

# update

- C10 MINIATURE INDUSTRIAL RELAY
- SOLID-STATE CONTACTOR
- SOFT STARTER

2014 | EDITION 1

## EDITORIAL

Would you wear jeans to the opera?

Nothing wrong with that in most cases, but not necessarily the best choice in every situation. Similar applies when it comes to choosing the right relay contact. Depending on the application, a contact has to meet a host of different requirements. Just like the orchestra at the opera, which consists of master musicians, each type of contact has its own strengths.

In this update issue, we are using series C10 for showcasing some types of contacts and their special features, so that you can count on top reliability, durability and quality for your application and not just have to make do with any relay. We will be pleased to offer you our expert advice when evaluating and sizing the right relay for your application.

You won't have to concern yourself much when it comes to our versatile MR series monitoring devices – they meet almost all requirements thanks to their numerous functions and practical graphic display.

We also aim to provide you with a suitable solution for all practical applications among our other products. We therefore strive to con-

tinuously improve and expand our product range. With this in mind, we are pleased to present to you our updated range of solid-state contactors and soft starters.

Are you looking for specific information on one of our products? Or are you searching for a certain product for your application? We look forward to advising you and helping you with your design and choice of product. You can write to us at [support@comat.ch](mailto:support@comat.ch) or phone us on +41 (0)31 838 55 10.

We hope you enjoy looking through this brochure.

Best regards



Sven Vogel  
Key Account Manager



**Technical support:** +41 (0)31 838 55 10 or [support@comat.ch](mailto:support@comat.ch)



**COMAT AG** | Bernstrasse 4 | CH-3076 Worb | Switzerland  
Phone +41 (0)31 838 55 77 | Fax +41 (0)31 838 55 99  
[info@comat.ch](mailto:info@comat.ch) | [www.comat.ch](http://www.comat.ch) | [www.releco.com](http://www.releco.com)

# C10

## THE RIGHT CONTACT FOR EVERY APPLICATION – THE C10 MINIATURE INDUSTRIAL RELAY

Series C10 miniature industrial relays comes with many different types of contacts. The C10 thus covers all areas of application: from signal switching to heavy loads. To ensure top reliability and durability, the right type of contact has to be selected for each application.

The pluggable series C10 miniature industrial relays are compact coupling relays with a changeover contact. Combined with socket S10, the relay has an installation width of just 15.6 mm. The special features of the C10 include the different types of contacts and the numerous coil voltages and wiring.

The relay can be manually operated and locked with the mechanical switch – a valuable feature during startup and troubleshooting.

The contact is at the heart of the relay. Its geometry and contact material are the deciding factors when selecting it for each corresponding application.

### C10-A10: COUPLING RELAY

The C10-A10 is suitable for all low power applications up to 10 A / 250 VAC and 10 A / 30 VDC for **ohmic loads**. The nominal values for low inductive loads such as **magnet valves** or **contactors** are 2 A / 250 VAC. This makes it perfect as a **coupling relay** for the protection of PLC outputs.

### C10-A15: HIGH POWER RELAY

The C10-A15 is used for all applications within the power range. It features a silver zinc oxide contact (AgSnO<sub>2</sub>) and can be used for switching loads with **increased starting currents** up to 120 A for 20 ms, such as ballast used in lighting technology and halogen lamps. The C10-A15 is the right choice for inductive loads like **large contactors**, **magnet valves** and **small motors** up to 6 A / 250 V.

### C10-T11: FOR CONTROL SIGNALS

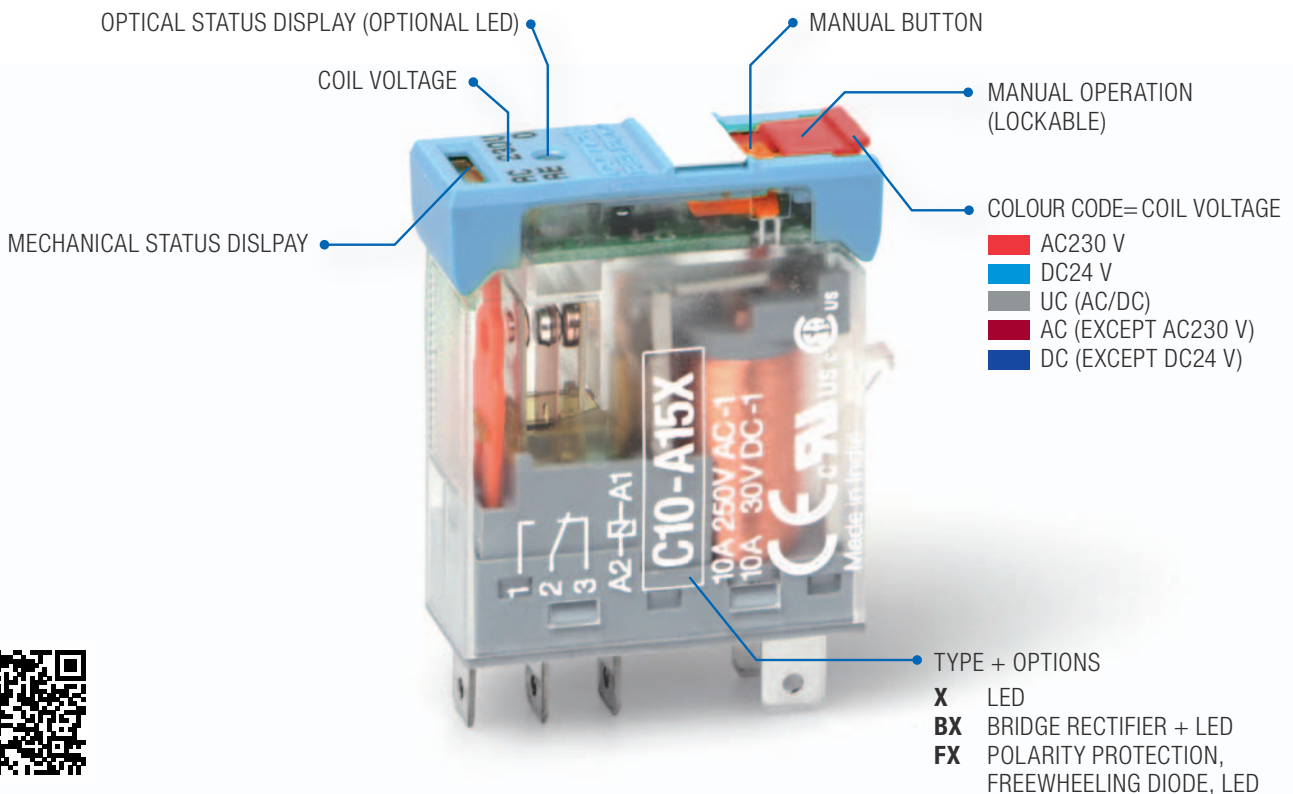
The twin contact of the C10-T11 provides high reliability when switching control signals in the 24 VDC / 5 mA range. The 0.2 µm gold layer prevents the contact from oxidising prematurely and also increases contact safety. Both **potential isolation** and **SPS input wiring** are typical applications. Contact safety is reliably ensured in the low range up to 5 mA / 5 V.

### C10-T12: FOR LOW SIGNALS

The C10-T12 has a twin contact coated with a 5 µm hard gold layer. The excellent contacting properties of this combination are suitable for **extremely reliable low signal switching** such as **SPS inputs** and **analogue standard signals** up to 1 mA / 5 V. To protect the gold layer against excessive wear and tear, 200 mA / 30 VDC should not be exceeded.

### Accessories:

- S10 socket
- S10-C bracket (comes with S10)
- S10-B neutral conductor/minus pole and root bridge





## SOLID-STATE CONTACTOR

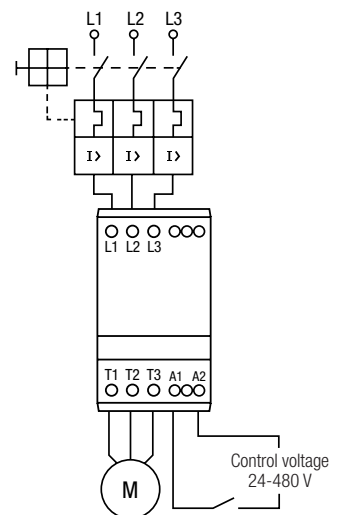
- For frequent switching without contact bounce
- No wear and tear and silent operation thanks to semiconductor technology
- Non-hazardous switching of inductive loads
- Space-saving: standard module width from 22.5 to 90 mm

The new series CC, CR, CPC and CCR solid-state contactors are available for one and three phase applications. They are designed for switching loads up to 125 A. The control voltage range is 5 – 230 V and load voltage 230 – 600 VAC.

## SOFT STARTER

- Protects the motor by limiting starting torque
- Maintenance-free: fanless design, no wear and tear
- Less wear throughout the whole drive train due to soft start
- Less wiring and lower component costs: bypass integrated
- Motor protection via the integrated and adjustable  $I^2t$  monitoring (CCL)

The new Comat Releco soft starters prevent harmonic distortions as a result of high inrush currents. Damaging mechanical effects like shocks onto gear units, slipping of V-belts, surge pressures in pipes or stuttering of the drive are avoided by soft start. Features such as the integrated motor protection and the bypass reduce wiring and component costs.



90 mm

22,5 mm

75 mm

45 mm

45 mm