

DYNISCO MODEL ATC770

1/4 DIN Self-Tuning Pressure and Process Controller

Description

The ATC770 pressure and process controller, with its unique self-tuning algorithm, makes it possible to set up a process such as extrusion, quickly, easily, and with a minimum of operator adjustment. Inputs include 350 Ohm strain gage, DC voltage and DC current, making the ATC770 compatible with a wide variety of process transmitters, and thus able to control a number of factory functions. It is fully configurable with a combination of jumpers and menu options, as well as providing a selection of readout option.

Features

- Unique self-tuning algorithm
- 3 levels of parameter security
- 3 fully programmable and assignable alarms
- Dual 5 digit displays (red/green) and analog bargraph
- Automatic ramp to setpoint
- 24 Vdc transmitter power supply
- Optional RS-485 serial communications, selectable for Modbus or Jbus
- Displays setpoint; deviation from setpoint; output %; motor RPM; peak (high or low)
- IP65/NEMA 4X rated

Benefits

- Set and forget
- Allow different authorization levels
- Protect process with flexible schemes
- Provide full process information
- Raise or lower setpoint under controlled conditions
- Provides excitation for 2 or 4 wire transmitters
- Send and receive information from PLCs, PCs, etc.
- Display process in familiar units
- Useable in harsh environments



Specifications

Performance Characteristics

Power supply: 100 to 240 Vac 50/60 Hz, switching

Power consumption: 15 VA maximum

Operating temperature: 0° to 50°C

Storage temperature: -20° to +70°C

Humidity: Maximum 85% RH non-condensing

Weight: 1.43 lbs

Inputs

Input: Selectable between strain gage and linear via jumper and configuration

Strain gage input: 350 Ohm, 2 to 4 mV/V; excitation 10 V ±7%

Input signal: -25% to +125% full scale

Shunt calibration: With or without shunt resistor (40.0% to 100.0%)

Linear input: Selectable between 0 to 5 Vdc, 0 to 10 Vdc, 0 to 20 mA, 4 to 20 mA scaleable

Auxiliary power supply: 24 Vdc/1.5 W for two or four wire transmitter

Input impedance: <10 Ohm for linear current input; >165 kohm for linear voltage input

Sampling time: 50 ms typical

Digital input: One input, voltage free contact closure. May be programmed for one of the following functions: a. Alarm reset b. Peak reset c. Alarm and peak reset

Control Algorithm

Control type: PID with Integral Preload and Anti-Reset Windup

Outputs

Control output: Selectable between 0 to 10 Vdc, -10 to +10 Vdc, 0 to 5 Vdc, 0 to 20 mA, 4 to 20 mA

Retransmission output: Selectable between 0 to 10 Vdc, -10 to +10 Vdc, 0 to 5 Vdc, 0 to 20 mA, 4 to 20 mA fully scaleable high and low limits (allows direct or reverse action)

Serial Communications (Optional)

Serial interface: RS-485

Protocol supported: Modbus and Jbus, selectable

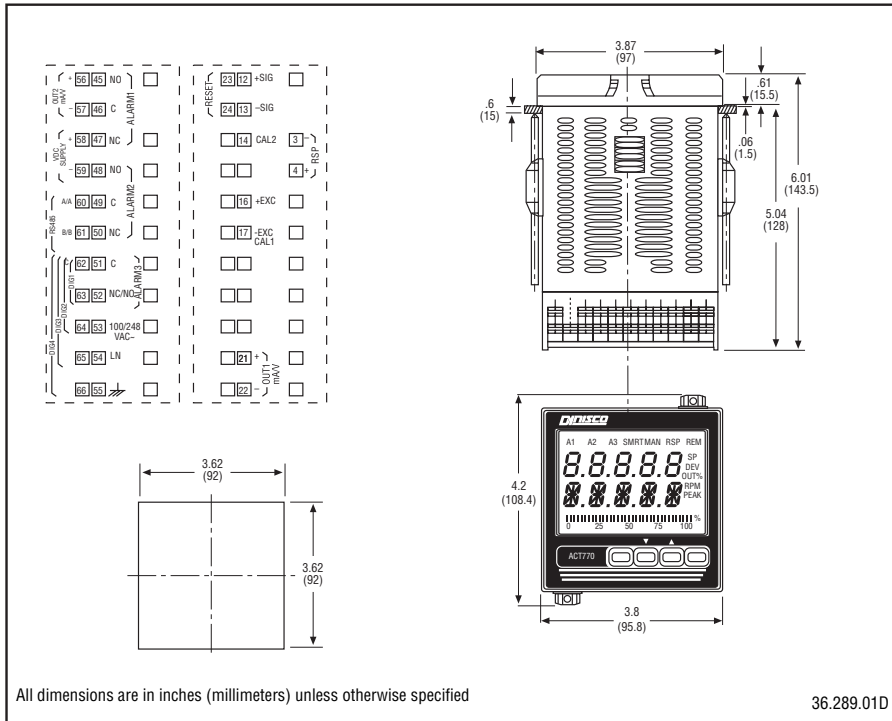
Other Options

Remote setpoint input: 0 to 20 mA, 4 to 20 mA, 0 to 10 V

Four opto-isolated digital inputs

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Ordering Guide

Model	External Setpoint		Options		Power	
	Code	Description	Code	Description	Code	Voltage
ATC770	0	Not present	2	Auxiliary power supply & retransmission output*	3	100 - 240 Vac (switching)
	1	Analog, remote setpoint	3	RS - 485 and 4 digital inputs	5	24 Vac/Vdc (switching)

* standard with basic model

Ordering Example: ATC770 - 0 - 3 - 3

- Basic ATC770 with RS - 485 and 4 digital inputs for 100 - 240 - Vac operation

Delivery

Please call for specific delivery information.