Time to switch.

The new time switches
from Hager

:hager

The start of a new era.

Technical know-how, decades of experience and always ready to listen to the needs of our customers. The new time switches bring all these qualities together to further facilitate installation and commissioning in the future.

The new generation combines the functions and modes required for modern building automation. Moreover, it offers you the possibility, for the first time, to program your time schedule via an app. Not only does this save time, but it ensures maximum flexibility in your personal time planning.

A further time-saving feature is choosing the right time switch. Instead of 15 references, the new product range now only comprises 4, without forgoing proven functions.

Benefits at a glance

Easy.
Convincing.
Safe.

The new time switches allow you to perform time switch tasks even faster and more flexibly, thanks to state-of-the-art technology.

New generation. More possibilities

Higher functionality and a clearer product range make it easier for you to choose the right time switch.

Time-saving installation

The possibility of pre-programming the time switch before installing it, offers you maximum flexibility in personal time scheduling.

Hassle-free commissioning

Extended program functions enable you to create individual program requests in seconds. Program time switching sequences directly on the device, via software or app. The new app is compatible with iOS (from version 8), Android (from version 5.1) and Windows (from version 10).

Compatible with twilight sensors

Switch your programs on or off depending on your set brightness value via the separately available twilight sensor.

Astronomical switching

Your time switch acts by itself! With the astronomical function, the timer automatically adapts its switching cycles to sunrise and sunset.

Timer

A timer can be easily set up by setting the activation time using a connected push button. The optional connection of wired push buttons or radio components (quicklink) allows the installation of an efficient time lag switch.

Forced switching

When a scenario is activated, override switching allows the use of remote controls to turn the associated electrical systems on or off. In the case of an override, when a new change of state is made by the scenario, then the latter automatically takes over the override.

Forced switching

When a scenario is activated, forced switching allowsuse remote controls to turn electrical systems on or off. In the case of forcing, when a new change of state is made by the scenario, the latter is blocked and cannot regain control of the installation.

Notice of extinction

To provide greater comfort in an installation, the shutdown warning function allows the power supply to be cut off some time after pressing the installation shutdown command.

Remote switch

You can also use your time schwitch as a remote contactor in the distribution board to turn an electrical source on or off. The time schwitch then becomes a command which no longer includes automation

Our new time switches at a glance.

The time switches EGN100, EGN200 and EGN400 combine all functions of a modern time switch.

For less complex weekly time switch tasks, EGN103 offers a simple and cost-saving one-channel solution, available as a set or individually.

EGN103

Digital weekly time switch
1 channel

EGN100

Digital multifunctional time switch
with Bluetooth
1 channel

EGN200

868-870 MHz / 25 mW max

EGN200

Digital multifunctional time switch
with Bluetooth
2 channels

EGN400

868-870 MHz / 25 mW max

EGN400
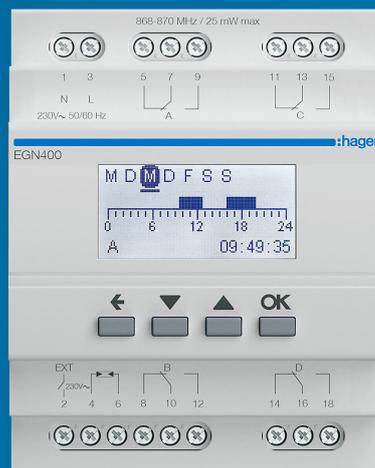
Digital multifunctional time switch
with Bluetooth
4 channels

Add-ons
for your
time switch.

Our time switches are the ideal solution for effectively implementing simple to complex time switch tasks. In addition to the individual products, you can also order the new time switches in sets with additional modules, such as twilight sensors.

The new Bluetooth programming key EGN003 enables you to program time schedules for EGN103 not only on the device itself, but also via the new app.

EGN003

EEN003

EEN002

Bluetooth programming key,
for EGN103

Separate twilight sensor,
wall mounted

Separate twilight sensor,
flush mounted

EGN103 + EGN003

Digital weekly time switch,
1 channel + Bluetooth programming key

EGN100 + EEN002

Digital multifunctional time switch with Bluetooth, 1 channel, flush-mounted sensor

EGN100 + EEN003

Digital multifunctional time switch with Bluetooth, 1 channel, wall-mounted sensor

Programming via app and software.

With the new Hager Mood app and software, the programming of your time schedules is completely location independent. If you wish, you can create them conveniently from home and on the go or make modifications.

Via Bluetooth, you can transfer your time schedules to the device at any time.
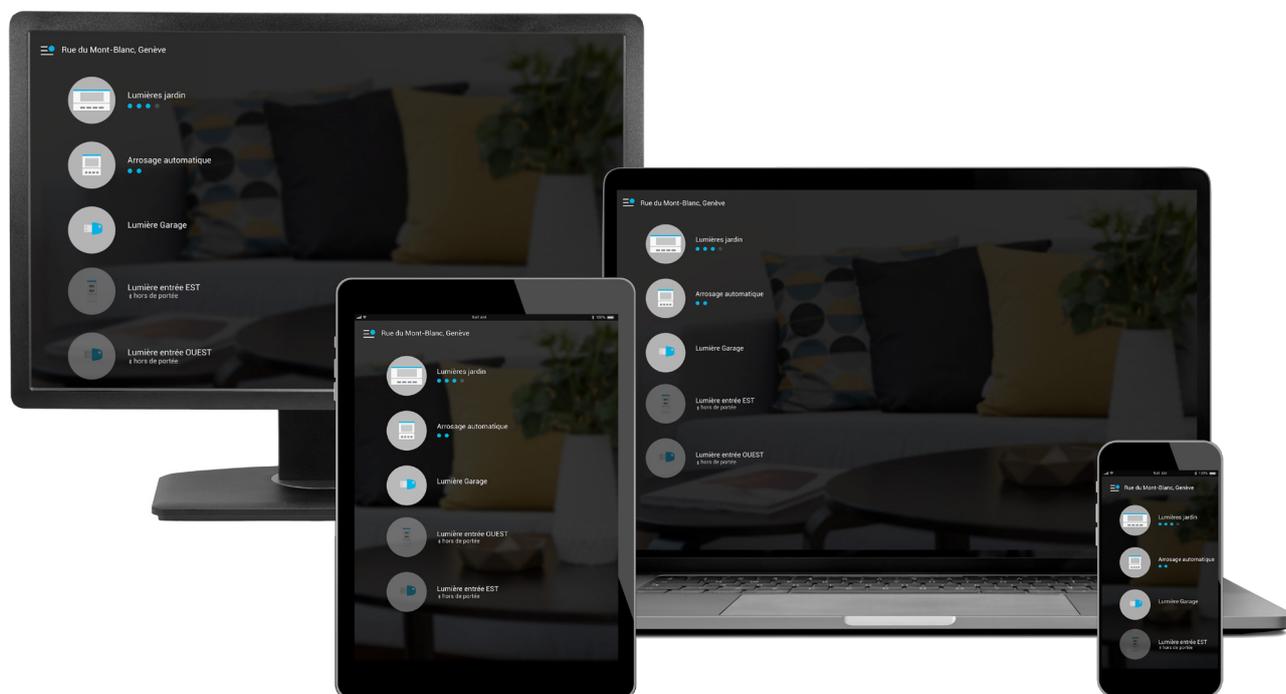
Benefits of the app:

01 **Easy and convenient**
The larger displays of a laptop, smartphone or tablet increase the clarity of programming.

02 **Automated Astro and public holiday settings**
After manually entering the location data, the software or app customises local features such as sunrise and sunset times, holiday periods and public holidays.

03 **Available everywhere**
Your time schedules can be checked, edited and pre-programmed for on-site installation, regardless of location and time.

04 **Safer connection**
To connect and transfer the time schedules via Bluetooth, a confirmation is required on the device. Thus, preventing unauthorised access by third parties.

05 **Transmission of time schedules to third parties**
You can share your generated time schedules with your colleagues or pass them to your customers via the Hager Cloud.

Programming and configuration

Easy commissioning thanks to Hager Mood app.
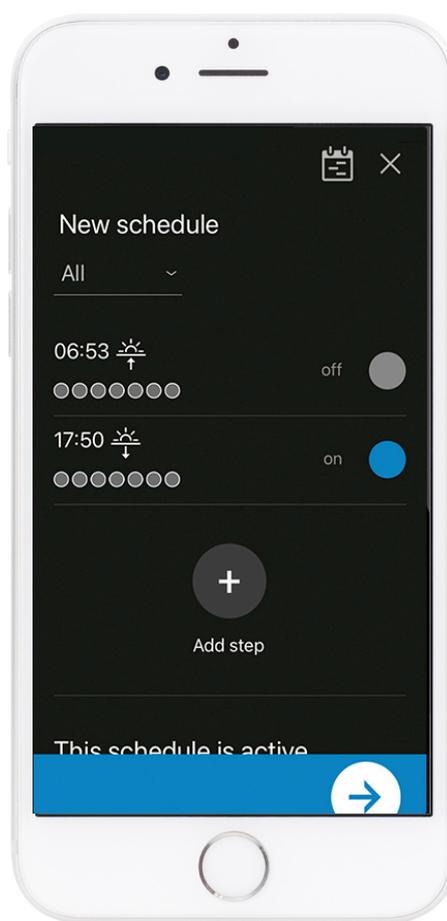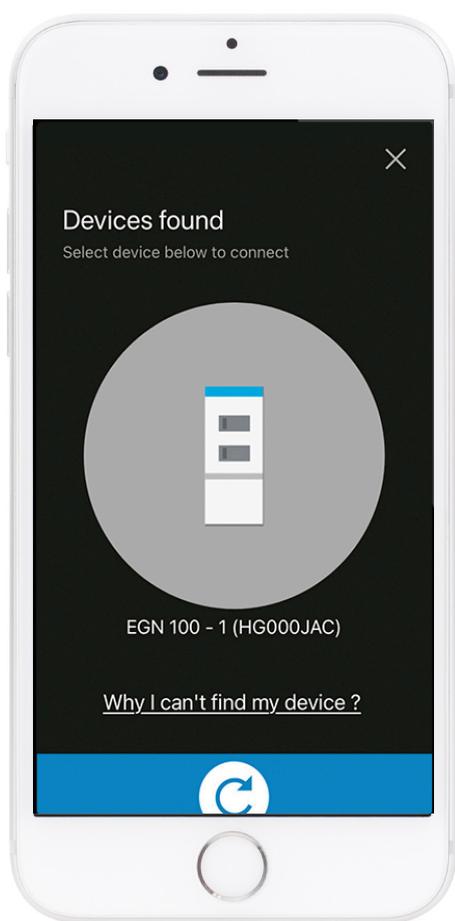
01 Select the timer

Use Bluetooth to locate the time switch and establish a connection. When connecting, the time switch briefly lights up and you need to confirm the access manually.

02 Create programs

The next step is to set the desired time, precise to the minute, for your time switch operation. Define switch on/off times, leap days as well as exceptions and priorities.

The Hager Mood app allows you to program your time schedules before the actual installation. You can put your time switch into operation immediately following the installation.

Download
The free Hager Mood app can be down loaded from the Google Play Store and Apple App Store.

AVAILABLE AT
Google play

AVAILABLE AT
App Store
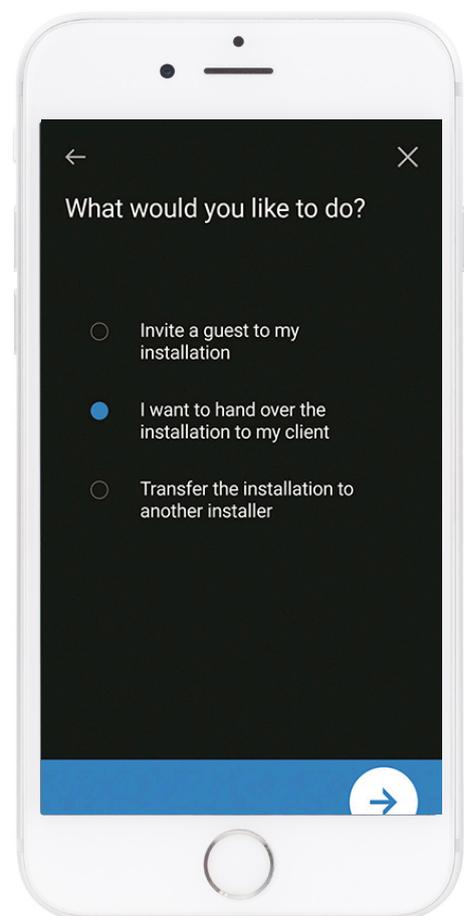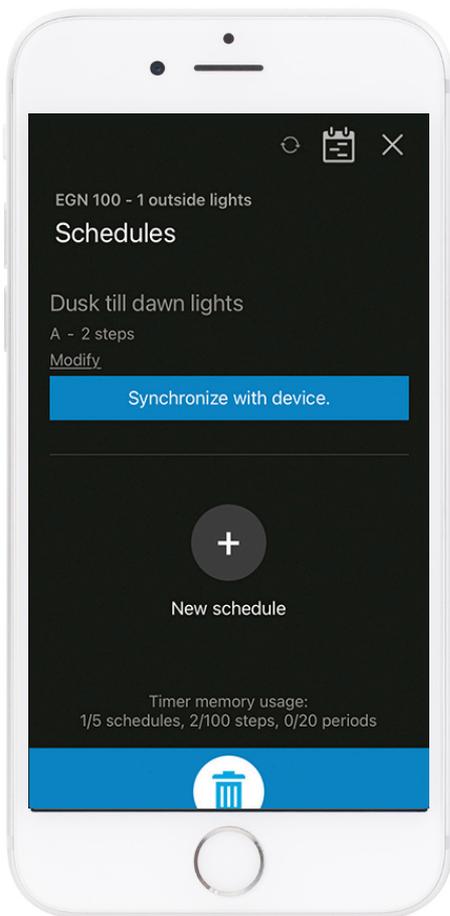
03 Synchronise the program with the timer

To transfer the program created on your end device to the timer, synchronise them with each other. This process requires both devices to be in Bluetooth range.

Transfer of data with myHager

After programming, data can be shared with colleagues via Hager Cloud. You can also transfer editing and access rights to the customer.

Fonctions

The «all-in-one» solution for your time switching.

With the new time switches from Hager, you are opting for multi-functional talents. They bring together all proven functions of the old generation and new features and fulfil every demand.

Time switching

Use the daily, weekly or yearly function to create your time schedules. As a result, you and the customer have free rein, whether to set routine or exception weeks or to plan everything in advance for the entire year.

Astro switching

Your time switch thinks with you: In the Astro function, the time switch automatically adjusts its time cycles to sunrise and sunset.

Twilight switching

The expandable twilight sensor detects changing lighting conditions on site and adjusts the timer automatically. You can also use your time switch as conventional twilight switches.

Staircase switching

The optional connection of wired pushbuttons or radio components (quicklink) enables the installation of effective staircase switching

Timer

Setting the switch-on time in conjunction with a connected pushbutton makes it easy to set up a timer.

Calendar

For a better overview of the schedule, a calendar view is available for each release.

Compatibility with LED

Zero-cross switching for high inrush currents.

All the models of our new time switches
use zero-cross switching and enable switching loads for
LEDs of up to 400W.

Function zero-cross switching

Electrical voltage [Volt]

0

×1

Time [milliseconds]

— electrical voltage at the output   — normal electrical voltage

× 1 = zero crossing activation
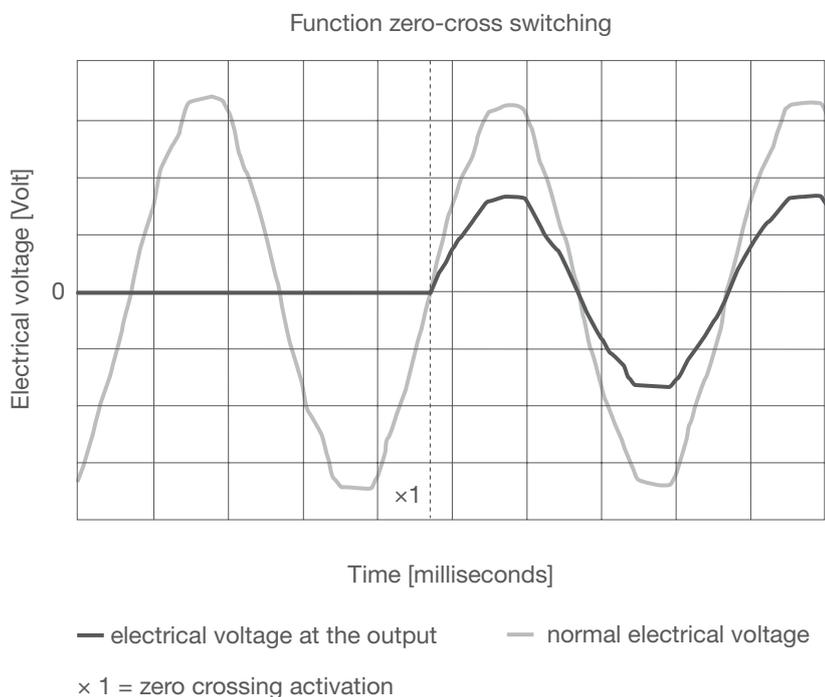
The zero-cross switching implemented in the devices regulates inrush
currents to a constantly low level. In order to do this, the system automa-
tically determines the zero crossing of the sine wave at the AC voltage.

The integrated zero-cross switching protects relay contacts and ensures compatibility with LED lamps. Thanks to the forward-looking approach, the life of the time switch is extended accordingly.
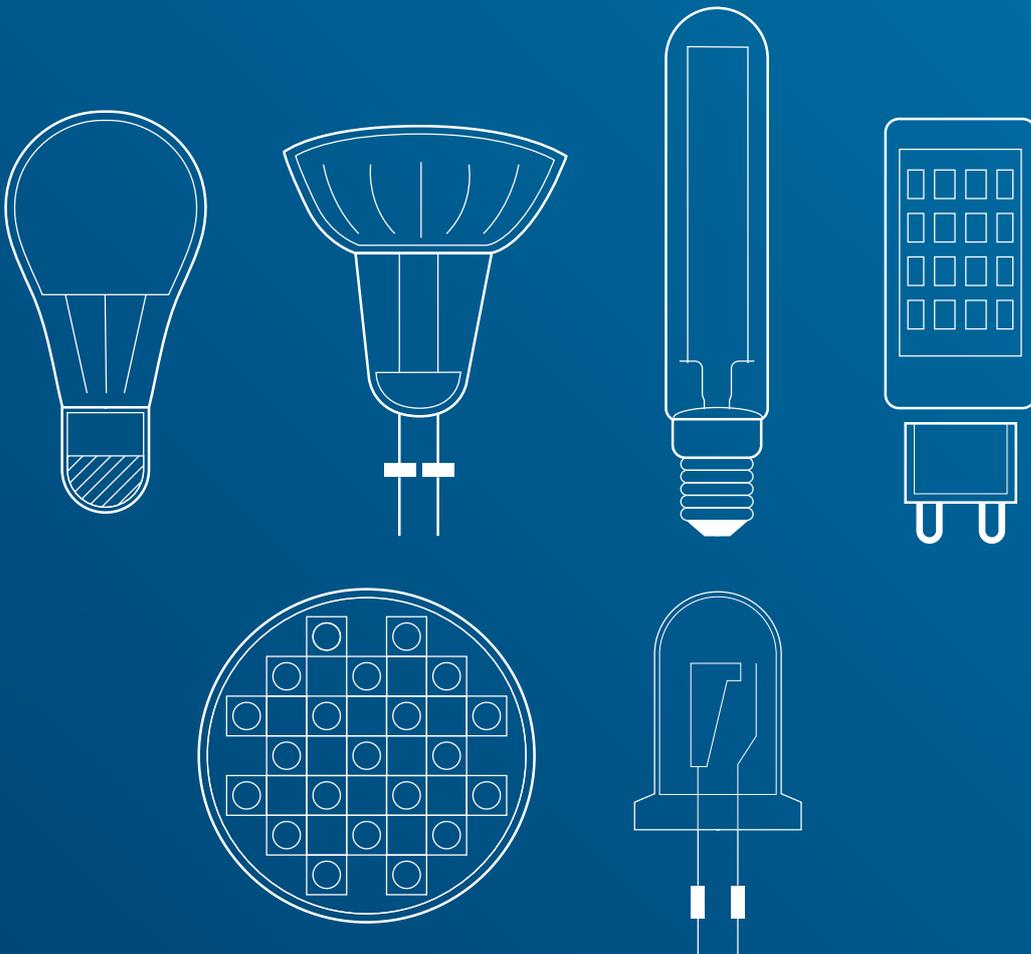
Maximum precision

Integrated real-time clock for maximum precision.

With modern time switching, every second counts. The integrated real-time clock ensures switching that is accurate to the second, thus increasing energy efficiency.

To-the-second precision.

Our time switches EGN100 and EGN200 and EGN400 allow precise switching of your programs. The integrated real-time clock operates at temperatures from -5 °C to +45 °C with an accuracy of only +/- 90 seconds per year. This ensures the highest efficiency of time-bound time schedules - without needing to adjust the time manually due to excessive deviation from the real time. In addition, the time synchronises whenever an end device is connected via Bluetooth.

Time accuracy vs. temperature
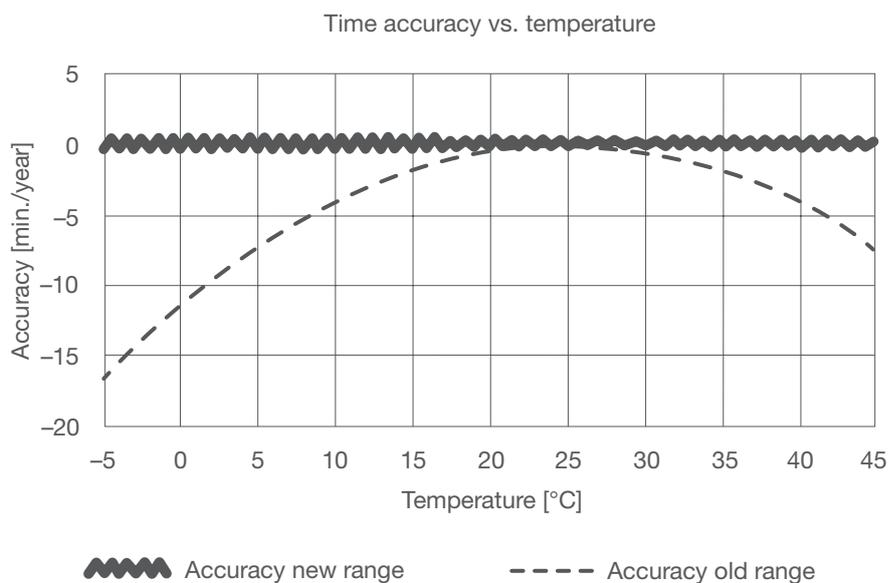
The integrated real-time clock operates exactly to the second, assuming normal use. Even at extreme temperatures of -5 °C to +45 °C however, the difference is only +/- 90 seconds per year.

Principle scheme

Compatible with
all components.

Control via radio transmitter

Remote control wireless
ref. TU404

Push button
quicklink gallery
ref. WXF092/094/096

Wireless surface mounted
luminosity cell
ref. EEN003W

Connection with brightness sensor

Twilight sensor
(wall mounted)
ref. EEN003

Twilight sensor
(flush mounted)
ref. EEN002

Connection via wired pushbutton
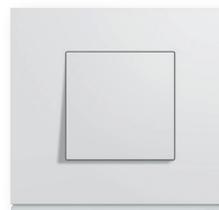
Push button
gallery
ref. WXF003

Automatic switch
gallery
ref. WXF051/052/053

868-870 MHz / 25 mW max

1   3   5   7   9
N   L

230V~ 50/60 Hz   A

:hager

EGN200

M D **M** D F S S

0   6   12   18   24

A   09:49:59

EXT   B

230V~

2   4   6   8   10   12

EGN200

Soft-touch control buttons
Improved pushbuttons enable quick
setting on the time switch

User-friendly operation
Integrated display with
LED backlighting

Wide range of applications.

Our time switches are suitable for almost all private and commercial applications. Here a small excerpt:

Outdoor lighting in multi-unit apartment buildings

Automatically control the lighting of entrance areas..

Shop window lighting of commercial spaces

With the right programming, shop windows can be presented attractively also at night.

Locking systems of public buildings

Our time switches enable time-bound opening and closing of accesses to public buildings.

Holiday program with absence simulation

Lighting at twilight provides a sense of security - and also during holidays.

Lighting control of buildings

Efficient switching via the Astro function.

The implemented, location-based Astro function automatically detects sunrise and sunset and adjusts the time switching accordingly. Light and time- specific controls can be programmed conveniently without needing to constantly make manual adjust-ments.

Combination

Logical control and connections.

By combining the Astro function, twilight and time at one output, logic control and connections can easily be created.
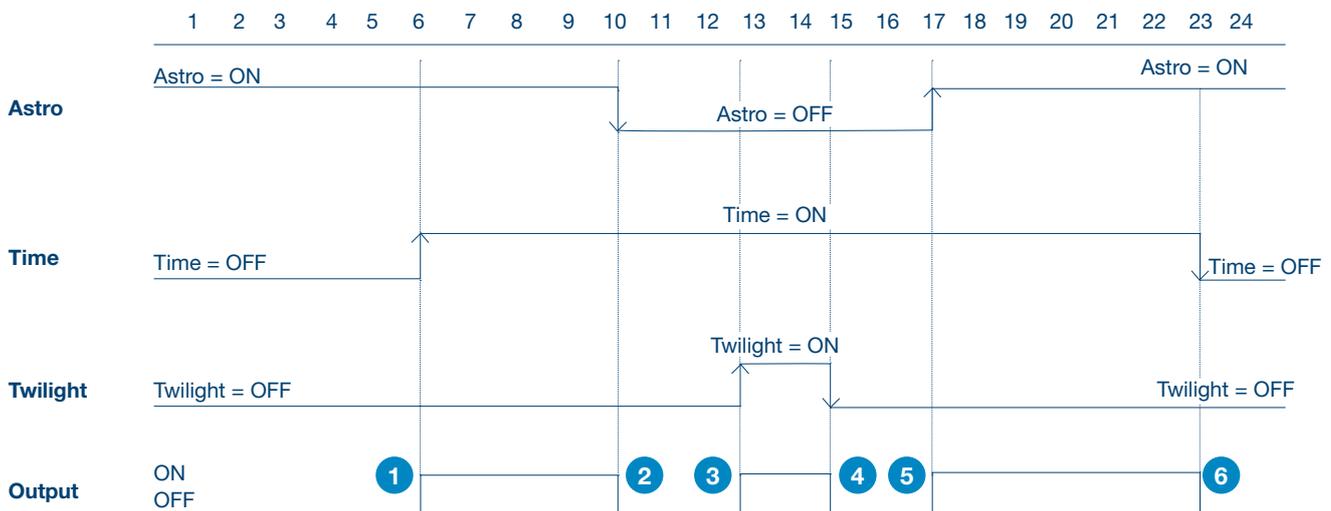
1 When time event ON and Astro state ON = output ON

2 When Astro state OFF = automatically OFF

3 When Astro state Off and time event ON,
  and twilight ON (brightness less than 100 lux,
  e.g. during a storm) = light On

4 When Astro state Off and time event ON,
  and twilight switch OFF = light OFF

5 When Astro state ON and time event ON = light ON

6 When time event OFF = automatically OFF

Using digital electronic technology, these devices provide great precision as well as a multitude of functionalities.They make it possible to manage, based on time information, applications such as lighting, heating and window illumination, in order to improve comfort and save energy.These products allow daily, weekly or annual time programming on 1, 2 or 4 channels. The power reserve is provided by a lithum battery.

Standard EGN103:
- 1-channel programmable time switch
- configuration via Bluetooth 4.2 via EGN003 optional
- accuracy: +/- 1.5 s / day
- loads: incandescent and halogens 230 V: 2300 W LED / CFL: 20 x 20 W
- switching technology: zero crossing

EGN100, EGN200, EGN400 advanced:
- programmable time switches 1, 2 or 4 channels
- twilight function possible with recessed probe EEN002 or surface-mounted probe EEN003
- different possible forcings
- configuration via integrated Bluetooth 4.2
- RF quicklink compatibility
- 433 MHz AU version*
- astronomical mode
- min pulse programming. 1 sec.
- precision: +/- 90 s / year
- consumption < 0.5 W
- switching technology: zero crossing
- loads: incandescent and halogens 230 V: 2300 W LED / CFL: 20 x 20 W
- geolocation
- backlit screen

EGN100

EGN200

EGN400

EGN003

Description	Caracteristics	Qty.	Width.	Cat. ref.
1 channel time switches **Standard version** **1 program** **56 steps**	230 V~ power supply +10% / -15% frequency 50/60 Hz 1 changeover contact 10 A screw terminals reserve 5 years	1	2 ▮	**EGN103**
Advanced version **5 programs** **100 steps**	230 V~ power supply +10% / -15% frequency 50/60 Hz 1 changeover contact 10 A screw terminals reserve 10 years min. time of pgm 1 min.	1	1 ▮	**EGN100**
	integrated bluetooth	1	1 ▮	**EGN100AU***
2 channel time switches **Advanced version** **10 programs** **200 steps**	230 V~ power supply +10% / -15% frequency 50/60 Hz 2 changeover contacts 10 A screw terminals reserve 10 years min. time of pgm 1 min.	1	2 ▮	**EGN200**
	integrated bluetooth	1	2 ▮	**EGN200AU***
4 channel time switches **Advanced version** **20 programs** **400 steps**	230 V~ power supply +10% / -15% frequency 50/60 Hz 2 changeover contacts 10 A screw terminals reserve 10 years min. time of pgm 1 min.	1	4 ▮	**EGN400**
	integrated bluetooth	1	4 ▮	**EGN400AU***
Wireless twilight sensor	for time switch EGN100, EGN200, EGN400	1	-	**EEN003W**
Bluetooth key for EGN103	for time switch EGN103	1	-	**EGN003**

EGN103

Weekly time switch, 1 changeover contact, 16A, 2 space units, digital

Weekly time switch digital 1-channel for time-dependent control of equipment. Programmable via app with Bluetooth interface for easy implementation of exception programs or for saving the switching program (with myHager). Temporary and permanent exception control on the device, bar display for quick recognition of daily programming. Automatic summer/winter time change.

- programmable with Bluetooth (with EGN003)
- changeover
- with potential-free switching contact
- button lock using lock key
- programming without voltage supply possible
- with programming key
- with automatic summer/winter time change
- program cycles: 1 x 7 days
- with screw terminals
- for mounting on DIN top-hat rail
- 5 years power reserve

Technical specifications

Operating voltage	230 V (+10 % / −15 %)
Frequency	50/60 Hz
Contact rating	AC1 µ 16A 230 V~
Power input	0,25 VA
Switching current at cos φ = 0.6	
Power loss at full load	
230 V incandescent and halogen lamps	max. 2300 W
Number of function channels	1
Number of contacts per channel	2
Shortest switching time	1 min
Number of switching times for On/Off	56
Power reserve [years]	≈ 5 years
Accuracy rate	+/− 1,5 s/jday
Operating temperature	−5 … 45 °C
Conductor cross-section (flexible)	1 … 6 mm²
Conductor cross-section (rigid)	1,5 … 10 mm²
Rail-mounted device (RMD) width	2

EGN100(AU)

Multifunctional time switch, 1 channel, 10A, 1 space unit, digital

Digital multifunctional time switch to control loads with commands such as on, off, pulse or cycle, astro-nomical function that switches connected loads according to the sunrise and sunset times. Programmable via app with Bluetooth interface for easy implementation of exception programs or for saving the switching program (with myHager). Temporary and permanent exception control on the device. The twilight function measures the lighting level via a photocell and switches depending on the measured value. Automatic summer/winter time change.

- integrated Bluetooth connection
- program cycles: daily, weekly, yearly
- 1 changeover output
- with pulse function
- wired input
- with radio input connection: Quicklink configuration
- button lock
- with automatic summer/winter time change
- with screw terminals
- for mounting on DIN top-hat rail
- 10 years power reserve

Technical specifications

Operating voltage	230 V (+10 % / −15 %)
Frequency	50/60 Hz
Contact rating	AC1 µ 10 A 230 V~
Power input	0,17 VA
Switching current at cos φ = 0.6	
Power loss at full load	
230 V incandescent and halogen lamps	max. 2300 W
Number of function channels	1
Number of contacts per channel	2
Shortest switching time	1 min
Number of switching times for On/Off	100
Power reserve [years]	≈ 10 years
Accuracy rate	+/− 90 s/year
Operating temperature	−5 … 45 °C
Conductor cross-section (flexible)	0,2 … 2,5 mm²
Conductor cross-section (rigid)	0,2 … 4 mm²
Rail-mounted device (RMD) width	1

EGN200(AU)

Multifunctional time switch, 2 channels, 16A, 2 space units, digital

Digital multifunctional time switch to control loads with commands such as on, off, pulse or cycle. Astronomical function that switches connected loads according to the sunrise and sunset times. Programmable via app with Bluetooth interface for easy implementation of exception programs or for saving the switching program (with myHager). Temporary and permanent exception control on the device. The twilight function measures the lighting level via a photocell and switches depending on the measured value. Automatic summer/winter time change.

- integrated Bluetooth connection
- program cycles: daily, weekly, yearly
- 2 changeovers output
- with pulse function
- with radio input connection: Quicklink configuration
- programming without voltage supply possible
- button lock
- LC display with lighting
- with automatic summer/winter time change
- with screw terminals
- for mounting on DIN top-hat rail
- 10 years power reserve

Technical specifications

Operating voltage	230 V (+10 % / −15 %)
Frequency	50/60 Hz
Contact rating	AC1 µ 16A 230 V~
Power input	0,3 VA
Switching current at cos φ = 0.6	
Power loss at full load	
230 V incandescent and halogen lamps	max. 2300 W
Number of function channels	2
Number of contacts per channel	2
Shortest switching time	1 min
Number of switching times for On/Off	200
Power reserve [years]	≈ 10 years
Accuracy rate	+/− 90 s/year
Operating temperature	−5 … 45 °C
Conductor cross-section (flexible)	0,2 … 2,5 mm²
Conductor cross-section (rigid)	0,2 … 4 mm²
Rail-mounted device (RMD) width	2

EGN400(AU)

Multifunctional time switch, 4 channels, 16A, 2 space units, digital

Digital multifunctional time switch to control loads with commands such as on, off, pulse or cycle. Astronomical function that switches connected loads according to the sunrise and sunset times. Programmable via app with Bluetooth interface for easy implementation of exception programs or for saving the switching program (with myHager). Temporary and permanent exception control on the device. The twilight function measures the lighting level via a photocell and switches depending on the measured value. Automatic summer/winter time change.

- integrated Bluetooth connection
- program cycles: daily, weekly, yearly
- 2 changeovers output
- with pulse function
- with radio input connection: Quicklink configuration
- programming without voltage supply possible
- button lock
- LC display with lighting
- with automatic summer/winter time change
- with screw terminals
- for mounting on DIN top-hat rail
- 10 years power reserve

Technical specifications

Operating voltage	230 V (+10 % / −15 %)
Frequency	50/60 Hz
Contact rating	AC1 µ 16A 230 V~
Power input	0,45 VA
Switching current at cos ɸ = 0.6	
Power loss at full load	
230 V incandescent and halogen lamps	max. 2300 W
Number of function channels	4
Number of contacts per channel	2
Shortest switching time	1 min
Number of switching times for On/Off	400
Power reserve [years]	≈ 10 years
Accuracy rate	+/− 90 s/year
Operating temperature	−5 … 45 °C
Conductor cross-section (flexible)	0,2 … 2,5 mm²
Conductor cross-section (rigid)	0,2 … 4 mm²
Rail-mounted device (RMD) width	4

EGN003

Bluetooth programming key, for EGN103 time switches

EGN003 is suitable for the following applications:

- Creating a time schedule via smartphone
- Copying and saving switching programs

Technical specifications

Operating temperature	–5 … 45 °C
Dimensions	10 × 20 × 30 mm (L × l × H)
Colour	blue

EEN002

Separate flush-mounted sensor for twilight switch

Flush-mounted sensor with connection cable for twilight switch EEN10x

Technical specifications

Measuring range brightness	5 … 2000 lx
Operating temperature	–30 … 60 °C
Probe cable length	1 m
Conductor cross-section	2 × 0,75 mm²
Cable length between twilight switch and brightness sensor	max. 100 m

EEN003

Separate wall-mounted sensor for twilight switch

For detecting surrounding brightness.

Technical specifications

Measuring range brightness	5 … 2000 lx
Operating temperature	–5 … 45 °C
Conductor cross-section	0,75… 4 mm²
Colour	light grey
Cable length between twilight switch and brightness sensor max.	max. 100 m

EEN003W

Wireless/radio surface-mounted photocell for EGN100/200/400

Technical specifications

Measuring range brightness	5 … 2000 lx
Operating temperature	–25 … 50 °C
Conductor cross-section	0,75… 4 mm²
Colour	gris clair
Cable length between twilight switch and brightness sensor	100 m en champ libre

Our new analog time switches at a glance.

Using analog electromechanical technology, these devices make it possible to manage, based on time information, the operation of applications such as lighting, heating and window illumination, in order to improve comfort and save energy. These products allow daily or weekly time programming on 1 channel.

EHN010
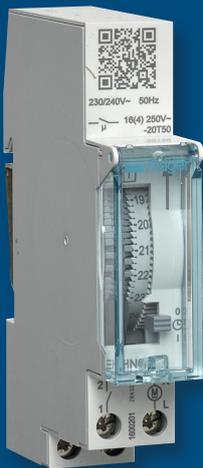
Daily time switch, without power reserve

1 ▮
1 NO contact - 16A

EHN011

Daily time switch, with power reserve 120h

1 ▮
1 NO contact - 16A

EHN110

Daily time switch, without power reserve

3 ▮
1 changeover contact - 16A

EHN111

Daily time switch,
with power reserve 120h

3 ▮
1 changeover contact - 16A

EHN171

Daily time switch,
with power reserve 120h

3 ▮
1 changeover contact - 16A

Using analog electromechanical technology, these devices make it possible to manage, based on time information, the operation of applications such as lighting, heating, window illumination, in order to improve comfort and save energy. energy.These products allow daily or weekly programming on 1 channel.

- The power reserve (depending on version) allows the time to be maintained during a power outage.
- Quartz time base.
- Programming by captive segments allowing easy visualization of programmed operations.
- Time indication by hands.
- Bi-directional fine adjustment via the central disc.
Summer/winter timetable corrections are easily carried out.
- Permanent ON or OFF manual control.

Compliest with:
EN 60 730.

EHN011

EHN110

EHN171

Description	Voltage	Cycle	Width	Cat. ref
Compact modular time switch	230 V ∼ 50 Hz	24h without battery reserve	1 ▊	**EHN010**
1 NO contact 16 A - 250 V - AC 1		24h with battery reserve 120h	1 ▊	**EHN011**
Modular time switch	230 V ∼ 50 / 60 Hz	24h without battery reserve	3 ▊	**EHN110**
1 changeover contact 16 A - 250 V - AC 1		24h with battery reserve 120h	3 ▊	**EHN111**
		7 days with battery reserve 120h	3 ▊	**EHN171**

Technical specifications

| Ref.		EHN010	EHN011	EHN110	EHN111	EHN171
Cycle		24 h	24h	24 h	24h	7j
No programmation		15 min	15 min	15 min	15 min	2h
Minimum interval between 2 switches		15 min	15 min	15 min	15 min	2h
Maximum number of switches per cycle		96	96	96	96	84
Supply voltage		230 V ~ + 10 % 230 V ~ - 15 % 240 V ~ ± 6 %		230 V ~ + 10 % 230 V ~ - 15 % 240 V ~ ± 6 %		230 V ~ + 10 % 230 V ~ - 15 % 240 V ~ ± 6 %
Frequency		50 Hz	50/60 Hz	50 Hz	50/60 Hz	50/60 Hz
Consumption		1 W	0,5 W	0,9 W	0,5 W	0,5 W
Changeover contacts Potential free or NO contact	resistive load	16 A/250 V ~ AC 1		16 A/250 V ~ AC 1		16 A/250 V ~ AC 1
	inductive load (cos Φ= 0,6)	4 A/250 V ~		4 A/250 V ~		4 A/250 V ~
	incandescent lamps/halogen	1000 W		1100 W		1100 W
	fluorescent lamps (ballast électronique)	600 W (10 x 58 W)		-		-
	fluorescent lamps compensated	600 VA (max. 70µF)		400 VA (max. 42µF)		400 VA (max. 42µF)
	fluorescent lamps no compensated	1000 VA		1100 VA		1100 VA
	fluorescent lamps compact	150 W		90 W		90 W
	LED lamps ≤ 2 W	30 W (15 x 2 W)		20 W		20W
	LED lamps > 2 W	300 W (20 x 15 W)		180 W		180W
Accuracy		1 s/24 h	1s/24h	1 s/24 h	1s/24h	1 s/24 h
Working temperature		-20°C at +50°C		-20°C +55°C		-10°C at +55°C
Storage temperature		-25°C at +70°C		-20°C at +70°C		-20°C at +70°C
Connection by cage terminals, conductors section		1 at 6 mm^2		1 at 6 mm^2		1 at 6 mm^2
Insulating class		II (II (under box cover))		II (II (under box cover))		II
Ingress protection		IP20 (II (under box cover))		IP20 (II (under box cover))		IP20
Complies with norm EN 60.730		yes		yes		yes
Working reserve		no	yes (120h)	no	yes (120h)	no	yes (120h)

Product presentation

EHN1xx
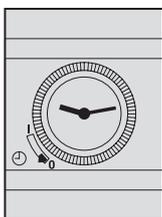
manual override:
- override at 0,
- automatic ⏲
- override at 1

## Wiring connection

For load controlling
(heating, lighting, ventilation, ...)

EHN0xx

EHN1xx

:hager

23EN_BRO_TIME_SWT