## Time switches

## Efficiency at your fingertips!



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## Time switches are used to accurately and automatically program the operation of heating, lighting, ventilation, access control, bells, roller blinds, etc.



Bell management in schools


Heating and ventilation management in buildings


Access management in buildings


Residential lighting management

## Energy savings

## Convenient use

Time switches start and stop various types of electric loads according to user-set programs. To reduce cost, the user can decide to automatically switch loads on only during low-rate periods.
The programmed switching on/off of loads provides energy savings compared to operations without a time switch, in which the loads would be on permanently.

## Easy installation

All the products can be installed easily on a DIN rail in a panelboard. Some "Intuitive switches" offer screw-less terminals and compatibility with electrical distribution comb busbars.

The programs are defined according to the user needs.
On most of the products, the automatic operation can be easily adapted, for temporary or permanent operations. On some "Intuitive switches" this can be done without going to the panelboard, by connecting switches or push-buttons to the product external input.

## Increased security

Simulation of presence with random operating mode is proposed in IHP'+' versions.


## > The digital time switches

With 4 keys and a display, they operate on a weekly cycle: the same program is repeated week after week.

> The digital yearly time switches
They operate on an daily, weekly or yearly program (ITA 1c: 1 channel, ITA 4c: 4 channels - 2 external inputs).

> The mechanical time switches
They operate on an hourly, daily or weekly cycle:
the same program is repeated hour after hour (IH 60 min ), day after day (IH 24 h) or week after week (IH 7 j ).



## Simple and intuitive use



Advanced features of
the IHP digital time switches

## Time-savings with intuitive programming

- Only 4 keys.
- Choice of language and guiding in the menus to create, check, modify or partially or totally delete the program.
- Time updating and changeover to winter/summer time: o automatic: selected when programming the changeover date (according to geographic area), o manually by the user, O without modification of programs.



## Unique programming legibility

Large screen for display of:

- Hour, minutes and day of the week.
- Current operating mode.
- Channel switching status ("On", "Off").
- Control mode (automatic, override, permanent, holiday or random for the + version).
- Operation on mains or battery.



## Simplified installation

- Mechanical compatibility with electrical distribution busbar.
- Direct connection of loads up to 16 A under 250 V .
- Fast connection; 2 screwless terminals per pole for cables up to $2.5 \mathrm{~mm}^{2}$.
- Installation leaflet always available in the device thanks to the built-in leaflet holder slot.
- Swivel, sealable cover.



## Simplified use

- Backlit display.
- Saving and duplicating of programs with memory key.
- Programming with a programming kit for PC.
- Control of the time switch away from the panelboard via external inputs.


Programming kit for PC


Memory key

## Advanced features of the ITA digital yearly time switches

- Easy handling, quick and intuitive programmable time switch.
- 1, 2, 3 or 4 channel for daily, weekly or yearly programming
- Up to 300 programming cycles.
- Text based menu and self-explanatory symbols.
- LCD, illuminated display with a large dot matrix area to provide two high resolution text lines.

- Auto summer time - Auto Easter time.
- 16 A switching load.
- 2 external inputs ( $1 \times 230 \mathrm{~V}, 1 \times$ potential free).
- DCF, GPS antenna optional.

- Unlimited program security by optional memory key.

- Programmable with PC via optional programming kit.

- Programmable with supply disconnected.

- 10 years battery-reserve.
- Minimum interval between 2 switchings: 1 second.
- Manual permanent mode.
- Manual override.
- Automatic sorting of switching times on readout.
- Programming of 4 different cycles.
- Unrestricted block programming.
- Elapsed time and pulse counter.
- Pulse function.
- Activation, for each channel of five different functions via a front panel key.
- Display showing the operating time and the number of switching operations for each channel and for all 4 channels.
- Security by PIN-Code.


## Choice table

The time switches control opening and closing of one or more separate circuits according to a programming pre-set by the user:

- by memorisation of On and Off switching operations for the IHP and ITA digital time switches,
- by positioning of jumpers or captive segments on a programming dial for the IH mechanical switches.


## A time switch is chosen according to the following criteria:

| Designation | Number <br> of channels | Cycle <br> period <br> (d: day) |
| :--- | :--- | :--- |


| Minimum <br> time | Number <br> of switching <br> between 2 <br> switching <br> operations | Saving <br> on mains <br> cut off |
| :--- | :--- | :--- | :--- |


| Width <br> (modules <br> of 9 mm ) | Override <br> controls <br> On $/$ Off | Output contact <br> changeover switch <br> $(\mathrm{Pf}=1)$ |
| :--- | :--- | :--- |
|  |  |  |

[^0]The 45 mm digital time switches

| IHP 1c | 1 | 24 h <br> and/or 7 d | 1 min. | 6 years | 5 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| IHP + 1c | 1 | 24 h <br> and/or 7 d | 1 s | 84 | 6 years | 5 |
| IHP 2c | 2 | 24 h <br> and/or 7 d | 1 min. | 56 | 6 years | 5 |
| IHP + 2c | 24 h <br> and/or 7 d | 1 s | 84 | 6 years | 5 |  |
| IHP + DCF 1c ${ }^{(1)}$ | 1 | 24 h <br> and/or 7 d | 1 s | 84 | 10 years | 4 |


| On / Off | 16 A | Auto |
| :--- | :--- | :--- |
| On / Off | 16 A | Auto |
| On / Off | 16 A | Auto |
| On / Off | 16 A | Auto |
| On / Off | 16 A | Auto |

The 18 mm digital time switches

| IHP 1c 18 mm | 1 | 24 h <br> and/or 7 d | 1 min. |
| :--- | :--- | :--- | :--- |
| IHP + 1c 18 mm | 1 | 24 h <br> and/or 7 d | 1 min. |

The $\mathbf{3 6}$ and $\mathbf{7 2} \mathbf{~ m m}$ digital yearly time switches

| ITA 1c ${ }^{(2)}$ | 1 | 24 h, 7 d , year | 1 min . | 300 | 10 years | 4 | On / Off | 16 A | Manual / Auto ${ }^{(3)}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ITA 4c ${ }^{(2)}$ | 4 | 24 h, 7 d, year | 1 min . | 300 | 10 years | 8 | On / Off | 16 A | Manual / Auto ${ }^{(3)}$ |

The 54 mm mechanical time switches

| IH 60mn 1c SRM | 1 | 60 min . | 37.5 s | 48 On - 48 Off | None | 6 | On / Off | 10 A | Manual |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| IH 24h 1c SRM | 1 | 24 h | 15 min . | 48 On - 48 Off | None | 6 | On / Off | 16 A | Manual |
| IH 24h 1c ARM | 1 | 24 h | 15 min. | 48 On - 48 Off | $200 \mathrm{~h}^{(4)}$ | 6 | On / Off | 16 A | Manual |
| IH 24h 2c ARM | 2 | 24 h | 30 min . | 24 On-24 Off | 150 h | 6 | On | 16 A | Manual |
| IH 7j 1c ARM | 1 | 7 days | 2 h | 42 On-42 Off | $200 \mathrm{~h}^{(4)}$ | 6 | On / Off | 16 A | Manual |
| $\begin{aligned} & \text { IH } 24 \mathrm{~h}+7 \mathrm{j} \\ & 1+1 \mathrm{ARM} \end{aligned}$ | 1+1 | $\begin{aligned} & 24 \mathrm{~h} \\ & +7 \text { days } \end{aligned}$ | $\begin{aligned} & 45 \mathrm{~min} . \\ & +12 \mathrm{~h} \end{aligned}$ | $\begin{aligned} & 16 \text { On -16 Off } \\ & +7 \text { On -7 Off } \end{aligned}$ | 150 h | 6 | On | 16 A | Manual |

The 18 mm mechanical time switches

| IHH 7j 1c ARM | 1 | 7 days | 2 h | 42 On - 42 Off | 100 h | 2 | On / Off | 16 A | Manual |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| IH 24h 1c ARM | 1 | 24 h | 15 min . | 48 On-48 Off | 100 h | 2 | On / Off | 16 A | Manual |
| IH 24h 1c SRM | 1 | 24 h | 15 min . | 48 On-48 Off | None | 2 | On / Off | 16 A | Manual |

[^1]| Back-lit display, random function and pulse programming | "Absence for holidays" function | Screwless connection | Mechanical compatibility with electrical distribution comb busbars | Input for external control | Instruction manual holder on front face | Memory key supplied with the product | Cat. no. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | - | - | - |  | - |  | $\begin{aligned} & \text { CCT15400 }^{(6)}, \text { CCT15420 }^{(7)}, \text { CCT15450 }^{(8)}, \\ & \text { CCT15720 }^{(9)}, \text { CCT15850 }^{(10)} \end{aligned}$ |
| $\begin{aligned} & \text { + Cycle } \\ & \text { programming } \end{aligned}$ | - | - | - | 1 input | - | - | $\begin{aligned} & \text { CCT15401 }^{(6)}, \text { CCT15451 }^{(8)}, \text { CCT15721 }^{(9)}, \\ & \text { CCT15851 }^{(10)} \end{aligned}$ |
|  | - | - | - |  | - |  | CCT15402 ${ }^{(6)}$, CCT15422 ${ }^{(7)}$, CCT15452 ${ }^{(8)}$, CCT15722 ${ }^{(9)}$, CCT15852 ${ }^{(10)}$ |
| $\begin{aligned} & \text { e+ Cycle } \\ & \text { programming } \end{aligned}$ | $\bigcirc$ | $\bigcirc$ | - | 2 inputs | - | - | CCT15423 ${ }^{(7)}$, CCT15723 ${ }^{(9)}$, CCT15853 ${ }^{(10)}$ |
| $\begin{aligned} & \text { - Cycle } \\ & \text { programming } \end{aligned}$ | - |  |  |  | - |  | CCT15857 |
|  | - | - |  |  |  | (12) | CCT15854 ${ }^{(11)}$ |
| $\begin{aligned} & \text { + Cycle } \\ & \text { programming } \end{aligned}$ | $\bigcirc$ | $\bigcirc$ |  | 1 input |  | - | CCT15838 ${ }^{(11)}$ |
| Back-lit display, pulse and cycle programming | ${ }^{(5)}$ |  |  |  |  | (13) | CCT15910 |
| Back-lit display, pulse and cycle programming | ${ }^{(5)}$ |  |  | 2 inputs |  | (13) | CCT15940 |
|  |  | - |  |  |  |  | CCT15338 |
|  |  | $\bigcirc$ |  |  |  |  | CCT16364 |
|  |  | - |  |  |  |  | CCT15365 |
|  |  |  |  |  |  |  | 15337 |
|  |  | $\bigcirc$ |  |  |  |  | CCT15367 |
|  |  |  |  |  |  |  | 15366 |
|  |  |  |  |  |  |  | 15331 |
|  |  |  |  |  |  |  | 15336 |
|  |  |  |  |  |  |  | 15335 |

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[^0]:    Time
    changeover
    (summer / winter)

[^1]:    ${ }^{(1)}$ The IHP DCF is synchronised on the Frankfurt 's DCF77 radio station via the ANT DCF antenna.
    ${ }^{(2)}$ The ITA 1c and ITA 4c are synchronised on the Frankfurt 's DCF77 radio station via the DCF antenna for ITA or GPS antenna for ITA.
    ${ }^{(3)}$ Summer/Winter-Time can be set to auto without any antenna.
    ${ }^{(4)} 110 \mathrm{~h}$ for 100 V AC supply voltage.

[^2]:    ${ }^{(5)}$ Function included and can be realized through special program entry.
    ${ }^{(6)}$ English, Russian, Ukrainian, Latvian, Lituanien, Estonian languages.
    ${ }^{(7)}$ English, Bulgarian, Greek, Slovene, Serbian, Croatian languages.
    ${ }^{(8)}$ English, Hungarian, Polish, Romanian, Czech, Slovak languages.
    ${ }^{(9)}$ French, English, Italian, Spanish, German, Portuguese languages.
    ${ }^{(10)}$ French, English, Swedish, Dutch, Finnish, Norwegian/Danish languages.
    ${ }^{(11)}$ French, English, Italian, Spanish, German, Portuguese, Dutch languages.
    ${ }^{(12)}$ Memory key (CCT15861) is not supplied with IHP 1c 18mm (CCT15854) but this memory key and the programming kit (CCT15860) can be used and operate on IHP 1c 18mm
    ${ }^{(13)}$ Memory key (CCT15955) is not supplied with ITA 1c /4c but this memory key and the programming kit (CCT15950) can be used and operate on ITA 1c/4c (see "Accessories selection table").

