

Universal 24 hour timer for surface-mounted fitting in DOT-U/1

Specifications:

Voltage :	20-25 V ac/dc	Maximum time:	24 hours
Capacity:	280mA	Minimum time:	10 minutes
Contact burden:	max. 30 Watt max. 30 Vdc-1A min. 10 MicroA	Acceptable temperature:	+5..+40C
Ohm :	62Va	Timer case:	glossy impact-resistant plastic
NO/C-NO/NC/C:	max. 110 Vdc-0.3A max. 125 Vac-0.5A	Case colour:	Alpine white (RAL 9010)
		Front colour:	Alpine white (RAL 9010)
		Text/icons colour:	Grey (RAL 7037)
		Display:	Red
Dimensions:	82x82x52(lxwxh)		

Application:

The timer is used as an overtime timer in climatic-conditioning equipment. It can be set from 10 minutes to 24 hours in 10-minute steps to 9 hours and 50 minutes after which the setting continues in 1-hour steps.

- 1.1 = 1 hour 10 minutes
- 11. = 11 hours

There are two output options:

- make-and-break contact of which the NC and NO output-voltage equals the timer input-voltage (G)
- potential-free contact

Both options also have a 10 V dc output-voltage on terminal 5 when the timer is active.

The timer can be set centrally.

The timer front has:

- membrane switches with click keys
- double display windows
- type and function indication
- two installation screws
- protective foil for display

The timer printing-plate has:

- 1 twofold display
- 1 jumper to select make-or-break contact/potential free contact (J1)
- 1 jumper to start with open/closed contact (J2) voltage on terminal 6 is/is not present
- 1 connector to connect front plate

The timer rear has:

- 1 spring-pressure assembly-block, numbered 1/6

1. Use as an overtime timer with potential-free contact:

Connect the power to terminals 1 and 2 of assembly-block. Set **jumper 1** to contact 1+2

- Terminal 3 = C
- Terminal 4 = NC

2. Use as an overtime timer with make-or-break contact:

Connect the power to terminals 1 and 2 of assembly-block. Set **jumper 1** to contact 2+3

- Terminal 3 = NC
- Terminal 4 = NO
- Terminal 1 = C = voltage

3. Use as an overtime timer with 10 V dc output:

Connect the power to terminals 1 and 2 of assembly-block. Jumper 1 settings does not apply here (both 1+2 and 2+3 are possible).

- Timer switched on – terminal 5 = 10 V dc
- Timer switched off – terminal 5 = 0 V dc
- A combination with settings 1 and 2 is also possible.

4. Use as a 'standard' overtime timer without central start:

Set Jumper 2 to contact 2+3. terminal 6 is not connected. The timer starts immediately after the time has been set.

5. Use as an overtime timer with central start:

Stel **Jumper 2** in op contact 1+2 en de timer start als er op klem 6 een spanning aanwezig is. (via een schakelklok met maakcontact)

Stel **Jumper 2** in op contact 2+3 en de timer start als er op klem 6 geen spanning aanwezig is. (via een schakelklok met verbreekcontact)

Hierdoor kunt u 's morgens al het gewenste aantal min/uren programmeren t.b.v. het overwerk, waarna de timer start als de schakelklok de installatie in de nacht schakelt.

6. Two and threefold mounting:

The timer has a standard bracket for mounting in a two or threefold Busch Jaeger mounting case. The timers can also be built-in in cases with a one to fivefold cover. A sticker simplifies building-in in switch panels.

7. Delivery

Delivery includes:

- 1 cable connector
- 2 chipboard screws
- 2 screw plugs
- 1 boring jig(sticker) for in-building in panels
- 1 set of instructions for use in Dutch(French, English and German are possible)

8. Instructions for use

Connect the timer in accordance with the instructions. The display will be off, if the timer is off with the exception of the decimal point (voltage present). The timer is set by clicking the up or down arrow-key, which will accelerate the counting up or down. By pressing the key once, the timer counts 10 minutes or one hour up or down. In order to return to the 00 position, press the up and down arrow-keys simultaneously. It is not necessary to go through 24 hours to reach 00. Depending on the selected options the timer will start as:

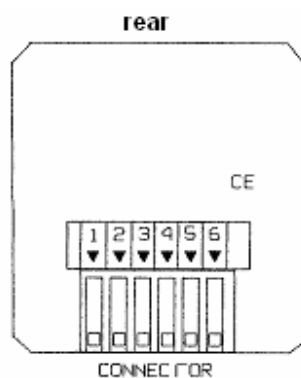
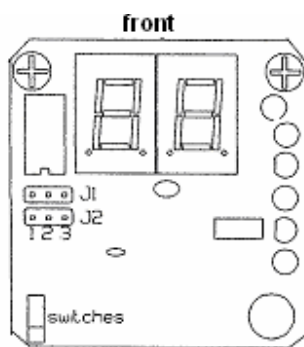
- A standard overtime timer
- An overtime timer with central start

If a timer has been set for less than 10 hours, a flashing dot *between* the two displays will indicate that the timer is counting down (1.1)

If a timer has been set for more than 10 hours, a flashing dot *after* the two displays will indicate that the timer is counting down (11.)

When the last 10 minutes have expired (0.1), overtime is switched off, the two display lights will go out after a few seconds and the timer is back to its off-position (decimal point is on)

It is possible to interrupt a setting by pressing the up or down arrow-keys.

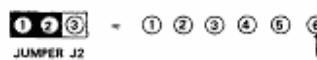
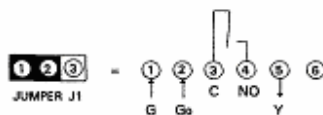
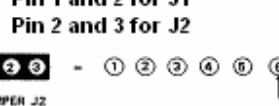
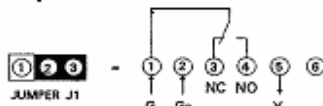


Warning:

Never connect other voltage than 20-25 V ac/dc to contact 3 and/or 4, if jumper 1 has been set to 2-3. This may seriously damage the timer. Foreign voltage may only be connected if the jumper has been set to 1-2 (potential-free contact)

DOT-U/1 detail settings

Jumpers are included in standard-timer delivery Pin 1 and 2 for J1



Icons:
G-Go = 15/25 V ac/dc
Y = 10 V dc

timer starts when the contacts has been broken

timer starts when the contact has been made

Royal Electronics B.V.
Voorhorst 9
7414 BA Deventer
The Netherlands
Phone/Fax 00 31 (0)570-640726
e-mail: info@royalelectronics.nl