

Mechanical Time Switches

Intermatic, the leader in mechanical time switches, offers a full line of mechanical controls for various applications. Whether you are controlling a pump, lighting, water heater, or other type of electrical load, Intermatic can provide the control you need.

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Mechanical Time Switches

24-Hour



T101R



Ratings	
Resistive	40 A @ varying voltages
Inductive	40 A @ varying voltages
Electronic Ballast	16 A, 277 VAC
Tungsten	40 A @ varying voltages
Pilot Duty	1000 VA @ varying voltages
Motor	2 HP, 24 FLA @ 120 VAC 5 HP, 28 FLA @ 240 VAC
Max Power Consumption	3 W
Operating Temperature	-40° F to 130° F (-40° C to 54° C)
Enclosure Dimensions H x W x D	
Metal Indoor	7 7/8" x 5 1/8" x 3 3/16" (200 mm x 130.2 mm x 87.3 mm)
Metal Indoor/Outdoor	10 1/8" x 6 1/2" x 3 3/16" (257.2 mm x 165.1 mm x 92.1 mm)
Plastic Indoor/Outdoor	10" x 6 1/2" x 4" (254 mm x 165.1 mm x 101.6 mm)
Knockout Dimensions	
Side/Back	(1) 1/2" and 3/4" combination
Bottom	(2) 1/2" and 3/4" combination
Wire Size	#8 - #14 AWG
Warranty	1-year

For enclosure options and dimensions, see pages 166-167

Accessories/Replacement

Extra/replacement trippers 1 ON and 1 OFF	156T1978A
Extra/replacement motors:	
WG1570-10D	for T101, T101P3, T103, T105, 120 VAC, 60 Hz
WG1571-10D	for T101, T103, T105, 120 VAC, 50 Hz
WG1573-10D	for T102, T104, T106P, 208-277 VAC, 60 Hz
WG1574-10D	for T104-50, 208-277 VAC, 50 Hz
Replacement Insulators	see pages 168-169

Voltage Ratings

For more details on model numbers / voltage ratings, scan the QR code with your smartphone or tablet.



T100 Series

24-Hour

The T100 Series mechanical time switch has proven it can stand the test of time. These dependable time switches can handle electrical loads up to 40 A per pole and allow for up to 12 ON/OFF operations per day. A manual override switch provides added convenience.

Applications

- Indoor/Outdoor lighting • Signs • Filters • Electric fences • Fans
- Conveyers • Pool heaters • Blowers • Pumps
- Other electrical loads

Features

- Direct 24-hour control of most loads
- Up to 12 ON/OFF operations each day with minimum ON/OFF times of one hour
- Manual override
- One ON and one OFF tripper included

Model #	Switch	Input Voltage
Metal Indoor Enclosure		
T101	SPST	120 VAC, 60 Hz
T102	SPST	208-277 VAC, 60 Hz
T103	DPST	120 VAC, 60 Hz
T104	DPST	208-277 VAC, 60 Hz
T104-50	DPST	208-277 VAC, 50 Hz
T101B*	SPST	120 VAC, 60 Hz
T105 **	1 NO/1 NC	120 VAC, 60 Hz
Metal Indoor/Outdoor Enclosure		
T101R	SPST	120 VAC, 60 Hz
T102R	SPST	208-277 VAC, 60 Hz
T103R	DPST	120 VAC, 60 Hz
T104R	DPST	208-277 VAC, 60 Hz
T106R**	1 NO/1 NC	208-277 VAC, 60 Hz
T1205R	DPST	480 VAC, 60 Hz
Plastic Indoor/Outdoor Enclosure		
T101P	SPST	120 VAC, 60 Hz
T102P	SPST	208-277 VAC, 60 Hz
T103P	DPST	120 VAC, 60 Hz
T104P	DPST	208-277 VAC, 60 Hz
Plastic Indoor/Outdoor Enclosure with See-Through Door		
T101PCD82	SPST	120 VAC, 60 Hz
T103PCD82	DPST	120 VAC, 60 Hz
T104PCD82	DPST	208-277 VAC, 60 Hz
Mechanism Only		
T101M	SPST	120 VAC, 60 Hz
T103M	DPST	120 VAC, 60 Hz
T104M	DPST	208-277 VAC, 60 Hz
T106M **	1 NO/1 NC	208-277 VAC, 60 Hz

*Separate clock motor terminals for switching circuits not on line voltage.

**Can be wired as SPDT.

T170, T1400, and T1800 Series

24-Hour with Skip-a-Day

Similar to the T100 Series, these time switches can also handle electrical loads up to 40 A per pole. The T170 Series time switches allow for up to 10 ON/OFF settings per day, but give you the additional capability of skipping days in which the loads may not be needed. Each time switch will come with one set of ON/OFF trippers as well as three skipper screws to omit the schedule for at least three days.

Applications

- For commercial, industrial and residential applications
- Indoor/Outdoor lighting • Signs • Filters • Electric fences • Fans
- Conveyers • Pool heaters • Blowers • Pumps
- Various other electrical loads

Features

- Controls loads up to 40 A per pole
- Direct 24-Hour control of most loads
- Up to 10 ON/OFF operations each day
- Minimum ON/OFF times of one hour
- Manual override
- One ON and one OFF tripper and three day-skipper screws included

Models with Carry-Over (T171CR, T173CR, T174CR, T1471BCR)

- Minimum of 16 hours carry-over operation
- Carry-over automatically rewinds and only takes one hour for every two hours of power loss
- 4PST models are ideal for 3-phase load control

Model #	Switch	Input Voltage
Metal Indoor Enclosure		
T171	SPST	120 VAC, 60 Hz
T172	SPST	208-277 VAC, 60 Hz
T173	DPST	120 VAC, 60 Hz
T174	DPST	208-277 VAC, 60 Hz
T175**	1NO/1NC	120 VAC, 60 Hz
T176**	1NO/1NC	208-277 VAC, 60 Hz
Metal Outdoor Enclosure		
T173R	DPST	120 VAC, 60 Hz
T174R	DPST	208-277 VAC, 60 Hz
T1471BR*	4PST	120 VAC, 60 Hz
T1472BR*	4PST	208-277 VAC, 60 Hz
T1475BR*	4PST	480 VAC, 60 Hz
T1871BR* †	2NO/2NC	120 VAC, 60 Hz
T171CR	SPST	120 VAC, 60 Hz
T173CR	DPST	120 VAC, 60 Hz
T174CR	DPST	208-277 VAC, 60 Hz
T1471BCR*	4PST	120 VAC, 60 Hz

*Separate clock motor terminals for switching circuits not on line voltage.

**Can be wired as SPDT.

† Can be wired as DPDT.



T171CR



Ratings	
Resistive	40 A @ varying voltages
Inductive	40 A @ varying voltages
Electronic Ballast	16 A, 277 VAC
Tungsten	40 A @ varying voltages
Pilot Duty	1000 VA @ varying voltages
Motor: T170 Series	2 HP, 24 FLA @ 120 VAC 5 HP, 28 FLA @ 240 VAC
Motor: T1400 and T1800 Series	
Single Phase	2 HP, 24 FLA @ 120 VAC; 5 HP, 28 FLA @ 240 VAC
Three Phase	7 1/2 HP, 28 FLA @ 208 VAC; 10 HP, 28 FLA @ 240 VAC
Max Power Consumption	3 W
Operating Temperature	-40° F to 130° F (-40° C to 54° C)
Enclosure Dimensions H x W x D	
Metal Indoor	7 7/8" x 5 1/8" x 3 3/16" (200 mm x 130.2 mm x 87.3 mm)
Metal Outdoor	10 1/8" x 6 1/2" x 3 3/8" (257.2 mm x 165.1 mm x 92.1 mm)
Knockout Dimensions	
Side/Back	(1) 1/2" and 3/4" combination
Bottom	(2) 1/2" and 3/4" combination
Wire Size	#8 - #14 AWG
Warranty	1-year

For enclosure options and dimensions, see pages 164-165

Accessories/Replacement

Extra/replacement Trippers, 1 ON and 1 OFF 156T1948A

Extra/replacement Motors:

WG1570-10D for T171, T173, T175, 120 VAC, 60 Hz

WG1571-10D for T171, T173, T175, 120 VAC, 50 Hz

WG1573-10D for T172, T174, T176, 208-277 VAC, 60 Hz

WG430-20D for T1471BR, T1871BR, T1471BCR, 208-277 VAC, 60 Hz

WG433-20D for T1472BR, 208-277 VAC, 60 Hz

Replacement Insulators see pages 168-169

Voltage Ratings

For more details on model numbers / voltage ratings, scan the QR code with your smartphone or tablet.



Mechanical Time Switches

24-Hour with 15-Minute Interval



T1905P



Ratings	
Resistive	20 A, 125-480 VAC
Motor	1/2 HP, 125 VAC 1 HP, 250 VAC
Max Power Consumption	3 W
Operating Temperature	-40° F to 130° F (-40° C to 54° C)
Enclosure Dimensions H x W x D	
Metal Indoor	7 7/8" x 5 1/8" x 3 7/16" (200 mm x 130.2 mm x 87.3 mm)
Metal Outdoor	10 1/4" x 6 1/2" x 3 3/8" (257.2 mm x 165.1 mm x 92.1 mm)
Plastic Indoor/Outdoor	10" x 6 1/2" x 4" (254 mm x 165.1 mm x 101.6 mm)
Knockout Dimensions	
Side/Back	(1) 1/2" and 3/4" combination
Bottom	(2) 1/2" and 3/4" combination
Wire Size	#12 - #14 AWG
Warranty	1-year

For enclosure options and dimensions, see pages 164-165

T1900 and T1970 Series

24-Hour with 15-Minute Interval

This series of mechanical time switches offers more flexible scheduling capabilities by offering 15-minute intervals. These units also come with trippers that slide in or out easily for fast and accurate settings. All units can control up to 20 A of electrical load and have a single pole double throw switch.

Applications

- Poultry feeders • Filters • Heaters • Blowers • Dairy equipment
- Foggers • Fans • Lighting • Various other electrical loads

Features

- Provides up to 96 operations (48 ON/48 OFF) every 24 hours
- Models with skipper wheel allow for operations to be omitted on selected day(s) of the week
- 15-minute intervals
- Trippers slide in and out of dial for fast, accurate setting

Model #	Switch	Input Voltage	Skipper Wheel
Metal Indoor Enclosure			
T1905*	SPDT	125 VAC, 60 Hz	No
T1905E*	SPDT	480 VAC, 60 Hz	No
T1906*	SPDT	208-277 VAC, 60 Hz	No
T1975†	SPDT	125 VAC, 60 Hz	Yes
T1976†	SPDT	208-277 VAC, 60 Hz	Yes
T1975E†	SPDT	480 VAC, 60 Hz	Yes
Metal Outdoor Enclosure			
T1975R†	SPDT	125 VAC, 60 Hz	Yes
T1976R†	SPDT	208-277 VAC, 60 Hz	Yes
T1975ER†	SPDT	480 VAC, 60 Hz	Yes
Plastic Indoor/Outdoor Enclosure			
T1905P*	SPDT	125 VAC, 60 Hz	No

Accessories/Replacement

*Replacement Snap Switch	133T701A
†Replacement Snap Switch	133T698A

T1905HD and T1975HD

24-Hour Heavy-Duty

These heavy-duty time switches are designed to handle the toughest environments, and have fully encapsulated motors to prevent dust or debris from entering the motor. The ON/OFF trippers are permanently attached to the metal dial to avoid the accidental loss of a tripper. These time switches offer 15-minute intervals, providing up to 96 operations each day.

Applications

- Oil well pumps • Silo unloaders • Process equipment
- Other electrical loads that may be in harsh environments

Features

- Heavy-duty metal dial and metal enclosure withstands the most punishing environmental conditions
- Models with skipper wheel allow for operations to be omitted on selected day(s) of the week
- Easy-to-set trippers rotate in/out for fast, accurate setting
- Up to 96 operations (48 ON/48 OFF) every 24 hours
- 15-minute intervals between events
- Fully encapsulated motor with protected gears



T1975EHD



Model #	Switch	Input Voltage	Skipper Wheel
Metal Indoor Enclosure			
T1905HD	SPDT	125 VAC, 60 Hz	No
T1975EHD	SPDT	480 VAC, 60 Hz	Yes
Metal Outdoor Enclosure			
T1905HDR	SPDT	125 VAC, 60 Hz	No
T1975HDR	SPDT	125 VAC, 60 Hz	Yes
T1975EHDR	SPDT	480 VAC, 60 Hz	Yes
Mechanism Only			
T1905HDM	SPDT	125 VAC, 60 Hz	No
T1975HDM	SPDT	125 VAC, 60 Hz	Yes
T1975EHDM	SPDT	480 VAC, 60 Hz	Yes

Ratings	
Resistive	20 A, 125-480 VAC
Motor	½ HP, 120 VAC 1 HP, 240 VAC
Max Power Consumption	3 W
Operating Temperature	-40° F to 130° F (-40° C to 54° C)
Enclosure Dimensions H x W x D	
Metal Indoor	7 7/8" x 5 1/8" x 3 3/16" (200 mm x 130.2 mm x 87.3 mm)
Metal Outdoor	10 1/8" x 6 1/2" x 3 5/8" (257.2 mm x 165.1 mm x 92.1 mm)
Knockout Dimensions	
Side/Back	(1) ½" and ¾" combination
Bottom	(2) ½" and ¾" combination
Wire Size	#12 - #14 AWG
Warranty	1-year

For enclosure options and dimensions, see pages 164-165

Mechanical Time Switches

7-Day

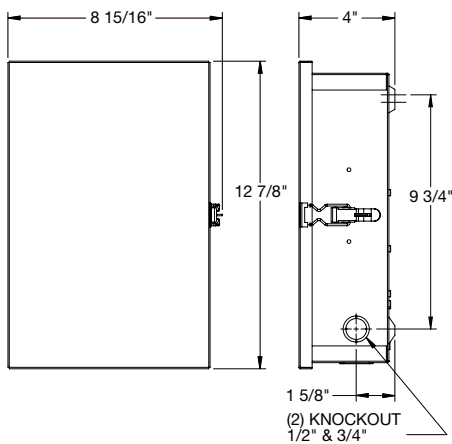


T51311BC



Includes K4121 Photocontrol

Dimensions



Ratings	
Resistive	15 A, 120-250 VAC
Tungsten	150 W, 120 VAC
Pilot Duty	420 VA, 120 VAC
Motor	1/2 HP, 125-250 VAC
Max Power Consumption	3 W
Operating Temperature	-40° F to 130° F (-40° C to 54° C)
Enclosure Dimensions H x W x D	12 7/8" x 8 15/16" x 4" (327 mm x 227 mm x 101.6 mm)
Knockout Dimensions	
Side/Back	(1) 1/2" and 3/4" combination
Bottom	(2) 1/2", 3/4" and 1" combination
Wire Size	#10 - #18 AWG
Warranty	1-year

T50000B Series

7-Day Mechanical

These mechanical time switches enable dusk-to-dawn operations as well as dusk ON and fixed time OFF operations. These units come in either 2 or 3-circuit configurations and provide a carry-over of at least 16 hours in case of power outages, reducing maintenance. These time switches can handle up to 15 A of electrical loads per circuit, have separate terminals for powering the clock motor, and come equipped with a photocontrol.

Applications

- Exterior sign lighting • Façade lighting • Exterior lighting
- Other types of outdoor lighting

Features

- Includes photocontrol initiated/time switch terminated control
- Enable different ON/OFF programs each day of the week
- Recommended for applications needing to turn a load ON at dusk and OFF at a preset time
- Minimum of 16-hour carry-over for maintaining preset schedules during power failures
- Carry-over automatically rewinds when power resumes
- Only one hour of rewinding time required for every two hours of power outage
- Light level adjustment
- Single pole double throw switches and manual circuit bypass switches
- Controls the contactor coil circuit only
- Type 1 rated indoor metal enclosure

Model #	Circuits	Input Voltage
T51211BC	2	120 VAC, 60 Hz
T51311BC	3	120 VAC, 60 Hz

Note: All models have separate clock motor terminals for switching circuits not on line voltage. They may be used with 24 V systems if wired in accordance with NEC regulations. Recommended to control the coil of a lighting contactor.

Accessories/Replacement

Extra/replacement trippers, set of 7 ON/OFF	156T2548A
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T7000B Series

7-Day Mechanical

These 7-Day Mechanical time switches offer the capability of having a different schedule for each day of the week. They can handle up to 40 A of electrical loads per circuit and have separate terminals for powering the clock motor. These time switches can handle up to four loads per clock, providing a single control for easier installation. Each time switch comes with 7 ON and 7 OFF trippers, allowing for at least one ON/OFF operation each day.

Applications

- Heating • Air conditioning • Pumps • Indoor/Outdoor lighting
- Motors • Signs • Filters • Fans • Various other electrical loads

Features

- Different ON/OFF programs each day of the week
- True 7-day load control with minimum ON/OFF time of 3 ½ hours
- Separate clock motor terminals for switching loads not on line voltage
- Carry-over automatically rewinds when power resumes
- Minimum of 16-hour carry-over for maintaining preset schedules during power failures
- Available with Type 3R rated outdoor metal enclosure or Type 1 rated indoor metal in gray finish with separate grounding terminal



Ratings	
Resistive	40 A, 120-480 VAC
Inductive	40 A, 120/208/240/277 VAC
Tungsten	40 A, 120/208/240/277 VAC
Electronic Ballast	16 A, 277 VAC
Pilot Duty	1000 VA, 120-277 VAC Per Pole
Motor	
Single Phase	2 HP, 24 FLA, 120 VAC; 5 HP, 28 FLA, 240 VAC
Three Phase	7 ½ HP, 28 FLA, 208 VAC; 10 HP, 28 FLA, 240 VAC
Operating Temperature	-40° F to 130° F (-40° C to 54° C)
Enclosure Dimensions H x W x D	
Metal Indoor	13 ½" x 9" x 3 ¾" (333.3 mm x 228.9 mm x 95.25 mm)
Metal Outdoor	12 ½" x 9" x 4" (317.5 mm x 228.9 mm x 101.6 mm)
Knockout Dimensions	
Side/Back	(1) ½" and ¾" combination
Bottom	(2) ½", ¾" and 1" combination
Wire Size	#8 - #14 AWG
Warranty	1-year



T7401B

Model #	Switch	Input Voltage
Type 1 Metal Indoor Enclosure Without Carry-Over		
T7401B	4PST NO	120 VAC, 60 Hz
T7402B	4PST NO	208-277 VAC, 60 Hz
T7801B*	2 NO/2 NC	120 VAC, 60 Hz
T7802B*	2 NO/2 NC	208-277 VAC, 60 Hz
Type 1 Metal Indoor Enclosure With Carry-Over		
T7401BC	4PST NO	120 VAC, 60 Hz
T7402BC	4PST NO	208-277 VAC, 60 Hz
T7801BC*	2 NO/2 NC	120 VAC, 60 Hz

*Can be wired as (2) DPDT.

Note: All models have separate clock motor terminals for switching circuits not on line voltage. They may be used with 24 V systems if wired in accordance with NEC regulations.

T2000 Series

7-Day Mechanical

These compact 7-Day Mechanical time switches offer the capability of having a different schedule for each day of the week. They can handle up to 20 A of resistive loads and up to six ON/OFF settings per day.

Applications

- Pumps • Lighting • Motors • Ventilation systems
- Fans • Various other electrical loads

Features

- Minimum 2-hour timing intervals
- Up to 42 ON/OFF operations per week
- Type 1 rated metal indoor enclosure

Model #	Switch	Input Voltage
T2005	SPDT	120 VAC, 60 Hz
T2006	SPDT	208-277 VAC, 60 Hz



T2005

Ratings	
Resistive	20 A, 125, 208-277 VAC
Motor	½ HP, 125 VAC; 1 HP, 250 VAC
Operating Temperature	-40° F to 130° F (-40° C to 54° C)
Enclosure Dimensions H x W x D	7 7/8" x 5 1/8" x 3 7/16" (200 mm x 130.2 mm x 87.3 mm)
Knockout Dimensions	
Side/Back	(1) ½" and ¾" combination
Bottom	(2) ½" and ¾" combination
Wire Size	#12 - #14 AWG
Warranty	1-year

For enclosure options and dimensions, see pages 166-165