





#### DX<sup>3</sup> offer

















AC DC RDSO Isolators

AC A HPI AC HPI Accessories

**Measure** Power Multi power Time-Switch Digital Astro **Contactor** 



# DX<sup>3</sup> – a global offer

- Global range
- R&D in France, Italy & India
- Launched in France, Spain, Portugal, Italy, Chili, central America, Russia and CEI countries, whole Africa, Arabic countries
- Next launch in China, Brazil, Peru, Northern and Eastern Europe and the remaining Asian countries
- India 13<sup>th</sup> country to launch DX<sup>3</sup>



#### MCB

- 0.5 to 125 A
- C & D Curve
- 10,16, 25,36 & 50 KA breaking capacity
- SP, SPN, DP, TP, TPN & FP versions







#### Auxiliaries

- Auxiliary contact
- Fault signaling contact
- Undervoltage
- Shunt trip
- Power over voltage
- Motor operator

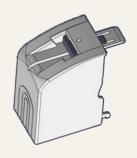


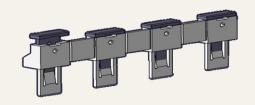




#### Accessories

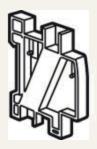
- Insulating shield
- Terminal cover
- Screw cover
- Support for padlock
- Spacing element













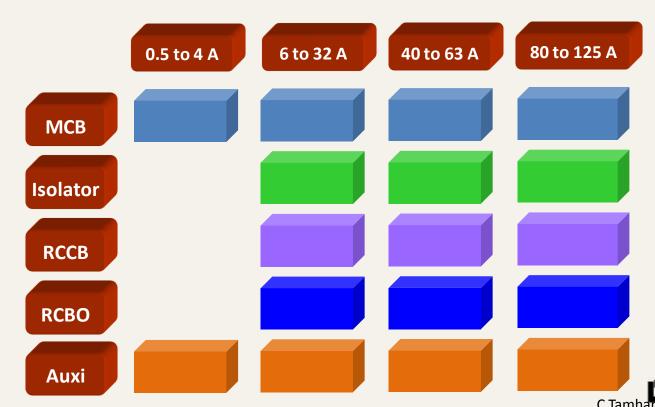






## Complete Range

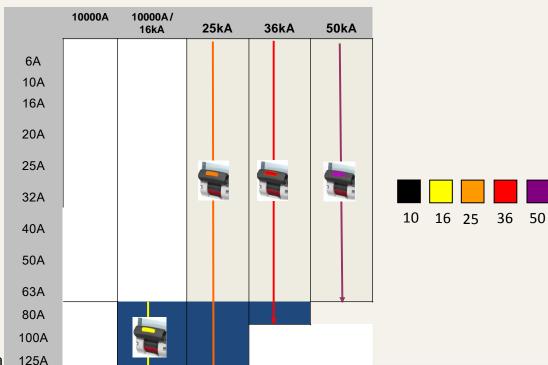
 DX<sup>3</sup> comes with complete range of devices in modular size





# Complete range

- DX³ is a complete range of MCBs from 10 KA to 50 KA
- Fulfills demand of all kind applications
- Homogeneity with Power range







## Complete system approach

- Most comprehensive range for energy distribution
- DMX<sup>3</sup>, DPX<sup>3</sup>, DPX & DX<sup>3</sup> makes a perfect system







# Innovative bottom clamp

Unique

- Specific clamp at bottom side
- Easy fixation and removal
- Easy removal from the bank with fork busbar connection

# Bottom clamp: Easy removal from the DIN rail



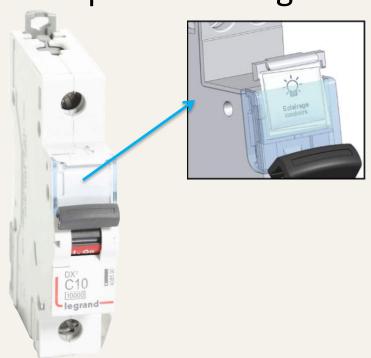




## Innovative label holder



- Improved opening & closing system
- Enhanced dust protection
- Label remains in place for longer time

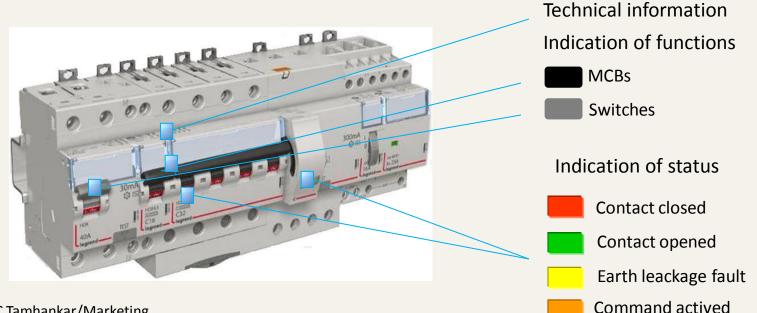






#### Easy diagnostic

- Easy identification of status of the product
- Easy identification of the faulty circuit
- Easy understanding of the standards



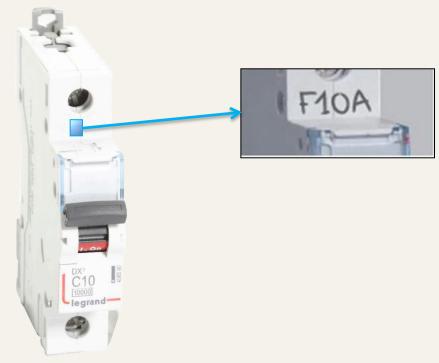




## Technical marking area



- Area defined for the markings
- Additional area than label holder

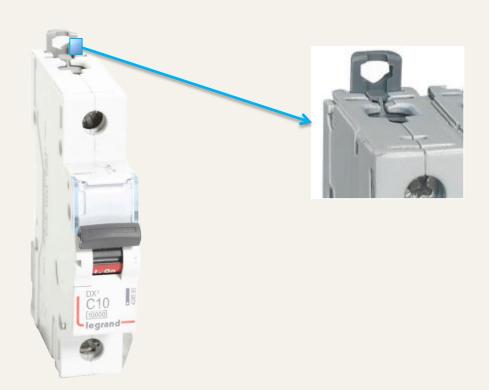






# Better top clamp

- Improved top clamp
- Easy accessibility with screw driver
- Longer life

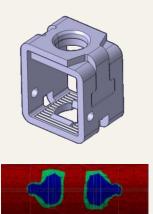


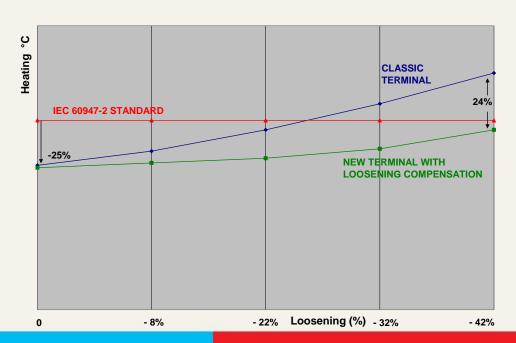




#### Improved terminal design

- Maintains high contact pressure
- Less heating at terminals
- Increased contact pressure on cable
- Heating values well below the standard









#### Cable termination

- In≤ 63 A 35 sqmm
- In≥ 80 A 50 sq mm
- In 1.5 module products
- In≤ 63 A 50 sqmm
- In≥ 80 A 70 sq mm
- Better connections
- Less terminal problems





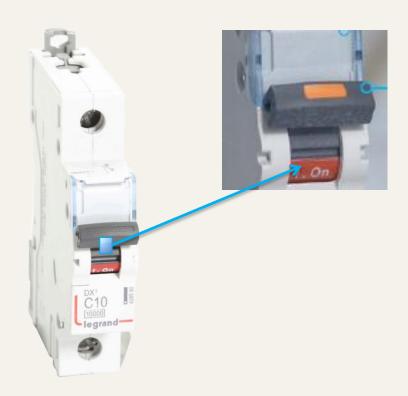
1 MODULE/POLE Terminal capacity: In  $\leq$  63 A  $\rightarrow$  35 mm<sup>2</sup> 1,5 MODULES/POLE Terminal capacity: In  $\leq$  63 A  $\rightarrow$  50 mm<sup>2</sup> In  $\geq$  80 A  $\rightarrow$  70 mm<sup>2</sup>





# **Contact Indication**

- Contact indication status with Green & Red color
- Green OFF
- Red ON

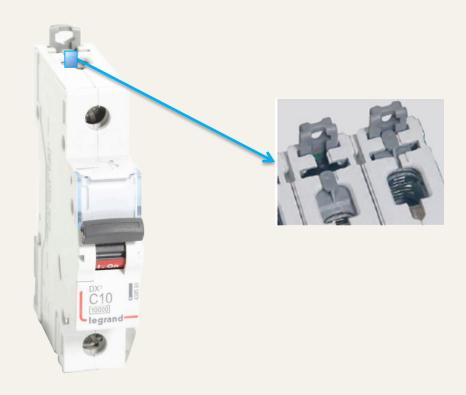






# Terminal shutter

- Terminal shutters for additional safety
- Ensures wire in right position

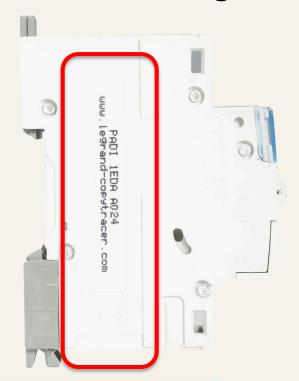






# Improved air channels

- Improved air-flow pattern
- Less internal heating
- Less temperature derating











Unique number on each product

number

The number can be checked on the website:

www.legrand-copytracer.com

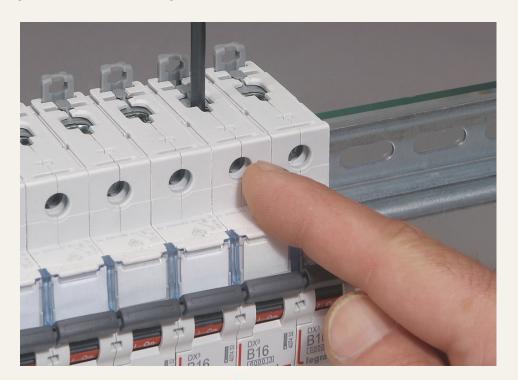






# IP20 terminals

- Finger proof terminals
- No contact with live parts
- Completely safe to operate







# **Environment friendly**

- High percentage of recyclable and recoverable components
- Decrease in packaging weight
- RoHS compliant
- EcoDesign
- PEP datasheet available for all product families





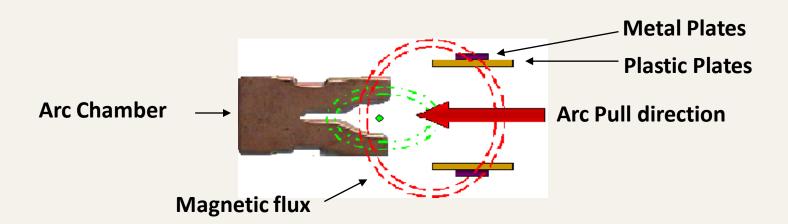




#### Arc chamber



- Quick & Efficient Arc Quenching
- Very low let through energy
- Increases life of Installation







#### Arc blower



#### Arc Blower (Arc diverter)

- After contact separates, arc shifts from moving contact to arc runner
- Thus the bimetal and the moving contact are bypassed & protected
- Thus uniform thermal characteristics during entire life of product







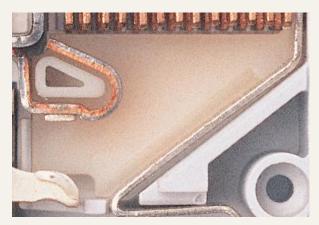


## Gas chamber



#### Gas Chamber

- Gas chamber offers high dielectric resistance to arc & forcibly carries arc to arc chamber
- Fast breaking of the fault current and hence reduces the breaking time



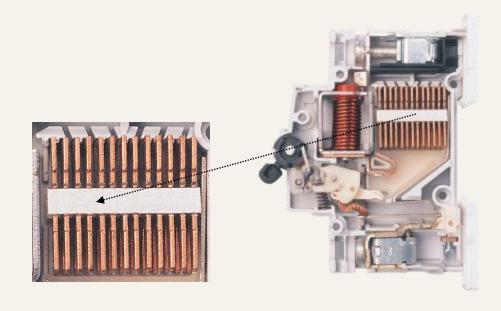




## Arc chamber

#### 13 Plates Arc Chamber

- Arc chute helps extinguishing the arc in minimum time
- Thus achieve low let through energy







#### Hammer trip



#### Hammer Trip

- Moving contact is forcibly separated from the fixed contact by a hammer
- Contact separation is by push action. Push action is more speedy & forceful
- The effectiveness of this hammer trip remains same up to the last shot of short circuit sequence
- Less tripping time so minimum let through energy





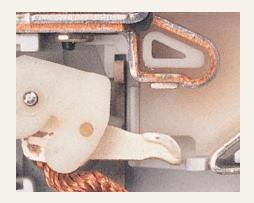


## Contact separation



#### 50 % increase in contact separation

- In normal ON/OFF operation current separation is 6 mm
- In case of thermal & magnetic tripping the contacts get separated by 9
   mm
- Thus preventing the arc to restrike & also ensures effective arc quenching
- No chance of Arc restriking





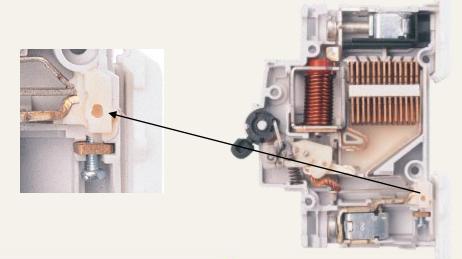


## Calibration screw



#### Sealing of calibration screw

- After calibration the cavity inside is filled with special moulding compound
- It acts as sealant to calibration nut and also forms the solid support to the bimetal
- Ensures bimetal to have very rigid & firm position through out its life resulting in to consistent thermal behavior of MCB

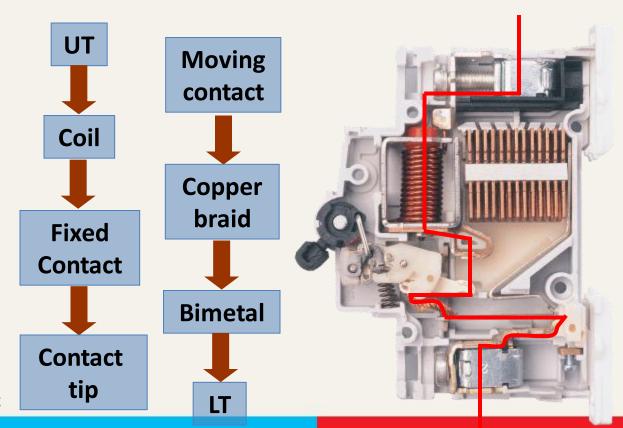






#### Current path

- In the entire range of MCB, the current path is always in series
- Higher consistency in thermal characteristic
- Less let through energy during short circuit

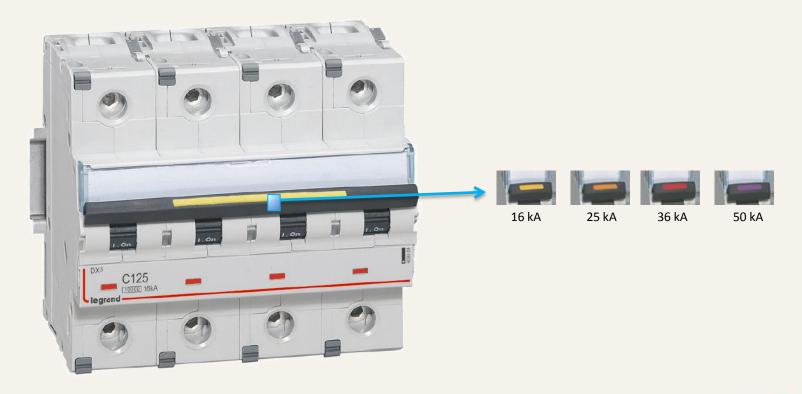






# Breaking capacity indicator

Breaking capacity flag on dolly







## Padlocking



- Simple padlocking concept on site with help of cable ties
- No need to buy special accessory
- Easy and safe maintenance







# Contact indication

- Front face indication on high rated products
- Easy understanding of the status of the product







# Insulated shields



- Integrated insulation shields for better safety
- No additional accessories required
- Complete isolation of phases







# Reliable connections



- New terminal designed to reduce the heating
- Loosening compensator is provided on the terminals
- Better grip with the cable
- Temperature rise of -20%







# Electrical performance

- Improved selectivity and co-ordination with upstream power products
- Better service continuity
- High back up values

	Upstream mcb : DX <sup>3</sup> 25kA, 36kA, 50kA - ( curve C )								
Downstream mcb : DX ≤10000A	20A	25A	32A	40A	50A	63A	80A	100A	125A
≤4A	150A	187A	1200A	1500A	2000A	Т	Т	T	Т
≤6A	150A	187A	700A	1200A	1500A	3000A	4000 A	Т	Т
10A	150A	187A	500A	700A	1000A	1800A	3000 A	5000A	Т
16A	150A	187A	300A	500A	700A	1300A	2000 A	3600A	5500A
20A		187A	300A	400A	500A	1000A	1600 A	3000A	4000A
25A			240A	400A	500A	800A	1300 A	2400A	3300A
32A				300A	500A	600A	1000 A	1800A	2700A
40A					400A	600A	800A	1600A	2400A
50A					•	500A	800A	900A	1700A
63A							650A	900A	1200A





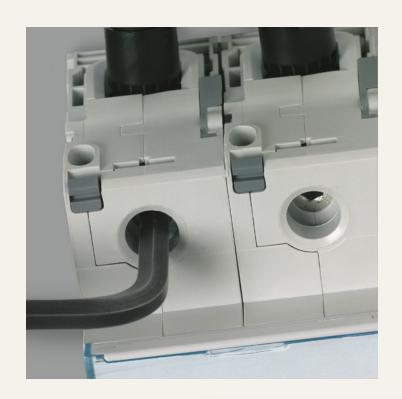
- Double break mechanism to break high current circuits
- Better performance
- Better life of terminals





# Rising clamp terminals

- High quality connections
- Durable connections







#### Auxiliaries

- Complete range of auxiliaries for all application
- Most comprehensive range



CA - Auxiliary signaling contact

SD - Fault signaling contact

ET - Shunt trip

UT - Undervoltage

POP - Overvoltage

MT - Motor operator





### Auxiliary - fitment



- Tool-less fitment of auxiliaries
- Makes complete assembly robust
- Easy accessibility of the terminals
- Makes installer's work easier









# Auxiliary operating range

- Operating range
  - Auxiliaries can be used for AC as well as DC applications

Un in AC	5 V to 60 V	110 to 230 V	400 V
Imax	10 A	6 A	3 A

Un in DC	12 to 24 V	48 to 60 V	110 to 230 V
Imax	4 A	1 A	0.5 A



## Auxiliary

- POP
  - Power Overvoltage Protection

	255 V	275 V	300 V	350 V	400 V
Breaking time	No tripping	15 Sec	5 Sec	0.75 Sec	0.2 Sec
Non actuation time		3 Sec	1 Sec	0.25 Sec	0.07 Sec





#### Indication

- Color code indicators on the control auxiliaries
- Test button on front for fault signaling contact
- Allows testing of signaling functions







# Motor operator



- Single module size
- Most compact motor operator for modular devices

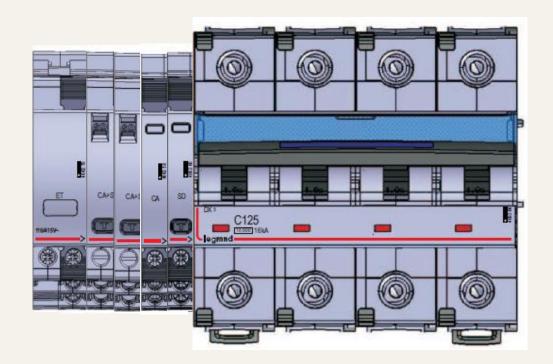






# Freedom of configuration

- 3 auxiliaries can be connected to each device
- Better control of circuits





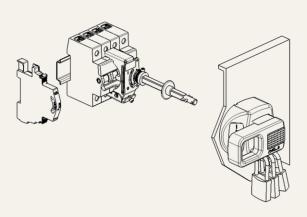


#### Accessories

#### Rotary handle

- To be enable to control (open or close) the associated modular device without opening the enclosure
- Markets: commercial, industrial, hospital
- The rotary handle maintains the good IP level of the enclosure.
- Compatible with all the Legrand modular references started from 2 pole: all ranges and all devices (MCBs, RCCBs, RCBOs, Isolating switches in 1 or 1.5 module up to 125A)







#### Accessories

Small padlock (cat no 4063 13): Ø5 mm padlock



Support for one padlock (cat no 4063 03):
 for large or small padlock. Enable to lock modular MCBs,
 RCBOs, RCCBs and Isolator Switches in OFF position.

