

CIM13, CIM13R (Railway)

Time relay with DC solid-state output

8 time functions and stepping function, ON-OFF switch, 50 ms ... 60 h
DIN Rail mounting according to DIN 43 880

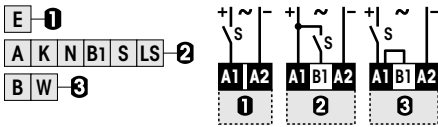
Type: CIM13/UC24-240V

Sophisticated multifunction time relay, 1 transistor output, 8 time functions, stepping function and service function ON/OFF, time ranges from 50 ms ... 60 h, multifunction LED state indicator, suitable for any time-control application and also staircase-light control, 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 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_{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	± 0.1 % or DC: 2 ms / AC: 10 ms
Response time, power on, on A1	≤ 45 ms
Min. trigger pulse on B1	20 ms (AC / DC)
Reset time B1 (AC/DC)	≤ 30 ms
Voltage failure buffering (50 / 60 Hz)	≥ 20 ms

Output

Type	MOS FET
Rated operational current (Fig. 1)	4 A
Max. inrush current (10 μ 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	≤ 0.5 mA
AC Neon lamp residual current into B1	≤ 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
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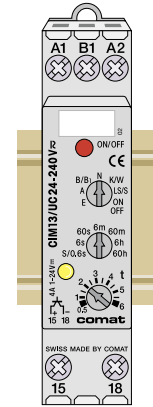
General Specifications

Ambient temperature storage / operation	-40 ... 85 °C / -40 ... 60 °C (Railway: -70 °C)
Conductor cross section	Stranded wire 2.5 mm ² , 2 x 1.5 mm ²
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

CIM13/UC24-240V
CIM13R/UC24-240V



Connection diagram

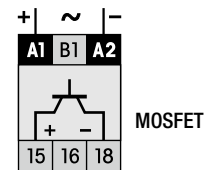
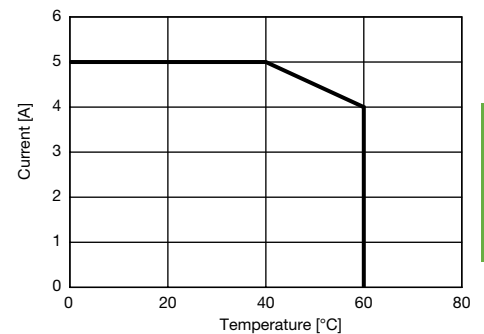
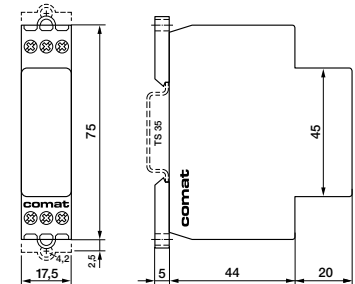


Fig. 1 Output derating curve



Dimensions [mm]



Technical approvals, conformities

EN 50155; EN 60730

