Advanced SelectAire Plus™ Microprocessor Controller
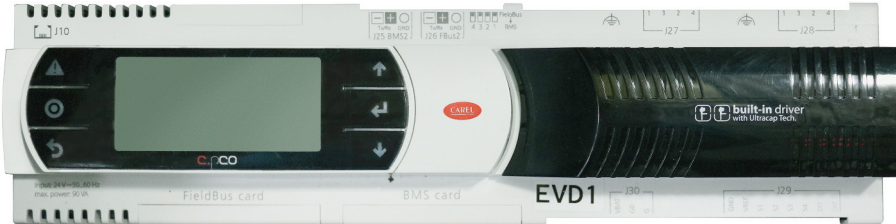
CM3560 Controller Used on SP Series Dehumidifiers

c(UL)US

Integral Return Temperature & Humidity Sensor

F EATURES

- Standard integral return air sensor for control

- Optional wall mounted sensor

- LCD interface terminal in control panel

- Optional remote display terminal (RDT)

- Built-in cloud based remote monitoring

Wall Mount Temperature & Humidity Sensor

CM3560 Series Optional Remote Display Terminal (RDT)

D ESCRIPTION

The CM3560 controllers are uniquely programmed for each Desert Aire application providing energy efficient moisture removal and precise temperature & humidity control.

The CM3560 controller offers an easy interface with building management systems (BMS) with on-board or pre-configured gateway modules. Modbus RTU and TCP/IP are standard. BACnet® MS/TP and BACnet® Ethernet are onboard and can be activated with optional licences. A LonTalk gateway is available that can connect a LonWorks system to the controls.

A user interface to the CM3560 is supplied on each unit. This backlit LCD display provides easy to navigate screens for setpoint adjustment and unit monitoring. The optional remote display terminal can be connected to the controller and mounted at a more convenient location for user interface.

O RDERING CODE

Accessories
☐ CA3560-WALL - Optional Wall Mount Sensor
☐ CA3560-OD - Optional Remote Display Terminal

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

S YSTEM DISPLAY OPTIONS

The CM3560 controller is matched to SelectAire Plus™ Series systems based on the number of inputs and outputs; and by taking into account the accessibility of the controller and its user interface.

CM3560 *Controller for SP Dehumidifiers (cont.)*

The SelectAire Plus™ Series uses the CM3560 controller with an integrated local display. The controller with local display is installed in the system electrical enclosure. All Inputs and Outputs along with alarm history can be viewed from the user interface to aid in unit or system diagnostics. When an integrated display and remote display terminal are connected to a controller, both display devices are fully functional.

B MS COMMUNICATION

LonWorks®- Echelon's LonWorks® is a solution of control in industry, offices, homes and transport. The electric standard supported is FTT10. The SP dehumidifiers need to be configured with a gateway at the time of order for LonWorks® communication.

Modbus®- One of the most widely used protocols. The system supports Modbus Slave, RTU mode; communications standard RS485 without licenses or activation. Additionally supports Modbus TCP/IP as standard.

BACnet® MS/TP and BACnet® Ethernet- Based on EIA-485 and Ethernet standards. Ports are available for both BACnet MSTP and Ethernet as standard equipment, but licenses are required to be purchased at the time of order. Connection is possible through the following networks:
- SNMP v1, v2, v3 networks
- BACnet®, Ethernet, BACnet®/IP networks, BACnet® MS/TP
- LAN or Internet

B MS COMMUNICATION - DETAILS

BACnet® MS/TP
If the system was purchased with the BACnet MS/TP option, the BACnet Device Instance and Station Address will need to be set before connection to the control network. This is because the Station Address is set to 0 as a default, and will conflict with any device on the control network already set to 0.

Defining the station address prior to system shipment will allow Desert Aire to correctly set the address. If the value is not known prior to shipment, then the contractor must alter these default settings during system commissioning. A software utility program will need to be used, allowing access to these settings. For more information, refer to the controller manual shipped with the dehumidifier. Download the system BACnet Point List from the Desert Aire website (www.desert-aire.com).

BACnet® Ethernet
If the system was purchased with the BACnet® Ethernet option, the licenses have been activated in the controller and the Ethernet port can be used for connection to the BACnet network immediately. For the correct operation of the Ethernet network, a number of basic parameters need to be set, such as the IP address and Netmask. Each device connected to an Ethernet network must have a unique IP address.

The Ethernet port on the controller is set for DHCP. Therefore, in a network served by a DHCP server, the controller will automatically acquire the necessary parameters without requiring configuration. In the case of a network without DHCP, these parameters need to be configured manually. For more information, refer to the controller manual shipped with the dehumidifier. Download the SYSTEM BACnet Ethernet Point List from the Desert Aire website (www.desert-aire.com).

LonWorks®
If the system was purchased with the LonWorks option, the unit will contain a gateway that allows for communication to the LonWorks network. Documentation, including points list and connection information will be included with the dehumidifier.

Modbus®
If the Modbus network is to be used, the network address needs to be set in the controller for proper communication operation. If Modbus® RTU is used, a baud rate must also be specified.

Refer to the system controller manual for address and baud rate setting instructions. For more information, refer to the controller manual shipped with the dehumidifier. Download the Modbus® Point List from the Desert Aire website (www.desert-aire.com).

AireGuard™ Remote Monitoring Tool
The SP Series controller is equipped with an Ethernet connection to the internet. The owner must provide the Ethernet cable connection from their network router to the controller in order for data to transmit to a secure cloud storage location. A 2-year AireGuard™ subscription is included with systems shipped with this controller.

For those users with more than one dehumidifier, this configuration can act as their local building management system where all of the units are available with the same login credentials. All that is required is an Ethernet cable to be connected between your network router with internet access and the AireGuard™ interface located on the controller. The connection communicates without opening additional ports in the systems firewall or requiring a virtual private network.

Please refer to the AireGuard™ brochure for additional details.

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