



G004203

Timer Control Unit

TC10 WP

Part no. 5200276-00A

System: CS3000, CS4000, TERRA FIRE

General Description

The addressable timer control unit TC10 WP is used for temporarily disconnecting detectors, to prevent unwanted alarms, e.g. at service, welding etc. The timer is connected the same way as other loop units and communicates with the central the same way as they do.

Disconnection times are programmable between 15 minutes and 12 hours via setup menu. When TC10 WP is power up the operate symbol is shown on the display.

The TC10 WP has an output with a potential free change-over relay.

Loop address and function are set by the two DIP switches: ADDR (SW1) and SET (SW2). Time is adjustable by a setup menu on the display.

Data

Output	1 change-over relay, max 30VDC, 1 A
Loop nominal voltage	35 VDC
Loop working voltage	22 - 38 VDC
Loop working current	1.5 mA
Ingress protection	IP55
Relative Humidity	At low temperature 95% At high temperature 93% ± 3%
Ambient temperature	-40°C to +75°C
Cable terminals	2.5 mm ²
Material	PC/ABS
Colour	Black
Weight	410 g

Certified according to

2531-CPR-232.1738
DOP no. 6301909

Max disconnection time 12 hours

Min disconnection time 15 minutes

TC10 WP as a Replacement Unit

The TC10 timer replaces the discontinued UR-2K timer and UR-2KN timer with key. Part no:

046400	UR-2K 0-30min
046410	UR-2K 0-15min
046401	UR-2KN 0-30min (+5min)
046401-20	UR-2KN 0-15min (+5min)
046401-120	UR-2KN 0-2h (+5min)

Choose function UR-2K or UR-2KN with DIP-SW2:1: ON=UR-2K, OFF=UR-2KN.

The disconnecting time, 15min-12h, is chosen in the setup menu.

i NOTE!

When replacing UR-2K and UR-2KN on CS3000, CS3004 and CS4000 it is important to enable the detector range setup, DIP-SW2:3 must be ON. The detector range is set in the setup menu after power on.

i NOTE!

Exact time replacement is not available for the UR-2KN versions since the 5 min bonus time after the old mechanical timer stopped is now included in TC10 total disconnection time.

i NOTE!

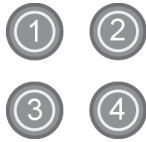
Physical dimensions and the relay output max voltage/current will differ between TC10 WP and the replaced products.

Timer Functions



G004268

Keyboard



The **numeric keyboard** is used to enter the setup menu, to navigate in the setup menu, to enter PIN codes and to activate the lamp test.



The **time set keys** decrease or increase the disconnection time in steps on the display during normal operation and are used to change the values during setup menu mode.

Start the disconnection of loop units

Press the + key to start the disconnection time. If TC10 is set as a UR-2KN, DIP-SW2:1=OFF, a four digit PIN code has to be entered before the disconnection time starts.

The display shows the active countdown in hours, minutes and second. Time can be adjusted during the countdown by pressing the + or – keys.

End the disconnection of loops units

The loop units are automatically reconnected when the timer reaches zero. To stop the timer during countdown and immediately reconnect the loop units, press the – key (repeatedly) until the time is set to zero.

When the screen is cleared there is no active disconnection.

Relay output during disconnection

- If function set as UR-2K, DIP-SW2:1=ON, the relay is activated during the disconnection
- If function set as UR-2KN, DIP-SW2:1=OFF, the relay is activated when there is 5 minutes left of the disconnection time.
By pressing once on the – key the relay is deactivated but the disconnection remains.
By pressing once more the disconnections ends.

Lamp test

By simultaneously pressing keys 1 and 3 the buzzer turns on and a horizontal line scans the

display. After a short while the unit returns to normal state.

Setup menu

To enter the setup menu press one numeric key and then enter PIN code 4444.

Use the numeric keys to navigate in the setup menu and use the time set keys to change the values.

To leave the setup menu press key no. 4 repeatedly. (In case of inactivity while in the setup menu the TC10 automatically returns to normal operation.)

Table 1. The Setup menu

Menu	Description
MAX TIME*	Max disconnection time that the user can set during normal operation. (>=15min to <=12h)
DEF TIME	Initial disconnection time when the + key is activated once. (>=15min to <=12h)
PIN CODE	PIN code used when function UR-2KN (SW2.1=OFF) is set. It must not/cannot be 4444.
DET START**	Disconnect detector range first address.
DET END**	Disconnect detector range last address

* The MAX TIME can only be set same or larger than DEF TIME. In TC10WP ver A4 and earlier the time range was 30min-12h.

** DET START and DET END are only present in setup menu if DIP-SW2:3=ON.
DET END can only be set larger than DET START.
SW2:3 must be ON when TC10 is used on CS3000, CS3004 and CS4000.
When TC10 is used on CCP fire centrals the detector range is ignored.



NOTE!

After changes have been made in the function setup (SW2) or in the setup menu the TC10 fire central loop has to be rebooted.

Terminals and DIP-switches

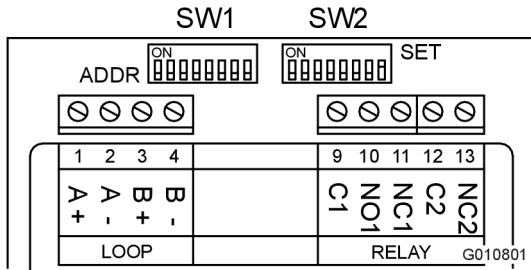


Figure 1. Location of DIP-switches and connections on the PCB

- The loop address of the TC10 WP is set by the ADDR DIP-switch (SW1).
- The function of the TC10 WP is set by the SET DIP-switch (SW2).

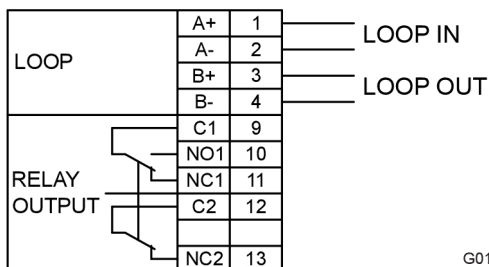
Switch 2:1 – 2:8

Switch 1, 2 and 3 are used to set the function of the TC10. Switch 4, 5, 6 and 7 are not used. Switch 8 must always be ON.

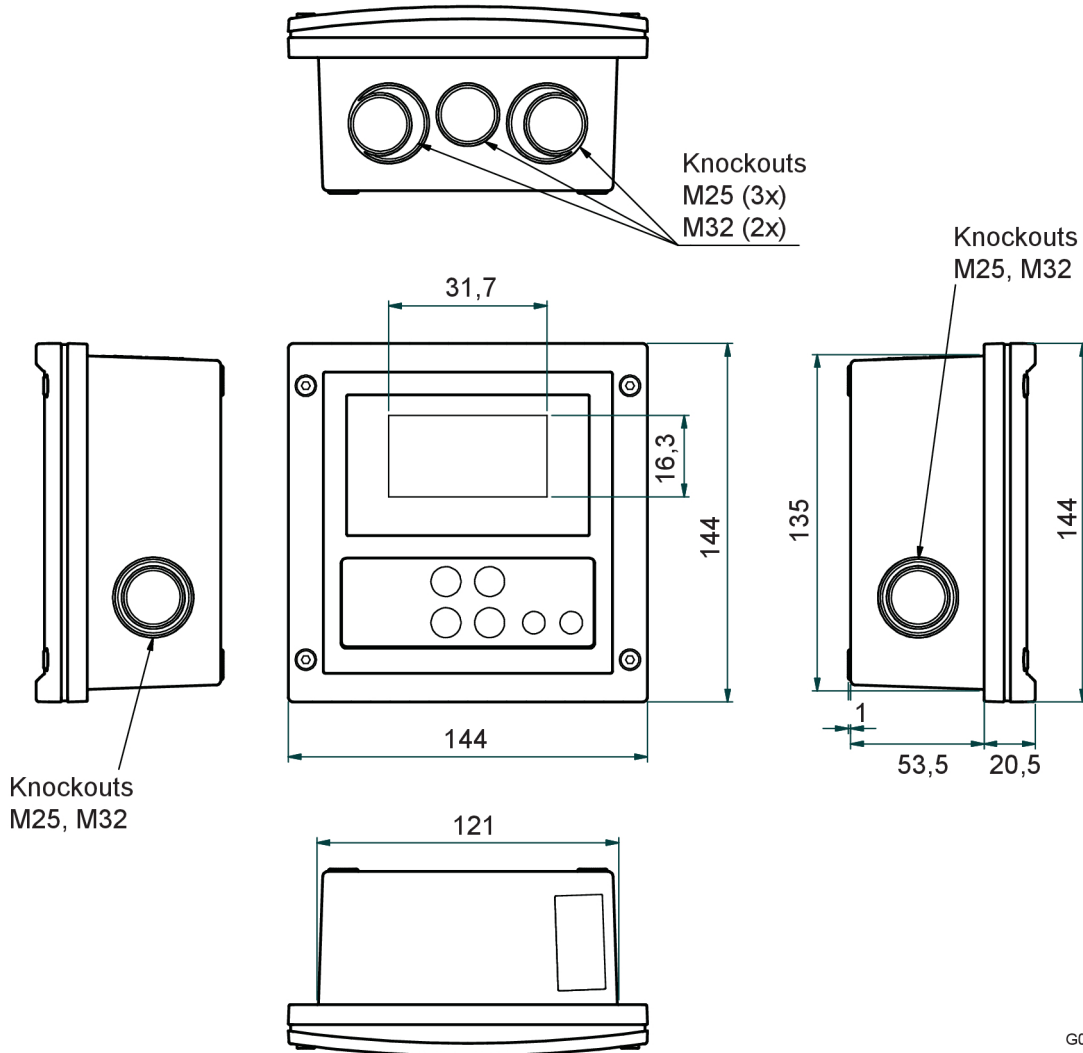
SW2	Switch OFF function	Switch ON function	Comments
SW2:1	<ul style="list-style-type: none"> • UR-2KN function. • PIN code necessary to start countdown. • Relay output is activated when it is 5 min left of countdown. 	<ul style="list-style-type: none"> • UR-2K function. • PIN code not necessary to start countdown. • Relay output is activated during the countdown. 	
SW2:2	All types of detectors are disconnected during countdown.	Only smoke detectors are disconnected during countdown.	Has no effect on CCP fire central. Detector type is set in CCP configuration program*
SW2:3	Detector range in setup menu is disabled.	Detector range in setup menu is enabled.	<ul style="list-style-type: none"> • Must be ON when TC10 is used on CS3000, CS3004 and CS4000. • Shall be OFF when TC10 is used on CCP fire centrals. Detector range is set in CCP configuration program*
SW2:8	Not allowed.	MUST BE ON.	

* Example of the Timer setup in CCP fire central configuration program:
 ZONE 1 IN 20.1 => MESSAGE ZONE 1 SD 2-7 ON/OFF;
 TC10 in Zone 1 with address 20 disconnects the smoke detectors in zone 1 with address 2-7.

Terminals



Dimensions (mm)



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Mounting holes in housing (mm)

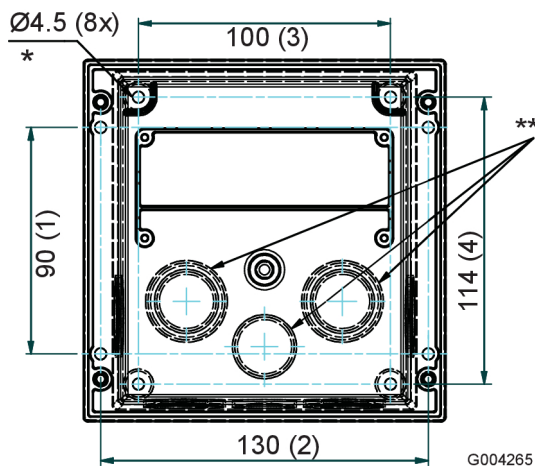


Table 2. Notes for mounting hole pattern in TC10 housing

- (1) & (2) Dimensions for recessed mounting
- (3) & (4) Dimensions for wall mounting
- * Holes are only indicated in plastic, use drill or sharp knife to clear.
- ** Knockouts on rear side. M25 (3x), M32 (2x)