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 130)
The functions are selectable by rotary switch

<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, \( t_{\text{max}} \) (rotary switch)
6 time functions
Fine adjustment range (rotary knob)
Time range tolerance
Repetition accuracy
Response time, power on, on A1
Min. trigger pulse on B1
Reset time B1 (AC/DC)
Voltage failure buffering (50 / 60 Hz)

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

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

Fig. 1 Output derating curve

Dimensions [mm]

Technical approvals, conformities
EN 50155; EN 60730