# **Time switches**

Efficiency at your fingertips!





## Efficiency at your fingertips!

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



Energy savings



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.

## Convenient use

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).



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## Simple and intuitive use



## 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).

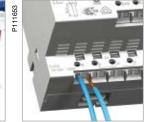
• Operation on mains or battery.



#### **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 mm<sup>2</sup>.
- 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

E.

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 (1x 230 V, 1x 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 of channels	<b>Cycle</b> period (d: day)	Minimum time between 2 switching operations	Number of switching operations	Saving on mains cut off	Width (modules of 9 mm)	Override controls On / Off	Output contact changeover switch (Pf =1)	Time changeover (summer / winter)
The 45 mm digi	ital time switch	nes							
IHP 1c	1	24 h and/or 7 d	1 min.	56	6 years	5	On / Off	16 A	Auto
IHP + 1c	1	24 h and/or 7 d	1s	84	6 years	5	On / Off	16 A	Auto
IHP 2c	2	24 h and/or 7 d	1 min.	56	6 years	5	On / Off	16 A	Auto
IHP + 2c	2	24 h and/or 7 d	1 s	84	6 years	5	On / Off	16 A	Auto
IHP + DCF 1c <sup>(1)</sup>	1	24 h and/or 7 d	1 s	84	10 years	4	On / Off	16 A	Auto
The 18 mm digi	ital time switch	nes		1				1	
IHP 1c 18 mm	1	24 h and/or 7 d	1 min.	56	10 years	2	On / Off	16 A	Auto
IHP + 1c 18 mm	1	24 h and/or 7 d	1 min.	84	10 years	2	On / Off	16 A	Auto
The 36 and 72 m	nm digital yea	rly time sw	vitches	1	·	·	·	1	1
ITA 1c <sup>(2)</sup>	1	24 h, 7 d, year	1 min.	300	10 years	4	On / Off	16 A	Manual / Auto <sup>(3)</sup>
ITA 4c <sup>(2)</sup>	4	24 h, 7 d, year	1 min.	300	10 years	8	On / Off	16 A	Manual / Auto <sup>(3)</sup>
The 54 mm med	chanical time s	witches							
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 h <sup>(4)</sup>	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 h <sup>(4)</sup>	6	On / Off	16 A	Manual
IH 24h + 7j 1+1c ARM	1+1	24 h + 7 days	45 min. + 12 h	16 On -16 Off + 7 On -7 Off	150 h	6	On	16 A	Manual
The 18 mm med	chanical time s	witches							
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

<sup>(1)</sup> 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.

<sup>(3)</sup> Summer/Winter-Time can be set to auto without any antenna.

 $^{\rm (4)}$  110 h for 100 V AC supply voltage.

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.
	•	•	•		•		CCT15400 <sup>(6)</sup> , CCT15420 <sup>(7)</sup> , CCT15450 <sup>(8)</sup> , CCT15720 <sup>(9)</sup> , CCT15850 <sup>(10)</sup>
 + Cycle programming	•	•	•	1 input	•	•	CCT15401 <sup>(6)</sup> , CCT15451 <sup>(8)</sup> , CCT15721 <sup>(9)</sup> , CCT15851 <sup>(10)</sup>
	•	•	•		•		CCT15402 <sup>(6)</sup> , CCT15422 <sup>(7)</sup> , CCT15452 <sup>(8)</sup> , CCT15722 <sup>(9)</sup> , CCT15852 <sup>(10)</sup>
+ Cycle programming	•	•	•	2 inputs	•	•	CCT15423 <sup>(7)</sup> , CCT15723 <sup>(9)</sup> , CCT15853 <sup>(10)</sup>
+ Cycle programming	•				•		CCT15857
	•	•				(12)	CCT15854 <sup>(11)</sup>
+ Cycle programming	•	•		1 input		•	CCT15838 <sup>(11)</sup>
	•						
Back-lit display, pulse and cycle programming	• (5)					(13)	CCT15910
Back-lit display, pulse and cycle programming	• (5)			2 inputs		(13)	CCT15940
•						'	
		•					CCT15338
		•					CCT16364
		•					CCT15365
							15337
		•					CCT15367
							15366
							15331
							15336
							15335

<sup>(5)</sup> Function included and can be realized through special program entry.

<sup>(6)</sup> English, Russian, Ukrainian, Latvian, Lituanien, Estonian languages.

 $^{(7)}$  English, Bulgarian, Greek, Slovene, Serbian, Croatian languages.

 $\ensuremath{^{(8)}}$  English, Hungarian, Polish, Romanian, Czech, Slovak languages.

<sup>(9)</sup> French, English, Italian, Spanish, German, Portuguese languages.

 $^{(10)}$  French, English, Swedish, Dutch, Finnish, Norwegian/Danish languages.

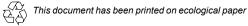
 $^{(11)}$  French, English, Italian, Spanish, German, Portuguese, Dutch languages.

(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.

<sup>(13)</sup> 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").

### **Schneider Electric Industries SAS** 35, rue Joseph Monier CS 30323 F- 92506 Rueil Malmaison Cedex

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