Change Instructions AA2/AE2 to CIM1

As part of the consolidation of our product portfolio, the monofunctional time relays of the **AA2 & AE2** series are being discontinued.
The successor product is the multifunctional time relay **CIM1/UC24-240V**, which, fully cover the functionality of the previous AA2/AE2 products although with a different connection scheme.

This document provides an overview of the similarities and differences between the AA2/AE2 variants and the CIM1/UC24-240V.

1 Technical compatibility

There are only a few points to consider when switching from the AA2/AE2 series to the CIM1. While the functional behaviour remains the same, the connection scheme differs. This is why some rewiring is needed when replacing the device.

1.1 Contacts

Both the AA2/AE2 and the CIM1 have a changeover contact. Both series have the same contact material and the same expected service life. The switching behaviour therefore remains unchanged.

1.2 Time functions

As a multifunction relay, the CIM1 has 9 different time functions. In particular, it covers the switch-on delay (E) of the AE2 variants and the switch-off delay (A) of the AA2 variants. The time range of the AE2/AA2 are fully covered by the CIM1.

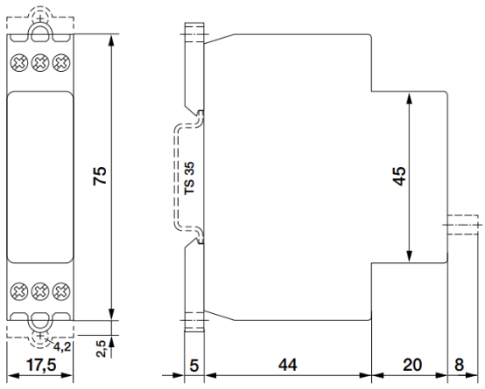
1.3 Firmware

While the AA2/AE2 run on an ASIC chip while the CIM1 runs on a microprocessor. Each CIM device remains on the firmware version it was shipped with. No updates are required on the customer side.

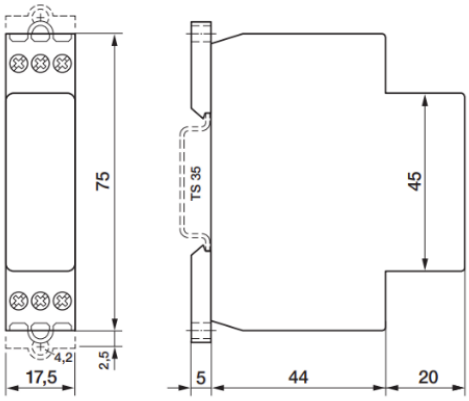
1.4 Form factor

The housings are the same, except for the potentiometer: on the AA2/AE2 it protrudes, while on the CIM1 it is level with the front. Both series have identical width and height.

Dimensions of the AA2/AE2



Dimensions of the CIM1



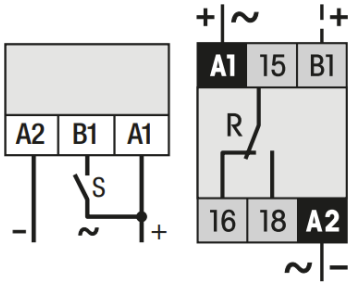
2 Wiring

The connection scheme differs between the AA2/AE2 and the CIM1 so that some rewiring is required when changing.

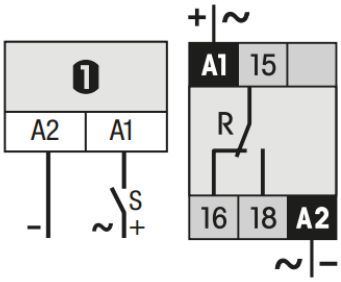
While the terminal A1 has the same position for all parts, the A2 terminal can be found on the top right of the CIM1 as opposed to the bottom right for the AA2/AE2. B1 is the top middle terminal on the CIM1; the use is identical to the AA2.

The requirements for conductor cross-section and torque are identical.

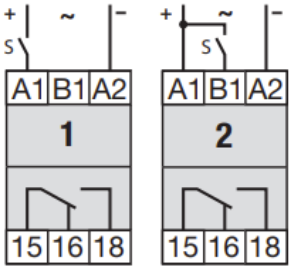
Wiring diagram for **AA2**



Wiring diagram for **AE2**



Wiring diagram for **CIM1**



1: E 2: A

2.1 Setting the time function and delay

When replacing a AA2/AE2 with a CIM1, the corresponding time function is set identically:

AE2 → CIM1: Function E (switch-on delay), wiring diagram 1
AA2 → CIM1: Function A (switch-off delay), wiring diagram 2
For setting the time delay on the CIM1, select the time range (middle potentiometer) with the nearest value above the value you want to set. With the lower potentiometer, set the time value as a scaling factor on the time range.
Example: to set a time delay of 60 seconds, set the time range to 60 seconds and the scale to 6 (scale goes from 0.5 to 6 → 1=10 s, 3 = 30 s, 6 = 60 s).

3 Product overview

Discontinued	Alternative product
AA2/AC220-240V	CIM1 /UC24-240V
AA2/UC24V	
AA2M/AC220-240V	
AA2M/UC24V	
AE2/AC220-240V	
AE2/UC24V	
AE2M/AC220-240V	

The CIM1 data sheet is available on our website and contains all relevant technical information. You can also find the data sheet via the navigation: www.comatreleco.com/en/Products/Time-Relays/Multifunction-Time-Relays/CIM-Series/

If you have any further questions, our technical support team will be happy to assist you: support@comatreleco.com