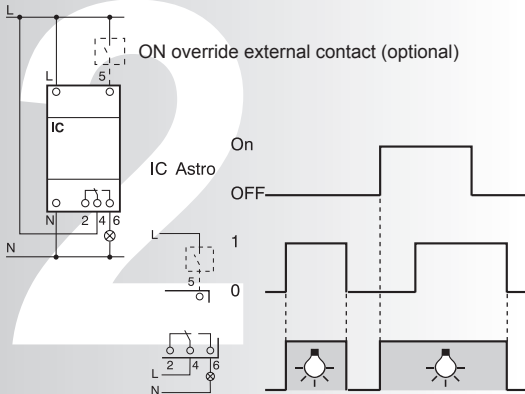


IC Astro: 15223

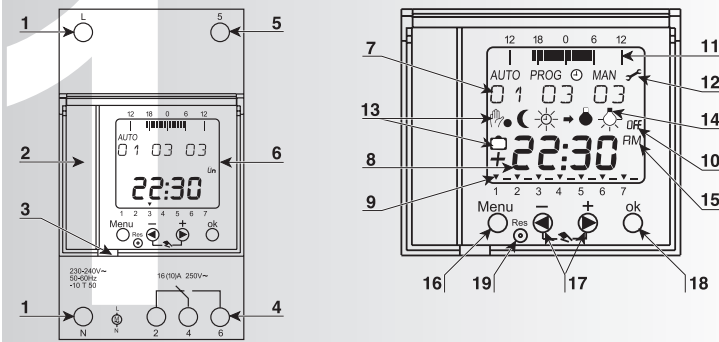


Cable

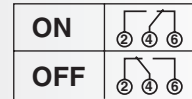


New features

The IC Astro controls lighting according to sunrise and sunset times.



- 1- Power supply 230 V AC +/-10%, 50/60 Hz
- 2- Leaflet holder slot
- 3- Sealable swivel cover
- 4- Output contact
- 5- ON override external control input
- 6- Permanent back-lit screen
- 7- 8- 9- Date; Time; Day 1 = Monday, Day 2 = Tuesday...
- 10- Output contact status (On, OFF)
- 11- Display of ON periods by 1 hour segment
- 12- Operating mode: "AUTO", "PROG": programming, "⌚": time setting, "MAN": "holidays" programming, "⚙️": adapt configuration
- 13- Operating indication "☀️", "☾" ON override "🏠" holidays
- 14- Programming aid pictogram: "☾→☀️" switch-on at sunset, "☀️→☾" switch-off at sunrise, "☀️→☀️" programmed switch-off, "☀️→☀️" programmed switch-on
- 15- "AM" morning, "PM" afternoon
- 16- "Menu" Operating mode selection
- 17- "-", "+": Value setting and navigation keys
- 18- "ok": flashing information validation key
- 19- "Res": Reset key: erases programmed data, date and time.



Configure

On energisation or after having pressed the "Res" key (19):

- Select the language (français/English/deutsch/etc.)
- Enter the place of installation:
 - by its position (in France, England, etc.) and by the closest town
 - by its geographic coordinates (latitude, longitude, time difference with respect to GMT) (see attached map)
- Set the year, month, day and time

Once this phase is completed, your IC Astro calculates the sunrise and sunset times and proposes a default programme (operation from sunset to sunrise).



If you do not agree with the value or the flashing word, scroll down the display using the "-" and "+" keys
 To confirm the value or the flashing word, validate by "ok"
 If you are lost, press "Menu" to return to the "Auto" mode without saving the last change
 If you do not press a key for 2 minutes, you will automatically return to "Auto" mode without saving.

Program "PROG"

Access the "PROG" mode by pressing the "Menu" key; the "PROG" mode offers 5 options:

- "NEW" to establish a new programme with possibility of copying onto the other days
- "REMOVE": an automatic (sunset/rise) or programmed switch-on/switch-off switching operation
- "ADD": an automatic (sunset/rise) or programmed switch-on/switch-off switching operation
- an OFF period (programmed switch-on and switch-off) can be added between sunrise and sunset hours: by default it is proposed from 11pm (23h) to 5am (5h) (see diagram)
- "SET": lets you adjust the hours for the above-mentioned OFF period
- "COPY" copies the programme onto other days
- "CHECK" to view the programmes:
 - "MODIFY" to establish a new programme day by day
 - "CLEAR" to delete the programme partially or totally (date, time and language are kept):
 - "NIGHT" deletes the programming for the chosen day
 - "PROG OFF" return to the default programming
 - "ALL OFF" deletes the programming for all the days of the week
 - "FINISH" to leave the "prog" mode and return to the "auto" mode.



Summer-winter time "☀️"

Change the time, date, winter/summer time:

- Press "Menu" and access the "☀️" mode via the "+" key
- Change time and date
- Select summer/winter time:
 - "WOUL S/W": no automatic change
 - "WITH S/W": automatic change as per the chosen zone:

Zone	Summer time	Winter time	Comments
EUROPE UTC+1	Last Sunday in March at 2am	Last Sunday in October at 3am	
GB-P UTC	Last Sunday in March at 1am	Last Sunday in October at 2am	Great Britain - Portugal
SF-GR-TR UTC+2	Last Sunday in March at 3am	Last Sunday in October at 4am	Finland - Greece - Turkey
USA-CAN	First Sunday in April at 2am	Last Sunday in October at 3am	United States - Canada
FREE	Free choice	Free choice	Choice of month, week and time (between 1am and 4am)

Adapt configuration "🌙"

In this mode you can:

1- Adjust the difference in sunset and/or sunrise hours by +/- 120 minutes according to local constraints (mountains, buildings, etc.)

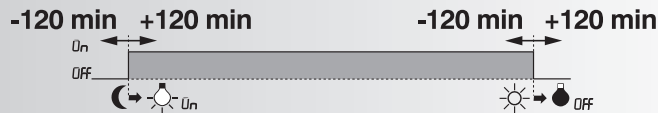
These differences apply to all the days

2- Modify language

3- Modify geographic position

4- Modify time and date format.

- Press "Menu", access the "🌙" mode via the "+" key
- "OFFSET": to anticipate or delay switching operations (see diagram):
 - "SUNSET" example: -30 minutes switches the contact 30 minutes before sunset, +50 minutes: 50 minutes after
 - "SUNRISE" example: -30 minutes switches the contact 30 minutes before sunrise, +50 minutes: 50 minutes after
- "LANGUAGE" to change language
- "POSITION" to change geographic zone
- "24h/12h" to change time display to 24 hours or 12 hours
- "DATEFORM" to change date display D/M/Y, M/D/Y or Y/M/D.



Load chart

■ Acceptable output contact power:

- resistive loads: **max. I = 16A** - 250 V~, **I mini = 100 mA** - 12 V~
- motors: **2300 VA**.

Type of lighting	max. power
resistive load	16 A
power factor = 0.6	10 A
incandescent (230 V)	2300 W
halogen (230V)	2300 W
series corrected/uncorrected fluorescent	26 x 36 W, 20 x 58 W, 10 x 100 W
parallel corrected fluorescent with conventional ballast	10 x 36 W (4.7 µF), 6 x 58 W (7 µF), 2 x 100 W (18 µF)
dual corrected fluorescent	10 x (2 x 58 W), 5 x (2 x 100 W)
fluorescent with electronic ballast	9 x 36 W, 6 x 58 W
dual corrected fluorescent with electronic ballast	5 x (2 x 36 W), 3 x (2 x 58 W)
fluo-compact with electronic ballast	9 x 7 W, 7 x 11 W, 7 x 15 W, 7 x 20 W
parallel corrected HQL fluorescent	1 x 250 W (30 µF)
parallel corrected sodium vapour	1 x 250 W (37 µF)

For other applications, relay using a CT contactor.

Holidays "MAN"

Move to the holiday mode "🏠":

- Press "Menu" and access the "MAN" mode via the "+" key
- The "🏠" mode lets you temporarily cancel On periods by configuring the start and end dates and times of absence.

ON - OFF override "🔑"

- Activate temporary ON or OFF (up to the next switching operation) by pressing the 2 keys "🔑" simultaneously for less than 2 s:
 - the output contact changes status
 - The IC Astro indicates by "MAN ON 🏠" or "MAN OFF 🏠" the new status of the output contact
 - Return to automatic mode by pressing these 2 keys again for less than 2 s
 - **Move to permanent ON or OFF** by pressing the 2 keys "🔑" simultaneously for more than 2 s:
 - the output contact changes status each time a key is pressed for more than 2 s
 - The IC Astro indicates by "PERM ON 🏠." or "PERM OFF 🏠." the new status of the output contact
 - Return to automatic mode by pressing these 2 keys again for less than 2 s.
 - **The IC Astro also allows lighting override external control by NO contact, cabled to input 5 (this external override takes priority over the product ON - OFF override function).**

Technical data

- Memory: 14 switching operations (not including sunrise/sunset)
- Minimum time between 2 switching operations: 1 minute
- Switching accuracy: 1 second
- Time accuracy: +/- 1 second/day
- Saving programme and time by lithium battery:
 - life time: 12 years
 - autonomy: 6 years
- Programming longitude: -180° (EAST)...+180° (WEST) in steps of 1°
- Programming latitude: -90° (SOUTH)...+90° (NORTH) in steps of 1°
- Programming "OFFSET" (independent sunrise and sunset): +/- 120 minutes
- Operating temperature: -20°C...+50°C
- Degree of protection: IP 20 B
- Connection terminals:
 - max. capacity: 6 mm²
 - Posidriv 1 or flat 0.8 x 4 mm
- Overall dimensions: 5 modules of 9 mm (width 45 mm)
- Weight: 90 g
- Consumption:
 - IC Astro: 18 mA
 - override input: < 0.5 mA.