

# WFC1

# WEATHERPROOF FAN CONTROLLER

# WFC1 Weatherproof Fan Controller Overview

The WFC1 Weatherproof Fan Controller, developed by Bradshaw Communication Systems, provides user adjustable, temperature based, fan and/or cooler control. The WFC1 is typically used to control single-phase (AC or DC) fans and/or coolers found in earth station antenna hubs and electronic equipment enclosures. Alternately, the WFC1 may be used to provide user adjustable "over temperature" alarm indication in the event the ambient air temperature surrounding the WFC1 exceeds the preset temperature setting.

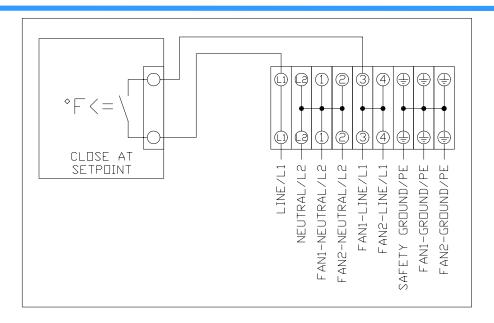
The WFC1 is housed in a IP66/NEMA 4X enclosure, thus supporting the most rugged outdoor applications. The WFC1 is available with up to five watertight cable entry glands that support the use of a wide range of cable diameters.

With a user adjustable set point temperature range of 30 to 140 degrees Fahrenheit, the WFC1 allows great flexibility for use in many applications and environments. Power is applied to the fans when the ambient temperature exceeds the selected setpoint value.

Electrical terminations located inside the WFC1 enclosure are provided via cage clamp style terminal blocks, providing fast, easy, and accurate termination of interface wiring. Individual terminals for up to two single-phase (AC or DC) fans and a terminal actuation tool are provided standard with each WFC1.

The WFC1 has been designed to provide long life and ease of adjustment while still allowing the system integrator great flexibility in use, configuration, and mounting.

# WFC1 Weatherproof Fan Controller Schematic Diagram



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# WFC1 Weatherproof Fan Controller Specifications

#### Sensing Element

Thermostatic Bi-Metal

## Adjustment Range

30 – 140° F (Contacts Close Above Setpoint)

#### Switching Difference (Hysteresis)

• +/-4° F

#### Electrical

- 15 Amps @ 120VAC
- 10 Amps @ 250VAC

#### Electrical Termination

- Cage Clamp Style Terminal Blocks (Actuation Tool Provided)
- 26-14 AWG Wire Size

#### Mounting

- Four 0.190" Diameter Mounting Holes
- Hole to Hole Dimensions 4.53" Square

#### Cable Entry

Cable O.D. Range: 0.230-0.530 inches

#### Environmental

- -40° F to +122° F, 95% humidity, condensing (-40° C to +50° C, 95% humidity, condensing)
- Enclosure Rating: IP66 (NEMA 4X)

#### Physical

- Enclosure Dimensions
  5.12" wide x 5.12" high x 2.95" deep
  (130mm wide x 130mm high x 75mm deep)
- Weight: 1 LB (0.45 Kg)
- Enclosure Color/Type: Light Gray/Polystyrene
- Cable Gland Protrusion: 1.25" (31.75mm) Nominal

## Approvals

 The WFC1 has been designed to meet or exceed CE, UL, & CSA safety requirements.

# WFC1 Weatherproof Fan Controller Configurations & Options

#### WFC1 Weatherproof Fan Controller

- P/N 03-03000-1 WFC1 w/ 2 Cable Entry Glands
- P/N 03-03000-3
   WFC1 w/ 4 Cable Entry Glands

- P/N 03-03000-2 WFC1 w/ 3 Cable Entry Glands
- P/N 03-03000-4
   WFC1 w/ 5 Cable Entry Glands

#### Conclusion

With over 40 years of combined experience in the Satellite Communications Industry, Bradshaw Communication Systems (BCS) has the solution to get your job done right and on time. By providing extremely high quality products and services at economical prices, BCS has become a respected name in the industry and the right choice when it comes to satellite earth station antenna products and services. BCS has provided custom solutions for numerous customers and stands ready to provide components, systems, and services to best fit your specific requirements. Please contact BCS today regarding your requirements.

BCS reserves the right to change specifications contained herein without notice.

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