FC Series Variable DC Control

Model: FC-1T-1VDC

Simple, reliable 0 to 10 VDC output control

The FC-1T-1VDC takes the hassle out of controlling equipment like ECM motors and variable frequency drives. It provides a 0 to 10 VDC signal output and includes a built-in disconnect relay, making it easy and effective to manage your equipment.

This versatile controller can operate up to 10 devices simultaneously and is also ideal for expansion controls, modulating valves, and other equipment requiring a DC signal—all from one intuitive, easy-to-use unit.

How it works

The display shows real-time temperatures, signal output, programming options, and alarm codes. Indicator lights highlight which setting is being adjusted, and the control knob makes it simple to navigate and fine-tune settings.

Features

- Automatic temperature-based control, range: 32 to 99°F (0 to 37°C)
- One variable 0 to 10 VDC output to control up to 10 devices
- One disconnect relay ⓘ
- Alarm relay (for external alarm system or siren)
- Three-second full-power-turn-on for minimizing fan ice-up
- Three-character LED display
- Status and programming LEDs
- Alarm code display
- Customizable alarm settings
- Power-failure settings protection
- 6-foot temperature sensor, extendable to 500 feet
- NEMA 4X enclosure (corrosion resistant, water resistant, and fire retardant)
- cCSAus approval
- CE certification
- 2-year limited warranty

ⓘ When the 0 to 10 VDC signal output is 0, the disconnect relay sends a start/stop signal to the equipment you are controlling with the variable output. The relay is not for controlling fans, heaters, or other equipment.

Electrical ratings

- **Input** 120/230 VAC, 50/60 Hz
- **Variable DC** 0 to 10 VDC, 2K Ω load
- **Disconnect relay** 5 A at 250 VAC, 5 A at 30 VDC, resistive load
  2 A at 250 VAC, 2 A at 30 VDC, inductive load
- **Alarm relay** 0.4 A at 125 VAC, 2.0 A at 30 VDC, resistive load
  0.2 A at 125 VAC, 1.0 A at 30 VDC, inductive load

NOTE: The maximum cable length is 350 ft. (107 m). The minimum wire gauge is 22 AWG.

Accessories

FanDRIVEs

FanDRIVEs expand the capacity of your control system by taking the 0 to 10 VDC signal from the control and adjusting the speed of variable AC-powered fans. No additional programming is required; FanDRIVEs follow the programming of the master control.

A 2x 7 FLA model (**FD-2-7**) and a 1x 14 FLA (**FD-1-14**) are available.

Phason 3K Series temperature sensors

Additional temperature sensors allow you to use 4-zone temperature averaging. Probes are available several lengths and can be extended up to 500 feet using extension cable.

Additional information

For more information about the FC-1T-1VDC or other products from Phason Controls, contact your dealer or visit www.phasoncontrols.com.