

## Electronic time relay C48 T



- 2 transistor and relay outputs
- 12 time ranges
- Easily programmable
- Up to 42 different operating modes
- Easy operation via 4 buttons
- DIN cut-out 45 mm x 45 mm
- protection class IP65

<https://www.wachendorff-prozesstechnik.de/en/c48t>

### Description

The C48 T is available with one or two presets. For example, the current time value and the preset value can be shown simultaneously on the 2-color display. The C48 T offers 12 different time ranges from 1/1000 seconds to hours and minutes. With up to 42 different operating modes and three programmable user inputs, as well as a programmable front button, the C48 T can be used universally. Its high IP65 protection rating allows it to be used in almost all branches of industry, such as electroplating, cleaning systems or test field equipment.

### Product details

Display	2 x 6-digit standard or backlit brilliant LCD. Upper display red 7.5 mm high and lower display green 5 mm high. Indicators: PRS, 1, 2, O1, O2 for the switching status of the outputs and the identification of the preselections
Keys	The device is programmed and operated using 4 buttons. All buttons can be selectively locked.
Entrance	Run/Stop, can be set as high or low active via jumper. Low active: $V_{ILmax} = 1.5 \text{ VDC}$ , 22 kOhm pull-up resistor to 5 VDC. High active: $V_{IHmin} = 3.5 \text{ VDC}$ , $V_{IN} = \text{max. } 30 \text{ VDC}$ , 22 kOhm pull-down resistor. Maximum run/stop delay time: 250 $\mu\text{s}$ .
Accuracy	$\pm 0.01 \%$
User inputs 1, 2 and 3	The 3 user inputs can be activated via push-buttons, switches, relays or NPN switching transistors to ground. Maximum delay time: 5 ms.
Outputs	Transistor: PNP-OC $I_{SRC} = 100 \text{ mA}$ , $V_{VOH} = 12 \text{ VDC} \pm 15 \%$ (with power supply via C48 T); $V_{VOH} = 13 \text{ VDC}$ to 30 VDC (with external power supply). Relay: NO contact, 250 VAC/30 VDC/5 A, min. 100,000 switching cycles. Wipe signal time: 0.01 s Resolution: 0.01 to 99.99 s, $\pm 0.01\% + 10 \text{ ms}$ . 0.1 s Resolution: 0.1 to 999.9 s $\pm 0.01 \%$ + 100 ms.
Programming	Programming and operation is menu-guided via the front buttons
RS485(option)	32 devices can be networked, baud rate: 1200 to 9600, Addresses: 0 to 99, format: 10 bits, 1 start bit, 7 or 8 data bits, 1 or no parity bit and stop bit. Parity: Odd, even or none.

Data backup	EEPROM stores all program parameters and timer values.
Power supply	C48TXX0X: 85 to 250 VAC, max. 9 VA/11 to 14 VDC (VDC supply not for devices with PNP output) C48TXX1X: 18 to 36 VDC, 5.5 W/24 VAC (10%).
Sensor supply	12 VDC ( $\pm 15 \%$ )/100 mA.
Protection class	Jet-proof and dust-tight to IP 65 from the front
Housing	Flame- and scratch-resistant black plastic. Housing is mounted on the control panel. Front panel can be pulled out. Devices can be mounted directly next to each other.
Dimensions	W 50 mm x H 50 mm x D 106 mm. Panel cut-out DIN W 45 x H 45 mm.
Connection	via 14 screw terminals.
Ambient temperature	Operation: 0 °C to +50 °C, storage: -40 °C to +70 °C.
Electromagnetic compatibility CE-compliant	Interference emission: EN 50 081-2 Interference immunity: EN 50 082-2
Approvals	UL approval (Underwriters Laboratories) for the USA and Canada.
Weight	approx. 170 g.
Scope of delivery	Device, mounting material, seal, operating instructions.
Customs tariff number:	9032 89 00
Manufacturer:	Red Lion

### Products Order no.

C48TD011	C48T, standard, 2 preselections, PNP output, 18-36 VDC/24 VAC supply
C48TD012	C48T, standard, 2 presets, relay output, 18-36 VDC/24 VAC supply
C48TD101	C48T, backlit LCD, 2 preselections, PNP output, 11-14 VDC/85-250 VAC supply
C48TD102	C48T, backlit LCD, 2 presets, relay output, 11-14 VDC/85-250 VAC supply
C48TD106	C48T, backlit LCD, 2 preselections, PNP output, RS485, 11-14 VDC/85-250 VAC supply

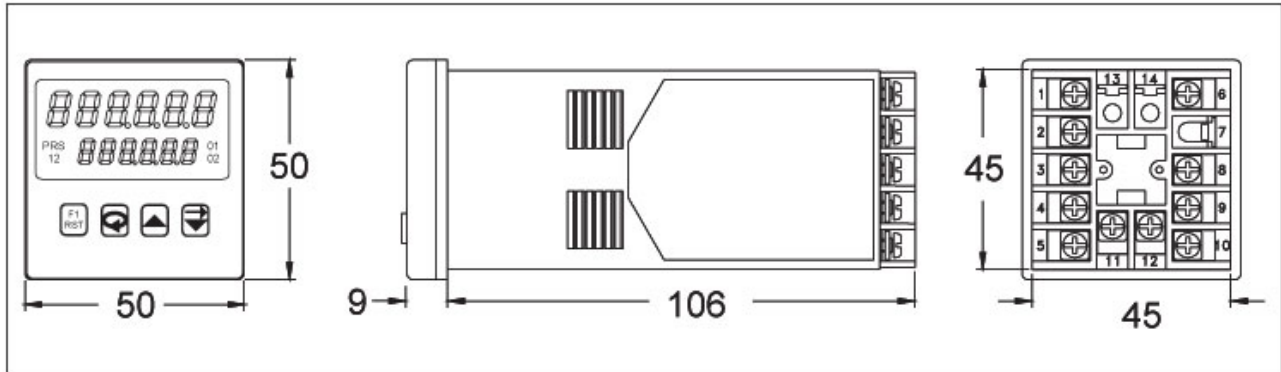
C48TD107	C48T, backlit LCD, 2 presets, relay output, RS485, 11-14 VDC/85-250 VAC supply
C48TD111	C48T, backlit LCD, 2 preselections, PNP output, 18-36 VDC/24 VAC supply
C48TD112	C48T, backlit LCD, 2 preselections, relay output, 18-36 VDC/24 VAC supply
C48TD116	C48T, backlit LCD, 2 preselections, PNP output, RS485, 18-36 VDC/24 VAC supply
C48TD117	C48T, backlit LCD, 2 presets, relay output, RS485, 18-36 VDC/24 VAC supply
C48TS004	C48T, standard, 1 preselection, PNP output, relay output, 85-250 VAC supply
C48TS014	C48T, standard, 1 preselection, PNP output, relay output, 18-36 VDC/24 VAC supply
C48TS104	C48T, backlit LCD, 1 preselection, PNP output, relay output, 85-250 VAC supply
C48TS114	C48T, backlit LCD, 1 preselection, PNP output, relay output, 18-36 VDC/24 VAC supply

#### Accessories Order no.

URDR4848	DIN rail adapter for devices in the UR4848 series
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**Drawings**

**Dimensions:**



Abmessungen (in mm)

Drawings

Key functions:

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Programmierbare Funktionstaste/Reset.



Aktiviert Programmiermodus, Quittierungstaste für Werteingaben, "Scroll-Taste" für Eingaben.



Taste zum Durchlaufen der einzelnen Programmabschnitte im Programmiermodus. Dient im Betrieb zur Werteingabe und Anzeigenwechsel.



Aktiviert Eingabemöglichkeit für Zeiteinstellung, Vorwahlwerte, etc. und dient zur Werteingabe.

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Drawings

Ordering information overview table:

## Bestellhinweise

Typ	Standard	hinterleuchtete LCD	Vorwahlen	PNP-Ausgang	Relais-Ausgang	RS485	Bestellnummer 18-36 VDC/24 VAC- Versorgung	Bestellnummer 11-14 VDC/85-250 VACVersorgung
C48T	x		1	x	x		C48TS014	C48TS004
		x	1	x	x		C48TS114	C48TS104
	x		2		x		C48TD012	C48TD002
	x		2		x	x	C48TD017	C48TD007
	x		2	x			C48TD011	C48TD001
		x	2		x		C48TD112	C48TD102
		x	2		x	x	C48TD117	C48TD107
		x	2	x			C48TD111	C48TD101
		x	2	x		x	C48TD116	C48TD106
<b>Zubehör</b>								
Ersatzplatine Relais für 1 Vorwahl							RBC48002	RBC48002
Ersatzplatine Relais für 2 Vorwahlen							RBC48003	RBC48003



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