# Astronomical Time Switches

## Technical Characteristics

<table>
<thead>
<tr>
<th></th>
<th>EE180 (1 Channel)</th>
<th>EE181 (2 Channel)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width in 17.5mm Modules</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Supply Voltage</td>
<td>230V AC (+10 % / -15%, 50/60Hz)</td>
<td></td>
</tr>
<tr>
<td>Number of Outputs</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Characteristics of Relay</td>
<td>Change over contact 16A C 1 250V /10A cos phi = 0.6</td>
<td></td>
</tr>
<tr>
<td>Incandescent</td>
<td>2300W</td>
<td></td>
</tr>
<tr>
<td>230V Halogen</td>
<td>2300W</td>
<td></td>
</tr>
<tr>
<td>Standards</td>
<td>CE + CTICK and CEI 60-669</td>
<td></td>
</tr>
</tbody>
</table>

### Connection

- **Flexible**
  - 1 to 6mm²
- **Rigid**
  - 1.5 to 10mm²

### Environment

- **Storage Temperature**
  - -20°C to +60°C
- **Working Temperature**
  - -10°C to +55°C
- **IP**
  - IP20

### Functional Characteristics

- **Display LCD**
  - Without backlight screen
- **Operating reserve**
  - Lithium battery 5 years
- **Precision**
  - +/- 1.5s/day
- **Programming Key**
  - Yes
- **Automatic change of winter / summer time**
  - Yes
- **Functions available in free programming**
  - Weekly programming / permanent override / temporary override

### Astro Functions

- **Astro mode**
  - Yes
  - Independent programming for each channel
- **Programming of the lighting interruption**
  - Yes (if channel Astro)
- **Temporary override**
  - 15 / 30 / 60min
- **Maintained ON**
  - Adjustment common to the 2 channels
- **Anticipation ON**
  - Adjustment common to the 2 channels

### Electrical Connection

#### EE180 : 1 Channel

![Electrical Connection Diagram for EE180 (1 Channel)](image)

#### EE181 : 2 Channels

![Electrical Connection Diagram for EE181 (2 Channels)](image)

### Product Presentation

![Product Presentation Diagram](image)

### Keys

1. **Menu**
   - Selection of operating mode
2. **Auto**
   - Mode of running according to the program selected
3. **Prog**
   - New for programming mode
4. **Prog**
   - To modify an existing program
5. **Check**
   - Checking of the program
6. **Modify**
   - Modification of time, date and selection of the winter/summer time change mode
7. **Astro**
   - Astronomical mode
8. **+ / -**
   - Indicated that the channel is in astronomical mode
9. **A**
   - Navigation or setting of values
10. **B**
    - In auto, mode, selection of overrides, waiver or random operation
11. **OK**
    - To validate flashing information on display
12. **Menu**
    - To return to the previous step

You may return into auto mode at any moment using menu. If no action is taken for 1 min, the switch returns to auto mode.