



**Description**

ESRD-TPA2 astronomical time switch is for realization of time functions in the systems of automatics and steering. It will calculate the sunrise and sunset according to the geographic position and time zone. Night break program can be used to turn off the output at night, set the offset time and operation times of sunrise and sunset.

There is an internal battery which can protect real time clock and all the settings when the electric power supply is off.

**Technical data**

Supply terminals	A1-A2
Rated voltage	AC/DC 24-264V
Rated frequency	50/60Hz, 0
Power consumption	2W
Supply voltage tolerance	±10%
Number of channels	2
Program	astronomical
Mode of work	manual, automatic, holiday,
Summer/winter time	off, automatic changeover
Time tolerance	≤1s/day at 20°C
Power reserve	10 year
Data readout	LCD display, with back light
Number of contacts	2 C/O
Current of contacts	16A/250V AC1
Switching capacity	4000VA/AC, 384W/DC
Mechanical life	10 <sup>6</sup>
Electrical life	10 <sup>5</sup>
Rated insulation voltage	250V
Protection degree	IP20
Pollution degree	3
Altitude	≤2000m
Ambient temperature	-30°C~55°C
Permissible relative humidity	≤50%(40°C, without condensation)
Storage temperature	-30°C~70°C
Wire size	1mm <sup>2</sup> ~4mm <sup>2</sup>
Tightening torque	0.5Nm
Mounting	TH-35 Rail(EN60715)
Dimensions	90*36*65mm
Standard	IEC60947-1/IEC60947-2-7

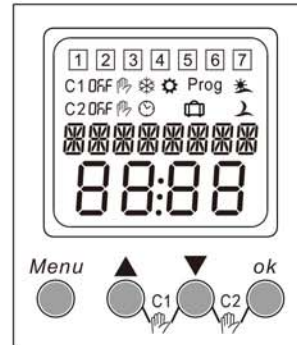
**Maximum pilotable power**

2300W	2300W	1000W	500W	500W

**Features**

- Digital time switch with astronomical program
- 10 year power reserve(lithium battery).
- Sealable cover of the front panel, easy setting by 4 keys.
- Automatic summer/winter time switchover
- Back-lighted LCD display
- Holiday mode.
- 2 channels version(each channel can be assigned an individual program)
- Automatic transfer of weekdays
- 24-264V AC/DC input supply.
- Double-module, mounted on TH-35 rail.

**Operating instruction**

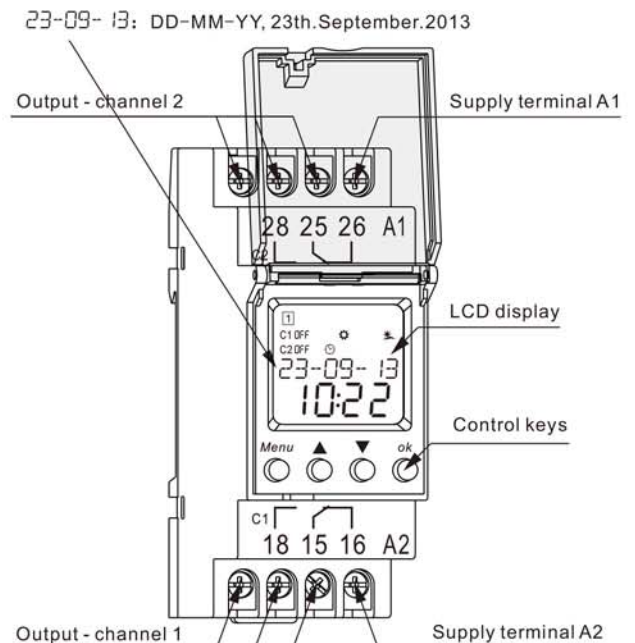


**Symbol legend**

- 1 2 3 4 5 6 7 — Days of the week Monday, Tuesday, ...Sunday
- C1 — Channel 1
- C2 — Channel 2
- On OFF — Relay status
- ☀ — Sunrise
- ☿ — Sunset
- ☾ — Winter time
- ☼ — Summer time
- ⌚ — Automatic mode
- 🔧 — Manual mode
- 🏠 — Holiday mode
- Prog — Program setting

**Keys**

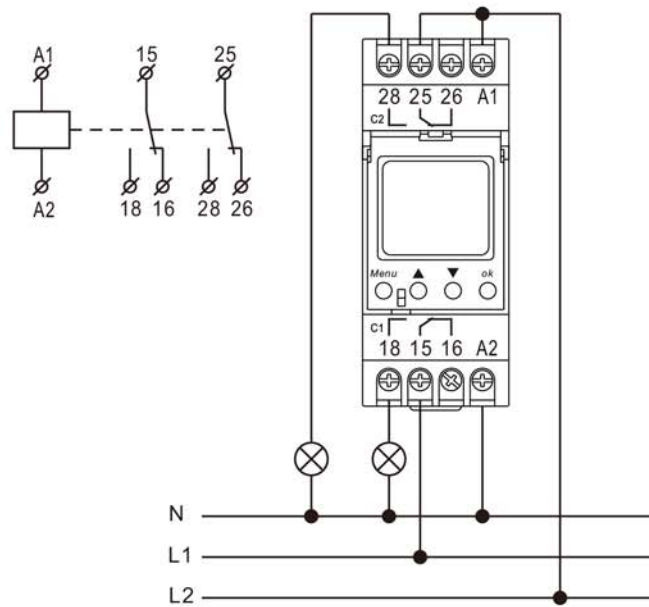
	○ Enter main menu		○ Confirm selection
	○ Back to main menu		○ Select menu
	○ Select menu		○ Select menu
	○ Increase a numerical value		○ Decrease a numerical value
	○ C1 manual operation		○ C2 manual operation



□ **Mode precedence**

Precedence	Display	Output mode
Highest ↑   ↓ Lowest	On  / OFF	Manual control
		Holiday mode
		Auto mode
		Astro mode

□ **Wiring diagrams**



□ **Dimensions**

