DPT-P-J

- All Digital Settings
- 1, 15, 30 & 60 Minute Cycle Times
- Running Hour Meter
- Resettable Running Hour Meter
- 5% to 95% Cycling
- Restart Timer
- Count Down Timer
- Multiple Mounting Options

Digital Percentage Timer

Pump Jack

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Purpose

The purpose of the DPT (Digital Percentage Timer) is to proportion the amount of On time (percentage of time On) based on a fixed total cycle time (total of On and Off times).

Operation

When supply voltage is applied to the DPT, the output contacts energize and the total cycle time is initiated along with the percentage of total cycle time that the output contacts will be energized. When the On time percentage is completed, the output contacts are de-energized. As long as supply voltage is available, the DPT will continue to cycle On and Off based on the percentage of On time and total cycle time.

For example if the total cycle time is 30 minutes and the DPT is set for a 20% of On time, when supply voltage is applied the output contacts will be energized for 6 minutes (20% of 30 minutes) and then de-energize for 24 minutes (80% of 30 minutes). The total cycle time will always be 30 minutes in this example.

Features

- All digital settings (no knobs)
- Digital display of the time remaining. This is a count down timer showing the time remaining until the output contacts transfer from open to closed or closed to open.
- Digital selection of Total Cycle Time (1, 15, 30 or 60 minutes)
- Digital selection of Percentage On Time (5% to 95% in 5% increments)
- Manual On, Manual Off or Auto Cycle selection
- Power Up Delay setting. This is used to delay the energizing of the output contracts when power is first applied to the DPT. This feature is used to allow for the staggered starting of multiple pieces of equipment using the same power source.
- When power returns after a loss of power, the DPT will re-start at the same time in the cycle as when power was lost.
- Hour Meters

  Running Hours - The Running Hour meter display total running hours associated with the closure of the output contacts.

  Interval Hours – The Interval Running Hour Display shows the running hours since it was last re-set to zero (like a trip odometer in your car).
- Changes in the On time percentage will be initiated on the next cycling of the output contacts.

General Operational Specifications

Supply Voltages:	24VAC, 120VAC & 240VAC, 50/60Hz
Cycle times:	1 minute, 15 minutes & 30 minutes & 60 minutes, selectable
On Time Percentages:	5% to 95%, 5% increments <5% Continuous Off >95% Continuous On
Re-Start Delay:	0 seconds to 10 minutes, 30 second increments, selectable
Screens & Set-Up:	Membrane Buttons & Digital display • Cycle time Remaining and Relay Status • Percentage On Time Selection (Off, 5% to 95%, On) • Power Re-Start Delay • Interval Running Hours (up to 99,999) • Running Hours (up to 99,999) • Manufacture Name & Firmware Version

Default Set-Up

The default set-up for the DPT as shipped from R-K Electronics is:

Cycle Time:	30 minutes
On Time:	50%

Custom Set-Up

The DPT uses 4 membrane buttons to allow the customer to change the set-up criteria for their particular application. The following listings show the arrangement and selections available by moving through the menu choices. The membrane buttons allow for movement right or left with wrap around to selection criteria and up and down within a selection for specific parameters.

Example: From the default screen (Cycle time Remaining and Relay Status) pressing the right arrow will take you to the Cycle Time selection screen. If you want to change the Total Cycle Time, press the up or down arrow until you have selected the Total Cycle Time that you want (1, 15, 30 & 60 minutes). Once you have selected the Total Cycle Time on the display:

1. Pressing either the Right or Left arrow will set the new Total Cycle Time into memory and take you to the next screen.
2. After 30 seconds of no action, the new Total Cycle Time will be set into memory and the screen will go back to the default screen showing the remaining time and relay status.

To view or change the Percentage of On Time scroll right or left to the Percentage On Time screen and then use the up or down arrows to select the percentage of On time that you want. Again, pressing the right or left arrow or waiting 30 seconds will set the new parameter into memory.

Power-Up Delay
If you want to use a delay on first application of supply voltage to the DPT (recovery from a power outage), move right or left to the Power-Up delay screen. Then use the up or down arrows to select the delay you want to postpone the On cycle after recovery from a power outage. Pressing the right or left arrow or waiting 30 seconds will set the new parameter into memory.

Interval Running Hours
There are 2 running hour meters in the DPT, one is Total Running hours and the other is Interval Running hours that can be reset back to zero (much like a trip odometer in your car). To reset the Interval Running Hours, move right or left to the Interval Running Hours screen and then press the up membrane button under the word "Reset", the display will reset. The Running Hours screen can not be reset.

Screens

Cycle time Remaining and Relay Status
TIME RELAY
05M 15S ON

Auto (Screen above), Manual Off, Manual On (via Up and Down arrows)

Percentage On Time Selection
OFF, 5%, 10%, 15%, 20%, 25%, 30%, 35%, 40%, 45%, 50%, 55%, 60%, 65%, 70%, 75%, 80%, 85%, 90%, 95%, ON

Total Cycle Time Selection
1 Min, 15 Min, 30 Min, 60 Min

Power-Up Delay
0Sec 0Min, 30S0M, 0S1M, 30S1M, 0S2M, 302M, 0S3M, 30S3M, 0S4M, 30S4M, 0S5M, 30S5M, 0S6M, 30S6M, 0S7M, 30S7M, 0S8M, 30S8M, 0S9M, 30S9M & 0Sec10Min

Interval Running Hours (reset via Up and Down arrows)
99,999

Running Hours
99,999

R-K Electronics
DPT v_____

Specifications

Supply Voltage: 24VAC, 120VAC, 240VAC; 50/60Hz, 1Ø

Part Number:

24VAC Supply:	DPT-24A
120VAC Supply:	DPT-120A
240VAC Supply:	DPT-240A

Display: 16 Characters, 2 Line, Back Lighting

Timing Accuracy: Approx ±1%

Buttons: (4) Right & Left, Up & Down

Total Cycle Time: 1, 15, 30 & 60 Minutes

On Time Selection: Off, 5% to 95% (5% increments), On

Mounting: Panel Mounting

Body: 2-7/8" Circular Hole (2-1/2" conduit punch)

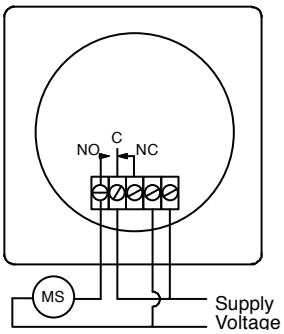
Holes: (4) Mounting Holes, #10

Termination: Pluggable Terminal Blocks

Packaging: Approx. 3.88"H x3.88W x3.6"D (Front to back of terminal blocks)

Nema 12

Connections



Dimensions