**C83**

**Multifunction time relay** with mechanical change over output contact
12 time functions + test function "ON", 50 ms … 60 h

**Type:** C83/UC24-240V R

Plug-in multifunction time relay, 1 change over power contact, 12 time functions, time ranges: 50 ms … 60 h, 3 LED’s for full state indication: Control input, time run and output,

Seismic qualification available (precondition for use in nuclear power plants)

Maximum contact load 8 A / 250 V AC-1 240 W DC-1

Recommended minimum contact load 10 mA / 10 V

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

The functions are selectable by rotary switch

<table>
<thead>
<tr>
<th>Function circuit</th>
<th>State</th>
<th>LED function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output, yellow LED</td>
<td>active</td>
<td>continuous ON</td>
</tr>
<tr>
<td>Time run, red LED</td>
<td>active</td>
<td>1: Double blinking</td>
</tr>
<tr>
<td>2: Blinking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B1 input, yellow LED</td>
<td>active</td>
<td>continuous ON</td>
</tr>
</tbody>
</table>

**Time data**

7 partial time ranges, t\(_{tmax}\) (rotary switch)

0.6, 6, 60 s / 6, 60 min / 6, 60 h

Fine adjustment range (rotary knob)

\(t_{tmax} \ldots t_{tmax} / 0.5 \ldots 6\)

Time range tolerance

\(t_{tmin} \pm 30\% \ldots +0\% / t_{tmax} \pm 0\% \ldots +25\%\)

Repetition accuracy

\(\leq 40\) ms

Min. trigger pulse on B1

30 ms

Reset time B1 (AC/DC)

\(\leq 50\) ms

Voltage failure buffering

\(\geq 15\) ms

**Contacts**

Type 1CO, Single contact micro disconnection

Material AgNi

Rated operational current 8 A

Max. inrush current (10 ms) 30 A

Max. switching voltage AC-1 250 V

Max. AC load AC-1 (Fig.1) 2000 VA

Max. DC load DC-1, 30 V / 250 V (Fig.2) 240 W / 75 W

**Power supply and control input** (UC = AC / DC)

Nominal voltage (A1, B1) UC 24 – 240 V

Operating voltage range [V] 20 … 265, 60 Hz: … 200 V

Power consumption [W] \(\leq 1.8\)

Frequency range [Hz] 45 … 63

Allowed residual current into B1 [mA] AC: \(\leq 0.8\); DC: \(\leq 1\)

Trigger threshold voltage on B1, AC / DC [V] \(V_{threshold} = V_{supp} \times m + b; m = 0.35; b = 7.5\)

**Insulation**

Test voltage open contact 1 kVrms 1 minute

Test voltage between contacts and control input 2 kVrms 1 minute

**General Specifications**

Ambient temperature storage /operation \(-40 \ldots 85\) °C / \(-25 \ldots 60\) °C

Mechanical life of contact

\(30 \times 10^6\) operations

Expected life \(\geq 50 000\) h

Ingress protection degree

IP 40 when plugged in

Housing material / Weight Lexan / approx. 60 g

**Standard types**

UC (AC/DC) 45…63 Hz C83/UC24-240V R

Seismic qualification: C83.C2292/UC24-240V R

Accessories: Socket: S7-C

Available:

Seismic IEEE 323, IEEE 344

EN 60947

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