87045 LIMOGES Cedex
Telephone : 05 55 06 87 87 – Fax : 05 55 06 88 88

DMX³ 6300 circuit breakers
(PU MP2.10 and MP4.10)
DMX³-I 6300 switch disconnectors

References: 0 284 80 / 81 / 82 / 83 / 85 / 86 / 87 / 88
0 282 88 / 89 / 98 / 99

CONTENTS PAGES

Full technical sheet LE12614AA

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 addiction 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

	DMX³ 6300 circuit breakers (new PU MP2.10 and MP4.10)	
	Fixed version	
	100kA	
I_n (A)	3P	4P
5000	0 284 80	0 284 82
6300	0 284 81	0 284 83
	Draw-out version	
	100kA	
I_n (A)	3P	4P
5000	0 284 85	0 284 87
6300	0 284 86	0 284 88

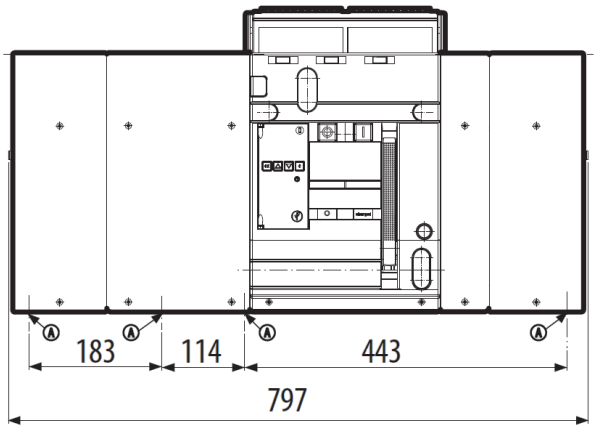
	DMX³-I 6300 switch disconnectors			
	Fixed version		Draw-out version	
I_n (A)	3P	4P	3P	4P
6300	0 282 88	0 282 89	0 282 98	0 282 99

3. DIMENSIONS

3.1 Fixed version

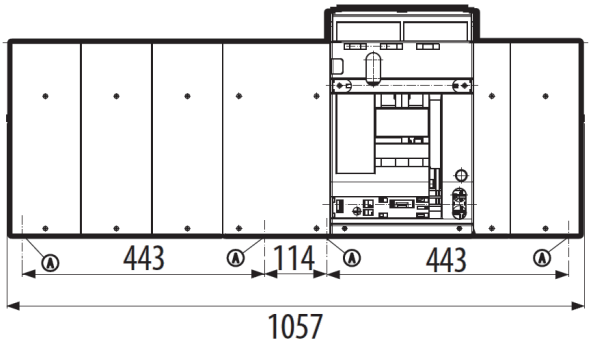
Frontal view

3P



A = fixing point on plate of enclosure

4P



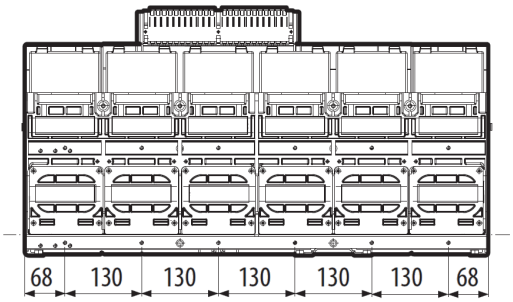
A = fixing point on plate of enclosure

DMX³ 6300 circuit breakers
(PU MP2.10 and MP4.10)
DMX³-I 6300 switch disconnectors

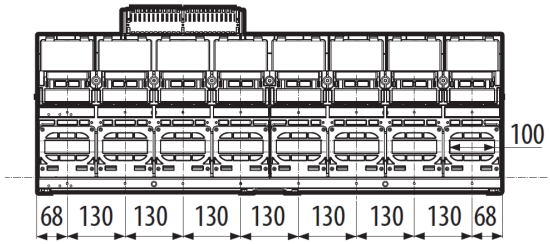
References: 0 284 80 / 81 / 82 / 83 / 85 / 86 / 87 / 88
0 282 88 / 89 / 98 / 99

Rear view

3P

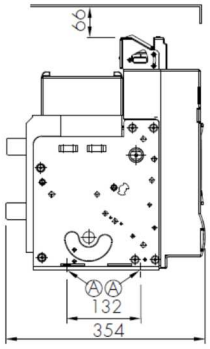


4P



Lateral view

3P - 4P

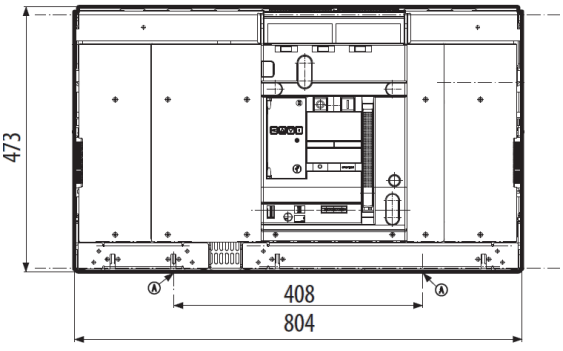


A = fixing point on plate of enclosure

3.2 Draw-out version

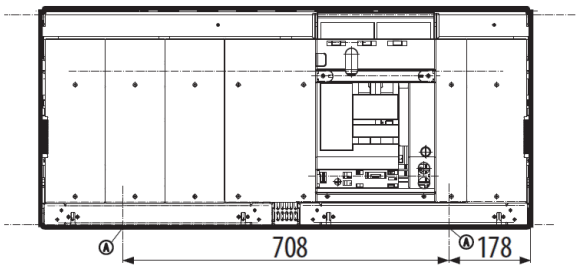
Frontal view

3P



A = fixing point on plate of enclosure

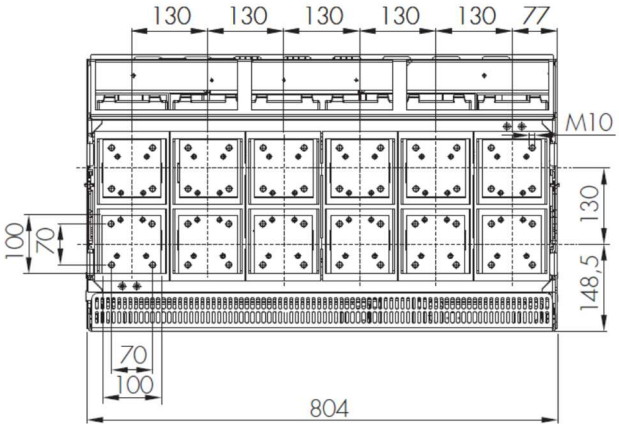
4P

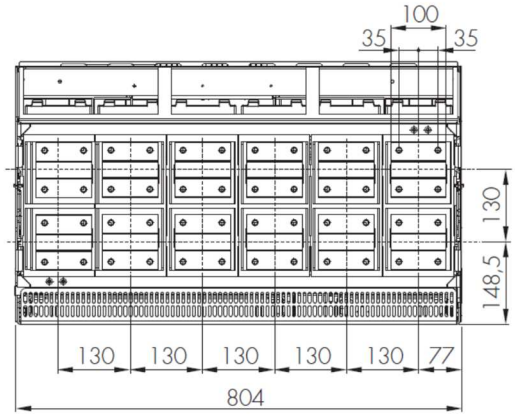


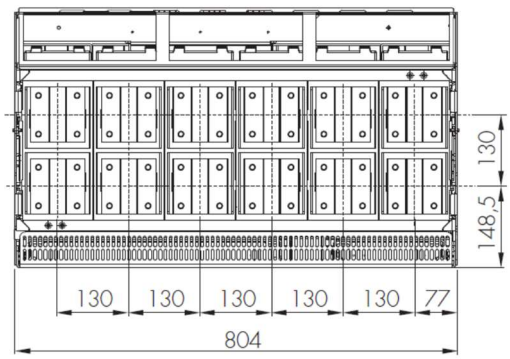
A = fixing point on plate of enclosure

Rear view

3P



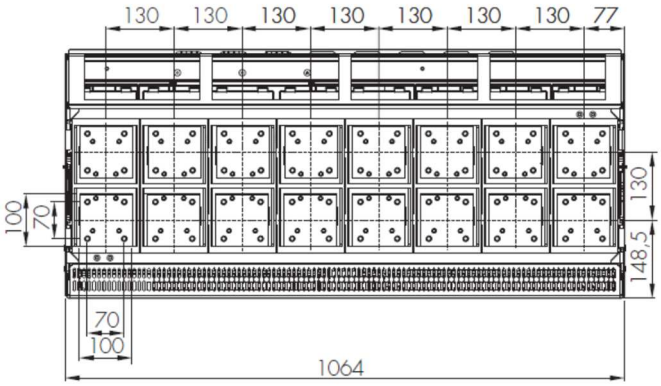


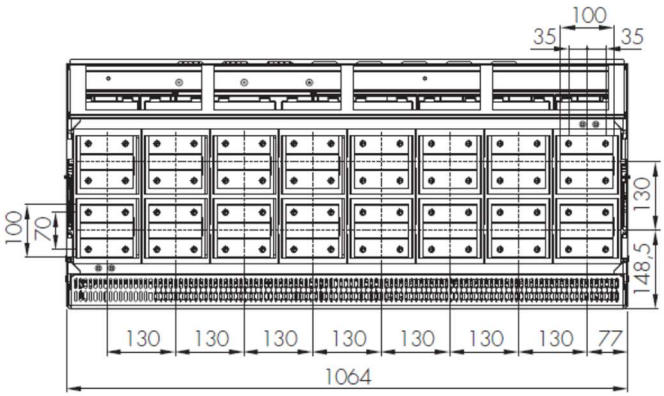


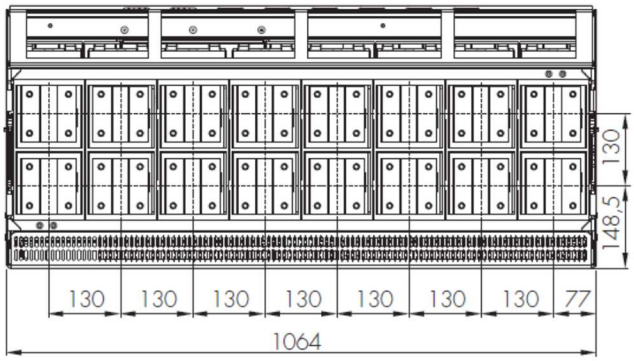
DMX³ 6300 circuit breakers
(PU MP2.10 and MP4.10)
DMX³-I 6300 switch disconnectors

References: 0 284 80 / 81 / 82 / 83 / 85 / 86 / 87 / 88
0 282 88 / 89 / 98 / 99

4P

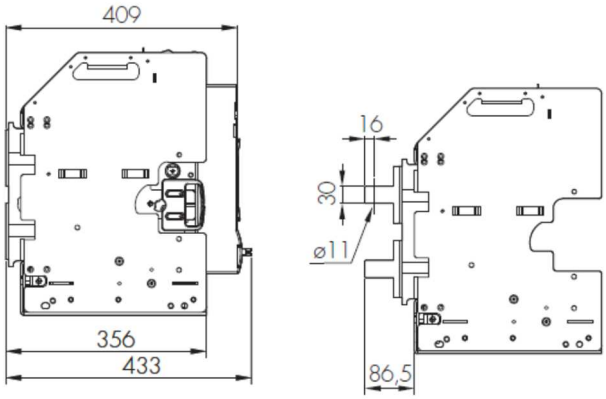


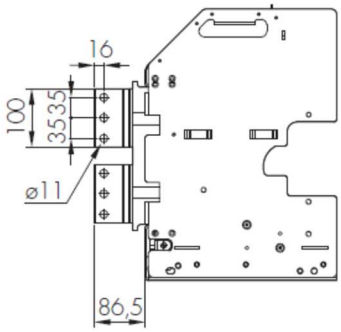




Lateral view

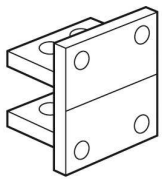
3P - 4P

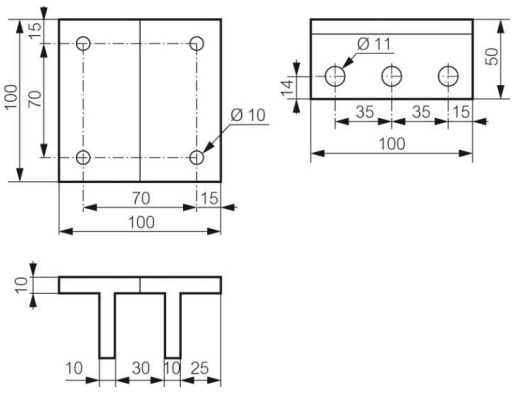




3.3 Rear terminals for fixed version – Flat connection

References	
3P	4P
0 288 92	0 288 93

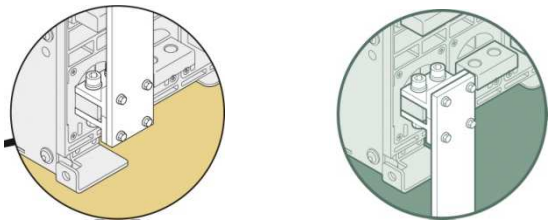




DMX³ 6300 circuit breakers
(PU MP2.10 and MP4.10)
DMX³-I 6300 switch disconnectors

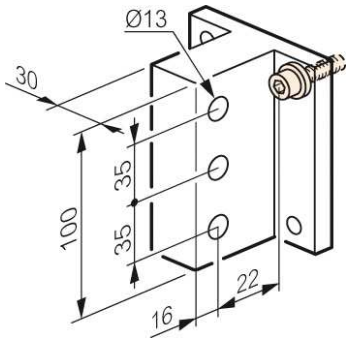
References: 0 284 80 / 81 / 82 / 83 / 85 / 86 / 87 / 88
0 282 88 / 89 / 98 / 99

Mounting examples:

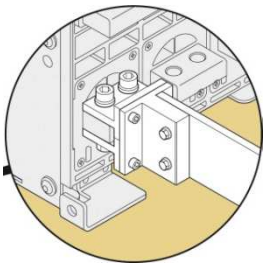


3.4 Rear terminals for fixed version – Vertical connection

References	
3P	4P
0 288 94	0 288 95

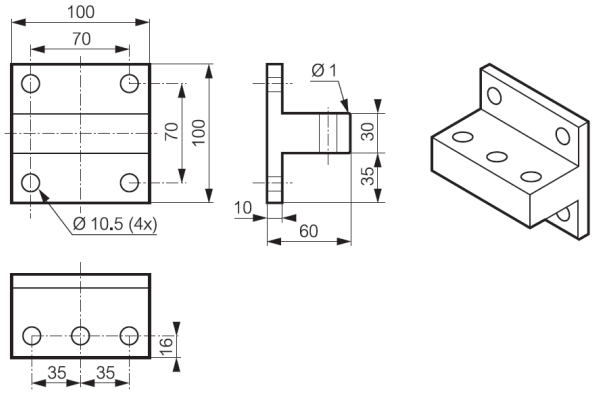


Mounting example:

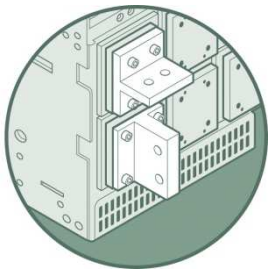


3.5 Rear terminals for Draw-out version – Flat/vertical connection

References	
3P	4P
0 288 94	0 288 95

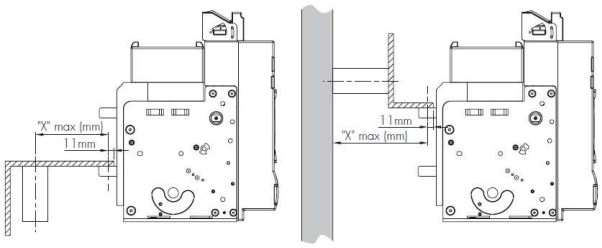


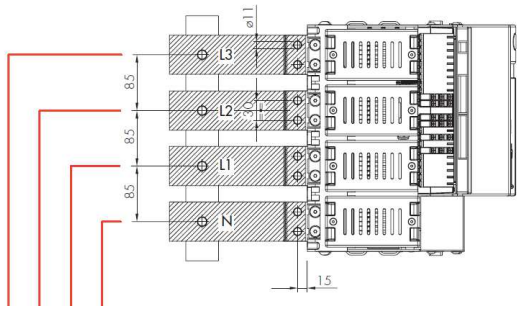
Mounting example:



3.6 Terminations support distances – Fixed version

Icc (kA)	≤ 100
"X" max (mm)	150





DMX³ 6300 circuit breakers
(PU MP2.10 and MP4.10)
DMX³-I 6300 switch disconnectors

References: 0 284 80 / 81 / 82 / 83 / 85 / 86 / 87 / 88
0 282 88 / 89 / 98 / 99

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

		DMX³ 6300 DMX³ 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_{cw} (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_{cw} (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_{th})		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
(PU MP2.10 and MP4.10)
DMX³-I 6300 switch disconnectors

References: 0 284 80 / 81 / 82 / 83 / 85 / 86 / 87 / 88
0 282 88 / 89 / 98 / 99

Switch disconnector

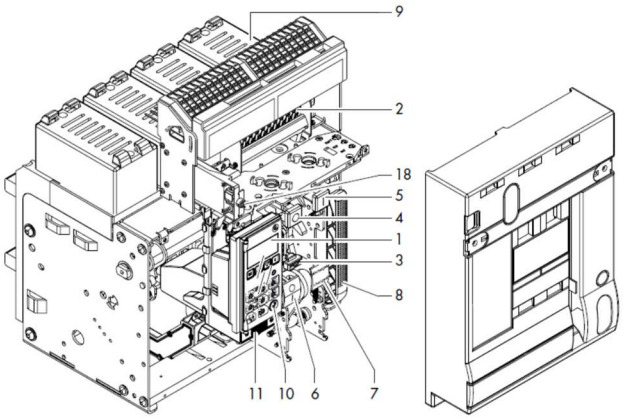
Electrical data refers to IEC/EN 60947-3 standard

		DMX³-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
	690 V AC	143
Rated short time withstand current I_{cw} (kA) for t = 1s	220 / 240 V AC	100
	380 / 415 V AC	100
	480 / 500 V AC	100
	600 V AC	75
	690 V AC	65
Rated short time withstand current I_{cw} (kA) for t = 3s	220 / 240 V AC	85
	380 / 415 V AC	85
	480 / 500 V AC	85
	600 V AC	75
	690 V AC	65
Suitable for insulation		Yes
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
	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)

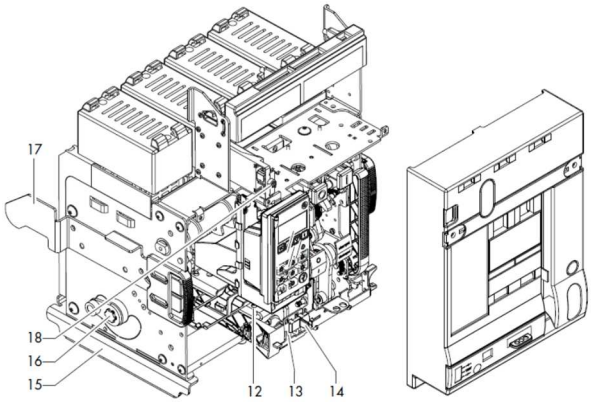
[1] Weights for draw-out releases are to be intended with base

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
(PU MP2.10 and MP4.10)
DMX³-I 6300 switch disconnectors

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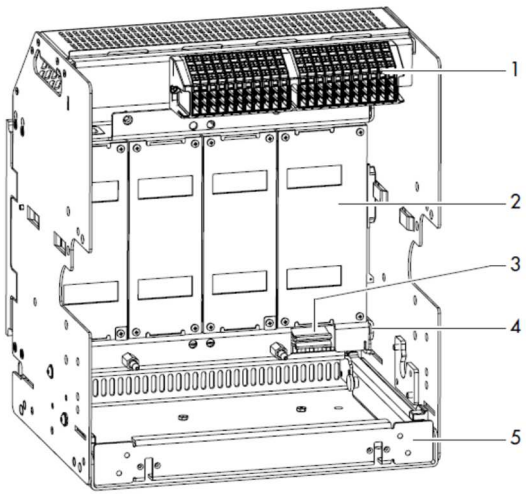
0 282 88 / 89 / 98 / 99

Draw-out base



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

6.2 Adjustment ranges

	Phases			
	I_r		I_{sd}	
I_n (A)	0.2 x I_n	1 x I_n	1.5 x $I_{r\ min}$	10 x $I_{r\ max}$
5000	1000	5000	3000	50000
6300	1260	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) DMX³ 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) DMX³-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

Fixed version										
Temperature	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
DMX³ 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

Draw-out version										
Temperature	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
DMX³ 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

6.5 Electronic protection unit

All DMX³ 1600 can be equipped by an MP2.10 or MP4.10 electronic protection unit which main characteristics are:

- Integrated LED matrix screen to show electrical values and settings (MP2.10) or Integrated LCD screen for displaying electrical values, settings and log (MP4.10)
- Adjustment via rotating encoder
- Adjustment of I_r, t_r, I_{sd}, t_{sd}, I_i, I_g and t_g
- Possibility to enable/disable protections
- Measure and display instantaneous, maximum and average values of different electrical values and protection conditions, fault signaling and log (for versions with measure)
- Equipped with batteries for powering in case of mains fault or when the breaker is open or not connected (MP4.10)

All protection units have onboard a mini USB type “B” socket for maintenance purposes or PCS software connection to PC

6.5.1 Protection unit types

Protection unit are available in in MP2.10 and MP4.10 type as following

Type	Features		Reference
	display	with measure	
MP2.10	LED matrix	NO	0 283 04
		YES	0 283 06 (*)
MP4.10	LCD screen	NO	0 283 06
		YES	0 283 07 (*)

(*) For the correct working of metering function, it's necessary to connect a CX³ EMS power supply module ref. 4 149 45

Protective functions

I_r : ***Long time delay protection against overloads***
From 0.2 to 1 x I_n with steps of 1A
Protection: ON/OFF

t_r : ***Long delay protection operation time***
From 40ms to 30 s (@6Ir) with steps of 40ms
Thermal memory: ON/OFF

I_{sd} : ***Short time delay protection against short-circuits***
From 1.5 to 10 x I_r with steps of 1A
Protection: ON/OFF

t_{sd} : ***Short time delay protection operation time***
From 40ms to 1 s with steps of 40ms
(both t=k, independent time delay, and I^2t=k, inverse short time delay)

I_i : ***Instantaneous protection against very high short-circuits***
From 2 to 15 x In or I_{cw} with steps of 1A
Protection: ON/OFF

I_g : ***Earth fault current***
From 0.2 to 1 x In with steps of 1A
Protection: ON/OFF

t_g : ***Time delay on earth fault tripping***
From 80ms to 1s with steps of 40ms
(both t=k, independent time delay, and I^2t=k, inverse short time delay)

IN : ***Neutral protection***
OFF - 50% - 100% - 200%

6.5.2 Configuration

Protection units MP2.10 and MP4.10 are fully configurable and can be configured in complete freedom.
They can be used to adapt settings as closely as possible to the requirements of the specific installation, either by enabling/disabling the different protection devices (currents and tripping times), or by altering the different trip thresholds.
The tripping curve is thus fully customised to suit the real-life conditions of each project.
Protection units with integrated measurement function can also be used to display voltages, active and reactive powers, frequency, power factor, and also energy, in addition to monitoring currents.
Alarms can be programmed on a number of these parameters: max. voltage, min. voltage, voltage unbalance, max. and min. frequency, etc

6.6 Common accessories for protection units

• Bluetooth communication key ref. 0 283 10
USB key for Bluetooth communication with DMX³ protection unit, needed to monitor and manage (test and report) the DMX³ protection units through EnerUp + Project App USB connection port on front of protection unit.

• Power supply module ref. 4 149 45
500 mA 12V DC stablized power supply module for CX³ energy management system – 1 DIN module.
To use for correct use of protection units with measure function (ref. 0 283 01 and 0 283 03)

• Communication interface ref. 4 149 40
RS485 / CX3 energy management system conversion
Consumption: 0.344 W - 28.7 mA (12 V DC) – 1 DIN module

• External neutral for DMX³ 1600 ref. 0 281 98
Optional accessories, to be ordered when ordering electronic protection unit and DMX³ air circuit breakers for factory assembly

DMX³ 6300 circuit breakers
(PU MP2.10 and MP4.10)
DMX³-I 6300 switch disconnectors

References: 0 284 80 / 81 / 82 / 83 / 85 / 86 / 87 / 88
0 282 88 / 89 / 98 / 99

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.

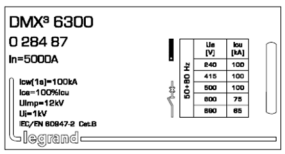
DMX³ respect the European Directives REACh, RoHS, RAEE and Product Environment Product (PEP Ecopassport) are available.

7.1 MARKING

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

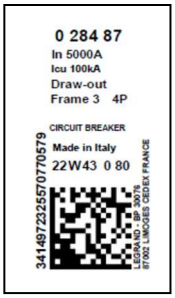
Product laser label on front

-Manufacturer responsible
-Denomination, type product, code
-Standard conformity
-Standard characteristics declared
-coloured identification of I_{cu} at 415V



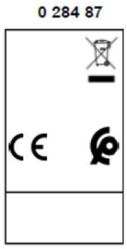
Product sticker label on side

-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

• 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_e)	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_e)	**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_e)	**DC**	250V 0.3A 125V 0.6A
	AC	250V 16A 125V 16A

• Additional signalling contact ref. 0 288 15

Rated operating voltage (U_e)	**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_e)	**DC**	250V 0.3A 125V 0.6A
	AC	250V 16A 125V 16A

8.3 Locking

Universal key locks
To be used in combination with key locking support ref. 0 281 91

o Key barrel and flat key with random mapping ref. 4 238 80
o Key barrel and flat key
with fixed mapping EL43525 ref. 4 238 81
o Key barrel and flat key
with fixed mapping EL 43363 ref. 4 238 82
o Key barrel and star key with random mapping ref. 4 238 83

o Key locking support in “open” position ref. 0 288 28
To be equipped with universal keylocks ref. 4 238 80/81/82/83

o Key locking support in “draw-out” position ref. 0 281 94
To be equipped with universal keylocks ref. 4 238 80/81/82/83

• 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

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

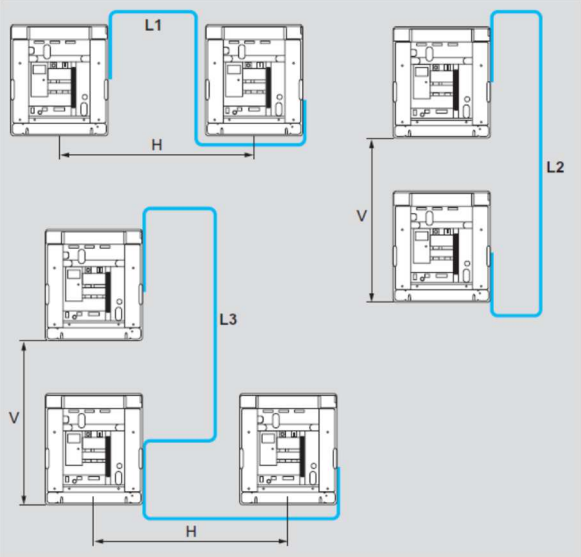
The mechanical interlock is set up using cables and can interlock 2 or 3 devices, which may be different type in a vertical or horizontal configuration. The interlock unit is mounted on the right-hand side of the device. Interlock cables to be ordered separately.

• Interlock for DMX³ 6300 ref. 0 288 66

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

Note1: refs. 0 288 92/93 to be fixed onto horizontal rear terminals of the circuit breaker
Note 2: refs. 0 288 94/95 to are 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

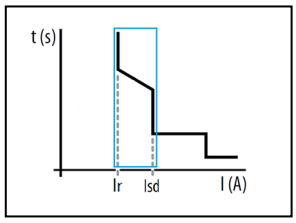
Note: for fixed and draw-out versions, please consider to double the number of references for each pole.

8.10 Insulating shields

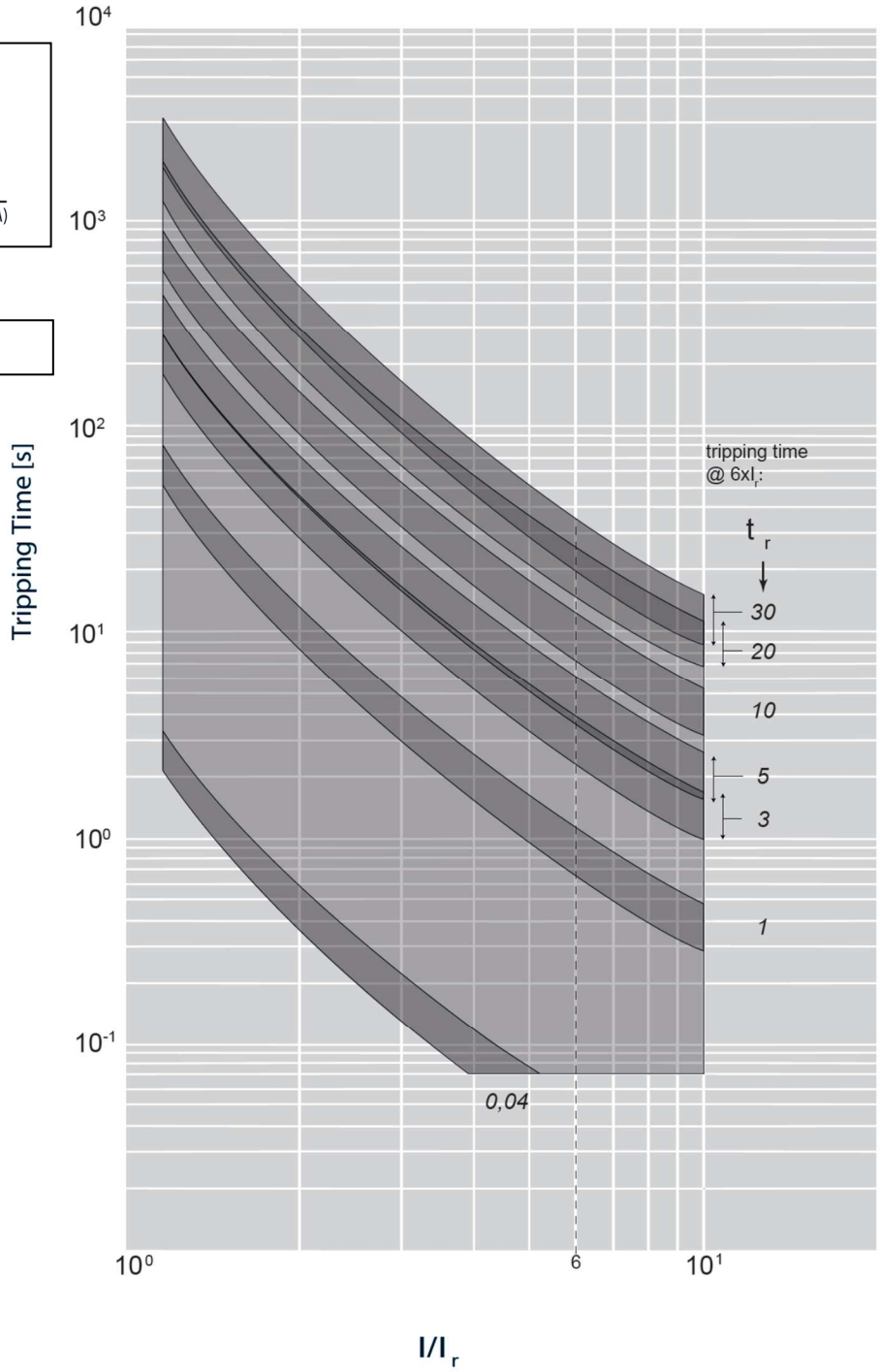
• Fixed version 3P	ref. 0 288 98
• Fixed version 4P	ref. 0 288 99
• Draw-out version 3P	ref. 0 288 18
• Draw-out version 4P	ref. 0 288 19

9. CURVES

9.1 TRIPPING CURVE FOR DMX³ 6300 MPx.10 protection units: L – T protection detail

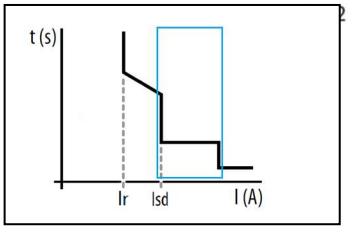


Update: 14/10/2022

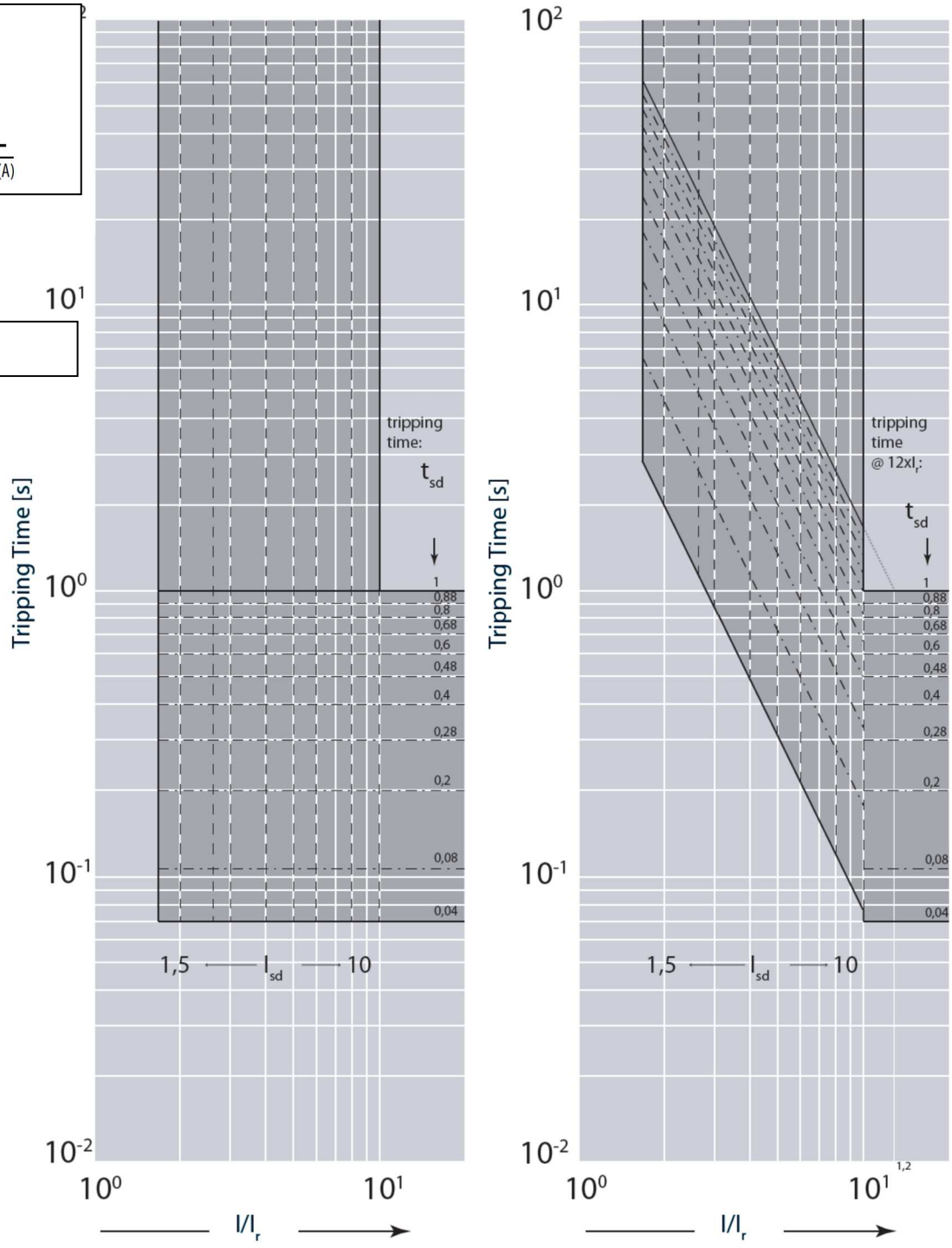


Value	Description
I	current
I_r	long time setting current
t_r	long time delay

9.2 TRIPPING CURVE FOR DMX³ 6300 MPx.10 protection units: short time trip protection detail

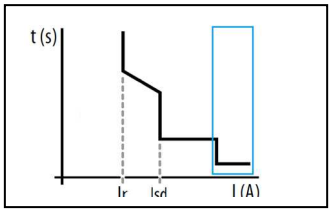


Update: 17/11/2022

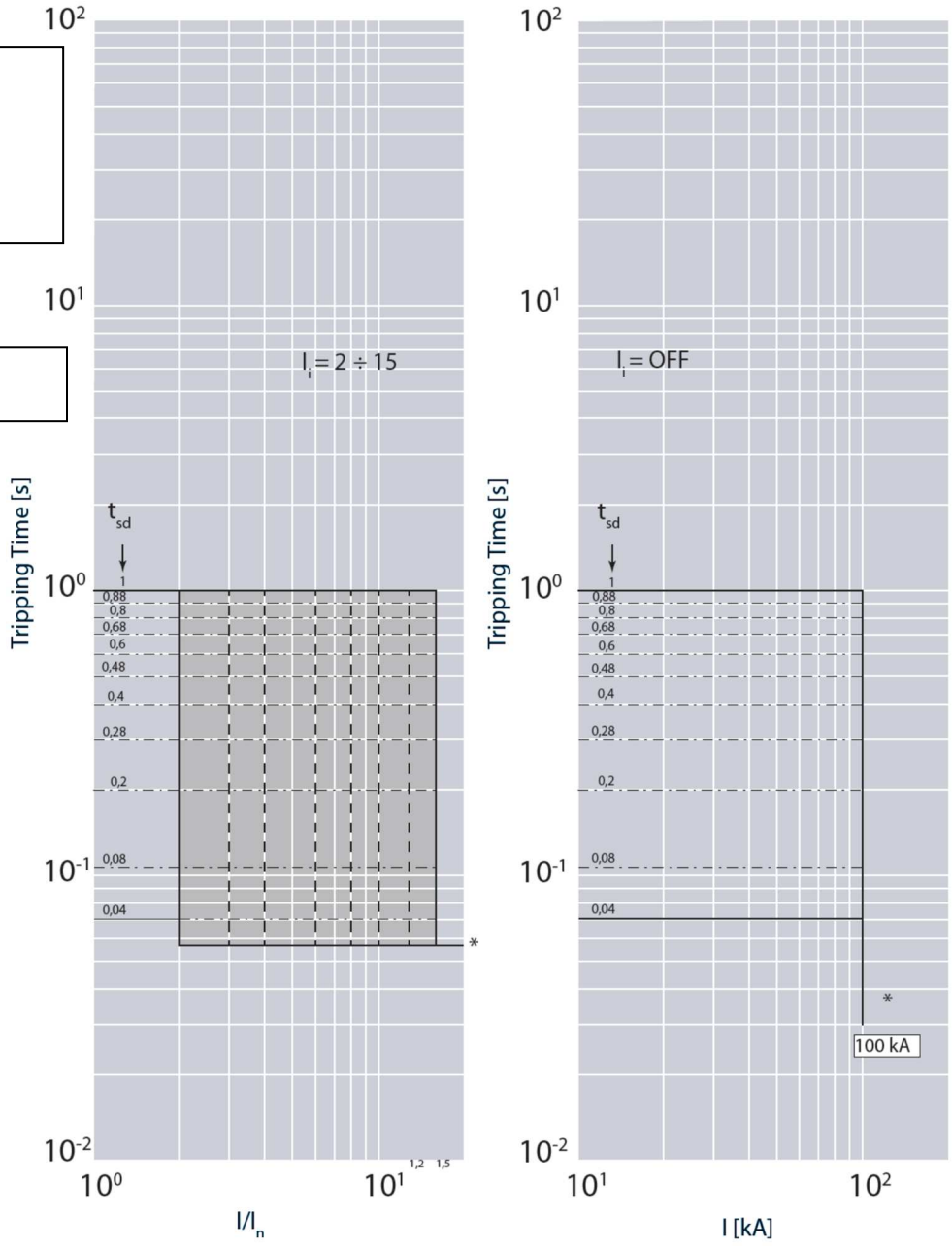


Value	Description
I	current
I_{sd}	short time setting current
t_{sd}	short time delay

9.3 TRIPPING CURVE FOR DMX³ 6300 MPx.10 protection units: instantaneous trip protection detail



Update: 17/11/2022



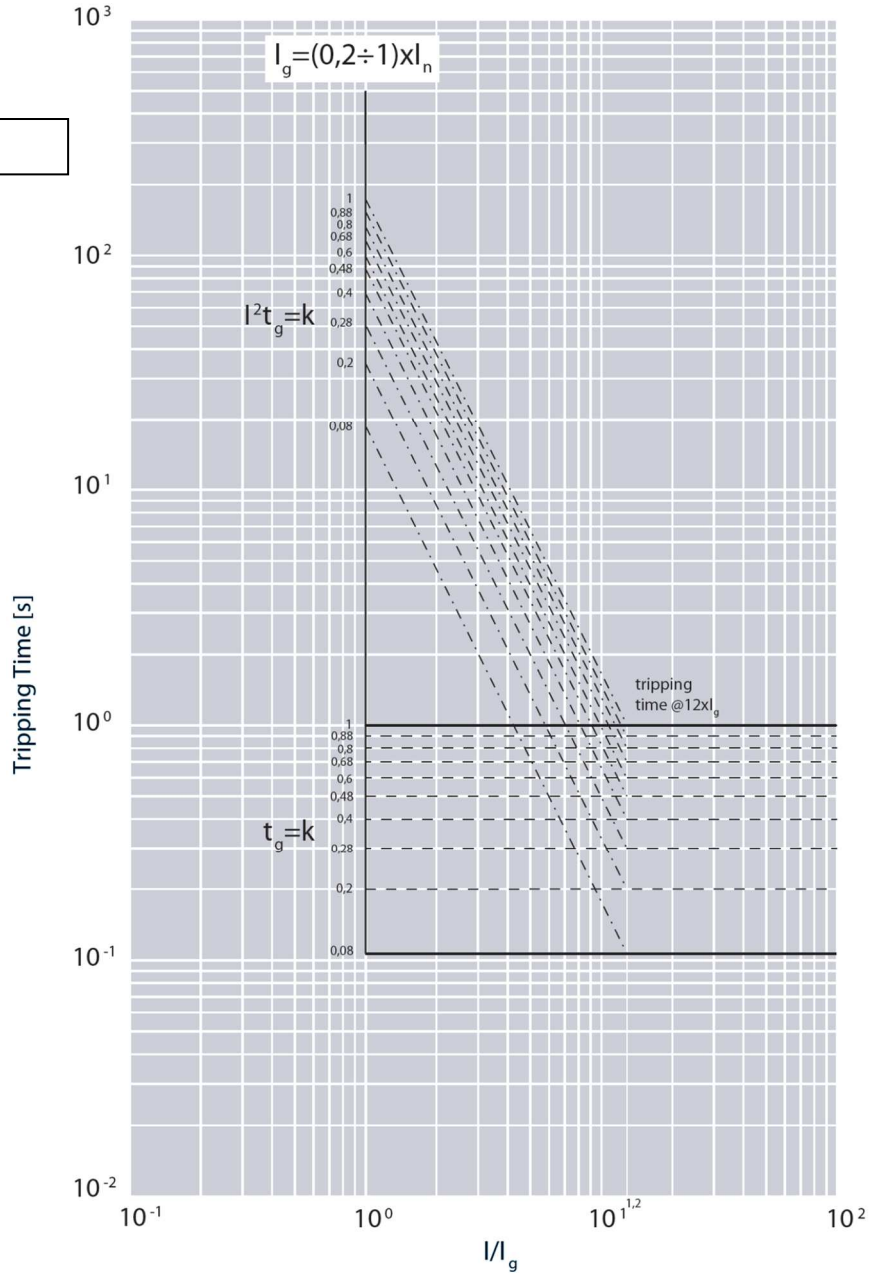
* Fixed Instantaneous override – I_{sf}

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

9.4 Ground fault curve for DMX³ 4000 MPx.10 protection units

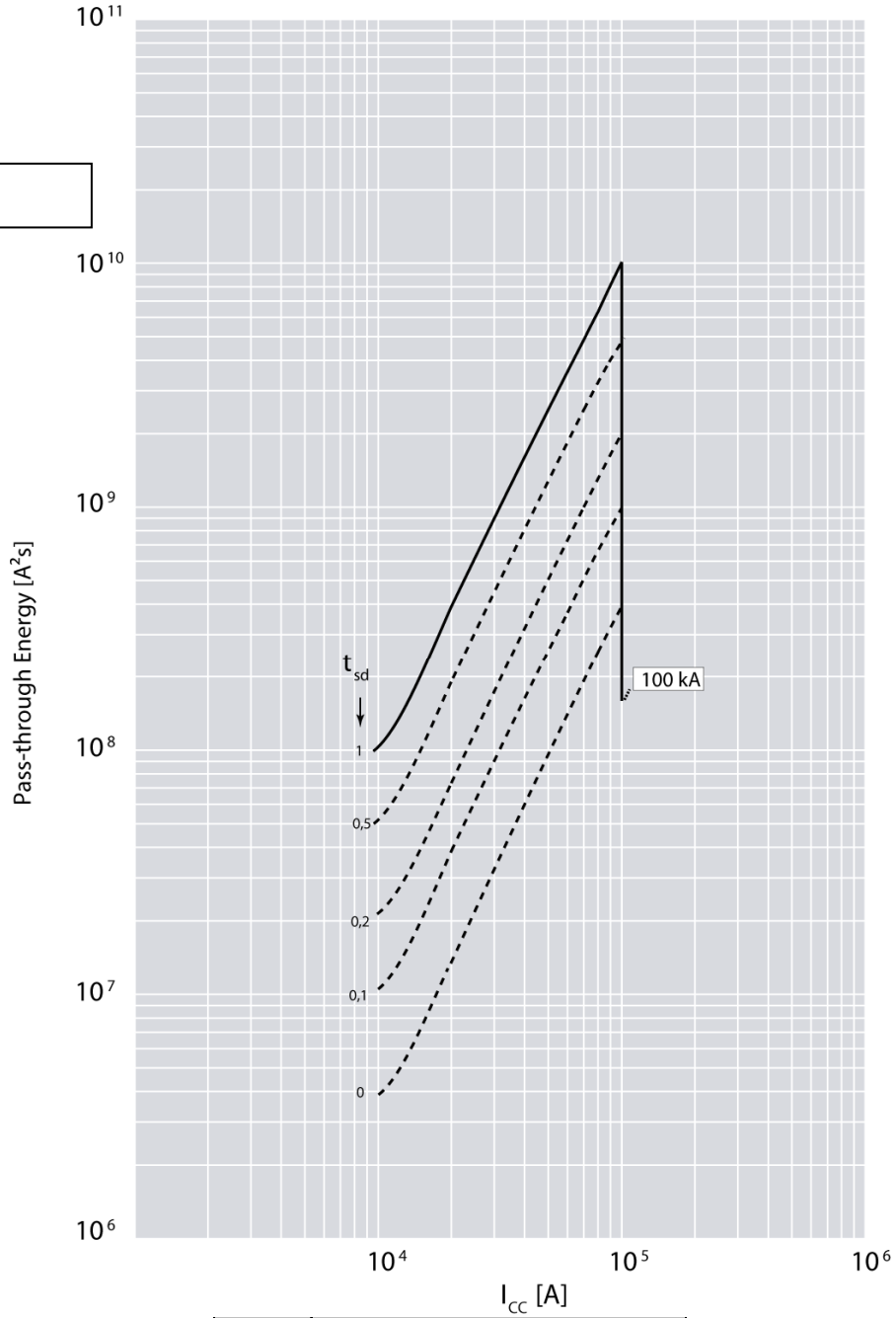
Update: 17/11/2022



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
$I^2t_{sd} = k$	Constant pass-through energy setting

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

Update: 14/07/2021



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
$I^2t_{sd} = k$	Constant pass-through energy setting