g	N/A	N/A	$0.1 \div 1s$	$t = k (0.1-0.2-0.5-1s)$	-
				$I^2t = k (0.1-0.2-0.5-1s)$	

MP6 protection unit

	LSI	LSIg	Maximum possible range of setting	Tolerance
I_r	$0.4 \div 1 \times I_n$	$0.4 \div 1 \times I_n$	$0.4 \div 1 \times I_n$ (step 0.1)	$\pm 20\%$
t_r	$5 \div 30s$	$5 \div 30s$	at $6 \times I_r$, MEM ON (5-10-20-30s)	-
	$5 \div 30s$	$5 \div 30s$	at $6 \times I_r$, MEM OFF (5-10-20-30s)	
I_{sd}	$1.5 \div 10 \times I_r$	$1.5 \div 10 \times I_r$	$1.5-2-2.5-3-4-5-6-8-10 \times I_r$	$\pm 20\%$
t_{sd}	$0.1 \div 1s$	$0.1 \div 1s$	$t = k (0 \div 1 \text{ step } 0.1)$ $I^2t = k (0 \div 1 \text{ step } 0.1)$	-
I_l	$2 \div 15 \times I_n$	$2 \div 15 \times I_n$	$2-3-4-6-8-10-12-15 \times I_n$	$\pm 10\%$
I_{ov}	I_{cw}/U_e	I_{cw}/U_e	override instantaneous fixed threshold	$\pm 10\%$
I_g	N/A	$0.2 \div 1 \times I_n$	$0.2-0.3-0.4-0.5-0.6-0.7-0.8-1$	$\pm 20\%$
t_g	N/A	$0.1 \div 1s$	$t = k (0.1-0.2-0.5-1s)$	-
			$I^2t = k (0.1-0.2-0.5-1s)$	

6.5.3 Batteries for protection units

All protection units are equipped with batteries for powering in case of mains fault or when the breaker is open or not connected. All settings, stored parameters and logs are kept saved on protection unit's memory also if batteries are removed to be replaced.

The protection unit has to be equipped with four CR2 Lithium batteries (voltage 3V).

6.6 Common accessories for protection units

- External auxiliary power supply ref. 0 288 06

Input supply	24 V DC or AC @50-60Hz
Output current	250 mA
Operating temperature (°C)	-10 ÷ +55
Input power supply (W / VA)	≥ 5
Dimension	35mm Din rail: 2 modules

- Communication option ref. 0 288 05
- External neutral for DMX³ 6300 ref. 0 288 10
- Programmable output module ref. 0 288 12

Input supply	24 V DC or AC @50-60Hz
Contact rated current (A)	AC: 250V 8A DC: 30V 8A; 110V 0.3A; 230V 0.12A
Operating temperature (°C)	-10 ÷ +55
Dimension	35mm Din rail: 6 modules

DMX³ 6300 circuit breakers

DMX³-I 6300 switch disconnectors

References: 0 289 50 / 51 / 52 / 53 / 60 / 61 / 62 / 63 / 70/
71/ 77/ 78

7. CONFORMITY

DMX³ 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.

Marks as CCC (China), EAC (Eurasian Federation) or different local certification are available.

DMX³ are in conformity with the Lloyds Shipping Register, RINA and Bureau Veritas Marine.

DMX³ respect the European Directives REACH, RoHS, RAEE and Product Environment Product (PEP Ecopassport) are available.

7.1 MARKING

Product is provided with labelling in full conformity to the referred standard and directives requirements by laser or sticker labels as:

Product laser label on front

- Manufacturer responsible
- Denomination, type product, code
- Standard conformity
- Standard characteristics declared
- coloured identification of I_{cu} 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
- Standard conformity
- Mark/Licence (if any)
- Directive requirements
- bar code identification product



8. EQUIPMENTS AND ACCESSORIES

8.1 Control auxiliaries

- shunt trip: when energised the circuit breaker will be tripped

24 V AC and DC	ref. 0 288 48
48 V AC and DC	ref. 0 288 49
110 ÷ 130 V AC and DC	ref. 0 288 50
220 ÷ 250 V AC and DC	ref. 0 288 51
415 ÷ 480 V AC	ref. 0 288 52

Rated operating voltage (U _c)	AC: 24V;48V;110V ÷ 130V;220V ÷ 250V;415V/440V/480V DC: 24V; 48V; 110V ÷ 130V; 220V ÷ 250V
Voltage range (%U _c)	70 ÷ 110
Pick-up consumption (W / VA)	500 / 500
Pick-up time (ms)	180
Hold consumption (W / VA)	5 / 5
Minimum opening time (ms)	30
Insulation voltage (kV)	2.5

- undervoltage releases: when the coil is de-energised, the circuit breaker will be tripped

24 V AC and DC	ref. 0 288 55
48 V AC and DC	ref. 0 288 56
110 ÷ 130 V AC and DC	ref. 0 288 57
220 ÷ 250 V AC and DC	ref. 0 288 58
415 ÷ 440 V AC	ref. 0 288 59

Rated operating voltage (U _c)	AC: 24V;48V;110V ÷ 130V;220V ÷ 250V;415V/440V/480V DC: 24V; 48V; 110V ÷ 130V; 220V ÷ 250V
Voltage range (%U _c)	85 ÷ 110
Pick-up consumption (W / VA)	500 / 500
Pick-up time (ms)	180
Hold consumption (W / VA)	5 / 5
Minimum opening time (ms)	60
Insulation voltage (kV)	2.5

- Modules for delayed tripping, to be used with undervoltage releases

110 V AC and DC	ref. 0 288 62
230 V AC and DC	ref. 0 288 63

Rated operating voltage (U _c)	AC: 110V / 230V DC: 110V / 230V
Voltage range (%U _c)	85 ÷ 110
Pick-up consumption (W / VA)	16.5 (@110V) / 34.5 (@230V)
Time delay (s)	1 ⁽¹⁾
Hold consumption (W / VA)	5 (@110V) / 10 (@230V)
Opening threshold	0.3 ÷ 0.75 U _n
Closing threshold	0.85 U _n
Operating temperature (°C)	-10 ÷ +55

⁽¹⁾ It is possible to connect up to 3 modules - 1s of delay for each module installed

DMX³ 6300 circuit breakers

DMX³-I 6300 switch disconnectors

References: 0 289 50 / 51 / 52 / 53 / 60 / 61 / 62 / 63 / 70 / 71 / 77 / 78

- Motor operators connect to a release coil (UVR or trip on energising) and a closing coil

24 V AC and DC	ref. 0 288 34
48 V AC and DC	ref. 0 288 35
110 ÷ 130 V AC and DC	ref. 0 288 36
220 ÷ 250 V AC and DC	ref. 0 288 37
415 ÷ 440 V AC	ref. 0 288 38
480 V AC and DC	ref. 0 288 40

Rated operating voltage (U_c)	AC: 24V;48V;110V ÷ 130V;220V÷250V;415V ÷ 440V;480V DC: 24V; 48V; 110V ÷ 130V; 220V ÷ 250V
Voltage range (%U_c)	85 ÷ 110
Maximum Power consumption (W / VA)	180 / 180 (pole 85mm); 240/240 (pole 130mm)
Maximum peak current for 80ms	(2 ÷ 3) x I _n
Charging time (s)	5 (pole 85mm); 7 (pole 130mm)
Operating frequency (n° / min)	2 (pole 85mm); 1 (pole 130mm)

- Closing coils
To enable remote closing of the circuit breaker if the closing spring is charged
- | | |
|-----------------------|---------------|
| 24 V AC and DC | ref. 0 288 41 |
| 48 V AC and DC | ref. 0 288 42 |
| 110 ÷ 130 V AC and DC | ref. 0 288 43 |
| 220 ÷ 250 V AC and DC | ref. 0 288 44 |
| 415 ÷ 480 V AC | ref. 0 288 45 |

Rated operating voltage (U_c)	AC: 24V;48V;110V ÷ 130V;220V ÷ 250V;415V/440V/480V DC: 24V; 48V; 110V ÷ 130V; 220V ÷ 250V
Voltage range (%V_n)	85 ÷ 110
Pick-up consumption (W / VA)	500 / 500
Pick-up time (ms)	180
Hold consumption (W /VA)	5 / 5
Maximum closing time (ms)	50
Insulation voltage (kV)	2.5

8.2 Signalling auxiliaries

- Signalling contact for draw-out version
Inserted / test / draw-out signalling contact
3 changeover contacts per position ref. 0 288 13

Rated operating voltage (U_c)	DC	250V 0.3A 125V 0.6A
	AC	250V 16A 125V 16A

- Contact "ready to close" with charged springs ref. 0 288 14

Rated operating voltage (U_c)	DC	250V 0.3A 125V 0.6A
	AC	250V 16A 125V 16A

- Additional signalling contact ref. 0 288 15

Rated operating voltage (U_c)	DC	250V 0.3A 125V 0.6A
	AC	250V 16A 125V 16A

- Signalling contact for auxiliaries (ST, CC and UVR) ref. 0 288 16

Rated operating voltage (U_c)	DC	250V 0.3A 125V 0.6A
	AC	250V 16A 125V 16A

8.3 Locking

- Key locking in "open" position
 - 1 lock + 1 Profalux star type flat key ref. 0 288 30
 - 1 lock + 1 Ronis type flat key ref. 0 288 31
 - 2 holes support frame for locks ref. 0 288 28
 - Set of 5 key barrels with Ronis type flat key ref. 0 288 29

- Key locking in "draw-out" position
 - Mounting of the lock on the base
 - Lock and key Profalux type star key ref. 0 288 32
 - Lock and key Ronis type flat key ref. 0 281 33

- Door locking
Prevents opening of the door with the circuit breaker closed
Left-hand and right-hand side mounting ref. 0 288 20

- Padlocks in "open" position
 - Padlocking system for ACB (padlock not supplied) ref. 0 288 21
 - Padlock for buttons ref. 0 288 24
 - Padlocking system for shutters (padlock not supplied) ref. 0 288 26

8.4 Accessories

- Mechanical operations counter: to count total number of operation cycles of device ref. 0 288 23
- Rating mis-insertion device: to prevent the insertion of a draw-out circuit breaker into an incompatible base ref. 0 288 25
- Lifting plate ref. 0 288 79
- Inserted/test/drawout lock button ref. 0 288 17

8.5 Fixing devices for DMX³ and DMX³-I 6300

Specific instruction sheets are provide to integrate DMX³ and DMX³-I 6300 into XL³ enclosures ranges (fixing plates, metal faceplates for circuit breakers and cable sleeves, etc...).

8.6 Equipment for conversion of a fixed device into draw-out device

- Bases for draw-out device
 - For DMX³ / DMX³-I 6300 frame 3P ref. 0 289 13
 - For DMX³ / DMX³-I 6300 frame 4P ref. 0 289 14
- Transformation kit for draw-out version
 - For DMX³ / DMX³-I 6300 frame 3P ref. 0 289 15
 - For DMX³ / DMX³-I 6300 frame 4P ref. 0 289 16

8.7 Equipment for interlocking

- The mechanical interlock is set up using cables and can interlock 2 or 3 devices, which may be different type in a vertical or horizontal configuration. The interlock unit is mounted on the right-hand side of the device. Interlock cables to be ordered separately.
 - Interlock for DMX³ 6300 ref. 0 288 66

DMX³ 6300 circuit breakers

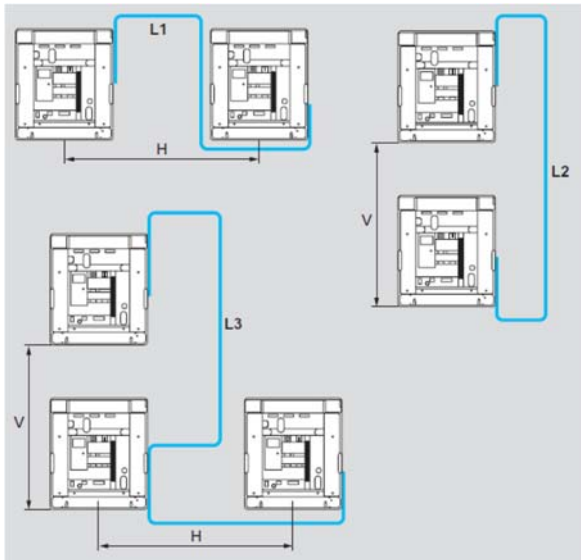
DMX³-I 6300 switch disconnectors

References: 0 289 50 / 51 / 52 / 53 / 60 / 61 / 62 / 63 / 70/
71/ 77/ 78

8.8 Interlock cables

- | | |
|-----------|---------------|
| • 1000 mm | ref. 0 289 17 |
| • 1500 mm | ref. 0 289 18 |
| • 2600 mm | ref. 0 289 20 |
| • 3000 mm | ref. 0 289 21 |
| • 3600 mm | ref. 0 289 22 |
| • 4000 mm | ref. 0 289 23 |
| • 4600 mm | ref. 0 289 24 |
| • 5600 mm | ref. 0 289 25 |

Choice of interlock cable



Calculation of cable length:

$$L1 = 1430 + H$$

$$L2 = 1570 + V$$

$$L3 = 1430 + V + H$$

8.9 Rear terminals

- For fixed version

For flat connections with bars, 3P	ref. 0 288 92
For flat connections with bars, 4P	ref. 0 288 93
For vertical connections with bars, 3P	ref. 0 288 94
For vertical connections with bars, 4P	ref. 0 288 95

Note 1: refs. 0 288 92/93 to be fixed onto horizontal rear terminals of the circuit breaker

Note 2: refs. 0 288 94/95 to be used to transform a flat connection into a vertical one. To be fixed onto refs. 0 288 92/93 according to the number of poles.

- For draw-out version

For vertical or horizontal connections with bars, 3P	ref. 0 288 94
For vertical or horizontal connections with bars, 4P	ref. 0 288 95

Note: to be fixed directly onto plate rear terminals of the circuit breaker

Note: for fixed and draw-out versions, please consider to double the number of references for each pole.

8.10 Insulating shields

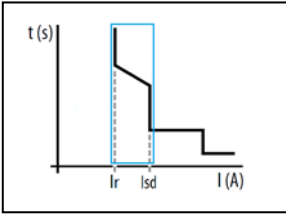
- | | |
|-----------------------|---------------|
| • Fixed version 3P | ref. 0 288 98 |
| • Fixed version 4P | ref. 0 288 99 |
| • Draw-out version 3P | ref. 0 288 18 |
| • Draw-out version 4P | ref. 0 288 19 |

DMX³ 6300 circuit breakers
DMX³-I 6300 switch disconnectors

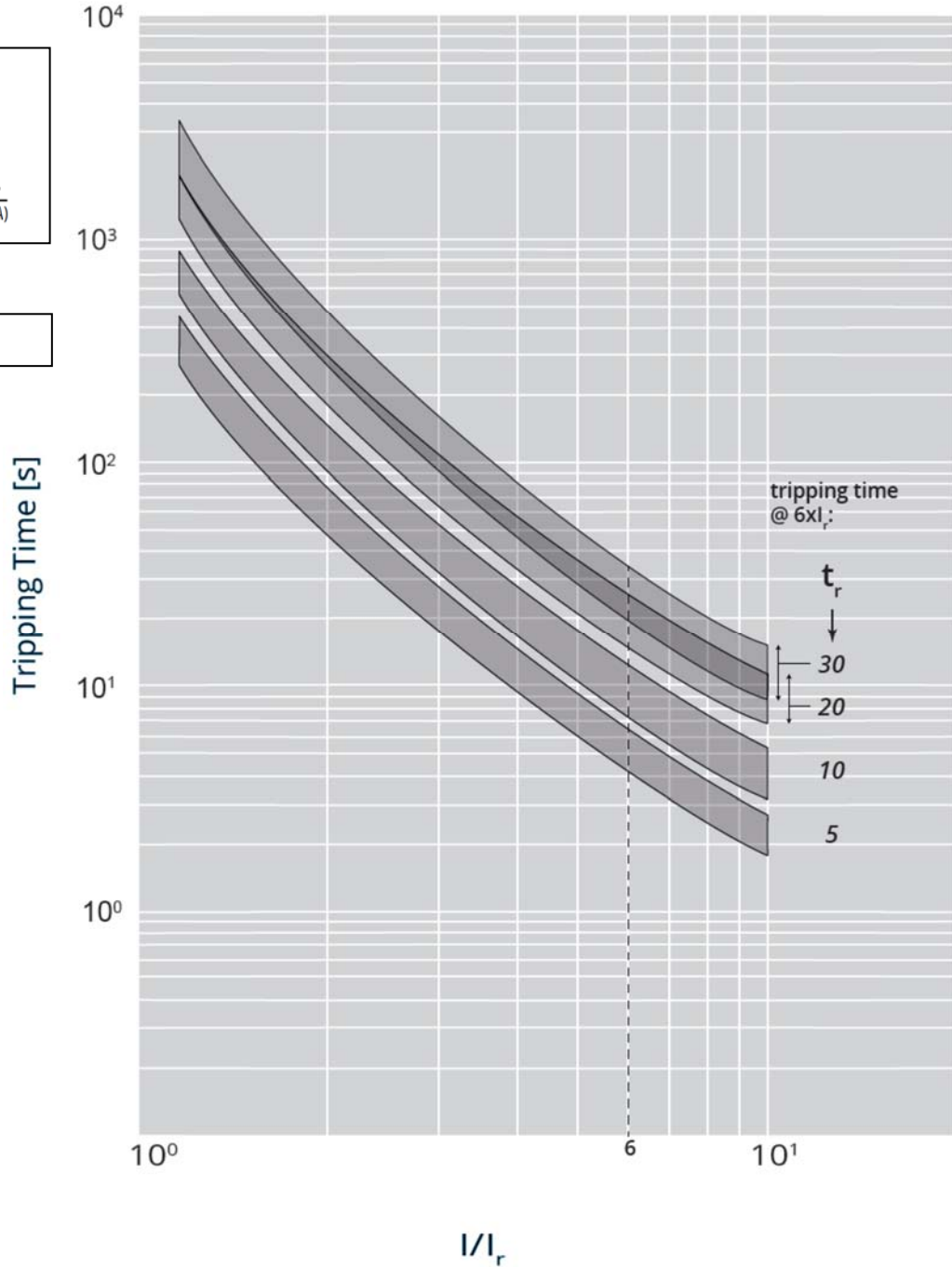
References: 0 289 50 / 51 / 52 / 53 / 60 / 61 / 62 / 63 / 70 / 71 / 77 / 78

9. CURVES

9.1.1 TRIPPING CURVE FOR DMX³ 6300 protection units: long time protection detail



Update: 27/03/2018

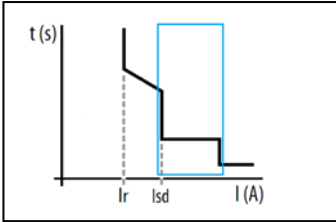


Value	Description
I	current
I _r	long time setting current
t _r	long time delay

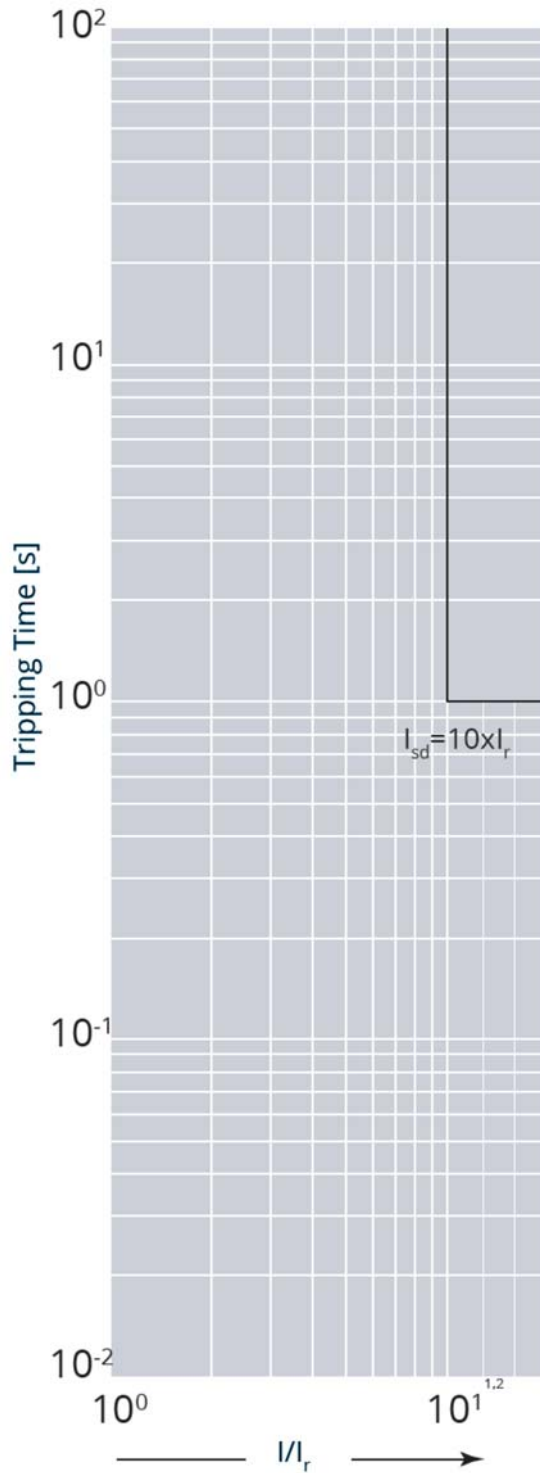
DMX³ 6300 circuit breakers
DMX³-I 6300 switch disconnectors

References: 0 289 50 / 51 / 52 / 53 / 60 / 61 / 62 / 63 / 70 / 71 / 77 / 78

9.1.2 TRIPPING CURVE FOR DMX³ 6300 (MP4 protection units): short time trip protection detail (only LI)

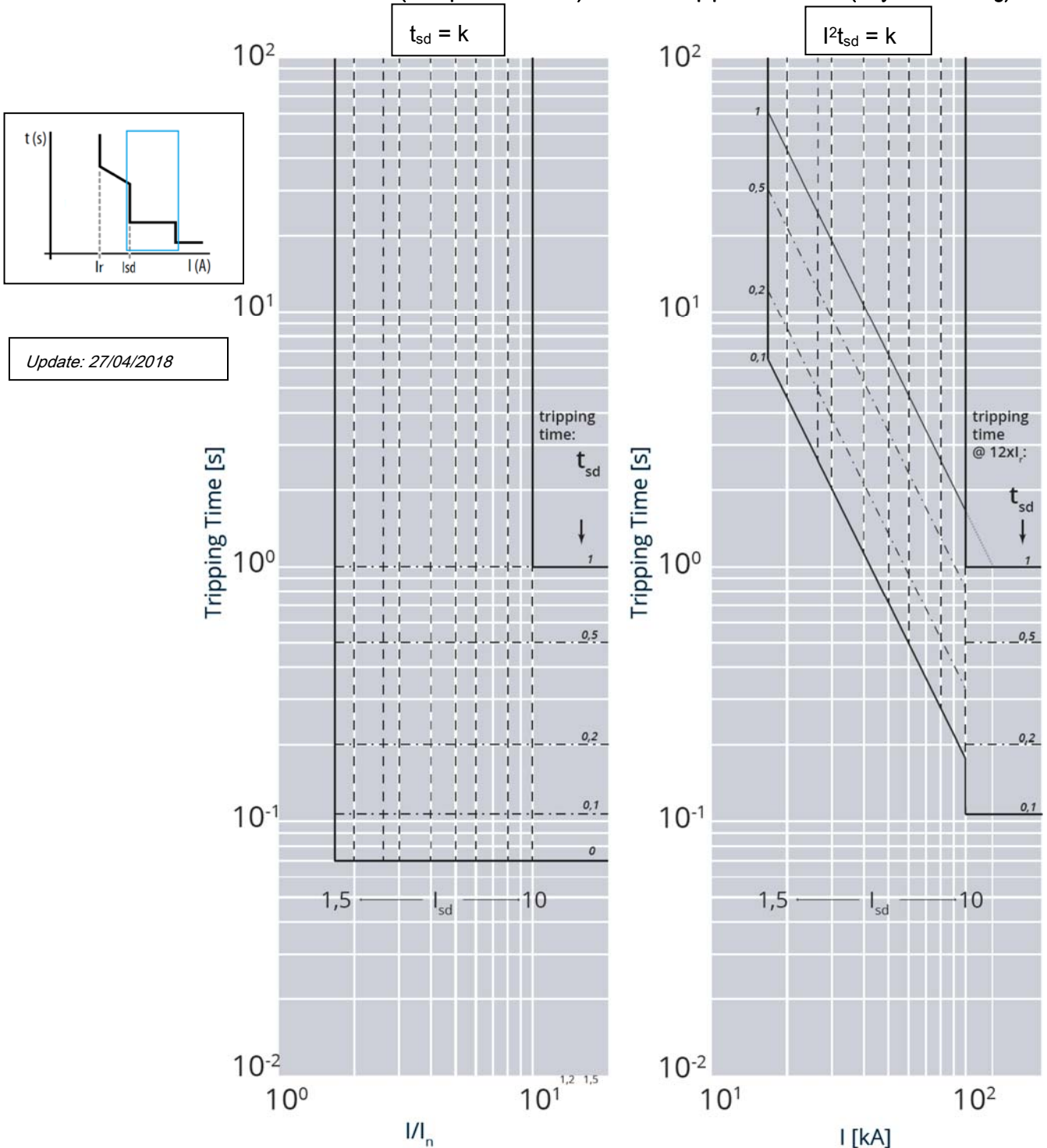


Update: 27/04/2018



Value	Description
I	current
I_{sd}	short time setting current
t_{sd}	short time delay

9.1.3 TRIPPING CURVE FOR DMX³ 6300 (MP4 protection units): short time trip protection detail (only LSI and LSIg)

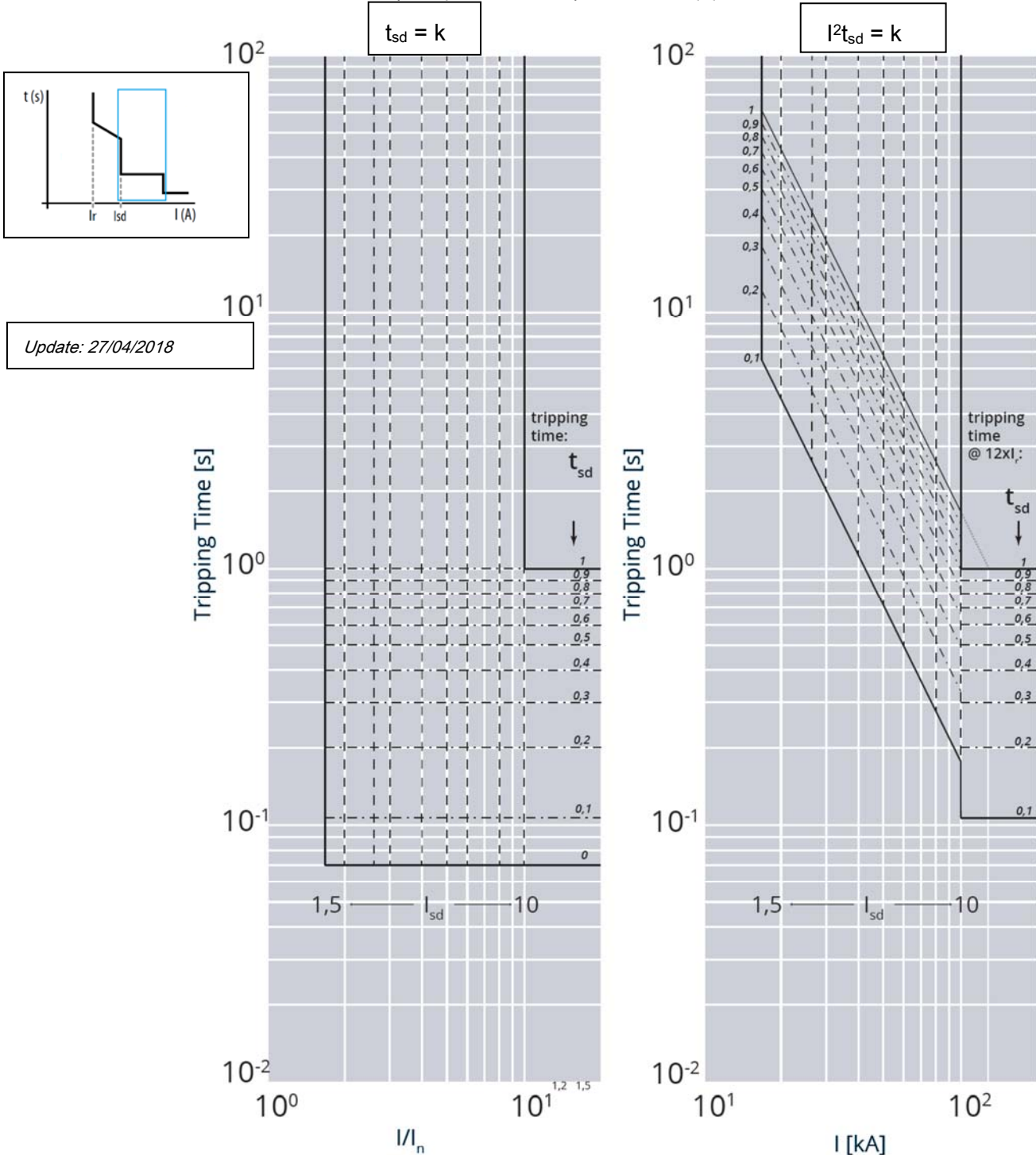


Value	Description
I	current
I _{sd}	short time setting current
t _{sd}	short time delay

DMX³ 6300 circuit breakers
DMX³-I 6300 switch disconnectors

References: 0 289 50 / 51 / 52 / 53 / 60 / 61 / 62 / 63 / 70 / 71 / 77 / 78

9.1.4 TRIPPING CURVE FOR DMX³ 6300 (MP6 protection units): short time trip protection detail



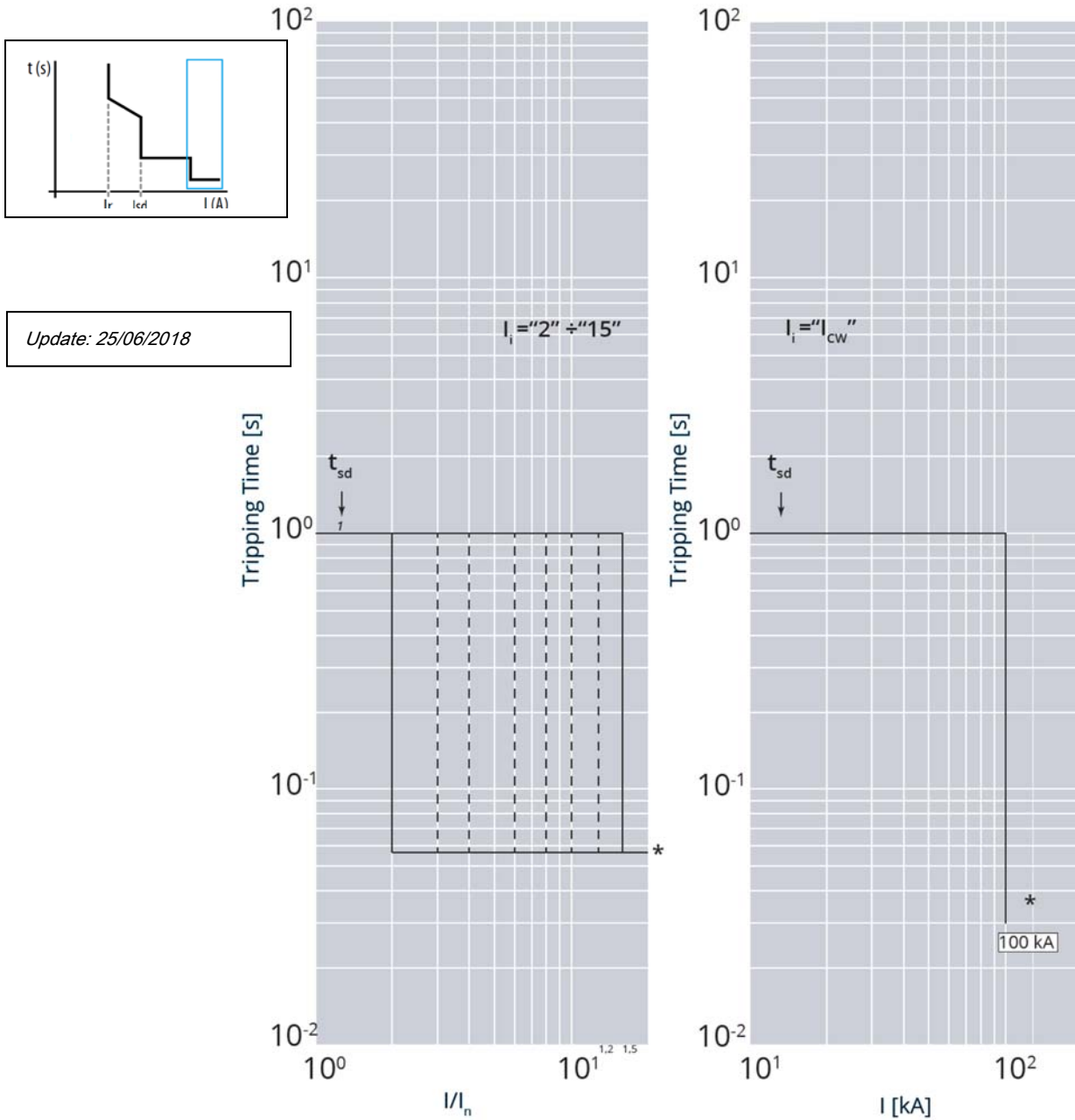
Value	Description
I	current
I_{sd}	short time setting current
t_{sd}	short time delay

DMX³ 6300 circuit breakers

DMX³-I 6300 switch disconnectors

References: 0 289 50 / 51 / 52 / 53 / 60 / 61 / 62 / 63 / 70 / 71 / 77 / 78

9.1.5 TRIPPING CURVE FOR DMX³ 6300 (MP4 protection units): instantaneous trip protection detail (only LI)



* Fixed Instantaneous override – I_{sf} →

I_{cu}	Values for I_{sf}
100kA	100kA

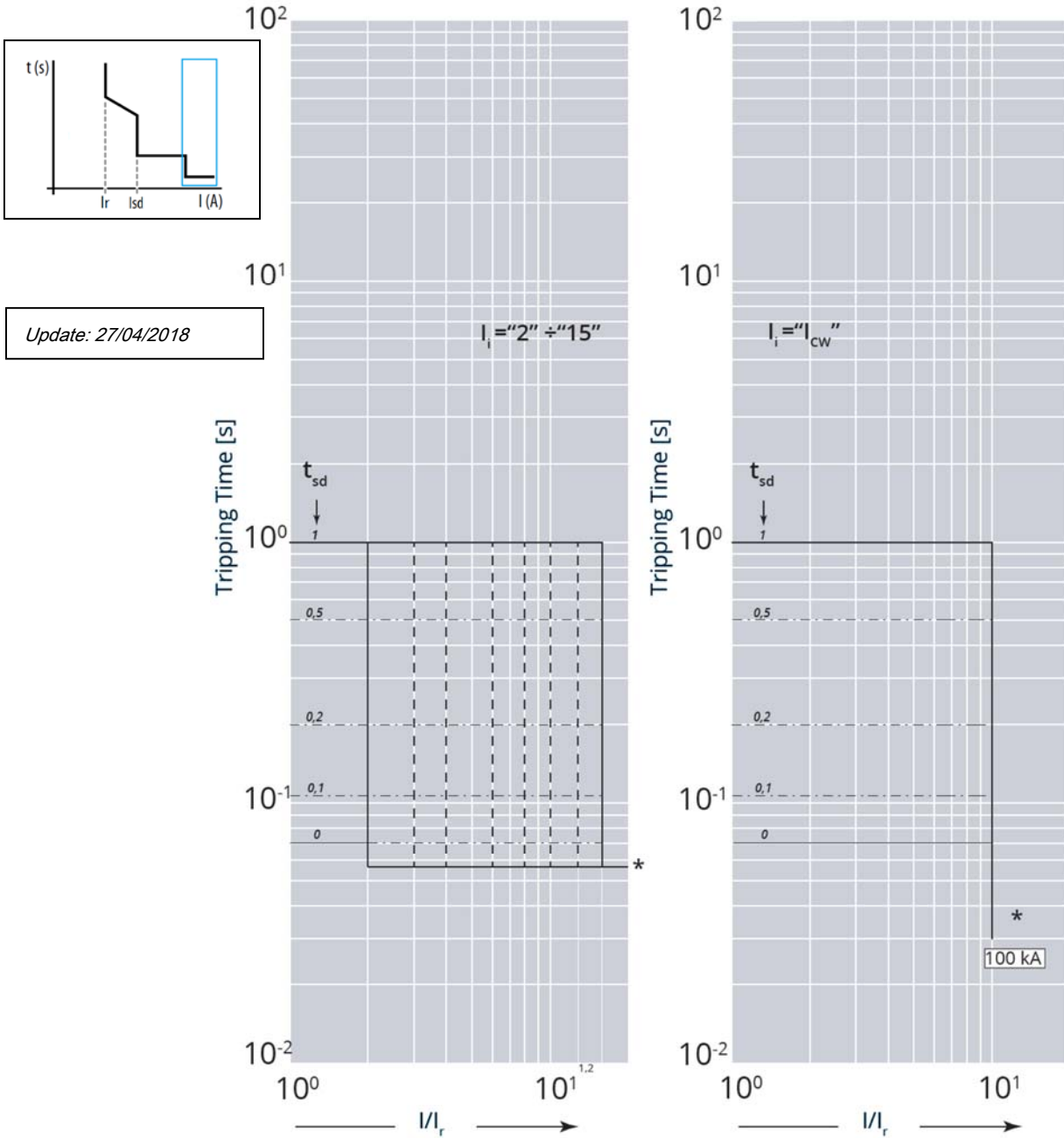
Value	Description
I	current
I_n	rated current
t_{sd}	short time delay
I_i	Instantaneous release
I_{cw}	Rated short time withstand current

DMX³ 6300 circuit breakers

DMX³-I 6300 switch disconnectors

References: 0 289 50 / 51 / 52 / 53 / 60 / 61 / 62 / 63 / 70 / 71 / 77 / 78

9.1.6 TRIPPING CURVE FOR DMX³ 6300 (MP4 protection units): instantaneous trip protection detail (only LSI and LSIg)



Update: 27/04/2018

* Fixed Instantaneous override - I_{sf}

I_{cu}	Values for I_{sf}
100kA	100kA

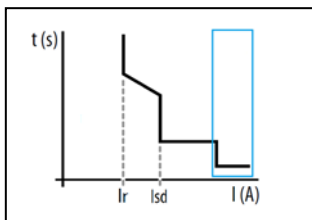
Value	Description
I	current
I_n	rated current
t_{sd}	short time delay
I_i	Instantaneous release
I_{cw}	Rated short time withstand current

DMX³ 6300 circuit breakers

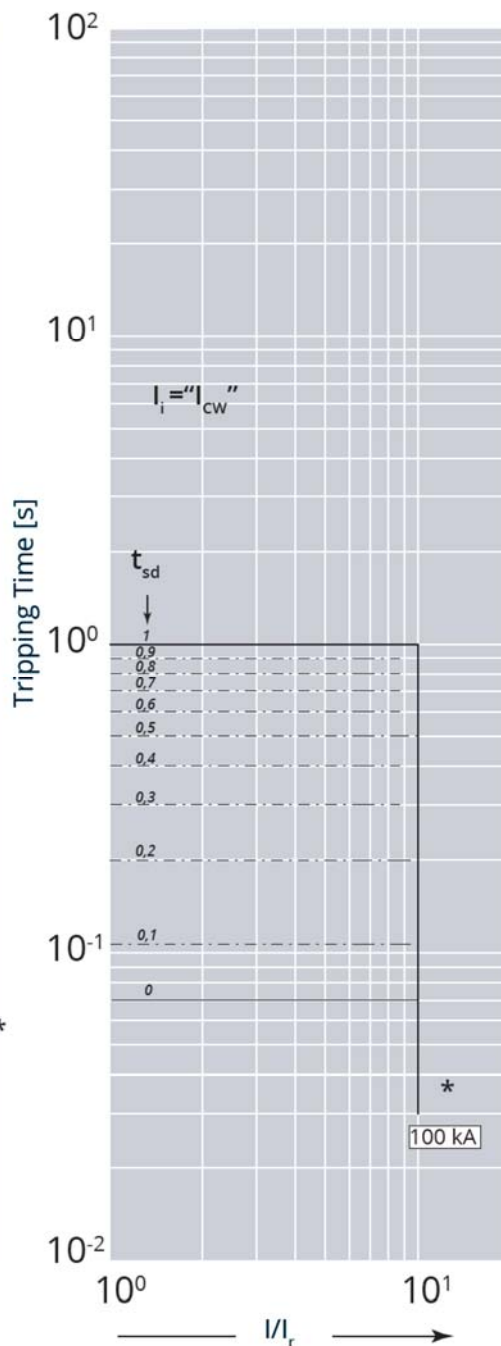
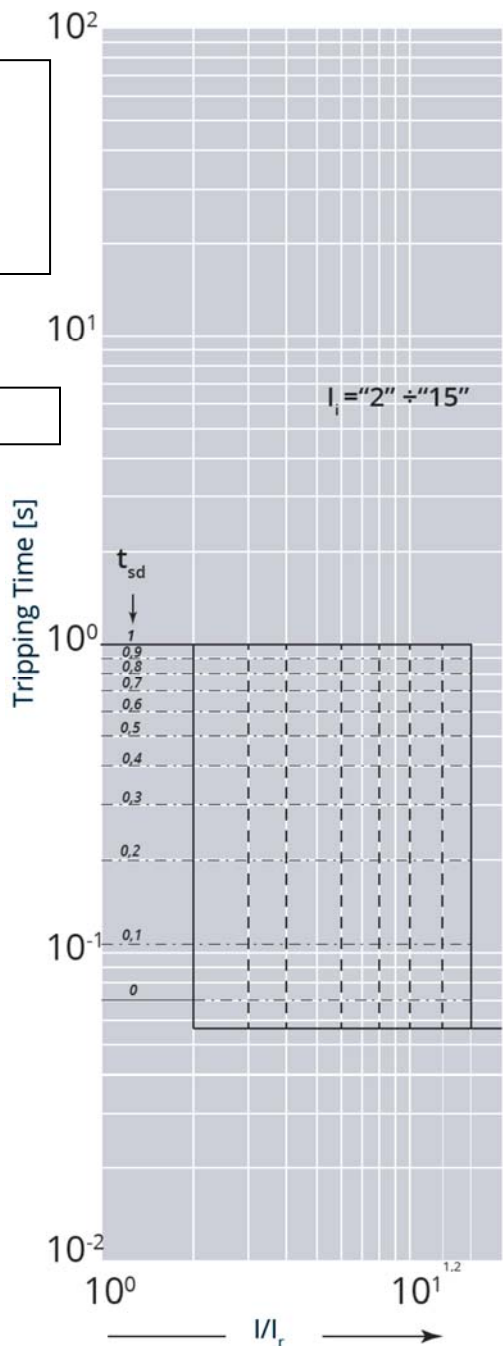
DMX³-I 6300 switch disconnectors

References: 0 289 50 / 51 / 52 / 53 / 60 / 61 / 62 / 63 / 70 / 71 / 77 / 78

9.1.7 TRIPPING CURVE FOR DMX³ 6300 protection units (MP6 protection units): instantaneous trip protection detail



Update: 27/04/2018



* Fixed Instantaneous override – I_{sf}

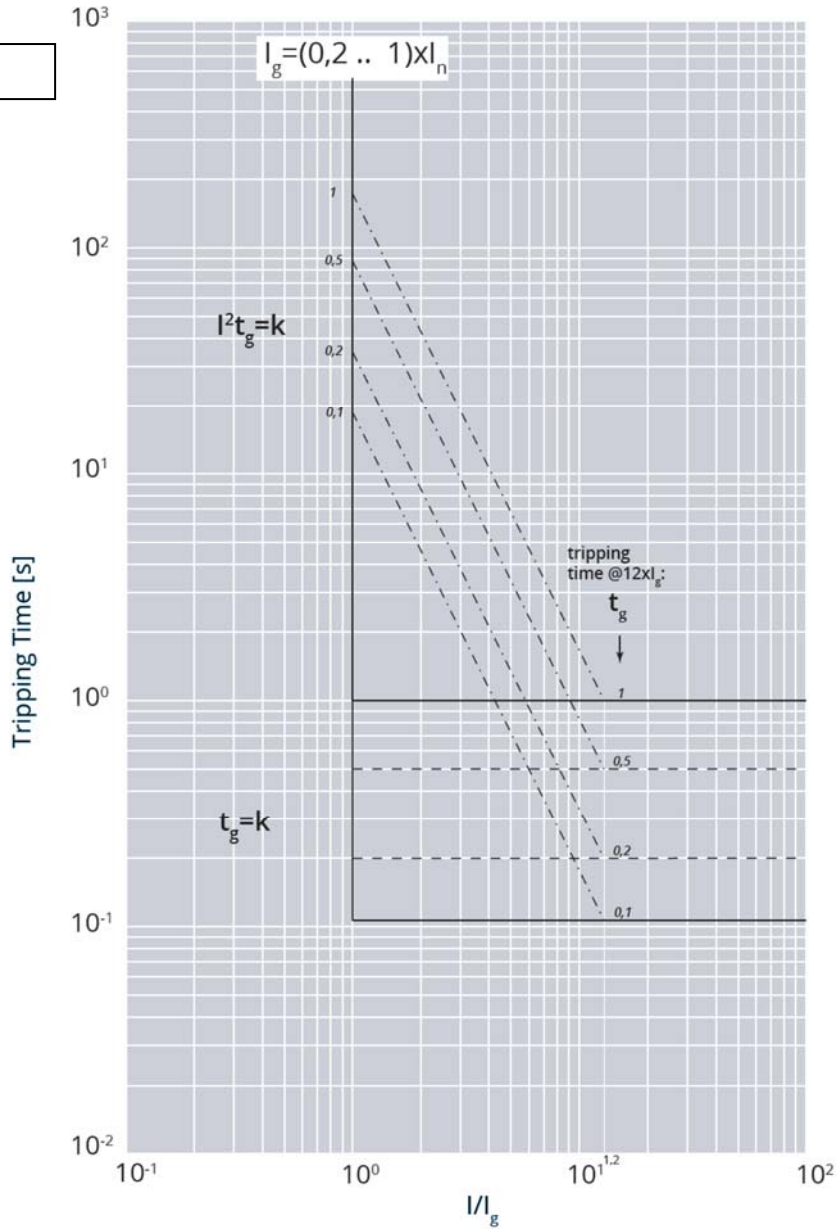
I_{cu}	Values for I_{sf}
100kA	100kA

Value	Description
I	current
I_n	rated current
t_{sd}	short time delay
I_i	Instantaneous release
I_{cw}	Rated short time withstand current

9.1.8 Ground fault curve (MP4 protection units)

Only LSig releases

Update: 27/04/2018



Value	Description
I	current
I _n	rated current
I _g	Ground fault current
t _{sd}	short time delay
t _{sd} = k	Constant tripping time setting
I ² t _{sd} = k	Constant pass-through energy setting

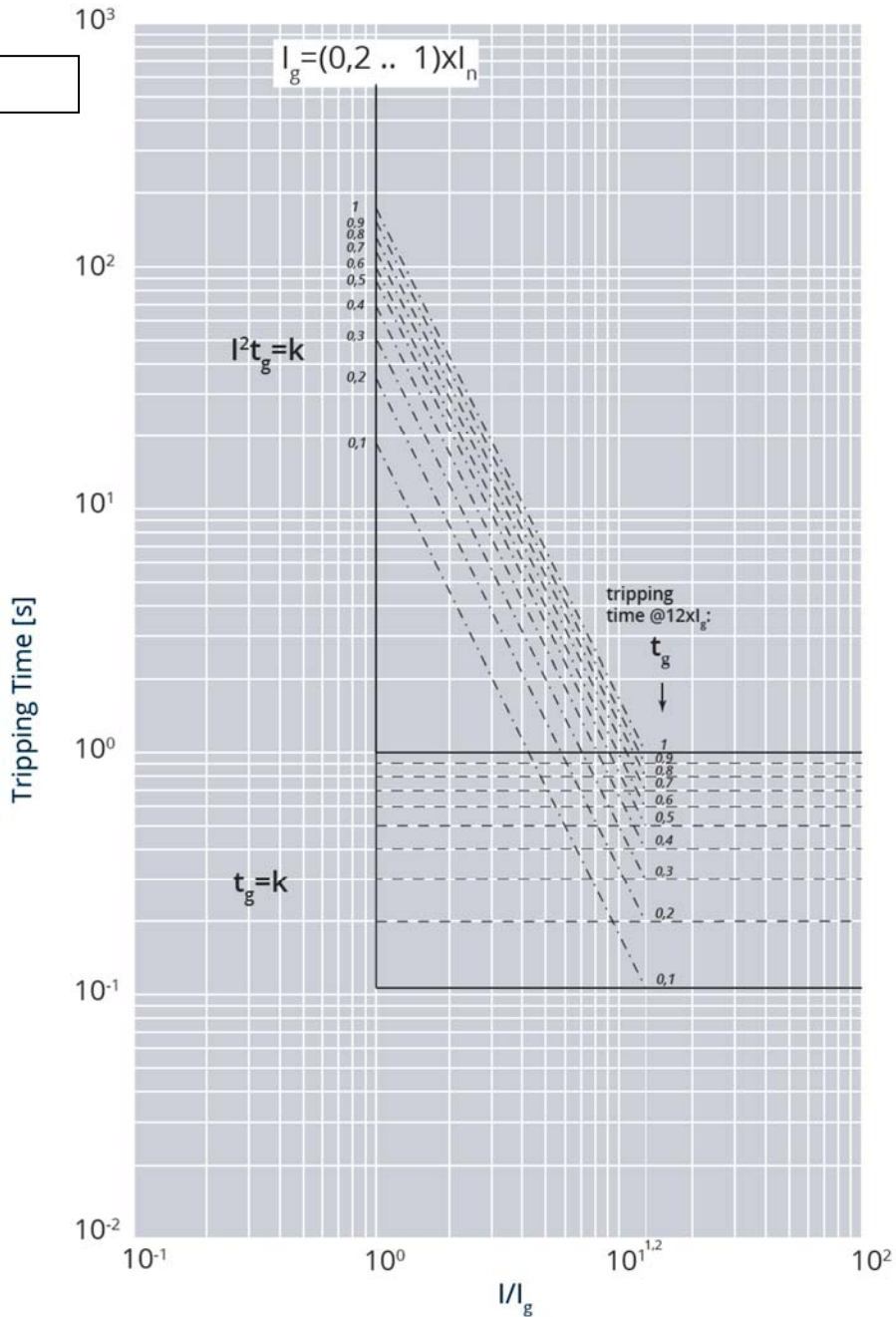
DMX³ 6300 circuit breakers
DMX³-I 6300 switch disconnectors

References: 0 289 50 / 51 / 52 / 53 / 60 / 61 / 62 / 63 / 70 / 71 / 77 / 78

9.1.9 Ground fault curve (MP6 protection units)

Only LSig releases

Update: 27/04/2018

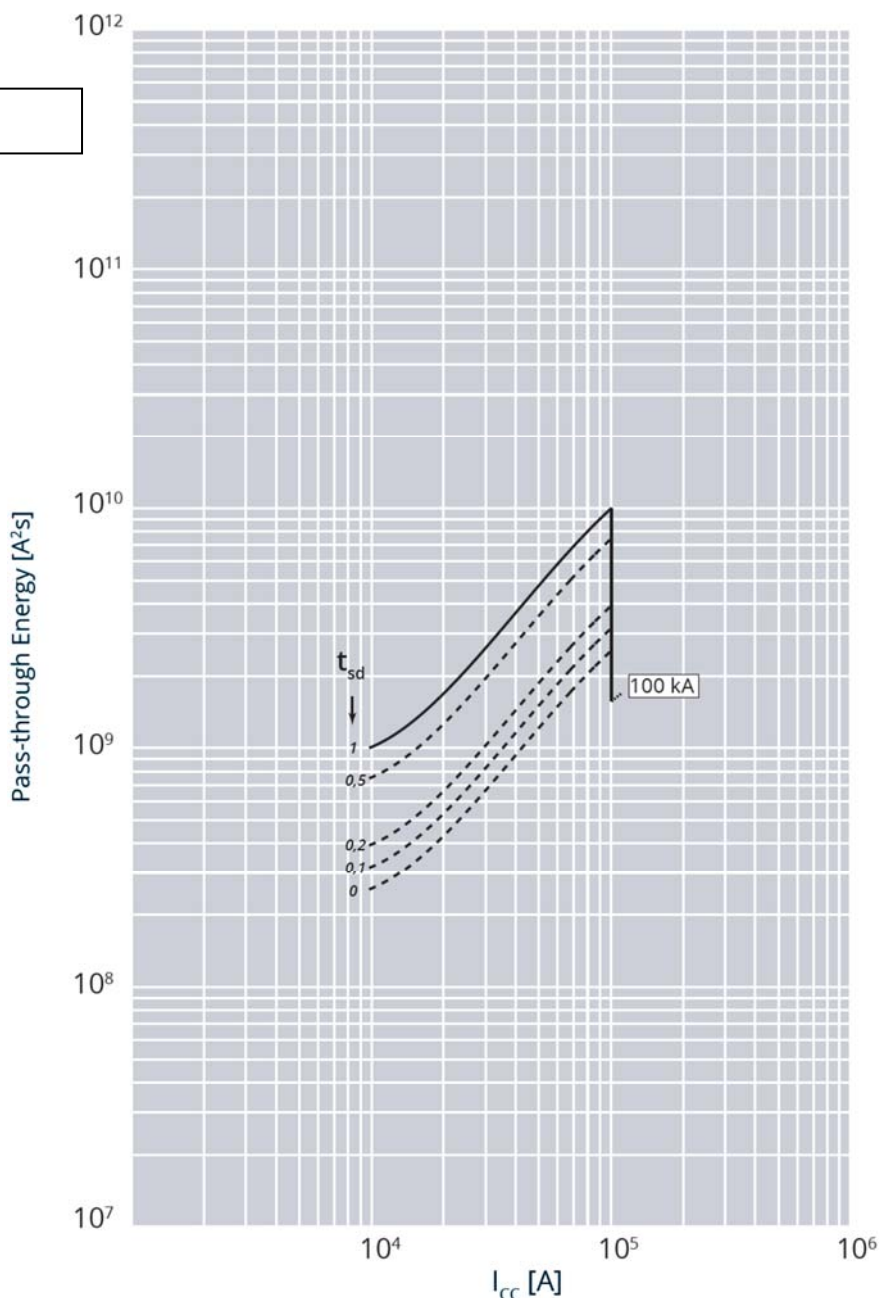


Value	Description
I	current
I_n	rated current
I_g	Ground fault current
t_{sd}	short time delay
$t_{sd} = k$	Constant tripping time setting
$I^2 t_{sd} = k$	Constant pass-through energy setting

9.2 PASS-THROUGH SPECIFIC ENERGY CURVE (at 415V)

Only LSIg releases

Update: 19/02/2018



Value	Description
I	current
I_n	rated current
I_g	Ground fault current
t_{sd}	short time delay
$t_{sd} = k$	Constant tripping time setting
$I^2 t_{sd} = k$	Constant pass-through energy setting