

# TORK®

## ELECTROMECHANICAL CONTROLS



JUNE 2007

A DIVISION OF **NSI** NSI INDUSTRIES, LLC

# FEATURES AT-A-GLANCE

# features

## ELECTROMECHANICAL CONTROLS

SERIES	CLOCK DIAL	MINIMUM SETTING (MINUTES)		SKIP-A-DAY	MANUAL OVERRIDE	ASTRO-NOMIC	MAX ON/OFF EVENTS PER DAY	SWITCH TYPES				RATING (AMPS)	RESERVE POWER
		ON	OFF					SPST	DPST	3PST	DPDT		
<b>1100</b>	24 Hour	20	75		YES		12	SPST	DPST			40	
<b>7000</b>	24 Hour	20	75	YES	YES		12	SPST SPDT	DPST	3PST	DPDT	40	Available
<b>701A, 711A</b>	24 Hour	30	30		Permanent		24	SPST				701A: 20 711A: 15	
<b>7000Z</b>	24 Hour	20 or 40 Minute Offset		YES	YES	YES		SPDT	DPST		3PST	40	Available
<b>TZ</b>	24 Hour	20 or 40 Minute Offset		YES	Permanent *Each Circuit	YES				3PST	DPDT	20	Standard
<b>W</b>	7 Day	60	120		YES		2	SPST SPDT	DPST	3PST	4PST DPDT	40	Available
<b>TW</b>	7 Day	60	120		Permanent *Each Circuit		2			3PST	DPDT	20	Standard
<b>T900</b>	7 Day	60	120		Permanent *Each Circuit	Photo-control	2	2 Circuit, 2SPDT 3 Circuit, 3SPDT				20	Standard
<b>1847A</b>	24 Hour		YES					SPDT, Momentary Contact					Available
<b>1847AZ</b>	24 Hour		YES		YES	YES		SPDT, Momentary Contact					Available
<b>1847AW</b>	7 Day							SPDT, Momentary Contact					Available
<b>8000 Duty Cycle</b>	24 Hour Duty Cycle	15	15	Available			48	SPDT				20	Available
<b>8000 Variable Cycle</b>	6, 12, 30 & 60 Minute	**6 Sec.	6 Sec.				30/dial	SPDT				10	
<b>8150</b>	Duty Cycle Delay Start	15	15				48	SPST				5,10	
<b>WH2</b>	24 Hour	20	75		YES		12		DPST			40	

\*Manual ON-OFF-AUTO switches for each circuit.

\*\*Various dials available from 6 to 60 minutes with minimum ON or OFF settings of 1/60th of the dial speed.



# TORK ELECTROMECHANICAL CONTROLS: OVER 80 YEARS OF EXPERIENCE PACKED INTO EVERY SINGLE BOX.

**EXCELLENCE THAT THE FIELD HAS COME TO EXPECT FROM TORK, SINCE 1922. ONE SIMPLE GOAL: EXTRAORDINARY PRODUCTS COMBINED WITH EXTRAORDINARY SERVICE, MAKING YOUR LIFE IN THE FIELD EASIER, EVERY DAY.**

TORK Electromechanical Controls are designed and manufactured with components which adhere to the highest industry standards. Trained personnel and in-process quality control procedures ensure that every unit meets our strictest quality standards.

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# 1100 SERIES

## 24 HOUR TIME SWITCHES

**SAME ON/OFF TIMES  
EACH DAY**

### APPLICATIONS

Automatic ON-OFF control when operation is required at the same time every day, 7 days a week.

- Lighting
- Pumps
- Signs
- Air Conditioning
- Water Heating
- Fans

# 1101

### SPECIFICATIONS

#### CONTACT RATINGS:

(all models except 1101-7):

- 40 Amp. Tungsten, 120VAC
- 40 Amp. Resistive, 120-277VAC  
Single Phase
- 40 Amp. General Purpose  
120-277 VAC Single Phase
- 20 Amp. Inductive 120VAC, 277VAC,  
Single Phase
- 1000 VA Pilot Duty 120-277 VAC.
- 2 HP (24 FLA) 120 VAC; 5 HP (28 FLA) 240 VAC
- Model 1101-7 is 30 amp inductive, 347 VAC only

**TIMING MOTOR:** Heavy duty synchronous, self-starting high torque. Power Consumption: 3 watts.

**AUTOMATIC OPERATION:** Minimum ON setting: 20 minutes.  
Minimum OFF setting: 75 minutes. One pair of ON-OFF trippers supplied – accommodates up to 12 pairs.  
Dial markings are in English, French and Spanish.

**TEMPORARY MANUAL OVERRIDE:** Standard.

**OPERATING TEMPERATURE RANGE:** -40° to +165°F. (-40° to +74°C.)

**ENCLOSURE:** See page 27 for dimensions. Metal Indoor (NEMA 1). Drawn steel, beige enamel, with combination 1/2" and 3/4" K.O.'s on sides, bottom and back. Lockable hasp. Cover is removable and movement releases from case at finger touch for easy installation. Back has keyhole as well as matching screw holes for quick mounting over single gang box.

**OTHER MOUNTINGS:** \*When ordering special enclosures ONLY, please use model number.

- Noryl® Indoor/Outdoor NEMA 3R: Models with suffix N. Enclosure only: Model 9000N\*
- Noryl® Indoor/Outdoor NEMA 3R with clear cover: Models with suffix NC. Enclosure only: Model 9000NC\*
- Metal Indoor/Outdoor NEMA 3: Models with suffix O. Enclosure only: Model 9000A\*
- Metal Flush, with lock and key: (suffix FL 1). Enclosure only: Model 9001\*
- Metal Duplex – 2 standard units in one indoor/outdoor case: (suffix DUOL). Enclosure only: Model 9004L\*
- Bracket mounting – specify mechanism only with bracket
- Intermatic® Adapter Plate Model IAP—allows any TORK 1100 model to fit into an Intermatic case without changing enclosure.



## 1101 NC WITH CLEAR LEXAN® COVER

CAT NO	UPC CODE	ENCLOSURE TYPE	SWITCH	AMPS	H.P. RATING	MOTOR: AC VOLTAGE	MOTOR: Hz	MOTOR: PART #
1101	10011	Metal Indoor	SPST	40	2	120	60	101
*1101-7	10033	Metal Indoor	SPST	30	—	347	60	201
1102	10012	Metal Indoor	SPST	40	5	208-277	60	201
1103	10013	Metal Indoor	DPST	40	2	120	60	101
1104	10014	Metal Indoor	DPST	40	5	208-277	60	201
1101-N	10040	Noryl® Indoor/Outdoor (I/O)	SPST	40	2	120	60	101
1101NC	10053	Noryl® I/O with Clear Lexan® Cover	SPST	40	2	120	60	101
1102-N	10045	Noryl® Indoor/Outdoor	SPST	40	5	208-277	60	201
1103-N	10041	Noryl® Indoor/Outdoor	DPST	40	2	120	60	101
1103NC	10054	Noryl® I/O with Clear Lexan® Cover	DPST	40	2	120	60	101
1104-N	10042	Noryl® Indoor/Outdoor	DPST	40	5	208-277	60	201
1104NC	10055	Noryl® I/O with Clear Lexan® Cover	DPST	40	5	208-277	60	201
1101-O	10015	Metal Outdoor	SPST	40	2	120	60	101
1102-O	10046	Metal Outdoor	SPST	40	5	208-277	60	201
1103-O	10016	Metal Outdoor	DPST	40	2	120	60	101
1104-O	10017	Metal Outdoor	DPST	40	5	208-277	60	201
1101-M	10022	Mechanism Only	SPST	40	2	120	60	101
†1101-M-IAP	10052	Mechanism Only	SPST	40	2	120	60	101
1102-M	10035	Mechanism Only	SPST	40	5	208-277	60	201
1103-M	10023	Mechanism Only	DPST	40	2	120	60	101
1104-M	10014	Mechanism Only	DPST	40	5	208-277	60	201

CONVERSION NOTE: ORDER **ZKIT**: Astronomic kit for field conversion of TORK 7000 and 1100 SERIES

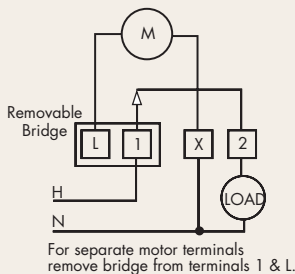
\*CSA Only

† Includes adapter plate to fit Intermatic enclosure.

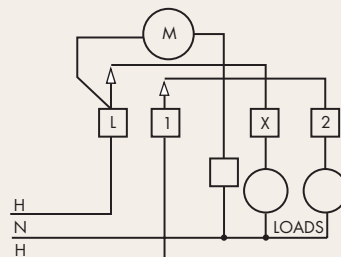
Reserve Power is not available in this series.

## WIRING DIAGRAMS

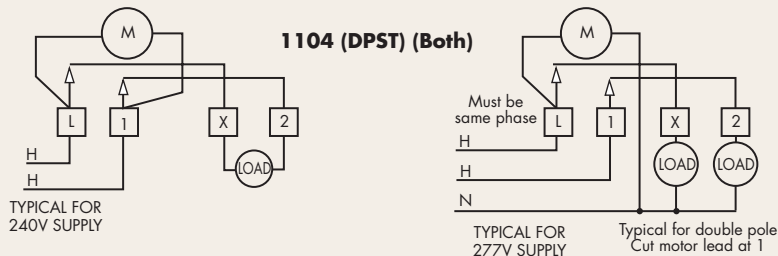
1101 & 1102 (SPST)



1103 (DPST)



1104 (DPST) (Both)



## SPECIFICATION WRITER'S GUIDE 1100 SERIES

Furnish and install where shown a TORK Time Switch with 24 hour dial. The Time Switch shall be powered by a self-starting synchronous motor. Time Switch contacts shall be capable of switching 40 amperes per pole continuously at 277 volts and shall be SPST (DPST, SPDT, as required). Removable ON-OFF trippers shall make possible automatic operation with a minimum ON period of 20 minutes and a minimum of 2 hours between one OFF period and the next. Enclosure shall be NEMA 1 surface type, finished in beige enamel, with combination 1/2", 3/4" knockouts on bottom, both sides and back. Provision shall be made for positive padlocking. Terminals shall be capable of receiving #8 AWG wire. Time Switch shall be TORK Model 11\_\_ (11\_\_ \_\_, etc, to fit requirement).

# 7000 SERIES

## 24 HOUR TIME SWITCHES

### WITH SKIP-A-DAY FEATURE RESERVE POWER OPTIONAL

#### APPLICATIONS

Automatic ON-OFF control when operation is required at the same time every day, with optional versatility of one to six days omission.

- Lighting
- Heating
- Pumps
- Air Conditioning
- Signs

#### SPECIFICATIONS

##### CONTACT RATINGS:

- 40 Amp. Tungsten, 120 VAC
- 40 Amp. Resistive, 120-277 VAC Single Phase
- 40 Amp. General Purpose, 120-277 VAC Single Phase
- 20 Amp. Inductive 120 VAC, 277 VAC Single Phase
- 1000 VA Pilot Duty 120-277 VAC.
- 2 HP (24 FLA) 120 VAC; 5 HP (28 FLA) 240 VAC

**TIMING MOTOR:** Heavy duty synchronous self-starting high torque. Power Consumption: 3 watts.

**OPTIONAL RESERVE POWER:** Keeps dial on time up to 16 hours during power outage.  
Add suffix L to model number. Power Consumption: 5 watts.

**AUTOMATIC OPERATION:** Minimum ON setting: 20 minutes. Minimum OFF setting: 75 minutes. One pair of ON-OFF trippers supplied – accommodates up to 12 pairs. Dial markings are in English, French and Spanish.

**OMITTING DEVICE:** 7-spoke wheel marked with days of week – 3 omitting screws (P-14) supplied.

**TEMPORARY MANUAL OVERRIDE:** Standard.

**OPERATING TEMPERATURE RANGE:** -40° to +165°F. (-40° to +74°C.)

**ENCLOSURE:** See page 27 for dimensions. General purpose (NEMA 1). Drawn steel, beige enamel, with combination ½" and ¾" K.O.'s on sides, bottom and back. Lockable hasp. Removable cover provides exceptional accessibility for wiring and setting. Mechanism releases from case at finger touch for easy installation, **(except 3 Pole Models which include metal indoor/outdoor case as standard).**

**OTHER MOUNTINGS:** \*When ordering special enclosures **ONLY**, please use model number.

- Noryl® Indoor/Outdoor NEMA 3R: (suffix N) – Model 9000N\*
- Metal Indoor/Outdoor NEMA 3: (suffix O) – Model 9000A\*
- Flush, with lock and key: (suffix FL1) – Model 9001\*
- Flush, with lock and key, NEMA 1B for 3 pole: (suffix FL2) – Model 9002\*
- Duplex – 2 standard units in one indoor/outdoor NEMA 3 metal case except 3 pole: (suffix DUOL) – Model 9004L\*
- Bracket mounting – specify mechanism only with bracket.
- Intermatic® Adapter Plate Model IAP – allows any TORK 7000 model to fit into an Intermatic case without changing enclosure



CAT NO	UPC CODE	ENCLOSURE TYPE	SWITCH	AMPS	H.P. RATING	MOTOR: AC VOLTAGE	MOTOR: Hz
7100	10001	Metal Indoor	SPST	40	2	120	60
7102	10002	Metal Indoor	SPST	40	5	208-277	60
7200	11001	Metal Indoor	DPST	40	2	120	60
7202	11002	Metal Indoor	DPST	40	5	208-277	60
7300	12001	Metal Indoor/Outdoor	3PST	40	2	120	60
7302	12002	Metal Indoor/Outdoor	3PST	40	5	208-277	60
7120	13001	Metal Indoor	SPDT	40	2	120	60
7122	13002	Metal Indoor	SPDT	40	5	208-277	60
7220	14001	Metal Indoor	DPDT	40	2	120	60
7222	14002	Metal Indoor	DPDT	40	5	208-277	60

### WITH RESERVE POWER

7200L	19003	Noryl® Indoor/Outdoor	DPST	40	2	120	60
7202L	19004	Noryl® Indoor/Outdoor	DPST	40	5	208-277	60
7300L	19005	Metal Indoor/Outdoor	3PST	40	2	120	60
7302L	19006	Metal Indoor/Outdoor	3PST	40	5	208-277	60
7120L	19007	Noryl® Indoor/Outdoor	SPDT	40	2	120	60
7220L	19009	Noryl® Indoor/Outdoor	DPDT	40	2	120	60
7222L	19011	Noryl® Indoor/Outdoor	DPDT	40	5	208-277	60

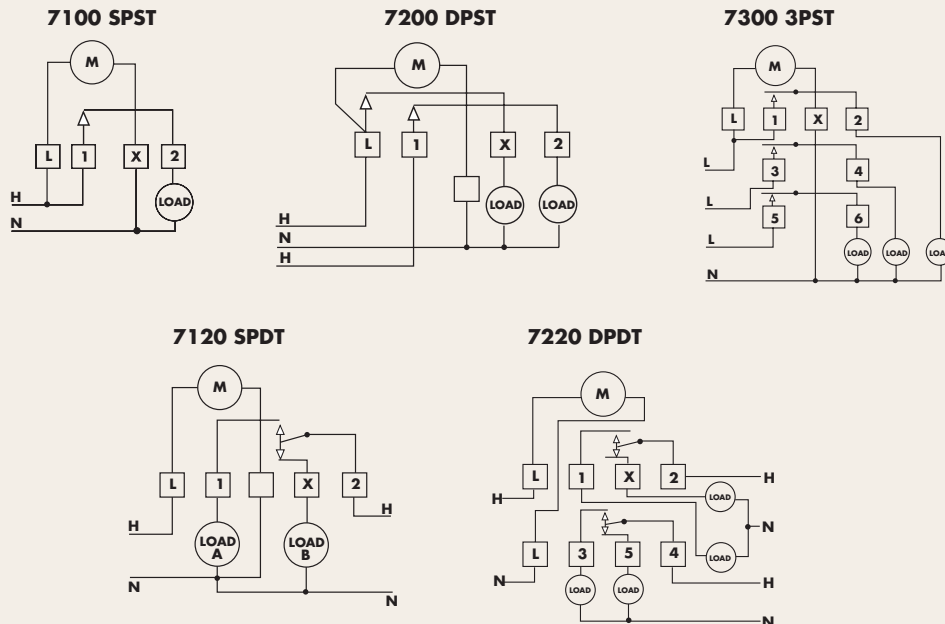
#### CONVERSION NOTE: ORDER ZKIT: Astronomic kit for field conversion of TORK 7000 and 1100 SERIES

†24 VOLT IN ALL MODELS AVAILABLE ON SPECIFICATION. Indoor/outdoor Noryl case is standard on all models with reserve power except 3PST is metal indoor/outdoor.

NOTE 1: If converting to reserve power in the field, order Model 63100 enclosure to accommodate the larger unit (not necessary with 3PST models)

NOTE 2: When replacing a Model 7300 or 7302 mechanism only into an existing enclosure, order CK7300 conversion kit since the new mechanism is designed narrower than the old one.

### WIRING DIAGRAMS



### SPECIFICATION WRITER'S GUIDE 7000 SERIES

Furnish and install where shown a TORK Time Switch with 24 hour dial and day-omitting device. The Time Switch shall be powered by a self-starting synchronous motor. Time Switch contacts shall be capable of switching 40 amperes per pole continuously at 277 volts and shall be SPST (DPST, 3PST, DPST, SPDT, as required). Removable ON-OFF trippers shall make possible automatic operation with a minimum ON period of 20 minutes and a minimum of 2 hours between one OFF period and the next. Enclosure shall be NEMA 1 surface type, finished in beige enamel, with combination 1/2", 3/4" knockouts on bottom, both sides and back. Provision shall be made for positive padlocking. Terminals shall be capable of receiving #8 AWG wire. Time Switch shall be TORK Model 7\_ \_ \_ (to fit requirement).

FOR RESERVE POWER (MODELS WITH SUFFIX "L"): Spring-driven reserve shall be provided sufficient to operate the Time Switch contacts at least 16 hours after power failure. On restoration of power, Time Switch shall transfer to synchronous motor drive and automatically rewind reserve power unit.

# 1100 SERIES

## SWIMMING POOL TIME SWITCHES

### 1 AND 2 CIRCUIT, 24 HOUR DIAL

#### APPLICATIONS

Automatic ON-OFF control of swimming pool pumping systems with or without water heaters. Two units in one case allow for addition of lighting control, or automatic pool sweep "ON". Models with "FM" suffix contain low voltage secondary circuit to turn OFF water heater thermostat 20-30 minutes before standard voltage main circuit turns OFF pump. This allows for slow cooling of heater coils, preventing sudden steam build-up and knocking, thereby prolonging heater life.

#### SPECIFICATIONS

##### CONTACT RATINGS:

- 40 Amp. Tungsten, 120 VAC
- 40 Amp. Resistive, 120-277 VAC Single Phase
- 40 Amp. General Purpose, 120-277 VAC Single Phase
- 20 Amp. Inductive 120 VAC, 277 VAC Single Phase
- 1000 VA Pilot Duty, 120-277 VAC.
- 2 HP (24 FLA) 120 VAC; 5 HP (28 FLA) 240VAC

**WATER HEATER CIRCUIT:** 760VA, 24V

**TIMING MOTOR:** Heavy duty synchronous, self-starting high torque. Power Consumption: 3 watts

**AUTOMATIC OPERATION:** Models with "FM" suffix – Include one pair of permanent type ON-OFF trippers. Can accommodate up to 3 pairs. Minimum ON setting, 45 minutes. Minimum OFF setting, 90 minutes. All other models include 1 pair of ON-OFF trippers – can accommodate up to 12 pairs. Minimum ON setting, 20 minutes. Minimum OFF setting, 75 minutes. Dial markings in English, French & Spanish.

**TEMPORARY MANUAL OVERRIDE:** Standard.

**OPERATING TEMPERATURE RANGE:** -40° to +165°F. (-40° to +74°C.)

**ENCLOSURE:** See page 27 for dimensions. Metal Indoor (NEMA 1). Drawn steel, beige enamel, with combination 1/2" and 3/4" K.O.'s on sides, bottom and back. Lockable hasp. Cover is removable and movement releases from case at finger touch for easy installation. Back has keyhole as well as matching screw holes for easy mounting over single gang box.

**OTHER MOUNTINGS:** \*When ordering special enclosures ONLY, please use model number.

Noryl® Indoor/Outdoor NEMA 3R: (suffix N) – Model 9000N\*

Metal Indoor/Outdoor NEMA 3: (suffix O) – Model 9000A\* (hinged side)

Duplex: 2 units in one indoor/outdoor NEMA 3 metal case (suffix DUOL) – Model 9004L\*

Bracket mounting – specify mechanism only with bracket.

Intermatic® Adapter Plate Model IAP – allows any TORK 1100 model to fit into an Intermatic® case without changing enclosure



CAT NO	UPC CODE	ENCLOSURE TYPE	SWITCH	H.P. RATING	MOTOR: AC VOLTAGE
1101	10011	Metal Indoor	SPST	2	120
1103	10013	Metal Indoor	DPST	2	120
1104	10014	Metal Indoor	DPST	5	208-277
1101 FM	10018	Metal Indoor	SPST	2	120
1104 FM	10020	Metal Indoor	DPST	5	208-277
1101 FM N	10043	Noryl® Indoor/Outdoor	SPST	2	120
1104 FM N	10044	Noryl® Indoor/Outdoor	DPST	5	208-277
1101-O	10015	Metal Outdoor	SPST	2	120
1103-O	10016	Metal Outdoor	DPST	2	120
1104-O	10017	Metal Outdoor	DPST	5	208-277
1101 FM-O	10019	Metal Outdoor	SPST	2	120
1104 FM-O	10021	Metal Outdoor	DPST	5	208-277
1101 M	10022	Mechanism Only	SPST	2	120
1103 M	10023	Mechanism Only	DPST	2	120
1104 M	10024	Mechanism Only	DPST	5	208-277
1101 FM M	10025	Mechanism Only	SPST	2	120
1104 FM M	10026	Mechanism Only	DPST	5	208-277
<b>Contains</b>					
1101 D	10028	Two units in metal indoor /outdoor		2 each 1101	
1114 D	10030	Two units in metal indoor /outdoor		1 each 1101, 1 each 1104	
1104 D	10029	Two units in metal indoor /outdoor		2 each 1104	
1101 DF	10027	Two units in metal indoor /outdoor		1 each 1101, 1 each 1101 FM	
1114 DF	10030	Two units in metal indoor /outdoor		1 each 1101, 1 each 1104 FM	
1104 DF	10032	Two units in metal indoor /outdoor		1 each 1104, 1 each 1104 FM	

FM MODELS CONTAIN LOW VOLTAGE POOL HEATER THERMOSTAT SWITCH  
Reserve Power is not available in this series.





# WH SERIES

## 24 HOUR WATER HEATER TIME SWITCH

**TORK**  
ELECTROMECHANICAL  
CONTROLS

### APPLICATIONS

Automatic ON/OFF control of electric water heaters. Allows for heating of water only when needed. Avoids wasting energy heating water which is not used.

### SPECIFICATIONS

**CONTACT RATINGS:** 40 Amp, 10,000 watt at 250V.

**TIMING MOTOR:** Heavy duty synchronous, self-starting high torque.  
Power Consumption: 3 watts.

**AUTOMATIC OPERATION:** Minimum ON setting: 20 minutes. Minimum OFF setting: 75 minutes. 3 pairs of ON/OFF trippers supplied. Accommodates up to 12 pairs.

**TEMPORARY MANUAL OVERRIDE:** Available on outside of case.

**OPERATING TEMPERATURE RANGE:** -40° to +165°F. (-40° to +74°C.)

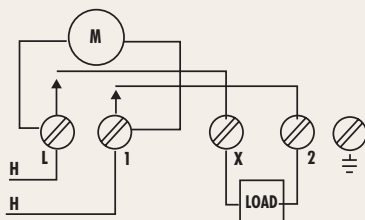
**ENCLOSURE:** See page 27 for dimensions. General Purpose Indoor (NEMA 1). Drawn steel, beige enamel, with combination 1/2" and 3/4" K.O.'s on sides, bottom and back. Lockable hasp. Cover is removable and movement releases from case at finger touch for easy installation. Back has keyhole as well as matching screw holes for quick mounting over single gang box.



CAT NO	UPC CODE	SWITCH	AMPS	WATTS	MOTOR: VOLTS AC	MOTOR: Hz
WH2	70042	DPST	40	10,000	208-250	60

### WIRING DIAGRAM

TYPICAL FOR 240  
VOLT SUPPLY



### SPECIFICATION WRITER'S GUIDE

#### EH SERIES

1. Furnish and install TORK 24 hour time switch with DPST contacts.
2. Contact ratings shall be 10,000W at 250VAC, 40 amps.
3. Unit shall be supplied with 3 pairs of ON/OFF trippers, but will accommodate 12 pairs.
4. Unit shall be capable of manual ON/OFF to the next event.
5. Unit shall have manual ON/OFF control with status indicator on outside of enclosure.
6. Unit shall be housed in heavy duty NEMA 1 enclosure.
7. To order specify TORK Model WH2.

# 7000Z SERIES

## ASTRONOMIC TIME SWITCHES

### WITH SKIP-A-DAY FEATURE

### RESERVE POWER OPTIONAL

#### APPLICATIONS

Automatic ON at dusk/OFF at dawn control of outdoor lighting.

- Parking Lots
- Outside Signs
- Canopy Lighting
- Walkways
- Show Windows
- Landscape Lighting

#### SPECIFICATIONS

##### CONTACT RATINGS:

- 40 Amp. Tungsten, 120 VAC
- 40 Amp. Resistive, 120-277 VAC Single Phase
- 40 Amp. General Purpose, 120-277 VAC Single Phase
- 20 Amp. Inductive 120 VAC, 277 VAC Single Phase
- 1000 VA Pilot Duty 120-277 VAC.
- 2 HP (24 FLA) 120 VAC; 5 HP (28 FLA) 240 VAC

**TIMING MOTOR:** Heavy duty synchronous self-starting high torque.  
Power Consumption: 3 watts.

**OPTIONAL RESERVE POWER:** Keeps dial on time up to 16 hours during power outage.  
Add suffix L to model number. Power Consumption: 5 watts.

**AUTOMATIC OPERATION:** ON at sunset – can be set 20 or 40 minutes before or after normal sunset, to adapt to local area.  
OFF at sunrise or can be set from 8:30PM to 2:30AM in half-hour increments. No resetting required for seasonal changes, as trippers automatically follow the seasons.

**OMITTING DEVICE:** 7-spoke wheel marked with days of week – 3 omitting screws (P-14) supplied.

**TEMPORARY MANUAL OVERRIDE:** Standard.

**OPERATING TEMPERATURE RANGE:** -40° to +165°F. (-40° to +74°C.)

**INSTRUCTIONS:** English, French and Spanish

**ENCLOSURE:** See page 27 for dimensions. Indoor/Outdoor Noryl® enclosure (NEMA 3R) is standard on all **(except 3 Pole Models which include metal indoor/outdoor case as standard)**. Lockable hasp. Removable cover provides exceptional accessibility for wiring and setting. Mechanism releases from case at finger touch for easy installation. Optional Metal enclosure available in all models.

**OTHER MOUNTINGS:** \*When ordering special enclosures ONLY, please use model number.

- Flush, with lock and key (suffix FL1) – Model 9001\*
- Flush, with lock and key, NEMA 1B for 3 pole (suffix FL2) – Model 9002\*
- Bracket mounting – specify mechanism only with bracket.
- Model IAP–Intermatic® Adapter Plate – allows any TORK 7000Z Model (SPST, SPDT or DPST) to fit into an Intermatic® case without necessity of changing the enclosure.

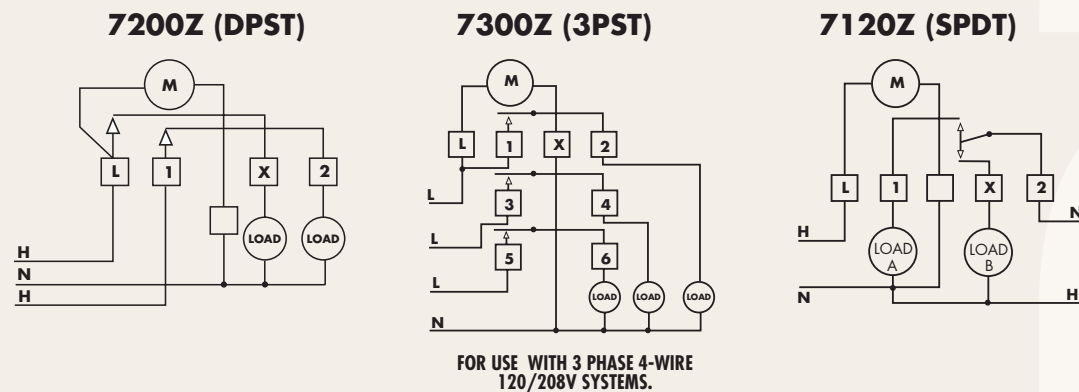


CAT NO	UPC CODE	SWITCH	AMPS	MOTOR: AC VOLTAGE	MOTOR: Hz	ENCLOSURE TYPE
7200Z	21001	DPST	40	120	60	Noryl® Indoor/Outdoor
7202Z	21002	DPST	40	208-277	60	Noryl® Indoor/Outdoor
7300Z	22001	3PST	40	120	60	Metal Indoor/Outdoor
7302Z	22002	3PST	40	208-277	60	Metal Indoor/Outdoor
7120Z	23001	SPDT	40	120	60	Noryl® Indoor/Outdoor
<b>WITH RESERVE POWER</b>						
7200ZL	29003	DPST	40	120	60	Noryl® Indoor/Outdoor
7202ZL	29013	DPST	40	208-277	60	Noryl® Indoor/Outdoor
7300ZL	29005	3PST	40	120	60	Metal Indoor/Outdoor
7302ZL	29015	3PST	40	208-277	60	Metal Indoor/Outdoor
7120ZL	29007	SPDT	40	120	60	Noryl® Indoor/Outdoor
7122ZL	29017	SPDT	40	208-277	60	Noryl® Indoor/Outdoor

24 VOLT IN ALL MODELS AVAILABLE ON SPECIFICATION.

NOTE 1: When replacing a Model 7300 or 7302 mechanism only into an existing enclosure, order CK7300 conversion kit since the new mechanism is designed narrower than the old one.

## WIRING DIAGRAMS



### SPECIFICATION WRITER'S GUIDE 7000Z SERIES

Furnish and install where shown a TORK Time Switch with Astronomic dial and day-omitting device powered by a self-starting synchronous motor. Time Switch contacts shall be capable of switching 40 amperes per pole continuously at 277 volts and shall be (DPST, 3PST or SPDT) as required. ON operation shall occur automatically at sunset (in city of use). OFF operation shall be adjustable from 8:30 P.M. to 2:30 A.M. in one-half hour increments or at sunrise. Both ON and OFF shall have a range of adjustability of 20-40 minutes before or after sunset and sunrise. Enclosure shall be: DPST or SPDT is NEMA 3R indoor/outdoor - Noryl® - 3PST is NEMA 3 metal indoor/outdoor. Terminals shall be of the pressure type, capable of receiving #8 AWG wire. Time Switch shall be TORK Model 7\_\_Z (to fit requirement).

FOR RESERVE POWER (Add Suffix L): Spring driven reserve shall be provided sufficient to operate the Time Switch contacts at least 16 hours after power failure. On restoration of power, Time Switch shall transfer to synchronous motor drive and automatically rewind reserve power unit.

# 1800 SERIES

## MOMENTARY CONTACT TIME SWITCHES

### FOR MECHANICALLY-HELD CONTACTORS AND LOW VOLTAGE REMOTE CONTROL RESERVE POWER OPTIONAL

#### APPLICATIONS

- Mechanically-held contactors
- 3 wire momentary lighting systems
- Remote station switching

#### SPECIFICATIONS

**CONTACTS:** 2 normally open dry contacts. 10 Amp @ 24-277 VAC, 360 VA

**TIMING MOTOR:** Heavy duty synchronous, self-starting high torque. Power Consumption: 3 watts.

**OPTIONAL RESERVE POWER:** Keeps dial on time up to 16 hours (on 24 hour models); up to 24 hours (on 7 day models) during power outage. Add suffix L to model number. Power Consumption: 5 watts.

**MOMENTARY TIMING CIRCUIT:** Solid state circuit drives two high capacity dry contacts to either ON or OFF contactor coil terminals. Dry contacts close for a period of 5 seconds and occur at such times as are set on the time switch dial.

**DIAL:** Choice of 24 hour, Astronomic or 7-day calendar dials –all can omit selected days, if desired.

**OPERATING TEMPERATURE RANGE:** -40° to +165°F. (-40° to +74°C.)

**ENCLOSURE:** See page 27 for dimensions. General purpose (NEMA 1). Drawn steel, beige enamel, with combination 1/2"-3/4" K.O.'s on top, sides, bottom and back. Lockable hasp.

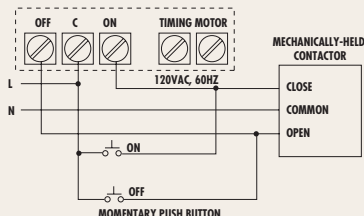
**OTHER MOUNTINGS:** \*When ordering special enclosures ONLY, please use model number.

Noryl® Indoor/Outdoor – NEMA 3R:  
(suffix N) – Model 9000N\*

Metal Indoor/Outdoor – NEMA 3:  
(suffix O) – Model 9000A\*

Flush, with lock and key NEMA 1:  
(suffix FL1) – Model 9001\*

#### WIRING DIAGRAM



CAT NO	UPC CODE	TYPE	MOTOR: AC VOLTAGE	MOTOR: Hz
1847A	52001	24 Hour	120	60
1848A	52014	24 Hour	208-277	60
1847AZ	52003	Astronomic	120	60
1848AZ	52018	Astronomic	208-277	60
1847AW	52005	7 Day	120	60
1848AW	52016	7 Day	208-277	60
<b>WITH RESERVE POWER</b>				
1847AL	52006	24 Hour	120	60
1848AL	52015	24 Hour	208-277	60
1847AZL	52008	Astronomic	120	60
1848AZL	52019	Astronomic	208-277	60
1847AWL	52010	7 Day	120	60
1848AWL	52017	7 Day	208-277	60

NOTE: Timing motor voltage need not be the same as contactor coil voltage

#### SPECIFICATION WRITER'S GUIDE

1800 SERIES  
Furnish and install where shown a Momentary Contact Time Switch. Time Switch shall have dial of the (24 hour with day omitting device) (Astronomic with day omitting device) (7 day calendar) type, which shall be suitable to operate mechanically-held contactor of maximum size. Terminal board shall enable fast and correct installation using screw terminals for up to AWG #12 wire. Timing motor terminals are completely independent from momentary switching circuit. Spring driven reserve mechanism shall be provided sufficient to operate time switch controls at least 16 hours after power failure. On restoration of power, time switch shall transfer to synchronous motor drive and automatically rewind reserve. Time Switch shall include solid state circuit to provide a switch closure not in excess of two seconds on both ON and OFF contactor coil terminals at such times as are set on dial: these settings to be made with removable trippers which can be added and removed without tools (except the astronomic dial). Contactor coil circuits shall be suitable for 10 Amp @ 24-277 VAC, 360 VA. Enclosures shall be NEMA 1 surface (or see other mountings), with provision for padlocking. Time Switch shall be TORK Model 1847AL, (1848AL), (1849AL), (AZL), (AWL).



# 8000 SERIES

## DUTY CYCLE 24 HOUR TIME SWITCHES

### MANY ON/OFF OPERATIONS PER DAY

**TORK**  
ELECTROMECHANICAL  
CONTROLS

#### APPLICATIONS

For one to many daily ON-OFF operations

- Duty Cycling
- Pumping
- Process Control
- Ventilating Fans
- Irrigation
- Laboratory Experiments

#### SPECIFICATIONS

**CONTACT RATINGS:** 20 Amps at 120 or 240V, 5 Amps at 480V,  
¼ HP @120V AC

**TIMING MOTOR:** Heavy duty synchronous, self-starting, high torque.  
Power Consumption: 3 watts.

**OPTIONAL RESERVE POWER:** Keeps dial on time up to 16 hours during power outage. Add suffix L to model number. Power Consumption: 5 watts.

**DIAL:** Captivated tabs for setting are easily tilted in or out by hand.  
Switch stays ON or OFF as set when adjacent tabs are set alike.  
1 TO 48 ON-OFF OPERATIONS PER DAY.  
96 tabs permit 15 minute switching changes.  
DUTY CYCLES adjustable from ½, 1, 2, 3, 4, 6, 12 and 24 hours.



**OPERATING TEMPERATURE RANGE:** -40° to +165°F. (-40° to +74°C.)

**ENCLOSURE:** See page 27 for dimensions. General purpose (NEMA 1). Drawn steel, beige enamel, with combination ½" and ¾" K.O.'s on sides, bottom and back. Lockable hasp. Cover is removable and movement releases from case at finger touch for easy installation.

**OTHER MOUNTINGS:** \*When ordering special enclosures ONLY, please use model number.

Noryl® Indoor/Outdoor NEMA 3R: (suffix N) – Model 9000N\*

Metal Indoor/Outdoor NEMA 3: (suffix O) – Model 9000A\*

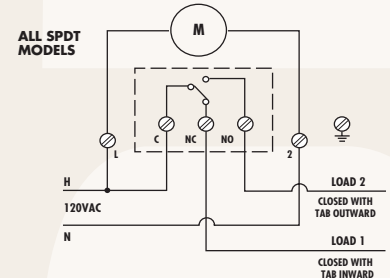
Flush, with lock and key: (suffix FL1) – Model 9001\*

Duplex – 2 standard units in one indoor/outdoor NEMA 3 metal case: (suffix DUOL) – Model 9004L\*

Bracket mounting – specify mechanism only with bracket.

Intermatic® Adapter Plate Model IAP – allows any TORK 8000 model to fit into an Intermatic case without changing enclosure

#### WIRING DIAGRAM



CAT NO	UPC CODE	SWITCH	TYPE	AMPS	H.P. RATING	MOTOR: AC VOLTAGE	MOTOR: Hz
8001	70001	SPDT	24 Hour	20	¼	120	60
8004	70002	SPDT	24 Hour	20	¼	208-277	60
8001U	70003	SPDT	24 Hour	5	¼	480/120 Trans.	60
8007	70005	SPDT	24 Hour, 7 Day Omit	20	¼	120	60
8008	70006	SPDT	24 Hour, 7 Day Omit	20	¼	208-277	60
8007V	70007	SPDT	24 Hour, 14 Day Omit	20	¼	120	60
<b>WITH RESERVE POWER</b>							
8007L	70015	SPDT	24 Hour, 7 Day Omit	20	¾	120	60
8008L	70016	SPDT	24 Hour, 7 Day Omit	20	¾	208-277	60
8007VL	70017	SPDT	24 Hour, 14 Day Omit	20	¾	120	60

24 VOLT IN ALL MODELS AVAILABLE ON SPECIFICATION.

#### SPECIFICATION WRITER'S GUIDE 8000 SERIES

The time switches shall be of duty cycle type, capable of programming at 15-minute intervals of the day. Schedule tabs shall be captive on the dial, and shall be easily set by hand without tools to obtain or to change the desired schedule. The switching condition shall be maintained when adjacent tabs are set alike. The unit shall be powered by a self-starting enclosed 120 (or 208-277) volt synchronous motor capable of continuous accurate operation. The switch mechanism shall be a self-contained unit rated at not less than 20 amps, 120 volts, single pole, double throw, and shall be readily replaceable in the field.

FOR 8001 ADD: The time switch shall be similar and equal to Tork Model 8001. FOR 8007 AND 8007V ADD: An omitting device shall be furnished as an integral part of the time switch, to enable the switching operation to be skipped for any preselected day or days of the week. The time switch shall be similar and equal to Tork Model 8007 or (8007V.) FOR 8007L ADD: (Same description as for 8007). The unit shall incorporate an integral electrically wound spring reserve power unit, which shall power the clock mechanism for up to 16 hours on a power failure. The time switch shall be similar and equal to Tork Model 8007L. FOR 8001U: The unit shall be furnished with built-in 480-120V transformer to operate timing motor in parallel with 480 volt load. The time switch shall be Tork Model 8001U.

# 8000 SERIES

## ELECTROMECHANICAL CONTROLS REPEATING VARIABLE CYCLE TIME SWITCHES

### MULTIPLE ON/OFF CYCLES PER DAY

#### APPLICATIONS

For one to many daily ON-OFF operations

- Duty Cycling
- Pumping
- Process Control
- Ventilating Fans
- Irrigation
- Laboratory Experiments

#### SPECIFICATIONS

**CONTACT RATINGS:** 20 Amps at 120 or 240V, 5 Amps at 480V, 3/4 HP at 120V AC

**TIMING MOTOR:** Heavy duty synchronous, self-starting, high torque. Power Consumption: 3 watts.

**DIAL:** Captivated tabs for setting are easily tilted in or out by hand. Switch stays ON or OFF as set when adjacent tabs are set alike.

#### 60 MINUTE DUTY CYCLE DIAL

1 to 30 ON-OFF operations per hour, 60 tabs permit 1 minute switching changes. Total Duty Cycle adjustable from 2, 3, 4, 5, 6, 10, 12, 15, 20, 30, or 60 minutes with 1 minute minimum ON and/or OFF settings.

#### 30 MINUTE, 12 MINUTE, AND 6 MINUTE DIALS

60 tabs available with minimum ON or OFF settings of 1/60th of dial speed.

**OPERATING TEMPERATURE RANGE:** -40° to +165°F. (-40° to +74°C.)

**ENCLOSURE:** See page 27 for dimensions. General purpose (NEMA 1). Drawn steel, beige enamel, with combination 1/2" and 3/4" K.O.'s on sides, bottom and back. Lockable hasp. Cover is removable and movement releases from case at finger touch for easy installation.

**OTHER MOUNTINGS:** \*When ordering special enclosures ONLY, please use model number.

Noryl® Indoor/Outdoor NEMA 3R: (suffix N) – Model 9000N\*

Metal Indoor/Outdoor NEMA 3: (suffix O) – Model 9000A\*

Flush, with lock and key: (suffix FL1) – Model 9001\*

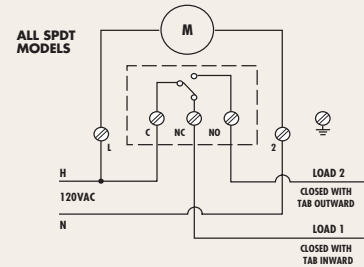
Duplex – 2 standard units in one indoor/outdoor NEMA 3 metal case: (suffix DUOL) – Model 9004L\*

Bracket mounting – specify mechanism only with bracket.

Intermatic® Adapter Plate Model IAP – allows any TORK 8000 model to fit into an Intermatic case without changing enclosure



#### WIRING DIAGRAM



CAT NO	UPC CODE	SWITCH	TYPE	AMPS	H.P. RATING	MOTOR: AC VOLTAGE	MOTOR: Hz
8601	70034	SPDT	60 Minute	20	3/4	120	60
8602	70035	SPDT	60 Minute	20	1 1/2	208-277	60
8301	70033	SPDT	30 Minute	20	3/4	120	60
8121	70032	SPDT	12 Minute	20	3/4	120	60
8061	70031	SPDT	6 Minute	20	3/4	120	60

24 VOLT IN ALL MODELS AVAILABLE ON SPECIFICATION.

#### SPECIFICATION WRITER'S GUIDE 8000 SERIES

The repeating variable cycle time switch shall be of the program tab-type, capable of programming in increments of 1/60 of one dial rotation. Program tabs shall be captive on dial and shall be easily set by hand without tools to obtain or change the desired programming schedule. The switching condition shall be maintained when adjacent tabs are set alike. The unit shall be powered with a self-starting, enclosed 120 (or 208-277) volt, synchronous motor capable of continuous accurate operation. The switch mechanism shall be a self-contained unit rated at not less than 20 amperes, 240 volt AC, SPDT, and shall be readily replaceable in the field. OPTION 1: Unit shall be furnished less case with mounting bracket (for mounting in control panel). OPTION 2: Enclosure shall be NEMA 1 surface with combination 1/2" and 3/4" knockouts on bottom, both sides, top and back (or see other mountings). There shall be at least 25 cubic inches of available space at bottom of enclosure to facilitate wiring. A slip-out arrangement will be included to permit prompt removal of the time switch mechanism. Provision shall be made for positive padlocking. Timer shall complete one dial rotation in \_\_\_ minute(s) and shall be TORK Model 8 \_\_\_ (to fit requirement).

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**POOL AND SPA CONTROLS**



**PHOTOCONTROLS**

**AIR CONDITIONING DISCONNECTS**



**DIGITAL CONTROLS**

**OCCUPANCY SENSORS**



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# W SERIES

## 7 DAY TIME SWITCHES

### DIFFERENT SCHEDULES EACH DAY

#### APPLICATIONS

- Heating
- Air Conditioning
- Display Lighting
- Ventilating
- Lighted Signs
- Storefront Lighting

SPDT switches provide for control of mechanically-held contactors.

#### SPECIFICATIONS

Offers the easiest and most accurate setting of any 7 day Time Switch by means of unique combination ON-OFF trippers, distinctive time indicator and trigger action switch tripping mechanism.

#### CONTACT RATINGS:

- 40 Amp. Tungsten, 120 VAC
- 40 Amp. Resistive, 120-277 VAC Single Phase
- 40 Amp. General Purpose, 120-277 VAC Single Phase
- 20 Amp. Inductive 120 VAC, 277 VAC Single Phase
- 1000 VA Pilot Duty 120-277 VAC.
- 2 HP (24 FLA) 120 VAC; 5 HP (28 FLA) 240 VAC

**TIMING MOTOR:** Heavy duty synchronous, self-starting high torque. Power Consumption: 3 watts.

**OPTIONAL RESERVE POWER:** Keeps dial on time up to 24 hours during power outage (16 hours on 4PST models). Add suffix L to model number. Power Consumption: 5 watts.

**AUTOMATIC OPERATION:** Minimum ON setting: 1 Hour. Minimum OFF setting: 2 Hours. (8 hours between 2 OFF settings). Models W400A and W402A offer minimum ON/OFF settings of 3½ hours. 7 day calendar dial accommodates up to 2 pairs of ON-OFF removable Trippers per day – 7 pairs are supplied. Dial markings in English, French & Spanish.

**TEMPORARY MANUAL OVERRIDE:** Standard.

**OPERATING TEMPERATURE RANGE:** -40° to +165°F. (-40° to +74°C.)

**ENCLOSURE:** See page 27 for dimensions. Surface: General Purpose (NEMA 1). Deep-drawn Steel, beige enamel, lockable hasp, with combination ½" & ¼" K.O.'s on both sides and bottom.

**OTHER MOUNTINGS:** \*When ordering special enclosures ONLY, please use model number.

- Indoor /Outdoor Metal – NEMA Type 3 (Suffix O) – Model 9006\*
- Flush Mount with lock and key – NEMA Type 1: (suffix FL5) – Model 9005\*
- Bracket mounting – specify mechanism only with bracket.



## W SERIES



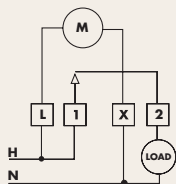


CAT NO	UPC CODE	SWITCH	AMPS	HP RATING	MOTOR: AC VOLTAGE	FREQUENCY Hz
W100	30001	SPST	40	2	120	60
W200	31001	DPST	40	2	120	60
W202	31011	DPST	40	5	208-277	60
W300	32001	3PST	40	2	120	60
W302	32002	3PST	40	5	208-277	60
W120	33001	SPDT	40	2	120	60
W220	34001	DPDT	40	2	120	60
W222	34011	DPDT	40	5	208-277	60
W400A	35001	4PST	40	2	120	60
W402A	35002	4PST	40	5	208-277	60
<b>WITH RESERVE POWER</b>						
W300L	39005	3PST	40	2	120	60
W302L	39006	3PST	40	5	208-277	60
W220L	39009	DPDT	40	2	120	60
W222L	39010	DPDT	40	5	208-277	60
W400AL	39007	4PST	40	2	120	60

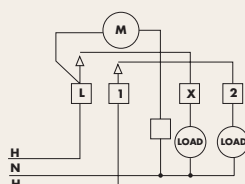
24 VOLT IN ALL MODELS AVAILABLE ON SPECIFICATION.

## WIRING DIAGRAMS

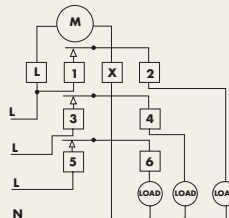
W100 (SPST)



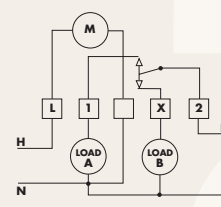
W200 (DPST)



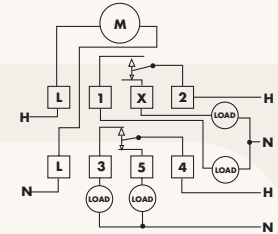
W300 (3PST)



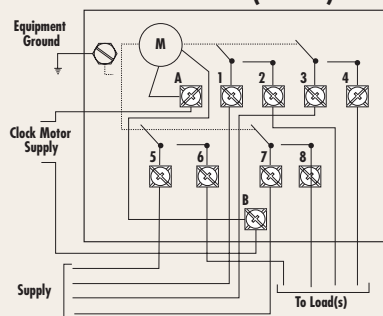
W120 (SPDT)



W220 (DPDT)



W400A (4PST)



### SPECIFICATION WRITER'S GUIDE W SERIES

Furnish and install where shown TORK Time Switch of the 7 day type, powered by a self-starting synchronous motor, capable of being set for different ON-OFF times each day of the week, to an operating accuracy of plus or minus 15 minutes of the desired time. Time Switch contacts shall be capable of switching 40 amperes per pole continuously at 277 volts and shall be SPST (DPST, 3PST, DPDT, SPDT, 4PST as required). Removable ON-OFF trippers shall make possible automatic operation with a minimum ON period of one hour and a minimum of 2 hours between one OFF operation and the next ON. Models W400 and W402 offer minimum ON and OFF settings of 3-1/2 hours. Enclosure shall be NEMA 1 surface, finished in baked beige enamel, with combination 1/2" - 3/4" knock-outs on bottom and both sides. Provision shall be made for positive padlocking. Terminals shall be capable of receiving #8 AWG wire. Time Switch shall be TORK Model W\_\_\_ (to fit requirement).  
**FOR RESERVE POWER** (Add suffix L): Spring-driven reserve shall be provided sufficient to operate the Time Switch contacts at least 24 hours after power failure (16 hour reserve power on 4PST models). On restoration of power, Time Switch shall transfer to synchronous motor driven and automatically rewind reserve power unit.

# TW SERIES

## 7 DAY TIME SWITCHES

### DIFFERENT SCHEDULES EACH DAY WITH MANUAL BYPASS SWITCHES RESERVE POWER STANDARD

#### APPLICATIONS

- Heating
- Air Conditioning
- Display Lighting
- Ventilating
- Lighted Signs
- Storefront Lighting

**NOTE: All models are designed to control a contactor circuit and not recommended for direct switching of most lighting loads.**

#### SPECIFICATIONS

**CONTACT RATINGS:** Tungsten rated at 277V.  
20 Amps per circuit,  
2 HP at 120V, 5 HP at 240V.

**MANUAL BY-PASS SWITCHES:** Single pole, 20 Amps – one per circuit.  
Factory prewired to terminal strip.  
ON-OFF-AUTO positions for each circuit is independent – will not disturb automatic settings.

**TIMING MOTOR:** Heavy duty self-starting, synchronous motor with 24 hour spring driven Reserve Power standard. Power Consumption: 5 watts.

**AUTOMATIC OPERATION:** Minimum ON setting: 1 Hour. Minimum OFF setting: 2 Hours. 7 day calendar dial accommodates up to 2 pairs of ON-OFF removable Trippers per day – 7 pairs are supplied.

**OPERATING TEMPERATURE RANGE:** -40° to +165°F. (-40° to +74°C.)

**ENCLOSURE:** See page 27 for dimensions. General Purpose (NEMA 1), beige enamel, lockable hasp, with combination ½" & ¾" K.O.'s on both sides and bottom. Optional "E" door [specify] available to replace standard removable cover when access to external by-pass switches is required.

**OTHER MOUNTINGS:** \*When ordering special enclosures ONLY, please use model number.  
Indoor /Outdoor Metal – NEMA Type 3 (Suffix O) – Model 9006\*  
Flush Mount with lock and key – NEMA Type 1: (suffix FL5) – Model 9005\*



## TW SERIES

**OPTIONAL  
"E" COVER**



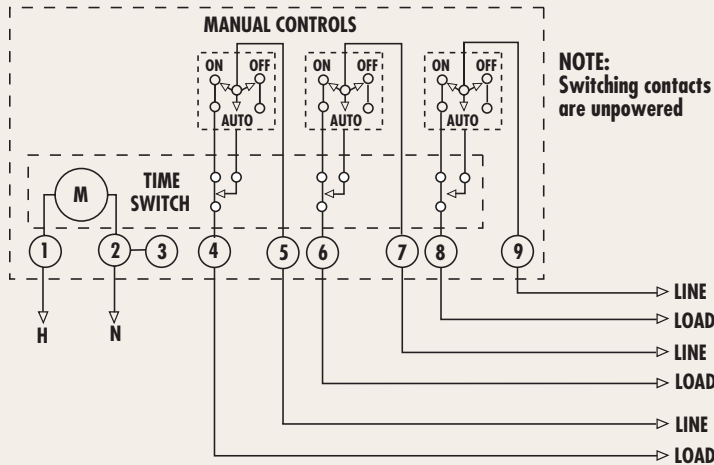
CAT NO	UPC CODE	SWITCH	AMPS	H.P RATING	MOTOR AC VOLTAGE	MOTOR: Hz	MOTOR PART NO
TW-220L	39013	DPDT	20	2	120	60	36
TW-222L	39014	DPDT	20	5	208-277	60	46
TW-300L	39015	3PST	20	2	120	60	36
TW-302L	39016	3PST	20	5	208-277	60	46

24 VOLT IN ALL MODELS AVAILABLE ON SPECIFICATION.

Add E suffix denoting extra case cover for external by-pass switches, to replace standard removable cover (only available for surface type enclosure).

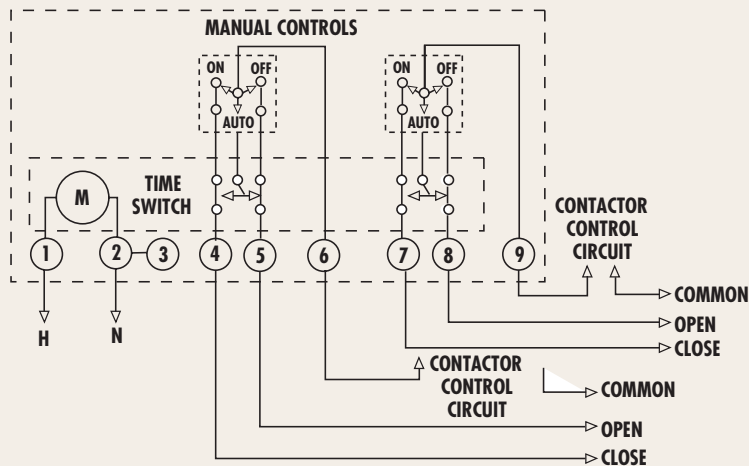
TW SERIES: NOTE: All models are designed to control a contactor circuit and not recommended for direct switching of most lighting loads. MANUAL BY-PASS SWITCHES: Single pole, 20 Amps – one per circuit. Factory prewired to terminal strip. ON-OFF-AUTO positions for each circuit is independent – will not disturb automatic settings.





## TW300L

When single line source is used, jumper terminals 1-5-7-9 and connect all commons to terminals 2 and 3.



## TW220L

Wiring shown is for mechanically-held contactors. Use CLOSE terminal only for magnetically-held contactors and to control direct loads not exceeding 2000 watts.

### SPECIFICATION WRITER'S GUIDE TW SERIES

Furnish and install where shown a TORK Time Switch of the 7 day type, capable of being set for different ON-OFF times each day of the week, to an operating accuracy of plus or minus 15 minutes of the desired time. The Time Switch shall be powered by a self-starting synchronous motor with spring-driven reserve, which shall be sufficient to operate the Time Switch contacts at least 24 hours after power outage. On restoration of power, Time Switch shall transfer to synchronous motor drive and automatically rewind reserve power unit. Time Switch shall provide for automatic operation with a minimum of one hour between an ON-OFF operation with minimum of four ON-OFF operations per day. ON-OFF operations shall be accomplished by removable ON-OFF trippers on the dial. Time Switch contacts shall be capable of carrying a minimum 20 amperes per pole continuously at 277 volts and shall be DPDT or 3PST. Manual switches shall be provided as an integral part of the Time Switch, one for each pole, and shall permit manual switching to maintained ON or OFF positions until manually returned to AUTOMATIC position. Terminal strip shall be capable of receiving #10 AWG wires. Enclosure shall be NEMA 1 surface type, finished in beige enamel, and with 1/2" - 3/4" combination knock-outs on bottom, both sides and top. Provision shall be made for positive padlocking. (Specify "E" door for manual switches to be accessible when case is locked). Shall be TORK Model TW (to fit switch requirement) or equal in general purpose NEMA 1, (general purpose metal) or (Indoor/Outdoor NEMA 3) enclosure.

# T900 SERIES 2 & 3 CIRCUIT LIGHTING CONTROL CENTERS

**COMBINES PHOTOELECTRIC AND  
7 DAY TIME SWITCH CONTROL  
DIFFERENT SCHEDULES EACH DAY,  
RESERVE POWER STANDARD**

## APPLICATIONS

- Use for general outdoor lighting such as parking lot and displays: Dusk-ON, Preset-OFF (Photoelectric control-ON, time Switch-OFF).
- Use for all night safety or security lighting: Dusk-ON, Dawn-OFF (Photoelectric control-ON, Photoelectric control OFF).
- Use for indoor lighting or HVAC: Preset-ON, Preset-OFF (Time Switch-ON, Time Switch-OFF).

**NOTE: All models are designed to control a contactor circuit and are not recommended for direct switching of most lighting loads.**



**MODEL  
2101 IS  
SUPPLIED  
WITH UNIT**

**OPTIONAL  
"E" COVER**



## CONTROLS 2 OR 3 CIRCUITS:

- CIRCUIT 1:** ON automatically at dusk, OFF at individual preset times each day, including skipping days when desired. Can be set to turn ON before dawn for early morning lighting.
- CIRCUIT 2:** ON at dusk, OFF at dawn automatically, daily.
- CIRCUIT 3:** Individual daily ON and OFF settings at desired times, including skipping any desired day or days.

## SPECIFICATIONS

**CONTACT RATINGS:** 20 Amps per Pole, 24-277 VAC (unpowered)

**MANUAL BY-PASS SWITCHES:** Single pole, 20 Amps – one per circuit. Factory pre-wired to terminal strip. ON-OFF-AUTO positions for each circuit independently & will not disturb automatic settings.

**TIMING MOTOR:** Heavy duty, self-starting synchronous motor with 24 hour spring driven reserve power standard. Power Consumption: 5 watts.

**AUTOMATIC OPERATION:** Minimum ON setting: 1 Hour. Minimum OFF setting: 2 Hours. 7 day calendar dial accommodates up to 2 pairs of ON-OFF removable trippers per day – 7 pairs are supplied.

**OPERATING TEMPERATURE RANGE:** -40° to +165°F. (-40° to +74°C.)

**ENCLOSURE:** See page 27 for dimensions. General Purpose (NEMA 1) – Steel beige enamel, lockable hasp, with combination 1/2" - 3/4" K.O.'s on both sides, top and bottom. Optional "E" door (specify) available to replace standard removable cover when access to external by-pass switches are required.

**OTHER MOUNTINGS:** \*When ordering special enclosures ONLY, please use model number.

Metal Indoor/Outdoor NEMA 3: (suffix O) – Model 9006\*

Flush with lock & key – NEMA 1: (suffix FL5) – Model 9005\*

Bracket Mounting – specify unit without case.



CAT NO	UPC CODE	TYPE	AMPS	RESERVE POWER MOTOR:		
				AC VOLTAGE	HZ	PART #
T920L	41033	2 circuit	20	120	60	36
T930L	41055	3 circuit	20	120	60	36

NOTE 1: Adding E suffix denotes case cover for external accessibility of by-pass switches, available for surface enclosure only.

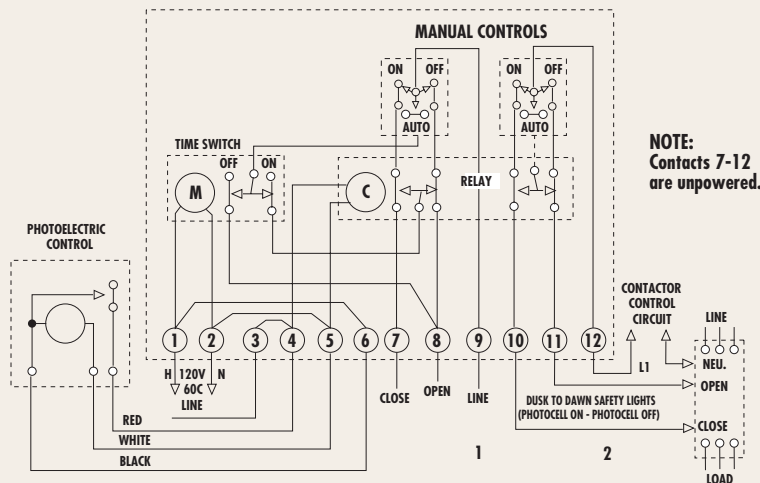
NOTE 2: All models designed to control mechanically-held and magnetic contactors, when wired in accordance with manufacturers recommendations. **Contacts are unpowered control circuits rated for 24-277V contactor coils.** See notes on wiring schematics.

NOTE 3: For momentary Contact of contactor coils, use TORK Model SMC-3D, in our Digital Controls Catalog.

## WIRING DIAGRAMS

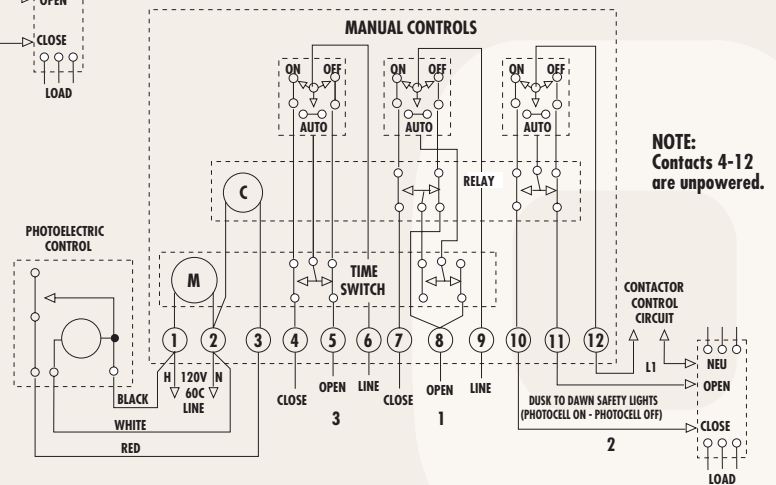
### T920L

ONLY CIRCUITS 1 AND 2 ARE INCLUDED IN T920L



### T930L

ALL 3 CIRCUITS ARE INCLUDED IN T930L



## SPECIFICATION WRITER'S GUIDE T900 SERIES

Furnish and install where shown a TORK Photo/Time Control of the 7 Day Calendar dial type, which shall be suitable to operate mechanically-held contactor(s). Photo/Time Control shall be prewired to a central terminal block which provides connecting terminals for Photocontrol and independent contactor control circuit(s). Time Switch shall function to prevent energization of lighting for preset periods each day. Time Switch dial shall permit different ON-OFF settings for each day of the week, with provision for omitting selected days. Control shall include prewired manual switching for each contactor circuit specified. Enclosure shall be NEMA 1 surface. Photocontrol to be remotely installed in appropriate outside location. It shall be fully temperature compensated and shall provide for time delay of at least 15 seconds to prevent false switching. Photocontrol shall operate control center to energize whenever natural lighting falls below 1.5 - 5.5 foot candles turn on. Spring driven reserve timing motor shall be provided sufficient to operate time switch controls at least 24 hours after power failure. On restoration of power, time switch shall transfer to synchronous motor drive and automatically rewind reserve power unit. FOR DUSK-TO-DAWN LIGHTS: Control shall provide additional contactor circuit to above specifications except that it shall be responsive to Photocontrol only. Tork Model T-920L or equal. FOR PRESET ON/PRESET OFF: Control shall provide for additional contactor circuit to above specification except that it shall be responsive to time switch only. Tork Model T-930L.

# TZ SERIES

## ASTRONOMIC TIME SWITCHES

### WITH MANUAL BYPASS SWITCHES

### RESERVE POWER STANDARD

#### APPLICATIONS

Automatic control for night lighting when the ON operation is required at sunset and it may be desirable to override the automatic schedule ON or OFF.

- Schools
- Industrial Yards
- Show Windows
- Hallway Signs
- Parking Lots
- Highway Signs
- Bridges

**NOTE:** All models are designed to control a contactor circuit and are not recommended for direct switching of most lighting loads.

#### SPECIFICATIONS

**CONTACT RATINGS:** (Tungsten rated at 277V) 20 Amps per circuit, 1 HP at 120V.

**MANUAL BY-PASS SWITCHES:** Single pole, 20 Amps – one per circuit.

Factory prewired to terminal strip. ON-OFF-AUTO positions for each circuit independently – will not disturb automatic settings.

**TIMING MOTOR:** Heavy duty, self-starting synchronous motor with 16 hour spring driven reserve power standard. Power Consumption: 5 watts.

**AUTOMATIC OPERATION:** 24 hour astronomic dial, with special cams to vary the ON and OFF settings each day according to seasonal changes of sunset and sunrise. Turns ON only at sunset – can be set 20 or 40 minutes before or after normal sunset, to adapt to local conditions. Turn OFF can be set from 8:30 P.M. to 2:30 A.M., in half-hour intervals, or at sunrise.

**OMITTING DEVICE:** 7-spoke wheel marked with days of week – 3 omitting screws (P-14) supplied.

**OPERATING TEMPERATURE RANGE:** -40° to +165°F. (-40° to +74°C.)

**ENCLOSURE:** See page 27 for dimensions. General Purpose (NEMA 1) – Beige enamel, lockable hasp, with combination 1/2" - 3/4" K.O.'s on both sides, top and bottom. Optional "E" door (specify) available to replace standard removable cover when access to external by-pass switches is required.

**OTHER MOUNTINGS:** \*When ordering special enclosures ONLY, please use model number.

Metal Indoor/Outdoor NEMA 3: (suffix O) – Model 9006\*

Flush with lock & key – NEMA 1: (suffix FL5) – Model 9005\*



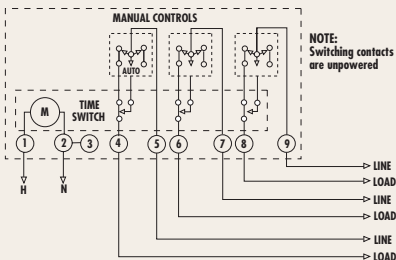
**OPTIONAL "E" COVER**



CAT NO	UPC CODE	SWITCH	AMPS	H.P. RATING	RESERVE POWER MOTOR		PART #
					AC VOLTAGE	HZ	
TZ-220L	29010	DPDT	20	1	120	60	36
TZ-222L	29011	DPDT	20		208-277	60	46
TZ-300L	29006	3PST	20	1	120	60	36
TZ-302L	29008	3PST	20		208-277	60	46

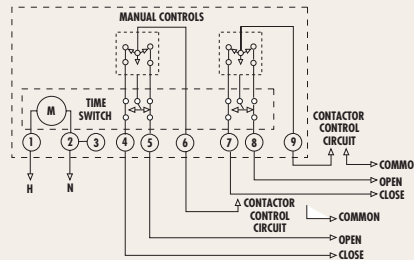
Add E suffix denoting extra case cover for external by-pass switches, to replace standard removable cover (only available for surface type enclosure).

#### WIRING DIAGRAMS



#### TZ300L

When single line source is used, jumper terminals 1-5-7-9 and connect all commons to terminals 2 and 3.



#### TZ220L

Wiring shown is for mechanically-held contactors. Use CLOSE terminal only for magnetically-held contactors and to control direct loads not exceeding 2000 watts.

#### SPECIFICATION WRITER'S GUIDE TZ SERIES

Furnish and install where shown a TORK Time Switch with Astronomic dial and day-omitting device, and a 3-way manual switch for each circuit. The Time Switch shall be powered by a self-starting synchronous motor with spring-driven reserve, which shall be sufficient to operate the time switch contacts at least 16 hours after power failure. On restoration of power, time switch shall transfer to synchronous motor drive and automatically rewind reserve. ON operation shall occur automatically at sunset (in city of use). OFF operation shall be adjustable from 8:30 P.M. to 2:30 A.M. in one-half hour increments or at sunrise. Both ON and OFF shall have a range of adjustability of 20 or 40 minutes before or after sunset and sunrise. Time Switch contacts shall be capable of carrying a minimum of 20 amperes per pole continuously at 277 volts and shall be DPST (3PST). Manual switches shall be provided as an integral part of the time switch, one for each pole, and shall permit manual switching to maintained ON or OFF positions until manually returned to AUTOMATIC position. Terminal strip shall be capable of receiving #10 AWG wires. Enclosure shall be NEMA 1 surface type, finished in beige enamel, and with 1/2" - 3/4" combination knock-outs on bottom, both sides and top. Provision shall be made for positive padlocking. (Specify "E" door for manual switches to be accessible when case is locked). Time switch shall be TORK Model TZ-\_\_\_ (to fit requirement).



# Z-KIT: ASTRONOMIC DIAL FIELD CONVERSION KIT

## APPLICATIONS

Astronomic Dial Conversion Kit provides everything necessary for quick and **easy field conversion of Models 1101, 1103, and all 7000 and 1847 Series Time Switches FROM STANDARD 24 HOUR DIAL TO ASTRONOMIC DIAL.**

The simplest way to upgrade existing Time Switch installations while providing the safest solution for night lighting:

- Show Windows
- Signs
- Parking Lots
- Poster Panels
- Highway Signs
- Bridges
- Hallways

## SPECIFICATIONS

DIAL: Different dials provide for various degrees of North Latitude. Can be set to turn ON either 20 minutes or 40 minutes before or after normal to adapt to local conditions.

Can be set to turn OFF from 8:30 P.M. to 2:30 A.M. or at sunrise.

**HOW TO ORDER:** \*SPECIFY Z KIT AND CITY OF USE OR LATITUDE. Kit includes the Astronomic Dial, the actuator (which advances the yearly gear) and simple installation and setting instructions.

**ZKIT      26001\*      ASTRONOMIC DIAL KIT**

# RESERVE POWER TIMING MECHANISMS

## APPLICATIONS

During power outages, precision spring mechanism takes over instantly and automatically. Keeps time switch on time up to 16 hours on 24 hour models and up to 24 hours on 7 day models.

No resetting needed after resumption of power; spring mechanism rewinds quickly and automatically. In case of frequent outages, reserve need not be fully rewind.

## SPECIFICATIONS

CAN BE FIELD INSTALLED\*\*

Exceptional TEMPERATURE RANGE of  $-40^{\circ}$  to  $+165^{\circ}$  F ( $-40^{\circ}$  to  $+74^{\circ}$ C) is possible as unit does NOT operate on batteries.

POWER CONSUMPTION: 5 watts.

## NOTES

For Models W400A and W402A, add suffix I (order 36I or 46I) When replacing reserve power motors for models 8320L or 8620L – order 36L or 46L.

The Reserve Power Motor is not adaptable to Model 4277 and 8001U, 8150U, or variable cycling timers.

For other voltages and frequencies, consult factory.

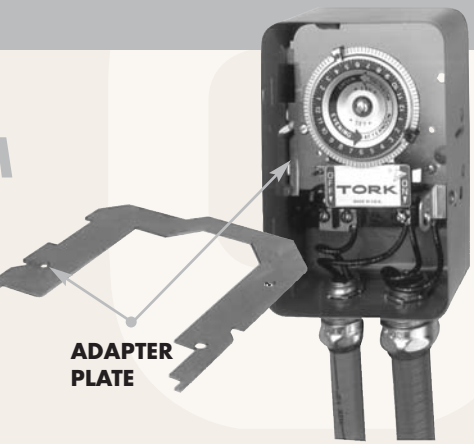
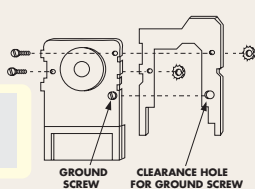
For field conversion of standard 1100, 7100, and 7200 series units, you must also order Model 63100 enclosure to accommodate the larger unit (not necessary with 3PST models)

\*\* Except Models W400/W402 – return to factory for conversion.

CAT NO	UPC CODE	MOTOR AC VOLTAGE	HZ
36	95016	120V	60
46	95017	208-277	60

# INTERMATIC® ADAPTER PLATE FOR FITTING A TORK MECHANISM INTO AN ALREADY INSTALLED INTERMATIC® CASE

**IAP    95031    INTERMATIC® ADAPTER PLATE**



TO REPLACE INTERMATIC®	USE TORK MODEL NO	TO REPLACE INTERMATIC®	USE TORK MODEL NO
T101	1101M + IAP	T171	7100M + IAP
T102	1102M + IAP	T172	7102M + IAP
T103	1103M + IAP	T173	7200M + IAP
T104	1104M + IAP	T174	7202M + IAP
T101M201	1101FM-M + IAP	T175	7120M + IAP
T104M201	1104FM-M + IAP	T176	7122M + IAP

# 701A & 711A SERIES

## 24 HOUR IN-WALL TIME SWITCHES

### MULTIPLE ON/OFF SETTINGS

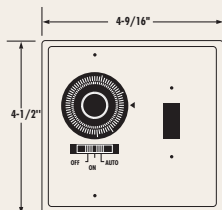


#### APPLICATIONS

Controls porch, patio, doorway, pool, or other outdoor "security" type lighting. Use for control of interior lighting to give the home a "lived-in" look. Operates attic fans and other motor driven devices such as pool and spa circulating pumps.

#### COMMON FEATURES

- AM/PM dial format
- Easy-to-set sliding tabs capable of up to 24 ON/OFF cycles (30 minute settings).
- Manual OFF-ON-AUTO override switch will not disturb automatic settings.
- Choice of white or almond color
- Supplied with wallplate, screws, and twist on wire connectors.
- Clamshell packaging



**TWO GANG MODEL (701A-2G) AVAILABLE**

#### CONTACT RATINGS

##### SPECIFICATION GRADE: 701A SERIES

125VAC, 60Hz, 20A Resistive,  
General Purpose,  
1250W Tungsten, 1/2 HP

##### BUILDERS GRADE: 711A SERIES

125VAC, 60Hz, 15A Resistive,  
General Purpose,  
1000W Tungsten, 1/2 HP

CAT NO	UPC CODE	COLOR
701A	10113	WHITE
701AA	10120	ALMOND
701A-2G	10111	WHITE
711A	10114	WHITE
711AA	10117	ALMOND

#### SPECIFICATION WRITER'S GUIDE 701A SERIES

Furnish and install a TORK electromechanical, in-wall time switch capable of up to 24 ON/OFF cycles per day in 30 minute increments, settable using sliding tabs. A manual OFF-ON-AUTO override switch shall be provided. Clock input shall be 125VAC, 60Hz. Unit shall be capable of switching 20A resistive & general purpose, 1250 watt tungsten, or 1/2 HP motor loads and be SPST. Unit shall be provided with a wallplate, screws, and twist-on wire connectors. Install TORK Model 701A (701AA) with single gang wallplate or (TORK Model 701A-2G with two gang wallplate).

#### SPECIFICATION WRITER'S GUIDE 711A SERIES

Furnish and install a TORK electromechanical, in-wall time switch capable of up to 24 ON/OFF cycles per day in 30 minute increments, settable using sliding tabs. A manual OFF-ON-AUTO override switch shall be provided. Clock input shall be 125VAC, 60Hz. Unit shall be capable of switching 15A resistive & general purpose, 1000 watt tungsten, or 1/3 HP motor loads and be SPST. Unit shall be provided with a wallplate, screws, and twist-on wire connectors. Install TORK Model 711A (711AA).

# M500 SERIES

## IN-WALL MOTOR OPERATED INTERVAL TIME SWITCHES

#### APPLICATIONS

Ideal for applications where quiet operation is desired. To set the time duration required, rotate the knob, which causes the switch contacts to be made. The electric motor then takes over and breaks the circuit at the end of the time cycle. Fits standard electrical junction box and comes with switch plate.



#### MANUAL CONTROL:

Units can be turned ON or OFF manually for temporary or permanent control.

#### CONTACT RATINGS

125VAC, 60Hz, 15A Resistive,  
General Purpose,  
1250W Tungsten, 1/2 HP

**NOTE: Requires neutral wire.**

CAT NO	UPC CODE	TIME CYCLE	COLOR OF PLATE
M560MW	10115	60 MIN	WHITE
M560MA	10118	60 MIN	ALMOND
M512HW	10116	12 HOURS	WHITE
M512HA	10119	12 HOURS	ALMOND

#### SPECIFICATION WRITER'S GUIDE M500 SERIES

Furnish and install a TORK in-wall motor operated interval time switch capable of 60 minute (M560M Series) or 12 hour (M512H Series) time cycles. Electric motor shall control the time cycle. Temporary or permanent manual ON/OFF control shall be provided. Clock input shall be 125VAC, 60Hz. Unit shall be capable of switching 15A resistive & general purpose, 1250 watt tungsten, or 1/2 HP motor loads. Install TORK Model M5\_ \_ \_.



# C500 AND A500 SERIES

## IN-WALL SPRING WOUND INTERVAL TIME SWITCHES

**AUTOMATICALLY TURNS OFF LOAD AT END OF TIMED CYCLE**

**TORK**  
ELECTROMECHANICAL  
CONTROLS



**CONTACT RATINGS:**

- **FOR COMMERCIAL AND INDUSTRIAL USE**
- **METAL WALLPLATE INCLUDED**

**FITS DECORATOR OR STANDARD SWITCHPLATE (NOT SUPPLIED).**

**IVORY, WHITE AND ALMOND COLORS**

### APPLICATIONS

- Ventilating Fans • Appliances • Heat Lamps
- Lighting • Thermostats

Convenient for installation in hotels, motels, hospitals, schools, offices, industrial plants, private homes.

### SPECIFICATIONS:

Unit is mechanically spring wound, requiring no electricity to operate. Switch contacts are made when knob is rotated and break circuit at the end of a timed cycle, thereby turning OFF load (N.O. contacts).

Models with "hold" feature allow switch contacts to remain closed for constant ON of load. Shaft is centered on the face of unit. A wire strip gauge is provided on the back of each unit.

- SPST 50/60 Hz
- 20 AMP inductive/resistive @ 125 VAC
- 10 AMP inductive/resistive @ 277 VAC
- 7 AMP Tungsten 125 VAC
- 1 HP 125 VAC
- 2 HP 250 VAC

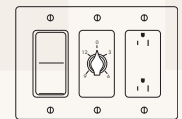
**OPERATING TEMPERATURE RANGE:** 32° - 122°F (0° - 50°C)

**HUMIDITY:** 0% - 90% RH (non-condensing)

**CAUTION:** This timer is not to be used in precision timing applications where inaccurate timing could have dangerous consequences (i.e., sun lamp, sauna, etc.)



**USING  
DECORATOR  
SWITCHPLATE**



**USING  
STANDARD  
SWITCHPLATE**



TIME CYCLE	METAL FACEPLATE			IVORY FACEPLATE			WHITE FACEPLATE			ALMOND FACEPLATE	
	WITH HOLD	WITHOUT HOLD	UPC CODE	WITH HOLD	WITHOUT HOLD	UPC CODE	WITH HOLD	WITHOUT HOLD	UPC CODE	WITHOUT HOLD ONLY	UPC CODE
5 minutes		<b>C505M</b>	15500		<b>A505M</b>	15012		<b>A505MW</b>			
0-15 minutes	<b>C515MH</b>		15502	<b>A515MH</b>		15020	<b>A515MHW</b>				
0-15 minutes		<b>C515M</b>	15501		<b>A515M</b>	15013	<b>A515MW</b>		<b>A515MA</b>	15127	
0-30 minutes	<b>C530MH</b>		15504	<b>A530MH</b>		15021	<b>A530MHW</b>				
0-30 minutes		<b>C530M</b>	15503		<b>A530M</b>	15014	<b>A530MW</b>		<b>A530MA</b>	15128	
0-60 minutes	<b>C560MH</b>		15506	<b>A560MH</b>		15022	<b>A560MHW</b>				
0-60 minutes		<b>C560M</b>	15505		<b>A560M</b>	15015	<b>A560MW</b>		<b>A560MA</b>	15129	
0-2 hours		<b>C502H</b>	15507		<b>A502H</b>	15016	<b>A502HW</b>				
0-4 hours		<b>C504H</b>	15509		<b>A504H</b>	15017	<b>A504HW</b>				
0-6 hours	<b>C506HH</b>		15512	<b>A506HH</b>		15025	<b>A506HWW</b>				
0-6 hours		<b>C506H</b>	15511		<b>A506H</b>	15018	<b>A506HW</b>				
0-12 hours	<b>C512HH</b>		15514	<b>A512HH</b>		15026	<b>A512HWW</b>				
0-12 hours		<b>C512H</b>	15513		<b>A512H</b>	15019	<b>A512HW</b>				

### SPECIFICATION WRITER'S GUIDE C500, A500 SERIES

Furnish and install where indicated a mechanical spring wound timer which requires no electricity to operate the timing mechanism. Unit shall be supplied with shaft in center. Device must be capable of fitting a standard 1 1/2 inch deep wall box (for A500 series and accept a rectangular decorator wallplate or standard toggle switch plate (or for C500 series include a metal wallplate) and be easily mountable on a panel board. Switch contacts shall break current carrying contacts at the end of timed cycles. Various timed cycles shall be available for up to 12 hours, with or without "HOLD" feature for constant ON. Timer shall be TORK Model A5\_\_\_ (or C5\_\_\_) to fit requirement.

# 400 SERIES: PLUG IN LAMP AND APPLIANCE TIMERS

	DESCRIPTION	CATALOG NO	UPC CODE
	<b>401A</b> <b>24 HOUR MECHANICAL TIMER</b> 96 Captive Tabs, POLARIZED plug and receptacle. 125VAC, 15A Resistive, General Purpose; 1000W Tungsten	401A	16001
	<b>402A</b> <b>24 HOUR MECHANICAL TIMER</b> 96 Captive Tabs, GROUNDED plug and receptacle. 125VAC, 15A Resistive, General Purpose; 1000W Tungsten	402A	16002
	<b>407A</b> <b>7 DAY MECHANICAL TIMER</b> 84 Captive Tabs (12 per day), GROUNDED plug and receptacle. 125VAC, 15A Resistive, General Purpose; 1000W Tungsten	407A	16003
	<b>437R</b> <b>7 DAY MECHANICAL RANDOM/VACATION TIMER</b> No tabs to set, factory preset to random ON/OFF times. POLARIZED plug and receptacle. 125VAC, 15A Resistive, General Purpose; 1000W Tungsten	437R	16005
	<b>451A</b> <b>24 HOUR MECHANICAL TIMER</b> 48 Captive Tabs, GROUNDED plug and receptacle. 125VAC, 15A Resistive, General Purpose; 1/3HP	451A	16006

# 600 SERIES: OUTDOOR TIMERS

	DESCRIPTION	CATALOG NO	UPC CODE
	<b>601A: ONE OUTLET</b> <b>24 HOUR MECHANICAL OUTDOOR TIMER</b> 96 Captive tabs, GROUNDED plug and receptacle. Outlet on bottom of timer with 18" cord. 125VAC, 15A Resistive, 1250W Tungsten	601A	16020
	<b>602A: TWO OUTLET</b> <b>24 HOUR MECHANICAL OUTDOOR TIMER</b> 96 Captive tabs, GROUNDED plug and receptacle. 2 Outlets on bottom of timer with 18" cord. 125VAC, 15A Resistive, 1250W Tungsten	602A	16021
	<b>611A: HEAVY DUTY ONE OUTLET</b> <b>24 HOUR MECHANICAL OUTDOOR TIMER</b> 96 Captive tabs, GROUNDED plug and receptacle. Outlet on bottom of timer with 24" cord. 125VAC, 15A Resistive, General Purpose, 1250W Tungsten, 1/3HP	611A	16022
	<b>651A: ONE OUTLET</b> <b>PHOTOCELL CONTROLLED MECHANICAL OUTDOOR TIMER</b> ON; OFF; ON at dusk, OFF 2, 4, 6, 8 hours later or at dawn. GROUNDED plug and receptacle with outlet on bottom, 6.5" cord. 125VAC, 15A Resistive, General Purpose, 1000W Tungsten.	651A	16024
	<b>652A: TWO OUTLETS</b> <b>PHOTOCELL CONTROLLED MECHANICAL OUTDOOR TIMER</b> ON; OFF; ON at dusk, OFF 2, 4, 6, 8 hours later or at dawn. GROUNDED plug and receptacle with two outlets on bottom, 6.5" cord. 125VAC, 15A Resistive, General Purpose, 1000W Tungsten	652A	16026
	<b>806A: SIX OUTLETS (FOUR TIMED &amp; TWO DIRECT)</b> <b>24 HOUR MECHANICAL OUTDOOR TIMER WITH STAKE</b> 96 Captive tabs, GROUNDED plug and receptacle. Timer with cover and 6 ft. cord and 15A circuit breaker. Stake for driving into ground. 125VAC, 15A Resistive, General Purpose, 1250W Tungsten, 1/3HP	806A	16028

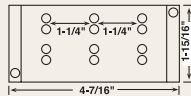


## ACCESSORIES

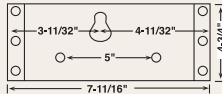
CAT NO	UPC CODE	DESCRIPTION
PK100	95110	Parts Kit includes parts cabinet and 24 P47, 5 P49, 28 P69, 10 P14, 4 101M motors, 2 201M motors.
P-47	95001	Pair Standard Screw-On Type Trippers for 1100 Series (except FM models) and all 7000 and 1800 Series models. Does not advance day omitting wheel.
K24	95026	Kit of 24 pairs of P-47 Trippers.
PF48	95003	Pair of standard trippers for 1100 FM Series.
P-49	95002	Special ON tripper for 7000 Series to also advance day omitting wheel. Standard OFF tripper included.
P-69	85003	Screw-On Type Trippers reversible ON and OFF for use on all models with 6½" dia. 7 day dial (except W400 Series). Available only in packages of 7 pairs.
P-69I	85004	ON and OFF Trippers for W400 Series. Available only in packages of 7 pairs.
P-41	95400	ON & OFF trippers for plug-in timers – Models 401, 421, 431.
P-14	95006	Omitting screws for inserting into tapped hole of appropriate spoke of day omitting wheel. Color: Black.
P-26	95007	Selector screws for 4000 (Double Dial) Series – Provides Extra Operations Daily. Color: Copper
KN500	95027	For ½" conduit. Grounding bushings for use with Noryl enclosures and metal conduit. Fits #10-14 AWG ground wires. 2 bushings per kit.
KN750	95028	For ¾" conduit. Grounding bushings for use with Noryl enclosures and metal conduit. Fits #10-14 AWG ground wires. 2 bushings per kit.
64140	95008	480/120v Step-down Transformer only for 480v power input. 7.8 VA (for use with Model 7100, 8001, 8007 only).
71018	95009	24/120V Step-up Transformer. 50VA.

**Mounting Brackets for mounting unit less case. Specify model number, date of manufacture, and whether model mounts by snapping into case, or with screws.**

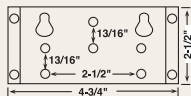
MODEL NO: 65447  
UPC CODE: 95020  
All 24 hour models except 3-pole, including reserve power models



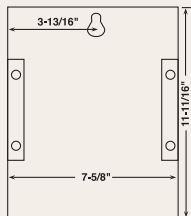
MODEL NO: 64040 (CK-7300)  
UPC CODE: 95023  
24 Hour 3-pole for Models 7300, 7302.



MODEL NO: 64039  
UPC CODE: 95021  
for W SERIES 7 Day Models:  
W100, W200, W202, W120, W220, W222.



MODEL NO: 62153-1  
UPC CODE: 95022  
W SERIES 7 Day 3-pole for Models W300, W302.



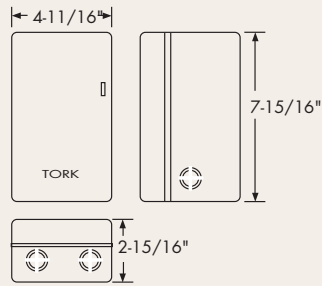
CAT NO	UPC CODE	DESCRIPTION
70159	95050	W. Dial for T900, TW, 1847AW, and W controls except W400A
73713-4	95051	24 hour dial for 7100 Series
73713-5	95052	24 hour dial for 1100 Series, 1847A Series
53032-17	95053	FM Series dial for 1100FM; 1100FMM
64041	95054	8001 Dial
64041-1	95055	8007 Dial
64041-2	95056	8601 Dial
64041-6	95059	8301 Dial
64041-5	95058	8121 Dial
64041-4	95057	8061 Dial
73855	95060	Wallplate for 701A
73856-1	95061	Wallplate for 701A-2G
90031-17	95062	Relay for T-900 Series
74240-2	95063	White Knob for A500 Series
74240-1	95064	Ivory Knob for A500 Series
74240-3	95065	Black Knob for C500 Series
59201-1	95024	Micro-switch for 8001 and M8000 units
59201-26	95025	Micro-switch for 8007 units
73192-3	95030	Adapter plate allows DG series to snap into 7 day (W Series) Time Switch Enclosure

# ENCLOSURE & MECHANISM DIMENSIONS

## METAL INDOOR NEMA 1 #68229

STD. FOR MODELS

1101	7200	8121
1102	7202	8301
1103	7120	8601
1104	7122	8602
1101FM	8001	
1104FM	8004	
7100	8061	
7102		



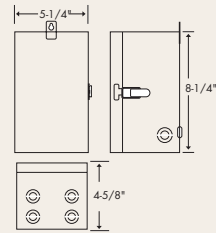
## METAL INDOOR/OUTDOOR NEMA 3 Model 9000A - Suffix O

STD. FOR MODELS

7300, (L)	7302Z
7302, (L)	7300ZL
7300Z	7302ZL

AVAILABLE FOR MODELS

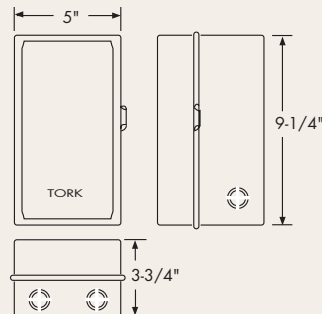
1101	7200, (L,Z,ZL)	1847AL	8007V
1102	7202, (L,Z,ZL)	1847AZL	8061
1103	7120, (L,Z,ZL)	8001	8121
1104	7122, (L,ZL)	8004	8301
1101FM	7220, (L)	8001U	8601
1104FM	7222, (L)	8007	8602
7100	1847A	8007L	
7102	1847AZ		



## METAL INDOOR NEMA 1 #63100

STD. FOR MODELS

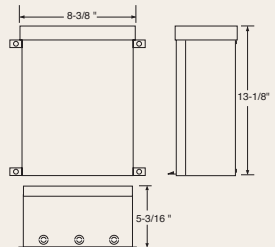
7220, (L)	1847AL
7222, (L)	1847AZL
7200L	8007
7202L	8007L
7120L	8007V
1847A	8150
1848A	8150U
1849A	
1847AZ	



## METAL INDOOR/OUTDOOR NEMA 3 Model 9006 - Suffix O

AVAILABLE FOR MODELS

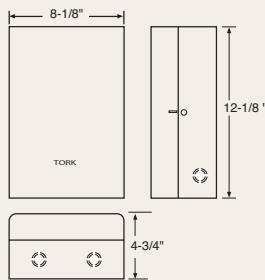
W100	W220	TW220L
W200	W222	TW300L
W202	W220L	T920L
W300	W222L	T930L
W302	W300L	1847AW
W120	W302L	1847AWL



## METAL INDOOR NEMA 1 #63016-1

STD. FOR MODELS

TZ220L	W302L
TZ300L	TW220L
W300	TW300L
W302	T920L
W300L	T930L



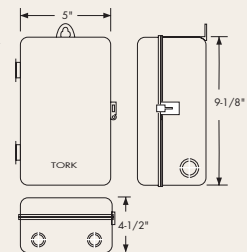
## NORYL® INDOOR/OUTDOOR NEMA 3R Model 9000N - Suffix N

STD. FOR MODELS

7200Z, (L, ZL)
7202Z, (L, ZL)
7120Z, (L, ZL)
7122Z, (L, ZL)

AVAILABLE FOR MODELS

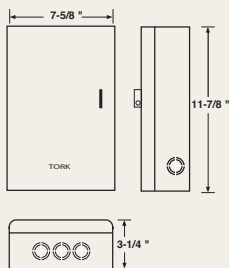
1101	7102	7222, (L)	8001U
1102	7200, (L)	1847A	8061
1103	7202, (L)	1847AZ	8121
1104	7120, (L)	1847AL	8301
1101FM	7122, (L)	1847AZL	8601
1104FM	7220, (L)	8001	8602
7100		8004	



## METAL INDOOR NEMA 1 #70100

STD. FOR MODELS

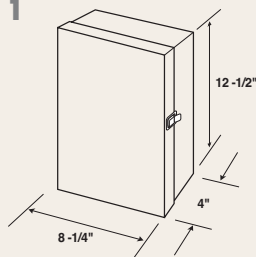
W100	W222
W200	W220L
W202	W222L
W120	1847AW
W220	1847AWL



## METAL INDOOR NEMA 1 for W400 Series

STD. FOR MODELS

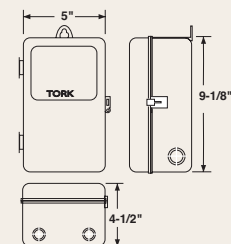
W400A	W400AL
W402A	



## NORYL® & LEXAN® NEMA 3R INDOOR/OUTDOOR Model 9000NC

STD. FOR MODELS

1101NC
1103NC
1104NC



## METAL DUPLEX NEMA 3 INDOOR/OUTDOOR Model 9004L - Suffix DUOL

STD. FOR MODELS

1101D 1101DF

1114D 1114DF

1104D 1104DF

AVAIL. FOR MODELS

1101 7100

1102 7102

1103 7200, (L,Z,ZL)

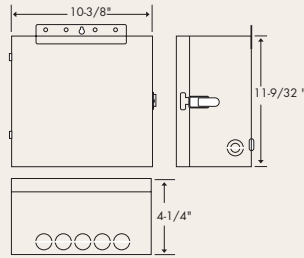
1104 7202, (L,Z,ZL)

1101FM 7120, (L,Z,ZL)

1104FM 7122, (ZL)

7220, (L)

7222, (L)



## METAL FLUSH NEMA 1 Model 9001 - Suffix FL1 Model 9002 - Suffix FL2\*

AVAILABLE FOR MODELS

1101 7200, (L,Z,ZL)

1102 7202, (L,Z,ZL)

1103 7120, (L,Z,ZL)

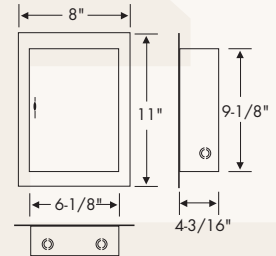
1104 7122, (ZL)

1101FM 7220, (L)

1104FM 7222, (L)

7100 8000 Series

7102



\*Model 9002 (FL2) - Depth is 4-9/16"  
For Models 7300 and 7302

### MODELS:

1101 1847A

1102 1848A

1103 1849A

1104 1847AZ

1101FM 1848AZ

1104FM 1849AZ

7100 1847AL

7102 1848AL

7200, (L,Z,ZL) 1849AL

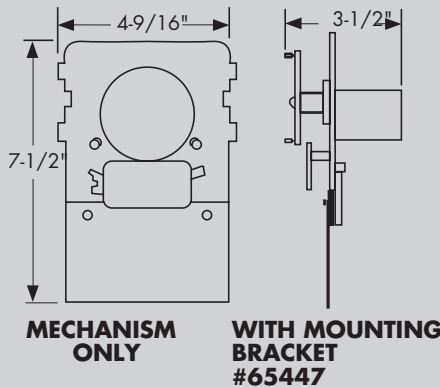
7202, (L,Z,ZL) 1847AZL

7120, (L,Z,ZL) 1848AZL

7122, (ZL) 1849AZL

7220, (L) 1849AZL

7222, (L)



### MODELS

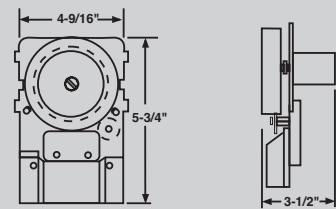
8601

8602

8301

8121

8061



MECHANISM  
ONLY

WITH MOUNTING  
BRACKET  
#65447

### MODELS

W100

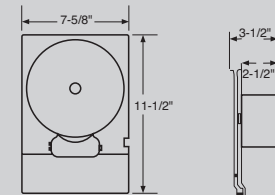
W200

W202

W120

W220

W222



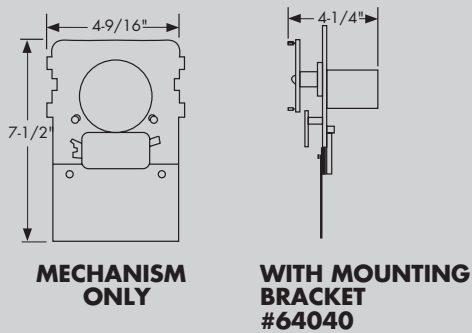
MECHANISM  
ONLY

WITH MOUNTING  
BRACKET  
#64039

### MODELS:

7300, (L,Z,ZL)

7302, (L,Z,ZL)



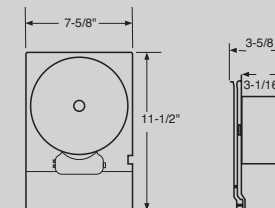
MECHANISM  
ONLY

WITH MOUNTING  
BRACKET  
#64040

### MODELS

W300

W302



MECHANISM  
ONLY

WITH MOUNTING  
BRACKET  
#62153-1

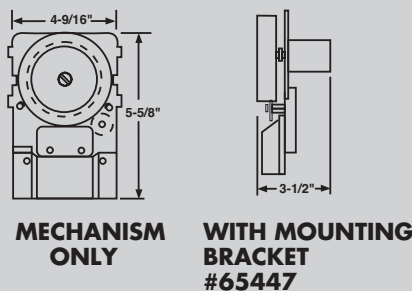
### MODELS

8001

8004

8007

8008



MECHANISM  
ONLY

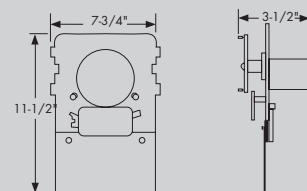
WITH MOUNTING  
BRACKET  
#65447

### MODELS

1847AWL

1848AWL

1849AWL



MECHANISM  
ONLY

WITH MOUNTING  
BRACKET  
#65447

# FEATURES OF TORK® ELECTROMECHANICAL CONTROLS

## EASY TO SET DIAL ASSEMBLY



Tork's 24 hour dial assembly allows the user to set the time switch more accurately, easily moving it by hand in small increments. Dial can provide up to 12 ON/OFFs per day with cycles as short as 20 minutes. AM and PM settings are easy to see by the light and dark areas of the dial.

## SPRING WOUND RESERVE



During power outages, precision spring mechanism takes over instantly and automatically. Keeps time switch on time up to 16 hours on 24 hour models and up to 24 hours on 7 day models. No resetting is needed after resumption of power – and field installation is easy!

## CAPTIVE TABS – DUTY CYCLE DIAL



For applications requiring many ON/OFF cycles per day, captive tabs on this dial tilt in and out easily using fingertip!

## ENCLOSED MOTOR



Enclosed time switch motor's gears are protected from dust and damage.

## FIELD UPGRADEABLE ASTRONOMIC DIALS



All Tork 24 Hour Time Switches can be upgraded in the field to astronomical operation.

## REMOVEABLE DOORS



Tork time switches feature removeable doors to provide easy access for installation and wiring.



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## TERMS OF SALE

### TORK VENDOR NUMBER: 786261

1. Prices are F.O.B. our plant.
2. Prices do not include any sales tax.
3. Freight charges will be prepaid on all orders \$250.00 and over shipping within continental USA using standard shipping methods and service.
4. Minimum order – \$100.00.
5. Claims for shortage, erroneous charges or price corrections shall be deemed waived unless made in writing, delivered to NSi within 30 days of invoice.
6. Terms of payment – 2% 10<sup>th</sup> prox. net 25<sup>th</sup> following.
7. Warranties – NSi guarantees all products to be free of defects in material and workmanship for a period of 1 year from date of sale. Any claims for defective material must be agreed to in writing by NSi. Defective material will be replaced on an F.O.B. – our factory basis. NSi disclaims the implied warranty of fitness for a particular application.

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NSi can provide many other products for special applications which are not listed in this catalog. If you require an item which you do not find listed, please contact us. We would be pleased to provide a quotation upon receipt of a drawing or a sample.

## GUARANTEE

It is our goal to provide extraordinary products and service on a daily basis. If our products or service do not meet with your satisfaction, please let us know immediately and we promise to make every reasonable effort to remedy the situation.

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**TORK TECHNICAL INFORMATION: 888.500.4598**  
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