

# CIM3, CIM3R (Railway)

**Time relay with mechanical changeover output contact**  
**6 time functions and service function, 7 time ranges from 50 ms...60 h,**  
**DIN Rail mounting according to DIN 43 880**



## Type: CIM3/UC24-240V

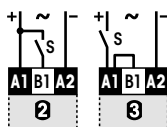
Sophisticated multifunction time relay, 1 changeover power contact switching in zero crossing (50/60 Hz), 6 time functions and service function ON/OFF, 7 time ranges from 50 ms to 60 h, multifunction LED state indicator, suitable for any time-control application, light-switch neon lamp current absorption on input B1, manual switching function for maintenance, emergency, etc., 16.6 Hz power supply applications. Railway version available.

**Maximum contact load** 16 A / 250 V AC-1 384 W DC-1  
**Recommended minimum contact load** 10 mA / 10 V

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

The functions are selectable by rotary switch

F Q G ②  
 H I P ③



### 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

## Contacts

Material CIM3 / CIM3R / Type AgNi / 1 CO, micro disconnection  
 Rated operational current at 40 °C / 60 °C 16 A / 13 A  
 Max. inrush current 30 A  
 Max. switching voltage AC-1 250 V  
 Max. AC load AC-1 (Fig.1) 4 kVA  
 Max. DC load DC-1 30 V / 250 V (Fig.2) 240 W / 85 W

## Power supply- and control input

Nominal voltage (A1, B1) **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 open contact 1 kVrms 1 minute  
 Test voltage between contacts and control input 2.5 kVrms 1 minute

## General Specifications

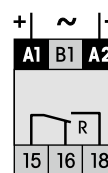
Ambient temperature storage / operation -40 ... 85 °C / -40 ... 60 °C (Railway: -46 °C)  
 Mechanical life of contact 30 x 10<sup>6</sup> operations  
 Conductor cross section Stranded wire 2.5 mm<sup>2</sup>, 2 x 1.5 mm<sup>2</sup>  
 Ingress protection degree IP 20  
 Max. Screw torque 0.4 Nm  
 Housing material / weight Lexan / 70 g

## Standard types

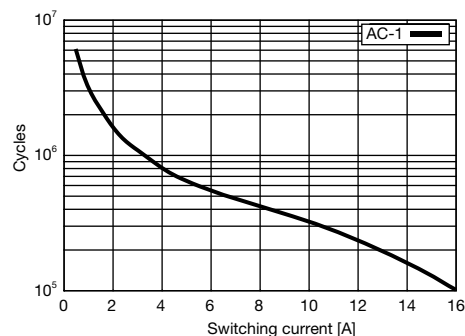
**UC (AC/DC) 15...60 Hz** **CIM3/UC24-240V**  
**Railway** **CIM3R/UC24-240V**



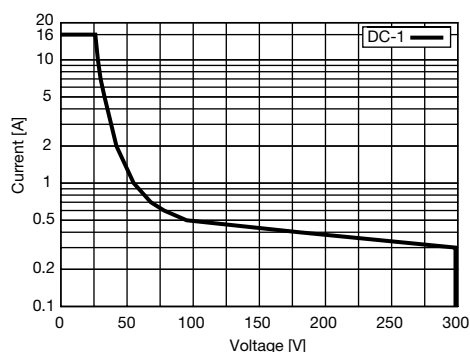
## Connection diagram



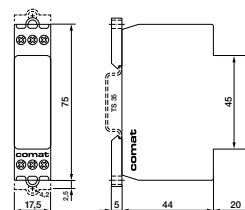
## Fig.1 AC voltage endurance



## Fig. 2 DC load limit curve



## Dimensions [mm]



## Technical approvals, conformities

EN 50155, EN 60730

