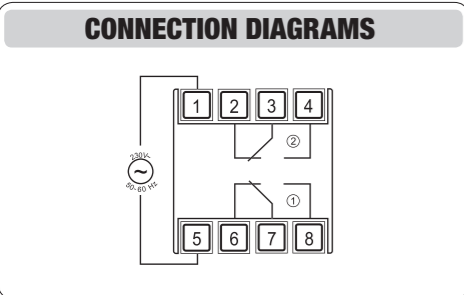
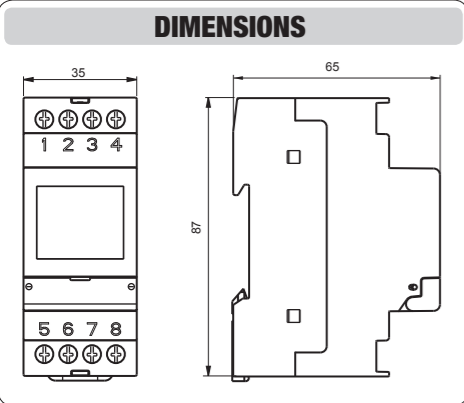
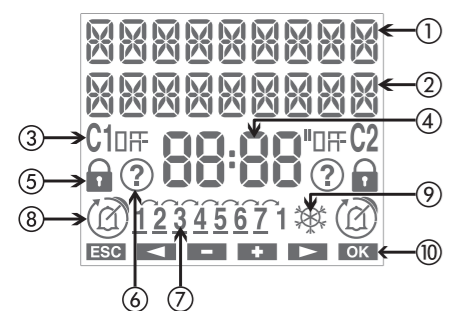




V31S00768-030



DISPLAY AND KEYPAD DESCRIPTION



- ① Field "text1 / day"
- ② Field "text 2 / date"
- ③ Field "status relay 1"
- ④ Field "time"
- ⑤ Field "lock" (lock relay switchings)
- ⑥ Field "random programme"
- ⑦ Field "day of the week"
- ⑧ Field "programme running"
- ⑨ Field "CET/DST"
- ⑩ Field "key functions"



- Key "←": activation menu/esc/check battery
Key "OK": confirm datum/activation IR transmission
Key "C1": decrease datum/previous menu / switching channel 1 / lock channel 1
Key "C2": increase datum/next menu / switching channel 2 / lock channel 2
Key "R": reset settings
Key "OK" + "C1" (3 sec): random on/off channel 1
Key "OK" + "C2" (3 sec): random on/off channel 2

User manual

DIGITAL TIME SWITCHES

⚠ Read all the instructions carefully

SAFETY WARNINGS

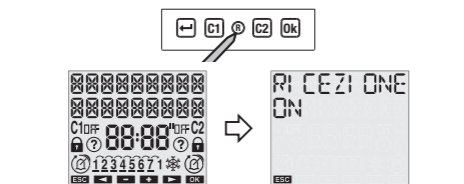
- During product installation and operation it is necessary to observe the following instructions:
- 1) The instrument must be installed and started up by a qualified person, strictly in observance of the connection diagrams shown in this manual.
 - 2) After installation inaccessibility to the terminals without using dedicated tools must be guaranteed
 - 3) Before accessing the connection terminals, make sure that the leads are not live.
 - 4) Do not connect or feed the instrument if any part of it is damaged
 - 5) The instrument must be installed and activated in compliance with current electric systems standards.
 - 6) Do not use the instrument for anything other than the indicated purpose.

TECHNICAL CHARACTERISTICS

- Power supply: 230Vac ± 10% 50/60Hz
- Absorption: 8VA (2W)
- Replaceable battery
- Output: - 2 relays with monostable change-over contacts 16(10)A / 250Vac (versions DW2 and Y2)
- Type of action: 1B
- Memorisable programmes (for each channel): - 30 events (on, off, impulse, cycle) - 4 periods + 20 holiday days
- Backlit LCD display
- Software class: A
- Mounting: DIN rail to backplane
- Container: 2 DIN modules
- Operating temperature: -20°C ÷ +40°C
- Storage temperature -10°C ÷ +70°C
- Pollution level: 2
- Rated impulse voltage: 4kV
- Degree of protection: IP20 for the terminals
- Insulation: reinforced between accessible parts (frontal) and all the other terminals

INSTALLATION

- The instrument is supplied with the battery not inserted to avoid wasted consumption. Extract the battery from its packing and insert it into the housing located behind the instrument so that pole (+) is visible as shown in the figure. Then secure the closure cover, turning it clockwise.
- Connect the load and the power supply as illustrated in section "Connection diagrams"
- Using a pointed object press key "R" to perform a reset. All the segments of the display will light for a few seconds and then the instrument will enter IR receipt mode. *Note: in case of powerfail, IR receipt is not activated.*



- Press key "←" to exit the IR receipt mode
- At this point it is possible to insert the parameters necessary for the instrument to work correctly:
 - language
 - date format
 - date
 - time

Setting the language

It is possible to choose from 5 languages:
Italian -> English -> Spanish -> French -> German

Use keys "C1" and "C2" to choose the desired language.

Press "OK" to confirm and go on to the "data format" menu.



Setting data format

It is possible to choose from two data formats: DD-MM-YY or YY-MM-DD

Use keys "C1" and "C2" to choose the desired format.

Press "OK" to confirm and go on to the "data" menu.

Setting the date

The parameter (year, month, day) to be changed flashes.

Use keys "C1" and "C2" to choose the desired value - and press "OK" to confirm and go on to the next parameter. The sequence of parameters to be entered is year -> month -> day. When the day is inserted, also appearing on the display is the bar with the corresponding day of the week (1 -> Monday, 7 -> Sunday).

Press "OK" to confirm and go on to the "data" menu.

Setting the time

The parameter (hours, minutes) to be changed flashes.

Use keys "C1" and "C2" to choose the desired value - and press "OK" to confirm and go on to the next parameter. The sequence of parameters to be inserted is hours -> minutes

Press "OK" to confirm.

The instrument then goes into normal operational status and is ready to work. The display shows the values for the date, time, status relay 1, status relay 2, day of the week (on the first line in letters and lower down in numbers) and the DST/CET symbol.

Note: if the instrument is not fed by the mains, on the first line of the display instead of the day are the words NO SUPPLY. In this condition backlighting is not active and the relay not switched.

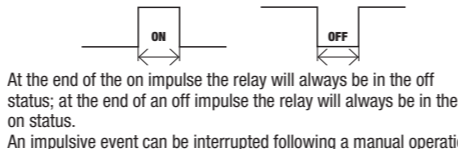
PROGRAMMINGS

Events ON/OFF

ON and OFF events consist of switching the relay to the on or off position. They may be daily (every day at the same time), weekly (one or more days during the week, each week) monthly (one day a month, every month), yearly (one day a year, every year).

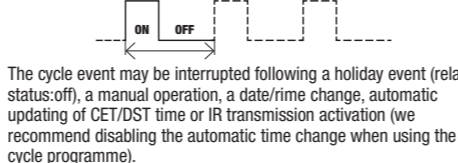
IMPULSE event

An impulse event can be an on or off type and may last for a maximum of 59 seconds:



CYCLE events

A cycle event is a programme which repeats itself over a preset period of time (maximum duration 1 week) during which there is a succession of on and off switching. The cycle programme always starts from the on status and always ends in the off status. The duration of the on and off status cannot be less than one minute.



The cycle event may be interrupted following a holiday event (relay status:off), a manual operation, a date/rime change, automatic updating of CET/DST time or IR transmission activation (we recommend disabling the automatic time change when using the cycle programme).

HOLIDAY events

A holiday event allows you to enter individual days or holiday periods during which all the set programmes shall not be carried out and the relay shall be in the off position. Holiday events always start at 00:00 on the starting day and end at 23:59 on the last day of the holiday. Holiday events are interrupted in the case of manual operations on output.

Programming priority

In automatic function mode the instrument behaves as foreseen by the entered programmes. Should there be conflict between programmes (different events starting at the same moment) the

instrument will only run the one with the highest priority, according to the following table (1 maximum priority, 10 minimum):

Event	Yearly	Monthly	Weekly	Daily
Holiday	1	-	-	-
Cycle	-	-	2	-
Impulse	3	4	5	6
ON or OFF	7	8	9	10

Programmed events which starting during an event already in progress (holiday, cycle) are ignored. In the case of non-instantaneous (holiday, cycle, impulse) the device always completed the started programme before managing the next. Exceptions to this are cases in which:

- a holiday event occurs while executing a non-instantaneous programme
- there is a change to manual operation while executing a non-instantaneous programme. In this case all the programmes running are interrupted and if there is a lock or random on the channel, execution of all programmes is disabled until manual procedure is deactivated

Programmes that are active when one of these exceptions occurs are interrupted and will not be restored. When execution is interrupted, the relays still maintain status unless entering a holiday day or period (relay set to off).

MANUAL OPERATION

Manual operation allows an output (or outputs) on the instrument to be worked manually, as well as as reading the battery charge level. Manual operations are reachable from the normal operational status in which the display assumes an appearance similar to the following:

Manual switching on/off

Briefly pressing keys "C1" or "C2" allows 1 or relay 2 switching. The achieved status is maintained until the next programmed event.

Casual on/off switchings

It is possible to activate casual output switching. Activation brings the output to the on status and shall then be followed by on/off switching with casual periods and duty-cycles (the default minimum period is 1 minute and the maximum 5 minutes: such values can in any case be changed in the settings menu). Hold keys "C1" and "OK" down simultaneously for 3 seconds to activate the function on channel 1 or "C2" and "OK" to activate the function on channel 2.

On confirmation of activation, under the output status indication appears the symbol Ⓞ.

Pressing keys "C1" and "OK" again for 3 seconds (or "C2" and "OK") deactivates the function. The relay is set to off status. If the function is active on both channels, the outputs shall switch simultaneously.

Lock output switching (Lock)

It is possible to activate the function which allows all the switchings of one output to be locked. In this way all the programmes are locked (including the holiday programme and the other manual switchings) and the output is maintained in its current status until manual unlocking.

Hold key "C1" down for 3 seconds to activate output 1 locking ("C2" for output 2).

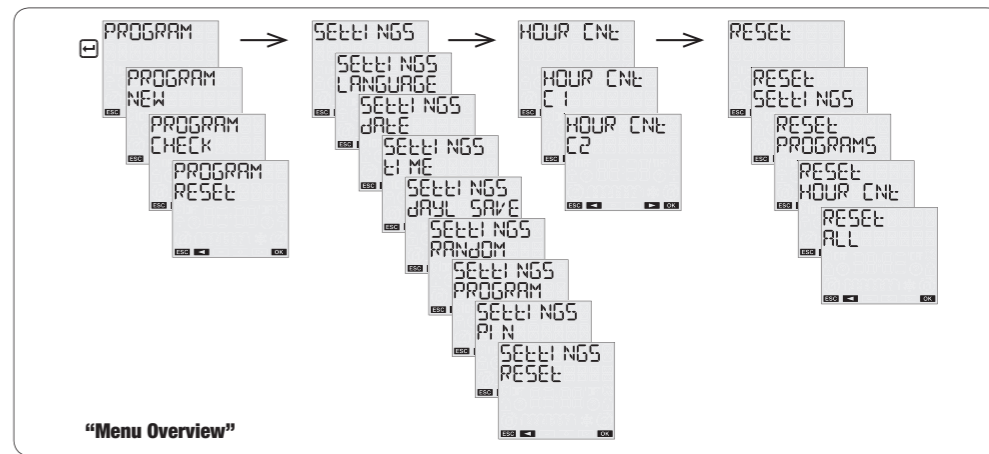
On confirmation of activation, on the display under the channel indication appears symbol Ⓦ.

Hold key "C1" down for 3 seconds (or "C2" for output 2) to unlock the output.

Battery Test

The battery is read automatically once a week (Monday at 00:00). It is in any case possible to read battery status by holding down key "←" for 3 seconds. On the display appear the words BATTERY: OK if the battery charge level is sufficient for correct operation; otherwise the words BATTERY appear to indicate that replacement is required as soon as possible.

The manual functions which work on the output relays have priority over any set programming. The highest priority function is the lock switchings function (LOCK).



AUTOMATIC PROGRAMMING

1. Creation of a new programme

1.1 Programmes ON / OFF

Press key "←" to enter the menu, choose the PROGRAM option using keys "C1" and "C2" and press "OK" to confirm.

Choose option NEW using keys "C1" and "C2" and press "OK" to confirm.

Choose the channel onto which to carry out the programming through keys "C1" and "C2". You can choose whether to execute the programme on channel 1, on channel 2 or on both channels simultaneously. Press "OK" to confirm.

Using keys "C1" and "C2" choose the frequency of the event from:

DAILY, WEEKLY, MONTHLY, YEARLY. Press "OK" to confirm.

Choose between an ON or OFF event. Press "OK" to confirm.

Insert the date using keys "C1" and "C2". (not required for daily events) For weekly events it is possible to set more than one day of the week. By pressing key "OK" you select/deselect the day in question while using key "C2" you scroll through the days until Sunday. By pressing "C2" again, CONF: RM appears: press "OK" to confirm.

Enter the hours and minutes for the switching using keys "C1" and "C2". Press "OK" to confirm.

Confirmation of programming is shown by the words SAVED on the display with the concerned channel.

Note: recursive function

At this point the instrument activates the recursive function which allows several on-off events to be programmed in succession on the same day. Thereby once an activation (deactivation) event has been programmed, it is possible to enter the time of a deactivation (activation) event for the same day. If you do not wish to enter an off (on) time, press key "←" to terminate programming.

There is no control of the correlation between on/off events programmed using the recursive function: such function is therefore to be intended as facilitated programming.

1.2 IMPULSE programmes

Press key "←" to enter the menu, choose the PROGRAM option using keys "C1" and "C2" and press "OK" to confirm.

Choose option NEW using keys "C1" and "C2" and press "OK" to confirm.

Choose the channel onto which to carry out the programming through keys "C1" and "C2". You can choose whether to carry out the programme on channel 1, on channel 2 or on both channels simultaneously. Press "OK" to confirm.

Using keys "C1" and "C2" choose the frequency of the event from:

DAILY, WEEKLY, MONTHLY, YEARLY. Press "OK" to confirm.

Choose the impulse using keys "C1" and "C2" and press "OK" to confirm.

Using keys "C1" and "C2" choose whether it is an ON impulse or an OFF impulse.

Press "OK" to confirm.

Set the date using keys "C1" and "C2" (not required for daily events).

Press "OK" to confirm.

Enter the starting time and duration of the impulse (max 59 seconds).

Press "OK" to confirm.

Once programming is confirmed, on the display the are shown the words SAVED with the channel concerned (C1 or C2).

During normal operation, the eventual execution of an impulse programme is shown by symbol Ⓞ on field (8) of the display.

