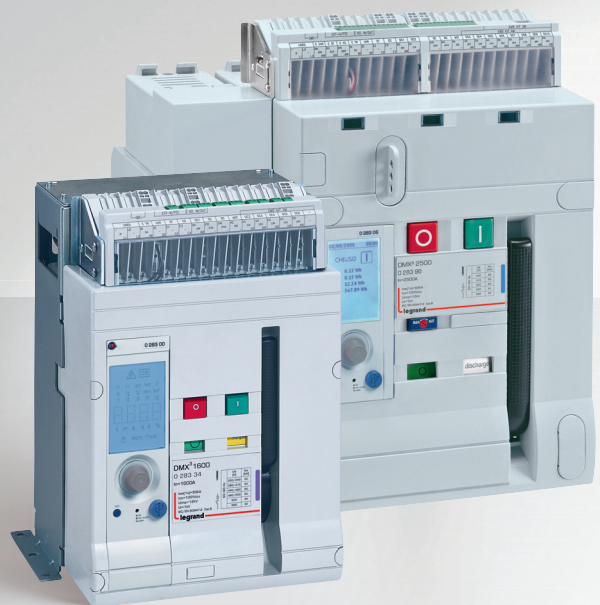




# TAILOR MADE PROTECTION UP TO 6300 A



AIR CIRCUIT  
BREAKERS  
DMX<sup>3</sup>



#LegrandImprovingLives

 **legrand**<sup>®</sup>

# DMX<sup>3</sup> ACBs up to 6300 A

EFFICIENT PROTECTION AND CONTROL  
FOR ALL TYPES OF BUILDING



Thanks to the DPX<sup>3</sup> range of MCCBs and to DX<sup>3</sup> MCBs you can benefit from the advantages of a complete protection system at any level in the installation



DMX<sup>3</sup> 1600 frame



DMX<sup>3</sup> 2500 frame



DMX<sup>3</sup> 4000 frame



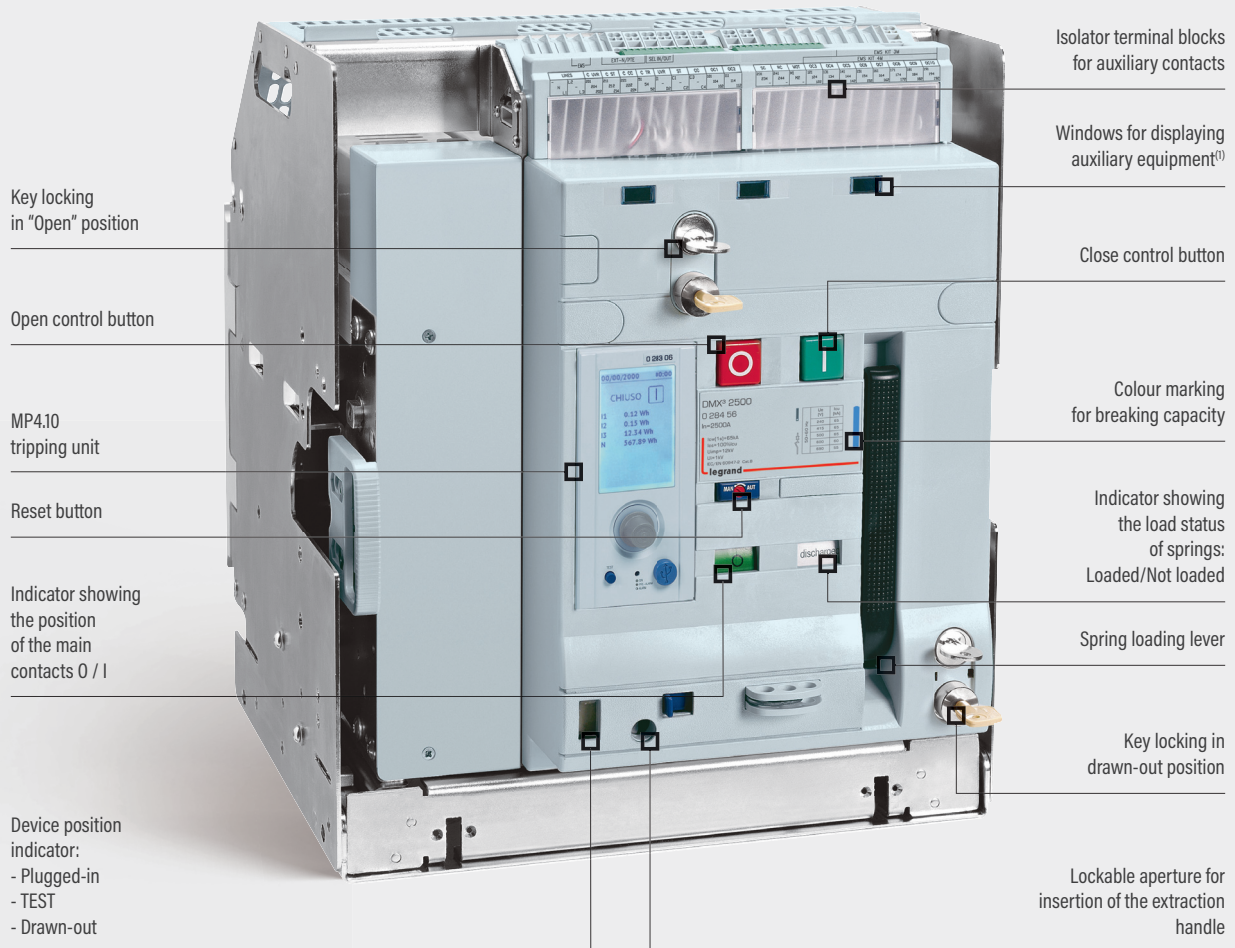
Distribution board  
equipped with DIN rail  
and plate-mounting MCBs and  
DPX<sup>3</sup> MCCBs up to 1600 A

Main distribution board  
equipped with DPX<sup>3</sup> MCCBs  
and DMX<sup>3</sup> ACBs up to 6300 A



DMX<sup>3</sup> 6300 frame

**DRAW-OUT**  
**DMX<sup>3</sup>**  
**2500 FRAME**



Key locking  
in "Open" position

Open control button

MP4.10  
tripping unit

Reset button

Indicator showing  
the position  
of the main  
contacts 0 / 1

Device position  
indicator:  
- Plugged-in  
- TEST  
- Drawn-out

Isolator terminal blocks  
for auxiliary contacts

Windows for displaying  
auxiliary equipment<sup>(1)</sup>

Close control button

Colour marking  
for breaking capacity

Indicator showing  
the load status  
of springs:  
Loaded/Not loaded

Spring loading lever

Key locking in  
drawn-out position

Lockable aperture for  
insertion of the extraction  
handle

## Optimized performance up to 6300 A

DMX<sup>3</sup> air circuit breakers and DMX<sup>3</sup>-I isolating switches are available in four frame sizes. Four breaking capacities for circuit breakers: 42 kA, 50 kA, 65 kA and 100 kA. The range covers 11 rated currents, between 630 A and 6300 A. All ranges of DMX<sup>3</sup> air circuit breakers and DMX<sup>3</sup>-I isolating switches are available in fixed and draw-out version.

- DMX<sup>3</sup>-I
- DMX<sup>3</sup> 100 kA
- DMX<sup>3</sup> 42 kA
- DMX<sup>3</sup> 50 kA
- DMX<sup>3</sup> 65 kA

<sup>(1)</sup> Available only on DMX<sup>3</sup> 2500, 4000 and 6300

### BREAKING CAPACITIES AND RATED CURRENTS

	630 A	800 A	1000 A	1250 A	1600 A	2000 A	2500 A	3200 A	4000 A	5000 A	6300 A
DMX <sup>3</sup> -B	42 kA   FIXED/DRAW-OUT					-					
DMX <sup>3</sup> -N	50 kA   FIXED/DRAW-OUT									-	
DMX <sup>3</sup> -H	65 kA   FIXED/DRAW-OUT									-	
DMX <sup>3</sup> -L	100 kA   FIXED/DRAW-OUT										

### OVERALL DIMENSIONS AND WEIGHT

#### Fixed version

		Height	Depth	Width	Weight <sup>(2)</sup>
1600 FRAME 42 / 50 kA	3P	321 mm	203 mm	254 mm	20 kg
	4P	321 mm	203 mm	324 mm	25 kg
2500 FRAME 50 / 65 kA	3P	419 mm	354 mm	273 mm	41 kg
	4P	419 mm	354 mm	358 mm	48 kg
4000 FRAME 50 / 65 / 100 kA	3P	419 mm	354 mm	408 mm	59 kg
	4P	419 mm	354 mm	538 mm	76 kg
6300 FRAME 100 kA	3P	419 mm	354 mm	797 mm	118 kg
	4P	419 mm	354 mm	1064 mm	152 kg



#### Draw-out version

		Height	Depth	Width	Weight <sup>(3)</sup>
1600 FRAME 42 / 50 kA	3P	352 mm	306 mm	282 mm	39 kg
	4P	352 mm	306 mm	352 mm	49 kg
2500 FRAME 50 / 65 kA	3P	465 mm	433 mm	327 mm	77 kg
	4P	465 mm	433 mm	412 mm	94 kg
4000 FRAME 50 / 65 / 100 kA	3P	465 mm	433 mm	425 mm	108 kg
	4P	465 mm	433 mm	555 mm	137 kg
6300 FRAME 100 kA	3P	465 mm	433 mm	804 mm	216kg
	4P	465 mm	433 mm	1064 mm	274 kg



(2) For trip-free switches, please consult us. (3) Including base.



### LEGRAND ADVANTAGE

The overall dimensions of the breaker contribute considerably to an efficient use of the space inside the distribution board. The constant depth for all rated currents for the 2500, 4000 and 6300 frames make it easier to configure the enclosures and connect the busbars.



### OTHER ELECTRICAL FEATURES

Rated operational voltage U<sub>e</sub>: 690 Vac 50/60 Hz  
 Rated insulation voltage U<sub>i</sub>: 1000 Vac 50/60 Hz  
 Rated impulse withstand voltage U<sub>imp</sub>: 12 kV  
 Utilisation category: B  
 Ambient temperature: -25°C to +70°C  
 Humidity: +55°C with relative humidity of 95%, conforms to IEC 68-2-30

**MP 2.10**  
**MP 4.10**  
ELECTRONIC  
PROTECTION UNITS



**MP 2.10**  
electronic protection unit  
(example for DMX<sup>3</sup> 1600 version)



**MP 4.10**  
electronic protection unit (example  
for DMX<sup>3</sup> 2500 to 6300 version)

DISPLAY - LED matrix for common measurements and settings

DISPLAY - LCD screen for common measurements and settings

ROTARY SELECTOR SWITCH for setting trip thresholds and navigating around the menu

MICRO USB PORT FOR EITHER:  
 - connecting the protection unit to a computer (to run tests, configure or manage the protection unit using a PC equipped with the Power Control Station software)  
 - or fitting it with a Bluetooth communication key Cat.No 0 283 10 (to run tests, display parameters or manage the protection unit using a tablet or smartphone, equipped with the EnerUp+ Project app)

LED indicating that the protection unit is in good working order or an alarm has tripped

TEST BUTTON

## Protection units that adapt perfectly to your project

Besides their easy mounting and connection, strength and good continuity of operation, 2 types of configurable electronic units, with or without integrated measurement function, allow precise adjustment of different limits for current values and time delay. The result is efficient protection against electrical faults and perfect adaptation to each type of installation, while maintaining total discrimination with downstream breakers. The display lets you monitor the measured current values and informs you about fault adjustments and logs (the cause of last trip and maintenance operations).

**THE RANGE**

Protection units for DMX <sup>3</sup> 1600				Protection units for DMX <sup>3</sup> 2500, 4000 and 6300			
MP 2.10		MP 4.10		MP 2.10		MP 4.10	
Without measurement	With measurement	Without measurement	With measurement	Without measurement	With measurement	Without measurement	With measurement
0 283 00	0 283 01	0 283 02	0 283 03	0 283 04	0 283 05	0 283 06	0 283 07

All DMX<sup>3</sup> breakers are factory-equipped with MP 2.10 or MP 4.10 protection units. You just need to select and indicate the 2 catalogue numbers when placing the order (1 for the breaker and 1 for the trip unit).

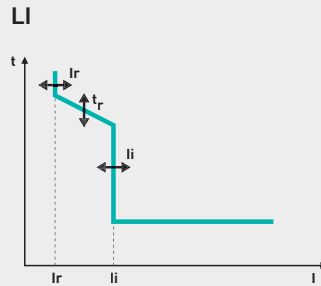
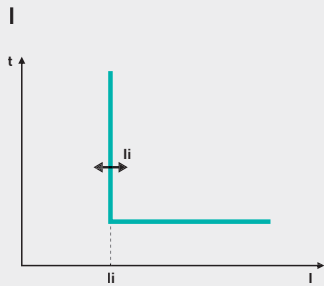


**LEGRAND ADVANTAGE**

MP 2.10 protection unit is particularly suitable for operation in extreme conditions: temperatures between -50°C and +70°C, tropical climates and saline environments.

Intuitive use thanks to the LCD display.  
MP 4.10 protection unit is fitted with batteries so that it can display parameters and back up data if there is a power cut or the circuit breaker is open/not connected.

## EXAMPLES OF TRIPPING CURVES

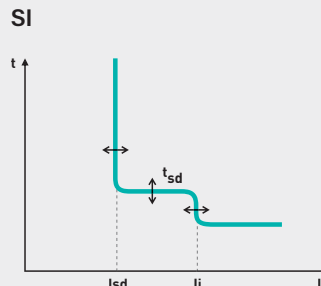
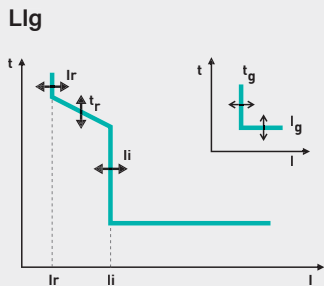


**Ir** Long time delay protection against overloads  
Ir from 0.2 to 1 x In with steps of 1 A  
Protection: ON/OFF

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

**Isd** Short time delay protection against short-circuits  
Isd from 1.5 to 10 x Ir with steps of 1 A  
Protection: ON/OFF

**tsd** Short time delay protection operation time  
tsd from 40 ms to 1 s with steps of 40 ms  
(both t=k and I2t=k)

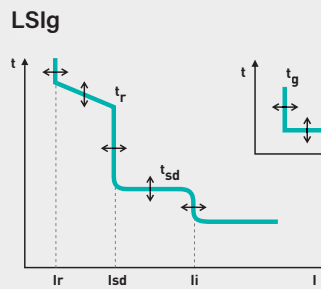
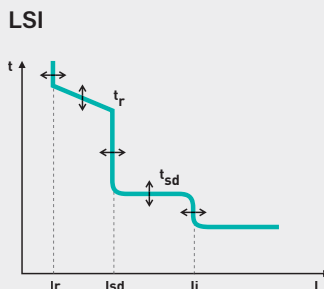


**Ii** Instantaneous protection against very high short-circuits  
Ii from 2 to 15 x In or Icw with steps of 1 A  
Protection: ON/OFF

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

**tg** Time delay on earth fault tripping  
tg from 80 ms to 1 s with steps of 40 ms  
(both t=k and I2t=k)

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



# Configure your protection devices in complete freedom

The new MP 2.10/MP 4.10 protection units are fully configurable. They can be used to adapt settings as closely as possible to the requirements of your 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.



## MANAGEMENT WITH SOFTWARE AND APP

Protection units can be managed: directly on the protection units (using the rotary selector switch), on a PC pre-equipped with the Power Control Station software or on a tablet or smartphone via the EnerUp + Project app.

Power Control Station software for PCs or EnerUp + Project app for smartphone/tablet can be used to exchange data with the protection unit of the DMX<sup>3</sup>. The software or the app can be used to:

- monitor the status of the breaker
- display information (firmware and device versions, alarms, measurements, parameters, fault history, settings)
- configure the different protections <sup>(1)</sup>

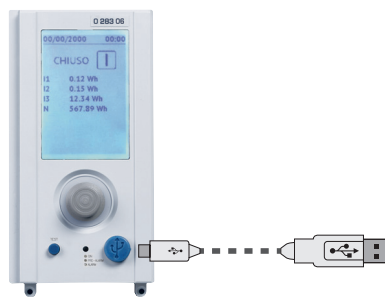
- update the firmware of the protection unit <sup>(2)</sup>
- generate reports based on the data stored and read by the protection unit <sup>(1)</sup>
- run diagnostic tests
- upload to the Cloud the data linked to your profile and installation (only with EnerUp + Project app.@)

(1) Only with Power Control Station software

(2) Only for Legrand technical assistance via Power Control Station software

## CONFIGURATION ON A PC

with the Power Control Station software



Any model in the MP 2.10/MP 4.10 range



### Start menu

This menu displays the values of I1, I2, I3, IN and Ig, the type and status of the circuit breaker, the breaking capacity, the number of poles, the neutral position, the temperature and overtemperature intervention threshold.

### Configuration menu

This menu can be used to set the different breaker parameters according to the tripping curves (time/current and ground fault curves).

## MANAGEMENT ON A SMARTPHONE/TABLET

EnerUp + Project app available from the Apple Store and Google Play

EnerUp + Project App.

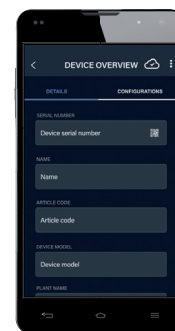


Any model in the MP 2.10/MP 4.10 range



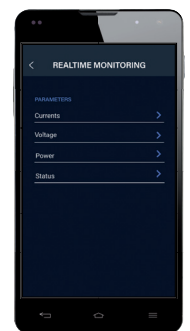
### Start menu

This menu gives access to different options like: overview of connected devices, real-time monitoring, device test, etc...



### Device overview menu

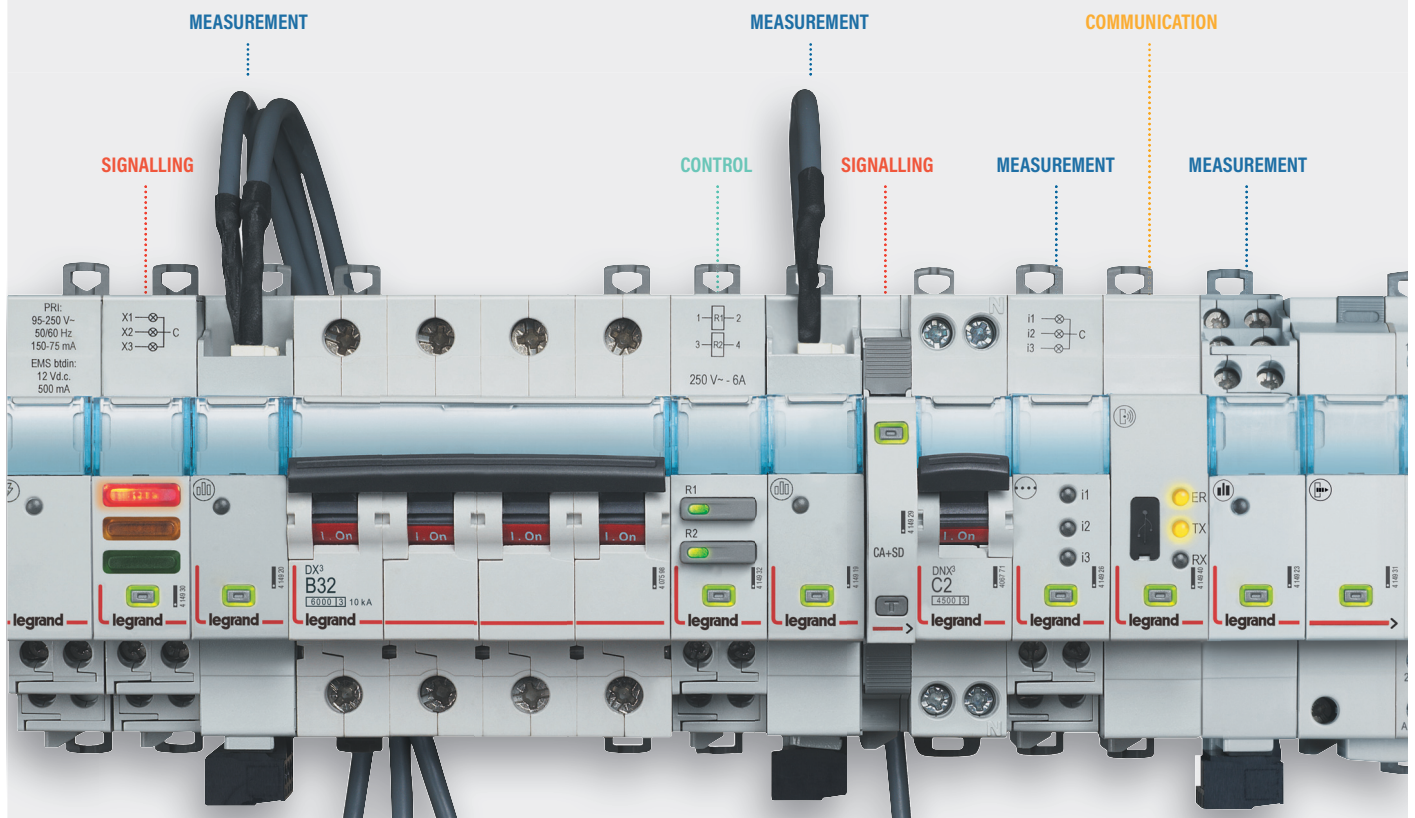
This menu displays the essential information linked to the circuit breaker like: the name, serial number, location, status and the circuit breaker parameters.



### Real-time monitoring menu

This menu displays the values of the current, voltage, power and the status of the circuit breaker.

# CX<sup>3</sup> EMS

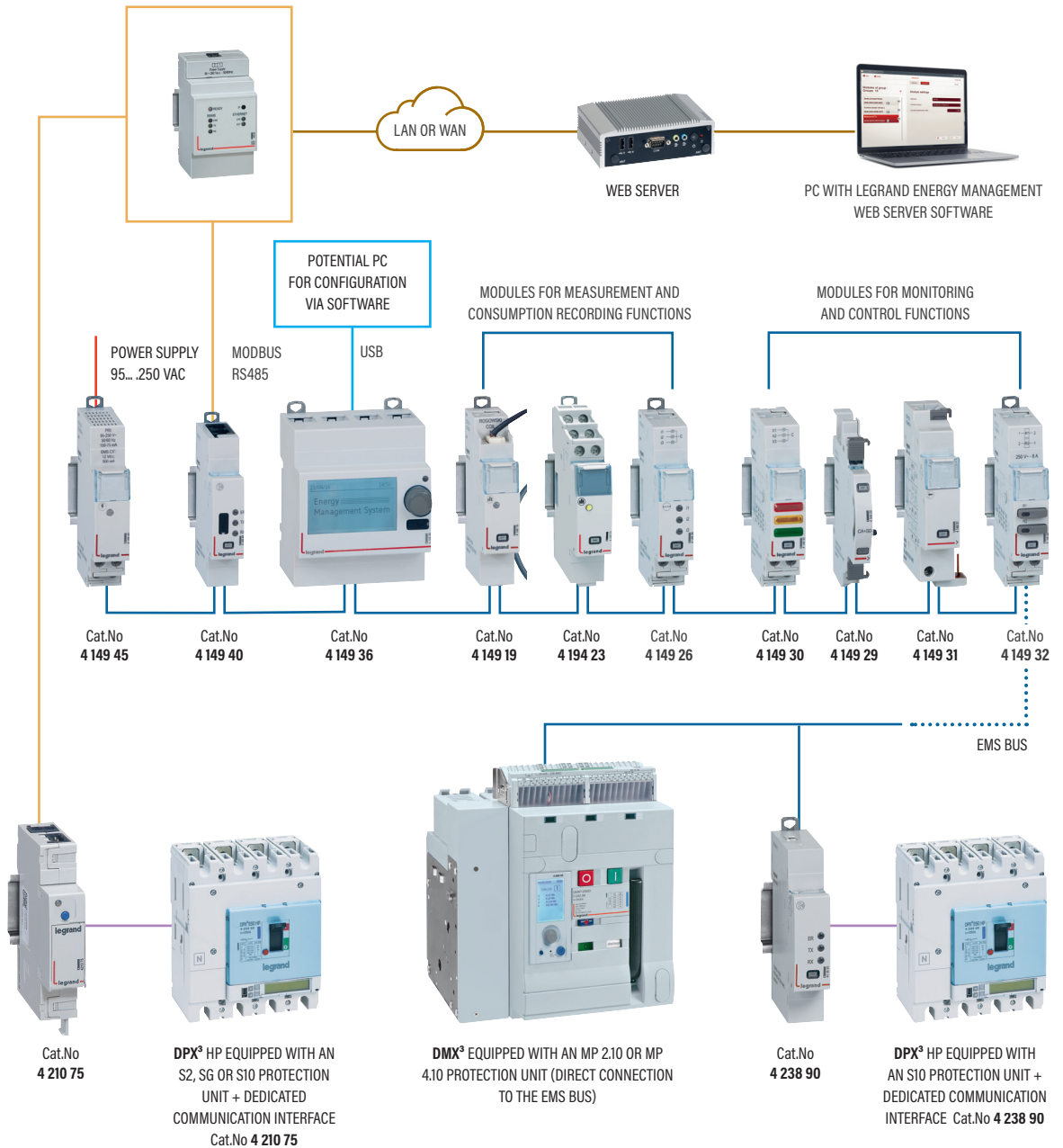


## A universal, innovative system for energy management

The CX<sup>3</sup> EMS energy management system is used to supervise and manage a building's energy consumption, ensuring reliability and continuity of service, for optimum installation efficiency. It offers the option of viewing, measuring and controlling the installation remotely and/or locally. Thanks to the innovative automatic connection process, this autonomous and fully integrated system simplifies mounting and does not require changes to the existing distribution boards wiring. The CX<sup>3</sup> EMS system consists of modules to be mounted on a DIN rail. There is no minimum number of modules and it can also be used to perform very basic supervision tasks. Thanks to its scalability, new functions can be added at any time to suit the needs of the installation.

**SCHEMATIC DIAGRAM**

CX<sup>3</sup> EMS modules are compatible with all Legrand protection devices, from the simple DIN rail mounting circuit breaker, to DPX<sup>3</sup> MCCBs or DMX<sup>3</sup> ACBs.



**LEGRAND ADVANTAGE**

For DPX<sup>3</sup> and DMX<sup>3</sup> devices equipped with protection units with integrated measurement, the measured values are automatically fed back to the Legrand Energy Management Web Server software.

DRAW-OUT  
**DMX<sup>3</sup>**  
2500 FRAME

SHUNT TRIP



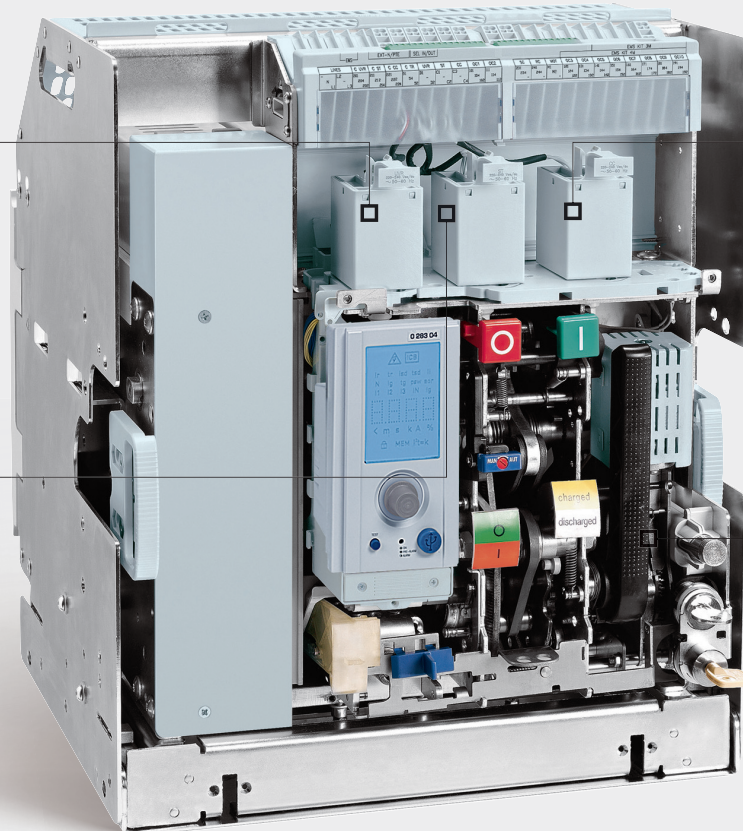
UNDervoltage RELEASE



CLOSING COIL



MOTOR OPERATORS



## Fast clipping control accessories

You can remotely control the DMX<sup>3</sup> thanks to its range of accessories: shunt trips, undervoltage releases, motor operators. All the control accessories are simply clipped on to the front panel of the circuit breaker, which is specially configured in order to facilitate clipping, and closing coils. Every type of accessory is compatible with its own location, in order to avoid any possible mistake.

All control accessories can easily be installed without any special tool and in a very short time. They should be installed on the front of the air circuit breaker. In that way, the separation between power and control circuits is guaranteed.



## LEGRAND ADVANTAGE

Electrical connection is made in no time thanks to the fast connector supplied on all the above accessories.

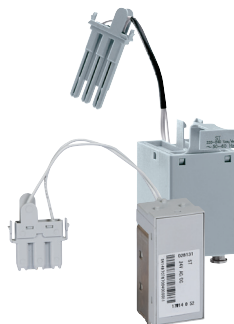


## OTHER ELECTRICAL FEATURES

Number of control auxiliaries: 2  
 Shunt trip: 1  
 Undervoltage release: 1  
 Closing coils: 1

### SHUNT TRIP

Shunt trips are devices used for remote instantaneous opening of the air circuit breaker. They are generally controlled through an N/O type contact. The current offer of shunt trips proposes different supply voltages from 24 V to 480 V (440 V for DMX<sup>3</sup> 1600 frame), compatible with AC and DC currents. The shunt trips are already equipped with a special fast connector, to be directly inserted into the auxiliary contact block. An auxiliary contact is connected in series with the coil, cutting off its power supply when the main poles are open.

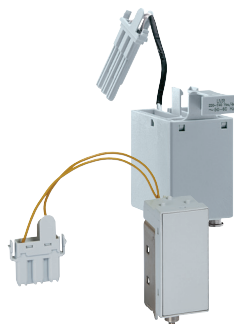


SHUNT TRIP FOR DMX<sup>3</sup> 1600, DMX<sup>3</sup> 2500 TO 6300

		FOR DMX <sup>3</sup>	
Size	1600	2500 to 6300	
Rated operating voltage V <sub>n</sub>	24 V ~/ 48 V ~/ 110 - 130 V ~/ 220 - 250 V ~/ 415 - 440 V ~		
Voltage range (% V <sub>n</sub> )	70 to 110		
Pick-up consumption (W/VA)	400/400	500/500	
Pick-up time (ms)	300	180	
Hold-in consumption (W/VA)	50/50	5/5	
Opening time (ms)	50	30	
Insulation voltage (kV)	2.5		

### UNDERVOLTAGE RELEASE

Undervoltage releases are devices which are generally controlled by an N/C type contact. They trigger instantaneous opening of the circuit breaker if their supply voltage drops below a certain threshold and in particular if the control contact opens. These releases are equipped with a device for limiting their consumption after the circuit has been closed.



UNDERVOLTAGE RELEASE FOR DMX<sup>3</sup> 1600, DMX<sup>3</sup> 2500 TO 6300

		FOR DMX <sup>3</sup>	
Size	1600	2500 to 6300	
Rated operating voltage V <sub>n</sub>	24 V ~/ 48 V ~/ 110 - 130 V ~/ 220 - 250 V ~/ 415 - 440 V ~		
Voltage range (% V <sub>n</sub> )	85 to 110		
Pick-up consumption (W/VA)	400/400	500/500	
Pick-up time (ms)	300	180	
Hold-in consumption (W/VA)	50/50	5/5	
Opening time (ms)	60		
Insulation voltage (kV)	2.5		

### CLOSING COILS

These coils are used for remotely controlling closing of the circuit breaker power contacts. The springs of the circuit breaker should be loaded prior to the action of the closing coils. They are controlled by an N/O type contact.



CLOSING COILS FOR DMX<sup>3</sup> 1600, DMX<sup>3</sup> 2500 TO 6300

		FOR DMX <sup>3</sup>	
Size	1600	2500 to 6300	
Rated operating voltage V <sub>n</sub>	24 V ~/ 48 V ~/ 110 - 130 V ~/ 220 - 250 V ~/ 415 - 440 V ~		
Voltage range (% V <sub>n</sub> )	85 to 110		
Pick-up consumption (W/VA)	400/400	500/500	
Pick-up time (ms)	300	180	
Hold-in consumption (W/VA)	50/50	5/5	
Opening time (ms)	50		
Insulation voltage (kV)	2.5		

## MOTOR OPERATORS

Motor operators are used for remotely reloading the springs of the circuit breaker mechanism immediately after the device closes. The device can thus be re-closed almost immediately after an opening operation.

To motorise a DMX<sup>3</sup> it is necessary to add a release coil (undervoltage release or shunt trip) and a closing coil.

If the supply voltage of the controls fails, it is still possible to reload the springs manually. Motor-driven controls have "limit switch" contacts which cut off the power supply of their motor after the springs have been reloaded. Motor operators are easy to mount, with only three screws.



MOTOR OPERATOR FOR DMX<sup>3</sup>  
1600, DMX<sup>3</sup> 2500 TO 6300

Size	FOR DMX <sup>3</sup>		
	1600	2500 to 6300	
		42, 50, 65 kA	100 kA
Rated operating voltage V <sub>n</sub>	24 V ~/= 48 V ~/= 110 - 130 V ~/= 220 - 250 V ~/= 415 - 440 V ~	24 V ~/= 48 V ~/= 110 - 130 V ~/= 220 - 250 V ~/= 415 - 440 V ~ 480 V ~	
Voltage range (% V <sub>n</sub> )	85 to 110		
Max. power consumption (W/VA)	240/240	180/180	240/240
Max. peak current for about 80 ms	2 to 3 x I <sub>n</sub>		
Loading time (s)	5	5	7
Operating frequency (n <sup>o</sup> /min)	2	2	1

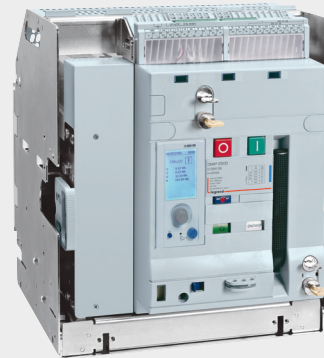
## SAFETY AND PADLOCKING ACCESSORIES FOR INCREASED SECURITY

Draw-out type DMX<sup>3</sup> circuit breakers are delivered as standard with safety padlocking shutters preventing access to live terminals. They have a number of other safety devices, such as:

- Key-operated locks:
  - Main contacts open
  - Circuit breaker in draw-out position
- Padlocks for:
  - Main contacts open
  - Contact shutters closed (for draw-out position)
- Door locking in order to prevent opening of the distribution board door when the contacts of the ACB are closed.



FIXED VERSION EQUIPPED  
WITH PADLOCKING SYSTEM



DRAW-OUT VERSION EQUIPPED  
WITH KEY-OPERATED LOCKS

All control accessories can easily be installed without any special tool and in a very short time.

They should be installed on the front of the air circuit breaker. In that way, the separation between power and control circuits is guaranteed.

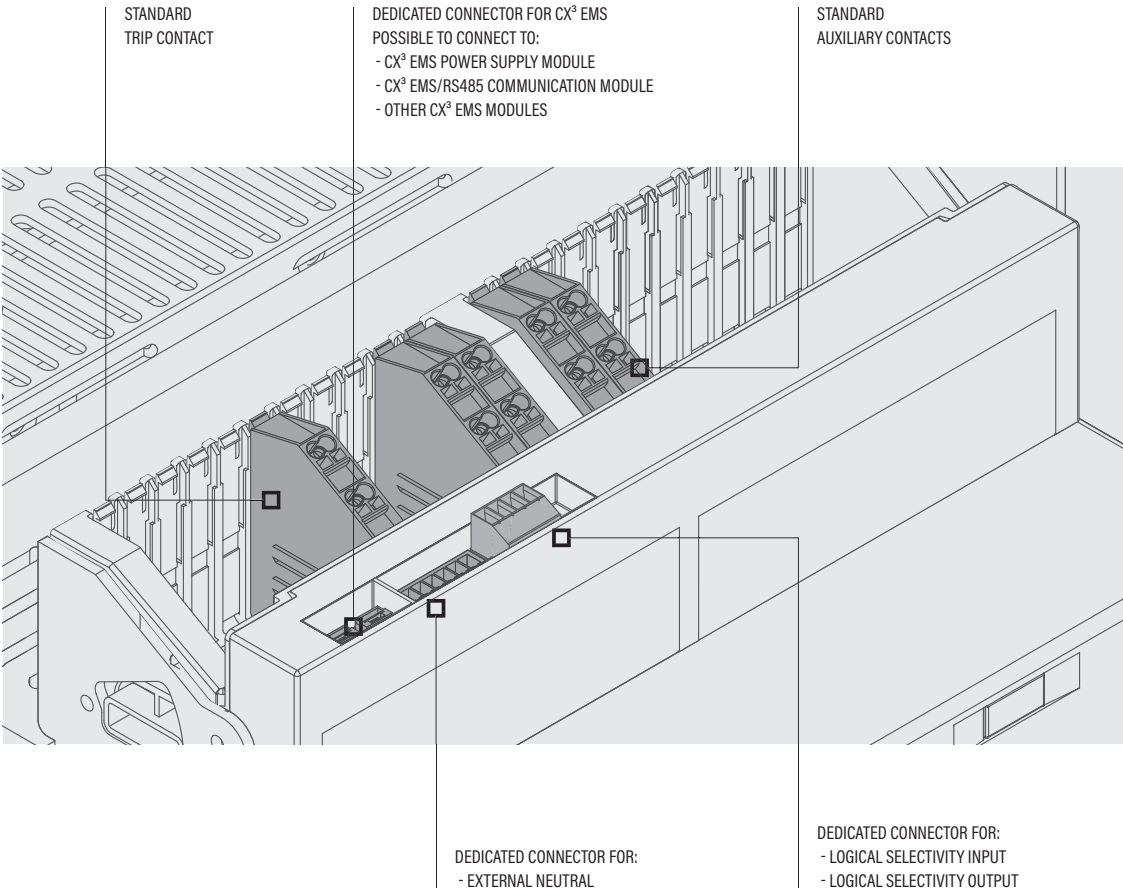
## Easy identification of control accessories

Electrical auxiliaries are connected on the front of terminal blocks provided for this purpose. Accessories are identified on the front.

As the cover has a window, it is easy to ascertain, which devices are fitted on the circuit breaker.

**FRONT CONNECTION TERMINAL BLOCK**

The terminal block of DMX<sup>3</sup> ACBs offers the possibility of connecting a trip contact with up to 10 auxiliary contacts (up to 6 contacts for DMX<sup>3</sup> 1600) and other different control and signalling functions



**MORE INFORMATION**

	DMX <sup>3</sup> 1600	DMX <sup>3</sup> 2500	DMX <sup>3</sup> 4000	DMX <sup>3</sup> 6300
Power supply module	4 149 45			
RS485/CX <sup>3</sup> EMS communication interface	4 149 40			
External neutral	0 281 25	0 281 98	0 281 98	0 281 97

**DMX<sup>3</sup>**  
1600  
FIXED VERSION



THE BREAKER IS  
SUPPLIED WITHOUT  
TERMINALS.

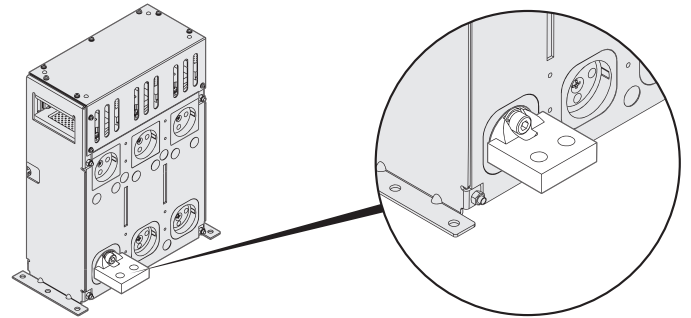
## Connection: maximum adaptability

The fixed versions of DMX<sup>3</sup> 1600 are supplied without terminals.  
You can change connection type according to your needs by adding  
the required terminals.



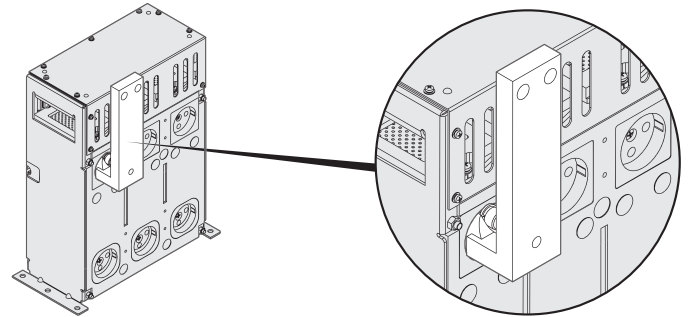
## 3 POSSIBILITIES OF CONNECTION ACCESSORIES

### REAR TERMINALS FOR HORIZONTAL OR VERTICAL CONNECTION



**1600 FRAME:**  
 3P: CAT.NO 0 280 35  
 4P: CAT.NO 0 280 41

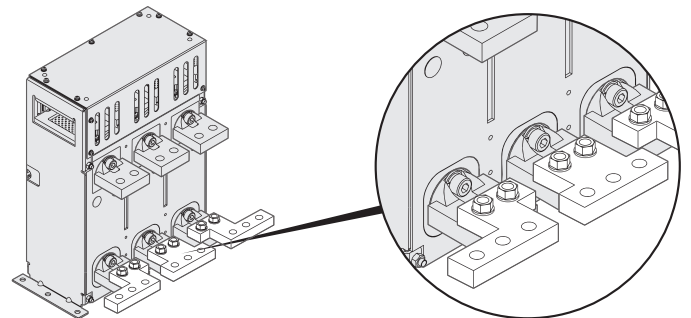
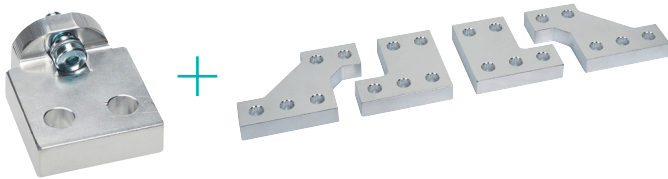
### FRONT TERMINALS FOR VERTICAL CONNECTION



**1600 FRAME:**  
 3P: CAT.NO 0 281 55  
 4P: CAT.NO 0 281 56

### SPREADERS FOR HORIZONTAL CONNECTION

For any situation requiring a bigger width for a safe connection (i.e. aluminium busbars).



**1600 FRAME:**  
 3P: CAT.NO 0 280 35 + 0 281 59  
 4P: CAT.NO 0 280 41 + 0 281 60

**DMX<sup>3</sup>**  
1600  
DRAW-OUT  
VERSION



THE BREAKER IS  
SUPPLIED WITHOUT  
TERMINALS.

## Connection: maximum adaptability

---

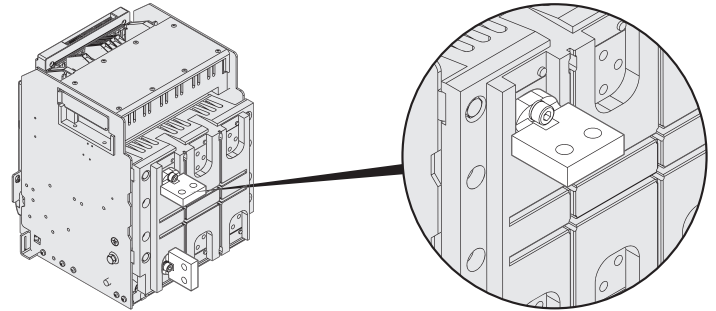
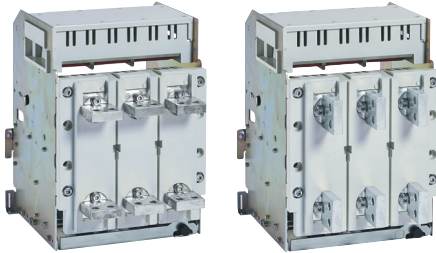
The draw-out versions of DMX<sup>3</sup> 1600 are supplied without terminals. You can change connection type according to your needs by adding the required terminals.

## 3 POSSIBILITIES OF CONNECTION ACCESSORIES

### REAR TERMINALS FOR HORIZONTAL OR VERTICAL CONNECTION



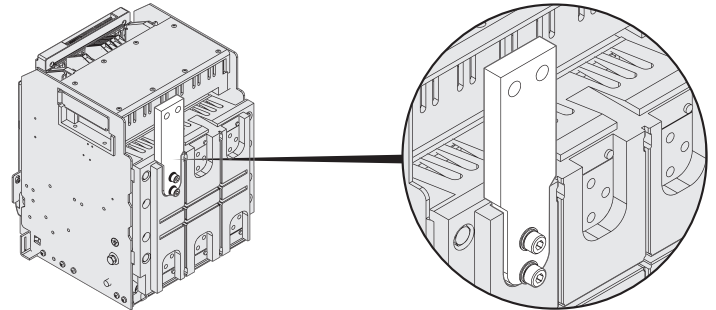
**1600 FRAME:**  
3P: CAT.NO 0 281 47  
4P: CAT.NO 0 281 48



### FRONT TERMINALS FOR VERTICAL CONNECTION

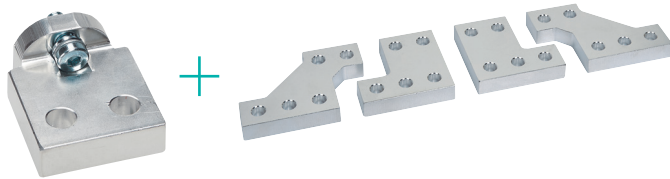


**1600 FRAME:**  
3P: CAT.NO 0 281 57  
4P: CAT.NO 0 281 58

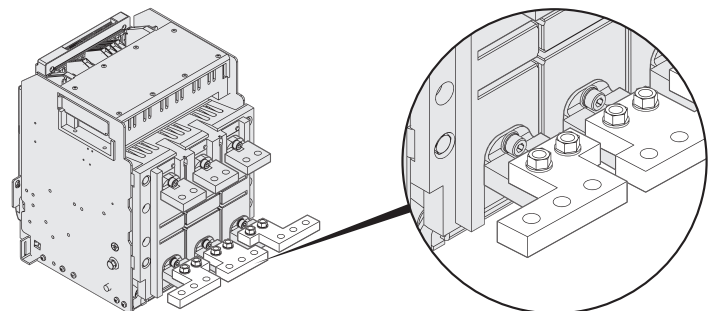


### SPREADERS FOR HORIZONTAL CONNECTION

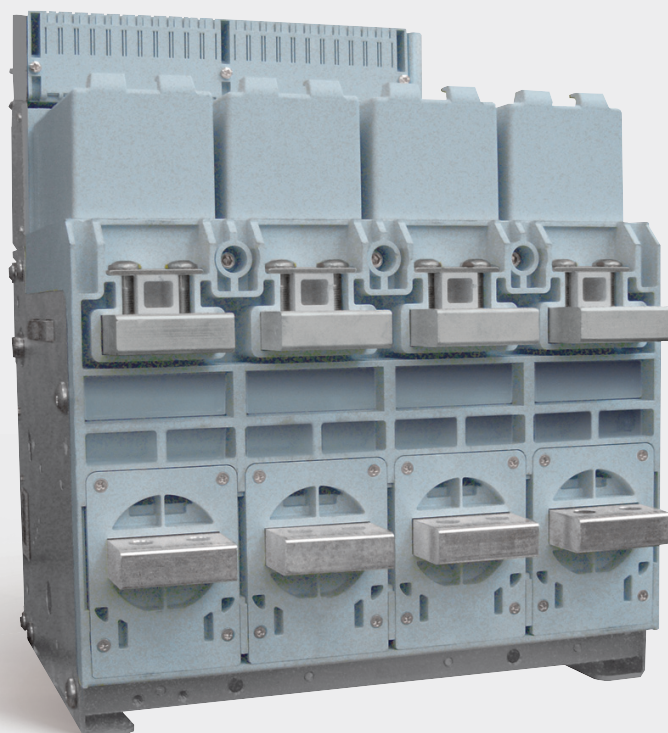
For any situation requiring a bigger width for a safe connection (i.e. aluminium busbars).



**1600 FRAME:**  
3P: CAT.NO 0 281 47 + 0 281 59  
4P: CAT.NO 0 281 48 + 0 281 60



**DMX<sup>3</sup>**  
2500 TO 6300  
FIXED VERSION



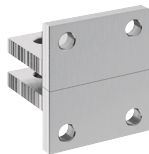
THE BREAKER IS  
SUPPLIED WITH REAR  
TERMINALS FOR  
HORIZONTAL CONNECTION

## Connection: maximum adaptability

The fixed version of DMX<sup>3</sup> is equipped with rear terminals for horizontal connection with bars. You can change connection type according to your needs.

## 3 POSSIBILITIES OF CONNECTION ACCESSORIES

### REAR TERMINALS FOR FLAT CONNECTION



**2500 FRAME:**

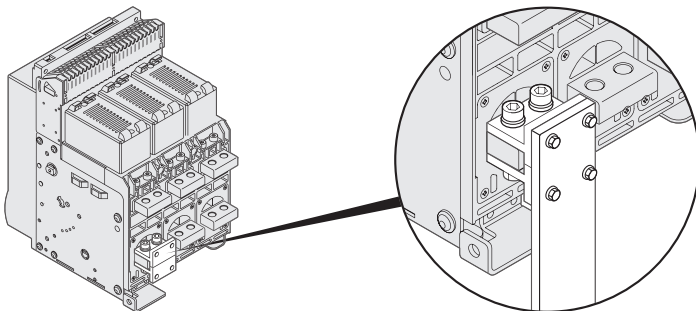
3P: CAT.NO 0 288 84  
4P: CAT.NO 0 288 85

**4000 FRAME:**

3P: CAT.NO 0 288 92  
4P: CAT.NO 0 288 93

**6300 FRAME:**

3P: CAT.NO 0 288 92 X 2  
4P: CAT.NO 0 288 93 X 2



### REAR TERMINALS FOR VERTICAL CONNECTION

This type of connection uses 2 accessories: the previous rear terminals for flat connection, which must be equipped with the vertical ones.



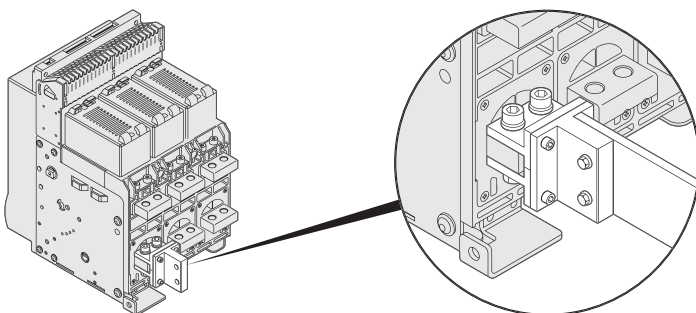
**FRAME 1:**

3P: CAT.NO 0 288 84 + 0 288 82  
4P: CAT.NO 0 288 85 + 0 288 83

**FRAME 2 AND 3<sup>(1)</sup>:**

3P: CAT.NO 0 288 92 + 0 288 94  
4P: CAT.NO 0 288 93 + 0 288 95

(1) For frame 6300 the quantity is multiplied by 2



### SPREADERS

For any situation requiring a bigger width for a safe connection (i.e. aluminium busbars).

2500 frame: 3 types of accessories



**FLAT CONNECTION:**

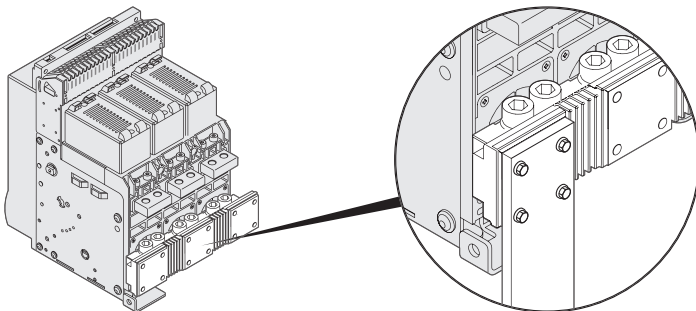
3P: CAT.NO 0 288 86  
4P: CAT.NO 0 288 87

**VERTICAL CONNECTION:**

3P: CAT.NO 0 288 88  
4P: CAT.NO 0 288 89

**HORIZONTAL CONNECTION:**

3P: CAT.NO 0 288 90  
4P: CAT.NO 0 288 91



**DMX<sup>3</sup>**  
2500 TO 6300  
DRAW-OUT  
VERSION



THE BREAKER IS  
SUPPLIED WITH REAR  
TERMINALS FOR FLAT  
CONNECTION

## Connection: maximum adaptability

The draw-out version of the DMX<sup>3</sup> breakers is supplied with rear terminals for flat connection with bars. You can easily transform those terminals into vertical or horizontal type by using the unique reversible connector.

## CHOOSE YOUR CONNECTION ACCESSORIES

### 2 TYPES OF FIXING

Reversible connector for vertical or horizontal connection.

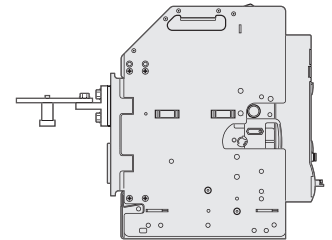
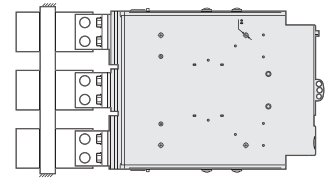
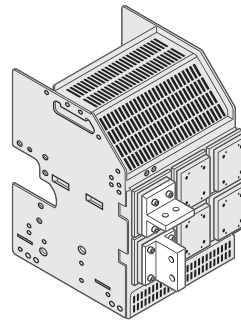


**2500 FRAME:**  
3P: CAT.NO 0 288 96  
4P: CAT.NO 0 288 97



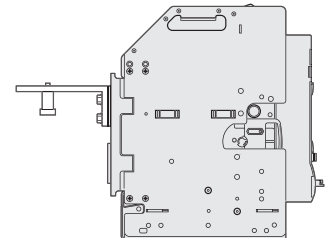
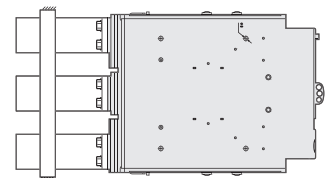
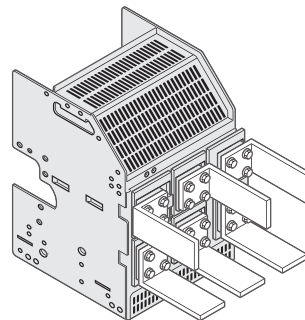
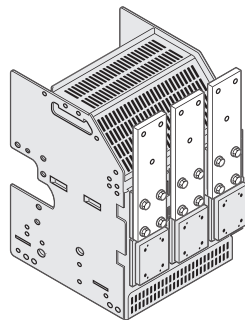
**4000 FRAME:**  
3P: CAT.NO 0 288 94  
4P: CAT.NO 0 288 95

**6300 FRAME:**  
3P: CAT.NO 0 288 94 X 2  
4P: CAT.NO 0 288 95 X 2



The draw-out version of the DMX<sup>3</sup> breakers is supplied with rear terminals for flat connection with bars. You can easily transform the rear terminals into vertical or horizontal type by using the unique reversible connector.

### FLAT CONNECTION USING THE REAR TERMINALS OF THE BREAKER



### CONNECTIONS: A FEW RECOMMENDATIONS!

- Connections provide the electrical connection of equipment and are also responsible for a considerable proportion of their heat dissipation.
- Connections must never be under-sized.
- Plates or terminals must be used over a maximum area.
- Heat dissipation is encouraged by arranging the bars vertically. If an uneven number of bars is connected, place the higher number of bars on the upper part of the terminal.
- Avoid bars running side by side: this causes poor heat dissipation and vibrations.
- Place spacers between the bars to maintain a distance between them which is at least equivalent to their thickness.

# AUTOMATIC TRANSFER SWITCHES

Stylish  
ergonomic design

Backlit screen, very easy to read,  
adjustable brightness and contrast.  
Menu available in 5 or 8 languages  
depending on unit model

Clear marking on the  
front panel for easy  
identification of the  
various functions

Touch-sensitive buttons  
for programming the  
various operating  
parameters directly on  
the control unit

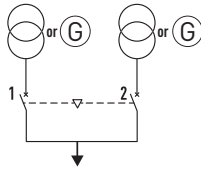
The optical communication port on the  
front can take a USB or a Wi-Fi connection  
module, which allows communication  
with a computer, smartphone or a tablet  
for programming, diagnostics and data  
downloading, without having to cut off the  
power to the distribution board.

## Continuity of service & increased safety

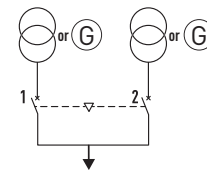
Automatic transfer switches satisfy the dual need of continuity of service and greater safety (security). Traditionally used in hospitals, public buildings, industries with continuous manufacturing processes, airports and military applications, automatic transfer switches are increasingly required for new applications such as telecommunications and data processing or in the management of energy sources, notably so-called "renewable energies". Our range of control units includes 3 different types, depending on the desired service level.



**FOR STANDARD MANAGEMENT OF 2 CIRCUIT BREAKERS**

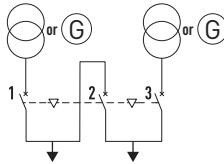
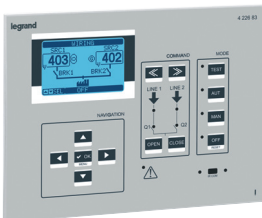


2 CIRCUIT BREAKERS  
(CAT.NO 4 226 81)



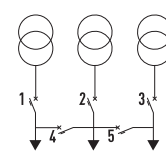
2 CIRCUIT BREAKERS  
(CAT.NO 4 226 82)

**FOR ADVANCED MANAGEMENT OF 3 CIRCUIT BREAKERS AND 2 POWER SOURCES**



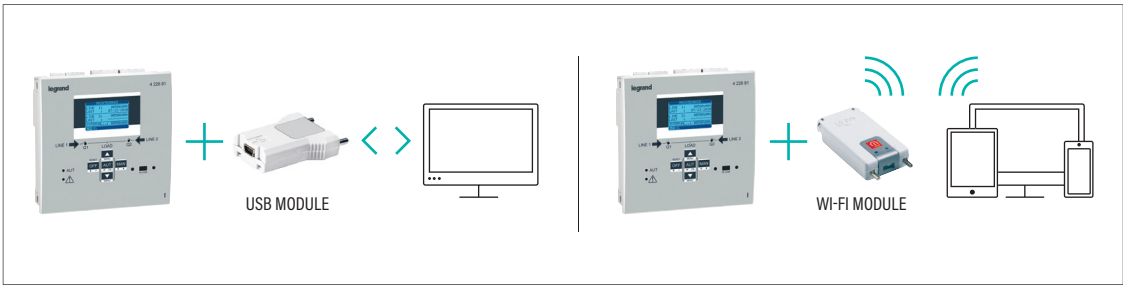
3 CIRCUIT BREAKERS  
(CAT.NO 4 226 83)

**FOR ADVANCED MANAGEMENT OF 5 CIRCUIT BREAKERS AND 3 POWER SOURCES**



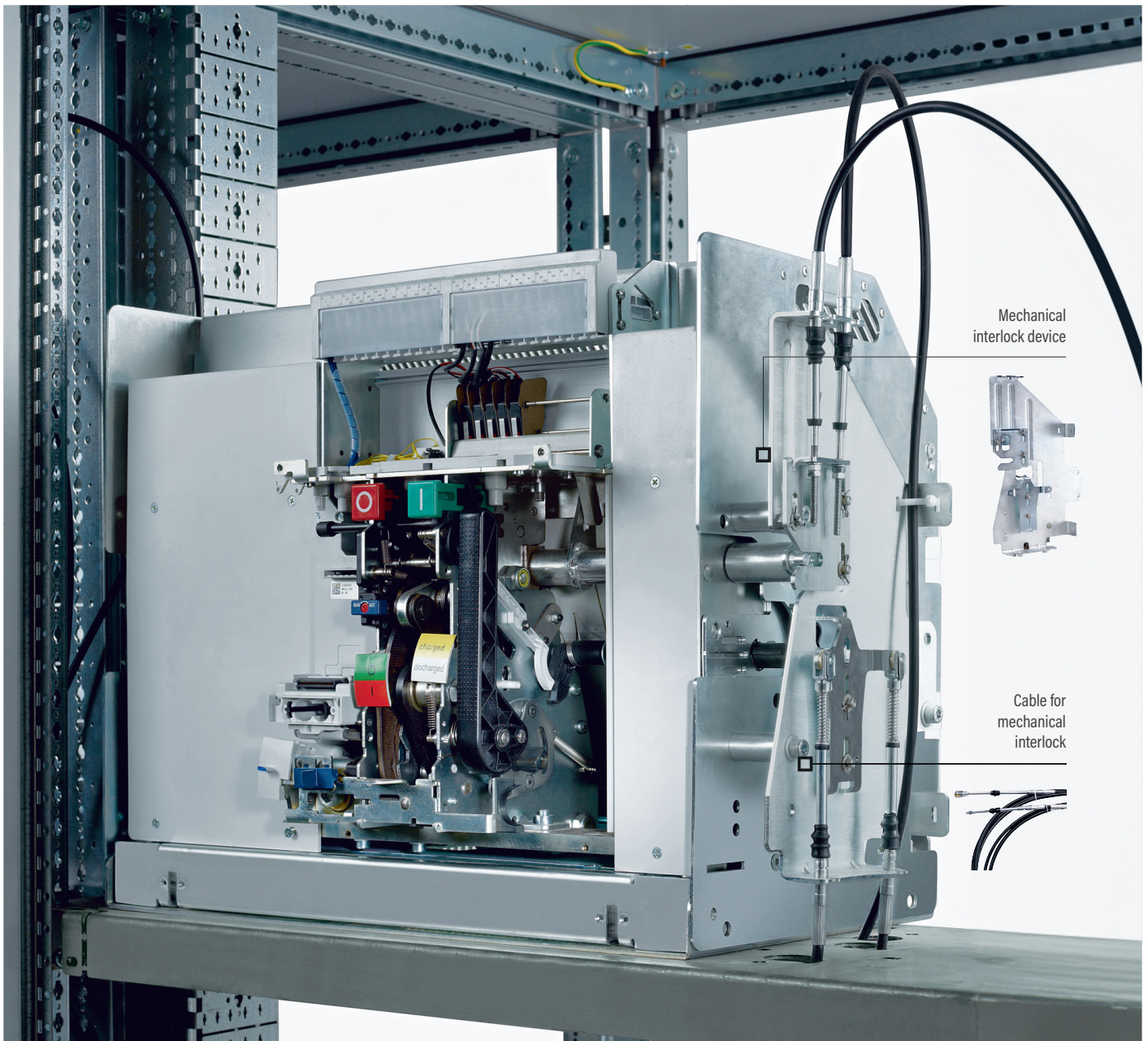
5 CIRCUIT BREAKERS  
(CAT.NO 4 226 84)

The 4 automation control units for supply inversion are fitted with an optical port designed to take communication modules. These modules can be used to configure the control units via a PC, tablet or smartphone, on which the software or Legrand app has already been installed.



**LEGRAND ADVANTAGE**

Thanks to its digital display and different LEDs it is possible to view the inverter status continuously, as well as the presence and the value of the voltage on each power supply.



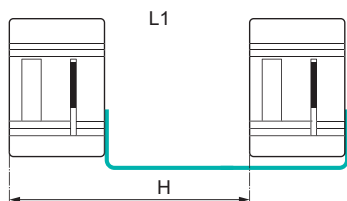
## Transfer switching & interlocking

Mechanical interlocking is set up using cables and a mechanical interlock device and can interlock 2 or 3 devices, which may be different types in a vertical or horizontal configuration.

The interlock device is mounted on the right-hand side of the air circuit breaker.

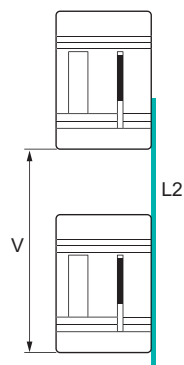
### DMX<sup>3</sup> 1600

#### Horizontal configuration



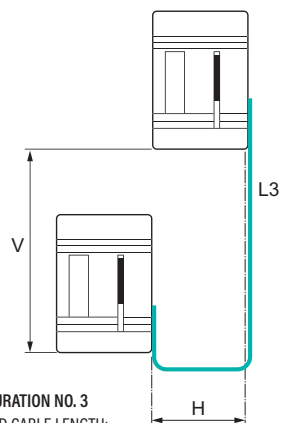
**CONFIGURATION NO. 1**  
REQUIRED CABLE LENGTH:  
 $L = 620 + H$

#### Vertical configuration



**CONFIGURATION NO. 2**  
REQUIRED CABLE LENGTH:  
 $L = 950 + V$

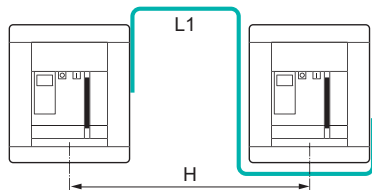
#### Vertical + Horizontal configuration



**CONFIGURATION NO. 3**  
REQUIRED CABLE LENGTH:  
 $L = 620 + V + H$

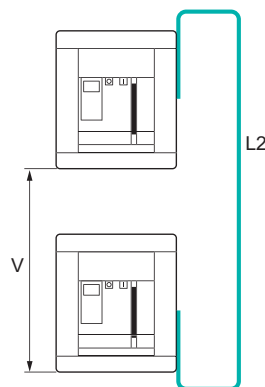
### DMX<sup>3</sup> 2500 / 4000 / 6300

#### Horizontal configuration



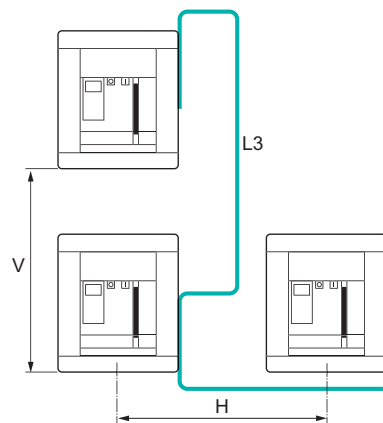
**CONFIGURATION NO. 1**  
REQUIRED CABLE LENGTH:  
 $L = 1430 + H$

#### Vertical configuration



**CONFIGURATION NO. 2**  
REQUIRED CABLE LENGTH:  
 $L = 1570 + V$

#### Vertical + Horizontal configuration



**CONFIGURATION NO. 3**  
REQUIRED CABLE LENGTH:  
 $L = 1430 + V + H$

### EXAMPLES OF CABLE INTERLOCK SELECTION FOR 2 OR 3 AIR CIRCUIT BREAKERS

Distance between air circuit breakers	DMX <sup>3</sup> 1600 (2 ACBs) Configuration No. 3: $L = 620 + H + V$				DMX <sup>3</sup> 2500 / 4000 / 6300 (3 ACBs) Configuration No. 3: $L = 1430 + H + V$				
	Horizontal (mm)								
		725	1000	1450	2000	725	1000	1450	2 000
Vertical (mm)	800	0 289 20	0 289 20	0 289 21	0 289 22	0 289 21	0 289 22	0 289 23	0 289 24
	1000	0 289 20	0 289 21	0 289 22	0 289 23	0 289 22	0 289 22	0 289 23	0 289 24
	1600	0 289 21	0 289 22	0 289 23	0 289 24	0 289 23	0 289 24	0 289 24	0 289 25
	2000	0 289 22	0 289 23	0 289 24	0 289 25	0 289 24	0 289 24	0 289 25	0 289 25

### CABLE LENGTH

Cat.Nos	0 289 17	0 289 18	0 289 20	0 289 21	0 289 22	0 289 23	0 289 24	0 289 25
Length (mm)	1000	1500	2600	3000	3600	4000	4600	5600

XL<sup>3</sup>  
OR  
XL<sup>3</sup> S

DMX<sup>3</sup> 1600 inside  
an XL<sup>3</sup> S 4000 enclosure

DMX<sup>3</sup> 6300 inside  
an XL<sup>3</sup> 6300 enclosure



## Be free to choose a fully adaptable enclosure

It is very easy to create the configuration you want thanks to the different available sizes of XL3 S 4000 or XL<sup>3</sup> 4000 and 6300 enclosures.

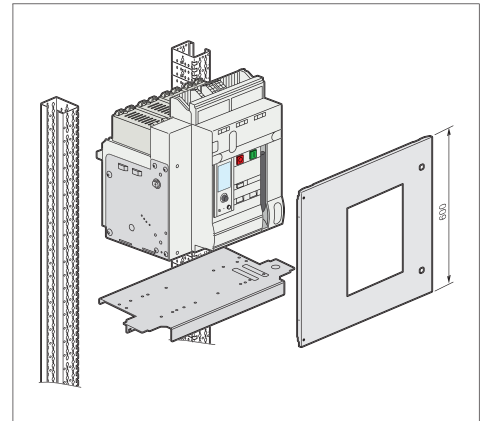
A full range of accessories, such as dedicated fixing plates and faceplates, facilitates the integration of DMX<sup>3</sup> devices inside the enclosures.

XLPro<sup>3</sup> software let you choose the optimum configuration between XL<sup>3</sup> and XL<sup>3</sup> S, according to the size and the requirements of your installation.

## DMX<sup>3</sup> FIXED VERSION



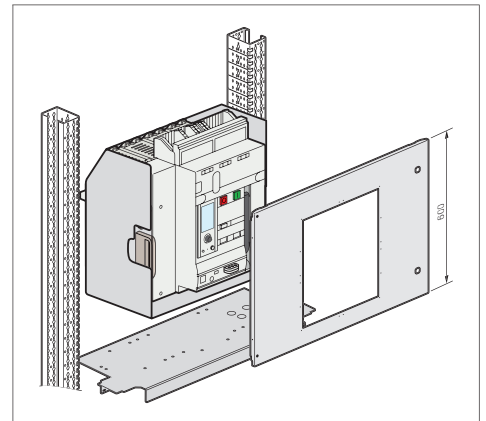
DMX<sup>3</sup> SIZE 1600  
AND DMX<sup>3</sup> SIZE 2500



## DMX<sup>3</sup> DRAW-OUT VERSION



DMX<sup>3</sup> SIZE 1600  
AND DMX<sup>3</sup> SIZE 2500



### MOUNTING PRINCIPLE

In XL<sup>3</sup> and XL<sup>3</sup> S, the DMX<sup>3</sup> devices and the associated busbars are arranged according to an identical principle for power ratings up to 4000 A, that is, the possibility of mounting two devices per enclosure.

The installation height of DMX<sup>3</sup> units is always 600 mm whatever the type and size of the device. When 2 DMX<sup>3</sup> devices are installed in the same cubicle, this leaves at least 600 mm usable for running the busbars.

# Air circuit breakers DMX<sup>3</sup> 1600

from 630 to 1600 A



0 283 34 + 0 283 00 (factory assembly)

Dimensions **p. 38-39**  
Electrical characteristics **p. 40-41**

Automatic air circuit breakers must be equipped with DMX<sup>3</sup> 1600 electronic protection units Cat.No 0 283 00/01/02/03, imperatively ordered together for factory assembly  
Please ask for DMX<sup>3</sup> order form  
Conform to IEC 60947-2

Pack	Cat.Nos		Fixed version
	Frame 1600		Supplied with - 1 auxiliary contact: NO/NC - door sealing  <b>Breaking capacity I<sub>cu</sub> 42 kA (415 V<math>\sim</math>)</b> In (A) 630 800 1000 1250 1600
	3P	4P	
1	0 283 20	0 283 25	Supplied with: - 1 auxiliary contact: NO/NC - door sealing To be installed on a draw-out base Cat.No 0 281 53 or 0 281 54  <b>Breaking capacity I<sub>cu</sub> 42 kA (415 V<math>\sim</math>)</b> In (A) 630 800 1000 1250 1600
1	0 283 21	0 283 26	
1	0 283 22	0 283 27	
1	0 283 23	0 283 28	
1	0 283 24	0 283 29	
	Frame 1600		<b>Breaking capacity I<sub>cu</sub> 50 kA (415 V<math>\sim</math>)</b> 630 800 1000 1250 1600
	3P	4P	
1	0 283 30	0 283 35	<b>Draw-out version</b> Supplied with: - 1 auxiliary contact: NO/NC - door sealing To be installed on a draw-out base Cat.No 0 281 53 or 0 281 54  <b>Breaking capacity I<sub>cu</sub> 42 kA (415 V<math>\sim</math>)</b> In (A) 630 800 1000 1250 1600
1	0 283 31	0 283 36	
1	0 283 32	0 283 37	
1	0 283 33	0 283 38	
1	0 283 34	0 283 39	
	Frame 1600		<b>Breaking capacity I<sub>cu</sub> 50 kA (415 V<math>\sim</math>)</b> 630 800 1000 1250 1600
	3P	4P	
1	0 283 40	0 283 45	<b>Draw-out base</b> For DMX <sup>3</sup> and DMX <sup>3</sup> -I 1600 Cat.No 0 283 40 to 0 283 59 and 0 284 90 to 0 284 99 (p. 3)
1	0 283 41	0 283 46	
1	0 283 42	0 283 47	
1	0 283 43	0 283 48	
1	0 283 44	0 283 49	
1	0 283 50	0 283 55	
1	0 283 51	0 283 56	
1	0 283 52	0 283 57	
1	0 283 53	0 283 58	
1	0 283 54	0 283 59	

Auxiliaries and accessories  
for DMX<sup>3</sup> 1600 **p. 30**



# DMX<sup>3</sup> 1600 electronic protection units



Settings and curves **p. 40**

DMX<sup>3</sup> circuit breakers must be equipped with electronic protection units (to be ordered together for factory assembly) enabling very precise adjustments of the protection conditions, while maintaining total discrimination with downstream devices  
Conform to IEC 60947-2

Pack	Cat.Nos	MP2.10 protection units with LED matrix screen	MP4.10 protection units with LCD screen	Bluetooth communication key	Power supply module	Communication interface	External neutral
1	0 283 00	Integrated LED matrix screen to show electrical values and settings Adjustment via rotating encoder Adjustment of I <sub>r</sub> , t <sub>r</sub> , i <sub>sd</sub> , t <sub>sd</sub> , I <sub>i</sub> , I <sub>g</sub> and t <sub>g</sub> Possibility to enable/disable protections Without mesure With mesure Measure and display instantaneous, maximum and average values of different electrical values and protection conditions Fault signaling and log	Integrated LCD screen for displaying electrical values, settings and log Equipped with batteries for powering in case of mains fault or when the breaker is open or not connected Adjustment via rotating encoder Adjustment of I <sub>r</sub> , t <sub>r</sub> , i <sub>sd</sub> , t <sub>sd</sub> , I <sub>i</sub> , I <sub>g</sub> and t <sub>g</sub> Possibility to enable/disable protections Without mesure With mesure Measure and display instantaneous, maximum and average values of different electrical values and protection conditions Fault signaling and log	USB key for Bluetooth communication with DMX <sup>3</sup> protection units. Needed to remotely configure, monitor and manage the DMX <sup>3</sup> protection units through EnerUp + Project App USB connection port on front of protection unit	500 mA 12 V $\sim$ stabilized power supply module for CX <sup>3</sup> energy management system	RS485 / CX <sup>3</sup> energy management system conversion Consumption: 0.344 W - 28.7 mA (12 V $\sim$ )	For DMX <sup>3</sup> 1600
1	0 283 01 <sup>1</sup>						
1	0 283 02	Integrated LED matrix screen to show electrical values and settings Adjustment via rotating encoder Adjustment of I <sub>r</sub> , t <sub>r</sub> , i <sub>sd</sub> , t <sub>sd</sub> , I <sub>i</sub> , I <sub>g</sub> and t <sub>g</sub> Possibility to enable/disable protections Without mesure With mesure Measure and display instantaneous, maximum and average values of different electrical values and protection conditions Fault signaling and log	Integrated LCD screen for displaying electrical values, settings and log Equipped with batteries for powering in case of mains fault or when the breaker is open or not connected Adjustment via rotating encoder Adjustment of I <sub>r</sub> , t <sub>r</sub> , i <sub>sd</sub> , t <sub>sd</sub> , I <sub>i</sub> , I <sub>g</sub> and t <sub>g</sub> Possibility to enable/disable protections Without mesure With mesure Measure and display instantaneous, maximum and average values of different electrical values and protection conditions Fault signaling and log	1	4 149 45	4 149 40	1
1	0 283 03 <sup>1</sup>						
1	0 283 10 <sup>2</sup>						
1	4 149 45						
1	4 149 40						
1	0 281 25 <sup>3</sup>						

1: For the correct working of metering function it's necessary to connect a CX<sup>3</sup> EMS power supply module Cat. No 4 149 45

2: EnerUp + Project App for smartphone and tablet available on Apple Store and Google Play. Configuration, monitoring and management software (PCS) available for download via e-catalogue (does not require the use of Bluetooth communication key Cat.No 0 283 10)

3: Optional accessories, to be ordered when ordering electronic protection unit and DMX<sup>3</sup> air circuit breakers for factory assembly

# Trip free switches DMX<sup>3</sup>-I 1600

from 630 to 1600 A



0 282 64

Dimensions p. 38-39

Conform to IEC 60947-3

Pack	Cat.Nos		In (A)	<b>Fixed version</b> Supplied with: - 1 auxiliary contact: NO/NC - door sealing
	3P	4P		
	Frame 1600			
1	0 282 60	0 282 65	630	
1	0 282 61	0 282 66	800	
1	0 282 62	0 282 67	1000	
1	0 282 63	0 282 68	1250	
1	0 282 64	0 282 69	1600	

Pack	Cat.Nos		In (A)	<b>Draw-out version</b> Supplied with: - 1 auxiliary contact: NO/NC - door sealing To be installed on a draw-out base Cat.No 0 281 53 or 0 281 54 (p. 28)
	3P	4P		
	Frame 1600			
1	0 284 90	0 284 95	630	
1	0 284 91	0 284 96	800	
1	0 284 92	0 284 97	1000	
1	0 284 93	0 284 98	1250	
1	0 284 94	0 284 99	1600	

# Trip free switches DMX<sup>3</sup>-I 1600

from 630 to 1600 A

## Technical characteristics

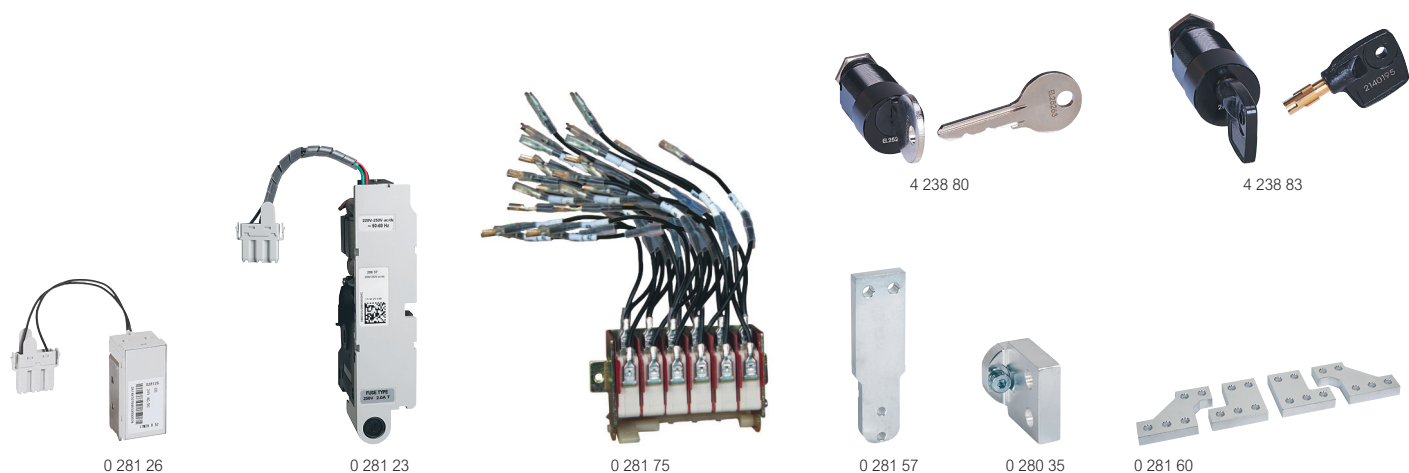
Trip free switch DMX <sup>3</sup> -I	1600	
Frame	1600	
Rating In (A)	630 800 1000 1250 1600	
Rated insulation voltage Ui (V)	1000	
Rated impulse withstand voltage Uimp (kV)	12	
Rated operational voltage (50/60Hz) Ue (V)	690	
Category of use	AC23A	
Isolation behaviour	Yes	
Short-circuit making capacity Icm (kA)	220 / 240 V~	105
	380 / 415 V~	105
	440 / 460 V~	105
	480 / 500 V~	105
	600 V~	88
	690 V~	88
Short time withstand current Icw (kA) for t = 1 s	220 / 240 V~	50
	380 / 415 V~	50
	440 / 460 V~	50
	480 / 500 V~	50
	600 V~	42
	690 V~	42
Endurance (cycles)	mechanical without maintenance	5000
	mechanical with maintenance	10000
	electrical	1500 at 690 V / 3000 at 415 V
Temperature	operation	-5°C to +70°C
	storage	-25°C to +85°C

## Temperature derating

Fixed / draw-out version

	Temperature									
	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>
DMX <sup>3</sup> -I 1600	630	1	630	1	630	1	630	1	630	1
	800	1	800	1	800	1	800	1	800	1
	1000	1	1000	1	1000	1	1000	1	1000	0.95
	1250	1	1250	1	1250	1	1187	0.95	1125	0.9
	1600	1	1600	1	1328	0.83	1280	0.8	1216	0.76

# Auxiliaries, accessories and fixing devices for DMX<sup>3</sup> 1600



Pack	Cat.Nos	Control and signalling auxiliaries
		<b>Shunt trip</b> When energised the circuit breaker will be tripped
1	0 281 31	24 V~/=
1	0 281 32	48 V~/=
1	0 281 33	110 - 130 V~/=
1	0 281 34	220 - 250 V~/=
1	0 281 35	415 - 440 V~
		<b>Undervoltage releases</b> When the coil is de-energised, the circuit breaker will be tripped
1	0 281 36	24 V~/=
1	0 281 37	48 V~/=
1	0 281 38	110 - 130 V~/=
1	0 281 39	220 - 250 V~/=
1	0 281 40	415 - 440 V~
		<b>Module for delayed tripping</b> To be used with above undervoltage releases
1	0 288 62	110 V~/=
1	0 288 63	230 V~/=
		<b>Motor operators</b> To motorize a DMX <sup>3</sup> , it is possible to attach, to the motor operators, a release coil (undervoltage or trip on energising) and a closing coil
1	0 281 20	24 V~/=
1	0 281 21	48 V~/=
1	0 281 22	110 - 130 V~/=
1	0 281 23	220 - 250 V~/=
1	0 281 24	415 - 440 V~
		<b>Closing coils</b> Enables remote closing of the circuit breaker if the closing spring is charged
1	0 281 26	24 V~/=
1	0 281 27	48 V~/=
1	0 281 28	110 - 130 V~/=
1	0 281 29	220 - 250 V~/=
1	0 281 30	415 - 440 V~
		<b>Signalling contact for draw-out version</b> Inserted / test / draw-out signalling contact
1	0 281 73	1 changeover contact per position (up to 2 contacts with double accessory if the safety button for test position Cat.No 0 281 87 is not mounted)
		<b>Locking</b>
		<b>Universal key locks</b> To be used in combination with key locking support Cat.No 0 281 91
1	4 238 80	Key barrel and flat key with random mapping
1	4 238 81	Key barrel and flat key with fixed mapping EL43525
1	4 238 82	Key barrel and flat key with fixed mapping EL43363
1	4 238 83	Key barrel and star key with random mapping

Pack	Cat.Nos	Locking (continued)
		<b>Key locking support in "open" or draw-out position</b> For locking a DMX <sup>3</sup> 1600 in "open" or draw-out position. To be equipped with universal keylocks Cat.Nos 4 238 80/81/82/83
1	0 281 91	
		<b>Door locking</b> Prevents opening of the door with the circuit breaker closed Left-hand and right-hand side mounting
1	0 281 84	
1	0 281 77	
		<b>Padlock</b> Padlock for buttons
		<b>Accessories</b>
1	0 281 88	Mechanical counter Counts total number of operation cycles of the device
1	0 281 74	Contact «ready to close» with charged springs
1	0 281 75	Module with 6 auxiliary contacts
1	0 281 76	Module with 4 auxiliary contacts
1	0 281 87	Inserted /test /draw-out lock button
1	0 281 89	Rating mis-insertion device Prevents the insertion of a draw-out circuit breaker in an incompatible base
		<b>Front terminals</b>
		<b>For frontal connection</b> For DMX <sup>3</sup> Frame 1600 fixed version
1	0 281 55	3P
1	0 281 57	4P
		<b>Reversible rear terminals</b> Can be fixed in horizontal or vertical position For DMX <sup>3</sup> Frame 1600 fixed version
1	0 280 35	0 280 41
1	0 281 47	0 281 48
		<b>Spreaders for DMX<sup>3</sup> Frame 1600 fixed and draw-out versions</b> To be fixed onto reversible rear terminals of the circuit breaker Cat.Nos 0 280 35/41 or 0 281 47/48
1	0 281 59	0 281 60
		<b>Insulation shields</b>
		<b>For fixed version</b> For DMX <sup>3</sup> /DMX <sup>3</sup> -I Frame 1600
1	0 281 49	0 281 50
		<b>For draw-out version</b> For DMX <sup>3</sup> /DMX <sup>3</sup> -I Frame 1600
1	0 281 51	0 281 52



## Equipment for DMX<sup>3</sup> 1600 transfer switches



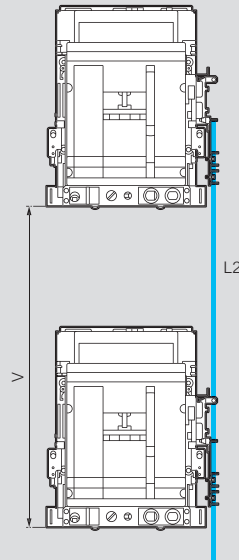
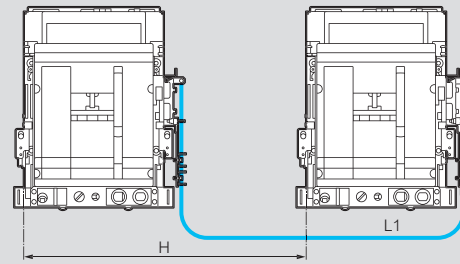
0 289 20

Technical characteristics p. 40-41

Pack	Cat.Nos	Equipment for transfer switches
1	0 281 90	<p>The mechanical interlock is set up using cables and can interlock devices, which may be different type in a vertical or horizontal configuration</p> <p>The interlock unit is mounted on the right-hand side of the device</p> <p>Cable interlock to be ordered separately (cable length to be specified according to every configuration - see below)</p> <p>Interlock for DMX<sup>3</sup> frame 1600</p>
<p><b>Cable interlock</b></p> <p>Length</p>		
1	0 289 17	1000 mm
1	0 289 18	1500 mm
1	0 289 20	2600 mm
1	0 289 21	3000 mm
1	0 289 22	3600 mm
1	0 289 23	4000 mm
1	0 289 24	4600 mm
1	0 289 25	5600 mm

## Equipment for DMX<sup>3</sup> 1600 transfer switches - installation principle

### Choice of cable interlock



Calculation of cable length:

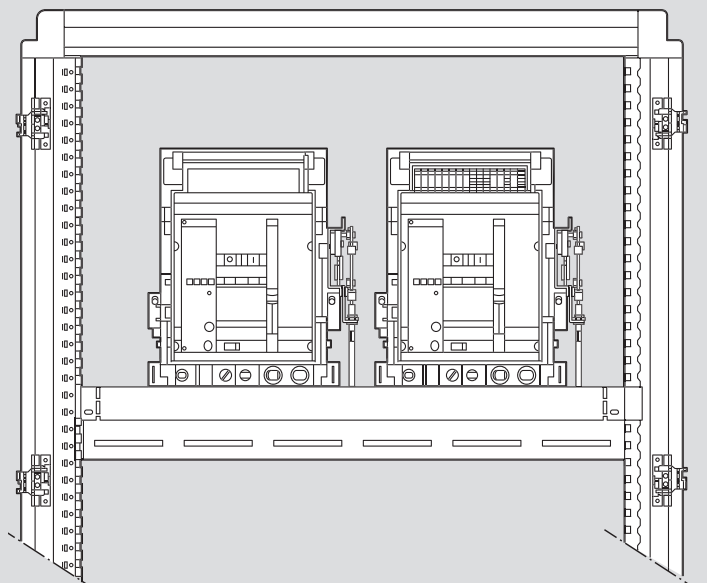
$$L1 = 600 + H$$

$$L2 = 950 + V$$

### Installation principle

**For XL<sup>3</sup> 4000 - 36 modules**

2 DMX<sup>3</sup> / DMX<sup>3</sup>-I can be installed side by side on the same fixing plate.



Automatic transfer switch control units  
p. 37



# Air circuit breakers DMX<sup>3</sup> 2500 and 4000

from 630 to 4000 A



0 283 96 + 0 283 06



0 284 17 + 0 283 04



0 284 56 + 0 283 04

Dimensions **p. 42-45**  
 Electrical characteristics **p. 47-49**

Automatic air circuit breakers must be equipped with electronic protection unit (p. 33), imperatively ordered together for factory assembly  
 Please ask for DMX<sup>3</sup> order form  
 Conform to IEC 60947-2

Pack	Cat.Nos		Fixed version
			Supplied with - 1 fault signalling contact NO/NC - 2 auxiliary contacts: NO/NC - rear terminals for horizontal connection with bars - door sealing <b>DMX<sup>3</sup> - N 2500</b> Breaking capacity Icu 50 kA (415 V <sub>N</sub> )
	Frame 2500		
	3P	4P	In(A)
1	0 283 60	0 283 70	630
1	0 283 61	0 283 71	800
1	0 283 62	0 283 72	1000
1	0 283 63	0 283 73	1250
1	0 283 64	0 283 74	1600
1	0 283 65	0 283 75	2000
1	0 283 66	0 283 76	2500
	Frame 2500		<b>DMX<sup>3</sup> - H 2500</b> Breaking capacity Icu 65 kA (415 V <sub>N</sub> )
	3P	4P	In(A)
1	0 283 80	0 283 90	630
1	0 283 81	0 283 91	800
1	0 283 82	0 283 92	1000
1	0 283 83	0 283 93	1250
1	0 283 84	0 283 94	1600
1	0 283 85	0 283 95	2000
1	0 283 86	0 283 96	2500
	Frame 4000		<b>DMX<sup>3</sup> - L 2500</b> Breaking capacity Icu 100 kA (415 V <sub>N</sub> )
	3P	4P	In(A)
1	0 284 00	0 284 10	630
1	0 284 01	0 284 11	800
1	0 284 02	0 284 12	1000
1	0 284 03	0 284 13	1250
1	0 284 04	0 284 14	1600
1	0 284 05	0 284 15	2000
1	0 284 06	0 284 16	2500
	Frame 4000		<b>DMX<sup>3</sup> - N 4000</b> Breaking capacity Icu 50 kA (415 V <sub>N</sub> )
	3P	4P	In(A)
1	0 283 67	0 283 77	3200
1	0 283 68	0 283 78	4000
	Frame 4000		<b>DMX<sup>3</sup> - H 4000</b> Breaking capacity Icu 65 kA (415 V <sub>N</sub> )
	3P	4P	In(A)
1	0 283 87	0 283 97	3200
1	0 283 88	0 283 98	4000
	Frame 4000		<b>DMX<sup>3</sup> - L 4000</b> Breaking capacity Icu 100 kA (415 V <sub>N</sub> )
	3P	4P	In(A)
1	0 284 07	0 284 17	3200
1	0 284 08	0 284 18	4000

Pack	Cat.Nos		Draw-out version
			Supplied with: - 1 fault signalling contact NO/NC - 2 auxiliary contacts: NO/NC - draw-out base and kit - flat rear terminals for connection with bars - door sealing <b>DMX<sup>3</sup> - N 2500</b> Breaking capacity Icu 50 kA (415 V <sub>N</sub> )
	Frame 2500		
	3P	4P	In(A)
1	0 284 20	0 284 30	630
1	0 284 21	0 284 31	800
1	0 284 22	0 284 32	1000
1	0 284 23	0 284 33	1250
1	0 284 24	0 284 34	1600
1	0 284 25	0 284 35	2000
1	0 284 26	0 284 36	2500
	Frame 2500		<b>DMX<sup>3</sup> - H 2500</b> Breaking capacity Icu 65 kA (415 V <sub>N</sub> )
	3P	4P	In(A)
1	0 284 40	0 284 50	630
1	0 284 41	0 284 51	800
1	0 284 42	0 284 52	1000
1	0 284 43	0 284 53	1250
1	0 284 44	0 284 54	1600
1	0 284 45	0 284 55	2000
1	0 284 46	0 284 56	2500
	Frame 4000		<b>DMX<sup>3</sup> - L 2500</b> Breaking capacity Icu 100 kA (415 V <sub>N</sub> )
	3P	4P	In(A)
1	0 284 60	0 284 70	630
1	0 284 61	0 284 71	800
1	0 284 62	0 284 72	1000
1	0 284 63	0 284 73	1250
1	0 284 64	0 284 74	1600
1	0 284 65	0 284 75	2000
1	0 284 66	0 284 76	2500
	Frame 4000		<b>DMX<sup>3</sup> - N 4000</b> Breaking capacity Icu 50 kA (415 V <sub>N</sub> )
	3P	4P	In(A)
1	0 284 27	0 284 37	3200
1	0 284 28	0 284 38	4000
	Frame 4000		<b>DMX<sup>3</sup> - H 4000</b> Breaking capacity Icu 65 kA (415 V <sub>N</sub> )
	3P	4P	In(A)
1	0 284 47	0 284 57	3200
1	0 284 48	0 284 58	4000
	Frame 4000		<b>DMX<sup>3</sup> - L 4000</b> Breaking capacity Icu 100 kA (415 V <sub>N</sub> )
	3P	4P	In(A)
1	0 284 67	0 284 77	3200
1	0 284 68	0 284 78	4000

# Air circuit breakers DMX<sup>3</sup> 6300

5000 and 6300 A



0 284 81 + 0 283 06

Dimensions **p. 46**  
 Electrical characteristics **p. 47-49**

Automatic air circuit breakers must be equipped with electronic protection unit, imperatively ordered together for factory assembly. Please ask for DMX<sup>3</sup> order form. Conform to IEC 60947-2.

Pack	Cat.Nos		Fixed version
			Supplied with - 4 auxiliary contacts: NO/NC - rear terminals for horizontal connection with bars - door sealing
			<b>DMX<sup>3</sup> - L 6300</b>
			Breaking capacity I <sub>cu</sub> 100 kA (415 V <sub>~</sub> )
	Frame 6300		
	3P	4P	I <sub>n</sub> (A)
1	0 284 80	0 284 82	5000
1	0 284 81	0 284 83	6300

Pack	Cat.Nos		Draw-out version
			Supplied with: - 4 auxiliary contacts: NO/NC - draw-out base and kit - flat rear terminals for connection with bars - door sealing
			<b>DMX<sup>3</sup> - L 6300</b>
			Breaking capacity I <sub>cu</sub> 100 kA (415 V <sub>~</sub> )
	Frame 6300		
	3P	4P	I <sub>n</sub> (A)
1	0 284 85	0 284 87	5000
1	0 284 86	0 284 88	6300

# Electronic protection units for DMX<sup>3</sup> 2500, 4000 and 6300



Settings and curves **p. 47**

DMX<sup>3</sup> circuit breakers must be equipped with electronic protection units (to be ordered together for factory assembly) enabling very precise adjustments of the protection conditions, while maintaining total discrimination with downstream devices.

Pack	Cat.Nos	MP2.10 protection units with LED matrix screen	
1	0 283 04	Integrated LED matrix screen to show electrical values and settings Adjustment via rotating encoder Adjustment of I <sub>r</sub> , t <sub>r</sub> , i <sub>sd</sub> , t <sub>sd</sub> , I <sub>i</sub> , I <sub>g</sub> and t <sub>g</sub> Possibility to enable/disable protections	
1	0 283 05 <sup>1</sup>	Without measure With measure Measure and display instantaneous, maximum and average values of different electrical values and protection conditions Fault signaling and log	
		<b>MP4.10 protection units with LCD screen</b>	
1	0 283 06	Integrated LCD screen for displaying electrical values, settings and log Equipped with batteries for powering in case of main fault or when the breaker is open or not connected Adjustment via rotating encoder Adjustment of I <sub>r</sub> , t <sub>r</sub> , i <sub>sd</sub> , t <sub>sd</sub> , I <sub>i</sub> , I <sub>g</sub> and t <sub>g</sub> Possibility to enable/disable protections	
1	0 283 07 <sup>1</sup>	Without measure With measure Measure and display instantaneous, maximum and average values of different electrical values and protection conditions Fault signaling and log	
1	0 283 10 <sup>2</sup>	<b>Bluetooth communication key</b> USB key for Bluetooth communication with DMX <sup>3</sup> protection units. Needed to remotely configure, monitor and manage the DMX <sup>3</sup> protection units through EnerUp + Project App USB connection port on front of protection unit	
1	4 149 45	<b>Power supply module</b> 500 mA 12 V <sub>~</sub> stabilized power supply module for CX <sup>3</sup> energy management system	Number of modules 1
1	4 149 40	<b>Communication interface</b> RS485 / CX <sup>3</sup> energy management system conversion Consumption: 0.344 W - 28.7 mA (12 V <sub>~</sub> )	Number of modules 1
1	0 281 97 <sup>3</sup>	<b>External neutral</b> For DMX <sup>3</sup> 6300	
1	0 281 98 <sup>3</sup>	For DMX <sup>3</sup> 2500 and DMX <sup>3</sup> 4000	

1: For the correct working of metering function it's necessary to connect a CX<sup>3</sup> EMS power supply module Cat.No 4 149 45

2: EnerUp + Project App for smartphone and tablet available on Apple Store and Google Play. Configuration, monitoring and management software (PCS) available for download via e-catalogue (does not require the use of Bluetooth communication key Cat.No 0 283 10)

3: Optional accessories, to be ordered when ordering electronic protection unit and DMX<sup>3</sup> air circuit breakers for factory assembly

## Trip free switches DMX<sup>3</sup>-I

from 1250 to 6300 A



0 282 53



0 282 93

Dimensions p. 42-46

Conform to IEC 60947-3

Pack	Cat.Nos	Fixed version
		Supplied with: - 2 auxiliary contacts: NO/NC - flat rear terminals for connection with bars - door sealing
		<b>DMX<sup>3</sup>-I 2500</b>
		Frame 2500
		3P 4P
1	0 282 40 0 282 50	In(A) 1250
1	0 282 41 0 282 51	1600
1	0 282 42 0 282 52	2000
1	0 282 43 0 282 53	2500
		<b>DMX<sup>3</sup>-I 4000</b>
		Frame 4000
		3P 4P
1	0 282 44 0 282 54	In(A) 3200
1	0 282 45 0 282 55	4000
		<b>DMX<sup>3</sup>-I 6300</b>
		Frame 6300
		3P 4P
1	0 282 88 0 282 89	In(A) 6300

Pack	Cat.Nos	Draw-out version
		Supplied with: - 2 auxiliary contacts: NO/NC - draw-out base and kit - flat rear terminals for connection with bars - door sealing
		<b>DMX<sup>3</sup>-I 2500</b>
		Frame 2500
		3P 4P
1	0 282 80 0 282 90	In(A) 1250
1	0 282 81 0 282 91	1600
1	0 282 82 0 282 92	2000
1	0 282 83 0 282 93	2500
		<b>DMX<sup>3</sup>-I 4000</b>
		Frame 4000
		3P 4P
1	0 282 84 0 282 94	In(A) 3200
1	0 282 85 0 282 95	4000
		<b>DMX<sup>3</sup>-I 6300</b>
		Frame 6300
		3P 4P
1	0 282 98 0 282 99	In(A) 6300

## Trip free switches DMX<sup>3</sup>-I

from 1250 to 6300 A

### Technical characteristics

Trip free switch DMX <sup>3</sup> -I	2500	4000	6300
Frame	2500	4000	6300
Rating In (A)	1250 1600 2000 2500	3200 4000	6300
Rated insulation voltage Ui (V)	1000	1000	1000
Rated impulse withstand voltage Uimp (kV)	12	12	12
Rated operational voltage (50/60Hz) Ue (V)	690	690	690
Isolation behaviour	Yes	Yes	Yes
Short-circuit making capacity Icm (kA)	230 V~	143	220
	415 V~	143	220
	500 V~	143	220
	600 V~	132	165
	690 V~	121	143
Short time withstand current Icw (kA) for t = 1 s	230 V~	65	85
	415 V~	65	85
	500 V~	65	85
	600 V~	60	75
	690 V~	55	65
Endurance (cycles)	mechanical	10000	10000
	electrical	5000	5000
Temperature	operation	-5°C to +70°C	-5°C to +70°C
	storage	-25°C to +85°C	-25°C to +85°C

### Temperature derating

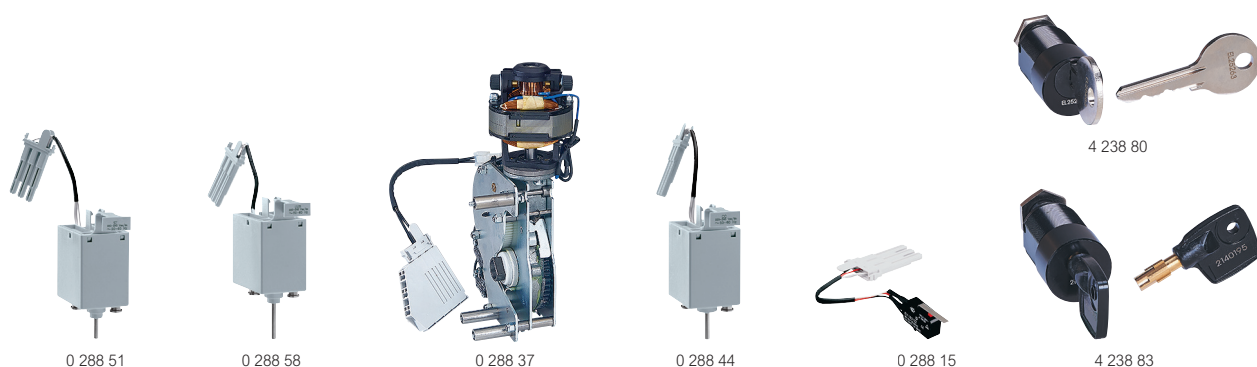
#### Fixed version

	Temperature									
	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>
DMX <sup>3</sup> -I 2500	1250	1	1250	1	1250	1	1250	1	1250	1
	1600	1	1600	1	1600	1	1600	1	1600	1
	2000	1	2000	1	1960	0.98	1920	0.96	1880	0.94
	2500	1	2500	1	2350	0.94	2250	0.9	2150	0.86
DMX <sup>3</sup> -I 4000	3200	1	3200	1	3200	1	3136	0.98	3008	0.94
	4000	1	4000	1	3680	0.92	3440	0.86	3120	0.78
DMX <sup>3</sup> -I 6300	6300	1	6300	1	6048	0.96	5796	0.92	5544	0.88

#### Draw-out version

	Temperature									
	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>
DMX <sup>3</sup> -I 2500	1250	1	1250	1	1250	1	1250	1	1250	1
	1600	1	1600	1	1600	1	1600	1	1600	1
	2000	1	2000	1	1960	0.98	1920	0.96	1875	0.94
	2500	1	2400	0.96	2250	0.9	2100	0.84	1950	0.78
DMX <sup>3</sup> -I 4000	3200	1	3200	1	3200	1	3072	0.96	2880	0.9
	4000	1	3760	0.94	3440	0.86	3200	0.8	2960	0.74
DMX <sup>3</sup> -I 6300	6300	1	6174	0.98	5985	0.95	5796	0.92	5292	0.84

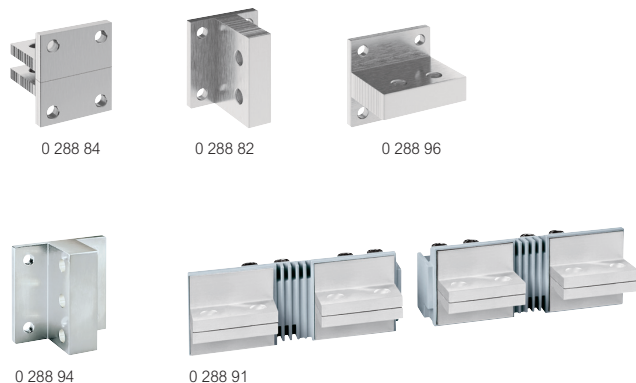
# Auxiliaries and accessories for DMX<sup>3</sup> 2500, 4000 and 6300



Pack	Cat.Nos	Control and signalling auxiliaries
		<b>Shunt trip</b> When energised the circuit breaker will be tripped
1	0 288 48	24 V~/=
1	0 288 49	48 V~/=
1	0 288 50	110 - 130 V~/=
1	0 288 51	220 - 250 V~/=
1	0 288 52	415 - 480 V~
		<b>Undervoltage releases</b> When the coil is de-energised, the circuit breaker will be tripped
1	0 288 55	24 V~/=
1	0 288 56	48 V~/=
1	0 288 57	110 - 130 V~/=
1	0 288 58	220 - 250 V~/=
1	0 288 59	415 - 480 V~
		<b>Module for delayed tripping</b> To be used with above undervoltage releases
1	0 288 62	110 V~/=
1	0 288 63	230 V~/=
		<b>Motor operators</b> To motorize a DMX <sup>3</sup> , it is possible to attach, to the motor operators, a release coil (undervoltage or trip on energising) and a closing coil
1	0 288 34	24 V~/=
1	0 288 35	48 V~/=
1	0 288 36	110 - 130 V~/=
1	0 288 37	220 - 250 V~/=
1	0 288 38	415 - 440 V~
1	0 288 40	480 V~/=
		<b>Closing coils</b> Enables remote closing of the circuit breaker if the closing spring is charged
1	0 288 41	24 V~/=
1	0 288 42	48 V~/=
1	0 288 43	110 - 130 V~/=
1	0 288 44	220 - 250 V~/=
1	0 288 45	415 - 480 V~
		<b>Signalling contact for auxiliaries</b> Signalling contact for shunt trips, undervoltage releases and closing coils
1	0 288 16	
		<b>Signalling contact for draw-out version</b> Inserted / test / draw-out signalling contact 3 changeover contacts per position
1	0 288 13	

Pack	Cat.Nos	Locking
		<b>Universal key locks</b> To be used in combination with key locking supports Cat.Nos 0 281 94/0 288 28
1	4 238 80	Key barrel and flat key with random mapping
1	4 238 81	Key barrel and flat key with fixed mapping EL43525
1	4 238 82	Key barrel and flat key with fixed mapping EL43363
1	4 238 83	Key barrel and star key with random mapping
		<b>Key locking support in "open" position</b> For locking a DMX <sup>3</sup> in "open" position To be equipped with universal keylocks Cat.Nos 4 238 80/81/82/83
1	0 288 28	
		<b>Key locking support in draw-out position</b> For locking a DMX <sup>3</sup> in draw-out position. To be equipped with universal keylocks Cat.Nos 4 238 80/81/82/83
1	0 281 94	
		<b>Door locking</b> Prevents opening of the door with the circuit breaker closed Left-hand and right-hand side mounting
1	0 288 20	
		<b>Padlocks in "open" position</b> Padlocking system for ACB (padlock not supplied)
1	0 288 24	Padlock for buttons
1	0 288 26	Padlocking system for shutters (padlock not supplied)
		<b>Equipment for conversion of a fixed device into draw-out device</b>
		<b>Bases for draw-out device</b> For DMX <sup>3</sup> /DMX <sup>3</sup> -I frame 2500
1	0 289 02	0 289 03
1	0 289 04	0 289 05
1	0 289 13	0 289 14
		For DMX <sup>3</sup> /DMX <sup>3</sup> -I frame 4000
		For DMX <sup>3</sup> /DMX <sup>3</sup> -I frame 6300
		<b>Transformation kit for draw-out version</b> For DMX <sup>3</sup> /DMX <sup>3</sup> -I frame 2500
1	0 289 09	0 289 10
1	0 289 11	0 289 12
1	0 289 15	0 289 16
		For DMX <sup>3</sup> /DMX <sup>3</sup> -I frame 4000
		For DMX <sup>3</sup> /DMX <sup>3</sup> -I frame 6300
		<b>Accessories</b>
1	0 288 25	Rating mis-insertion device Prevents the insertion of a draw-out circuit breaker in an incompatible base
1	0 288 23	Operations counter Counts total number of operation cycles of the device
1	0 288 14	Contact "ready to close" with charged springs
1	0 288 15	Additional signalling contact
1	0 288 79	Lifting plate

## Rear terminals for DMX<sup>3</sup> 2500, 4000 and 6300



0 288 84

0 288 82

0 288 96

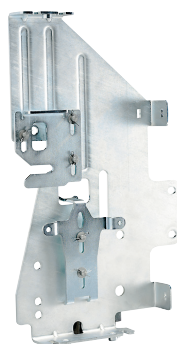
0 288 94

0 288 91

Dimensions p. 42-46

Pack	Cat.Nos		Rear terminals
1	3P 0 288 84	4P 0 288 85	<b>For DMX<sup>3</sup> frame 2500 fixed version</b> For flat connection with bars To be fixed onto horizontal rear terminals of the circuit breaker
1	0 288 82	0 288 83	For vertical connection with bars Those terminals are used in order to transform a flat connection into a vertical one To be fixed onto Cat.Nos 0 288 84/85 according to the number of poles
1	0 288 96	0 288 97	<b>For DMX<sup>3</sup> frame 2500 draw-out version</b> For vertical or horizontal connection with bars To be fixed onto plate rear terminals of the circuit breaker
1	0 288 92	0 288 93	<b>For DMX<sup>3</sup> frame 4000 and 6300 fixed version</b> For flat connection with bars To be fixed onto horizontal rear terminals of the circuit breaker 2 sets are required for frame 6300
1	0 288 94	0 288 95	<b>For DMX<sup>3</sup> frame 4000 and 6300 fixed or draw-out version</b> On DMX <sup>3</sup> fixed version: - For vertical connection with bars - To be fixed onto Cat.Nos 0 288 92/93 according to the number of poles On DMX <sup>3</sup> draw-out version: - For vertical or horizontal connection with bars - To be fixed directly onto plate rear terminals of the circuit breaker 2 sets are required for frame 6300
1	3P 0 288 86	4P 0 288 87	<b>Spreaders for DMX<sup>3</sup> frame 2500 fixed version</b> To be fixed onto horizontal rear terminals of the circuit breaker
1	0 288 88	0 288 89	
1	0 288 90	0 288 91	
1	3P 0 288 98	4P 0 288 99	<b>Insulation shields</b> <b>For fixed version</b> Insulation shields for DMX <sup>3</sup> /DMX <sup>3</sup> -I frames 2500 / 4000 / 6300
1	0 288 18	0 288 19	<b>For draw-out version</b> Insulation shields for DMX <sup>3</sup> /DMX <sup>3</sup> -I frames 2500 / 4000 / 6300

## Equipment for DMX<sup>3</sup> 2500, 4000 and 6300 transfer switches



0 288 64

Technical characteristics p. 50

Pack	Cat.Nos	Equipment for transfer switches
		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 Cable interlock to be ordered separately (cable length to be specified according to every configuration - see below)
1	0 288 64	Interlock for DMX <sup>3</sup> frame 2500
1	0 288 65	Interlock for DMX <sup>3</sup> frame 4000
1	0 288 66	Interlock for DMX <sup>3</sup> frame 6300
		<b>Cable interlock</b>
		Length
1	0 289 17	1000 mm
1	0 289 18	1500 mm
1	0 289 20	2600 mm
1	0 289 21	3000 mm
1	0 289 22	3600 mm
1	0 289 23	4000 mm
1	0 289 24	4600 mm
1	0 289 25	5600 mm

# Automatic transfer switch control units



Technical characteristics **p. 51**  
Configuration software **see e-catalogue**

They can control transfer switching between sources, manage generator start/stop, control single phase, two-phase and three-phase networks, control phase-phase and phase-neutral voltages  
For DPX<sup>3</sup> and DMX<sup>3</sup> circuit breakers and CTX<sup>3</sup> contactors

Pack	Cat.Nos	Automatic transfer switch control units	Pack	Cat.Nos	Dual power supply selector
1	4 226 81 <sup>1</sup>	<b>For standard management of 2 circuit breakers</b> 6 programmable digital inputs and 7 programmable relay outputs LCD display IR communication port on the front panel for connection of USB or WiFi modules Cat.Nos 4 226 87/88 Can be configured with the help of front panel touch keys or of the Legrand dedicated software Power supply: 110-240 V~ IP40	1	4 226 86	Dual power supply selector measures and controls two supply voltages at its inputs (single phase, 230 V~) and selects the most adapted voltage for auxiliary circuits supply Equipped with 1 alarm contact, if no supply voltage can be selected within the limits
1	4 226 82 <sup>1</sup>	<b>For advanced management of 2 circuit breakers</b> 6 programmable digital inputs and 7 programmable relay outputs Can be equipped with maximum 2 plug-in modules between: - extension modules Cat.Nos 4 226 90/91/92 - opto-isolated RS485 communication interface Cat.No 4 226 89 LCD display IR communication port on the front panel for connection of USB or WiFi modules Cat.Nos 4 226 87/88 Can be configured with the help of front panel touch keys or of the Legrand dedicated software Power supply: 12-24 V= ; 110-240 V~ IP40	1	4 226 89	<b>Plug-in modules</b> Opto-isolated RS485 interface
1	4 226 83 <sup>1</sup>	<b>For advanced management of 3 circuit breakers and 2 power sources</b> 8 programmable digital inputs and 7 programmable relay outputs Can be equipped with maximum 3 plug-in extension modules between Cat.Nos 4 226 90/91/92 Integrated opto-isolated RS485 communication interface LCD display IR communication port on the front panel for connection of USB or WiFi modules Cat.Nos 4 226 87/88 Can be configured with the help of front panel touch keys or of the Legrand dedicated software Power supply: 12-24-48 V= ; 110-240 V~ IP65	1	4 226 90	4 opto-isolated static outputs
1	4 226 84 <sup>1</sup>	<b>For advanced management of 5 circuit breakers and 3 power sources</b> 12 programmable digital inputs and 11 programmable relay outputs Can be equipped with maximum 3 plug-in extension modules between Cat.Nos 4 226 90/91/92 Integrated opto-isolated RS485 communication interface LCD display IR communication port on the front panel for connection of USB or WiFi modules Cat.Nos 4 226 87/88 Can be configured with the help of front panel touch keys or of the Legrand dedicated software Power supply: 12-24-48 V= ; 110-240 V~ IP65 Must be factory configured to fit installation needs Please ask for ATS order form.	1	4 226 91	2 relay outputs, rated 5 A 250 V~
			1	4 226 92	2 opto-isolated digital inputs and 2 relay outputs rated 5 A 250 V~
			1	4 226 87 <sup>1</sup>	<b>Communication accessories</b> These communication devices can be used to connect Alptec 8 and Alptec 3.2/5.2/8.2 power factor controllers (p. 123) and automatic transfer switch controllers to a computer, smartphone or tablet For programming, downloading data, diagnostics and upgrading the firmware
			1	4 226 88 <sup>1</sup>	<b>USB front connector</b> Computer connection cable with USB connector The computer identifies the connection as a standard USB connection. There is no need to switch off the controller power supply
					<b>Wi-Fi front connector</b> Wi-Fi connection device compatible with computers, smartphones and tablets There is no need to switch off the controller power supply

<sup>1</sup>: Configuration software available for download via e-catalogue  
ACU Configurator app for smartphone and tablet available on Apple Store and Google Play

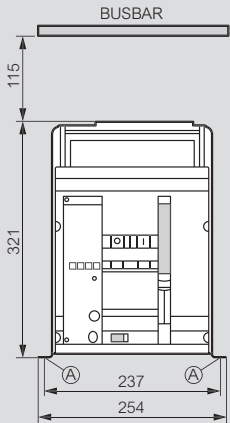
# DMX<sup>3</sup> 1600 and DMX<sup>3</sup>-I 1600 - Frame 1600

## dimensions

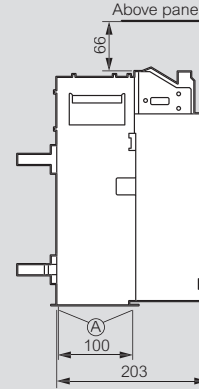
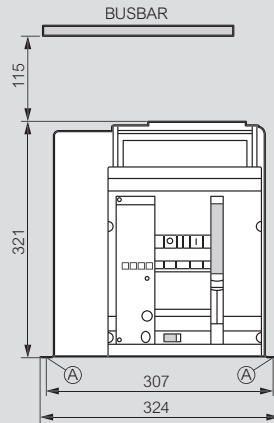
**Fixed version**

**Overall dimensions**

**3P version**



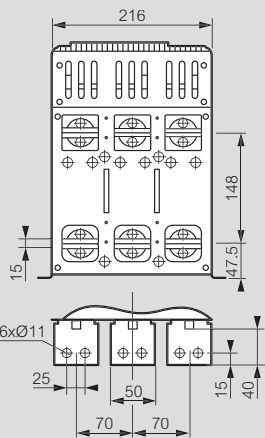
**4P version**



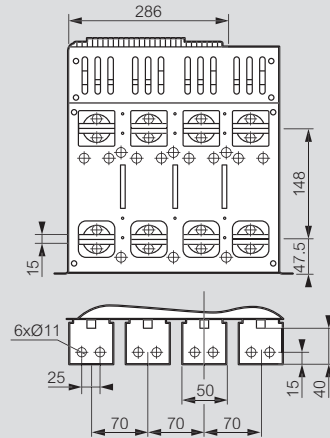
A = fixing point on plate of enclosure

**Rear terminals for horizontal connection with bars**

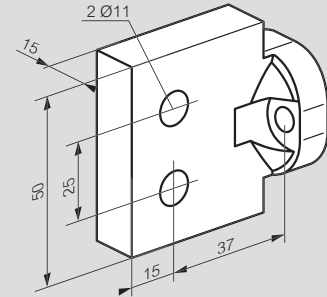
**3P version**



**4P version**

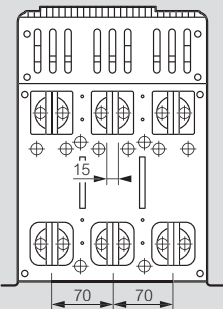


**Reversible rear terminals**

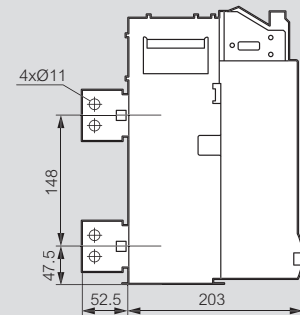
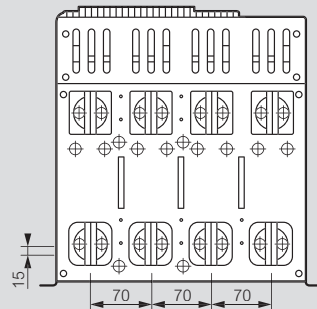


**Rear terminals for vertical connection with bars**

**3P version**



**4P version**

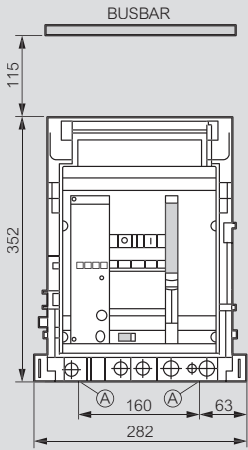




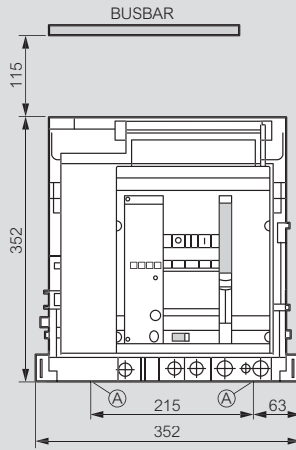
**Draw-out version**

**Overall dimensions**

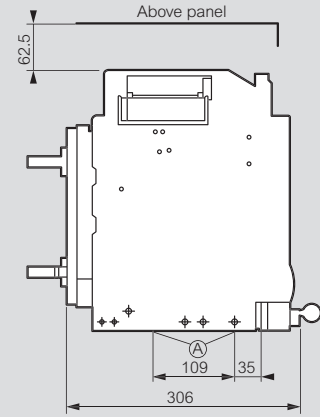
**3P version**



**4P version**

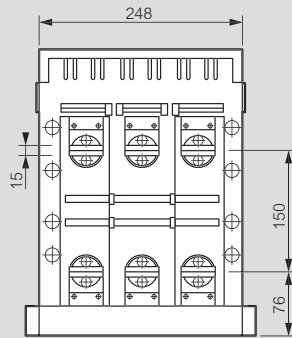


A = fixing point on plate of enclosure

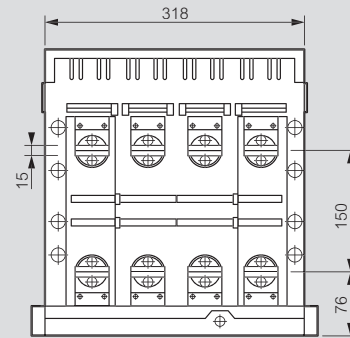


**Rear terminals for horizontal connection with bars**

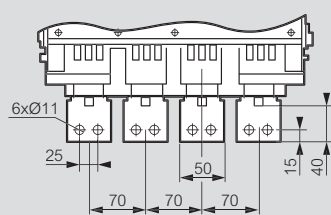
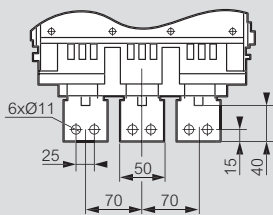
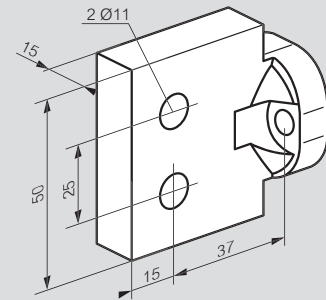
**3P version**



**4P version**

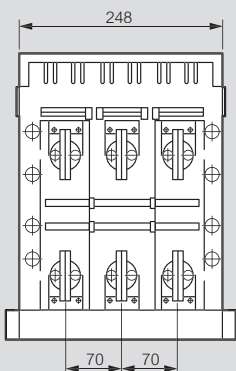


**Reversible rear terminals**

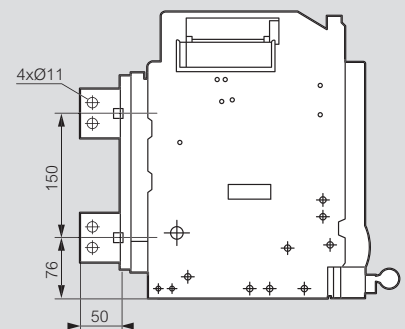
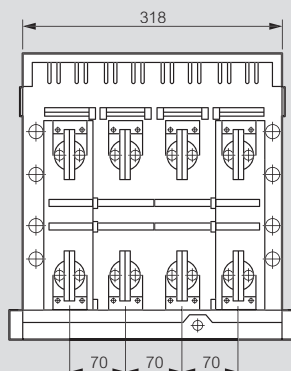


**Rear terminals for vertical connection with bars**

**3P version**



**4P version**



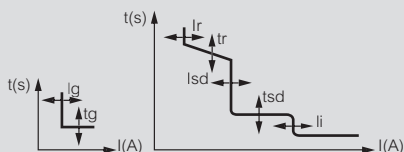
# DMX<sup>3</sup> 1600

## electronic protection units

### Settings of the electronic protection units

#### MP2.10 and MP4.10

$I_r$ ,  $t_r$ ,  $I_{sd}$ ,  $t_{sd}$ ,  $I_i$ ,  $I_g$ ,  $t_g$  adjustment



#### • Long time delay protection against overloads

$I_r$  from 0.2 to 1 x  $I_n$  with steps of 1 A  
Protection: ON/OFF

#### • Long delay protection operation time

$t_r$  from 40 ms to 30 s (@6 $I_r$ ) with steps of 40 ms  
Thermal memory: ON/OFF

#### • Short time delay protection against short circuits

$I_{sd}$  from 1.5 to 10 x  $I_r$  with steps of 1 A  
Protection: ON/OFF

#### • Short time delay protection operation time

$t_{sd}$  from 40 ms to 1 s with steps of 40 ms  
(both  $t=k$  and  $i^2t=k$ )

#### • Instantaneous protection against very high short circuit

$I_i$  from 2 to 15 x  $I_n$  or  $I_{cw}$  with steps of 1 A  
Protection: ON/OFF

#### • Earth fault current

$I_g$  from 0.2 to 1 x  $I_n$  with steps of 1 A  
Protection: ON/OFF  
 $t_g$  from 80 ms to 1 s with steps of 40 ms  
(both  $t=k$  and  $i^2t=k$ )

#### • Neutral protection

OFF - 50% - 100% - 200%

# DMX<sup>3</sup> 1600

## technical characteristics

### Selectivity in three-phase network 415 V $\sim$

#### DMX<sup>3</sup>/DPX<sup>3</sup>

Downstream \ Upstream	DMX <sup>3</sup> 1600				
	630 A	800 A	1000 A	1250 A	1600 A
DPX <sup>3</sup> 160 <sup>(1)</sup>	T	T	T	T	T
DPX <sup>3</sup> 250 <sup>(1)</sup> TM and elec.	T	T	T	T	T
DPX <sup>3</sup> 630 <sup>(1)</sup> TM and elec.		T	T	T	T
DPX <sup>3</sup> 1600 <sup>(1)</sup> thermal magnetic	630 A		T	T	T
	800 A			T	T
	1000 A				T
	1250 A				T
DPX <sup>3</sup> 1600 <sup>(1)</sup> electronic	630 A			T	T
	800 A			T	T
	1000 A				T
	1250 A				T
1600 A					T

1: All breaking capacities

T: total selectivity, up to downstream circuit breaking capacity according to IEC 60947-2

#### DMX<sup>3</sup>/DMX<sup>3</sup>

Downstream \ Upstream	DMX <sup>3</sup> 1600				
	630 A	800 A	1000 A	1250 A	1600 A
DMX <sup>3</sup>	630 A		T	T	T
	800 A			T	T
	1000 A				T
	1250 A				T
	1600 A				

T: total selectivity, up to downstream circuit breaking capacity according to IEC 60947-2  
 $I_{cu}$  of downstream circuit breaker  $\leq I_{cu}$  of upstream circuit breaker  
Selectivity values are intended with protection unit properly adjusted

#### DMX<sup>3</sup>/DX<sup>3</sup>

	DMX <sup>3</sup> 1600				
	630 A	800 A	1000 A	1250 A	1600 A
DX <sup>3</sup> [6000] - 10 kA	T	T	T	T	T
DX <sup>3</sup> [10000] - 16 kA	T	T	T	T	T
DX <sup>3</sup> 25 kA	T	T	T	T	T
DX <sup>3</sup> 36 kA	T	T	T	T	T
DX <sup>3</sup> 50 kA	T	T	T	T	T

T: total selectivity, up to downstream circuit breaking capacity according to IEC 60947-2  
 $I_{cu}$  of downstream circuit breaker  $\leq I_{cu}$  of upstream circuit breaker  
Selectivity values are intended with protection unit properly adjusted

## Technical characteristics

### DMX<sup>3</sup> 1600

DMX <sup>3</sup> according to IEC 60947-2		DMX <sup>3</sup> 1600	
		42 kA	50 kA
Frame current (A)		1600	
Number of poles		3P-4P	
Rating In (A)		630/800/1000/1250/1600	
Rated insulation voltage Ui (V)		1000	
Rated impulse withstand voltage Uimp (kV)		12	
Rated operational voltage (50/60Hz) Ue (V)		690	
Category of use		B	
Ultimate breaking capacity Icu (kA)	220 / 240 V $\sim$	42	50
	380 / 415 V $\sim$	42	50
	440 / 460 V $\sim$	42	50
	480 / 500 V $\sim$	42	50
	600 V $\sim$	42	42
	690 V $\sim$	42	42
Service breaking capacity Ics (% Icu)		100 %	100 %
Short-circuit making capacity Icm (kA)	220 / 240 V $\sim$	88	105
	380 / 415 V $\sim$	88	105
	440 / 460 V $\sim$	88	105
	480 / 500 V $\sim$	88	105
	600 V $\sim$	88	88
	690 V $\sim$	88	88
Short time withstand current Icw (kA) for t = 1s	220 / 240 V $\sim$	42	50
	380 / 415 V $\sim$	42	50
	440 / 460 V $\sim$	42	50
	480 / 500 V $\sim$	42	50
	600 V $\sim$	42	42
	690 V $\sim$	42	42
Magnetic threshold	Istantaneous releases li (x In)	(2 ÷ 15) & Icw	
Isolation behavior		Yes	
Endurance (cycle)	mechanical without maintenance	5000	
	mechanical with maintenance	10000	
	electrical	1500 at 690 V / 3000 at 415 V	

## Temperature derating

### Fixed and draw-out version

Temperature	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>
DMX <sup>3</sup> 1600	630	1	630	1	630	1	630	1	630	1
	800	1	800	1	800	1	800	1	800	1
	1000	1	1000	1	1000	1	1000	1	950	0.95
	1250	1	1250	1	1250	1	1187	0.95	1125	0.9
	1600	1	1600	1	1330	0.83	1280	0.8	1216	0.76

## Derating at different altitudes

Air circuit breaker	DMX <sup>3</sup> 1600			
Altitude H (m)	< 2000	3000	4000	5000
Rated current (at 40°C) I <sub>n</sub> (A)	I <sub>n</sub>	0.93 x I <sub>n</sub>	0.88 x I <sub>n</sub>	0.82 x I <sub>n</sub>
Rated voltage U <sub>e</sub> (V)	690	600	500	440
Rated insulation voltage U <sub>i</sub> (V)	1000	900	750	600

## Minimum recommended dimension of copper busbars per pole

In (A)	Fixed version		Draw-out version	
	Horizontal bars (mm)	Vertical bars (mm)	Horizontal bars (mm)	Vertical bars (mm)
630	2 x 40 x 5	2 x 40 x 5	2 x 40 x 5	2 x 40 x 5
800	2 x 30 x 10	2 x 50 x 5	2 x 30 x 10	2 x 50 x 5
1000	2 x 30 x 10	1 x 60 x 10 / 2 x 60 x 5	2 x 30 x 10	2 x 60 x 5
1250	2 x 40 x 10	1 x 80 x 10 / 2 x 40 x 10	2 x 40 x 10	2 x 80 x 5
1600	2 x 50 x 10	2 x 50 x 10	2 x 50 x 10	2 x 50 x 10

Note: The tables presenting the minimum recommended dimensions of connection plates and bars per pole should be used solely as a general guideline for selecting products. Due to extensive variety of switchgear constructions shapes and conditions that can affect the behavior of the apparatus, the solution used must always be verified



For minimum recommended section of aluminium busbars  
**Please, consult us**

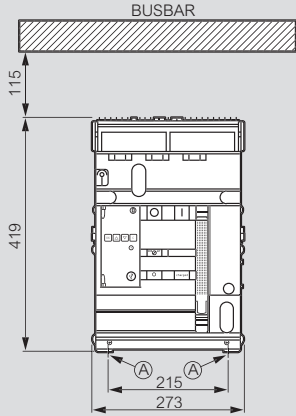
# DMX<sup>3</sup> 2500 and DMX<sup>3</sup>-I 2500 - frame 2500

## dimensions

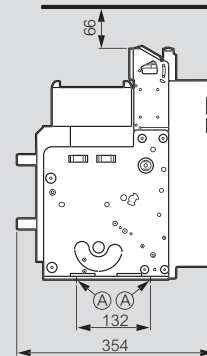
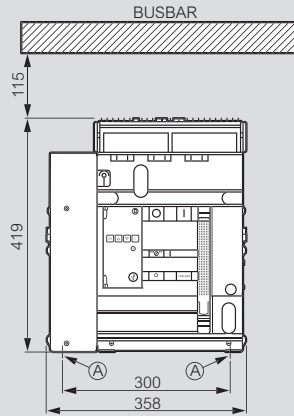
### Fixed version - frame 2500

#### Overall dimensions

##### 3P version

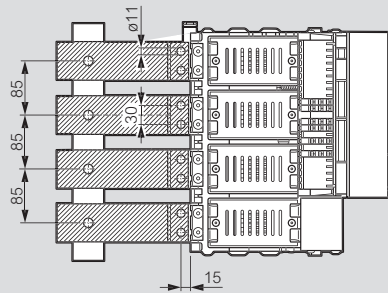
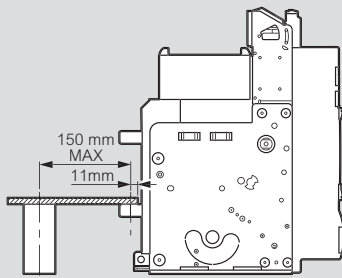


##### 4P version

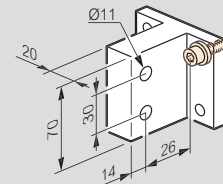


A = fixing point on plate of enclosure

#### Connection principle

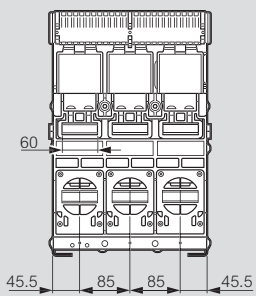


#### Rear terminals for vertical connection with bars Cat.Nos 0 288 82/83

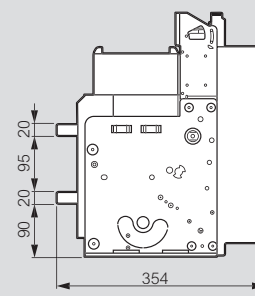
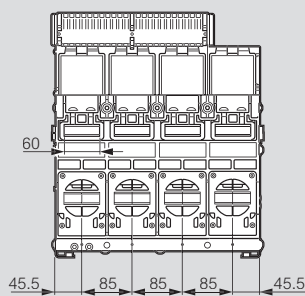


#### Rear terminals for horizontal connection with bars

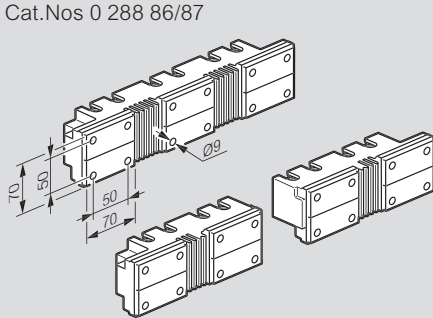
##### 3P version



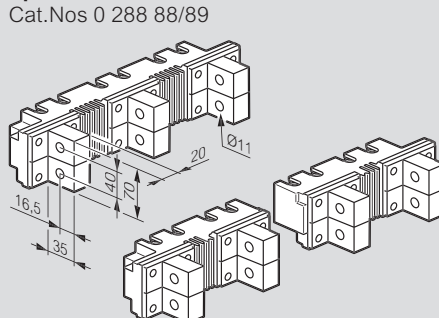
##### 4P version



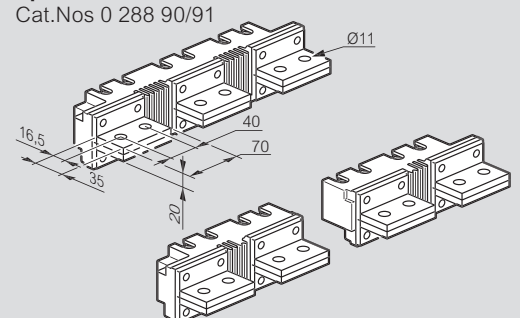
#### Spreaders for flat connection with bars Cat.Nos 0 288 86/87



#### Spreaders for vertical connection with bars Cat.Nos 0 288 88/89



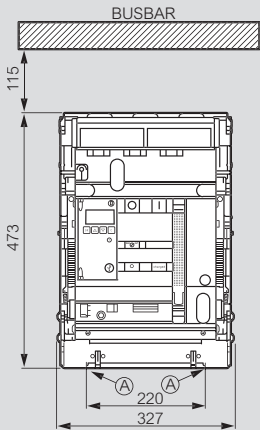
#### Spreaders for horizontal connection with bars Cat.Nos 0 288 90/91



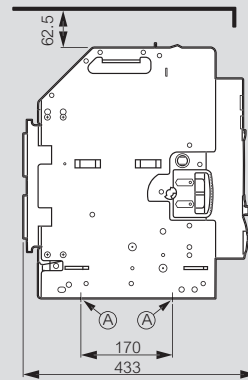
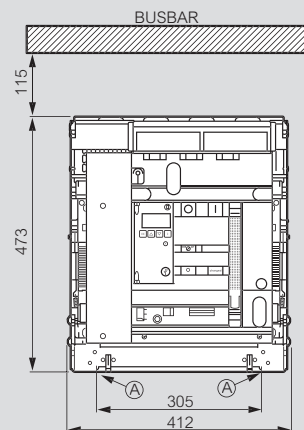
**Draw-out version - frame 2500**

**Overall dimensions**

**3P version**



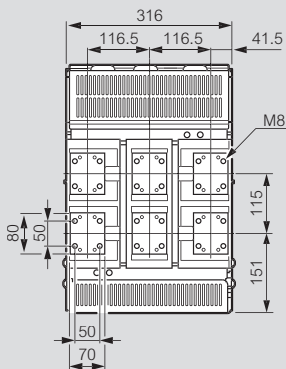
**4P version**



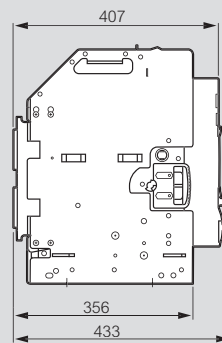
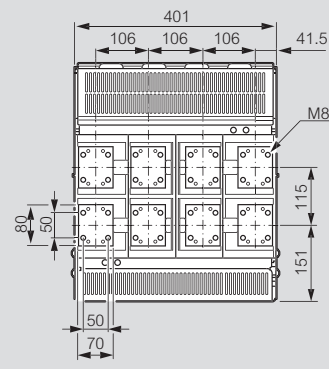
A = fixing point on plate of enclosure

**Rear terminals for flat connection with bars**

**3P version**

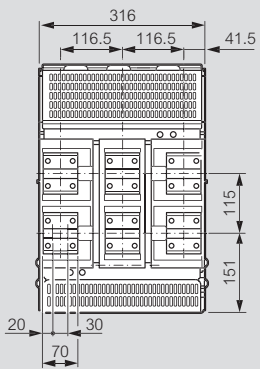


**4P version**

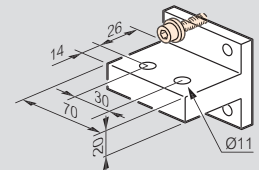
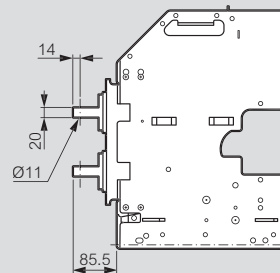
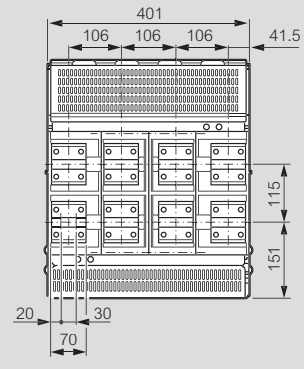


**Rear terminals for horizontal connection with bars - Cat.Nos 0 288 96/97**

**3P version**

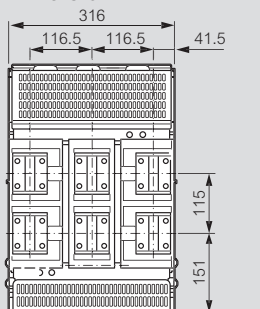


**4P version**

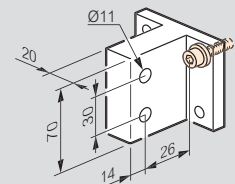
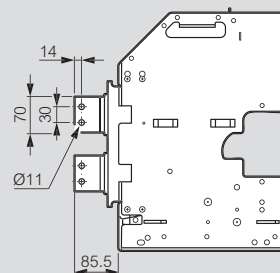
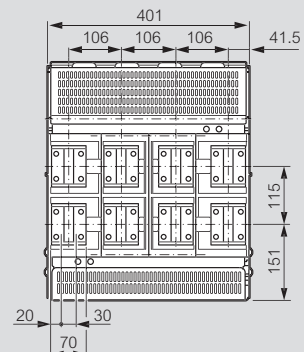


**Rear terminals for vertical connection with bars - Cat.Nos 0 288 96/97**

**3P version**



**4P version**



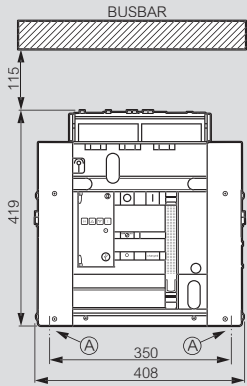
# DMX<sup>3</sup> 2500, DMX<sup>3</sup>-I 2500, DMX<sup>3</sup> 4000 and DMX<sup>3</sup>-I 4000 - frame 4000

## dimensions

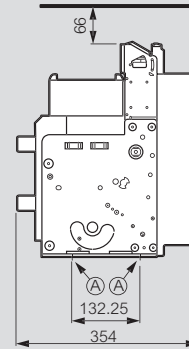
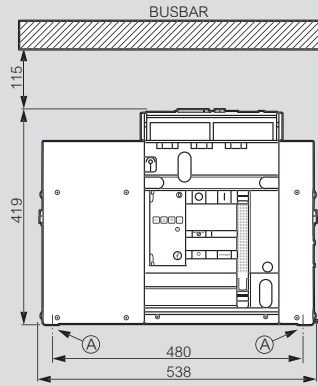
### Fixed version - frame 4000

#### Overall dimensions

##### 3P version

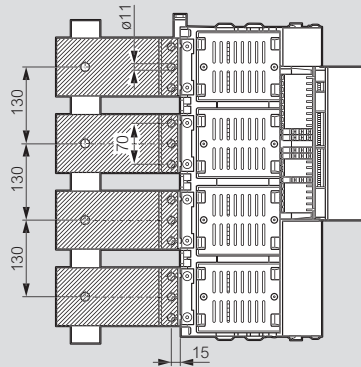
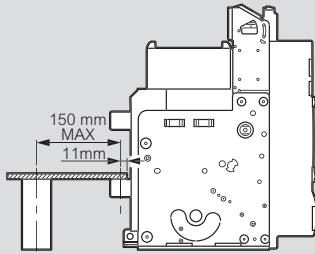


##### 4P version



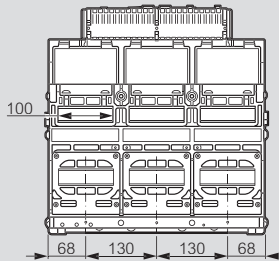
A = fixing point on plate of enclosure

#### Connection principle

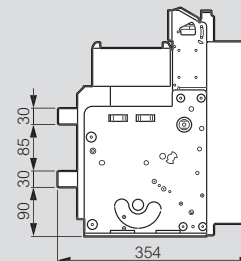
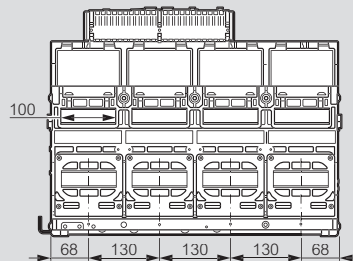


#### Rear terminals

##### 3P version



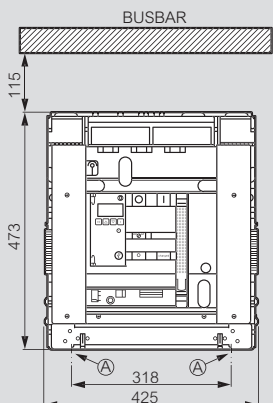
##### 4P version



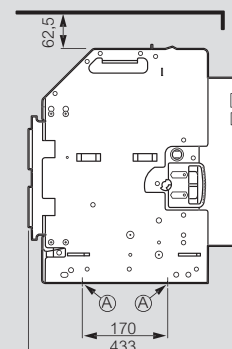
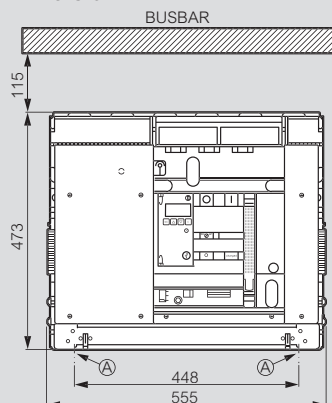
### Draw-out version - frame 4000

#### Overall dimensions

##### 3P version



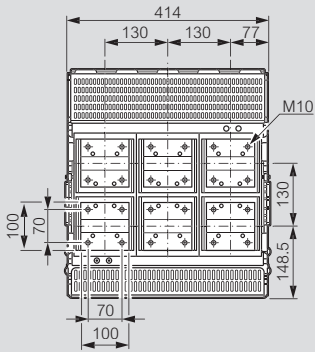
##### 4P version



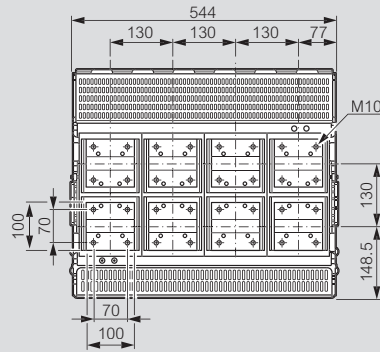
**Draw-out version - frame 4000 (continued)**

**Rear terminals for flat connection with bars**

**3P version**



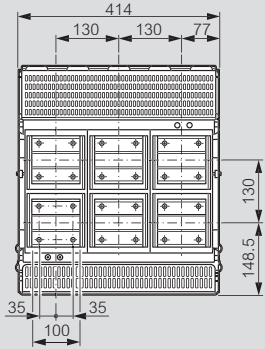
**4P version**



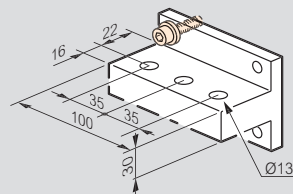
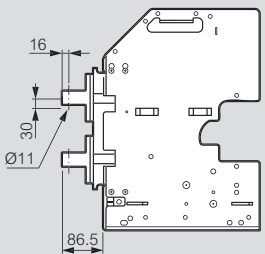
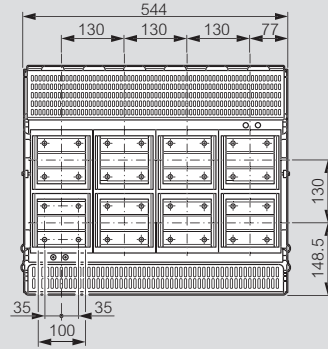
**Rear terminals for horizontal connection with bars**

Cat.Nos 0 288 92/93

**3P version**



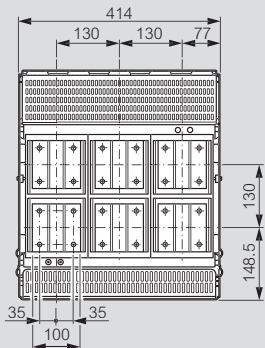
**4P version**



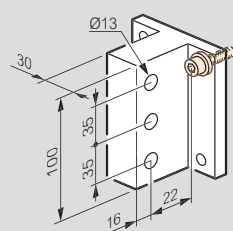
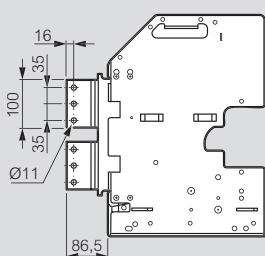
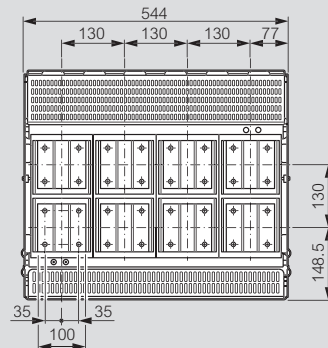
**Rear terminals for vertical connection with bars**

Cat.Nos 0 288 92/93

**3P version**

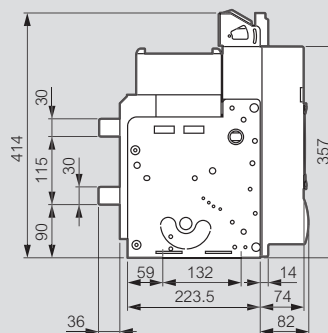
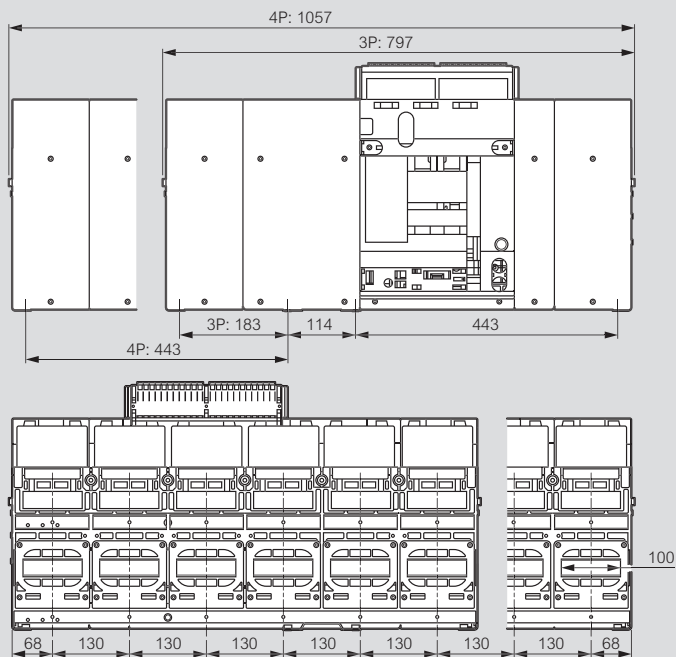


**4P version**

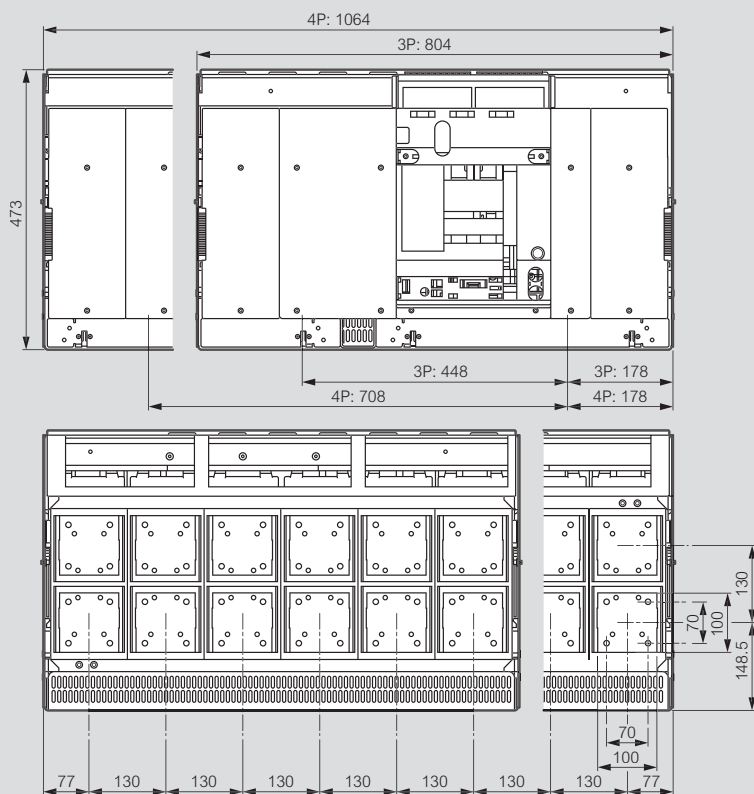


# DMX<sup>3</sup> 6300 et DMX<sup>3</sup>-I 6300 - frame 6300

## Fixed version - frame 6300



## Draw-out version - frame 6300





# DMX<sup>3</sup>

## electronic protection units

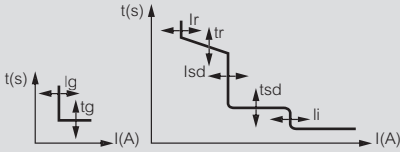
# DMX<sup>3</sup>

## technical characteristics

### Settings of the electronic protection units

#### MP2.10 and MP4.10

$I_r$ ,  $t_r$ ,  $I_{sd}$ ,  $t_{sd}$ ,  $I_i$ ,  $I_g$ ,  $t_g$  adjustment



- **Long time delay protection against overloads**

$I_r$  from 0.2 to 1 x  $I_n$  with steps of 1 A

Protection: ON/OFF

- **Long delay protection operation time**

$t_r$  from 40 ms to 30 s (@6 $I_r$ ) with steps of 40 ms

Thermal memory: ON/OFF

- **Short time delay protection against short circuits**

$I_{sd}$  from 1.5 to 10 x  $I_r$  with steps of 1 A

Protection: ON/OFF

- **Short time delay protection operation time**

$t_{sd}$  from 40 ms to 1 s with steps of 40 ms

(both  $t=k$  and  $i^2t=k$ )

- **Instantaneous protection against very high short circuits**

$I_i$  from 2 to 15 x  $I_n$  or  $I_{cw}$  with steps of 1 A

Protection: ON/OFF

- **Earth fault current**

$I_g$  from 0.2 to 1 x  $I_n$  with steps of 1 A

Protection: ON/OFF

$t_g$  from 80 ms to 1 s with steps of 40 ms

(both  $t=k$  and  $i^2t=k$ )

- **Neutral protection**

OFF - 50% - 100% - 200%

### Selectivity in three-phase network 415 V~

#### DMX<sup>3</sup>/DPX<sup>3</sup>

Downstream	Upstream	DMX <sup>3</sup> 2500				DMX <sup>3</sup> 4000	DMX <sup>3</sup> 6300
		800 A	1000 A	1250 A	1600 A	2000 & 2500 A	3200 & 4000 A
DPX <sup>3</sup> 160 <sup>(1)</sup>		T	T	T	T	T	T
DPX <sup>3</sup> 250 <sup>(1)</sup>		T	T	T	T	T	T
DPX <sup>3</sup> 630 <sup>(1)</sup> TM and elec.		T	T	T	T	T	T
DPX <sup>3</sup> 1600 <sup>(1)</sup> thermal magnetic	630 A	T	T	T	T	T	T
	800 A		T	T	T	T	T
	1000 A			T	T	T	T
	1250 A				T	T	T
DPX <sup>3</sup> 1600 <sup>(1)</sup> electronic	630 A			T	T	T	T
	800 A			T	T	T	T
	1000 A				T	T	T
	1250 A					T	T
	1600 A						T

1: All breaking capacities

T: total selectivity, up to downstream circuit breaker breaking capacity according to IEC 60947-2

#### DMX<sup>3</sup>/DMX<sup>3</sup>

Downstream	Upstream	DMX <sup>3</sup>									
		800 A	1000 A	1250 A	1600 A	2000 A	2500 A	3200 A	4000 A	5000 A	6300 A
DMX <sup>3</sup>	800 A		T	T	T	T	T	T	T	T	T
	1000 A			T	T	T	T	T	T	T	T
	1250 A				T	T	T	T	T	T	T
	1600 A					T	T	T	T	T	T
	2000 A						T	T	T	T	T
	2500 A							T	T	T	T
	3200 A							T	T	T	
	4000 A								T	T	
	5000 A									T	
	6300 A										

T: total selectivity, up to downstream circuit breaker breaking capacity according to IEC 60947-2  
 $I_{cu}$  of downstream circuit breaker  $\leq I_{cu}$  of upstream circuit breaker  
 Selectivity values are intended with protection unit properly adjusted

#### DMX<sup>3</sup>/DX<sup>3</sup>

	DMX <sup>3</sup> 2500						DMX <sup>3</sup> 4000		DMX <sup>3</sup> 6300		
	630 A	800 A	1000 A	1250 A	1600 A	2000 A	2500 A	3200 A	4000 A	5000 A	6300 A
DX <sup>3</sup> [6000] - 10 kA	T	T	T	T	T	T	T	T	T	T	T
DX <sup>3</sup> [10000] - 16 kA	T	T	T	T	T	T	T	T	T	T	T
DX <sup>3</sup> 25 kA	T	T	T	T	T	T	T	T	T	T	T
DX <sup>3</sup> 36 kA	T	T	T	T	T	T	T	T	T	T	T
DX <sup>3</sup> 50 kA	T	T	T	T	T	T	T	T	T	T	T

T: total selectivity, up to downstream circuit breaker breaking capacity according to IEC 60947-2



DMX<sup>3</sup> tripping curves,  
see technical sheet



For the settings of MP6 protection units  
Please, consult us

# DMX<sup>3</sup>

## technical characteristics (continued)

### Technical characteristics

#### DMX<sup>3</sup> 2500

DMX <sup>3</sup> according to IEC 60947-2	DMX <sup>3</sup> 2500																		
	800			1000			1250			1600			2000			2500			
	N	H	L	N	H	L	N	H	L	N	H	L	N	H	L	N	H	L	
Number of poles	3P - 4P			3P - 4P			3P - 4P			3P - 4P			3P - 4P			3P - 4P			
Rating In (A)	800			1000			1250			1600			2000			2500			
Rated insulation voltage Ui (V)	1000			1000			1000			1000			1000			1000			
Rated impulse withstand voltage Uimp (kV)	12			12			12			12			12			12			
Rated operational voltage (50/60Hz) Ue (V)	690			690			690			690			690			690			
Frame	2500		4000	2500		4000	2500		4000	2500		4000	2500		4000	2500		4000	
Ultimate breaking capacity Icu (kA)	230 V~	50	65	100	50	65	100	50	65	100	50	65	100	50	65	100	50	65	100
	415 V~	50	65	100	50	65	100	50	65	100	50	65	100	50	65	100	50	65	100
	500 V~	50	65	100	50	65	100	50	65	100	50	65	100	50	65	100	50	65	100
	600 V~	50	60	75	50	60	75	50	60	75	50	60	75	50	60	75	50	60	75
	690 V~	50	55	65	50	55	65	50	55	65	50	55	65	50	55	65	50	55	65
Service breaking capacity Ics (% Icu)	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Short-circuit making capacity Icm (kA)	230 V~	105	143	220	105	143	220	105	143	220	105	143	220	105	143	220	105	143	220
	415 V~	105	143	220	105	143	220	105	143	220	105	143	220	105	143	220	105	143	220
	500 V~	105	143	220	105	143	220	105	143	220	105	143	220	105	143	220	105	143	220
	600 V~	105	132	165	105	132	165	105	132	165	105	132	165	105	132	165	105	132	165
	690 V~	105	121	143	105	121	143	105	121	143	105	121	143	105	121	143	105	121	143
Short time withstand current Icw (kA) for t = 1s	230 V~	50	65	85	50	65	85	50	65	85	50	65	85	50	65	85	50	65	85
	415 V~	50	65	85	50	65	85	50	65	85	50	65	85	50	65	85	50	65	85
	500 V~	50	65	85	50	65	85	50	65	85	50	65	85	50	65	85	50	65	85
	600 V~	50	60	75	50	60	75	50	60	75	50	60	75	50	60	75	50	60	75
	690 V~	50	55	65	50	55	65	50	55	65	50	55	65	50	55	65	50	55	65
Category of use	B			B			B			B			B			B			
Isolation behavior	Yes			Yes			Yes			Yes			Yes			Yes			
Endurance (cycles) without maintenance	mechanical	10000			10000			10000			10000			10000			10000		
	electrical	5000			5000			5000			5000			5000			5000		

#### DMX<sup>3</sup> 4000

DMX <sup>3</sup> according to IEC 60947-2	DMX <sup>3</sup> 4000						
	3200			4000			
	N	H	L	N	H	L	
Number of poles	3P - 4P			3P - 4P			
Rating In (A)	3200			4000			
Rated insulation voltage Ui (V)	1000			1000			
Rated impulse withstand voltage Uimp (kV)	12			12			
Rated operational voltage (50/60Hz) Ue (V)	690			690			
Frame	4000			4000			
Ultimate breaking capacity Icu (kA)	230 V~	50	65	100	50	65	100
	415 V~	50	65	100	50	65	100
	500 V~	50	65	100	50	65	100
	600 V~	50	60	75	50	60	75
	690 V~	50	55	65	50	55	65
Service breaking capacity Ics (% Icu)	100	100	100	100	100	100	
Short-circuit making capacity Icm (kA)	230 V~	105	143	220	105	143	220
	415 V~	105	143	220	105	143	220
	500 V~	105	143	220	105	143	220
	600 V~	105	132	165	105	132	165
	690 V~	105	121	143	105	121	143
Short time withstand current Icw (kA) for t = 1s	230 V~	50	65	85	50	65	85
	415 V~	50	65	85	50	65	85
	500 V~	50	65	85	50	65	85
	600 V~	50	60	75	50	60	75
	690 V~	50	55	65	50	55	65
Category of use	B			B			
Isolation behavior	Yes			Yes			
Endurance (cycles) without maintenance	mechanical	10000			10000		
	electrical	5000			5000		

#### DMX<sup>3</sup> 6300

DMX <sup>3</sup> according to IEC 60947-2	DMX <sup>3</sup> 6300		
	5000	6300	
	L	L	
Number of poles	3P - 4P	3P - 4P	
Rating In (A)	5000	5000	
Rated insulation voltage Ui (V)	1000	1000	
Rated impulse withstand voltage Uimp (kV)	12	12	
Rated operational voltage (50/60Hz) Ue (V)	690	690	
Frame	6300	6300	
Ultimate breaking capacity Icu (kA)	230 V~	100	100
	415 V~	100	100
	500 V~	100	100
	600 V~	75	75
	690 V~	65	65
Service breaking capacity Ics (% Icu)	100	100	
Short-circuit making capacity Icm (kA)	230 V~	220	220
	415 V~	220	220
	500 V~	220	220
	600 V~	165	165
	690 V~	143	143
Short time withstand current Icw (kA) for t = 1s	230 V~	100	100
	415 V~	100	100
	500 V~	100	100
	600 V~	75	75
	690 V~	65	65
Category of use	B	B	
Isolation behavior	Yes	Yes	
Endurance (cycles)	mechanical	5000	5000
	electrical	2500	2500

## Temperature derating

### Fixed version

Temperature	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>
DMX <sup>3</sup> 2500	800	1	800	1	800	1	800	1	800	1
	1000	1	1000	1	1000	1	1000	1	1000	1
	1250	1	1250	1	1250	1	1250	1	1250	1
	1600	1	1600	1	1600	1	1600	1	1600	1
	2000	1	2000	1	1960	0.98	1920	0.96	1880	0.94
DMX <sup>3</sup> 4000	2500	1	2500	1	2350	0.94	2250	0.9	2150	0.86
	3200	1	3200	1	3200	1	3136	0.98	3008	0.94
DMX <sup>3</sup> 6300	4000	1	4000	1	3680	0.92	3440	0.86	3120	0.78
	5000	1	5000	1	5000	1	5000	1	5000	1
	6300	1	6300	1	6048	0.96	5796	0.92	5544	0.88

### Draw-out version

Temperature	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>
DMX <sup>3</sup> 2500	800	1	800	1	800	1	800	1	800	1
	1000	1	1000	1	1000	1	1000	1	1000	1
	1250	1	1250	1	1250	1	1250	1	1250	1
	1600	1	1600	1	1600	1	1600	1	1600	1
	2000	1	2000	1	1960	0.98	1920	0.96	1875	0.94
DMX <sup>3</sup> 4000	2500	1	2500	1	2250	0.9	2100	0.84	1950	0.78
	3200	1	3200	1	3200	1	3072	0.96	2880	0.9
DMX <sup>3</sup> 6300	4000	1	4000	1	3440	0.86	3200	0.8	2960	0.74
	5000	1	5000	1	5000	1	5000	1	5000	1
	6300	1	6300	1	5985	0.95	5796	0.92	5292	0.84

## Derating at different altitudes

Air circuit breaker	DMX <sup>3</sup> 2500, DMX <sup>3</sup> 4000 and DMX <sup>3</sup> 6300			
Altitude H (m)	< 2000	3000	4000	5000
Rated current (at 40°C) I <sub>n</sub> (A)	I <sub>n</sub>	0.98 x I <sub>n</sub>	0.94 x I <sub>n</sub>	0.90 x I <sub>n</sub>
Rated voltage U <sub>e</sub> (V)	690	600	500	440
Rated insulation voltage U <sub>i</sub> (V)	1000	900	750	600

## Minimum recommended dimension of copper busbars per pole

### Frame 2500

In (A)	Fixed version		Draw-out version	
	Vertical bars (mm)	Horizontal bars (mm)	Vertical bars (mm)	Horizontal bars (mm)
630	2 x 40 x 5	2 x 40 x 5	2 x 40 x 5	2 x 40 x 5
800	2 x 50 x 5	2 x 50 x 5	2 x 50 x 5	2 x 50 x 5
1000	1 x 60 x 10 or 2 x 60 x 5	1 x 60 x 10 or 2 x 60 x 5	2 x 60 x 5	2 x 60 x 5
1250	1 x 80 x 10 or 2 x 80 x 5	1 x 80 x 10 or 2 x 80 x 5	2 x 80 x 5	2 x 80 x 5
1600	2 x 50 x 10	2 x 50 x 10	2 x 50 x 10	2 x 50 x 10
2000	3 x 50 x 10	3 x 50 x 10 or 4 x 50 x 10	3 x 50 x 10	3 x 50 x 10
2500	3 x 80 x 10	4 x 80 x 10 or 5 x 60 x 10	3 x 80 x 10	4 x 80 x 10

### Frame 4000 - fixed and draw-out versions

In (A)	Vertical bars (mm)	Horizontal bars (mm)
630	1 x 40 x 10 or 2 x 40 x 5	2 x 40 x 5
800	1 x 50 x 10 or 2 x 50 x 5	2 x 50 x 5
1000	1 x 50 x 10 or 2 x 50 x 5	2 x 60 x 5
1250	2 x 60 x 5	2 x 80 x 5
1600	2 x 80 x 5	2 x 50 x 10
2000	2 x 50 x 10	2 x 60 x 10
2500	3 x 50 x 10	3 x 60 x 10
3200	3 x 100 x 10	4 x 80 x 10
4000	4 x 100 x 10	5 x 100 x 10

### Frame 6300 - fixed and draw-out versions

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

Note: The tables presenting the minimum recommended dimensions of connection plates and bars per pole should be used solely as a general guideline for selecting products. Due to extensive variety of switchgear constructions shapes and conditions that can affect the behavior of the apparatus, the solution used must always be verified

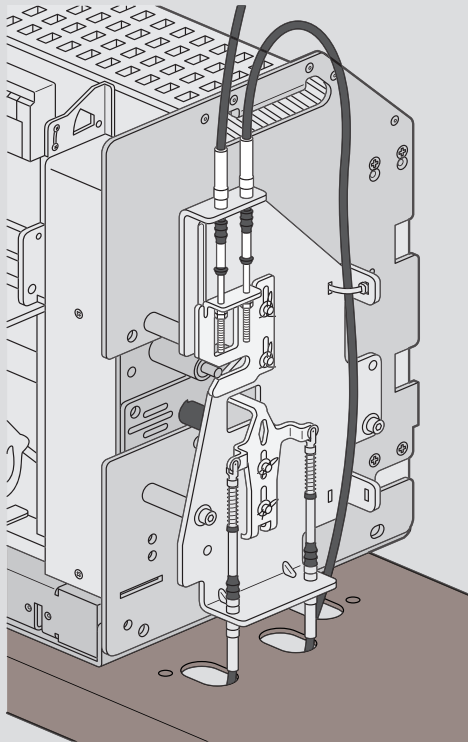


For minimum recommended dimensions of aluminium busbars  
**Please, consult us**

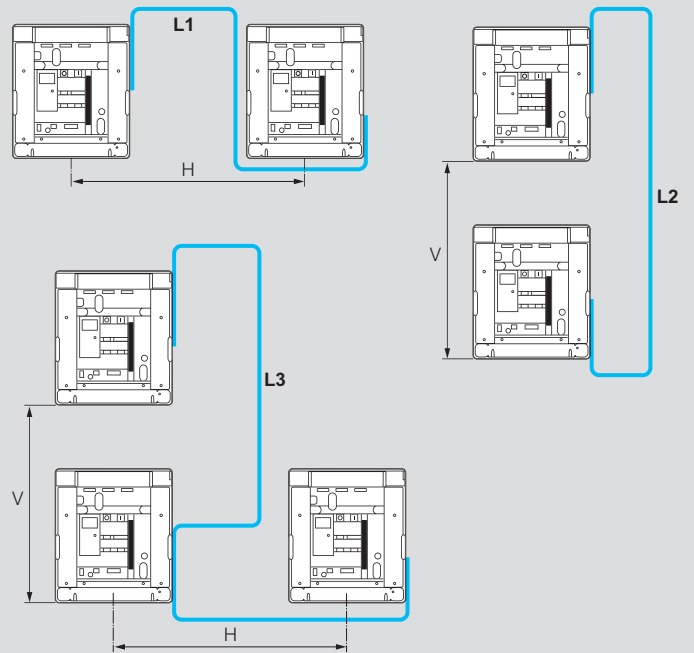
# Supply invertors equipment for DMX<sup>3</sup> 2500, 4000 and 6300

## installation principle

### Mounting of interlock unit



### Choice of cable interlock



Calculation of cable length:

$$L1 = 1430 + H$$

$$L2 = 1570 + V$$

$$L3 = 1430 + V + H$$

# Automation control units for transfer switches

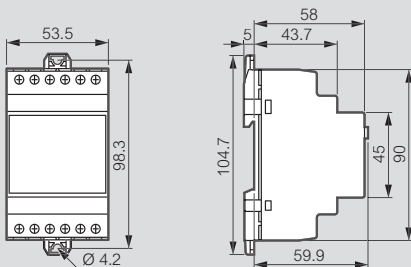
## technical characteristics and dimensions

### Technical characteristics

		Cat.Nos			
		4 226 81	4 226 82	4 226 83	4 226 84
Voltage Inputs	Ue max rated voltage	100-480 V~	100-480 V~	100-600 V~ L-L (346 V~ L-N)	100-600 V~ L-L (346 V~ L-N)
	Measuring range	50-576 V~ (L-L)	50-576 V~ (L-L)	50-720 V~ (L-L)	50-720 V~ (L-L)
	Frequency range	45...65 Hz 360...440 Hz	45...65 Hz 360...440 Hz	45...65 Hz 360...440 Hz	45...65 Hz 360...440 Hz
	Measurement type	True RMS value	True RMS value	True RMS value	True RMS value
	Connection modes	Single phase, two-phase or three-phase system with or without neutral	Single phase, two-phase or three-phase system with or without neutral	Single phase, two-phase or three-phase system with or without neutral	Single phase, two-phase or three-phase system with or without neutral
	Measuring error	± 0.25% f.s. ± 1 digit	± 0.25% f.s. ± 1 digit	± 0.25% f.s. ± 1 digit	± 0.25% f.s. ± 1 digit
Ambient conditions	Operating temperature	-30... +70 °C	-30... +70 °C	-30... +70 °C	-30... +70 °C
	Storage temperature	-30...+80 °C	-30...+80 °C	-30...+80 °C	-30...+80 °C
	Relativity humidity	80 % (IEC/EN 60068-2-78)	80 % (IEC/EN 60068-2-78)	80 % (IEC/EN 60068-2-78)	80 % (IEC/EN 60068-2-78)
	Maximum pollution degree	2	2	2	2
	Overvoltage category	3	3	3	3
	Measurement category	III	III	III	III
	Rated impulse withstand voltage	Uimp 7.3 kV	Uimp 7.3 kV	Uimp 7.3 kV	Uimp 7.3 kV
	Protection index	IP 40	IP 40	IP 65	IP 65
Functionalities	Inputs	6 programmables	6 programmables	8 programmables	12 programmables
	Outputs	7 relay programmables	7 relay programmables	7 relay programmables	11 relay programmables
	Expandibility	No	Yes (2 modules)	Yes (3 modules)	Yes (3 modules)
	ModBus	No	Yes, with expansion module RS485	Yes, embedded RS485	Yes, embedded RS485
	Storage	No	Yes, 100 most recent events	Yes, 250 most recent events	Yes, 250 most recent events
	Programming	USB or WiFi (Direct on front panel or with comm module and Legrand software or App)			

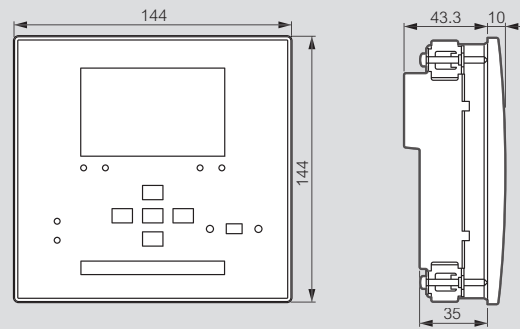
### Dimensions

#### Cat.No 4 226 86

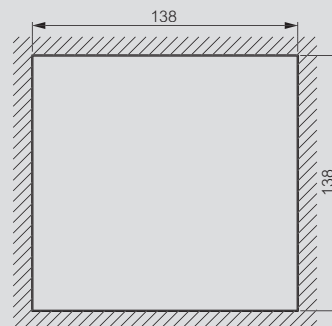


### Dimensions (continued)

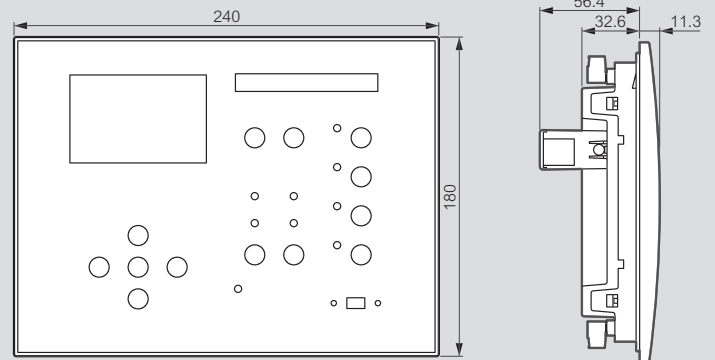
#### Cat.Nos 4 226 81/82



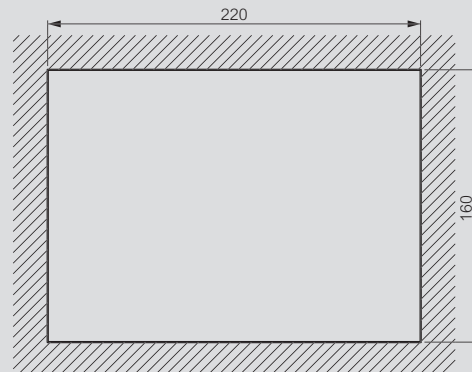
#### Door cut



#### Cat.Nos 4 226 83/84



#### Door cut



# Catalogue number index

Cat.Nos	Page No	Pack	Cat.Nos	Page No	Pack	Cat.Nos	Page No	Pack	Cat.Nos	Page No	Pack	Cat.Nos	Page No	Pack	Cat.Nos	Page No	Pack
<b>0 280 00</b>			0 282 51	34	1	0 283 40	28	1	0 284 05	32	1	0 284 78	32	1	0 288 86	36	1
			52	-	1	41	-	1	06	-	1	80	33	1	87	-	1
0 280 35	30	1	53	-	1	42	-	1	07	-	1	81	-	1	88	-	1
<b>0 281 00</b>			54	-	1	43	-	1	08	-	1	83	-	1	89	-	1
0 281 20	30	1	55	-	1	44	-	1	10	-	1	85	-	1	90	-	1
21	-	1	60	29	1	45	-	1	11	-	1	86	-	1	91	-	1
22	-	1	61	-	1	46	-	1	12	-	1	87	-	1	92	-	1
23	-	1	62	-	1	47	-	1	14	-	1	88	-	1	93	-	1
24	-	1	63	-	1	48	-	1	15	-	1	90	29	1	94	-	1
25	28	1	64	-	1	49	-	1	16	-	1	91	-	1	95	-	1
26	30	1	65	-	1	50	-	1	17	-	1	92	-	1	96	-	1
27	-	1	66	-	1	51	-	1	18	-	1	93	-	1	97	-	1
28	-	1	67	-	1	52	-	1	20	-	1	94	-	1	98	-	1
29	-	1	68	-	1	53	-	1	21	-	1	95	-	1	99	-	1
30	-	1	69	-	1	54	-	1	22	-	1	96	-	1	<b>0 289 02</b>		
31	-	1	80	34	1	55	-	1	23	-	1	97	-	1	0 289 02	35	1
32	-	1	81	-	1	56	-	1	24	-	1	99	-	1	03	-	1
33	-	1	82	-	1	57	-	1	25	-	1	<b>0 288 00</b>			04	-	1
34	-	1	83	-	1	58	-	1	26	-	1	0 288 13	35	1	05	-	1
35	-	1	84	-	1	59	-	1	27	-	1	14	-	1	09	-	1
36	-	1	85	-	1	60	32	1	28	-	1	15	-	1	10	-	1
37	-	1	88	-	1	61	-	1	30	-	1	16	-	1	11	-	1
38	-	1	89	-	1	62	-	1	31	-	1	18	36	1	12	-	1
39	-	1	90	-	1	63	-	1	32	-	1	19	-	1	13	-	1
40	-	1	91	-	1	64	-	1	33	-	1	20	35	1	14	-	1
47	-	1	92	-	1	65	-	1	34	-	1	21	-	1	15	-	1
48	-	1	93	-	1	66	-	1	35	-	1	23	-	1	17	31, 36	1
49	-	1	94	-	1	67	-	1	36	-	1	24	-	1	18	-	1
50	-	1	95	-	1	68	-	1	37	-	1	25	-	1	20	-	1
51	-	1	98	-	1	70	-	1	40	-	1	26	-	1	21	-	1
52	-	1	99	-	1	71	-	1	41	-	1	34	-	1	22	-	1
53	28	1	<b>0 283 00</b>			72	-	1	42	-	1	35	-	1	23	-	1
54	-	1	0 283 00	28	1	73	-	1	43	-	1	36	-	1	24	-	1
55	30	1	00	-	1	74	-	1	44	-	1	37	-	1	25	-	1
56	-	1	01	-	1	75	-	1	45	-	1	38	-	1	<b>4 149 00</b>		
57	-	1	02	-	1	76	-	1	46	-	1	40	-	1	4 149 40	28, 33	1
58	-	1	03	-	1	77	-	1	47	-	1	41	-	1	45	-	1
59	-	1	04	33	1	78	-	1	48	-	1	42	-	1	<b>4 226 00</b>		
60	-	1	05	-	1	80	-	1	50	-	1	43	-	1	4 226 81	37	1
73	-	1	06	-	1	81	-	1	51	-	1	44	-	1	82	-	1
74	-	1	07	-	1	82	-	1	52	-	1	45	-	1	83	-	1
75	-	1	10	28, 33	1	83	-	1	54	-	1	48	-	1	84	-	1
76	-	1	20	28	1	84	-	1	55	-	1	49	-	1	86	-	1
77	-	1	21	-	1	85	-	1	56	-	1	50	-	1	87	-	1
84	-	1	22	-	1	86	-	1	57	-	1	51	-	1	88	-	1
87	-	1	23	-	1	87	-	1	58	-	1	52	-	1	89	-	1
88	-	1	24	-	1	88	-	1	60	-	1	55	-	1	90	-	1
89	-	1	25	-	1	90	-	1	61	-	1	56	-	1	91	-	1
90	31	1	26	-	1	91	-	1	62	-	1	57	-	1	92	-	1
91	30	1	27	-	1	92	-	1	63	-	1	58	-	1	<b>4 238 00</b>		
94	35	1	28	-	1	93	-	1	64	-	1	59	-	1	4 238 80	30, 35	1
97	33	1	29	-	1	94	-	1	65	-	1	62	30, 35	1	81	-	1
98	-	1	30	-	1	95	-	1	66	-	1	63	-	1	82	-	1
<b>0 282 00</b>			31	-	1	96	-	1	68	-	1	64	36	1	83	-	1
0 282 40	34	1	32	-	1	97	-	1	70	-	1	65	-	1	<b>0 284 00</b>		
41	-	1	33	-	1	98	-	1	71	-	1	66	-	1	0 284 00	32	1
42	-	1	34	-	1	<b>0 284 00</b>			01	-	1	67	-	1	01	-	1
43	-	1	35	-	1	35	-	1	02	-	1	68	-	1	02	-	1
44	-	1	36	-	1	36	-	1	03	-	1	69	-	1	03	-	1
45	-	1	37	-	1	37	-	1	04	-	1	70	-	1	04	-	1
50	-	1	38	-	1	38	-	1	05	-	1	71	-	1	05	-	1
			39	-	1	39	-	1	06	-	1	72	-	1	06	-	1
									07	-	1	73	-	1	07	-	1
									08	-	1	74	-	1	08	-	1
									09	-	1	75	-	1	09	-	1
									10	-	1	76	-	1	10	-	1
									11	-	1	77	-	1	11	-	1
									12	-	1	78	-	1	12	-	1
									13	-	1	79	-	1	13	-	1
									14	-	1	80	-	1	14	-	1
									15	-	1	81	-	1	15	-	1
									16	-	1	82	-	1	16	-	1
									17	-	1	83	-	1	17	-	1
									18	-	1	84	-	1	18	-	1
									19	-	1	85	-	1	19	-	1
									20	-	1	86	-	1	20	-	1
									21	-	1	87	-	1	21	-	1
									22	-	1	88	-	1	22	-	1
									23	-	1	89	-	1	23	-	1
									24	-	1	90	-	1	24	-	1
									25	-	1	91	-	1	25	-	1
									26	-	1	92	-	1			
									27	-	1	93	-	1			
									28	-	1	94	-	1			
									29	-	1	95	-	1			
									30	-	1	96	-	1			
									31	-	1	97	-	1			
									32	-	1	98	-	1			
									33	-	1	99	-	1			
									34	-	1						
									35	-	1						
									36	-	1						
									37	-	1						
									38	-	1						
									39	-	1						





[legrandgroup.com](mailto:legrandgroup.com)



[youtube.com/user/legrand](https://youtube.com/user/legrand)



[linkedin.com/company/legrand](https://linkedin.com/company/legrand)



[twitter.com/Legrand](https://twitter.com/Legrand)

**Head Office**  
and International Department  
87045 Limoges Cedex - France  
Tel: +33(0)5 55 06 87 87

