# National Controls Corp.

4-2

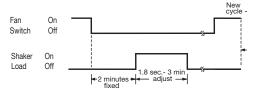
DUST COLLECTOR CONTROLS

# Intermittent Use Collectors Model T2101

### **FEATURES**

- Simple 4 wire installation
- Replaces electromechanical timers
- Completely solid state timing and switching logic
- High quality locking bushing potentiometers for timing adjustment
- Very low power consumption
- Conformally coated for protection against vibration, humidity, and contamination
- LED function lights on PC board
- Function indicating lights on T2101-020
- Mounts in standard NEMA 4/JIC enclosures
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#### LOGIC FUNCTION DIAGRAM



**Operating Logic:** The control is used on intermittent type dust collectors to automatically activate the shaking mechanism 2 minutes after the fan motor is turned off.

Upon removing power from the fan, a 2 minute fixed delay is initiated. At the end of the delay, the shaker output is activated for an adjustable period of 1.8 seconds to 3 minutes. Resetting the control occurs by turning the fan motor on again.

CAUTION: The control must be wired according to the schematic provided.

### **SPECIFICATIONS**

#### TIMING

**Delay Time:** 120 sec.  $\pm 10\%$  fixed **Shake Time:** Adjustable from 1.8 to 180 sec. **Repeatability:**  $\pm 3\%$  over temperature and voltage range

#### INPUT

Operating Voltage: 105 to 135 VAC Power Consumption: 5.5 W plus shaker contactor coil power

Frequency: 50/60 Hz

#### OUTPUT

**Type:** Solid state switch, 1 A continuous at 1.5 V below input voltage

#### TRANSIENT PROTECTION

**Input:** Transformer and large filter capacity **Output:** Solid state switch rated for 10 A at 400V protected by metal oxide varistor; 3 A fuse protects against external short circuit

#### ENVIRONMENTAL

**Operating Temperature:** -40°C to 65°C **Storage Temperature:** -40°C to 70°C





### ORDERING INFORMATION

DESCRIPTION	PART NUMBER
Control on Chassis	DNC-T2101-010
Control in Hinged NEMA 4 Box with Functional Lights	DNC-T2101-020

ACCESSORY	DIMENSIONS	PART NUMBER
NEMA 4 Box	6" x 8" x 4"	BOX-A0606-CHNF
Pilot Lamp	NEMA 4 Rated Red Light	ASL-00RED-NEMA 4
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.

Do not mount controls in areas of high dust or corrosive atmospheres without a protective enclosure.
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

### AMETEK DC National Controls Corp.

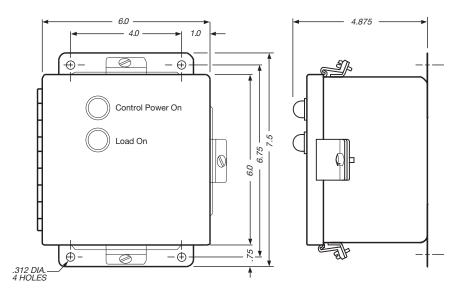
### DUST COLLECTOR CONTROLS

4-3

## Model DNC-2101-010

5.125 ←2.125 Max<del>.</del>► 625 .25 4.625 25 -.25 DIA. 4 HOLES -<del>(</del> Æ Ì 岨 Shake Time Adjust — 5.625 6.125 ЗA ØØ  $\square$ L1 L2 Ð ÷ Ħ Metal Chassis #6 screw typ. (4250-1 10/92)

# Model DNC-2101-020



# **Field Wiring Diagram**

