Time switches

Efficiency at your fingertips!

a brand of Schneider Electric

Merlin Gerin

Summary

Presentation

Efficiency at your fingertips!

Residential lighting management

Bell management in schools

Heating and ventilation management in buildings

Access management in buildings

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

Energy *savings*

The installation only operates when necessary, and during low-rate periods.

Convenient *use*

Customization of operating periods, accurate start-up.

User *safety*

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

The intuitive *switches*

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

P93362

PB100163

The annual *switches*

They operate on an annual cycle: the same program is repeated year after year.

041312D

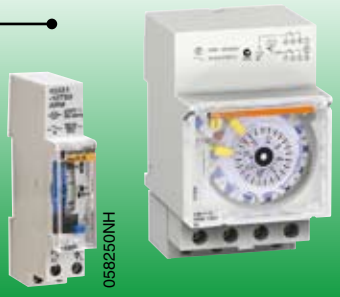
The multifunctional *switches*

They operate with weekly or annual time programming distributed across 1, 2, 3 or 4 channels. 6 inputs to condition the functions.

059239

The mechanical *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 7d).



P94911

058250NH

Advanced features of intuitive switches

Time-savings with intuitive programming

- Only 4 keys.
- Choice of language and guiding in the menus by key words to create, check, modify or partially or totally delete the program.
- Time updating and changeover to winter/summer time:
  - automatic: selected when programming the changeover date (according to geographic area),
  - manually by the user,
  - 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, random or holiday for the + version).
- Operation on mains or battery.

P93582

Simplified installation

- Mechanical compatibility with electrical distribution busbar.
- Direct connection of loads up to 16 A under 250 V.
- Fast connection; 2 screw-less terminals per pole for cables up to 2.5 mm² .
- Installation leaflet always available in the device thanks to the built-in leaflet holder slot.
- Swivel, sealable cover.


P93589


P93584

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.


P93581

Programming kit for PC


P93580

Memory key

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 switches
- by positioning of jumpers or captive segments on a programming dial

for the mechanical IH switches.
An IHP or IH time switch is chosen according to the following criteria:

Designation	**Number of channels**	**Cycle period** (d: day)	**Mnimum 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 (cos φ =1)	**Time changeover** (summer/ winter)
The intuitive switches									
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	1 s	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 **(2)**	1	24 h and/or 7 d	1 s	42	4 years	5	On / Off	16 A	Auto
IHP 1c (UL) **(3)**	1	24 h and/or 7 d	1 min.	28	3 years	5	On / Off	16 A	Auto
IHP 2c (UL) **(3)**	2	24 h and/or 7 d	1 min.	42	5 years	5	On / Off	16 A	Auto
The 18 mm intuitive switches									
IHP 1c 18 mm	1	24 h and/or 7 d	1 min.	28	3 years	2	On / Off	16 A	Auto
IHP + 1c 18 mm	1	24 h and/or 7 d	1 min.	42	3 years	2	On / Off	16 A	Auto
The annual switches									
IHP 1c annual **(1)**	1	7 d + dated d	1 min.	116	4 years	10	On / Off	16 A	Auto
IHP 2c annual **(1)**	2	7 d + dated d	1 min.	116	4 years	10	On / Off	16 A	Auto
The multifunctional switch									
ITM 4C-6E **(4)**	4	60 min., 24 h, 7 d, 7 d + dated d	1 s	**(5)**	5 years	10	On/Off **(6)**	10 A	Auto
The mechanical switches									
IH 60 mn 1c SRM	1	60 min.	1 min. 15 s	24 On - 24 Off	none	6	On	16 A	Manual
IH 24h 1c SRM	1	24 h	30 min.	24 On - 24 Off	none	6	On	16 A	Manual
IH 24h 1c ARM	1	24 h	30 min.	24 On - 24 Off	150 h	6	On	16 A	Manual
IH 24h 2c ARM	2	24 h	30 min.	24 On - 24 Off	150 h	6	On	16 A	Manual
IH 7d 1c ARM	1	7 days	4h	21 On - 21 Off	150 h	6	On	16 A	Manual
IH 24 h + 7d 1+1c ARM	1+1	24 h + 7 d	45 min. + 12 h	16 On -16 Off + 7 On -7 Off	150 h	6	On	16 A	Manual
The 18 mm mechanical switches									
IHH 7d 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
Accessories									
Programming kit **(7)**									
Memory key **(7)**									
Memory cartridge **(8)**									
ANT DCF antenna									

(1) Programming of dated days allows specific switching operations on certain days.
(2) The IHP DCF is synchronised on the Frankfort transmitter via the ANT DCF antenna.
(3) Supply voltage: 120 V CA.
(4) 4 output channels and 6 condition inputs.
(5) 45 time brackets in weekly time programming, 15 time brackets in annual time programming, 20 different pulses in pulse programming.
(6) On/Off via an override input or a condition input.
(7) For IHP +1c and IHP+ 2c.
(8) For ITM 4c-6E.

Back-lit display, random function and pulse programming (9)	«Absence for holidays» function	Screw-less connection	Mechanical compatibility with electrical distribution comb busbars	Input for external control	Instruction manual holder in front face	Memory key integrated in front face	Catalogue number
		■	■		■		CCT15400 **(10)**, CCT15420 **(11)**, CCT15450 **(12)**, CCT15720 **(13)**, CCT15850 **(14)**
■	■	■	■	1 input	■	■	CCT15401 **(10)**, CCT15421 **(11)**, CCT15451 **(12)**, CCT15721 **(13)**, CCT15851 **(14)**
		■	■		■		CCT15402 **(10)**, CCT15422 **(11)**, CCT15452 **(12)**, CCT15722 **(13)**, CCT15852 **(14)**
■	■	■	■	2 inputs	■	■	CCT15403 **(10)**, CCT15423 **(11)**, CCT15453 **(12)**, CCT15723 **(13)**, CCT15853 **(14)**
Random function	■				■		15857
					■		15830
					■		15831
							15854 **(14)**, 15724 **(13)**
■	■	■					15837**(14)**, 15725 **(13)**
	■						16355
	■						16356
Pulse function		■			■	■	15270
							15338
							16364
							15365
							15337
							15367
							15366
							15331
							15336
							15335
							CCT15860
							CCT15861
							15280
							15858

(9) Pulse programming allows switching operations of a duration less than one minute (adjustable from 1 to 59s); a pulse control always has priority.
(10) English, russian, ukrainian, latvian, lituanien, estonian languages.
(11) English, bulgarian, greek, slovene, serbian, croatian languages.
(12) English, hungarian, polish, romanian, czech, slovak languages.
(13) French, english, italian, spanish, german, portuguese languages.
(14) French, english, swedish,dutch, finnish, norwegian/danish languages.

Technical data
The intuitive switches


P93352

IHP 1c


P93358

IHP 2c


P93356

IHP +1c


P93362

IHP +2c


P93580

Programming kit for PC


P93581

Memory key

Function

- These time switches automatically switch on and off loads according to the program entered by the user.
- They operate on weekly cycle: the same program is repeated week after week.
- They offer automatic summer/winter time change, and allow to adjust it according to where you are located.
- The program can be overriden temporary or permanently by pressing 2 keys on the product.
- The IHP 1C and 2C, as the IHP+ also offer holidays program, by configuring the starting and ending dates of the absence.

Electrical data

- Voltage: 230 V AC ± 10 %.
- Frequency: 50/60 Hz.
- Consumption: 2 VA for IHP DCF 1c, 4 VA for IHP1c/+1c, 7 VA for IHP 2c/+2c and 6 VA for IHP1c/2c (UL).
- Saving of program and time by lithium battery:
  - lifetime: 6 years for IHP 1c/2c, IHP+ 1c/2c, 12 years for IHP DCF 1c, IHP 1c/2c (UL),
  - back-up time, cumulated mains cut off: 4 years for IHP DCF 1c, 5 years for IHP 1c/2c (UL), 6 years for IHP 1c/2c and IHP+ 1c/2c.
- Time accuracy:
  - ± 1 s per day at 20°C,
  - 1 s on 1 million years thanks to the synchronisation on the DCF Frankfort transmitter signal for IHP DCF 1c.
- Contact rating:
  - 16 A under 250 V AC (cos φ = 1),
  - 10 A under 250 V AC (cos φ = 0.6).

Mechanical data

- Overall dimensions: 5 modules of 9 mm.
- Degree of protection: IP20B.
- Operating temperature: - 10°C to + 50°C.
- Location for instruction manual on the front face for IHP 1c/2c, IHP + 1C/2c and IHP DCF 1c.
- The IHP 1c/2c, IHP +1c/2c are compatible with electrical distribution comb busbars (mechanical compatibility).

Specific data for 1 and 2 channel IHP+

- Manual functions:
  - temporary cancellation of programming for holidays, public holidays, etc. by configuration of the 2 dates - start and end of absence,
  - simulation of presence thanks to random operation during On periods.
- Pulse functions: programming of pulses adjustable from 1 to 59 s (pulse takes priority over switching).
- Back-lighting of the screen.
- Memory key located on front face.
- Supplementary inputs for external control with a switch or a push-button (1 input for IHP+ 1c and 2 inputs for IHP+ 2c).
  - characteristics of the input:
  - voltage: 230 V AC, +10 %, -15 %,
  - frequency: 50/60 Hz,
  - input current: max. 1.2 mA,
  - consumption: max. 0.3 mW,
  - cable length: max. 100 m.
- Accessory:
  - programming kit for PC consists of a programming device, a memory key, a CDROM and a 2 m USB cable.
  - memory key for saving and duplicating programs.

059237NHD

IHP DCF 1c

059236NHD

ANT DCF

Specific data for the IHP DCF

- Synchronisation on the Frankfort transmitter DCF 77 signal:
  - automatic on commissioning, then at 1 am, 2 am, 3 am and 4 am every day,
  - manual by pressing the IHP keys or after a «reset»,
  - displayed on the screen by the letters RC,
  - programming of pulses adjustable from 1 to 59 s (pulse takes priority over switching).
- Manual functions:
  - temporary cancellation of programming for holidays, public holidays, etc. by configuration of the 2 dates - start and end of absence,
  - simulation of presence thanks to random operation during On periods.
- Pulse functions: programming of pulses adjustable from 1 to 59 s (pulse takes priority over switching).

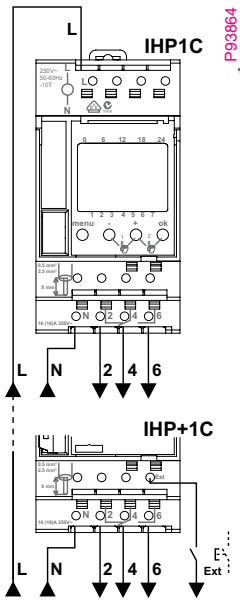
Specific data for the ANT DCF antenna

- Connection: 1.5 mm², 5 IHP DCF maximum per antenna, maximum distance between the IHP DCF and the antenna: 200 m.
- Installation: outside the electrical switchboard, outdoors, under shelter.
- Operating temperature: - 20°C to + 70°C.
- Degree of protection: IP54.
- Overall dimensions: L x W x H: 70 x 57 x 92 mm.

Connection

- 1 screw connection per pole for cables up to 6 mm² for IHP 1c/2c (UL) and IHP DCF 1c.
- 2 screw-less connection per pole for cables up to 2.5 mm² for IHP 1c/2c and IHP+ 1c/2c.

P93864



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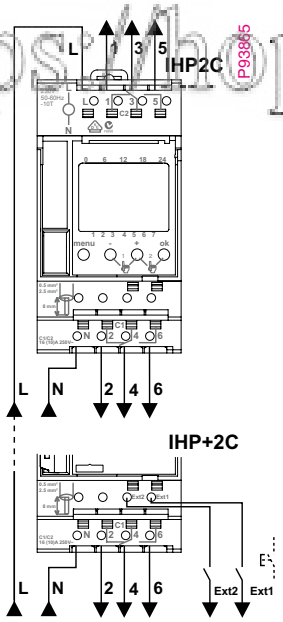
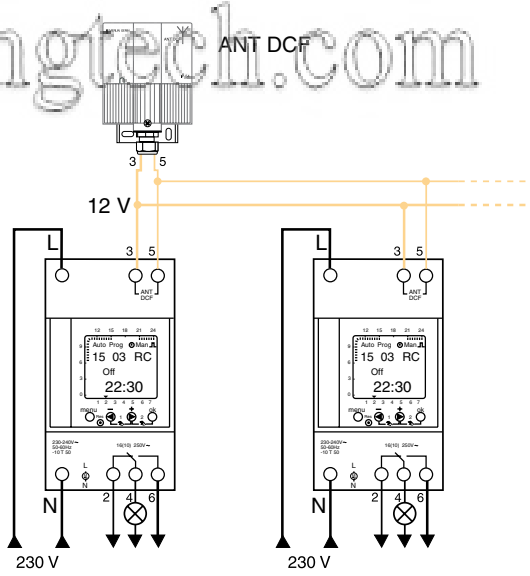




IHP DCF 1c- connection of 5 IHP DCF maxi. per antenna

Catalogue numbers

Designation	Catalogue number
IHP 1c	CCT15400 **(1)**, CCT15420 **(2)**, CCT15450 **(3)**, CCT15720 **(4)**, CCT15850 **(5)**
IHP + 1c	CCT15401 **(1)**, CCT15421 **(2)**, CCT15451 **(3)**, CCT15721 **(4)**, CCT15851 **(5)**
IHP 2c	CCT15402 **(1)**, CCT15422 **(2)**, CCT15452 **(3)**, CCT15722 **(4)**, CCT15852 **(5)**
IHP + 2c	CCT15403 **(1)**, CCT15423 **(2)**, CCT15453 **(3)**, CCT15723 **(4)**, CCT15853 **(5)**
IHP DCF 1c	15857
IHP 1c (UL)	15830 **(6)**
IHP 2c (UL)	15831 **(6)**
Accessories	
ANT DCF	15858
Programming kit for PC	CCT15860
Memory key	CCT15861

(1) English, russian, ukrainian, latvian, lituanien, estonian.
(2) English, bulgarian, greek, slovene, serbian, croatian.
(3) English, hungarian, polish, romanian, czech, slovak.
(4) French, english, italian, spanish, german, portuguese.
(5) French, english, swedish,dutch, finnish, norwegian/danish.
(6) Supply voltage: 120 VAC ± 10%.

Technical data
The 18 mm intuitive switches


PB100163

IHP +1c 18 mm

Function

- These time switches automatically switch on and off loads according to the program entered by the user.
- They operate on weekly cycle: the same program is repeated week after week.
- They offer automatic summer/winter time change, and allow to adjust it according to where you are located.
- The program can be overriden temporary or permanently by pressing 2 keys on the product.

Electrical data

- Voltage: 230 V AC ± 10 %.
- Frequency: 50/60 Hz.
- Consumption: 2.5 VA for IHP 1c 18 mm, 3 VA for IHP + 1c 18 mm.
- Saving of program and time by lithium battery:
  - lifetime: 10 years,
  - back-up time, cumulated mains cut off: 3 years.
- Time accuracy: ± 1 s per day at 20°C.
- Contact rating:
  - 16 A under 250 V AC (cos φ = 1),
  - 4 A under 250 V AC (cos φ = 0.6).

Mechanical data

- Overall dimensions: 2 modules of 9 mm.
- Degree of protection: IP20B.
- Operating temperature: - 10°C to + 50°C.
- Mechanical compatibility with electrical distribution comb busbars (only for IHP +1c 18 mm).

Connection

- 1 screw connection per pole for cables up to 6 mm².

Catalogue numbers

Designation	Catalogue number
IHP 1c 18 mm	15854 **(1)**, 15724 **(2)**
IHP + 1c 18 mm	15837 **(1)**, 15725 **(2)**

(1) French, english, swedish, dutch, finnish, norwegian/danish.
(2) French, english, italian, spanish, german, portuguese.

Technical data
The annual switches


053941

IHP 1c annual


041312D

IHP 2c annual

Function

- These time switches automatically switch on and off loads according to the program entered by the user.
- They operate on annual cycle: the same program is repeated year after year.
- They offer automatic summer/winter time change and allow to adjust it according to where you are located.
- The program can be overriden temporary or permanently by pressing keys on the product.

Electrical data

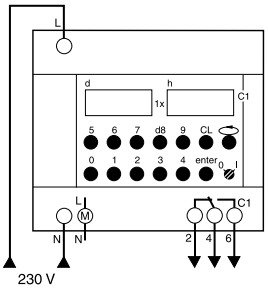
- Voltage: 230 V AC ± 10 %.
- Frequency: 50/60 Hz.
- Consumption: 3.5 VA.
- Saving program and time by lithium battery:
  - lifetime: 10 years,
  - back-up time, cumulated mains cut off: 4 years.
- Time accuracy: ± 1 s per day at 20°C.
- Contact rating:
  - 16 A under 250 V AC (cos φ = 1),
  - 10 A under 250 V AC (cos φ = 0.6).

Mechanical data

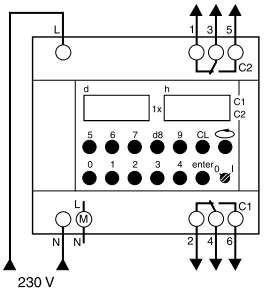
- Overall dimensions: 10 modules of 9 mm.
- Degree of protection:
  - front face: IP40,
  - terminals: IP20B.
- Operating temperature: - 10°C to + 50°C.

Connection

- 1 screw connection per pole for cables up to 6 mm².



IHP 1c annual



IHP 2c annual

Catalogue numbers

Designation	Catalogue number
IHP 1c annual	16355
IHP 2c annual	16356
Accessory	
Lithium battery	16357

Technical data
The multifunctional switch

ITM 4c - 6E

Function

■ Weekly or annual time programming to be distributed over 1, 2, 3 or 4 channels. 6 inputs to condition these functions.
■ A removable memory cartridge to duplicate on another ITM or to save the program created by the contractor.

Electrical data

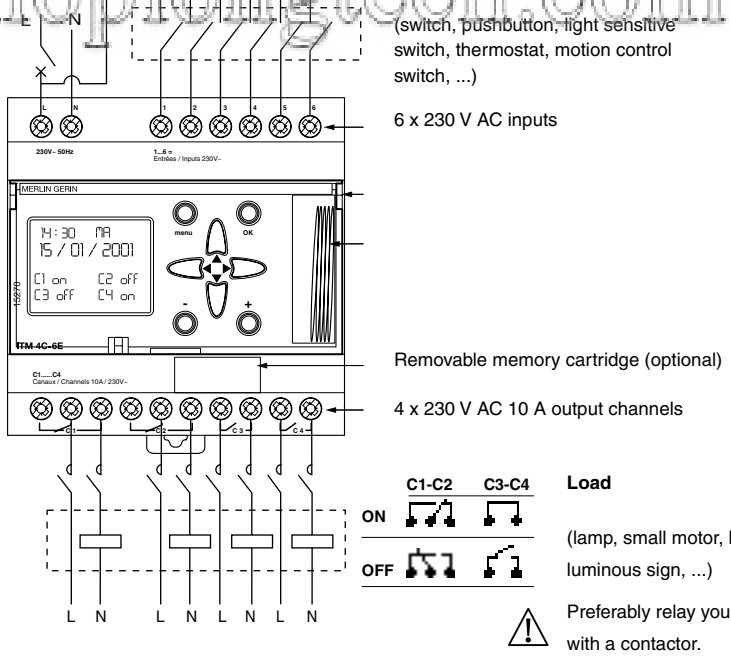
■ Voltage: 230 V AC ± 10 %.
■ Frequency: 50 Hz.
■ Consumption: 4.5 VA.
■ Saving program and time by lithium battery:
□ lifetime: 10 years,
□ back-up time: 5 years.
■ Time accuracy: ± 1 s per day at 20°C.
■ Contact rating:
□ 10 A under 250 V AC (cos φ = 1),
□ 6 A under 250 V AC (cos φ = 0.6).

Mechanical data

■ Overall dimensions: 10 modules of 9 mm.
■ Degree of protection:
□ front face: IP40,
□ terminals: IP20B.
■ Operating temperature: - 5°C to + 50°C.

Connection

■ 1 screw connection per pole for cables up to 6 mm².



Catalogue numbers

Designation	Catalogue number
ITM 4C-6E	15270
Accessory	
Memory cartridge	15280

Technical data
The mechanical switches


P94906

IH 60 min. 1c SRM


P94907

IH 24 h 1c SRM


P94911

IH 24 h + 7d 1+1c ARM

Function

- These time switches automatically switch on and off loads according to the program entered by the user.
- They operate on hourly, daily or weekly cycle: the same program is repeated hour after hour (IH 60 min), day after day (IH 24 h), week after week (IH 7d).
- The program can be overriden on.

Electrical data

- Voltage: 230 V AC ± 10 %.
- Frequency: 50/60 Hz (50 Hz for IH 60 min. 1c SRM, IH 24h + 7d 1+1c SRM).
- Consumption: 2.5 VA (1 VA for IH 60 min. 1c SRM).
- Time accuracy: ± 1 s per day at 20°C.
- Contact rating:
  - 16 A under 250 VAC (cos φ = 1),
  - 4 A under 250 VAC (cos φ = 0.6).

Mechanical data

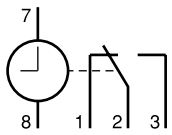
- Programming:
  - by jumpers (supplied):

IH type	Number of jumpers supplied
IH 24h 2c ARM	4 red + 4 green + 2 white
IH 24h + 7d 1+1c ARM	6 yellow (24 h)
	12 blue + 2 red (7 white)
IH 7d 1c ARM	7 blue + 7 red

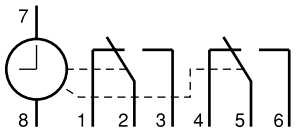
  - by captive segments for the other catalogue numbers.
- Overall dimensions: 6 modules of 9 mm.
- Degree of protection:
  - front face: IP40,
  - terminals: IP20B.
- Operating temperature: - 10°C to + 50°C.
- Accessories for IH 24h 2c ARM, IH 24h + 7d 1+1c ARM, IH 7d 1c ARM: the additional jumpers are used to program a larger number of sequences.

Connection

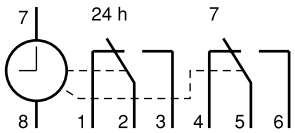
- Screw connection for cables up to 6 mm².



IH 60 min 1c SRM,
IH 24h 1c SRM/ARM, IH 7d 1c ARM



IH 24h 2c ARM



IH 24d +7d 1+1c ARM

Catalogue numbers

Designation	Catalogue number
IH 60 min 1c SRM	15338
IH 24h 1c SRM	16364
IH 24h 1c ARM	15365
IH 24h 2c ARM	15337
IH 7d 1c ARM	15367
IH 24h + 7d 1+1c ARM	15366
Accessories	
Additional jumpers (1 bag containing: 5 red, 5 green, 5 white, 5 yellow)	15341

Technical data
The 18 mm mechanical switches


058250NH

IHH 7d 1c ARM


058251NH

IH 24h 1c ARM

Function

- These time switches automatically switch on and off loads according to the program entered by the user.
- They operate daily or weekly cycle: the same program is repeated hour after hour, day after day (IH 24 h), week after week (IH 7d).
- The program can be overriden on or off.

Electrical data

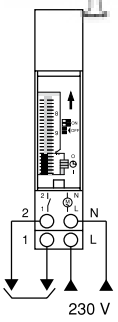
- Voltage: 230 V AC ± 10 %.
- Frequency: 50/60 Hz.
- Consumption: 2.5 VA.
- Saving program and time:
  - lifetime: 10 years,
  - back-up time, cumulated mains cut off: 100 hours (except for IH 24 h 1C SRM).
- Time accuracy: ± 1 s per day at 20°C.
- Contact rating:
  - 16 A under 250 V AC (cos φ = 1),
  - 4 A under 250 V AC (cos φ = 0.6).

Mechanical data

- Programming by captive segments
- Overall dimensions: 2 modules of 9 mm.
- Degree of protection:
  - front face: IP40,
  - terminals: IP20B.
- Operating temperature: - 10°C to + 50°C.

Connection

- 1 screw connection per pole for cables up to 6 mm².



Catalogue numbers

Designation	Catalogue number
IHH 7d 1c ARM	15331
IH 24h 1c SRM	15335
IH 24h 1c ARM	15336

Practical advice
A few principles

Programming principle

■ For the IHP switches, this consists of memorising the days and times of the required switching operations.
■ For the IH - IHH switches, this is performed by positioning captive segments or jumpers on a switching dial.

Example

■ Controlling an air conditionner in a hairdressing salon:

	Monday (1)	Tuesday	Wednesday	Thursday (2)	etc.	
On n° 1		08 h 30	08 h 30	08 h 30		switch on
Off n° 1		12 h 00	12 h 00			switch off
On n° 2		13 h 30	13 h 30			switch on
Off n° 2		20 h 00	20 h 00	20 h 00		switch off

(1) Closed on Mondays
(2) Non-stop

Programming by copying or blocks

Whenever identical switching operations are found at the same times, several days in the week, this function lets you program these operations once only.
In this case a single switching operation is used. If this function is used wisely, the number of possible switching operations can be greatly increased.

Example

	Monday	Tuesday	Wednesday	Thursday	Friday	
On n°1	10 h 00			10 h 00		switch on
Off n°1		18 h 00	18 h 00		18 h 00	switch off

1 switching operation

1 switching operation

Number of switching operations

Designation	Number of switching operations
IHP 1c	56
IHP + 1c	84
IHP DCF 1c	42
IHP 2c	56
IHP + 2c	84
IHP 1c annual	116
IHP 2c annual	116
IHP 18 mm 1c	28
IHP + 1c 18 mm	42
ITM 4C-6E	45 time brackets in weekly time programming, 15 time brackets in annual time programming and 20 different pulses in pulse programming
IHP 1c (UL)	28
IHP 2c (UL)	42
IH 7d 1c ARM	42 On / 42 Off
IH 24h 1c ARM	48 On - 48 Off
IH 24h 1c SRM	48 On - 48 Off
IH 60 mn 1c SRM	24 On - 24 Off
IH 24h 1c SRM	24 On - 24 Off
IH 24h 1c ARM	24 On - 24 Off
IH 24h 2c ARM	24 On - 24 Off
IH 7d 1c ARM	21 On - 21 Off
IH 24 h + 7 d 1+1c ARM	16 On - 16 Off + 7 On - 7 Off

Saving on mains cut off

For IHP switches equipped with this function, a lithium battery is used for saving. The program, date and time are preserved. Switching operations are not performed.

Practical advice
Programming examples

60 min. time programming.
Lets you control starting and stopping of a group of loads according to a cycle that is repeated every 60 minutes.

Example
- Controlling automatic watering:

On n° 1	2 min. 30 s
Off n° 1	5 min.
On n° 2	25 min.
Off n° 2	37 min. 30 s

Relevant time switches
- IH 60 min 1c SRM

24 h daily programming.
Lets you control starting and stopping of one or two groups of loads according to a daily cycle that is repeated, in identical manner, every day of the week.

Example
- Controlling a door of a block of flats:
  - from 8 am to 7.30 pm: contact on «On», free access
  - from 7.30 pm to 8 am the next day: contact on «Off», access by confidential code

every day of the week:

	From Monday to Sunday
On n° 1	8 am
Off n° 1	7.30 pm

Relevant time switches
- IH 24h 1c SRM/ARM
- IH 24h 2c ARM
- IHP 1c 18 mm
- IHP + 1c 18 mm
- IHP DCF 1c
- IHP 1c, IHP + 1c
- IHP 2c, IHP + 2c
- ITM 4C-6E

7 days weekly programming.
Lets you control starting and stopping of one to 4 groups of loads according to a weekly cycle, that can be different each day, repeated each week.

Example
- Controlling the lighting of a shop window:

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
On n° 1		09 h 00	09 h 00	09 h 00		
Off n° 1		12 h 00	12 h 00			
On n° 2		14 h 00	14 h 00			
Off n° 2		20 h 00	20 h 00	20 h 00		
On n° 3					8 h 30	8 h 30
Off n° 3					12 h 30	12 h 30
On n° 4					14 h 30	14 h 30
Off n° 4					21 h 00	21 h 00

Relevant time switches
- IH 7 d 1c ARM
- IHP 1c, IHP + 1c
- IHP 2c, IHP + 2c
- IHP 1c 18 mm
- IHP + 1c 18 mm
- IHP DCF 1c
- ITM 4C-6E

Pulse programming.
Lets you control by pulses (adjustable from 1 to 59 s) one to four groups of loads (pulse relays, bells, etc.).

Example

■ Automatic controlling of bells, lighting and distribution of food: bells sounding the resumption and finish of work (channel 1), lighting of premises (channel 2), feeding fish in the aquarium (channel 3):

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Channel 1 : bell (20 s pulse order)							
On	08 h 00	08 h 00	08 h 00	08 h 00	07 h 00	09 h 00	
Duration	20 s	20 s	20 s	20 s	20 s	20 s	
On	12 h 00	12 h 00	12 h 00	12 h 00	11 h 00	13 h 00	
Duration	20 s	20 s	20 s	20 s	20 s	20 s	
On	14 h 00	14 h 00	14 h 00	14 h 00	13 h 00		
Duration	20 s	20 s	20 s	20 s	20 s		
On	18 h 00	18 h 00	18 h 00	18 h 00	16 h 00		
Duration	20 s	20 s	20 s	20 s	20 s		
Channel 2: lighting (latched order)							
On	07 h 30	07 h 30	07 h 30	07 h 30	06 h 30	08 h 30	
Off	18 h 30	18 h 30	18 h 30	18 h 30	17 h 00	13 h 30	
Channel 3: aquarium (15 s pulse order)							
On	10 h 00		10 h 00		10 h 00		10 h 00
Duration	15 s		15 s		15 s		15 s

Programming

■ Programming of a pulse takes up 2 memory spaces.
■ Combination of the two order types (pulse and latched) is possible on the same channel.

Relevant time switches

■ IHP + 1c
■ IHP + 1c 18 mm
■ IHP DCF 1c
■ IHP + 2c
■ ITM 4C-6E

Programming special days.
Lets you create special programs for dated days.

Example

■ Controlling lighting and heating in a school:
□ basic programming: program lighting (channel 1) and heating (channel 2):

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Channel 1: lighting							
On	07 h 00	07 h 00	07 h 00	07 h 00	07 h 00		
Off	20 h 00	20 h 00	16 h 00	20 h 00	16 h 00		
Channel 2: heating							
On	06 h 00	06 h 00	06 h 00	06 h 00	06 h 00		
Off	18 h 00	18 h 00	12 h 00	18 h 00	12 h 00		

□ dated programming: periods of non-operation, school holidays, etc.
Just memorise an Off at the start and another Off at the end of each period of absence:

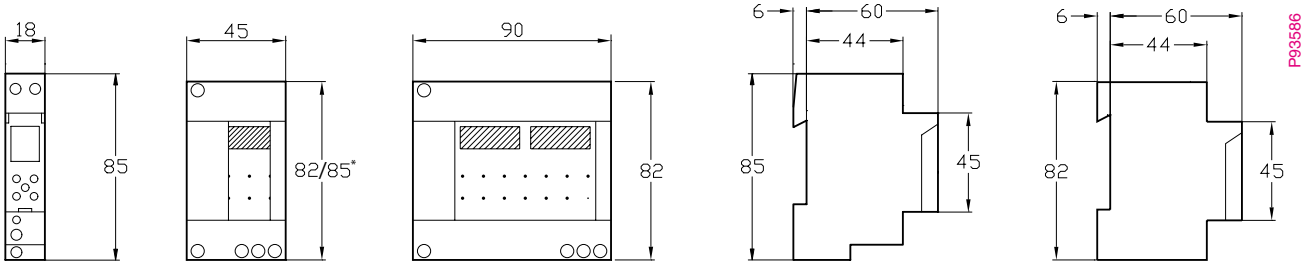
		Holidays				
		Winter	Spring	Summer	Autumn	End of year
Channel 1 : lighting						
Off	Date	20 feb.	17-apr	07-july	23 oct.	18 dec.
	Time	12 h 00	17 h 00	12 h 00	17 h 00	12 h 00
Off	Date	08-march	03-may	9 sept.	2 nov.	4 jan.
	Time	01 h 00	01 h 00	01 h 00	01 h 00	01 h 00
Channel 2 : heating						
Off	Date	20 feb.	17-apr		23 oct.	18 dec.
	Time	12 h 00	17 h 00		17 h 00	12 h 00
Off	Date	08-march	03-may		2 nov.	4 jan.
	Time	01 h 00	01 h 00		01 h 00	01 h 00

Relevant time switches

■ IHP 1c annual
■ IHP 2c annual
■ ITM 4C-6E

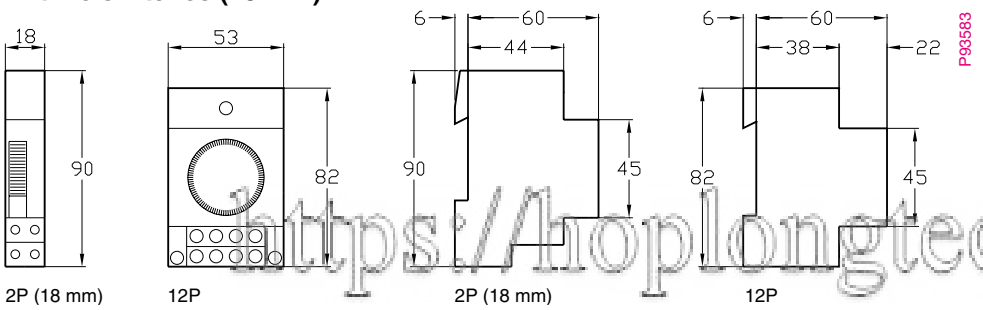
Dimensions

IHP programmable time switches



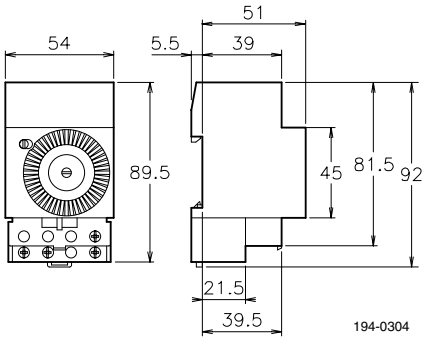
2P (18 mm) | 5P *5P (IHP 1C/2C/+1C/+2C) | 10P | 2P (18 mm) 5P (IHP 1C/2C/+1C/+2C) | 5P, 10P

IH time switches (18 mm)

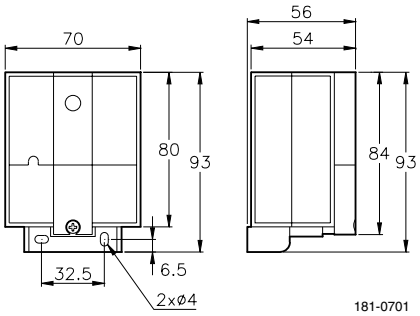


2P (18 mm) | 12P | 2P (18 mm) | 12P

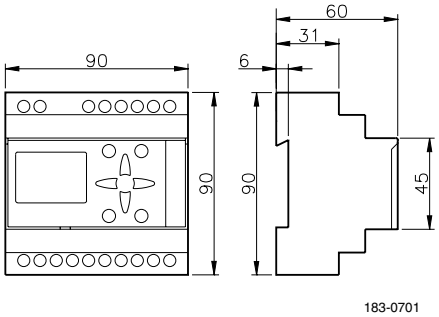
IH time switches



ANT DCF antenna



ITM 4C-6E



Notes

Notes

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