

ET Series Extension Timers

The ET Series Plant Extension timers have been designed to provide a simple way to extend the running hours of a plant or a system. The extension timers are available with different maximum extension periods.

The timers have 7A 230Vac relay for switching the plant on/off, both normally open and normally closed models are available. The five green LEDs on the fascia of the unit indicate the current extension time and the red on/off LED indicates the status of the relay.

The units have built-in HOLD contacts (default open). When the hold contacts are open the timer starts counting down immediately after selecting the required extension time. If the HOLD contacts are closed, the timer is in hold mode and the timer does not start counting down until the contacts are opened (LEDs flash slowly).

The extension timers have touch sensitive push button for the selection of the extension time.

The maximum extensions time can be limited through the configuration mode.



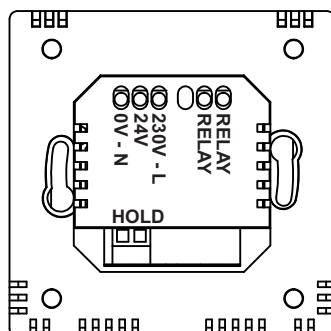
Model Type	Model	Description
	ET1	Extension Timer, Up to 1 Hours, Normally Open Relay
	ET5	Extension Timer, Up to 5 Hours, normally Open Relay
	ET10	Extension Timer, Up to 10 Hours, Normally Open Relay
	ET1-NC	Extension Timer, Up to 1 Hours, Normally Closed Relay
	ET5-NC	Extension Timer, Up to 5 Hours, Normally Closed Relay
	ET10-NC	Extension Timer, Up to 10 Hours, Normally Closed Relay

Technical Data

Power Supply	Power supply	24Vac/dc -10%/+15% 230Vac +/-10%
Interfaces	LEDs	5 Green LEDs for the current extension time 1 Red LED indicating Relay Status
Signal Outputs	Output	1 x 7A 230Vac Relay, SPST, Normally Open Contact NC-Models: Normally Closed Relay
Signal Inputs	Input Contact	Hold Contacts (volt-free) - Open = Run Closed for Run; Available on Request
Connections	Terminal Connections	Solid and Stranded Cable Maximum Size: Solid: 0.05-2.5mm ² , Stranded: 0.05-1.50mm ² Rising Clamp: Size 2.5 x 2.2mm
Environmental Conditions	Operating	
	Temperature	0°C...+50°C (32..122°F)
	Humidity	0...95%rh (non-cond.)
	Storage	
	Temperature	-30°C...+70°C (-22..158°F)
	Humidity	0...95%rh (non-cond.)
Standards	CE Conformity	CE Directive 2014/30/EU EN61000-6-3: 2001 (Generic Emission) EN61000-6-1: 2001 (Generic Immunity).

	Degree of Protection	IP30
Housing	Housing Material	ABS Plastics, Self Extinguishing
	Mounting	Junction Box Mounting, RAL9010 Pure White Wall Mounting with Wall Mounting Box
	Dimensions	W86 x H86 x D44mm
	Weight	200g

Wiring Connections



0V - N	24V: 0V or 230V: Neutral
24V	24Vac/dc
230V - L	230V Live
RELAY	Relay, Normally Open NC Models: Normally Closed
HOLD	Hold Input (Low Voltage), Normally Open

Wiring Precautions

Switch off the power before any wiring is carried out.



WARNING:When using 230V AC please take care to establish which supply line is live and which neutral prior to connection to the timer. Whilst the unit will function normally if the Live and Neutral supply lines are accidentally swapped, the HOLD input terminals are not galvanically isolated from the supply voltage and would present a shock hazard under those conditions. Mount the unit only in isolated enclosure / wall mounting box.

Time Extension

To set the required time, press SELECT and hold. The current extended hour start flashing (or the first LED if the unit has been off). Keep holding the SELECT touch button until the required extension time is flashing, and then release the touch button.

The required extension time LEDs are now permanently lit (e.g. if 4 hours extension is required with ET5, the first 4 LEDs are lit) and the output relay switches ON. The output relay status is indicated by the red ON/OFF LED.

When the extension time is about to expire, the red ON/OFF LED flashes rapidly indicating the imminent delay time-out.

Cancelling Extension

The time extension is cancelled by holding the SELECT button until all green LEDs are switched off. At this moment release the SELECT button and the output relay switches OFF.

LED Indication

The tables below explain the different modes of the green extension time LEDs and red on/off LED.

Green Extension Time LEDs	Description
OFF	Extension Timer Inactive
CONSTANT (multiple LEDs)	Extension Time Delay Active
FLASHING (single LED)	Extension Time Delay is being Changed
FLASHING (multiple LEDs)	Extension Time Delay Paused (Hold condition)

Red ON/OFF LED	Description
OFF	Relay OFF
CONSTANT	Relay ON
FLASHING	Imminent Switch OFF

HOLD Contacts

The extension timers have HOLD contacts that are normally open. When these are open the extension timer operates as normal.

When the HOLD contacts are closed, the extension timer holds the current delay time setting and the red ON/OFF LED/relay is ON. This mode is indicated by the flashing green LEDs (all LEDs up to the selected extension time are flashing). When the HOLD contacts open, the timer starts counting down normally.

This feature can be used e.g. by the heating controller to hold the selected extension time until the out-of-hours operation, from where the extension timer starts counting down.

NOTE: On request ET timers are also available with Normally Closed hold contacts i.e. contacts are closed for the countdown to run.

Maximum Extension Time (Configuration)

It is possible to limit the maximum user extension time. When the maximum extension time has been set, the users can extend the plant only up to the maximum extension time set.

The maximum extension time option for ET5 are 2,3,4,5 hours and for ET10 4,6,8,10 hours.

The maximum extension time is set by holding the SELECT touch button for 11 cycles i.e. keep holding the SELECT button until all LEDs have been cycled 11 times. Continue holding. After this time the green LEDs start to cycle in reverse. Release the button at the desired setting (e.g. when 3 LEDs are lit), this is then automatically stored as the maximum extension time.

Dimensions

