



EAN code  
 SHT-1 /230 V: 8595188130424  
 SHT-1 /UNI: 8595188130431  
 SHT-1/2 /230 V: 8595188130400  
 SHT-1/2 /UNI: 8595188130417  
 SHT-3 /230 V: 8595188136761  
 SHT-3 /UNI: 8595188136754  
 SHT-3/2 /230 V: 8595188129015  
 SHT-3/2 /UNI: 8595188129046

### Technical parameters

|   | SHT-1, SHT-3                 | SHT-1/2, SHT-3/2                 |
|---|------------------------------|----------------------------------|
| Supply terminals:                       | A1 - A2                      |                                  |
| Voltage range:                          | UNI                          | AC/DC 12 - 240 V (AC 50 - 60 Hz) |
| Burden (max.):                          | AC 0.5 - 2 VA / DC 0.4 - 2 W |                                  |
| Voltage range:                          | 230                          | AC 230 V / 50 - 60 Hz            |
| Burden:                                 | AC max. 14 VA / 2 W          |                                  |
| Max. dissipated power (Un + terminals): | 3.5 W                        | 5 W                              |
| Supply voltage tolerance:               | -15 %; +10 %                 |                                  |
| Back-up supply:                         | yes                          |                                  |
| Summer/winter time:                     | automatic                    |                                  |

### Output

|                        |  |  |
|------------------------|--|--|
| Number of contacts:    | 1x changeover/SPDT (AgSnO <sub>2</sub> ) | 2x changeover/SPDT (AgSnO <sub>2</sub> ) |
| Current rating:        | 16 A / AC1                               |  |
| Breaking capacity:     | 4000 VA / AC1, 384 W / DC                |  |
| Inrush current:        | 30 A / < 3 s                             |  |
| Switching voltage:     | 250 V AC1 / 24 V DC                      |  |
| Mechanical life:       | > 3x10 <sup>7</sup>                      |  |
| Electrical life (AC1): | > 0.7x10 <sup>5</sup>                    |  |

### Time circuit

|                   |                                   |
|-------------------|-----------------------------------|
| Power back-up:    | up to 3 years                     |
| Accuracy:         | max. ±1s / day at 23 °C (73.4 °F) |
| Minimum interval: | 1 min                             |
| Data stored for:  | min. 10 years                     |
| Cyclic output:    | 1 - 99 s                          |
| Pulse output:     | 1 - 99 s                          |

### Program circuit

|                           |  |
|---------------------------|--|
| Number of memory places:  | 100  |
| Program (SHT-1; SHT-1/2): | daily, weekly                                    |
| Program (SHT-3; SHT-3/2): | daily, weekly, monthly, yearly (up to year 2095) |
| Data readout:             | LCD display, with back light                     |

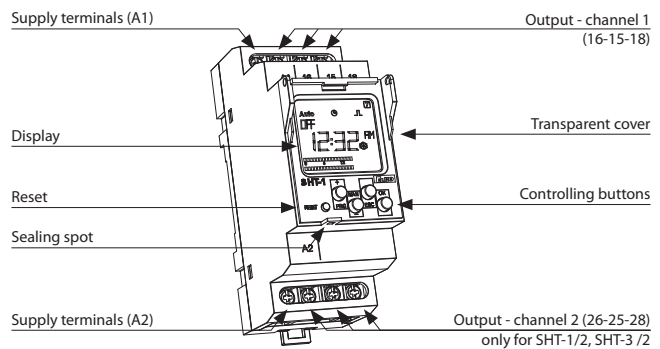
### Other information

|                                     |  |
|-------------------------------------|--|
| Operating temperature:              | -20 °C to +55 °C (-4 °F to 131 °F)   |
| Storage temperature:                | -30 °C to +70 °C (-22 °F to 158 °F)  |
| Electrical strength:                | 4 kV (supply - output)   |
| Operating position:                 | any  |
| Mounting:                           | DIN rail EN 60715  |
| Protection degree:                  | IP10 clips, IP40 from front panel  |
| Overtoltage category:               | III.   |
| Polution degree:                    | 2  |
| Max. cable size (mm <sup>2</sup> ): | solid wire max. 2x 2.5 or 1x 4<br>with sleeve max. 1x 2.5 or 2x 1.5 (AWG 12) |
| Dimensions:                         | 90 x 35 x 64 mm (3.5" x 1.4" x 2.5")   |
| Weight:                             | (UNI) - 117 g (4.13 oz.),<br>(230) - 115 g (4.06 oz.)                        |
| Standards:                          | (UNI) - 132 g (4.7 oz.),<br>(230) - 128 g (4.5 oz.)                          |
|                                     | EN 61812-1, EN 61010-1   |

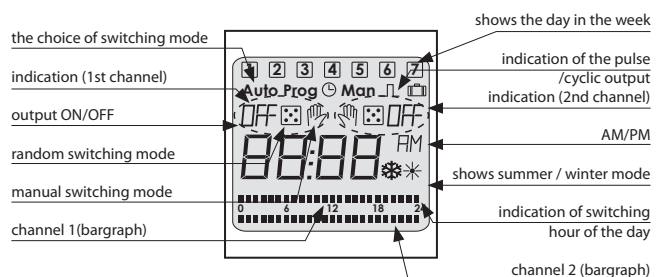
- This time switch clock SHT is used to control various appliances in real time; daily, weekly, monthly and yearly mode.
- Switching: according the program (AUTO)/constantly manually, manually to next program change/random (CUBE).
- „Holiday program” option to choose an interval when the device doesn't switch according to the standard program, but will be block during that time.
- Automatic conversion summer / winter time.
- Sealable cover of front panel, easy controlling via 4 buttons.
- 100 memory places, clear LCD display, min. interval 1 s.
- Voltage range: AC 230 V or AC/DC 12-240 V.
- Cyclic output.
- Pulse output.
- SHT-1, SHT-3: one channel version, 2-MODULE, DIN rail mounting, clamp terminals.
- SHT-1/2, SHT-3/2: two channel version, 2-MODULE, an individual program can be run on each channel.

|         | Output    |           | Time programm |      |       |      |
|---------|-----------|-----------|---------------|------|-------|------|
|         | 1 channel | 2 channel | day           | week | month | year |
| SHT-1   | •         |           | •             | •    |       |      |
| SHT-1/2 |           | •         | •             | •    |       |      |
| SHT-3   | •         |           | •             | •    | •     | •    |
| SHT-3/2 |           | •         | •             | •    | •     | •    |

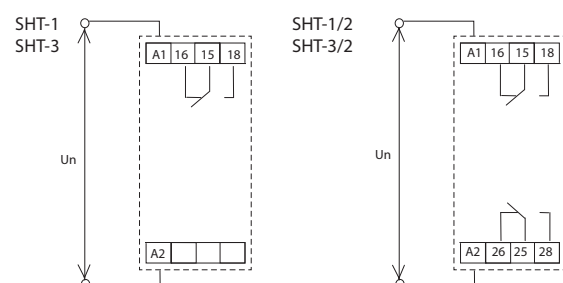
### Description



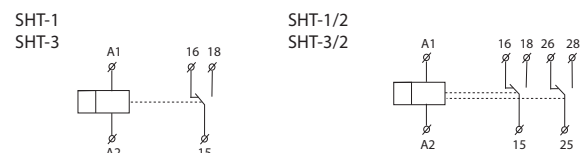
### Description of displayed elements on the screen



### Connection



### Symbol





EAN code  
SHT-4: 8595188144759

| Technical parameters                    |   | SHT-4 |
|---|---|-------|
| Power supply terminals:                 | A1 - A2   |       |
| Supply voltage:                         | AC 230 V / 50 - 60 Hz   |       |
| Input power:                            | AC max. 14 VA / 2 W   |       |
| Max. dissipated power (Un + terminals): | 5 W   |       |
| Supply voltage tolerance:               | -15 %; +10 %  |       |
| Real time back-up:                      | yes   |       |
| Transition to summer /winter time:      | automatic   |       |
| Output                                  |   |       |
| Number of contacts:                     | 2x changeover / SPDT (AgSnO <sub>2</sub> )                              |       |
| Rated current:                          | 16 A / AC1  |       |
| Switching power:                        | 4000 VA / AC1, 384 W / DC   |       |
| Peak current:                           | 30 A / < 3 s  |       |
| Switching voltage:                      | 250 V AC1 / 24 V DC   |       |
| Mechanical service life:                | > 3x10 <sup>7</sup>   |       |
| Electrical service life (AC1):          | > 0.7x10 <sup>5</sup>   |       |
| Timing circuit                          |   |       |
| Real time reserve:                      | up to 3 years   |       |
| Accuracy of operation:                  | max. ±1 s per day, at 23°C (73 °F)                                      |       |
| Minimum triggering interval:            | 1 minute  |       |
| Program data storage period:            | 10 years at minimum   |       |
| Programming circuit                     |   |       |
| Number of memory locations:             | 100   |       |
| Program:                                | daily, yearly (until 2099)  |       |
| Data display:                           | LCD display, backlight  |       |
| Other information                       |   |       |
| Operating temperature:                  | -20.. +55 °C (-4 °F to 131 °F)  |       |
| Storage temperature:                    | -30.. +70 °C (-22 °F to 158 °F)   |       |
| Electrical strength:                    | 4 kV (power supply - output)  |       |
| Operating position:                     | any   |       |
| Mounting:                               | DIN rail EN 60715   |       |
| Protection degree:                      | IP10 terminals, IP40 from front panel                                   |       |
| Overvoltage category:                   | III.  |       |
| Pollution degree:                       | 2   |       |
| Max. cable size (mm <sup>2</sup> ):     | max. 2x 2.5, max. 1x 4<br>with sleeve max. 1x 2.5, max. 2x 1.5 (AWG 12) |       |
| Dimensions:                             | 90 x 35 x 64 mm (3.5" x 1.4" x 2.5")                                    |       |
| Weight:                                 | 128 g (4.5 oz.) - without battery                                       |       |
| Standards:                              | EN 61812-1, EN 61010-1  |       |

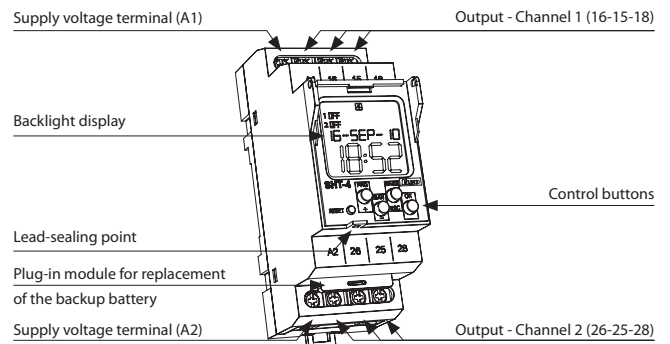
Plug-in module



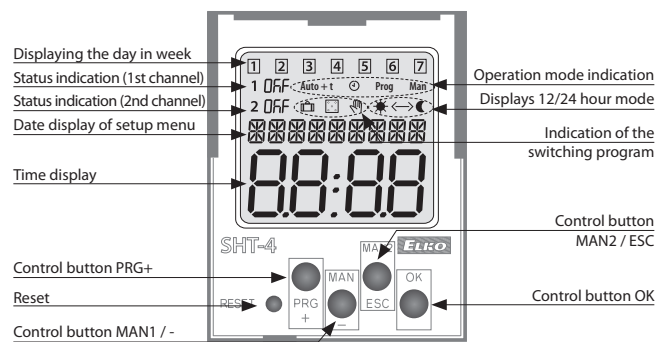
Type of backup battery: CR 2032 (3V)

- used for controlling the lighting (billboards, advertisements, shop windows, etc.) with no light sensor required.
- function:
  - by entering the geographic coordinates, the lighting can be switched on/off by sunrise and sunset
  - the preset coordinates for European cities, with optional manual adjustment of the geographical coordinates
  - during programming, 120 minutes may be added to the time of sunrise and sunset
  - selection of ON/OFF functions at sunrise or sunset
  - astro-clock with adjustable interruption
  - operating hours counter for each channel
  - timer - switching on the basis of real-time.
- two-channel design, where each channel is programmable independently of the other.
- automatic switching between winter and summer time.
- sealable transparent cover on the front panel.
- data and time backup using the battery.
- battery life - up to 3 years.
- easy replacement of the backup battery through the plug-in module, no disassembling is required.
- supply voltage: AC 230 V.
- 2-MODULE, DIN rail mounting.

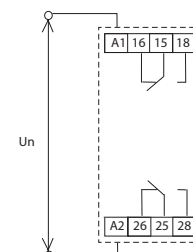
Description



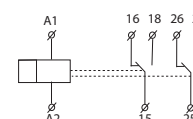
Description of items displayed on the screen



Wiring



Symbol





EAN code  
SHT-6: 8595188148382  
DCFR-1: 8595188148412

### Technical parameters SHT-6

|  |                       |
|--|-----------------------|
| Terminals supply:                          | A1 - A2               |
| Voltage supply:                            | AC 230 V / 50 - 60 Hz |
| Burden (max.):                             | 8 VA / 0.7 W          |
| Max. dissipated power<br>(Un + terminals): | 3.5 W                 |
| Tolerance of voltage supply:               | -15 %; +10 %          |

### Output

|                         |                                      |
|-------------------------|--------------------------------------|
| Number of contacts:     | 1 x changeover (AgSnO <sub>2</sub> ) |
| Rated current:          | 16 A / AC1                           |
| Switching capacity:     | 4000 VA / AC1, 384 W / DC            |
| Peak current:           | 30 A / < 3 s                         |
| Max. switching voltage: | 250 V AC1 / 24 V DC                  |
| Mechanical life:        | > 3x10 <sup>7</sup>                  |
| Electrical life (AC1):  | > 0.7x10 <sup>5</sup>                |

### Time circuit

|   |                                     |
|---|-------------------------------------|
| Backup real. time:                          | up to 3 years                       |
| Running accuracy<br>- without DCF receiver: | max. ±1 s per day with 23°C (73 °F) |
| Minimum switching interval:                 | 1 min                               |
| Data retention programs:                    | min. 10 years                       |

### Program circuit

|                             |                                |
|-----------------------------|--------------------------------|
| Number of memory locations: | 100                            |
| Program:                    | daily, yearly (till year 2099) |
| Displayed data:             | LCD display with backlight     |

### Other information

|                                     |   |
|-------------------------------------|---|
| Working temperature:                | -10.. +55 °C (14 to 131 °F)   |
| Storage temperature:                | -30.. +70 °C (-22 °F to 158 °F)   |
| Dielectric strength:                | 4 kV (output supply)  |
| Operating position:                 | any   |
| Mounting:                           | DIN rail EN 60715   |
| Protection:                         | IP10 terminals, IP40 from the front panel                               |
| Over voltage category:              | III.  |
| Degree of pollution:                | 2   |
| Max. cable size (mm <sup>2</sup> ): | max. 2x 2.5, max. 1x 4<br>with sleeve max. 1x 2.5, max. 2x 1.5 (AWG 12) |
| Dimensions:                         | 90 x 35 x 64 mm (3.5" x 1.4" x 2.5")                                    |
| Weight:                             | 114 g (4 oz.) - without battery   |
| Standards:                          | EN 61812-1, EN 61010-1  |

### Plug-in module



With battery

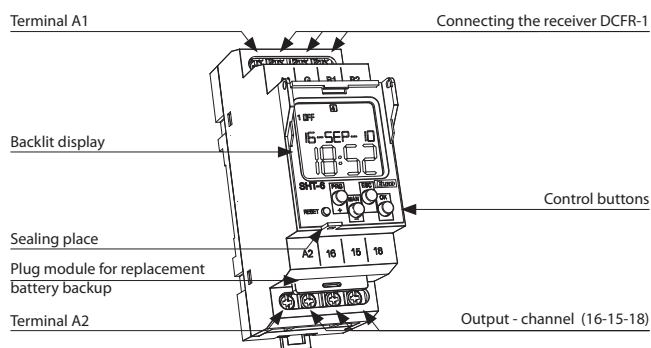


Without battery

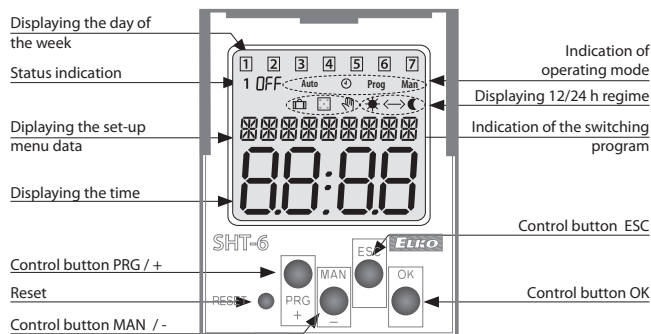
Type of backup battery: CR 2032 (3V)

- Used for controlling appliances depending on real time, that is synchronized by a DCF 77 signal, thanks to the automatic time settings (with DCF 77 signal) it eliminates inaccuracies and errors by time running.
- 1 channel design with external DCF receiver.
- automatic switching between winter/summer time.
- sealable cover of the front panel.
- 100 memory places.
- backlit LCD display.
- switching according to the program: auto / manual / random / holiday program.
- Function of the operating hours counter.
- backing up data and time using the battery.
- reserve battery for up to 3 years.
- Easy replacement for the backup battery with plugging module without dismantling the device.
- Power supply: AC 230 V.
- 2-MODULE, mounting on DIN rail.

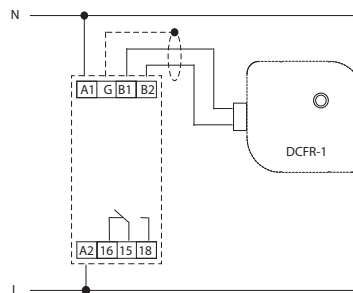
### Description



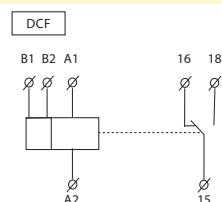
### Description of the displayed elements on the screen



### Connection



### Symbol



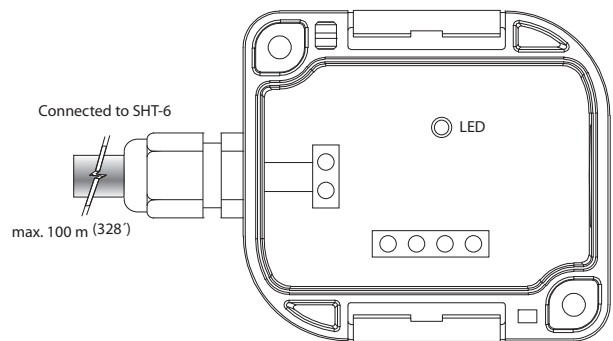


- Universal DCF module, which is designed for controlling the SHT-6 timer, and other devices.
- outdoor applications (IP65 protection).
- Two-wire connection - not polarity sensitive!
- Length of connecting cable is up to 100 m (328').
- visual indication of proper function module.

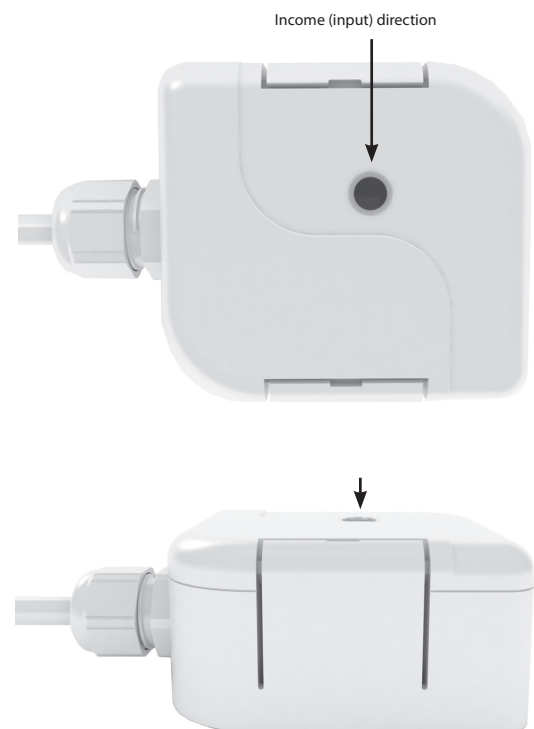
EAN code  
DCFR-1: 8595188148412

| Technical parameters              |  | DCFR-1                                      |
|-----------------------------------|--|---|
| Connection:                       |  | 2 conductors                                |
| Max. cross-connection conductors: |  | 2.5 mm <sup>2</sup>                         |
| Max voltage on the wires:         |  | 10 V  |
| Indication Function:              |  | red LED                                     |
| Other information                 |  |   |
| Storage temperature:              |  | -30.. +70 °C (-22 to 158 °F)                |
| Protection:                       |  | IP65  |
| Dimensions:                       |  | 98 x 62 x 34 mm (39.3 x 2.4 x 1.3")         |
| Weight:                           |  | 110 g (3.88 oz)                             |
| Operating position:               |  | perpendicular to the direction of reception |
| The reception area:               |  | about 1500 km from Frankfurt / Main         |

Description



Working position - options



NEW



EAN code  
SHT-7: 8595188135498

| Technical parameters                       |   | SHT-7 |
|--|---|-------|
| Power supply terminals:                    | A1 - A2   |       |
| Supply voltage:                            | AC 230 V / 50 - 60 Hz   |       |
| Input power:                               | AC max. 14 VA / 2 W   |       |
| Max. dissipated power<br>(Un + terminals): | 5 W   |       |
| Supply voltage tolerance:                  | -15 %; +10 %  |       |
| Real time back-up:                         | yes   |       |
| Transition to summer /winter time:         | automatic   |       |
| Output                                     |   |       |
| Number of contacts:                        | 2x changeover / SPDT (AgSnO <sub>2</sub> )                              |       |
| Rated current:                             | 16 A / AC1  |       |
| Switching power:                           | 4000 VA / AC1, 384 W / DC   |       |
| Peak current:                              | 30 A / < 3 s  |       |
| Switching voltage:                         | 250 V AC1 / 24 V DC   |       |
| Mechanical service life:                   | > 3x10 <sup>7</sup>   |       |
| Electrical service life (AC1):             | > 0.7x10 <sup>5</sup>   |       |
| Timing circuit                             |   |       |
| Real time reserve:                         | up to 3 years   |       |
| Accuracy of operation:                     | max. ±1 s per day, at 23°C (73 °F)                                      |       |
| Minimum triggering interval:               | 1 minute  |       |
| Program data storage period:               | 10 years at minimum   |       |
| Programming circuit                        |   |       |
| Number of memory locations:                | 100   |       |
| Program:                                   | daily, yearly (until 2099)  |       |
| Interface NFC:                             | daily, yearly (until 2099)  |       |
| Data display:                              | LCD display, backlight  |       |
| Other information                          |   |       |
| Operating temperature:                     | -20.. +55 °C (-4 °F to 131 °F)  |       |
| Storage temperature:                       | -30.. +70 °C (-22 °F to 158 °F)   |       |
| Electrical strength:                       | 4 kV (power supply - output)  |       |
| Operating position:                        | any   |       |
| Mounting:                                  | DIN rail EN 60715   |       |
| Protection degree:                         | IP10 terminals, IP40 from front panel                                   |       |
| Overtoltage category:                      | III.  |       |
| Polution degree:                           | 2   |       |
| Max. cable size (mm <sup>2</sup> ):        | max. 2x 2.5, max. 1x 4<br>with sleeve max. 1x 2.5, max. 2x 1.5 (AWG 12) |       |
| Dimensions:                                | 90 x 35 x 64 mm (3.5" x 1.4" x 2.5")                                    |       |
| Weight:                                    | 125 g (4.4 oz.) - without battery                                       |       |
| Standards:                                 | EN 61812-1, EN 61010-1  |       |

#### Plug-in module



With battery

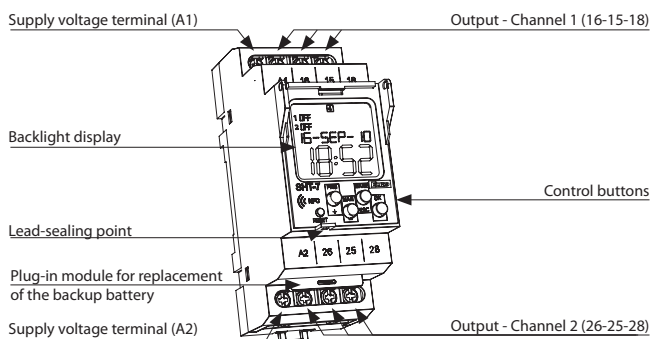


Without battery

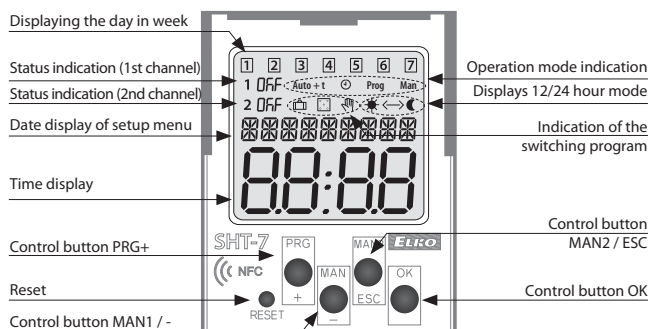
Type of backup battery: CR 2032 (3V)

- Digital switch timer clock with day and year program and setting via smartphone supporting NFC transfer
- Timer switch - switching based on real time in day and week mode
- 100 memory locations for on / off setting
- OFF line setting of programs in the application
- Backup / insertion into the phone memory for transfer to the next timer switch
- two-channel design, where each channel is programmable independently of the other.
- automatic switching between winter and summer time.
- sealable transparent cover on the front panel.
- data and time backup using the battery.
- battery life - up to 3 years.
- easy replacement of the backup battery through the plug-in module, no disassembling is required.
- supply voltage: AC 230 V.
- 2-MODULE, DIN rail mounting.

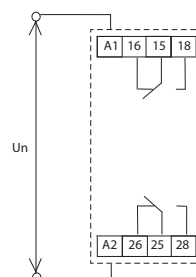
#### Description



#### Description of items displayed on the screen



#### Wiring



#### Symbol

