CIM12, CIM12R (Railway)

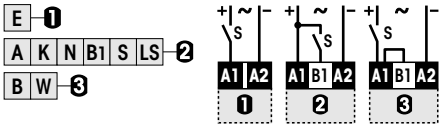
Time relay with AC solid-state output
8 time functions and stepping function, ON-OFF switch, 50 ms … 60 h, DIN Rail mounting according to DIN 43 880

Type: CIM12/UC24-240V

Sophisticated multifunction time relay, 1 triac output, suitable for high frequency of operations and inductive loads, 8 time functions, stepping function and service function ON/OFF, time ranges: 50 ms … 60 h, multifunction LED state indicator, suitable for any time-control application and also staircase lighting, 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_{max} (rotary switch)	0.6, 6, 60 s / 6, 60 min / 6, 60 h
Fine adjustment range (rotary knob)	t_{min} … 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	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
I^2t value	78 A^2s
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	≤ 0.5 mA
AC Neon lamp residual current into B1	≤ 10 mA
Trigger threshold voltage on B1, AC / DC	15 / 17 V

Insulation

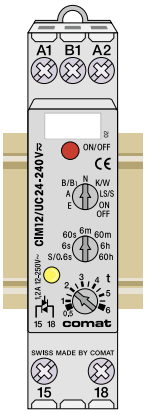
Test voltage between output and control input	2.5 kVrms 1 minute

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	**CIM12/UC24-240V**
Railway	**CIM12R/UC24-240V**



Connection diagram

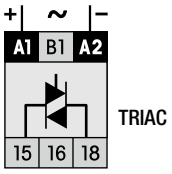
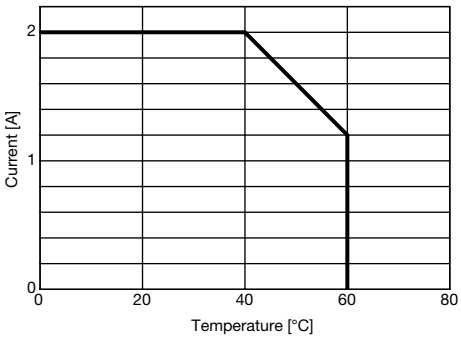
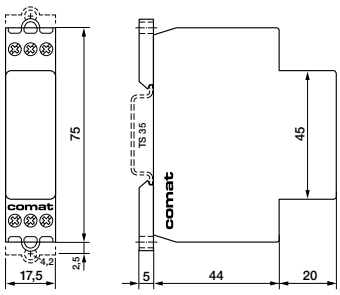


Fig. 1 Output derating curve



Dimensions [mm]



Technical approvals, conformities

EN 50155, EN 60730