4-6

**DUST COLLECTOR CONTROLS** 

# DC Input, Pulse Cleaning of Bag House Dust Collectors

## **Model DNC-T2010-ADC**

### **FEATURES**

- Field selectable from 2 to 10 outputs
- Solid state timing and switching logic
- 300% overrated solid state switch
- Pressure switch control option on board
- 12 to 24 VDC input voltage
- Adjustable ON and OFF times
- High quality locking bushing potentiometers for timing adjustment
- Very low power consumption
- Conformally coated for protection against vibration, humidity, and contamination
- LEDs show compartment being cleaned
- Metal chassis provided for mounting directly into NEMA 4 enclosure

**Operating Logic:** The control can function in 2 modes.

In Continuous Mode, the pressure switch terminals are shorted. Upon application of output voltage, the control activates output #1 after the preset off time. It will continue to activate outputs sequentially until input voltage is removed.

In On Demand Mode, the pressure switch terminals are connected to an isolated set of contacts of a differential pressure switch. The control will activate the outputs sequentially whenever the pressure switch contacts are closed. When the pressure switch contacts open, the output sequencing stops. Re-closing of the contacts will cause the control to resume activating the outputs. Program wire allows the user to select the maximum number of outputs to be activated.

Note: Controls are shipped with jumper across pressure switch terminals.

### **SPECIFICATIONS**

#### **TIME SETTING RANGES**

ON-Time: Adjustable from 20 to 200 ms

OFF-Time: Adjustable from 1.5 to 60 sec.

Repeatability: ±3% over temperature and voltage ranges

#### **INPUT**

**Operating Voltage:** 10.0 to 29.0 VDC (unfiltered supply voltage must be full-wave rectified)

**Power Consumption Voltage During Off Time:** 1.5 W at 12 VDC, 4.2 W at 24 VDC

#### OUTPUT

Type: Solid state switch

Load Per Output: 3 A max. at 1.5 V less than input voltage

## PROTECTION

Transient Input Voltage: Metal oxide varistor

plus large filter capacity

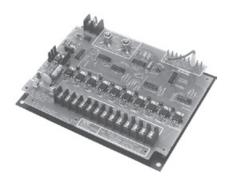
**Transient Output Voltage:** Solid state switch rated at 10 A to 60 V fly-back diode protected **Short Circuit Protection:** 3 A fuse for circuit, reverse polarity protected

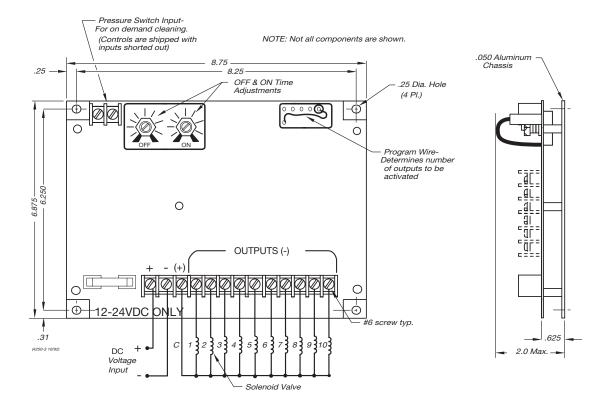
## **ENVIRONMENTAL**

Operating Temperature: -40°F to 150°F (-40°C

Storage Temperature: -40°F to 185°F (-40°C to

85°C)





## **ORDERING INFORMATION**

| PROGRAMMABLE NO.<br>OF OUTPUTS | INPUT VOLTAGE | OFF TIME       | PART NUMBER   |
|--------------------------------|---------------|----------------|---------------|
| 2 to 10                        | 12 to 24 VDC  | 1.5 to 60 sec. | DNC-T2010-ADC |
|                                |               |                |               |

| ACCESSORY     | DIMENSIONS                     | PART NUMBER    |
|---------------|--------------------------------|----------------|
| NEMA 4 Box    | 10" x 8" x 4"                  | BOX-A1008-CHNF |
| NEMA 4 Box    | 12" x 10" x 5"                 | BOX-A1210-CHNF |
| ON/OFF Switch | NEMA 4 Rated with Legend Plate | MSW-0DPST-011  |

AMETEK NCC offers NEMA 4 type enclosures for mounting our controls. These enclosures are made of heavy gauge steel and have a continuous hinge cover. All seams are continuously welded. The finish is gray hammer-tone enamel inside and out, over phosphatized surfaces.

#### Caution:

- 1. Do not mount controls in high vibration areas without shock mounts.
- 2. Do not mount controls in areas of high dust or corrosive atmospheres without a protective enclosure.
- 3 Do not use a converter or inverter for the power source.
- 4. Do not mount control in high transient voltage areas without an isolation transformer.
- 5. Do not leave control box open.
- Do not allow a local repair shop to repair the controls, as we employ some very sophisticated components that could be further damaged. For service, call us directly: 800-323-2593.