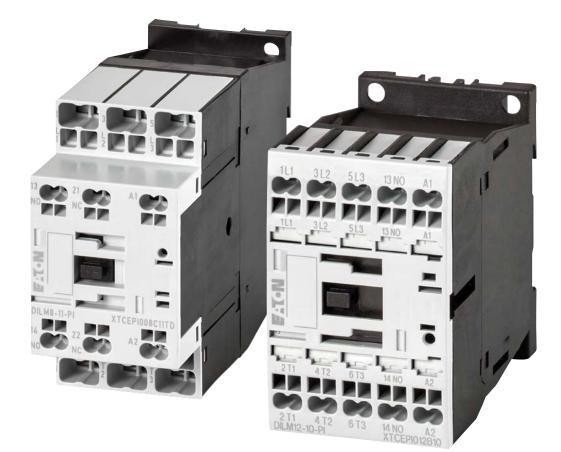
## Win-win with push-in: **XT motor control**







B frame contactor and contactor relays

C frame contactors

B frame manual motor protectors

# XT motor control, the win-win effect

Faster, more cost-effective and reliable at the same time

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Eaton's XT motor control now offers push-in technology. This new tool-free connection technology makes wiring even faster, safer, more efficient and reliable. The XT motor control solution with push-in technology offers maximum reliability, can be used anywhere in the world, and integrates seamlessly into existing control panel designs.

#### No screws needed-just one click

The push-in terminals enable safe and easy control-panel wiring with just one click with ferrule. Or if you're not using ferrule wires, it's still quick and easy to connect without using the screw. With our modular system and wide range of accessories, you'll always find the right solution for your application.

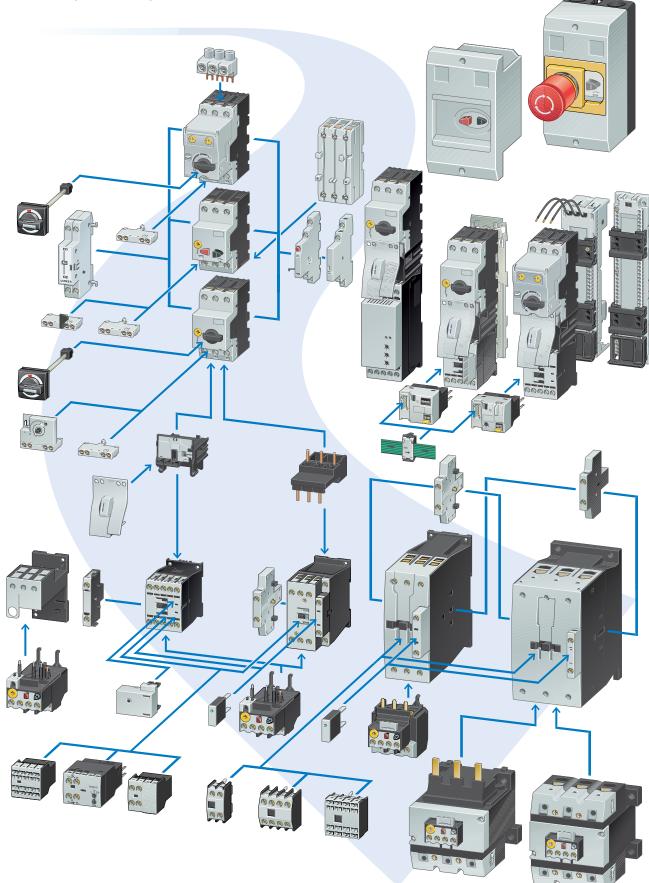
Because of their compact, space-saving size, these devices can be easily integrated into existing control cabinet designs.

#### Future-proof your control panel the simple way

Technicians and purchasers alike benefit from Eaton's push-in range of devices. Eaton's tried and tested *XT* motor control and state-of-the-art push-in technology makes wiring more efficient and reliable. You too can benefit from this win-win effect by future-proofing your control panel the simple way.

### XT motor control overview

The current system that you know and trust.



## System expansion with push-in technology

Simplify and optimize the installation and design of your machines and systems by using Eaton's tool-free push-in technology, which is suitable for use without restrictions anywhere in the world.

With the simplified wiring process, establishing the connection is up to 50% faster (compared to screw terminals), thereby increasing the competitiveness of your products.

**Note:** Secure connections can still be made without a ferrule by simply using a screwdriver to help the wire slide into place.



#### Faster commissioning

- Tool-free and simplified installation
- Time savings of 50% compared to screw terminals

#### Improved machines and systems

- High level of vibration and shock resistance, i.e., no need to retighten the cable connections after transport; immediately ready for use
- Maintenance-free over the entire service life



#### A future-proof wiring system

- Using the next generation of cage clamp terminals
- Can be automatically installed by robots and robotic technology



#### **Easy integration**

- No need to adapt the control panel design
- Screw/push-in combination device for use with a three-phase bus bar link

## XT contactors



The XT contactors are powerful, efficient and versatile and can be combined with Eaton's entire product range. The XT contactors are suitable for global use and cover the entire output range, from mini contactor relays (up to 7 A) to vacuum contactors (up to 3180 A).

Eaton has extended the rated current of the contactors with push-in connection technology to 38 A (AC-3).

Through the expansion of our product range and the use of the new push-in technology, we've made wiring even easier, faster, safer and more reliable.

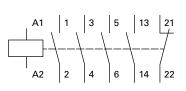
#### Protecting and switching IE3 motors

The latest update of the Energy-related Products (ErP) Directive requires increasingly energy-efficient electric motors, with important implications for their design and protection systems. Eaton's contactors, motor-protective circuit breakers and motor-starter combinations meet the challenges associated with protecting and switching IE3 motors.

#### More features, same frame width

The base unit of the contactors with screw technology from our XT family previously contained either an NC or NO auxiliary contact. The contactors with push-in technology are now equipped with two auxiliary contacts (1NC contact and 1NO contact) as standard. The footprint, however, remains the same.







#### Existing accessories can simply be re-used

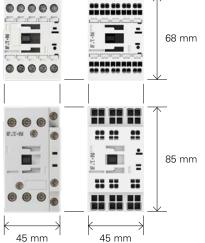
The existing XT accessories can be easily connected to the new, screw-free devices.





#### New contactor, same dimensions

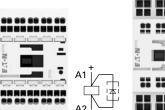
The new XT contactors with push-in technology have the same footprint as the contactors with conventional screw terminals and can therefore easily be installed in existing systems. This also simplifies the planning of new systems, as the dimensions are identical.





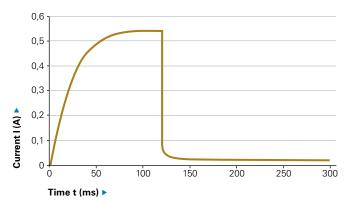
#### Energy savings made easy with the integrated suppressor circuit

The suppressor circuit is already integrated in every DC-operated contactor from Eaton. The contactors can be controlled directly from a PLC.





DC / PLC controlled Integrated suppressor circuit



## XT manual motor protectors

Eaton's fuseless motor-protective circuit breakers combine short-circuit and overload protection in a single device. With integrated electronic wide-range protection, the XTPE is able to cover the current range from 0.3 A to 32 A with only four types, which saves storage space and simplifies project planning. The 13 different models of the electromechanical XTPR cover the current range from 0.1 A to 32 A.

The motor-protective circuit breakers are fully compatible with Eaton's XT contactor series and are ideally suited for use in motor-starter combinations. All accessories, including the integrated auxiliary contact switches, trip indicators, voltage releases and door coupling rotary handles, can be used.



#### Suitable for motor-starter combinations

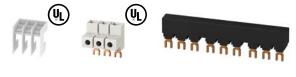
- Wiring kits for motor starters up to 32 A
- Mechanical connecting element
- Pre-assembled connecting cables

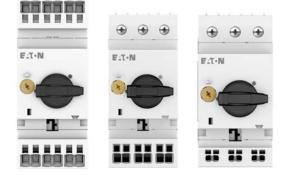




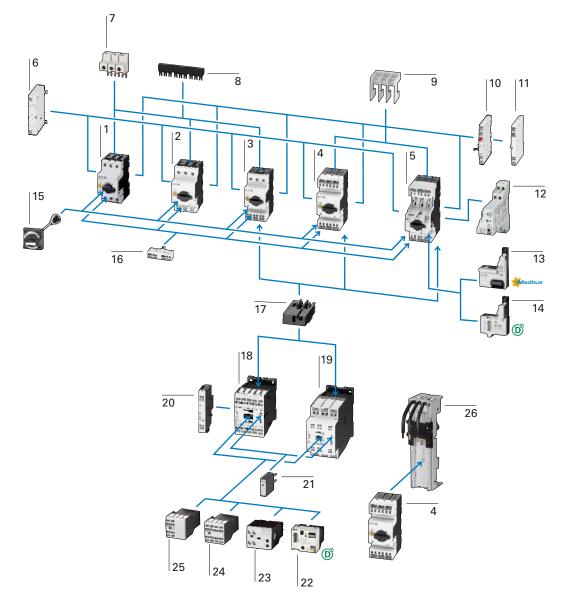
## Integration into existing control panel designs for global export—Eaton makes it possible

Eaton's push-in range boasts a winning combination model that integrates both screw and push-in connection in a single device. This means that the new devices can also be easily incorporated into existing control panel designs.





### System overview



- 1. XTPR motor-protective circuit breaker up to 32 A—screw terminal
- 2. XTPR motor-protective circuit breaker up to 16 A screw/push-in terminal
- 3. XTPR motor-protective circuit breaker up to 32 A screw/push-in terminal
- XTPR motor-protective circuit breaker up to 32 A push-in terminal
- 5. XTPE motor-protective circuit breaker / circuit breaker up to 32 A—push-in terminal
- 6. Undervoltage / shunt release—push-in terminal
- 7. IEC/UL® power supply terminal for three-phase bus bar link—screw terminal
- 8. Three-phase bus bar link—screw terminal
- XTPR...-PI phase isolator / UL Type E and Type F applications
- 10. Trip indicator for overload and short circuit push-in terminal
- 11. Side-mounting auxiliary contact—push-in terminal
- 12. Overload relay module-screw terminal

- 13. Modbus® RTU networking module for XTPE
- 14. SmartWire-DT® networking module for XTPE
- 15. Door-coupling rotary handle
- 16. Front-mounting auxiliary contact—push-in terminal
- 17. Mechanical connection module for motor starters
- XTRE contactor relay / XTCE contactors up to 7.5 kW push-in terminal
- 19. XTCE contactor up to 18.5 kW—push-in terminal
- 20. Side-mounting auxiliary contact—push-in terminal
- 21. Coil protection circuits
- 22. SmartWire-DT networking module
- 23. Electronic timer module—screw terminal
- 24. Front-mounting auxiliary contact, four-pole push-in terminal
- 25. Front-mounting auxiliary contact, two-pole push-in terminal
- 26. Adapter for motor-protective circuit breakers/ motor starters



At Eaton, we believe that power is a fundamental part of just about everything people do. Technology, transportation, energy and infrastructure—these are things the world relies on every day. That's why Eaton is dedicated to helping our customers find new ways to manage electrical, hydraulic and mechanical power more efficiently, safely and sustainably. To improve people's lives, the communities where we live and work, and the planet our future generations depend upon. Because that's what really matters. And we're here to make sure it works.

See more at Eaton.com/whatmatters

## For more information, visit **Eaton.com/XTpushin**

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