# CIM22, CIM22R (Railway)

# Time relay with AC solid-state output

7 time functions and 7 time ranges 50 ms ... 60 h, DIN Rail mounting according to DIN 43 880

#### Type: CIM22/UC24-240V

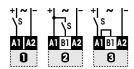
Sophisticated multifunction time relay, 1 triac output, suitable for high frequency of operations and inductive loads, 7 time functions and service function ON/OFF, 7 time ranges from 50 ms ... 60 h, multifunction LED state indicator, suitable for any time-control application light-switch neon lamp current absorption on input B1, manual switching function for maintenance, emergency, etc., 16.6 Hz applications. Railway version available.

Maximum contact load 2 A / 250 V Minimum contact load 50 mA

Time functions and related connection diagrams (Function diagrams: refer to page 130)

The functions are selectable by rotary switch





#### LED function table:

LED	Relay	Time run
OFF	OFF	NO
Continuous ON	ON	NO
Short blinking	OFF	YES
Long blinking	ON	YES

## Time data

7 partial time ranges, t<sub>max</sub> (rotary switch) Fine adjustment range (rotary knob)

Time range tolerance Repetition accuracy

Response time, power on, on A1 Min. trigger pulse on B1 Reset time B1 (AC/DC)

Voltage failure buffering (50 / 60 Hz)

0.6, 6, 60 s / 6, 60 min / 6, 60 h

 $t_{min}\,\ldots\,t_{max},\,0.5\,\ldots\,6$ 

 $t_{min}\text{: -5 \% ... +0 \% / }t_{max}\text{: -0 \% ... +5 \%} \\ \pm 0.1 \text{ \% or DC: 2 ms / AC: 10 ms}$ 

≤ 45 ms 20 ms (AC / DC) ≤ 30 ms ≥ 20 ms

voltage failure bullering (50 / 60 Hz)

# Output

Type Triac, zero crossing

Rated operational current at 40 °C (Fig.1) 2 A

Max. inrush current (10 ms) 100 A

Max. switching voltage 250 V

Max. AC load AC-1 300 VA

12t value 78 A2s

Leakage current < 1 mA

### Power supply- and control input

Nominal voltage UC 24-240 V (UC = AC / DC)

Operating voltage range UC 19 ... 250 V Power consumption approx. 1 W Frequency range 15 ... 60 Hz Allowed DC residual current into B1  $\leq$  0.5 mA AC Neon lamp residual current into B1  $\leq$  10 mA Trigger threshold voltage on B1, AC / DC 15 / 17 V

#### Insulation

Test voltage between output and control input 2.5 kVrms 1 minute

### **General Specifications**

Ambient temperature storage /operation

Conductor cross section Stranded wire 2.5 mm², 2 x 1.5 mm² Ingress protection degree IP 20

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Max. Screw torque 0.4 Nm

Housing material / weight Lexan / 70 g

# Standard types

UC (AC/DC), 15...60 Hz

Railway

CIM22/UC24-240V CIM22R/UC24-240V

-40 ... 85 °C / -40 ...60 °C (Railway: -70 °C)



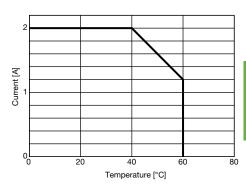




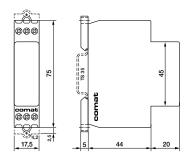
## **Connection diagram**



Fig. 1 Output derating curve



### Dimensions [mm]



# Technical approvals, conformities

EN 50155, EN 60730



