C85

Time relay and repeat cycle timer with 2 time lapses 50 ms ... 60 h, mechanical change over output contact, 6 time functions + test function "ON"

Type: C85/UC24-240 V R
Plug-in multifunction time relay / repeat cycle timer, 1 change over power contact, 6 time functions, time ranges: 2 x 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

LED function table:

<table>
<thead>
<tr>
<th>Output, yellow LED</th>
<th>active</th>
<th>continuous ON</th>
</tr>
</thead>
<tbody>
<tr>
<td>passive</td>
<td>OFF</td>
<td></td>
</tr>
<tr>
<td>Time run, red LED</td>
<td>active</td>
<td>11: Double blinking</td>
</tr>
<tr>
<td>12: Blinking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B1 input, yellow LED</td>
<td>active</td>
<td>continuous ON</td>
</tr>
<tr>
<td>passive</td>
<td>OFF</td>
<td></td>
</tr>
</tbody>
</table>

Time data for each time t1 / t2
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 tmin: -30 % ... +0 % / tmax: -0 % ... +25 %
Repetition accuracy ± 0.1 % or DC: 5 ms / AC: 25 ms
Response time, power on, on A1 ≤ 40 ms
Min. trigger pulse on B1 30 ms
Reset time B1 (AC/DC) ≤ 50 ms
Voltage failure buffering ≥ 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] ≤ 1.8
Frequency range [Hz] 45 ... 63
Allowed residual current into B1 [mA] AC: ≤ 0.8; DC: ≤ 1
Trigger threshold voltage on B1, AC / DC [V] Vth = Vsupp x m + b; m = 0,35; b = 7,5 V

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 ... 85 °C / -25 ... 60 °C
Mechanical life of contact 30 x 10⁶ operations
Expected life @ 25 °C (except contact) >> 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 C85/UC24-240V R
Seismic qualification:
C85.C2292/UC24-240V R

Accessories: Socket: S7-C

Connections:

Fig.1 AC electrical endurance

Fig. 2 DC load limit curve

Dimensions [mm]

Technical approvals, conformities
Available:
Seismic IEEE 323, IEEE 344
EN 60947