

**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)**

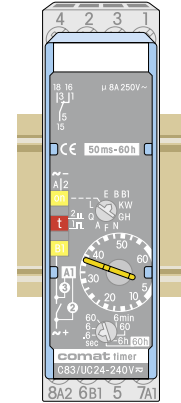
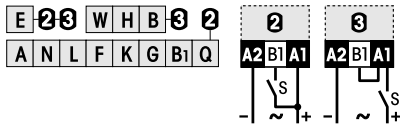
**Maximum contact load** 8 A / 250 V AC-1 240 W DC-1  
**Recommended minimum contact load** 10 mA / 10 V

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

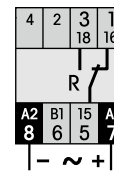
The functions are selectable by rotary switch

**LED function table:**

Function circuit	State	LED function
Output, yellow LED	active	continuous ON
	passive	OFF
Time run, red LED	active	t1: Double blinking t2: Blinking
	passive	OFF
B1 input, yellow LED	active	continuous ON
	passive	OFF



**Connection diagram**



**Time data**

7 partial time ranges, $t_{max}$ (rotary switch)	0.6, 6, 60 s / 6, 60 min / 6, 60 h
Fine adjustment range (rotary knob)	$t_{min} \dots t_{max}$ , 0.5 ... 6
Time range tolerance	$t_{min}$ : -30 % ... +0 % / $t_{max}$ : -0 % ... +25 %
Repetition accuracy	$\pm 0.1$ % or DC: 5 ms / AC: 25 ms
Response time, power on, on A1	$\leq 40$ 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)	<b>UC 24 – 240 V</b>
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**

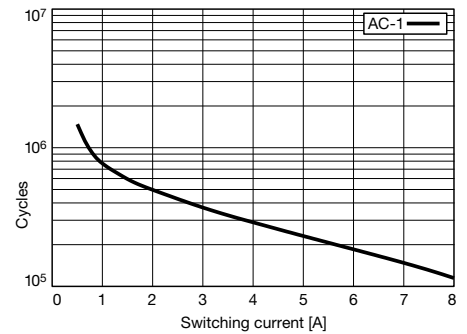
Ambient temperature storage /operation	-40 ... 85 °C / -25 ... 60 °C
Mechanical life of contact	30 x 10 <sup>6</sup> operations
Expected life @ 25 °C (except contact)	$\gg 50\,000$ h
Ingress protection degree	IP 40 when plugged in
Housing material / Weight	Lexan / approx. 60 g

**Standard types**

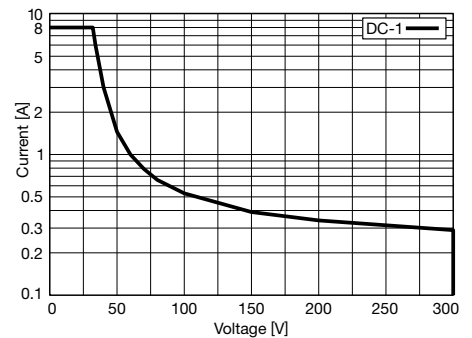
<b>UC (AC/DC) 45...63 Hz</b>	<b>C83/UC24-240V R</b>
<b>Seismic qualification:</b>	<b>C83.C2292/UC24-240V R</b>

**Accessories:** Socket: **S7-C**

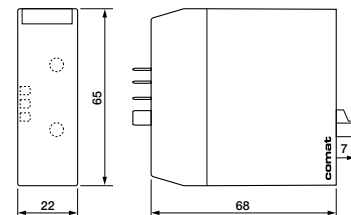
**Fig.1 AC electrical endurance**



**Fig. 2 DC load limit curve**



**Dimensions [mm]**



**Technical approvals, conformities**

Available:  
Seismic IEEE 323, IEEE 344

EN 60947

