

# CIM23, CIM23R (Railway)

**Time relay with DC solid-state output**  
**7 time functions and 7 time ranges from 50 ms ... 60 h**  
**DIN Rail mounting according to DIN 43 880**



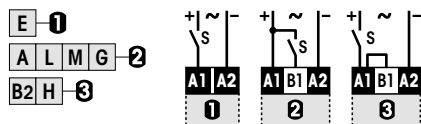
## Type: CIM23/UC24-240V

Sophisticated multifunction time relay, 1 transistor output, 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** 4 A / 30 V  
**Recommended minimum contact load** 1 mA

## Time functions and related connection diagrams (Function diagrams: refer to page 152)

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,  $t_{max}$  (rotary switch) 0.6, 6, 60 s / 6, 60 min / 6, 60 h  
 Fine adjustment range (rotary knob)  $t_{min} \dots t_{max}$ : 0.5 ... 6  
 Time range tolerance  $t_{min}$ : -5 % ... +0 % /  $t_{max}$ : -0 % ... +5 %  
 Repetition accuracy  $\pm 0.1$  % or DC: 2 ms / AC: 10 ms  
 Response time, power on, on A1  $\leq 45$  ms  
 Min. trigger pulse on B1 20 ms (AC / DC)  
 Reset time B1 (AC/DC)  $\leq 30$  ms  
 Voltage failure buffering (50 / 60 Hz)  $\geq 20$  ms

## Output

Type MOS FET  
 Rated operational current (Fig. 1) 4 A  
 Max. inrush current (10  $\mu$ s) 40 A  
 Max. switching voltage 30 V  
 Leakage current  $< 10 \mu$ A

## Power supply- and control input

Nominal voltage (UC = AC / DC) **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 -40 ... 85 °C / -40 ... 60 °C (Railway: -70 °C)  
 Conductor cross section Stranded wire 2.5 mm<sup>2</sup>, 2 x 1.5 mm<sup>2</sup>  
 Ingress protection degree IP 20  
 Max. Screw torque 0.4 Nm  
 Housing material / Weight Lexan / 70 g

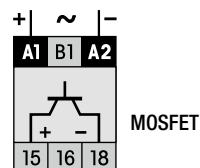
## Standard types

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

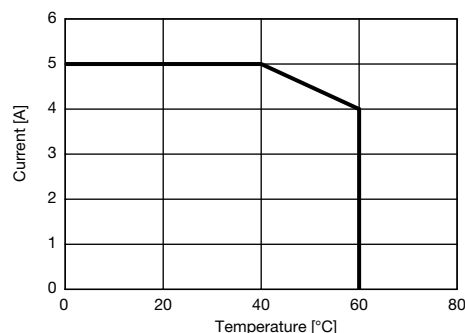
**CIM23/UC24-240V**  
**CIM23R/UC24-240V**



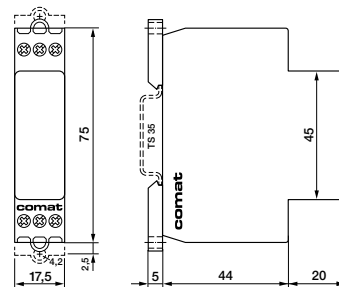
## Connection diagram



**Fig. 1 Output derating curve**



## Dimensions [mm]



## Technical approvals, conformities

EN 50155; EN 60730

