Daily Time Switch

Weekly Control with a Large Time Display

Easy Programming with Large Display and Interactive Functions.

- Easy operation with five keys.
- Up to 24 steps of ON/OFF operations can be set.
- Power supply freely selectable from 100 to 240 VAC.
- Memory protection during power failure for up to 10 years.
- Certified for UL and CSA safety standards.
- The same setting can be used for multiple-day operation and timer operation.

Refer to Safety Precautions for All Timers. Refer to Safety Precautions on page 12



For the most recent information on models that have been certified for safety standards, refer to your OMRON website.

Ordering Information

Wiring	Backup power supply function for memory protection	No. of program steps	Model
Screw terminals	Provided (approx. 10 years at 25°C)	24 (Each ON or OFF is considered to be one step.)	H5L-A

Specifications

■Time Ranges

Rated time	Time setting range	Time division
24 hrs x 7 days	00:00 to 23:59	1 min

Ratings

Rated supply voltage	100 to 240 VAC (50/60 Hz)
Operating voltage range	85% to 110% of rated supply voltage
Power consumption	Approx. 4 VA at 240 VAC
Control outputs	15 A at 250 VAC, resistive load at 50°C 12 A at 250 VAC, resistive load at 55°C Minimum applied load: 100 mA at 5 VDC (failure level: P, reference value)

Characteristics

Accuracy of operating time	±0.01% ±0.05 s max. (see note 1)
Setting error	
Influence of voltage	
Influence of temperature	
Time accuracy	±15 s per month (at 25°C)
Insulation resistance	100 MΩ min.
Dielectric strength	2,000 VAC, 50/60 Hz for 1 min (between current-carrying terminals and exposed non-current-carrying metal parts and between control power supply circuit and contact control output circuits) 1,000 VAC, 50/60 Hz for 1 min (between non-continuous contacts)
Vibration resistance	Destruction: 10 to 55 Hz with 0.75-mm double amplitude Malfunction: 10 to 55 Hz with 0.5-mm double amplitude
Shock resistance	Destruction: 300 m/s ² (approx. 30G) Malfunction: 100 m/s ² (approx. 10G)
Ambient temperature	Operating: -10°C to 55°C
Ambient humidity	Operating: 35% to 85%
Life expectancy	100,000 operations min. (15 A at 250 VAC, resistive load)
Degree of protection	IP-40 (Rear case: IP-20, Terminals: IP-00)
Weight	Approx. 350 g
Approved standards	UL917 CSA 22.2 No.14
	Conforms to Electrical Appliance and Material Safety Law (for Japan)
	CCC: GB/T 14048.5 Pollution degree 2, Overvoltage category II (see note 2)

Note: 1. The overall error, which includes repeat accuracy, setting error, and variations due to changes in voltage and temperature, is $\pm 0.01\%$ or ± 0.05 s max. The accuracy of $\pm 0.01\%$ also indicates the error in the time interval of the set time.

2. CCC certification requirements.

Recommended fuse	021702.5 (250 VAC, 15 A), manufactured by Littelfuse
Rated operating voltage Ue	AC-15: Ue: 250 VAC, le: 10 A
Rated operating current le	DC-13: Ue: 125 VAC, le: 15 A
Rated insulation voltage	250 V
Rated impulse withstand voltage	2.5 kV (at 240 VAC)
(altitude: 2,000 m max.)	
Conditional short-circuit current	1,000 A

Engineering Data

Ambient Operating Temperature and Carry Current

Note that the upper limit of the ambient operating temperature lowers when a large carry current is being applies as shown below.



Nomenclature



Key Operation

Key	Name	Function
MODE	Mode Key	Changes program mode RUN mode Second circuit weekday setting mode RUN mode Second circuit setting mode First circuit operation Second circuit setting mode First circuit operation Second circuit setting mode First circuit operation Second circuit setting mode First circuit operation Second circuit setting mode
Ł	Write Key	To write the set data using the Plus and/or Minus Key. Reads out the set program.
+	Plus Key	Changes "day of week" while setting day of week. Changes "hours" or "minutes" while setting current time. When the Plus Key is held down, the displayed digit increments continuously; when the Minus Key is held
-	Minus Key	down, it decrements continuously. When specifying output. The Plus Key specifies output ON while the Minus Key specifies output OFF. Note that if the same key is pressed twice, the output specification becomes invalid; neither ON nor OFF is set.
ථ	Cycle Key	Specifies the cycle program. Pressing this key twice causes the set cycle program to be cleared.
	Manual override switch	ON: Turns ON output regardless of program RUN: Executes program OFF: Turns OFF output regardless of program First and second circuit can be operated independently.