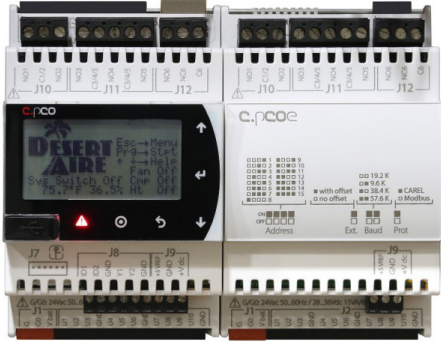




CM3570 Series Controller for GreenAire™ GR Systems

ADVANCED COMMUNICATIONS CAPABILITIES EASY INSTALLATION AND OPERATION CONTINUOUS MONITORING

Advanced GreenAire™ Microprocessor Controller



CM3570 Series Controller



Optional CM3570 Series Remote Display Terminal (RDT)

FEATURES

- Backlit LCD User Interface
- Uniquely programmed for complex dehumidification, temperature and humidity control
- Multiple communication options
- Alarm history retention

DESCRIPTION

The CM3570 controllers are uniquely programmed for the indoor grow application providing energy efficient moisture removal and precise temperature and humidity control.

The CM3570 controllers offer greater compatibility with building management systems (BMS). Optional communication for the CM3570 includes: BACnet® Ethernet, BACnet® MS/TP, Modbus® TCP/IP or Modbus® RTU.

The CM3570 is supplied with a photocell for setup/setback of temperature and humidity setpoints based on lighting status. An input is also available that can be tied directly into lighting contactors to provide this functionality as well. The control of the light schedule can also be done via BMS.

A user interface to the CM3570 is supplied on each unit. This backlit LCD display provides easy to navigate screens for setpoint adjustment and unit monitoring. All Inputs and Outputs along with alarm history can be viewed from the user interface to aid in unit or system diagnostics. The interface is supplied as a built-in display on the face of the controller. A separate remote display terminal that is connected to the controller is optional.

ORDER OPTIONS

Sensor Configuration Options

- CA3570-ZONE (One for each grow room zone) This package includes the zone sensor and the radiant shield. Additionally, this includes a photocell and associated mounting for installation in the zone.
- CA3570-OD (One for each unit when selected) This package includes a remote display (RDT) and cord.
- CA3570-CO2 (One for each unit when selected) This package includes a zone CO₂ sensor.

Communication Configuration

- Standard - No BMS Communication
- BACnet® Ethernet
- BACnet® MS/TP
- Modbus®

All trademarks hereby referenced are the property of their respective owners.

SYSTEM DISPLAY OPTIONS

The CM3570 controller is matched for each Desert Aire product based on the number of inputs and outputs and by taking into account the accessibility of the controller and its user interface. When the remote display terminal is connected to a controller with an integrated display both display devices are fully functional. The following summarizes the options for each product line.

GreenAire™ Series (GR)

The GreenAire™ Series use a controller with the integral user interface. As an option, a remote mounted display terminal (hand-held or wall mounted) can be ordered (See Order Options on page 1). The remote display terminal is shipped with a 20 ft. cable that has RJ12 6-pin termination plugs.

RADIATION SHIELD

Grow rooms utilizing high-intensity lighting generate a large amount of radiant heat energy which can impact temperature readings at zone sensors. Error in the magnitude of 10°F could be experienced. To avoid these significant errors, Desert Aire utilizes a radiation shield designed to hold our sensors. With the curved shape and white color of the plates, radiant heat is rejected while airflow is allowed to pass through, allowing for accurate readings.

For ease of installation, the shield comes with integral pipe mounting hardware which can be easily removed for surface mounting applications.

BUS COMMUNICATION

Modbus®- One of the most widely used protocols. Supports Modbus RTU mode; communications standard RS485. Modbus TCP/IP is also supported with appropriate on-board capability.

BACnet® MS/TP and **BACnet® Ethernet-Based** on RS-485 and Ethernet standards. Connection is possible through the following networks:

- SNMP v1, v2, v3 networks
- BACnet®, Ethernet, BACnet®/IP networks, BACnet® MS/TP
- LAN or Internet



Wall or Pipe Mount Temperature & Humidity Sensor with Radiation Shield

AIREGUARD™

In order to utilize AireGuard™ on these units you must purchase an AireGuard™ subscription service. The AireGuard™ platform allows for remote monitoring, alarming, and data trending of connected Desert Aire equipment through a secure cloud based database. The owner must provide an Ethernet internet connection to the controller to enable the data transmission to the cloud server. The connection communicates without opening additional ports in the system's firewall or requiring a virtual private network.

For those users with more than one dehumidifier, this system can act as their remote access connection where all of the units are available with the same login credential. Ethernet cable to be connected from each controller to the facility network.

Please refer to the AireGuard™ brochure for additional details.

OPTIMIZING SOLUTIONS THROUGH SUPERIOR DEHUMIDIFICATION TECHNOLOGY

N120 W18485 Friestadt Road, Germantown, WI 53022 sales@desert-aire.com

Ph: (262) 946-7400 - www.desert-aire.com



WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov