AUTOMATISMOS
Control y Programación S.L.U.

DIGITAL TIMER

XTDU309
XTDC309

Multifunction, 4 operating modes
Preset and elapsed time displayed at the same time
Up or down timing selectable by side DIP switch
Programming lock by external control input
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. On this model, timing can count up or down, selected with a DIP switch on its side. It also has a programming lock operated by a remote control input.



CE

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	XTDU309 - 11-pin socket XTDC309 - Plug-in terminals

POWER SUPPLY

Consumption	2.3 VA
Voltage	24 VAC - 48 VAC - 110 VAC - 230 VAC 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 functions	Selectable by side DIP switch	
	A. On-delay	Mode A (with RESET) Mode B (without RESET)
	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

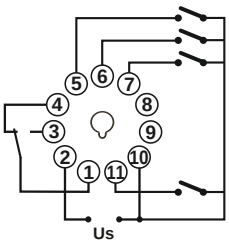
Operating temperature	- 10º C + 55ºC
Storage temperature	- 25º C + 85ºC

STANDARDS

CE compliance	2014/35/EU ; 2014/30/EU

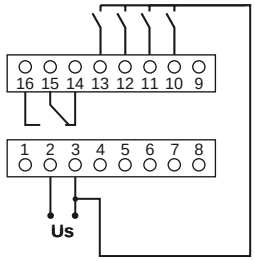
WIRING

XTDU309



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

XTDC309

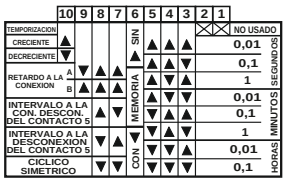


2 - 3	Power supply
13	Start
12	Timing halt
11	Reset
10	Programming lock
14 - 15 - 16	Changeover output

16 NO · 15 common · 14 NC

FUNCTION SELECTION

DIP SELECTOR



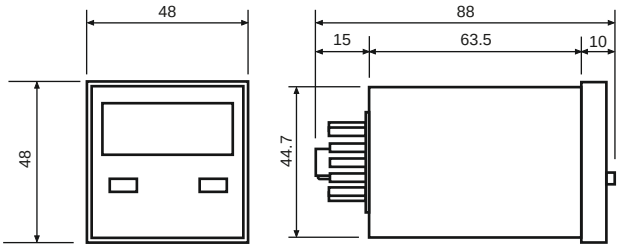
3 4 5	Time range selection
6	Memory on/off selection
7 8 9	Operating mode selection
10	Up / down timing selection

FRONT PANEL

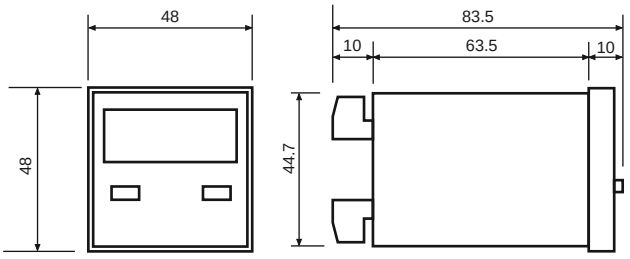


DIMENSIONS

XTDU309

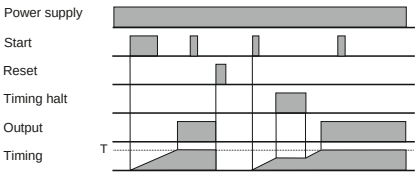


XTDC309



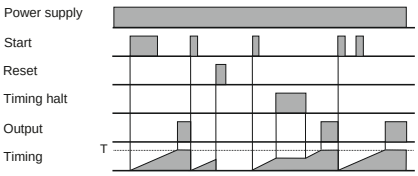
FUNCTIONS

Function A. On-delay. Mode A (reset needed to start a new cycle)



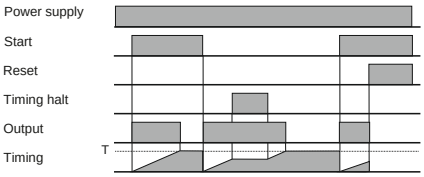
The device starts timing when the start contact closes. If the start contact is already closed, timing starts when power is applied. When the preset time (T) is reached, the output switches on. If the reset contact closes, the output switches off and the timing returns to zero. If memory is enabled and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

On-delay. Mode B (no reset needed to start a new cycle)



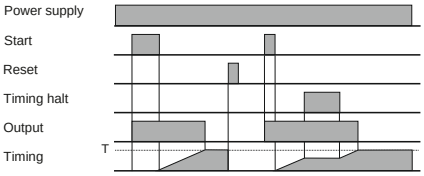
The device starts timing when the start contact closes. If the start contact is already closed, timing starts when power is applied. When the preset time (T) is reached, the output switches on. If the start contact closes, the output switches off and timing starts again. If memory is enabled and the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

Function B. Interval on closing / opening of the auxiliary contact



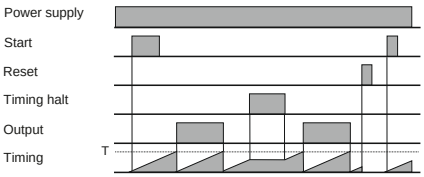
The device starts timing and switches the output on when the start contact closes. If the start contact is already closed, timing starts when power is applied. When the preset time (T) is reached, the output switches off and stays off until the reset contact closes or the start contact opens; in the 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.

Function 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.

Function 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