

Bearware A304589x61

Bearware Digital DIN Rail Timer - Model A304589x61 Instruction Manual

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your Bearware Digital DIN Rail Timer, Model A304589x61. This digital timer is designed for precise time control of electrical circuits, suitable for installation in fuse boxes, distribution boxes, or mesh boxes on a DIN rail. It offers flexible programming options for daily and weekly schedules, making it ideal for applications such as staircase lighting, garage door control, or access route illumination.

2. SAFETY INSTRUCTIONS

WARNING: Electrical installation should only be performed by a qualified electrician in accordance with local wiring regulations and safety standards. Incorrect installation can lead to electric shock, fire, or damage to the device.

- Always disconnect power at the main circuit breaker before installation, maintenance, or troubleshooting.
- Ensure the timer is installed in a dry, protected environment.
- Do not connect devices with a current output exceeding 16A (3650W).
- The switching contact is potential-free.
- Suitable for capacitive loads (e.g., LED lighting power supplies). Conditionally suitable for inductive loads (e.g., small motors for pumps up to 300 watts).
- Keep the device away from children.

3. PRODUCT OVERVIEW

The Bearware Digital DIN Rail Timer (Model A304589x61) features a clear LCD display and intuitive controls for easy programming. It is designed for seamless integration into standard DIN rail setups.





Figure 1: Front view of the Bearware Digital DIN Rail Timer with its protective cover open, showing the LCD display and control buttons.

3.1 Key Features

- 28 programmable ON/OFF switching times.
- Minimum switching interval of 1 minute.
- Flexible day and week programming options.
- 12/24-hour display mode.
- Summer time activation function.
- Manual ON/AUTO/OFF operating mode.
- Integrated backup battery for program retention during power outages.
- Protective cover for the control panel.

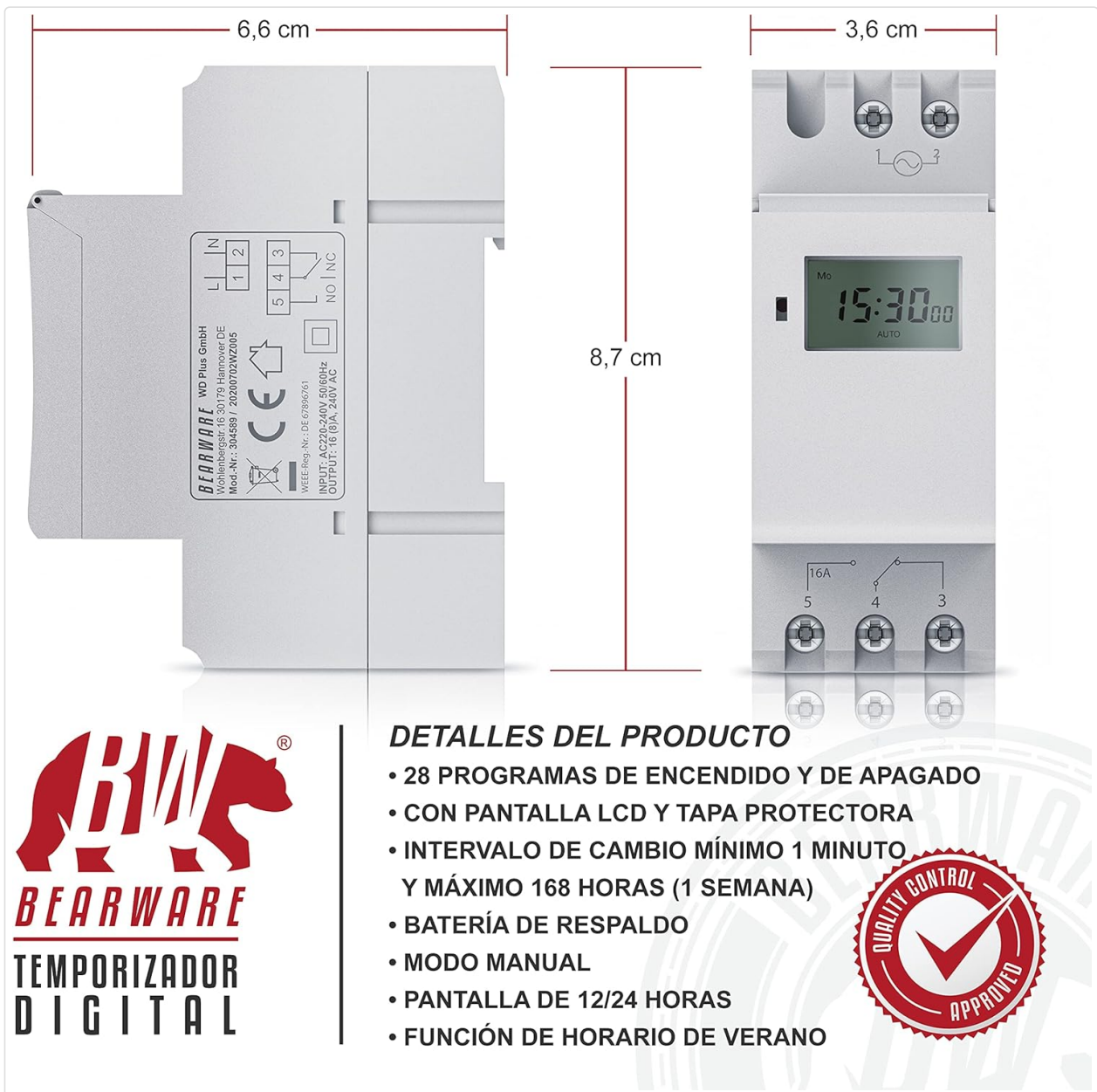


Figure 2: Product dimensions (3.6 cm width, 8.7 cm height, 6.6 cm depth) and a summary of key features including 28 programs, LCD, 1-minute minimum interval, 1-week maximum, backup battery, manual mode, 12/24-hour display, and summer time function.

3.2 Control Panel



Figure 3: Detailed view of the control panel with numbered buttons.

1. **P (Program) Key:** Used for program selection and setting ON/OFF times.
2. **D+ (Day) Key:** Adjusts the day of the week during time setting or program setting.
3. **H+ (Hour) Key:** Adjusts the hour during time setting or program setting.
4. **M+ (Minute) Key:** Adjusts the minute during time setting or program setting.
5. **CLOCK Key:** Used to set the current time and exit programming mode.
6. **RESET Key:** Resets the timer to factory defaults, clearing all programs and settings.
7. **MANUAL Key:** Toggles between ON, AUTO, and OFF operating modes.

4. INSTALLATION

The Bearware Digital DIN Rail Timer is designed for easy mounting on a standard DIN rail (35mm). Ensure all safety precautions are followed before proceeding with installation.

4.1 Mounting on DIN Rail



BEARWARE

**TEMPORIZADOR
DIGITAL**

USO:

Para instalación en
caja de fusibles, caja
de distribución o caja de
alimentación en **carril DIN**

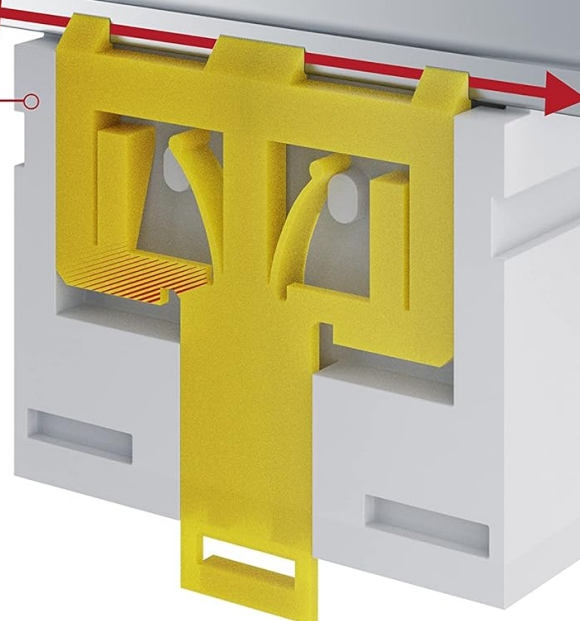


Figure 4: Illustration demonstrating the correct method for attaching the timer to a DIN rail within a distribution box.

1. Locate an available slot on your DIN rail within the fuse box or distribution box.
2. Align the timer's mounting clips with the DIN rail.
3. Press the timer firmly onto the rail until it clicks securely into place.



Figure 5: The Bearware Digital DIN Rail Timer shown securely installed on a DIN rail.

4.2 Wiring Diagram

Refer to the wiring diagram printed on the side of the device (also visible in Figure 2, top left corner) for correct electrical connections. The terminals are typically labeled as follows:

- **L:** Live input
- **N:** Neutral input
- **1, 2:** Power supply for the timer (AC220-240V 50/60Hz)
- **3, 4, 5:** Switching contacts (3: Common, 4: Normally Open (NO), 5: Normally Closed (NC))

Ensure all connections are tight and correctly insulated. Double-check all wiring before restoring power.

5. OPERATION

5.1 Initial Setup and Reset

1. Upon first use or after a long period of inactivity, the display may be blank. Connect the timer to power.

2. Press the **RESET** button (6 in Figure 3) using a pointed object (e.g., a pen tip) to clear all previous settings and initialize the timer. The display will show 0:00.

5.2 Setting Current Time and Day

1. Press and hold the **CLOCK** button (5 in Figure 3) for approximately 3 seconds. The hour display will start flashing.
2. Use the **H+** button (3 in Figure 3) to set the current hour.
3. Use the **M+** button (4 in Figure 3) to set the current minute.
4. While still holding the **CLOCK** button, press the **D+** button (2 in Figure 3) to set the current day of the week (Mo, Tu, We, Th, Fr, Sa, Su).
5. Release the **CLOCK** button to save the current time and day.

5.3 Programming ON/OFF Times

The timer allows for up to 28 ON and 28 OFF programs. Each program can be set for individual days or various day combinations.

1. Press the **P** button (1 in Figure 3). The display will show '1 ON' and the hour will flash.
2. Use **D+** to select the desired day(s) for this program. Options include individual days, all weekdays, weekends, or various combinations (e.g., Mo-Sa, Mo-We, Fr).
3. Use **H+** and **M+** to set the desired ON time for '1 ON'.
4. Press **P** again. The display will show '1 OFF' and the hour will flash.
5. Use **D+** to select the desired day(s) for this OFF program (usually matching the ON program).
6. Use **H+** and **M+** to set the desired OFF time for '1 OFF'.
7. Repeat steps 1-6 for additional programs (2 ON, 2 OFF, etc., up to 28 ON/OFF).
8. To exit programming mode and return to the current time display, press the **CLOCK** button.

5.4 Manual Mode (ON/AUTO/OFF)

The **MANUAL** button (7 in Figure 3) allows you to override programmed settings temporarily or permanently.

- Press **MANUAL** repeatedly to cycle through the modes:
- **AUTO:** The timer operates according to the programmed ON/OFF schedules.
- **ON:** The connected device is continuously ON, overriding all programs.
- **OFF:** The connected device is continuously OFF, overriding all programs.

5.5 Summer Time Function

To activate or deactivate summer time (Daylight Saving Time):

1. Press and hold the **CLOCK** button.
2. While holding **CLOCK**, press the **H+** button. The display will show 'S' (for Summer Time) and the time will adjust by one hour. Repeat to revert.

6. MAINTENANCE

The Bearware Digital DIN Rail Timer requires minimal maintenance.

- Clean the device with a soft, dry cloth. Do not use abrasive cleaners or solvents.

- Ensure the protective cover is closed when not programming to prevent dust and accidental button presses.
- The internal backup battery is designed for long-term use and typically does not require replacement. It maintains program settings during power outages.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Display is blank.	No power supply.	Check power connections and circuit breaker.
Timer does not switch ON/OFF as programmed.	Timer is in ON or OFF manual mode. Incorrect program settings.	Press MANUAL until 'AUTO' is displayed. Review and correct program settings.
Time is incorrect.	Time not set correctly. Summer time activated/deactivated incorrectly.	Reset and set current time and day. Check summer time setting.
Device connected to timer does not work.	Device faulty. Overload. Incorrect wiring.	Test the device directly. Ensure load does not exceed 16A/3650W. Verify wiring.

8. SPECIFICATIONS

- **Brand:** Bearware
- **Model Number:** A304589x61
- **Product Dimensions (W x H x D):** 3.6 x 8.7 x 6.6 cm
- **Item Weight:** 115 g
- **Input Voltage:** AC 220-240V, 50/60Hz
- **Max Switching Capacity:** 16A / 3650W
- **Inductive Load:** Up to 5A (e.g., small motors up to 300W)
- **Minimum Switching Interval:** 1 minute
- **Programmable Times:** 28 ON/OFF programs
- **Display:** LCD, 12/24-hour mode
- **Features:** Internal backup battery, Summer time function, Manual mode (ON/AUTO/OFF)
- **Installation Height:** 61 mm

9. WARRANTY AND SUPPORT

Bearware products are manufactured to high-quality standards. For warranty information or technical support, please refer to the documentation provided with your purchase or contact your retailer. Keep your proof of purchase for warranty claims.



Figure 6: The timer can be used for optimal lighting control, such as for staircase and garage lighting or for access routes.