

This document must be retained for future reference.

It is the responsibility of the person installing the electrical equipment to ensure that the installation meets the requirements of the IET wiring regulations and is therefore 'fit for purpose'. Factors such as correct selection of components, cable sizing, protective devices and Earth bonding are all critical and should be checked prior to full testing and power-up. Any other regulations applicable to the equipment being installed such as the Machinery Directive and current health and safety legislation must also be adhered to.

All connections (including factory made) must be checked for the correct tightness prior to commissioning of the electrical installation. All connections should also be inspected periodically to ensure correct tightness.

DO NOT USE POWER TOOLS ON THESE PRODUCTS



ET1624HA/ PM

Operating Instructions

Important notice to installers!

Before installation work starts the operating instructions should be read and understood. If you need technical assistance please contact the manufacturer at the address shown on this leaflet. Installation of this unit should only be undertaken by a skilled electrician working to the standards set by the latest edition of the IEE wiring regulations.

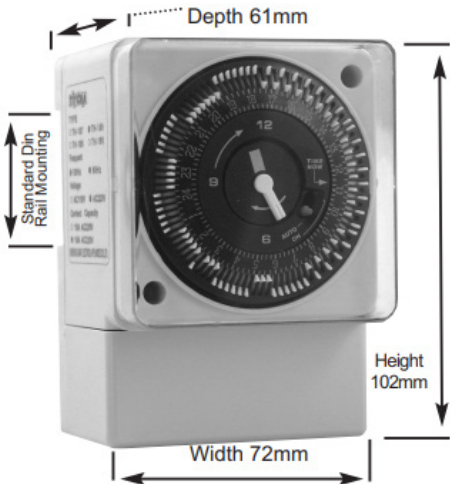
The unit is designed to withstand reasonable levels of interference from external sources such as voltage peaks in the electricity supply. If however the supply is known to be subject to unusual level of interference then measures to protect the device from this need to be taken by the installer. Similarly the output relay is designed to switch a resistive load. If inductive or capacitive loads need to be switched it is suggested that a suitably specified slave device such as a contactor or relay be used to carry out the switch duty.

Electrical connections

- 240V mains supply to terminals 1 & 2
- Switched, volt free, output is across terminals 3, 4 & 5 where terminal 3 is common.
- The switch across terminal 3 & 4 is made when the timer is ON
- The switch across terminal 3 & 5 is made when the timer is OFF

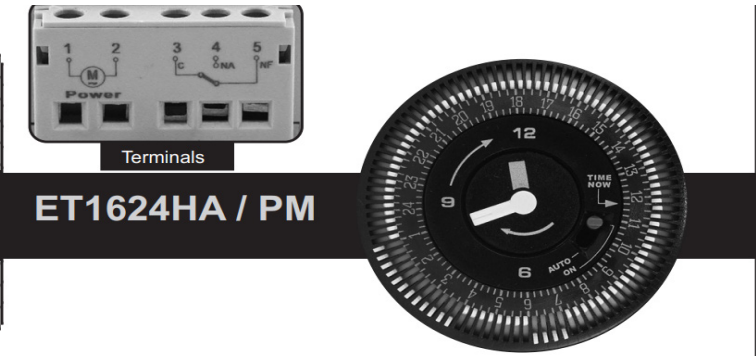
Mounting the ET1624HA Din Rail Moutning unit

The device is rated at IP 20 and as such provides finger protection but no immunity to fluids. It is designed to be fitted on a Din rail within a suitably IP rated enclosure. Visit www.europacomponents.com to select an enclosure from the broad range on offer. Efforts should be made to ensure that the device is not subjected to undue vibration. Methods such as resilient mounting of the enclosure should be employed to keep levels to a minimum.



Technical Data

Supply Voltage	230Volts 50/60Hz AC
Voltage Tolerance:	220-260Volts AC
Output relay rating	16Amps AC1 resistive
Relay type	Single pole changeover (volt free)
Power consumption	<2VA
Drive Method	Quartz controlled stepper motor
Set Period of relay	Minimum of one 15minute period in 24 hours Maximum of 96 settable periods in 24 hours
Time Error	<±3 Seconds per Day at 22°C
Ambient temp range	-10°C to +50°C
Operating Humidity	<85%
Working reserve:	72 hours



Initial setup

In order to programme the unit the internal battery will need to be charged. To do this you will need to connect a live feed to the unit for about ten minutes. The set up procedure can then be done with the power disconnected. It will take three days of charging to reach the full reserve time of 72 hours.

Setting the master clock (as viewed from the front face)

Remove the transparent plastic cover from the top face of the timer. The timer is split into three separate parts. Working from the centre out, they are as follows. Firstly the centre, which is a fixed part with hour and minute hands. Secondly, working outwards, the fixed clock face showing the hours 6, 9 & 12. Thirdly, the outer ring which has the 24 hour clock printed on it and can be moved by hand in a clockwise rotation. You will also see in the outer ring 96 protruding white triangles each sitting in its own slot, which are the timer settable segments. To set the correct master time grasp the outer wheel and move it in a clockwise rotation. Note the white arrow marked 'Time Now' on the fixed clock face. Rotate the outer wheel until the correct time on the outer ring is lined up with the arrow. Each white segment on the ring represents 15 minutes. As this process takes place it is worth noting the position of the clock hands which can be used to fine-set the time to the nearest minute. The master clock has now been set.

What the timer can do

The timer has 96 segments on the wheel, each segment relating to 15 minutes. Any segment can be used to operate the time relay either in discreet 15 minute intervals or in multiple blocks of 15 minutes together. For example, in the picture the timer has been set to come on for three hours at 01.00Hrs (12 segments) and one hour at 06.00Hrs (4 segments).

To programme the timer

The white segments on the outer ring can be moved in their respective slots. Each segment that is moved outwards becomes a part of the set programme and will cause the output relay to change state. Segments can be moved individually or in blocks. As time progresses the ring moves round and the segments pass the 'Time Now' arrow. In so doing they will activate the output relay dependent on whether they have been moved in or out. Those that have been moved out will cause the output relay (terminals 3-4) to close and those that have been moved in will cause the relay to open.

Having adjusted the time periods as required the master clock should be set as described in the section 'setting the master clock'

Enabling the programme to run

In the fixed clockface at 4 O'clock you will see a red slide peg. Slide this peg downwards in its slot to set the timer to 'Auto' which will enable the programme set by the position of the pegs. Alternatively slide the peg upwards to the 'ON' position which will force the timer into a permanently 'ON' status. In the ON position the timer is overridden and the relay (terminals 3-4) is permanently forced into the closed mode. In the 'AUTO' position the time will run to the programme set.

Fitting of Panel Mount Model ET1624HAPM (Dimensions: H: 67 x W: 67 x D: 55mm)

- Remove lid by undoing the fixing screws 1 & 2
- Cut panel hole: **67 x 67 x 67 x 67mm**
- Locate the main body of the timer (Fig A) under the panel
- Connect the terminals as required beneath the panel (before re-attaching the lid)
- Secure in position by re-attaching the lid, sandwiching the panel between the lid and the body of the timer. Using a screw driver turn out the secure holding tags 3 & 4

