

MPX³ CTX³ RTX³

UNCOMPROMISING
PERFORMANCE
FOR MOTOR
PROTECTION
AND CONTROL



→ CATALOGUE
PAGES
INSIDE

THE GLOBAL SPECIALIST
IN ELECTRICAL AND DIGITAL BUILDING INFRASTRUCTURES

 **legrand**[®]



MPX³ CTX³ RTX³ A SENSE OF FAMILY

There are requirements for control and protection of motors in all sectors: heating, ventilation and air conditioning in commercial buildings; pumps, compressors, conveyors and machines in industrial buildings, etc. Legrand's new motor circuit breakers, contactors and thermal relays provide a response for all these applications. Their high performance levels, perfect complementarity, compact size, ease of mounting, wide range of auxiliaries, etc. make them suitable for installation in all distribution boards and control enclosures.



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A COMPLETE RANGE OF DEVICES FOR THE PROTECTION AND CONTROL OF MOTORS



MPX³ MOTOR PROTECTION CIRCUIT BREAKERS UP TO 100 A

- High breaking capacity and type 2 coordination for an optimum service level
- Trip class 10
- Sensitive to phase loss
- Compact
- Can be fixed on 35 mm DIN rail or using screws
- Easy combination with CTX³ 3-pole contactors
- Complete range of control and signalling auxiliaries and accessories

STANDARD
BREAKING
CAPACITY

HIGH BREAKING CAPACITY

MAGNETIC ONLY



MPX³ 32S
0.16 A - 100 kA
to 32 A - 15 kA



MPX³ 32H
0.16 A - 100 kA
to 32 A - 50 kA



MPX³ 63H
10 A - 100 kA
to 63 A - 50 kA



MPX³ 100H
17 A - 100 kA
to 100 A - 75 kA



MPX³ 32MA
0.16 A - 100 kA
to 32 A - 50 kA



CTX³ CONTACTORS AND RTX³ THERMAL RELAYS UP TO 800 A

- Compact
- High mechanical and electrical endurance for maximum reliability
- 3-pole and 4-pole contactors
- Screw terminals or cage terminals
- Complete range of auxiliaries and accessories
- Standard and residual current version thermal relays

3-POLE CTX³ CONTACTORS

4-POLE CTX³ CONTACTORS



RTX³ thermal relays



MPX³: MAXIMUM EFFICIENCY IN A COMPACT UNIT

With just 4 sizes of unit, the MPX³ range of circuit breakers offers uncompromising performance levels and functions for the protection of motors up to 100 A.



1 IP 2X terminals




MPX³ 32 screw



MPX³ 63/100 cage

2 Front and side mounting of auxiliary contacts

3 Mount on  rail

4 Wide current adjustment range

5 Settings protected by a sealable transparent cover (optional)



6 Test function

7 Handle can be padlocked in OFF position



8 Label-holder



Certification

- EC declaration of conformity
- UL listed
- EAC
- CCC



IEC 60947, UL 508

UL 508 Type E, K 60947, GB 14048

A COMPLETE RANGE UP TO 100 A IN 4 SIZES



> 45 mm <
MPX³ 32S



> 45 mm <
MPX³ 32H/MA



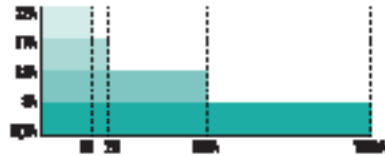
> 55 mm <
MPX³ 63H



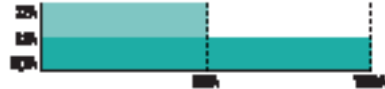
> 70 mm <
MPX³ 100H

BREAKING CAPACITIES ICU AT 415 V~

MPX³ 32S



MPX³ 32H/MA



MPX³ 63H



MPX³ 100H



PERFECT COMPLEMENTARITY WITH CTX³ CONTACTORS



Using the dedicated accessories, MPX³ motor circuit breakers and CTX³ contactors can be joined together directly to create compact motor starters.

AUXILIARIES AND ACCESSORIES PROVIDING FLEXIBILITY

Whatever the specifications of your installation, you will always find a solution from the wide range of dedicated auxiliaries and accessories for MPX³ circuit breakers.



ELECTRICAL AUXILIARIES COMMON TO ALL SIZES OF MPX³

- ① Front-mounting auxiliary contacts



- ② Side-mounting auxiliary contacts and fault signal contacts

- ③ Side-mounting shunt trips and undervoltage releases



Possible combinations of auxiliaries

AUXILIARIES			MPX ³ 32S		MPX ³ 32H/MA		MPX ³ 63H		MPX ³ 100H		
AUXILIARY CONTACTS	FRONT-MOUNTING	MAX. NO.	0	1 or	0	1 or	0	1 or	1	0 or	1
	SIDE-MOUNTING	MAX. NO.	2	1	2	1	2	1	0	2	1
FAULT SIGNAL CONTACT		MAX. NO.	0	1	0	1	0	1 ⁽¹⁾	1 ⁽²⁾	0	1 ⁽²⁾
SHUNT TRIP OR UNDERVOLTAGE RELEASE		MAX. NO.	1	1	1	1	1	1	1	1	1

⁽¹⁾: Cat. No. 4 174 07 - ⁽²⁾: Cat. No. 4 174 08

A COMPLETE RANGE OF DEDICATED ACCESSORIES FOR EASIER INSTALLATION

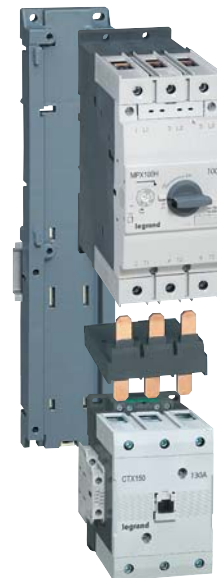
Supply busbars and terminals for connecting the circuit breakers in parallel.



Remote rotary control for mounting on door and IP65 unit with black or yellow and red rotary handle.



Plates and connectors for creating motor starters.



CTX³: CONTROL OF CIRCUITS UP TO 800⁽¹⁾ A

With a comprehensive selection of ratings, control voltages, auxiliaries and accessories, and total complementarity with MPX³ circuit breakers and RTX³ thermal relays, CTX³ power contactors provide an ideal solution for motor switching and controlling circuits for the most demanding applications.

⁽¹⁾ 900 A for 4P contactors

CTX³ 225/400/800: MOUNTING ON PLATE UP TO 800 A

- 1 Connection plates for bars or lugs
- 2 Pre-mounted auxiliary contact blocks (2 per contactor). Additional auxiliary contact blocks can be mounted on the right or left of the contactors.





The 4-pole version of CTX³ contactors is available from 20 to 900 A (AC-1).

CTX³ 22/40/65/100/150: MOUNTING ON DIN RAIL OR ON PLATE UP TO 150 A

- 3 IP 2X terminals: screw terminals up to 40 A, screw or cage terminals from 50 to 150 A
- 4 Integrated auxiliary contacts
- 5 A1 and A2 supply terminal block (top and bottom)



Common time-delay modules and auxiliary contact blocks for all CTX³ up to 150 A.



CTX³ contactors can be fitted with a safety cover.



CTX³ MINI: AN ULTRA-COMPACT SOLUTION UP TO 16 A

With their compact size, CTX³ MINI are easy to integrate in control panels or distribution boards for switching motors, lighting and heating circuits up to 16 A.



CTX³ MINI: MOUNTING ON DIN RAIL OR ON PLATE

- ① IP 2X screw terminals
- ② Integrated auxiliary contact (3P only)
- ③ A1 and A2 supply terminal block



The flexible wire kits allow to associate freely two CTX³ mini 3-pole contactors and make very compact assemblies for motor reversing. For motors up to 7.5 kW 415 V.

AUXILIARIES AND ACCESSORIES FOR EVEN MORE APPLICATIONS

CTX³ mini contactors can take front and side-mounting additional auxiliary contact blocks and a mechanical interlock module.



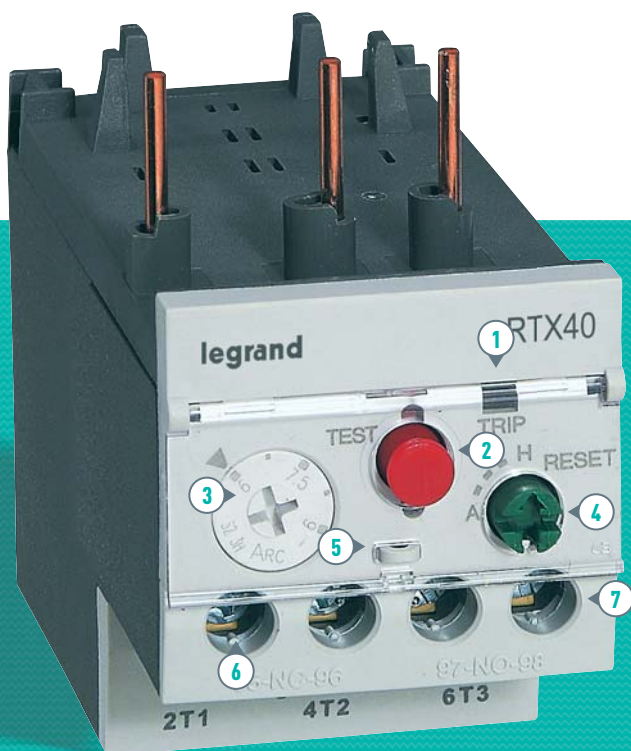
CTX³ control relays take the same auxiliaries as the CTX³ mini.



Plate and connector for joining a CTX³ mini and an MPX³ 32 motor circuit breaker together directly to create a compact motor starter.

RTX³: THERMAL PROTECTION OF MOTORS

RTX³ thermal relays provide protection against overloads, long starting times and prolonged stalling of the motor. The differential technology provides increased protection in the event of the failure of one phase. They are very easy to install, connecting directly beneath CTX³ contactors.



- 1 Trip indicator
- 2 Off/test button
- 3 Adjustment of the trip threshold of the thermal protection
- 4 Reset button and mode selector switch: automatic (A)/manual (H)
- 5 Sealable protective cover
- 6 Integrated auxiliary contacts (1 NO + 1 NC)
- 7 IP20 terminals



COMPACT MOTOR STARTERS



Mounting directly beneath contactors or separately (up 150 A) with the dedicated accessory.

A COMPLETE RANGE

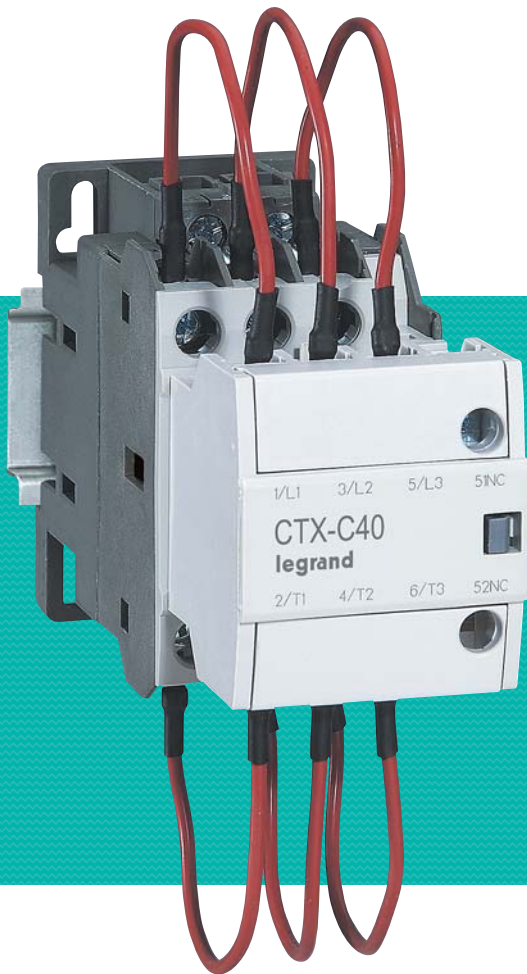


RTX³ thermal relays can be used to create 0.1 A to 800 A motor starters when combined with contactors, from the CTX³ mini to the CTX³ 800.

ACCESSORIES FOR ALL APPLICATIONS

With the wide range of accessories, CTX³ contactors can be used in a wide variety of applications:

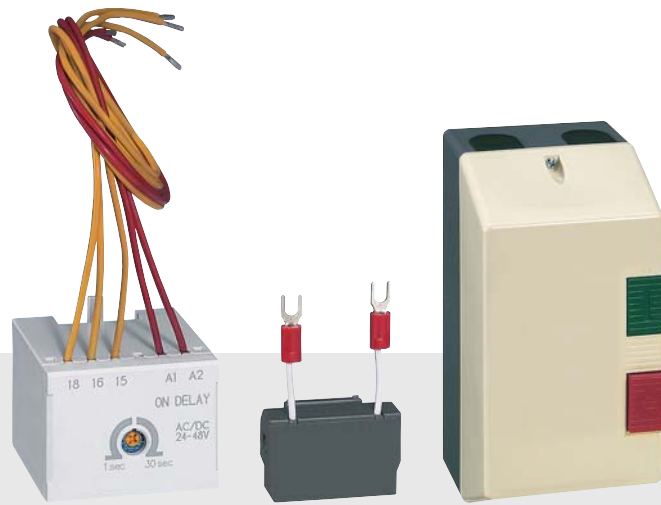
- Switching capacitor banks
- Supply inverter
- Reversing contactor
- Time-delay motor starter
- Control unit on machine, etc.



FRONT-MOUNTING BLOCK FOR SWITCHING CAPACITORS

Auxiliary blocks for switching capacitors are installed directly on CTX³ 3-pole, 9 to 100 A contactors. With their discharge resistors, they reduce current peaks during switching of capacitor banks.



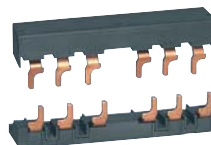


Time-delay modules, interference suppression module, motor starter units, etc., a complete range of accessories for all requirements.

MECHANICAL AND ELECTRICAL INTERLOCKING FOR 3 AND 4-POLE CONTACTORS



The mechanical interlock devices, with or without electrical interlocking, can be used to create 9 to 800 A inverters for 3P contactors, and 20 to 900 A inverters for 3P contactors.



The connection kits make it very easy to create reversing contactors up to 100 A.



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