

DPX³

Moulded case circuit breakers



Introduction

Objectives :

- To answer high level technical requirements
- To convey an image of high technology and robustness
- To simplify and secure installers' work with innovative solutions
- To offer complete package under one brand

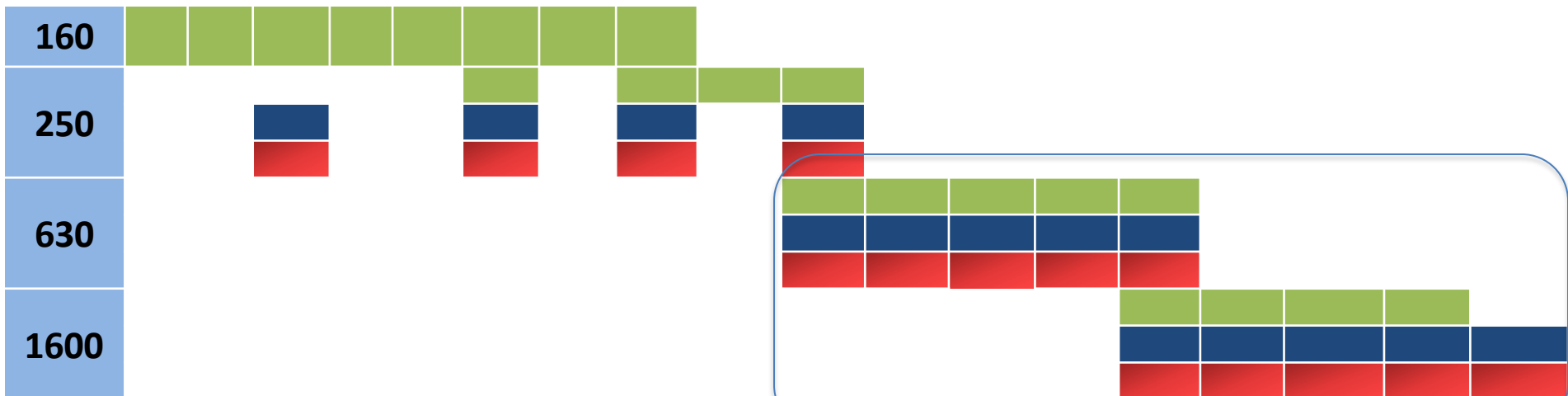


The range – overview (part 1)

The complete list of ratings by frame



	16	25	40	63	80	100	125	160	200	250	320	400	500	630	800	1000	1250	1600
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Thermal-magnetic



Electronic



Electronic with measure



The range – overview (part 2)

The complete list of ratings available with earth leakage module by frames



In (A)

	16	25	40	63	80	100	125	160	200	250
160	Thermalmagnetic+EL module	Thermalmagnetic+EL module	Thermalmagnetic+EL module	Thermalmagnetic+EL module	Thermalmagnetic+EL module	Thermalmagnetic+EL module	Thermalmagnetic+EL module	Thermalmagnetic+EL module		
250			Electronic+EL module Electronic with measure+EL module			Electronic+EL module Electronic with measure+EL module		Electronic+EL module Electronic with measure+EL module	Thermalmagnetic+EL module	Electronic+EL module Electronic with measure+EL module

Thermalmagnetic+EL module



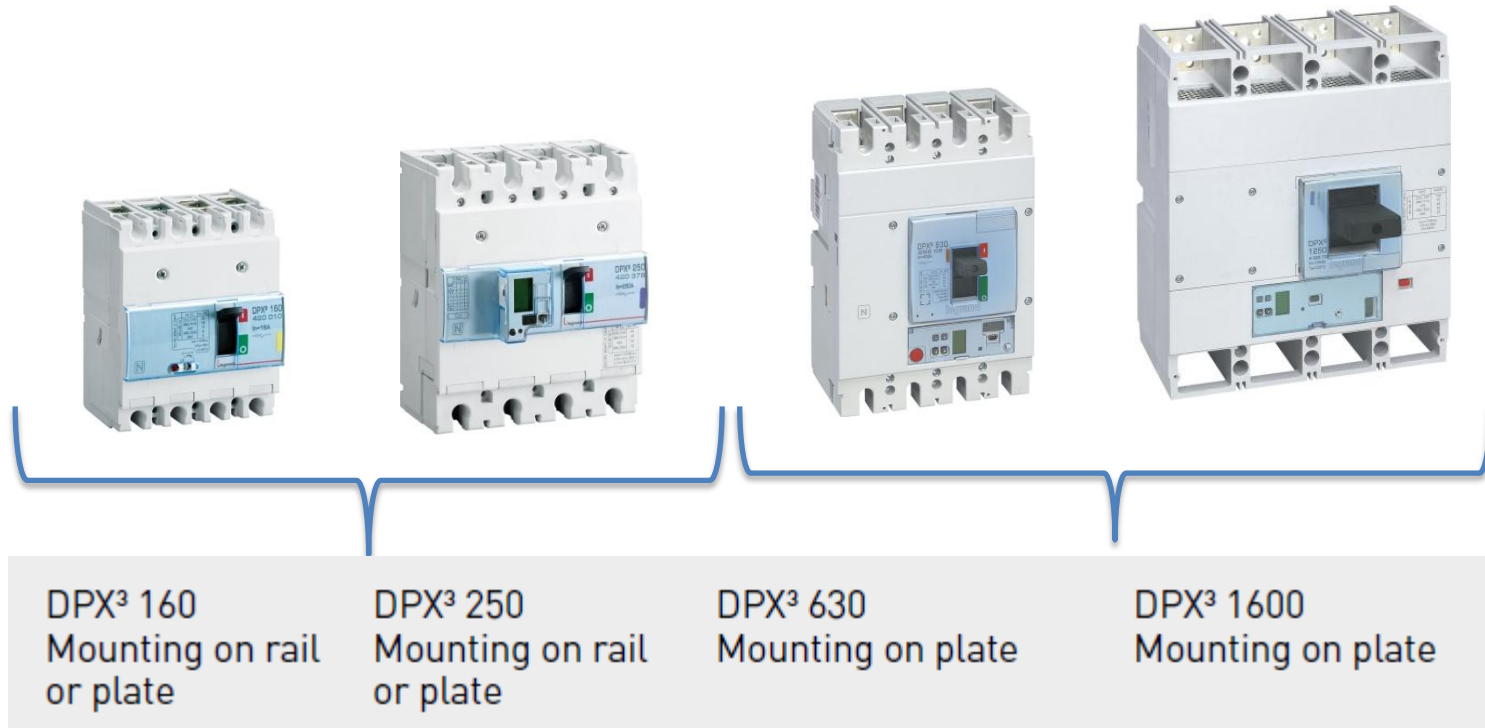
Electronic+EL module



Electronic with measure+EL module

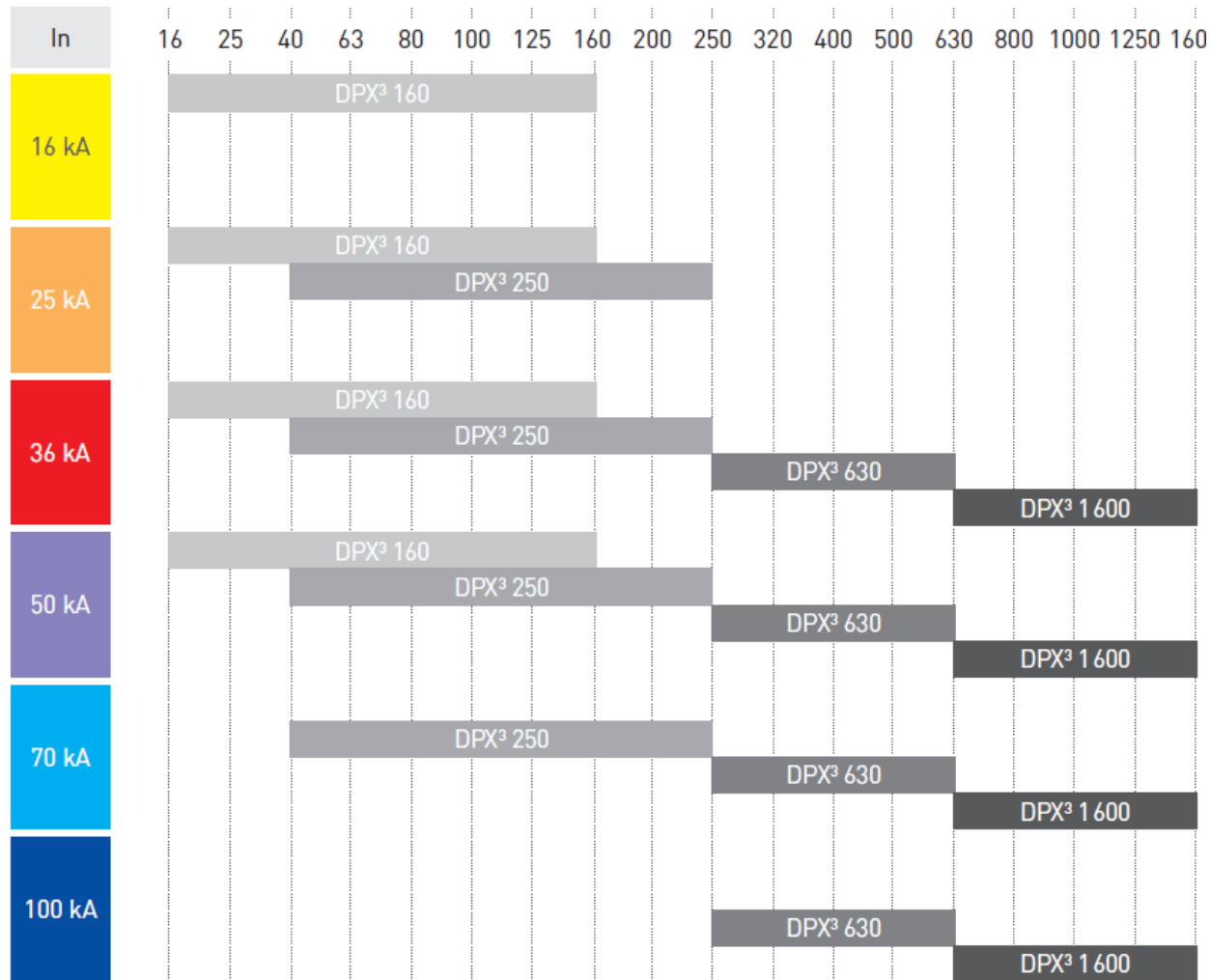


The range



The range

The DPX³ range features four sizes of moulded case circuit breakers with breaking capacities ranging from 16 to 100 kA.



Focus on DPX3 630 and 1600 frames

DPX3 630 thermal magnetic

	36kA	50kA	70kA	100kA
250 A				
320 A				
400 A				
500 A				
630 A				

DPX3 630 electronic (S1 - S2 - Sg)

	36kA	50kA	70kA	100kA
250 A				
320 A				
400 A				
500 A				
630 A				

DPX3 1600 thermal magnetic

	36kA	50kA	70kA	100kA
630				
800				
1000				
1250				

DPX3 1600 electronic (S1 - S2 - Sg)

	36kA	50kA	70kA	100kA
630				
800				
1000				
1250				
1600				

All electronic version are available also with measure

The electronic range - evolution

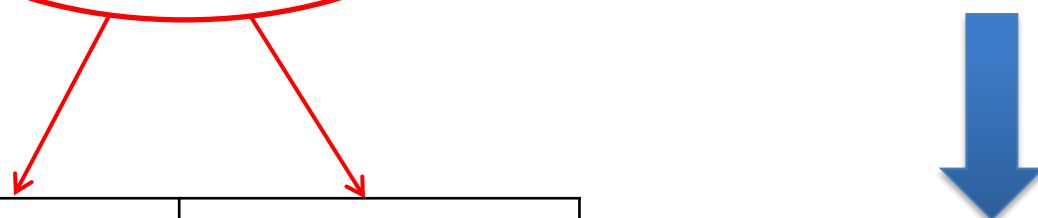
DPX

	Electronic		
	S1	S2	Sg
DPX 630 3P/4P	X	X	X
DPX 1600 3P/4P	X	X	X



DPX³

	New Electronic		New Electronic with E measure	
	S2	Sg	S2	Sg
DPX 630 3P/4P	X	X	X	X
DPX 1600 3P/4P	X	X	X	X



New frames



DPX³ 630 TM:

In: from 250 to 630A
 Polarity: 3 and 4 P
 Thermal threshold:
 0,8 - 1 In
 Magnetic threshold:
 5 - 10 In
 Breaking capacity: 36,
 50, 70, 100 kA

DPX³ 630 electronic:

In: from 250 to 630A
 Polarity: 3 and 4 P
 Thermal threshold:
 0,4 - 1 In
 Magnetic threshold:
 1,5 - 10 In
 Breaking capacity:
 36, 50, 70, 100 kA

Version with integrated
 energy measure

DPX³ 1600 TM:

In: from 630 to 1250A
 Polarity: 3 and 4 P
 Thermal threshold:
 0,8 - 1 In
 Magnetic threshold:
 5 - 10 In
 Breaking capacity:
 36, 50, 70, 100 kA

DPX³ 630 electronic:

In: from 630 to 1600A
 Polarity: 3 and 4 P
 Thermal threshold:
 0,4 - 1 In
 Magnetic threshold:
 1,5 - 10 In
 Breaking capacity:
 36, 50, 70, 100 kA

Version with integrated
 energy measure

Certifications

Whole range certified according to IEC 947 standard



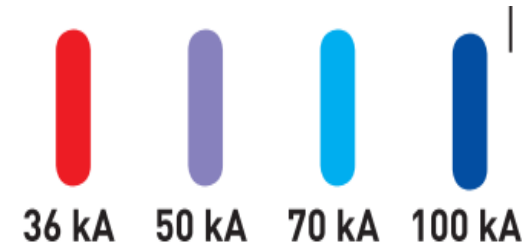
		Ref. Certif. No. SE-58368
IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE CB SCHEME)		SYSTEME DE RECOGNITION MUTUELLE DE CERTIFICATS D'ESSAI DES EQUIPEMENTS ELECTRIQUES (IECEE METHADOC)
CB TEST CERTIFICATE CERTIFICAT D'ESSAI OC		
Product Nom et adresse de l'acheteur Nom et adresse du fabricant Name and address of the factory Nom et adresse de l'usine Ratings and principal characteristics Valeurs nominales et caractéristiques principales Trademark (if any) Marque de fabrique (si elle existe) Type of manufacturer's testing administration used Type de programme de laboratoire classé Model / Type Ref. Ref. De type Additional information if necessary may also be included on page 2. Les informations complémentaires (si nécessaires) peuvent être inscrites sur la 2 ^e page. A sample of the product was tested and found to be in conformity with the requirements of the product as described in the certificate. Un échantillon du produit a été testé et a été trouvé conforme à la... As shown in the Test Report Ref. No. which forms part of this Certificate. Comme indiqué dans le Rapport d'essai mentionné en référence qui constitue partie de ce Certificat. This CB Test Certificate is issued by the National Certification Body Ce Certificat d'essai OC est émis par l'Organisme National de Certification	Circuit breakers LEGRAND SNC 128 Avenue du Maréchal-de-Lafitte, de-Tassigny, FR-87041 Limoges cedex, FRANCE STICNO SpA - Legrand Group Via Messina 38, I-20154 Milano ITALY STICNO SpA - Legrand Group Via Fabroni 5, 54052 Azzano San Paolo, Bergamo ITALY UL = 220 - BEV AC, L = 630 - 400A - 65-65kV - Pattern No 3 and 4, Close out version UL = 1000V - 100V = 120V. See also page 2. Legrand VMT OMS ¹ 400H IEC 60847-2:2008 800051	
Intertek SEMKO AB Box 1103 SE-164 02 Åkers, Sweden Int +46 8 750 00 00 Date: 8 July 2009	Signature Helen Gustafsson	Mandated reviewer: RRL 1/2 RRL

Wide range with all versions

The DPX³ range includes a wide range of versions to meet all requirements

		DPX ³ 160	DPX ³ 250	DPX ³ 630	DPX ³ 1600
Number of poles	3 P	•	•	•	•
	4 P	•	•	•	•
	3 P + N/2			•(1)	•(1)
Version	Fixed	•	•	•	•
	Plug-in	•	•	•	
	Draw-out			•	•
Release	Thermal-magnetic	•	•	•	•
	S1 electronic			•	•
	S2 electronic		•	•	•
	Sg electronic			•	•
Options	Integrated residual current protection	•	•		
	Integrated measurement		•(2)	•(2)	•(2)

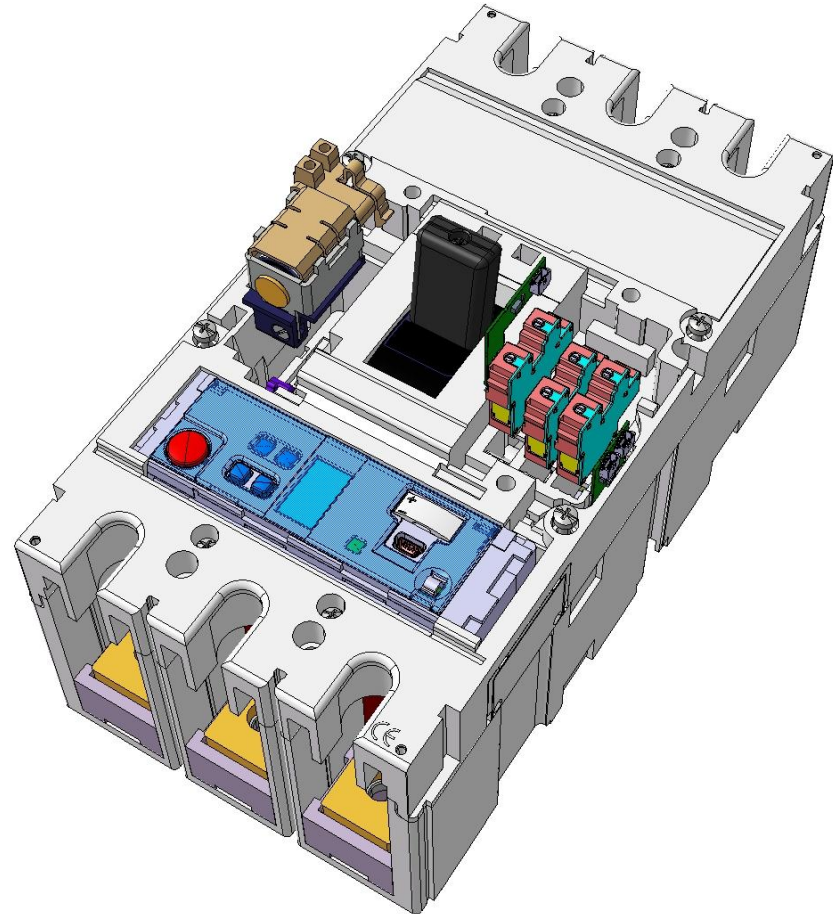
New electrical features



I_{cs} = I_{cu} up to 70kA

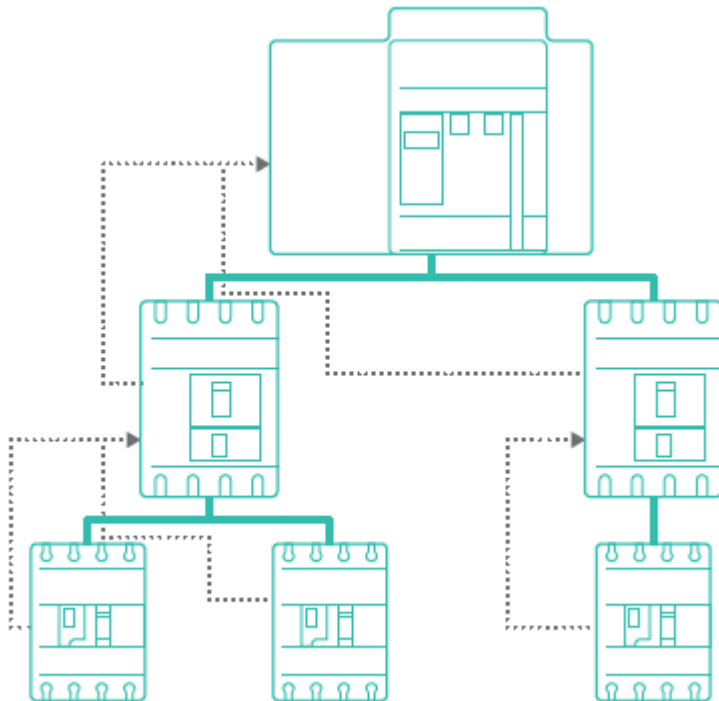
New internal accessories

- Auxiliary contacts
Same as DPX³ 160 and 250
- Shunt trip and UVR
New version with cage



Total selectivity

Selectivity between Legrand circuit breakers, which ensures continuity of service, is optimised by the improved performance of the DPX³ devices

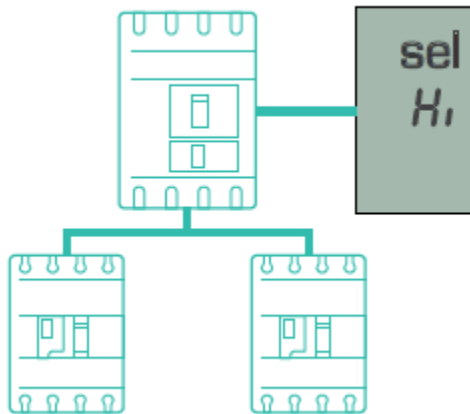


Logical selectivity

This is “smart” selectivity, obtained by means of communication between DPX³ (and/or DMX³) electronic circuit breakers that are connected together via an external wired link

Total selectivity

Selectivity between Legrand circuit breakers, which ensures continuity of service, is optimised by the improved performance of the DPX³ devices



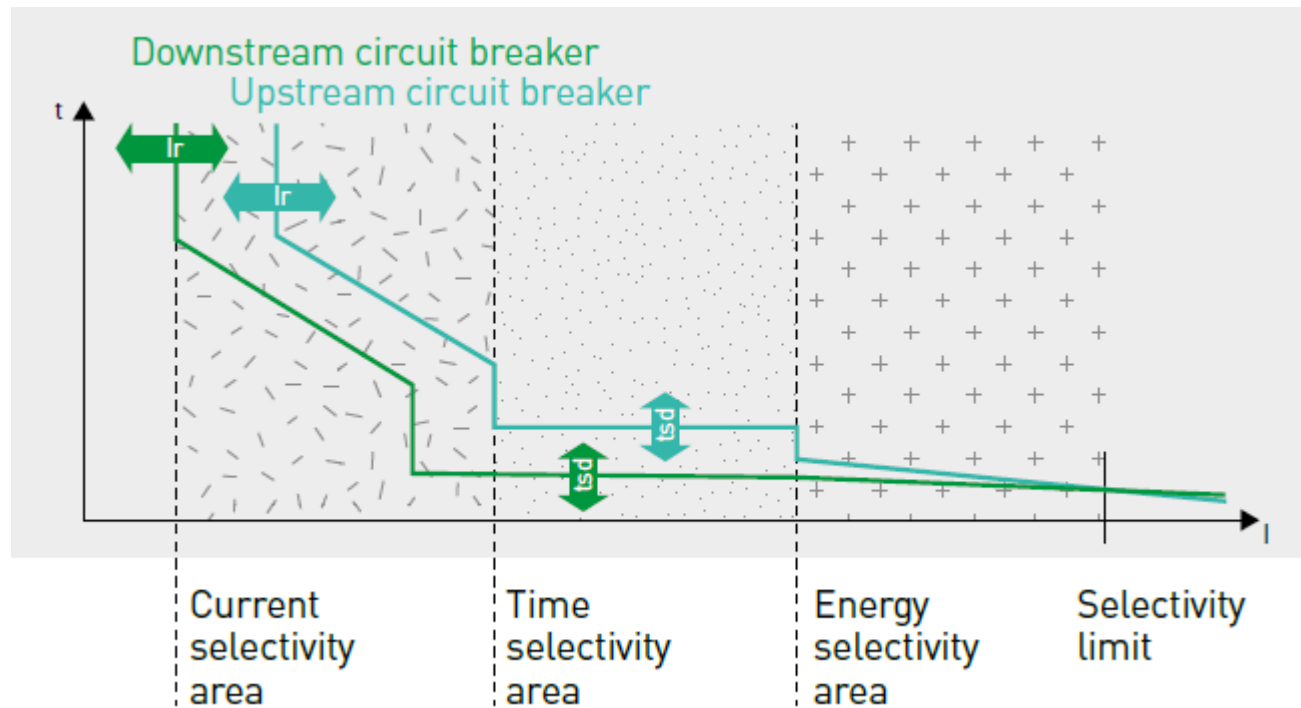
Dynamic Selectivity

Electronic DPX³ units have 2-position adjustment:

- Low for normal selectivity level
- High for high selectivity level

Total selectivity

Current selectivity and time selectivity The precision of the settings on electronic DPX³ units ensures optimum current and time selectivity.



Same size – more functions

- Same overall dimensions
- Same range of external accessories
- New electronic (Standard & High performance)
- New functions

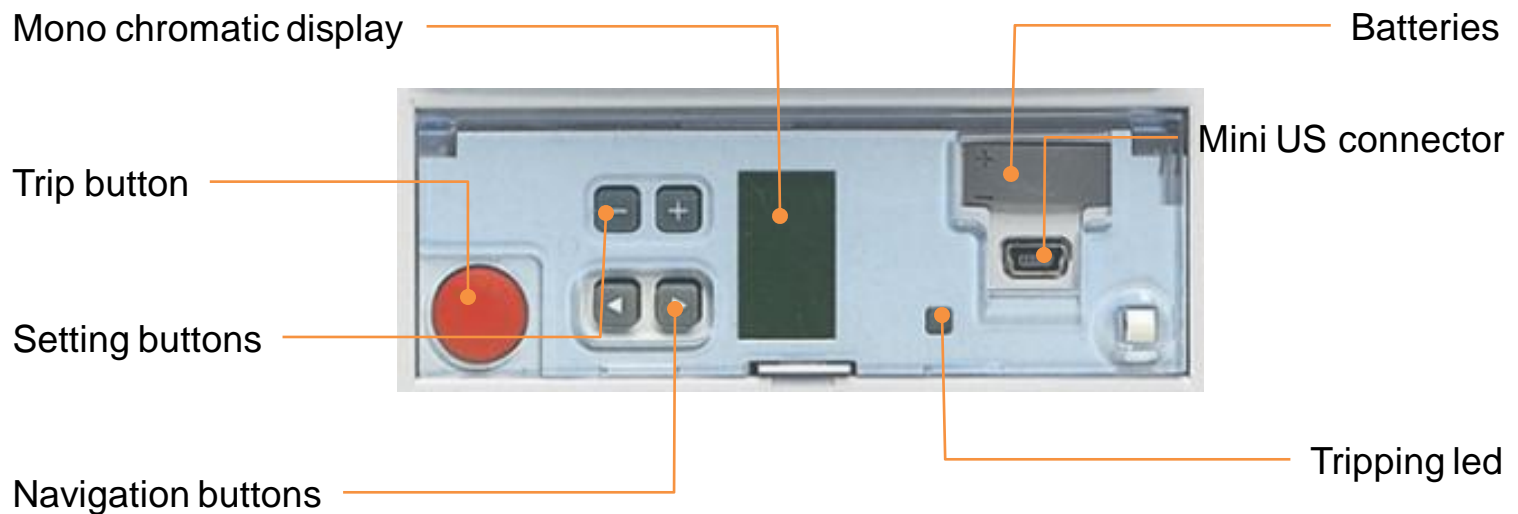
Electronic displays



DPX³ 160 - 250



DPX³ 6e0 - 1600



New electronic features

Settings

S2 & Sg

Contact for handle position

Yes

New

Adjustable neutral

Yes

Only magnetic version

Yes

New

Thermal memory

Yes

AUX supply

Yes

Internal battery

Yes

New

Communication (remote and on field)

Yes

Measures

Yes

New

LED for diagnostic

Yes

Selectivity DIN & LOG

Yes

External neutral

Yes (DPX3 1600)

New

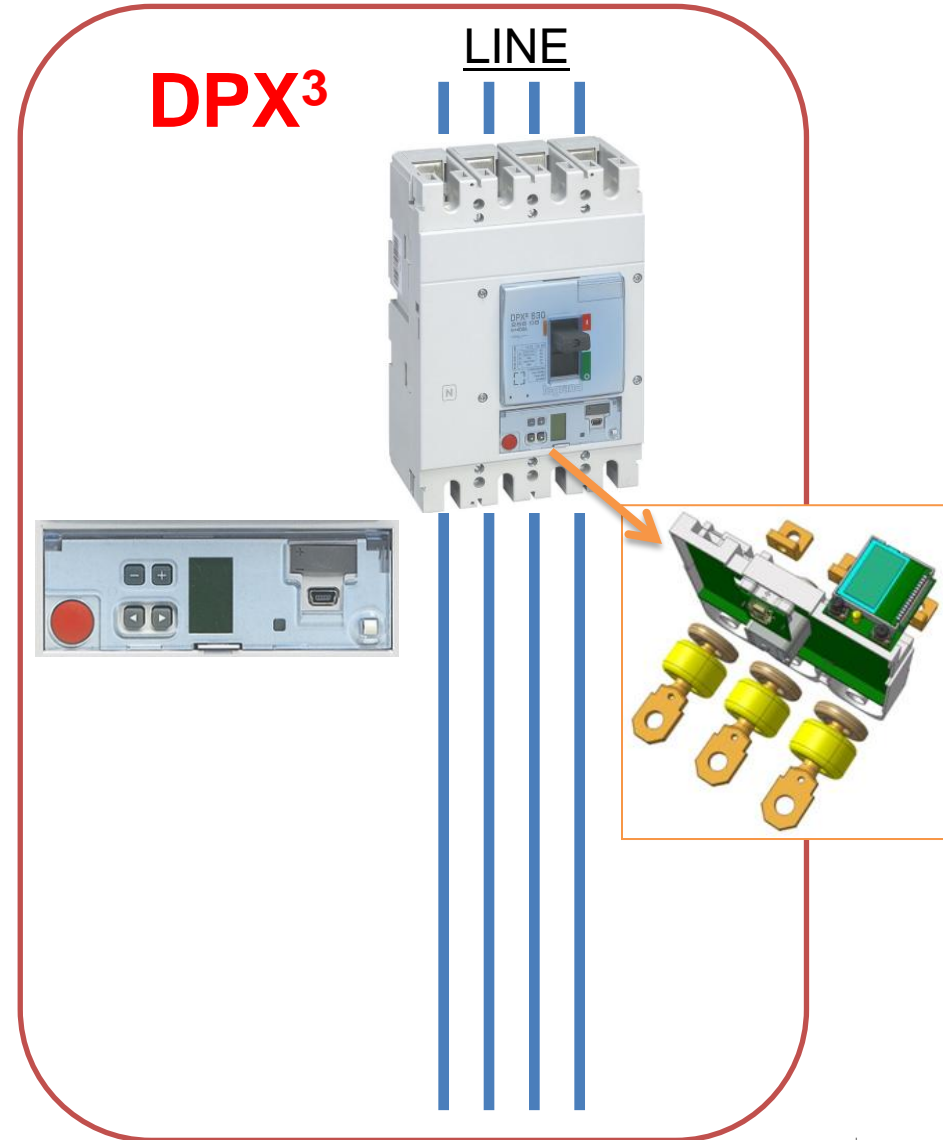
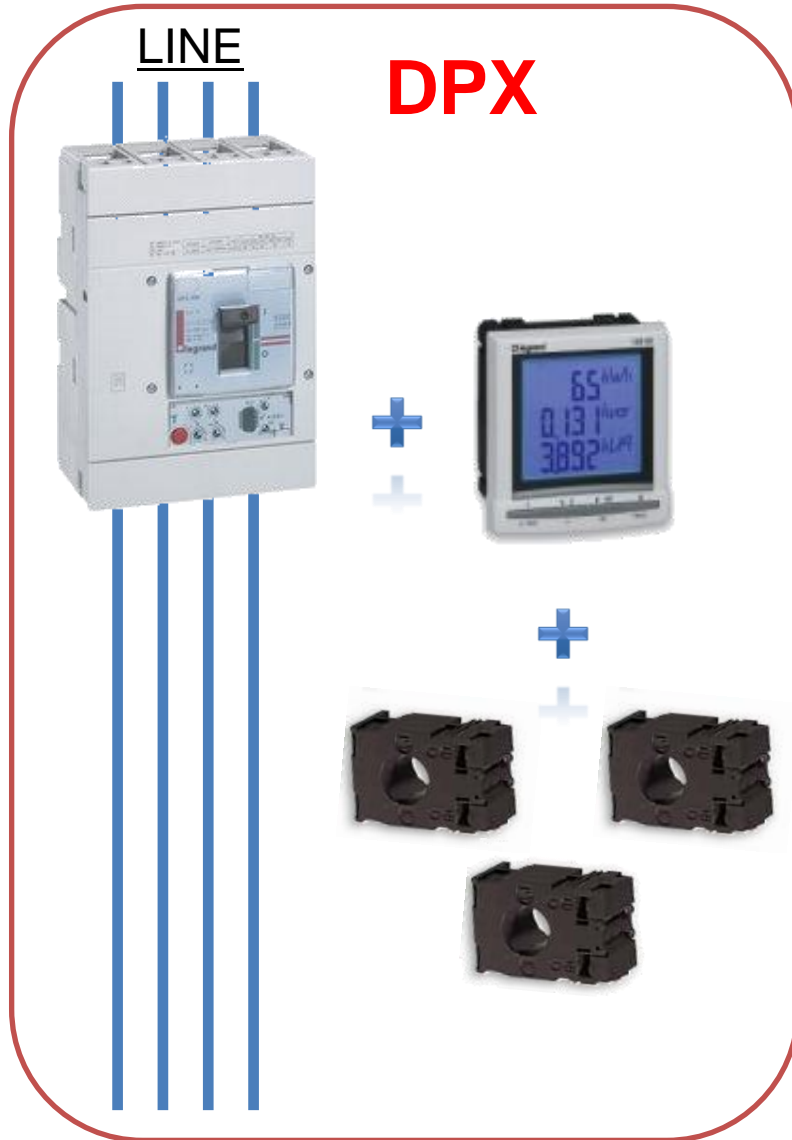
Integrated measurement

DPX³ units with integrated measurement combine an electronic circuit breaker and a high-performance measurement control unit with LCD display in a single device



Integrated measurement is available on the DMX³, DPX³ and DX³ ranges. The panel board display is an innovative solution, allowing to integrate informations coming from 8 different devices DX3-HP, DPX3, DMX3 or EMDX3.

Integrated measures



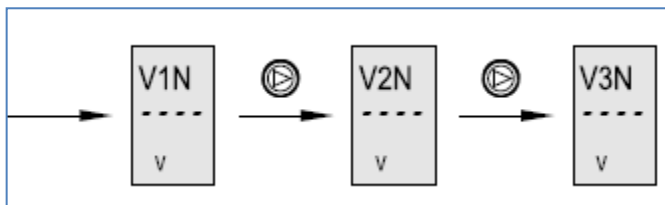
Integrated measure for all the range

Current
Voltage
Frequency
Power
Energy
THD

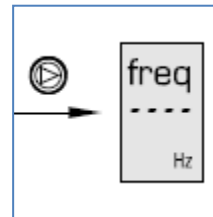


Integrated measurement is available on the DPX³ 250, 630 and 1600.

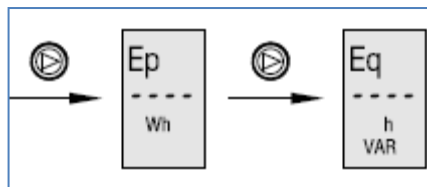
CURRENT / VOLTAGE



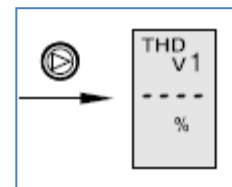
FREQUENCY



ENERGY / POWER



THD



Internal battery

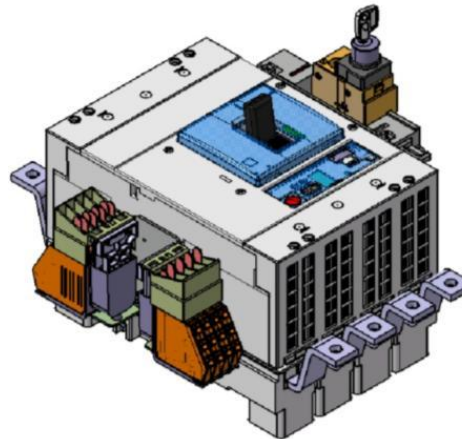
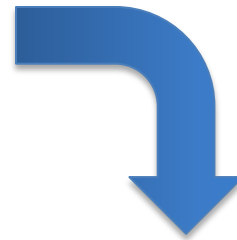


Internal battery

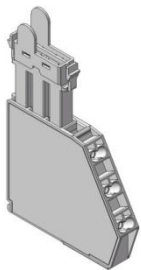
Protection unit can
be setted also in off-
line mode

Check of fault
reason also without
software on laptop

Improved new plug-in & draw-out for DPX³ 630

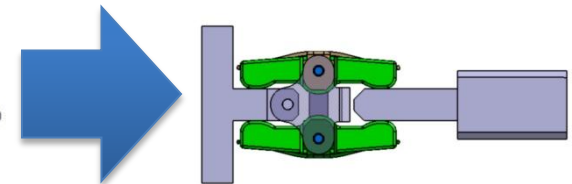


Front auxiliaries*



**Same as DMX³
Easier connection**

Improved rear connection



**Same as DPX³ 1600
Less heating**

*also for DPX³ 1600

Touch screen switchboard

Touch screen device to show measurement and status information of up to 8 devices connected through Ethernet

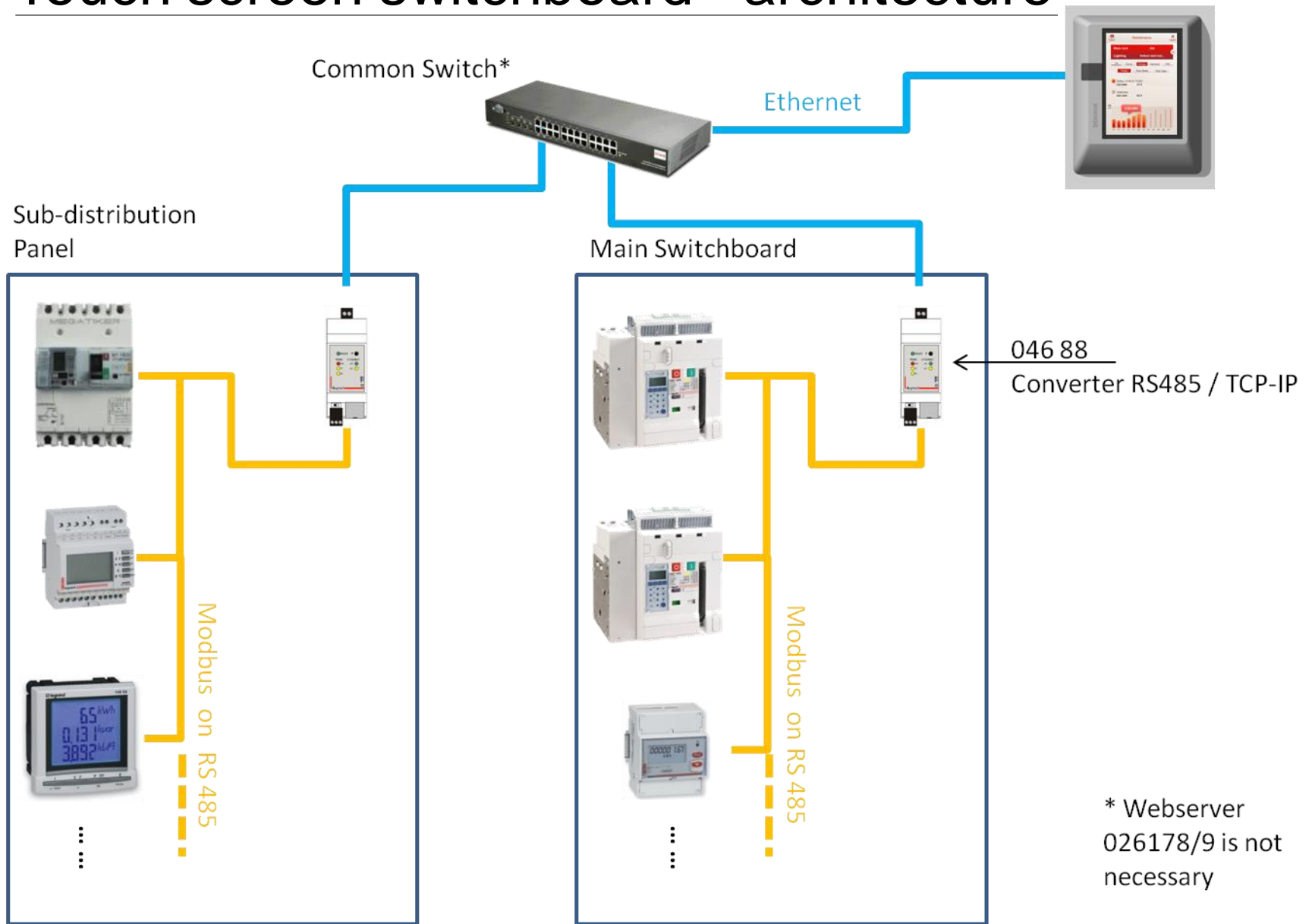
Devices able to visualize data coming from
DX³, DPX³, DMX³ or EMDX³

Retro-lighted display

Supply:
18-30V dc



Touch screen switchboard - architecture



Control equipment

Central position

Allows you to collect all information of a line Three phase (voltage phase / neutral and phase to phase, phase currents, active and reactive power, total active power, reactive power factor)

Microprocessor interface

Used to record information of a DPX³ microprocessor version S2 & Sg (identified currents Phase 1, 2 and 3, records of currents in neutral temperature)



Accessories



ELECTRICAL AUXILIARIES

- The same auxiliary or fault signal contacts for the whole range
- Shunt trips or undervoltage releases



ROTARY HANDLES AND MOTOR-DRIVEN HANDLES

- One version for both DPX³ 160 and 250
- Previous DPX versions for DPX³ 630 and 1600

Accessories



CONNECTION ACCESSORIES

- Cage terminals, extensions, spreaders, rear terminals, etc. to adapt the DPX³ to suit all wiring configurations and simplify panel builder's work

Accessories

For emergency breaking, automatic or remote control and feedback on the status of the device, all DPX³ circuit breakers can be equipped very easily with a comprehensive range of electrical auxiliaries

NUMBER OF AUXILIARIES THAT CAN BE INSTALLED PER DEVICE

	Auxiliary contacts	Fault signal contacts	Releases
DPX ³ 160	1	1	1
DPX ³ 250	1	1	1
DPX ³ 630	2	2	1
DPX ³ 1600	3	1	1

Benefits

Installer

- Comfortable cabling
- Secured connection
- Easier maintenance
- Clear range choice
- Complete range

Panel builder

- Fastest cabling
- Adjustable RCD
- Integrated RCD
- Integrated measure
- Secured connection
- Breaking capacity coverage
- Clear range choice

Specifiers/ consultant

- Electrical performance
- Electronic protection unit
- Integrated measurement
- Integrated RCD
- Selectivity
- Breaking capacity identification

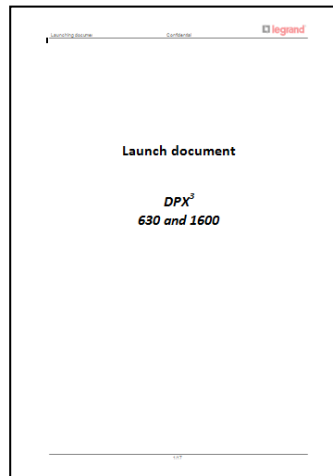
Stockist

- Common auxiliaries & accessories up to 1600A

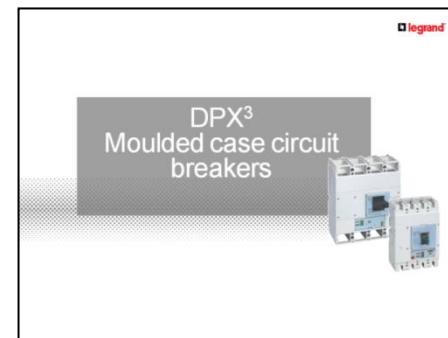
Tools & means



Catalogue



Launch document



Presentation