**CIM23, CIM23R (Railway)**

**Time relay with DC solid-state output**

7 time functions and 7 time ranges from 50 ms ... 60 h

DIN Rail mounting according to DIN 43 880

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**Type: CIM23/UC24-240V**

Sophisticated multifunction time relay, 1 transistor output, 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.

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**Maximum contact load**

4 A / 30 V

**Recommended minimum contact load**

1 mA

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**Time functions and related connection diagrams** (Function diagrams: refer to page 130)

The functions are selectable by rotary switch

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**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>

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**Time data**

- 7 partial time ranges, \( t_{\text{max}} \) (rotary switch): 0.6, 6, 60 s / 6, 60 min / 6, 60 h
- Fine adjustment range (rotary knob): \( t_{\text{min}} \) ... \( t_{\text{max}} \): 0.5 ... 6
- Time range tolerance: \( t_{\text{min}}: -5 \% \ldots +0 \% \) / \( t_{\text{max}}: -0 \% \ldots +5 \% \)
- 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): \( \leq 20 \) ms

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**Output**

- Type: MOS FET
- Rated operational current (Fig. 1): 4 A
- Max. inrush current (10 μs): 40 A
- Max. switching voltage: 30 V
- Leakage current: \( < 10 \) μA

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**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: \( \leq 0.5 \) mA
- AC Neon lamp residual current into B1: \( \leq 10 \) mA
- Trigger threshold voltage on B1, AC / DC: 15 / 17 V

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**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 mm², 2 x 1.5 mm²
- Ingress protection degree: IP 20
- Max. Screw torque: 0.4 Nm
- Housing material / Weight: Lexan / 70 g

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**Standard types**

- UC (AC/DC), 15...60 Hz: CIM23/UC24-240V
- Railway: CIM23R/UC24-240V

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**Technical approvals, conformities**

EN 50155; EN 60730