

instructions

Installation and operating



Basic safety information 1.

WARNING

Danger of death through electric shock or fire! > Installation should only be carried out by a qualified electrician!

- The device is designed for installation on DIN top hat rails (in accordance with IEC 60715)
- It complies with product standard EN 60669-2-1

> Do not operate the device outside the specified technical data

m M The device must be installed in an enclosed switchgear cabinet made of metal or an appropriate fire-resistant material!

 \blacksquare After proper installation, the housing component under the cover must not be accessible!

2. Proper use

Control box TC 649 C is an annual time switch with astronomical function, which can be controlled and updated via Theben Cloud and managed centrally from a computer and a smartphone. The control box is used for lighting and ventilation.



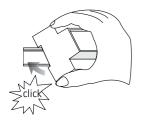
Do not use on safety devices, e.g. escape route doors, fire safety equipment, etc.

Disposal

> For an environmentally appropriate disposal, send the device back to the owner

3. Installation and connection

Installing TC 649 C



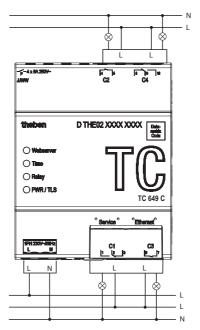
Connecting TC 649 C

Connecting the power supply

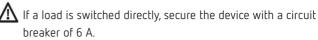
- > Strip cable to 8 mm (max. 9 mm)
- > Insert the line into the terminal and fasten it
- > Plug terminal into power supply socket
- ➤ Connect to power supply
 - \rightarrow During the start of the operating system, all LEDs are flashing. After approx. 150 s the start process is completed and the power LED (PWR/TLS) flashes.



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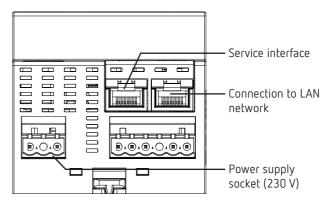


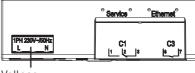
③ Switch the load with a contactor.



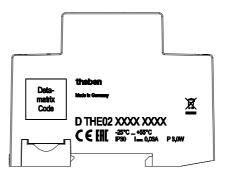
Device description 4.

Connections



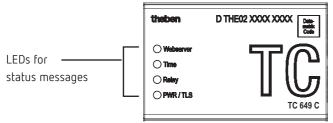


Voltage



① The performance specifications can be found on the side and on the device shoulder (see picture). After installation they are not visible any more!

③ Status messages are indicated by four LEDs.



| Label | Description | |
|------------|----------------------------|--|
| Web server | Web server started | |
| Time | Connection to NTP server | |
| Relay | at least 1 relay connected | |
| PWR/TLS | Power and TLS | |

5. Start-up

For the professional electrician/network administrator

① By default, the network interface is set to DHCP.

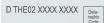
- Tor configuration with a static IP address, see <u>https://www.theben.de/tc-649-en/</u>
- Connect TC 649 C with the local network at LAN interface "Ethernet".
- ➤ Connect voltage.
 - → During the start of the operating system, all LEDs are flashing. After approx. 150 s the start process is completed and the power LED (PWR/TLS) flashes.

For the operator

To use the TC 649 C device, proceed as follows:

Access via host name (DHCP):

- Enter the host name in the address bar of the browser (only with Google Chrome). The host name is the serial number of TC 649 C (printed on the housing)
- Example: http://dthe0200001234



If access via the host name does not work (depending on router), use the manual at <u>https://www.theben.de/tc-649-en/</u>

Access via static IP address:

To set up access via a static IP address, use the manual

- During initial operation, enter the user name "admin" and the password "admin" to log in.
- D By default, the network interface is set to DHCP. If the TC 649 C device is to be used without DHCP server, please contact your network administrator or use the manual.

Start-up with Theben Cloud, use the manual.

Operation using the App OBELISK top3

You can access the cloud directly via the OBELISK top3 app.



Download – OBELISK software

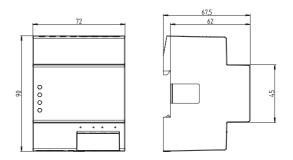
The OBELISK software is required to carry out an ot.2 download in the "Control" menu. It can be found at

https://www.theben.de/en/pc-set-obelisk-top2-3-9070409

| Start | Settings 🔻 | Control - Info - |
|-------|------------|-------------------|
| | | Direct connection |
| | | OT2 download |
| | | Astro offset |

6. Technical data

| Operating voltage: | extended operating range 230 V~, –20% +15% |
|--------------------------------------|--|
| Switching capacity: | $ \begin{array}{l} 6 \ A/250 \ V \ AC, \ cos \ \phi \ = \ 1 \\ Switching \ of \ any \ external \ conductor \\ is \ permitted. \ Switching \ SELV \ is \ only \\ permissible \ if \ both \ switching \ channels, \\ top \ or \ bottom, \ switch \ SELV. \end{array} $ |
| Minimum load: | 5 V / 1 mA |
| Switch contact: | µ contact |
| Frequency: | 50 Hz |
| Power consumption: | 3 W |
| Set operating range: | –10 °C to +45 °C |
| Threshold for operation: | –25 °C to +55 °C |
| Threshold for storage and transport: | –25 °C to +70 °C |
| Humidity: | 95%, non-condensing |
| Protection class: | Il subject to designated installation |
| Protection rating: | IP 30 |



7. Contact

Service address Theben AG Hohenbergstr. 32 72401 Haigerloch GERMANY Phone +49 7474 692-0 Fax +49 7474 692-150 Hotline Phone +49 7474 692-369 hotline@theben.de Addresses, telephone numbers etc. www.theben.de

8. Use of open source software

- This product uses open source software (OSS). A list of the OSS components used and their licence type and version can be found at <u>https://www.theben.de/tc-649-en/</u>
- If you need to connect groups of devices, please contact the Theben hotline.