

CIM33, CIM33R (Railway)

Time relay with DC solid-state output

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

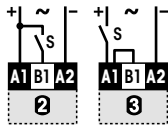
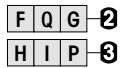


Type: CIM33/UC24-240V

Sophisticated multifunction time relay, 1 transistor output, 6 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 ± 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

General Specifications

Ambient temperature storage / operation -40 ... 85 °C / -40 ... 60 °C (Railway: -70 °C)
 Conductor cross section Stranded wire 2.5 mm², 2 x 1.5 mm²
 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 **CIM33/UC24-240V**
Railway **CIM33R/UC24-240V**



Connection diagram

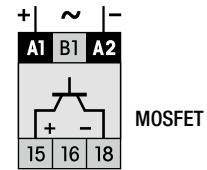
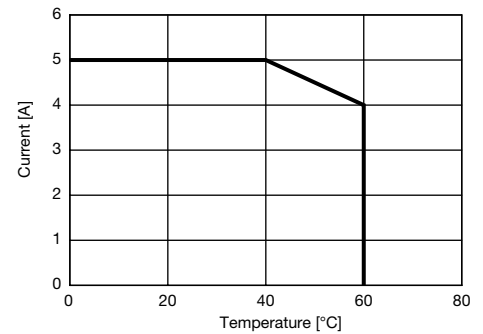
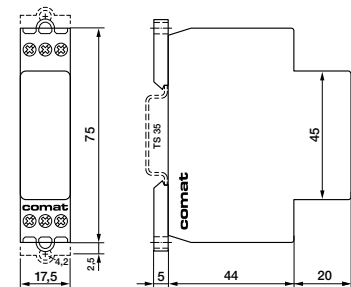


Fig. 1 Output derating curve



Dimensions [mm]



Technical approvals, conformities

EN 50155; EN 60730

