AUTOMATISMOS
Control y Programación S.L.U.

# DIGITAL TIMER

# XTDU302
# XTDC302

Multifunction, 4 operating modes
Preset and elapsed time displayed at the same time
Multi-range from 0.01 second to 99.9 hours
IP65 front protection

Precision timer from the XTD series. Its very simple programming system lets you handle it like an analogue timer, with the preset time and the elapsed time shown at the same time.




## PHYSICAL SPECIFICATIONS

| | |
|---|---|
| Housing | Grey UL94 - V - 0 polycarbonate |
| Mounting | Snap-in bracket |
| Format | 48mm x 48mm |
| Weight | 170 g |
| Panel cut-out | 45mm x 45mm |
| Connector | XTDU302 - 11-pin socket<br>XTDC302 - Plug-in terminals |

## POWER SUPPLY

| | |
|---|---|
| Consumption | 2.3 VA |
| Voltage | 24 VAC - 48 VAC - 110 VAC - 230 VAC<br>12 VDC - 24 VDC |

## OUTPUT

| | |
|---|---|
| Output | 1 changeover contact 8 A 250 VAC |

## FUNCTIONS

| | | | |
|---|---|---|---|
| Time ranges | Selectable by side DIP switch | | |
| | SECONDS | MINUTES | HOURS |
| | 0.01s to 9.99s | 0.01m to 9.99m | 0.01h to 9.99h |
| | 0.1s to 99.9s | 0.1m to 99.9m | 0.1h to 99.9h |
| | 1s to 999s | 1m to 999m | |

| | |
|---|---|
| Operating modes | Selectable by side DIP switch |
| | A. On-delay |
| | B. Interval on closing / opening of the auxiliary contact |
| | C. Interval on opening of the auxiliary contact |
| | D. Symmetric cyclic |

⚠ Change the operating mode only with the device disconnected from the mains

## AMBIENT CONDITIONS

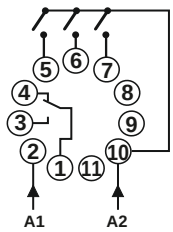
| | |
|---|---|
| Operating temperature | - 10º C + 55ºC |
| Storage temperature | - 25º C + 85ºC |

## STANDARDS

| | |
|---|---|
| CE compliance | 2014/35/UE ; 2014/30/UE |

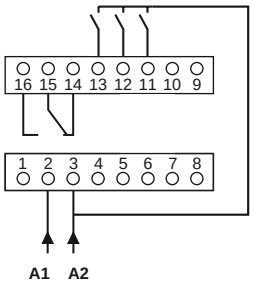
## WIRING

XTDU302




| | |
|---|---|
| 2 - 10 | Power supply |
| 5 | Start |
| 6 | Timing halt |
| 7 | Reset |
| 1 - 3 - 4 | Changeover output |

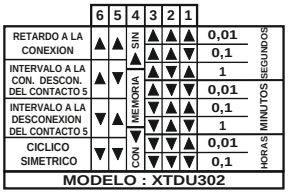
XTDC302




| | |
|---|---|
| 2 - 3 | Power supply |
| 13 | Start |
| 12 | Timing halt |
| 11 | Reset |
| 14 - 15 - 16 | Changeover output |

16 NO · 15 common · 14 NC

## FUNCTION SELECTION




DIP SELECTOR

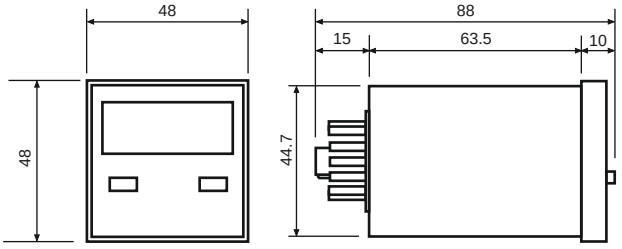
| | |
|---|---|
| 1<br>2<br>3 | Time range selection |
| 4 | Memory on/off selection |
| 5<br>6 | Operating mode selection |

## FRONT PANEL

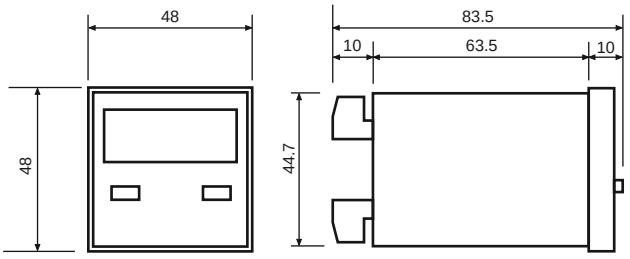



## DIMENSIONS

XTDU302

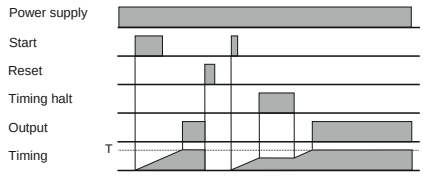



XTDC302



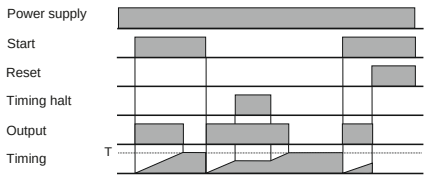
## OPERATING MODES

### Mode A. On-delay



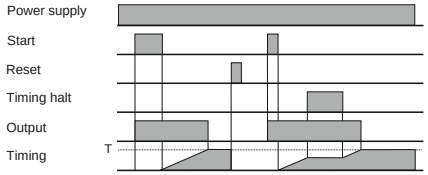

The device starts timing when the start contact closes. If the start contact is already closed, timing starts when power is applied. When the preset time (T) is reached, the output switches on. If the reset contact closes, the output switches off and the timing returns to zero. If memory is enabled and the power supply is lost, the cycle resumes from where it was when the power failed once power returns.

### Mode B. Interval on closing / opening of the auxiliary contact



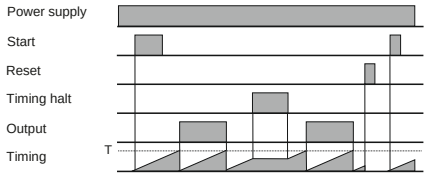

The device starts timing and switches the output on when the start contact closes. If the start contact is already closed, timing starts when power is applied. When the preset time (T) is reached, the output switches off and stays off until the reset contact closes or the start contact opens; in the latter case, the device switches the output on and starts a new timing. If the reset contact closes, the output switches off and the timing returns to zero. If memory is enabled and the power supply is lost, the cycle resumes from where it was when the power failed once power returns.

### Mode C. Interval on opening of the auxiliary contact




The device starts timing and switches the output on when the start contact closes. If the start contact is already closed, timing starts when power is applied. When the preset time (T) is reached, the output switches off and stays off until the reset contact closes or the power supply is disconnected. If memory is enabled and the power supply is lost, the cycle resumes from where it was when the power failed once power returns.

### Mode D. Symmetric cyclic




The device starts timing when the start contact closes. If the start contact is already closed, timing starts when power is applied. When the preset time (T) is reached, the output switches on and a second timing of the same length starts; when it ends, the output switches off and an identical new cycle starts. If the reset contact closes, the output switches off and the timing returns to zero. If memory is enabled and the power supply is lost, the cycle resumes from where it was when the power failed once power returns.

## PRECAUTIONS

.- Before connecting the device, make sure the supply voltage is within the ranges shown on the label; otherwise internal parts of the timer may be damaged.

.- Use crimp terminals to wire the device. Stranded wire without terminals can cause a short circuit if a loose strand gets in.

.- If the devices are used where there is a lot of electrical noise, keep the device and its wiring away from the noise source.

.- If the devices are powered continuously, leave some free space between them for better ventilation, since excessive temperature can shorten the life of the internal components.

.- Do not expose the device to solvents or acids, as they can damage the housing. In highly corrosive or very humid environments, both the internal components and the printed circuit board (PCB) can be affected.

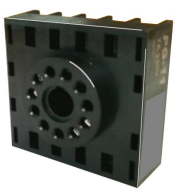
## ACCESSORIES

**ZB11-0 SOCKET**




11-pin socket for DIN-rail mounting

**PG11 SOCKET**



11-pin socket with screw terminals on the back

**XAMPDH MEMBRANE**



Silicone protective membrane

**TC11 BLANKING COVER**



Blanking cover for 48 × 48 mm panel cutout