

Theben SYN160A

Theben SYN 160a Analog Timer User Manual

Model: SYN160A

INTRODUCTION

The Theben SYN 160a is a reliable analogue time switch designed for daily programming. This single-channel device operates synchronously with the mains power supply and features 96 switching segments, allowing for precise control with a shortest switching time of 15 minutes. It is equipped with convenient screw terminals for easy installation and a manual switch offering three positions: Permanent ON, AUTO, and continuous OFF, providing flexible operation for various applications.

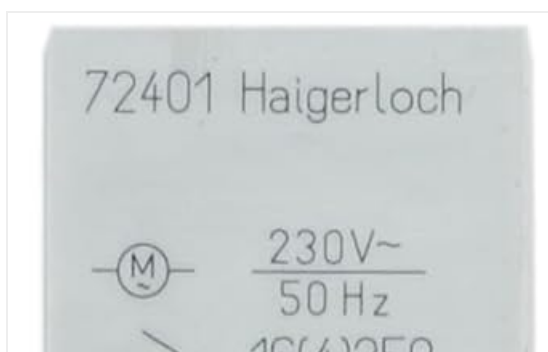
SAFETY INFORMATION

Please read these safety instructions carefully before installation and operation. Failure to follow these instructions may result in electric shock, fire, or serious injury. Keep this manual for future reference.

- Installation and maintenance should only be performed by a qualified electrician.
- Ensure the power supply is disconnected before any installation or wiring work.
- Do not expose the device to moisture, extreme temperatures, or direct sunlight.
- Verify all connections are secure and correct before restoring power.

PRODUCT OVERVIEW

The Theben SYN 160a time switch is designed for DIN rail mounting and features a clear analogue dial for setting daily programs. Key components include the time dial, switching segments, and the manual override switch.



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SYN 160 a



Figure 1: Front view of the Theben SYN 160a Analog Timer, showing the time dial, blue switching segments, and the manual ON/AUTO/OFF switch.



Figure 2: Angled view of the Theben SYN 160a, illustrating the transparent protective cover in an open position, revealing the time setting mechanism and screw terminals at the bottom.

SETUP AND INSTALLATION

The SYN 160a is designed for quick and secure mounting on a standard DIN rail. Follow these steps for proper installation and wiring.

1. Mounting

1. Ensure the main power supply to the installation area is switched off at the circuit breaker.
2. Clip the time switch onto the DIN rail by aligning the top edge and pressing down firmly until it clicks into place.



Figure 3: The Theben SYN 160a time switch securely mounted on a standard DIN rail, ready for electrical connections.

2. Wiring

The device features screw terminals for electrical connections. Refer to the wiring diagram on the device or packaging for specific connections. Typically, this involves connecting the mains supply and the load to be controlled.

- Connect the incoming phase (L) and neutral (N) wires to the designated input terminals.
- Connect the load (e.g., light, pump) to the output terminals.
- Tighten all screw terminals securely to prevent loose connections.

After wiring, ensure the transparent cover is closed to protect the internal components.

OPERATING INSTRUCTIONS

The Theben SYN 160a allows for easy programming of daily switching times and manual override.

1. Setting the Current Time

Rotate the time dial clockwise until the current time aligns with the time marker (usually a small arrow or line on the housing).

2. Programming Switching Times

- The dial is divided into 96 segments, each representing 15 minutes.
- To set an "ON" period, push the blue switching segments outwards at the desired times.
- To set an "OFF" period, leave the blue switching segments pushed inwards.
- The timer will switch the connected load ON when the dial reaches an outward-pushed segment and OFF when it reaches an inward-pushed segment.

3. Manual Override Switch

The manual switch provides three operating modes:

- **Permanent ON:** The connected load remains continuously ON, overriding the programmed times.
- **AUTO:** The timer operates according to the programmed switching times. This is the standard operating mode.
- **Continuous OFF:** The connected load remains continuously OFF, overriding the programmed times.

Move the switch to the desired position. Remember to return it to "AUTO" for programmed operation.

MAINTENANCE

The Theben SYN 160a is designed for maintenance-free operation. However, periodic checks can ensure its longevity and proper function.

- Ensure the device and its connections are free from dust and debris.
- Periodically check screw terminals for tightness, especially after initial installation.
- Do not use abrasive cleaners or solvents on the device. A soft, dry cloth is sufficient for cleaning.

TROUBLESHOOTING

If you encounter issues with your Theben SYN 160a, consider the following common solutions:

- **Device not switching:**
 - Check if the manual override switch is set to "AUTO".
 - Verify the current time is correctly set on the dial.
 - Ensure the blue switching segments are correctly pushed in/out for the desired ON/OFF times.
 - Check the power supply to the device and the connected load.
- **Load remains continuously ON/OFF:**
 - Confirm the manual override switch is not set to "Permanent ON" or "Continuous OFF".
 - Inspect the wiring for any loose connections or short circuits.
- **Time not advancing:**
 - Ensure the device is receiving continuous power. This model does not have a power reserve.

If the problem persists after checking these points, contact qualified personnel or Theben customer support.

SPECIFICATIONS

Feature	Detail
Model Number	SYN160A
Type	Analogue Time Switch
Program	Daily Program
Channels	1

Feature	Detail
Power Reserve	Without
Switching Segments	96
Shortest Switching Time	15 minutes
Synchronization	Synchronised with mains
Terminals	Screw terminals
Manual Switch	3 positions: Permanent ON/AUTO/continuous OFF
Dimensions (L x W x H)	50D x 50W x 50H centimetres
Weight	70 Grams (approx. 2.47 Ounces)
Colour	Grey
Manufacturer	Theben AG
Country of Origin	Germany

WARRANTY AND SUPPORT

For information regarding warranty terms and conditions, please refer to the documentation provided with your purchase or visit the official Theben website. For technical support or further assistance, please contact Theben customer service.

Theben AG Contact Information:

- **Address:** Hohenbergstraße 32, 72401 Haigerloch, Germany
- **Website:** www.theben.de

