

Available in a wide variety of models to suit a multitude of environmental and weather conditions.



AUTOMATIC TIME SWITCH

What's an Automatic Time Switch?

An automatic time switch automatically controls the use of electricity according to time. It's a device that lowers both electrical and labour costs.

Automatically Turns the Power On and Off

The Time Switch combines a clock with a switch to automatically turn power on or off at preset times. It is generally built into a lightboard or distribution panel, and controls electricity on a 24-hour or weekly basis. It makes it possible to replace conventional manual control with automated, reliable ON/OFF time management.

Eliminating Electrical Waste Is Also Ecological

Because the power is reliably turned on and off according to a preset time schedule, the amount that was wasted by extended use is saved, and electric bills are effectively lowered.

Cutting Labour Costs Is Also Efficient

Since the job of turning the power on and off is done automatically instead of manually, you can assign your valuable human resources to more important jobs. Human error is also eliminated, so power management is more reliable.

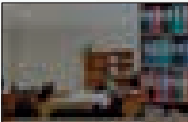
Simply Set the Time for ON/OFF Control

Time management consists of simply setting the times to turn the power on and off. A wide range of uses are possible across various operations, such as lighting, air conditioning, water supply, and livestock feeding.

Example: Managing electricity in the office



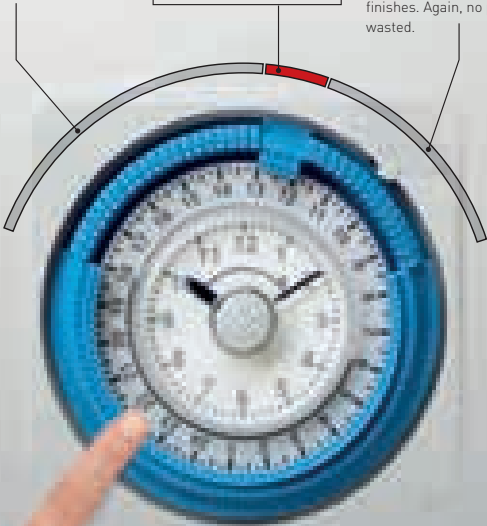
From 8:30 AM to 12:00 AM
Turn the power on at the start of the workday. Lighting and air conditioning are turned on to provide a smooth start to office work.



From 0:00 PM to 1:00 PM
Lunchtime. Lighting and air conditioning are turned off while people leave the office for lunch. No power is wasted.



From 1:00 PM to 6:00 PM
Lighting and air conditioning are turned on precisely when lunchtime ends. Then the power is automatically turned off when the workday finishes. Again, no power is wasted.



FLOOR OUTLET SERIES

PASSIVE INFRARED SENSOR

TECHNICAL DETAILS

AUTOMATIC TIME SWITCH

Uses and Advantage of Panasonic Time Switch

Panasonic, with almost 100 years of expertise forged in the Electrical Construction Material field with its Wiring Devices series, has also established a name for itself in the Time Control Devices market during the past 50 years with its Automatic Time Switch.

Thorough Quality Control

In addition to advanced functions, Panasonic focuses its manufacturing efforts on providing high durability and performance for many years of reliable use, and selects materials with full consideration of the global environment. Certification by third-party institutions and compliance with a wide range of international standards attest to these efforts. This approach is also used with Panasonic's Automatic Time Switches, to allow our customers worldwide to experience a new level of comfort and safety for the control of electric equipment.

Meeting IEC Standards

Panasonic's product design has been recognised and certified by many international organisations worldwide, such as the IEC (International Electrotechnical Commission), the top reference for electrical and electronic safety standards. Our Automatic Time Switch has successfully passed and complies with the IEC730-2-7 directives to provide safer and more comfortable use of our line-up to our customers.



Products Compliant with the RoHS Directive

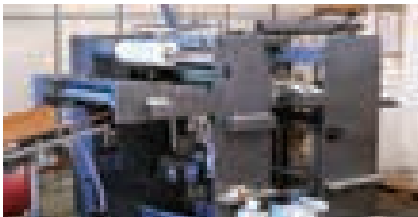
Panasonic's manufacturing processes are based on management standards for chemical substances by complying with the EU RoHS directive in order to provide all of our customers safer products with less impact on the environment.



Example of Use

Example 1 Factories

Time Switches are at work in a wide variety of applications, including production lines, air conditioning systems, and lighting equipment.



FLOOR OUTLET SERIES

Example 2 Public Infrastructure

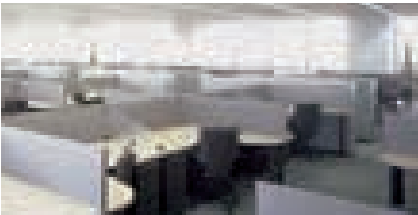
The number of people in towns and cities varies depending on the time of day. Time Switches enable waste-free management of lighting and other equipment.



PASSIVE INFRARED SENSOR

Example 3 Offices, Residences and Commercial Facilities

Time Switches can be used to save electricity during the times when lighting and air conditioning are not needed, like at lunchtime and late at night.



TECHNICAL DETAILS

Example 4 Agriculture and Livestock

Time Switches can be used to automatically supply food and water at appropriate times each day, to increase working efficiency.

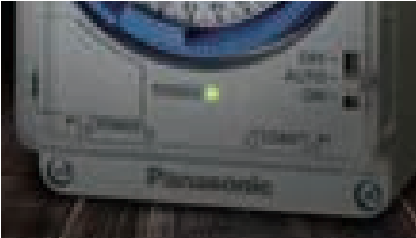


AUTOMATIC TIME SWITCH

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Detailed consideration is given to users in the form of functions that are helpful in ordinary usage, and designs that simplify maintenance.

Easy Operation Check



A power lamp is located on the front panel, so the user can see at a glance whether the unit is operating or not, thus helping to provide safe use.

Easy Battery Replacement



With conventional time switches, the unit must be removed from its installation location, such as in a distribution panel, to replace the batteries. Panasonic's Time Switch lets you easily replace the batteries from the front panel. This makes maintenance considerably easier.

Preventing Entry of Ants and Other Small Insects



Time Switches are sometimes subject to the entry of ants and other small insects, which can cause malfunctions. Panasonic Time Switches have an airtight construction that prevents this problem for long, trouble-free use.

TB35N, TB36N, TB38N, TB39N (Surface and DIN Rail Mount Type)

Features

- 24hour program
- 300 hours reserve battery (TB38N,39N)
- *Battery exchange from the front side.
- 96 operations per day
- Minimum setting interval is 15 minutes

Dimensions (unit:mm)

Applicable Installation		Indoor Use			
Type		Daily			
Series		TB35N series	TB36N series	TB38N series	TB39N series
Item No.		TB35809NE5 (220-240V AC 50Hz)	TB36809NE5 (220-240V AC 50Hz)	TB38809NE7 (220-240V AC 50Hz)	TB39809NE7 (220-240V AC 50Hz)
Drive Method		AC Motor		Quartz Motor	
Power Failure Backup Time		—		300 hours	
Time Precision		Same as AC frequency		±15 sec/month(at 25°C)	
Circuit Configuration		Same Circuit	Separate Circuit	Same Circuit	Separate Circuit
Switch Construction		Single Pole, Single Through (1a Contact)	Single Pole,Double Through (1c Contact)	Single Pole, Single Through (1a Contact)	Single Pole,Double Through (1c Contact)
Load Capacity	Resistive Load	250V AC 20A			
	Incandescent Lamp Load	250V AC 10A			
	Inductive Load(cosφ≥0.6)	250V AC 12A			
	Motor Load(cosφ≥0.6)	220V AC 1500W			
	Minimum Setting Interval	15 minutes			
No. of On/Off Operation		96 operations			

TB11N, TB17N

Features

- 24hour program
- On/Off operations are set with separated pins
- With a manual On/Off switch
- 300 hours reserve battery(TB11N)
- *Battery exchange from the front side.

Dimensions (unit:mm)

Applicable Installation		Indoor Use	
Type		Daily	
Series		TB17N series	TB11N series
Item No.		TB178NE5 (220-240V AC 50Hz)	TB118NE7 (220-240V AC 50Hz)
Drive Method		AC Motor	Quartz Motor
Power Failure Backup Time		—	300 hours
Time Precision		Same as AC frequency	±15 sec/month(at 25°C)
Circuit Configuration		Same Circuit	
Switch Construction		Single Pole, Single Through (1a Contact)	
Load Capacity	Resistive Load	250V AC 15A	
	Incandescent Lamp Load	250V AC 15A	
	Inductive Load(cosφ≥0.6)	250V AC 12A	
	Motor Load(cosφ≥0.6)	220V AC 1500W	
	Minimum Setting Interval	30 minutes	
No. of On/Off Operation		Standard 6 operations (Max.48 operations)	

TB35N, TB38N (Steel Box Type)

Features

- With robust steel box
- 24hour program
- 300 hours reserve battery(TB38N)
- *Battery exchange from the front side.
- 96 operations per day
- Minimum setting interval is 15 minutes

Dimensions (unit:mm)

Applicable Installation		Indoor Use	
Type		Daily	
Series		TB35N series	TB38N series
Item No.		TB358NE5 (220-240V AC 50Hz)	TB388NE7 (220-240V AC 50Hz)
Drive Method		AC Motor	Quartz Motor
Power Failure Backup Time		—	300 hours
Time Precision		Same as AC frequency	±15 sec/month(at 25°C)
Circuit Configuration		Same Circuit	
Switch Construction		Single Pole, Single Through (1a Contact)	
Load Capacity	Resistive Load	250V AC 20A	
	Incandescent Lamp Load	250V AC 10A	
	Inductive Load(cosφ≥0.6)	250V AC 12A	
	Motor Load(cosφ≥0.6)	220V AC 1500W	
	Minimum Setting Interval	15 minutes	
No. of On/Off Operation		96 operations	

TB43N (Plastic Box Type)



Features

- 24hour program
- Surface mount
- Weatherproof type (IP53)
- 300 hours reserve battery (TB43N)
- Battery exchange from the front side.

Dimensions (unit:mm)

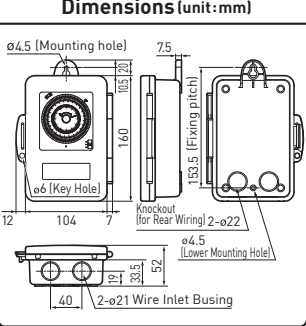


Diagram showing dimensions for TB43N Plastic Box Type. Key dimensions include: Mounting hole (ø4.5), Key Hole (ø6), Knockout for Rear Wiring (2-ø22), Lower Mounting Hole (ø4.5), and 2-ø21 Wire Inlet Busing.

Applicable Installation	Outdoor & Indoor Use
Type	Daily
Series	TB43N Series
Item No.	TB438NE7 (220-240V AC 50Hz)
Drive Method	Quartz Motor
Power Failure Backup Time	300 hours
Time Precision	±15 sec/month(at 25°C)
Circuit Configuration	Separate Circuit
Switch Constraction	Single Pole, Single Through (1a Contact)
Load Capacity	
Resistive Load	250V AC 20A
Incandescent Lamp Load	250V AC 10A
Inductive Load(cosφ≥0.6)	250V AC 12A
Motor Load(cosφ≥0.6)	220V AC 1500W
Minimum Setting Interval	15 minutes
No.of On/Off Operation	96 operations

TB62 (DIN Rail Mount Digital Type)



Features

- Digital type
- Weekly type
- 6 years reserve battery
- With a manual On / Off button
- Possible to lock the manual button
- Holiday setting function
- Manual ±1 hour changeover function
- DIN 2P module

Dimensions (unit:mm)

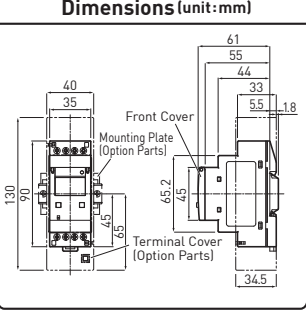


Diagram showing dimensions for TB62 DIN Rail Mount Digital Type. Key dimensions include: Front Cover, Mounting Plate (Option Parts), Terminal Cover (Option Parts), and various mounting and terminal dimensions.

Applicable Installation	Indoor Use	
Type	Weekly	
Series	TB62 series	
Item No.	TB621018A7(1circuit) (220-240V AC 50-60Hz)	TB622018A7(2circuits) (220-240V AC 50-60Hz)
Drive Method	Electronic	
Power Failure Backup Time	6 years	
Time Precision	±15 sec/month(at 25°C)	
Circuit Configuration	Separate Circuit	
Switch Constraction	Single Pole,Double Through (1c Contact)	
Load Capacity		
Resistive Load	250V AC 16A	
Inductive Load(cosφ=0.6)	250V AC 8A	
Minimum Setting Interval	1 minute	
No.of On/Off Operation	50 operations (On/Off 25 sets)/circuit	