# PERCENTAGE TIMER

# MODEL#:

MAINTENANCE:



The central will cycle loads on/off based on the setting of the control knobs as long as input power is supplied. The control will start with the on time cycle after initial power is applied to the control. The unit is simple to set consisting of only two dials: one CYCLE TIME dial to set time durations and one % ON dial to set the percentage of ON time for the selected

Total cycle duration can be set from 15 seconds minimum to 24 hours maximum, The % ON setting for each cycle duration is independently adjustable from 0% (continuous OFF) to 100% (continuous ON) in 32 increments

POWER REQUIREMENTS:	Inputs: 120 and 240 VAC (+10%-15% at 60 Hz) Outputs: SPDT relay with 20 Amp N.O. and 10 Amp N.C. general purpose at 120,240 VAC; N.O. 1 HP at 120 VAC, 2HP at 240 VAC			
Environmental:	Operating Temperature Range: 32°F to 122°F (0°C to 50°C). Operating Humidity Range: Relative humidity up to 100% Water Resistance: The control will be capable of direct low-pressure water wash down according to NEMA 4X specification.			
CONTACT RATING:	VOLTAGE	LOAD TYPE	N.O. CONTACTS	N.C. CONTACTS
	120-240 VAC	Resistive	20 A	10 A
	120-240 VAC	General Purpose	20 A	10 A
	120 VAC	Motor	1 HP	1/4 HP
	208-240 VAC	Motor	2 HP	½ HP
	120-240 VAC	Pilot Duty	470 VA	275 VA
ENCLOSURE:	NEMA type 4X (indoor use only) enclosure standard (EJWT). Watertight cover with gasket is flame retardant UV stabilized and non-metallic. In grey.			
MOUNTING:	Control is compatible for mounting to Tork's NEMA 4X nonmetallic enclosure			
DIALS:	Sealed from external access ! CAUTION !			
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### RISK OF ELECTRIC SHOCK

Disconnect power at main panel prior to installing or servicing this lighting control or the equipment connected to it.

# **INSTALLATION & WIRING INSTRUCTIONS**

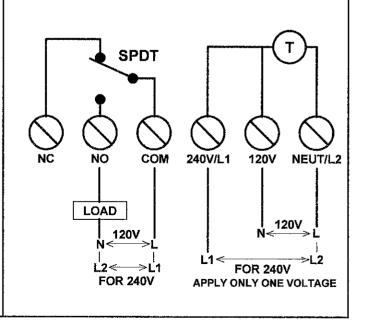
Note: Wiring connections are made to a six-position terminal block. All terminals accept AWG #18 to AWG #12 wire.

to clean the enclosure

1. Turn off all power to the timer circuit at the distribution panel before beginning the installation.

Cleaning: Use only mild detergent and water

- 2. The EJWT box contains knockouts on two sides. Determine the most convenient way to mount the box to the conduit and remove the appropriate knockout. To secure the box to a fixed location, use at least two of the four box mounting knockouts located on the back of the box.
- 3. Wire timer for either 120 VAC or 240 VAC as shown by the wiring diagram. Wire the load to the timer as shown in the wiring diagram, noting the contact load type and ratings shown.
- 4. Securely attach the timer to Tork's NEMA 4X (for indoor use only) non-metallic enclosure with the included screws.



# **ON/OFF TIME SETTING INSTRUCTIONS**

## FOR LOADS USING NORMALLY OPEN (NO) RELAY CONTACTS

### To set the ON time:

- 1. Select the total cycle time between 15 seconds and 24 hours, using the dial on the left.
- 2. Set ON time duration using the right dial (% ON). The ON time duration is a percentage of the total cycle time chosen in the previous step. Set percentage to desired length of time that the load (fan, light, etc.) is to be turned on. The control will turn the load on for the defined % and then off until the total cycle time is reached, then the process is repeated until power is interrupted or the program is changed. For example to cycle a load on for 30 seconds and off for 4 minutes and 30 seconds, one would choose a five minute cycle time with the left dial and a 10% cycle time with the right dial. See Table 2 for all possible ON/OFF time settings.
- 3. The green ON LED will blink once a second when the load circuit is ON and has a timed duration. The red OFF LED will blink once a second when the load circuit is OFF and has a timed duration.

#### To set for CONTINOUS ON:

To set the timer for a CONTINUOUS ON condition, align the pointer on the % ON dial to be 100% ON position (approximately 12:00 o'clock position). The green ON LED will illuminate steadily when the timer is set for a continuous ON condition.

## To set for CONTINOUS OFF:

To set the timer for a CONTINUOUS OFF condition, align the pointer on the % ON dial to be 0% OFF position (approximately 12:00 o'clock position.) This position takes precedence over all other active timing or continuous settings of the timer. The red OFF LED will illuminate steadily when the timer is set for a continuous OFF conditions.

## FOR LOADS USING NORMALLY CLOSED (NC) RELAY CONTACT:

The normally closed relay contact is provided to enable a secondary load to be switched at opposite time intervals of the main load (the load controlled by the normally open contact.) When the load that is connected to the normally open relay contact is OFF, when the load that is connected to the normally open relay contact is OFF, the load that is connected to the normally closed contact is ON.

## PROGRAMMING & OPERATING THE TIMER

#### **OPERATING PARAMETERS**

- The control will repeat cycle within 1% of timing range.
- The control will automatically reset after a 1 second power interruption. The control will resume the cycle starting with the ON time after power has been restored.

ONE YEAR LIMITED WARRANTY: If this product fails because of a manufacturing defect within one year after purchase, we will, at our option, either repair or replace it at no charge. Our warranty does not cover damage caused by accident, abuse or misuse. We assume no further liability with respect to the sale or use of this product. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE WARRANTY OF MERCHANTABILITY. We make no warranty with respect to the fitness of any goods for the users particular appplication. This warranty gives you specific legal rights, and you also may have other rights which vary from state to state.