

# Astronomical twilight switches

Time switches to manage electric utilities over time between sunset and sunrise time calculated on the basis of the set geographical area. Particularly suitable to light shops, luminous signs, fountains, etc. The rear cover of the instrument allows for the replacement of the depleted battery. The IR Interface also allows for an exchange of programs between the instrument and its remote control. The memo AST PLUS offers the function of weekly time switch (output 1) and astronomical twilight switch (output 2).

## MEMO AST1 / AST2 MEMO AST PLUS



- 1 Wide backlit LCD to visualize date, time and relay
- 2 Container: 2 DIN modules
- 3 Text guide
- 4 Sealable cover
- 5 Cover on the back for replacing the battery
- 6 IR integrated interface for transmit/receive programs from and to remote control (available as accessory)

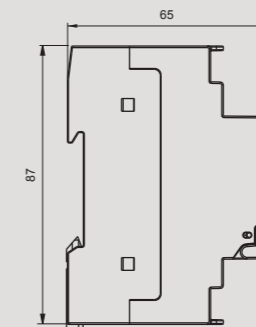


## DIMENSIONS (mm)

### Front view

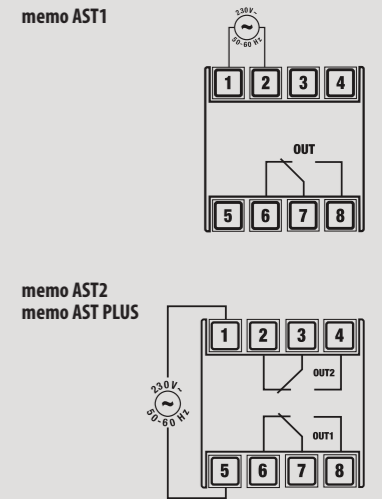


### Side view



## CONNECTION DIAGRAM

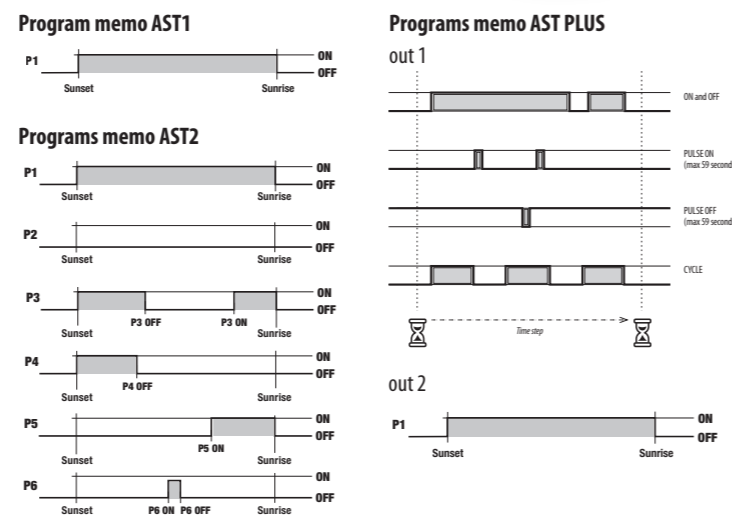
### Diagram



## TIME MANAGEMENT

## DIGITAL TWILIGHT SWITCHES

- Power supply: 230 V AC 50/60 Hz
- Version: 1 or 2 channels
- Maximum holiday events for each channel: 4 periods + 20 days
- Programs available for memo AST1:
  - P1 fixed and not modifiable
- Programs available for memo AST2:
  - 6 programs (P1, ..., P6) on output 1
  - P1 fixed and not modifiable on output 2
- Programs available for memo AST PLUS:
  - 30 events between ON, OFF, cycle, pulse on output 1
  - P1 fixed and not modifiable on output 2
- Summertime automatic update
- Manual override of the relay (temporary or permanent)
- Battery life: 3 years (replaceable by opening the rear cover)
- Depleted battery signal
- Relays switching only in the presence of power supply
- Integrated infrared interface
- Keyboard can be locked with the use of a password
- Display automatically shuts-off after 3 minutes of inactivity of the keyboard



Code	Model	Description	n. relays	ENEC certified
VE344800	memo AST1	Astronomical twilight switch	1	ENEC certified
VE343000	memo AST2	Astronomical twilight switch	2	ENEC certified
VE436200	memo AST PLUS	Astronomical twilight switch + time switch	2	-

## TECHNICAL INFORMATION

### GENERAL CHARACTERISTICS

		memo AST1	memo AST2 memo AST PLUS	
Power supply	V AC	230 (-10% ÷ +10%)	230 (-10% ÷ +10%)	
Frequency	Hz	50 / 60	50 / 60	
Absorption	VA	8	8	
	W	2	2	
Output		1 relay in monostable change-over	2 relays in monostable change-over	
Capacity 250 V AC	A	16 (10)	16 (10)	
	fluorescent lamps (a 240V)	W	600	600
	incandescent lamps (a 240V)	W	1500	1500
	halogen lamps (a 240V)	W	1500	1500
Duration battery		3 years (Lithium battery CR-2032)	3 years (Lithium battery CR-2032)	
Charge reserve (for battery replacement)		1 minute	1 minute	
Switchings in case of power failure		NO	NO	
Programming resolution		1 minute	1 minute	
Pulse time (program P6)	s	-	1 ÷ 59	
Operating precision		± 1 second/day at 25°C	± 1 second/day at 25°C	
Operating temperature	°C	0 ÷ +50	0 ÷ +50	
Storage temperature	°C	-10 ÷ +70	-10 ÷ +70	
Degree of protection		IP20 / IP41 (frontal)	IP20 / IP41 (frontal)	

### REFERENCE STANDARDS

Compliance with Community Directives: 2006/95/EC (Low voltage) and 2004/108/EC (E.M.C.) is declared with reference to the following standards:  
 • Safety: EN 60730-2-7  
 • E.M. Compatibility: EN 55014-2 / EN 55014-1