

Technical Specifications

	EH011	EH010	EH111	EH110	EH171	EG103	EG103E	EG203	EG203E	EG493E
Version	Daily				Weekly				Weekly & Annual	
Voltage Supply	230V 50/60Hz	230V 50Hz	230V 50/60Hz	230V 50Hz	230V 50/60Hz	230V AC 50/60Hz	230V AC 50/60Hz	230V AC 50/60Hz	230V AC 50/60Hz	230V AC 50/60Hz
Consumption	0.5VA	0.5VA	0.5VA	0.5VA	0.5VA	6VA	6VA	6VA	6VA	6VA
Output	1 NO Contact Volt Free	1 NO Contact Volt Free	1 C/O Contact Volt Free	1 C/O Contact Volt Free	1 C/O Contact Volt Free	1 Volt Free Change-over Contact	1 Volt Free Change-over Contact	2 Volt Free Change-over Contacts	2 Volt Free Change-over Contacts	2 Volt Free 2 NO Changeover Contact Contacts

Switching Capacity

AC 1	16A / 250V	16A / 250V	16A / 250V	16A / 250V	16A / 250V	16A AC 1 / 250V 4A DC 1 / 12V	16A AC 1 / 250V 4A DC 1 / 12V	16A AC 1 / 250V 4A DC 1 / 12V	16A AC 1 / 250V 4A DC 1 / 12V	10A AC 1 / 250V
Inductive Load cos 0.6	4A / 250V	4A / 250V	4A / 250V	4A / 250V	2.5A / 250V	10A / 250V	10A / 250V	10A / 250V	10A / 250V	10A / 250V
Incandescent Lamp	900W	900W	900W	900W	900W	2300W	2300W	2300W	2300W	1500W
Halogen Lighting 230V	-	-	-	-	-	2300W	2300W	2300W	2300W	1500W
Compensated Fluorescent Tubes (max 45µF)	-	-	-	-	-	400W	400W	400W	400W	400W
Non Compensated Fluorescent Tubes Compensated in Series	-	-	-	-	-	1000W	1000W	1000W	1000W	800W
Compact Fluorescent Tubes	-	-	-	-	-	500W	500W	500W	500W	400W
Minimum Current AC 1	-	-	-	-	-	100mA / 250V	100mA / 250V	100mA / 250V	100mA / 250V	100mA / 250V
Minimum Current DC 1	-	-	-	-	-	-	-	-	-	-
Galvanic Insulation Between Power Supply and Output	-	-	-	-	-	< 4 kV	< 4 kV	< 4 kV	< 4 kV	< 4 kV

Characteristics

Technology	Quartz	Quartz	Quartz	Quartz	Quartz	-	-	-	-	-
Dial	24hrs	24hrs	24hrs	24hrs	7 days	-	-	-	-	-
Minimum Switching	5min	5min	5min	5min	2h	-	-	-	-	-
Programming Capacity	-	-	-	-	-	56 Steps	56 Steps	56 Steps	56 Steps	300 Steps
Minimum Time Between 2 Steps	-	-	-	-	-	1min	1min	1min	1min	1min
Working Accuracy	1sec per day	1sec per day	1sec per day	1sec per day	1sec per day	±1.5sec / 24h	±1.5sec / 24h	±1.5sec / 24h	±1.5sec / 24h	±0.2sec / 24h
Supply Failure Reserve	200hrs	No	200hrs	No	200hrs	5 years lithium battery	5 years lithium battery	5 years lithium battery	5 years lithium battery	5 Years Lithium Battery
Reached in	120h	120h	120h	120h	120h	-	-	-	-	-
Manual Switch Type	On Auto On	Off Auto On	Off Auto On	Off Auto On	Off Auto On	-	-	-	-	-
Protection Degree	-	-	-	-	-	IP20	IP20	IP20	IP20	IP20

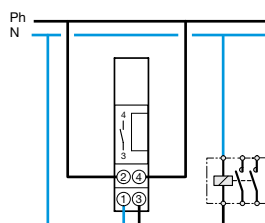
Environment

Working Temperature	-10°C to +45°C	-10°C to +45°C	-10°C to +45°C	-10°C to +45°C	-10°C to +45°C	-5°C to +45°C	-5°C to +45°C	-5°C to +45°C	-5°C to +45°C	-10°C to +45°C
Storage Temperature	-100°C to +50°C	-100°C to +50°C	-100°C to +50°C	-100°C to +50°C	-100°C to +50°C	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C

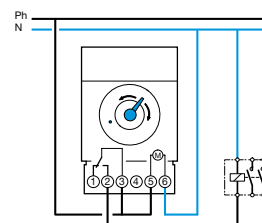
Connection

Flexible	0.5 to 4mm ²	0.5 to 4mm ²	0.5 to 4mm ²	0.5 to 4mm ²	0.5 to 4mm ²	1.5 to 10mm ²	1.5 to 10mm ²	1.5 to 10mm ²	1.5 to 10mm ²	1 to 4mm ²
Rigid	-	-	-	-	-	1 to 6mm ²	1 to 6mm ²	1 to 6mm ²	1 to 6mm ²	1.5 to 6mm ²

EH010 / EH011
230 VM ±10% 50/60Hz



EH110 / EH111 / EH171
230 VM ±10% 50/60Hz



Time Clocks/Switches Selection Chart

	Electromechanical Time Clocks		Digital Time Clocks			
	1 Channel		1 Channel		2 Channels	4 Channels
						
	1 Modules	3 Modules	1 Modules	2 Modules	2 Modules	4 Modules
	EH010 EH011	EH110 EH111 EH171	EG071 EG010	EG103 EG103E	EG203 EG203E	EG493E

Programming Cycle	Electromechanical		Digital			
	1 Channel 1 Module	3 Modules	1 Channel 1 Modules	2 Modules	2 Channels 2 Modules	4 Channels 4 Modules
24 Hours	EH010 EH011	EH110 EH111	EG010			
7 Days		EH171	EG071	EG103 EG103E	EG203 EG203E	
Annual						EG493E

Technical Characteristics - EG010

Electrical Characteristics

Voltage Supply	230V $\pm 10\%$ 50/60Hz
Consumption	1VA
Output	1 Changeover contact 16A - 250V AC 1 3A - 250V cos ϕ = 0.6 1000W Incandescent lighting

Functional Characteristics

Number of programs	5 Adjustable Pre-recorded Programs
Accuracy	± 6 min per year
Supply Failure Reserve	Total of 3 years

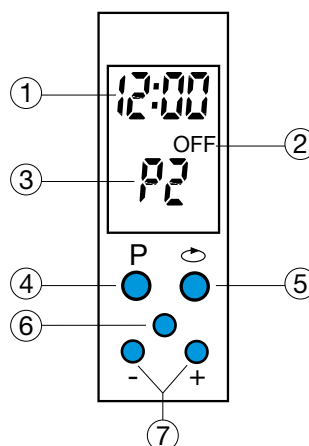
Environment

Working Temperature	-10°C to +50°C
Storage Temperature	-10°C to +60°C
Cable Capacity	1 to 4mm ²
Main Characteristics	Easy to program: 5 programs are pre-recorded. The user just has to select the program which corresponds to its use and modify time switches if necessary.

The 5 pre-registered programs are as follows:

P	Prog
P0	OFF
P1	ON
P2	6.00 23.00
P3	6.00 8.00 17.00 23.00
P4	6.00 8.00 11.00 13.00 17.00 23.00

Product Presentation



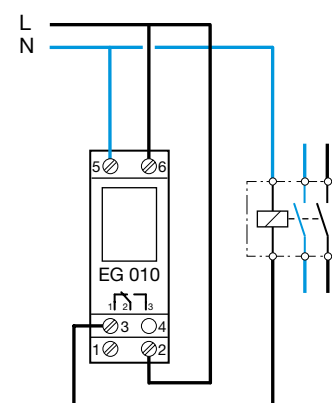
Display

1. Time
2. Circuit Status
3. Program Selection

Buttons

4. P to select the program to apply
5. Reset
6. $\rightarrow$ to scroll program steps
7. + and - : to input time

Electrical Connection



Technical Characteristics - EG071

Electrical Characteristics

Voltage Supply	230V $\pm 10\%$ 50/60Hz
Consumption	1VA
Output	1 Changeover contact 16A - 250V AC 1 3A - 250V cos ϕ = 0.6 1000W Incandescent lighting

Functional Characteristics

Number of programs	20 Program Steps (each program step can be applied to one of several days)
Accuracy	± 6 min per year
Supply Failure Reserve	Total of 3 years

Environment

Working Temperature	-10°C to +50°C
Storage Temperature	-10°C to +60°C
Cable Capacity	1 to 4mm ²

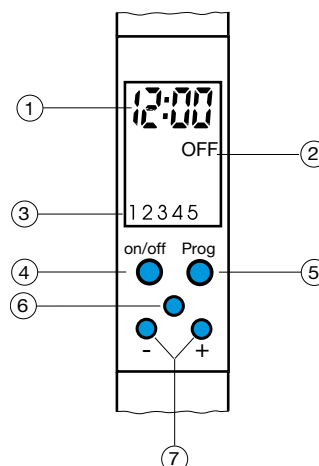
Product Presentation

Display

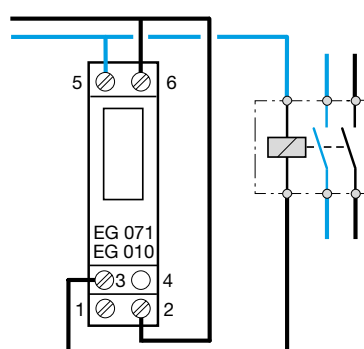
1. Time
2. Circuit Status
3. Days of the week

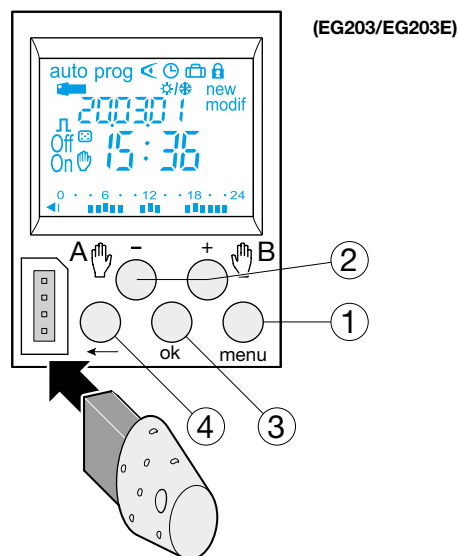
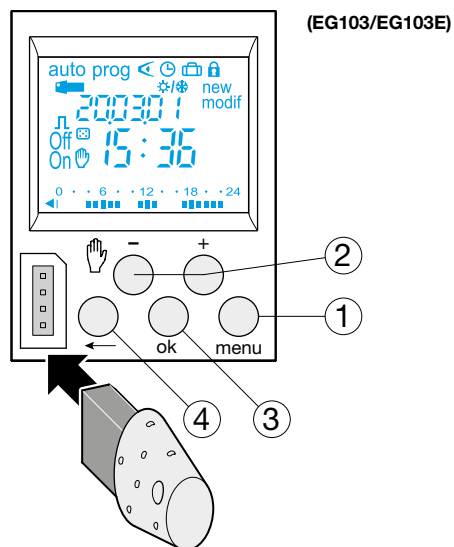
Buttons

4. ON / OFF : to select the circuit status
5. Reset
6. Prog: to program the device and scroll program steps
7. To input time and day



Electrical Connection



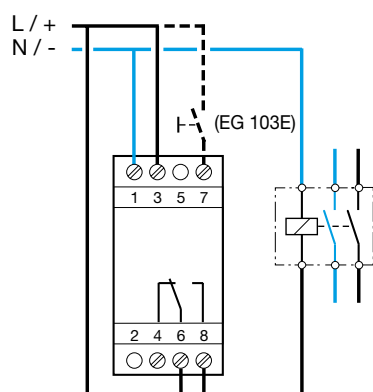


Keys

1.	Menu	Selection of operating mode
	Auto	Mode of running according to the program selected
	Prog	New for programming mode
	Prog	To modify an existing program
	←	Checking of the program
	⌚	Modification of time, date and selection of the winter/summer time change mode.
	📅	Holidays
2.	+ / -	Navigation or setting of values
	👤	In auto, mode, selection of overrides, waivers or random operation
3.	OK	To validate flashing information on display
4.	←	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.

Connection Diagram EG103*

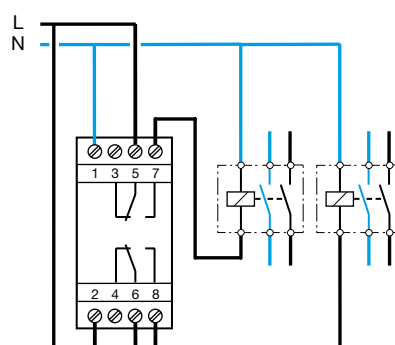


Major Characteristics

- Product delivered with current time and date set
- Automatic change of winter / summer time ⚙️/⚙️
- Programming key 🗑️
 - For permanent waivers
 - For program copy or save
- Programming for day or group of days
- 56 program steps On, Off
- Impulses ⚡ (1 sec to 30 min)*
- Permanent overrides On or Off (👤 permanent light on)
- Temporary overrides On or Off (👤 flashing)
- Holiday mode 📅 : overrides On or Off between two dates*
- Simulation of presence 🏠 *
- Display bar graph of daily profile
- Keyboard locking possible 🔒
- Programmable with power off
- Back lit display*

* Evolution models E or V only

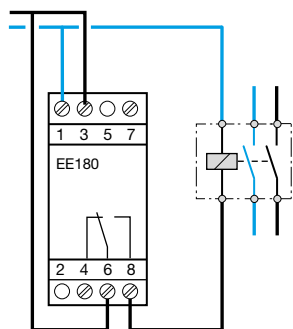
Connection Diagram EG203*



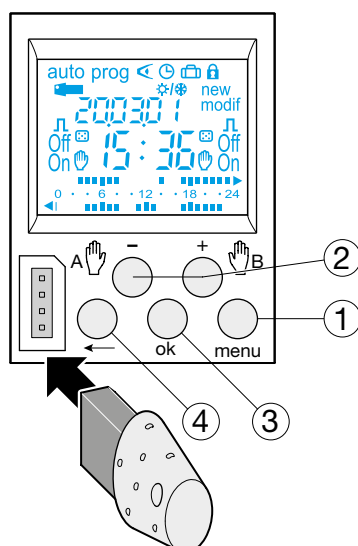
Technical Characteristics

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



Product Presentation



Keys

- Menu Selection of operating mode
 - Auto Mode of running according to the program selected
 - Prog New for programming mode
 - Prog To modify an existing program
 - ☐ Checking of the program
 - 🕒 Modification of time, date and selection of the winter/summer time change mode
 - Astro Astronomical mode
 - ★ Indicated that the channel is in astronomical mode
- + / - Navigation or setting of values
 - A 🖐 In auto, mode, selection of overrides, waiver or random operation
 - B 🖐
- OK To validate flashing information on display
- ⬅ 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.

EE181 : 2 Channels

