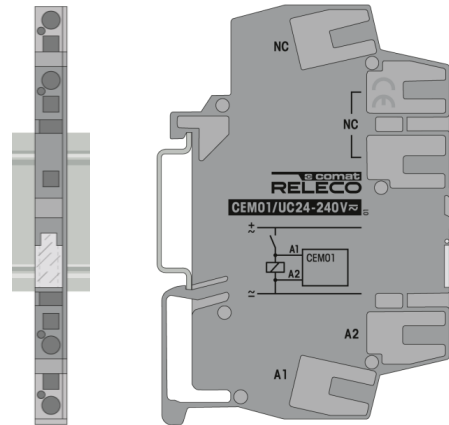


# Comat Interference Suppressor CEM01

## 1 Features

- Safe de-energizing of relays and contactors with long power supply conductors and alternating voltage
- For power supply 24 ... 240 V
- LED status display



## 2 General description

The CEM01 prevents a problem, which occurs when a relay or a contactor is supplied with alternating voltage over a very long conductor. Even though the controlling contact is open, a current flow remains in the conductor due to the parasitic capacity. That's why the relay or contactor remains energized. The relay coil and the capacity of the conductor are developing an oscillating circuit. In extreme cases, the coil voltage with open controlling contact is higher than the nominal voltage of the system.

The CEM01 compensates the residual current generated by the cable and makes sure that the relay is safely de-energized. It is able to compensate a maximal parasitic capacity of 60 nF, which corresponds to a conductor length of ca. 500 m with a standard control cable.

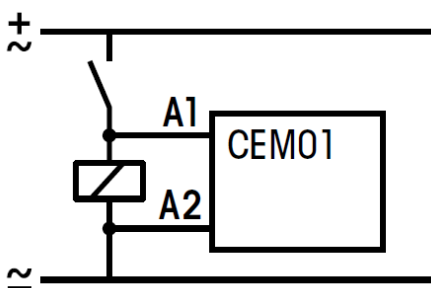
**Technical specification is subject to change without previous notice.**

## 3 Order designation

Comat Interference Suppressor CEM01/UC24-240V

## 4 Connection diagram

The CEM01 is connected in parallel with the relay coil.



## 5 Technical specifications

### 5.1 General data

#### 5.1.1 Mechanical data

Housing	Terminal housing, W x H x D: 6 x 56 x 91 mm
Connector	Cage clamp 0.08 ... 2.5 mm <sup>2</sup>
Ingress protection degree	IP20
Housing material	Polyamide 6.6
Weight	15 g
Fastening	TS35 DIN/EN 60715

#### 5.1.2 Ambient conditions

Storage temperature	-40 °C ... +85 °C
Operating temperature	-40 °C ... +60 °C
Relative humidity	10 % ... +95 % (non condensing)

#### 5.1.3 Life cycle

Expected life time	> 100 000 h (at 25 °C)
--------------------	------------------------

### 5.2 Electrical data

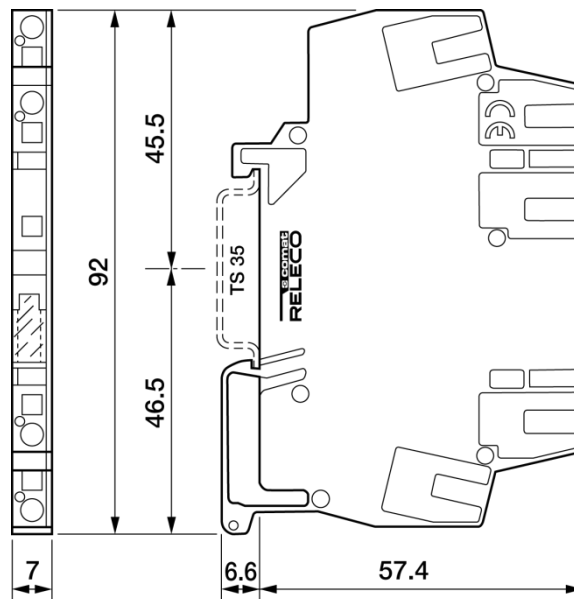
#### 5.2.1 Power supply A1, A2

Nominal voltage range	24 ... 240 V AC/DC
Admissible voltage range	8 ... 250 V AC/DC
Max. current consumption	20 mA
Max. power consumption at 24 V AC	75 mW
Max. power consumption at 230 V AC	500 mW
Max. compensated parasitic capacity et 230 V AC	60 nF
Max. conductor length (1.5 mm <sup>2</sup> , not shielded)	500 m

### 5.3 Display of switching state

Yellow LED shows the state of the relay.

## 6 Dimensions



## 7 Standards

Interference immunity	EN 61000-6-2:2005
Interference emission	EN 61000-6-3:2007
Safety	EN 60730-1:2000
Conformities, Identification	CE

## 8 Revision history

Version	Revision date	Responsible	Modification
15373-10-57-401	15.07.2011	Cp, Sa	Version 1