

PHONOTRONICA Ltd.

DIGITAL CLOCK

SWITCH-ON AND OFF

PHONOTRONICA 4

PRODUCT PASSPORT

1. INTENDED USE

A digital clock of the PHONOTRONICA-4 type is designed for immediate control of objects/sites by means of a PHASE control signal to the control output at pre-programmed times.

2. TECHNICAL SPECIFICATIONS

- 2.1. Supply voltage - 220V, 50Hz;
- 2.2. Maximum deviation - 0.5s / 24h;
- 2.3. Maximum consumption - <2 VA;
- 2.4. Power reserve - >5 days;
- 2.5. Load capacity of the control circuit - 0.5A at 220V;
- 2.6. Working conditions:
 - temperature from -25°C to 55°C
 - relative humidity 80% at 25°C
- 2.7. Time to reach the full reserve of the stroke 5 seconds.

3. STRUCTURE AND PRINCIPLE OF OPERATION

The clock is built as a real-time microcomputer system. A permanent display of the current time (hours and minutes) is displayed on the front panel of the product. When operating in autonomous power mode (mains voltage failure), no indication is present on the display, but the programs and the current time entered in the clock are stored. Power reserve is ensured by a built-in 0.22F capacitor.

An installed program allows for implementation of up to 5 times switch-on and 5 switch-off of the controlled site. The output signal is 230 V **PHASE**. For greater load capacity, the output should be buffered with a suitable contactor.

Tariff switching times shall be embedded in the product software. On the last Sunday of March, the clock automatically readjusts its time one hour ahead for the summer mode. On the last Sunday of October, a similar operation is performed - the time is readjusted one hour back for the winter mode. Entering new information is carried out by means of two buttons (B1 and B2) located next to each other, under the cover of the watch.

The setup is carried out as follows:

Press button B1 once. The hours of the current time start flashing on the display. Pressing B2 sets the desired hour. Press B1 again. The minutes of the current time start flashing on the display. Pressing B2 now sets the desired minutes. The operations are repeated in this sequence.

The following modes are selectable with B1:

- 1 setting of the current time;
 - 2 setting of the current minutes;
 - 3 setting of the current date;
 - 4 setting of the current month;
 - 5 setting of the current year;
 - 6 setting the time of first switch-on
- 1a. xx ;

- 7 setting the minutes of first switch-on 1 b. xx ;
- 8 setting the time of the first switch-off 2a. xx ;
- 9 setting the minutes of the first switch-off 2b. xx ;
- 10 setting of the second switch-on time 3a. xx ;
- 11 setting the minutes of the second switch-on 3b. xx ;
- 12 setting the hours of the second switch-off 4a. xx ;
- 13 setting the minutes of the second switch-off 4b. xx ;
- and so on up to 0a and 0b, of the last switch-off
- 14 working status of the clock;

When the watch is in operation mode, by pressing and holding B2, the minutes and seconds of the current time appear on the display.

If in 24 hours you do not need all five times switching on and off, then the setting shall be made only for the necessary hours and minutes, and the remaining redundant modes shall be set at the time of the last switching off, or shall be left with 00 readings.

4. INSTALLATION AND OPERATION

The installation and servicing of this item shall be carried out by person authorized by the Utility Electricity Distribution Company. The clock shall be connected to the controlled site according to the diagram shown on the base next to the terminal block.

5. WARRANTIES

This product Digital Clock, tariff type Phonotronica-4 meets the requirements of BDS EN61038. It has been tested at the National Metrological Centre (NMC), and has been registered in the State Register under No. 3666. Malfunctions that have occurred during this period are identified by the technical offices of the Utility Electricity Distribution Company and are registered in a Report of Findings, where the type of failure and the date of occurrence have been indicated. Within the warranty period defective clocks shall be submitted with a claim by the customer to the commercial organization from which they were purchased.

This document provides a 2-year warranty.

6. STORAGE AND TRANSPORT

Clocks are stored packed in covered warehouses under the following conditions:

- *Ambient temperature from -25°C to +70°C*
- *Relative air humidity up to 85%*
- *No aggressive gases and vapours.*

The product is transported in packaging, in closed vehicles, in compliance with the transport and handling signs indicated on the packaging. The maintenance of this product shall be carried out by the manufacturer:



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Date of sale:

No.:

General Manager:
(Momchil Gergov)