CIM22, CIM22R (Railway)

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

Type: CIM22/UC24-240V
Sophisticated multifunction time relay, 1 triac output, suitable for high frequency of operations and inductive loads, 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 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:

<table>
<thead>
<tr>
<th>LED</th>
<th>Relay</th>
<th>Time run</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>OFF</td>
<td>NO</td>
</tr>
<tr>
<td>Continuous ON</td>
<td>ON</td>
<td>NO</td>
</tr>
<tr>
<td>Short blinking</td>
<td>OFF</td>
<td>YES</td>
</tr>
<tr>
<td>Long blinking</td>
<td>ON</td>
<td>YES</td>
</tr>
</tbody>
</table>

Time data
7 partial time ranges, tmax (rotary switch) 0.6, 6, 60 s / 6, 60 min / 6, 60 h
Fine adjustment range (rotary knob) tmin ... tmax: 0.5 ... 6
Time range tolerance tmax: -5 % ... +0 % / tmin: -0 % ... +5 %
Repetition accuracy ± 0.1 % or DC: 2 ms / AC: 10 ms
Min. trigger pulse on B1 ≤ 45 ms
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. AC load AC-1 300 VA
I²t value 78 A²s
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 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 CIM22/UC24-240V
Railway CIM22R/UC24-240V

Technical approvals, conformities
EN 50155, EN 60730

This issue replaces all previous issues. Availability, errors and specifications subject to change without notice.