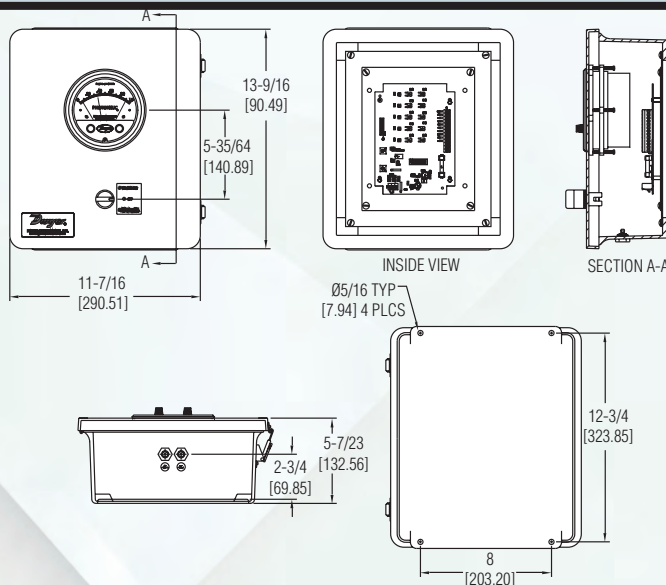


# Photohelic® Pressure Switch/Gages On-Demand Cleaning Controller

## Reverse Pulse-Jet Cleaning Initiated by Differential Pressure



The Photohelic® Pressure Switch/Gages On-Demand Cleaning Controller provides a simple, complete dust collection control all in one enclosure. The Photohelic® controller combined with the DCT500DC Timer Control provides a timed energization of solenoid valves when the differential pressure indicates filter cleaning is necessary. The operator can easily set the cleaning initiation and duration by adjusting the 2 set point knobs on the front face of the Photohelic® controller. Solenoid valve sequencing is also easily set via two potentiometers inside the enclosure on the timer board. A three position switch on the front of the enclosure offers cleaning versatility by allowing the user to select between on-demand or continuous manual cleaning. The Photohelic® controller is pneumatically connected with tubing to fittings on the enclosure. All that is required for start-up is connection of tubing from the process to the external fittings on the enclosure, and wiring the solenoid valves to the timer board.

### CONTROLLER FEATURES

- External, manual adjustment of set points with Photohelic® controller adjustment knobs.
- On and off time easily set with 2 potentiometers located on the DCT500DC timer board.
- 3 position switch for selecting between On-Demand Cleaning or continuous manual cleaning.
- Photohelic® controller pre-connected with tubing to pressure fittings on body of enclosure.

### DCT500DC SPECIFICATIONS

- Output Channels:** 4, 6, & 10 channels.
- Power Requirements:** 10 to 35 VDC, 0.6 watt max. no load power. 120 Volt powered timer board also available.
- Solenoid Supply:** 3A max. per channel.
- Fuse:** Type 3 AG, 3A @ 250 VAC.
- Temperature Limits:** -40 to 176°F (-40 to 80°C).
- Storage Temperature Limits:** -40 to 176°F (-40 to 80°C).
- On Time:** 50 msec to 500 msec.
- On Time Accuracy:** ±5% of setting.
- Off Time:** 1 second to 200 seconds.
- Off Time Accuracy:** ±5% of setting.
- Weight:** 9 oz (255 g).

### PHOTOHELIC® SPECIFICATIONS GAGE SPECIFICATIONS

- Service:** Air and non-combustible, compatible gases.
- Wetted Materials:** Consult factory.
- Accuracy:** ±2% of full scale.
- Pressure Limits:** -20" Hg to 25 psig (-0.677 bar to 1.72 bar). MP option; 35 psig (2.41 bar), HP option; 80 psig (5.52 bar).
- Temperature Limits:** 20 to 120°F (-6.67 to 48.9°C).
- Process Connections:** 1/8" female NPT (duplicated side and back).
- Size:** 4" (101.6 mm) dial face, 5" (127 mm) O.D. x 3-1/8" (79.38 mm).
- Weight:** 1.8 lb (816 g).

### SWITCH SPECIFICATIONS 3000MR

- Switch Type:** Each setpoint has a 1 Form C relay (SPDT).
- Relay Contacts:** (resistive load) 1 Form C rated 1.0A @ 30 VDC, 0.3A @ 110 VDC or 0.5A @ 125 VAC. Gold over clad silver - suitable for dry circuits.
- Electrical Connections:** 18" (46 cm) cable assembly with 8 conductors. Optional lengths to 100' (30.5 m).
- Power Requirements:** 24 VDC, regulated ±10%.
- Mounting Orientation:** Diaphragm in vertical position. Consult factory for other position orientations.
- Set Point Adjustment:** Adjustable knobs on face.

MODEL NUMBER	RANGE*
DCTE504ADC-3010MR	10" w.c.
DCTE506ADC-3010MR	10" w.c.
DCTE510ADC-3010MR	10" w.c.

\* For other ranges and engineering units contact factory.  
Note: 120 VAC powered timer board also available.