Anzures

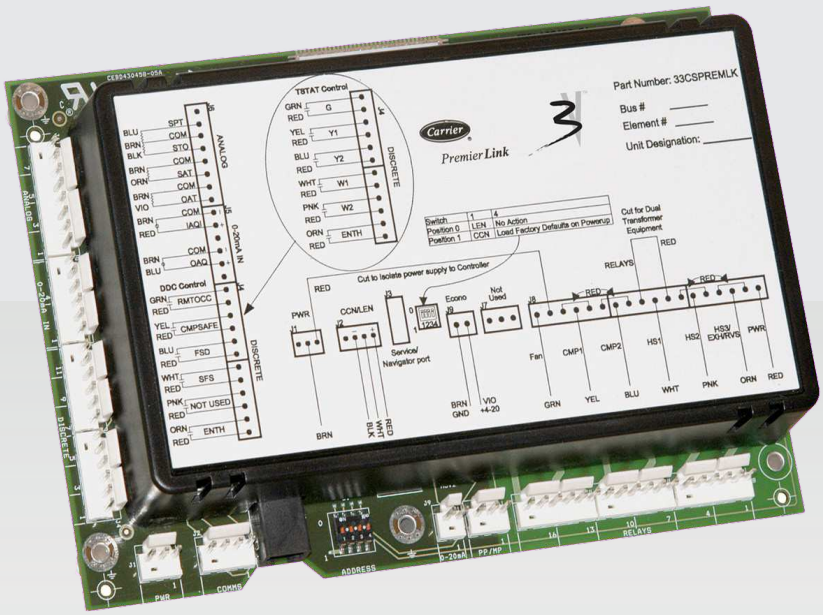
Su socio estratégico en soluciones de control

SISTEMA CARRIER CONFORT NETWORK

PREMIERLINK™

Retrofit Rooftop Controller

33CSPREMLK



Email
ivupro@anzures.com.ar

Web
anzures.com.ar

Redes sociales

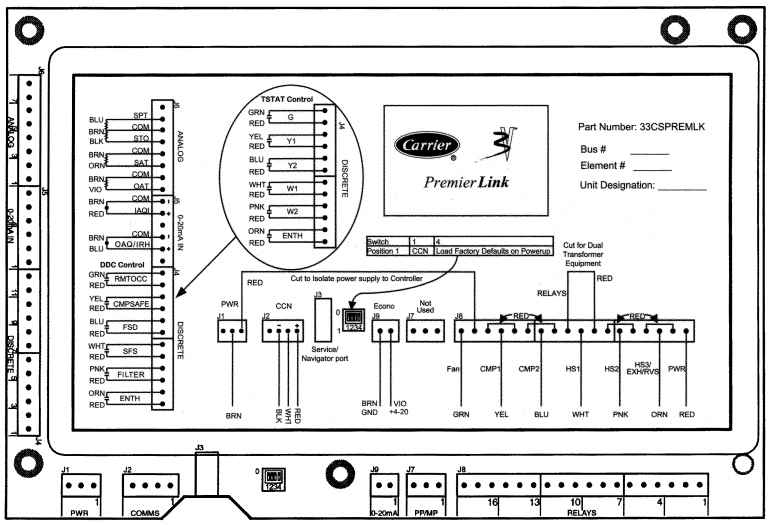
Teléfono
+54 11 6012 5590

Product Specification

PREMIERLINK™ Retrofit Rooftop Controller

33CSPREMLK

Carrier® Comfort System PremierLink



The PremierLink retrofit controllers offer:

- continuous monitoring and regulation of the rooftop unit
- compatibility with Carrier diagnostic display tools
- other devices can read and write data to the controller
- ability to connect unit to the Carrier Comfort Network® (CCN) system

Features/Benefits

The PremierLink retrofit rooftop controller is an intelligent control that continuously monitors and regulates rooftop operation with reliability and precision that minimizes downtime to ensure maximum occupant comfort.

The PremierLink controller is compatible with the Carrier Comfort Network (CCN) system. Carrier's diagnostic standard tier display tools such as System Pilot™ or Touch Pilot™ device can be used with the PremierLink controller. User interfaces include the CCN Service Tool, ComfortVIEW™ and ComfortWORKS® software.

When the PremierLink controller is used as part of the CCN system, other devices such as the CCN data transfer, 3V™ linkage coordinator, or Comfort Controller can read data from or write data to the retrofit controller.

Features/Benefits (cont)

Extensive control capabilities

The 33CSPREMLK retrofit controller provides the following features and benefits:

- provides software clock and local occupancy schedule for local occupancy control (requires time broadcaster and hardware clock from another device in the system)
- uses remote timeclock input to provide occupancy control through external contacts or this input can be reconfigured for use with a door or window switch to disable heating and cooling if a door or window is left open
- provides continous or intermittent fan operation in the occupied mode
- features supply air temperature limiting and integrated safeties for DX (direct expansion), gas, electric and heat pump units
- provides field tests that enables the user to check output points and verify their functionality
- controls two stages of DX cooling to maintain space temperature set point
- ability to provide occupied and unoccupied dehumidification
- controls up to 3 stages of gas heat or combination of mechanical and electric heat to maintain space temperature set point
- ability to control exhaust fan based on economizer or occupancy on 2-stage heat units
- ability to control reversing valve on heat pump units
- provides temperature compensated start of heating or cooling to achieve set point by the start of the scheduled occupied time
- provides alarms for analog temperature input(s) out of range
- provides alarm for space temperature deviation from desired set point
- adjustable filter maintenance timer
- allows manual and system overrides of selected input/output channels
- supports CCN remote timed override, set point adjustment and manual fan control override
- provides Broadcast Acknowledger capability for CCN (configuration)
- conforms to the general requirements for CCN devices
- modulates control of economizer to assist mechanical cooling without adversely affecting compressor performance
- provides ventilation monitoring with optional CO_2 ventilation sensor
- compatible with T55 space sensor and T56 space sensor with set point adjustment, timed override and service port jack
- compatibility with T58 communicating sensor provides set point adjustment, timed override, force fan, and read equipment mode
- compatibility with System Pilot as a communicating sensor providing set point adjustment, timed override, and a user interface for programming, configuration, and monitoring and forcing points
- support a local or global occupancy schedule or remote start input status to determine occupancy
- individual fan start delay for each Premierlink™ board upon occupancy change.

Available for wide range of rooftop applications

The PremierLink controller is available as a field retrofit application and can control one or several rooftop units with (multiple controllers) from 3 to 25 tons. In addition, it has an integrated economizer controller that eliminates the need for a separate circuit board.

The PremierLink controller can be installed on the following Carrier rooftop units: 48/50HE (2 to 5 tons), 50HEQ (2 to 5 tons), 48/50HJ (3 to 25 tons), 50HJQ (3 to 15 tons), 48TF/50TFF (3 to $12^1/_2$ tons), 50TFQ (3 to 10 tons), 48/50TJ ($12^1/_2$ to 25 tons), and 48/50TM (3 to 25 tons). Other Carrier equipment and non-Carrier equipment can also be controlled by PremierLink controller. Contact a Carrier Factory Sales representative for more information.

Flexibility for every application

The PremierLink controller is an advanced microprocessor-based control. PremierLink is precision controlled to send heating and cooling only when needed, reducing energy use and operating costs.

Carrier linkage compatibility

When used as the air source for a 3V™ zoning system, the PremierLink controller will use occupancy schedules, zone temperature, and set points from the 3V linkage coordinator. The PremierLink controller provides the 3V linkage coordinator with the unit's operating mode and supply-air temperature to provide coordination of the individual member zone's local mode with the system mode.

Additional control features

The PremierLink controller provides additional control features such as Occupied/Unoccupied scheduling initialized via the network. The PremierLink controller offers override invoked from a wall sensor during unoccupied hours from 1 to 4 hours in 1-hour increments.

The PremierLink controller offers ventilation monitoring with an optional CO_2 ventilation sensor. The CO_2 ventilation sensor measures the amount of ventilation needed by the space and a proportional integral derivative loop (PID) calculation makes adjustments to the economizer minimum position during occupied operation. The indoor CO_2 will be compared to an outdoor CO_2 reference before making adjustments to the economizer minimum position.

Using a space sensor with set point adjustment, timed override and service port jack, the PremierLink controller will provide intelligent compressor staging and economizer operation.

Modulating control of the economizer will assist mechanical cooling without adversely affecting compressor performance. Economizer assisted cooling is determined from a comparison of space temperature, outside air temperature and an enthalpy switch input. The switch input can also be used for differential enthalpy input, meeting ASHRAE (American Society of Heating, Refrigeration, and Air Conditioning Engineers) Standard 90.1.

The T58 Communicating Space temperature sensor with service port jack provides set point adjustment, timed override, force fan and read equipment mode and measures and maintains room temperature by communicating with the PremierLink controller.

Using an optional indoor humidity sensor, the PremierLink control can provide dehumidification control on units that are equipped to provide dehumidification.

Simple mounting and ease of installation

The PremierLink controller has an integrated plastic cover with secured with two plastic tabs that can be removed for ease of installation.

For ease of installation, the PremierLink controller is provided with removable Molex connectors which include pigtails for easy installation to unit or sensors using spade connectors or wire nuts. The removable connectors are designed so that they can be inserted one way so as to prevent installation errors. The PremierLink controller also provides an RJ-11 modular phone jack for the Network Service Tool connection to the module via the Carrier Comfort Network® (CCN) communications.

Specifications

User interface

The PremierLink™ controller is designed to allow a service person or building owner to configure and operate the unit through the CCN user interface. A user interface is not required for day-to-day operation. All maintenance, configuration, setup, and diagnostic information is available through the Level II communications port to allow data access by an attached computer running Network Service Tool, ComfortVIEW™, or ComfortWORKS® software. Data access also can be obtained from System Pilot™ or Touch Pilot™ devices.

Wiring connections

Field wiring is 18 to 22 AWG (American Wire Gage). The PremierLink controller is a NEC (National Electrical Code) Class 2 rated device.

Inputs

- space temperature sensor
- set point adjustment
- outdoor air temperature sensor
- indoor air quality sensor
- outdoor air quality sensor/indoor humidity sensor
- compressor lockout
- fire shutdown
- supply fan status
- remote time clock/door switch
- enthalpy status

Outputs

- economizer
- fan
- cool stage 1
- cool stage 2
- heat stage 1
- heat stage 2
- heat stage 3/exhaust/reversing valve/dehumidify/ occupied

Power supply

2-wire, 24 VAC ± 15% at 40 va, 60 Hz

Power consumption

Normal operating supply range is 18 to 32 VAC with minimum consumption of 10 VA

Hardware (memory)

Internal flash memory of 64K

Specified sensing temperature range

The PremierLink controller space temperature range is –40 to 245 F (–40 to 118 C). The PremierLink controller has an allowable control set point range from 40 to 90 F (4 to 32 C) for heating and 45 to 99 F (7 to 37 C) for cooling.

Communications

The number of PremierLink controllers is limited only by the maximum number of controllers allowed on a CCN system. Bus length may not exceed 4000 ft (1219 m), with no more than 60 devices on any 1000 ft (305 m) section. Optically isolated RS-485 repeaters are required every 1000 ft (305 m). Status and control data is transmitted at a baud rate of between 9600 and 38.4K.

Activity indicators

Two activity indicators present on the PremierLink controller indicate activity. A green LED will indicate activity on the communication port and a red LED will indicate status of processor operation.

Dimensions

Height: $5^3/_4$-in. (146 mm)
Width: $8^1/_2$-in. (216 mm)
Depth: 3-in. (76 mm)

Minimum service dimensions

Height: 7-in. (178 mm)
Width: 9-in. (229 mm)
Depth: 4-in. (102 mm)

Environmental ratings

Operating Temperature: –40 to 158 F (–40 to 70 C) at 10 to 95% RH (non-condensing)

Storage Temperature: –40 to 185 F (–40 to 85 C) at 10 to 95% RH (non-condensing)

Vibration

Performance vibration: all planes/directions, 1.5G at 20 to 300 Hz

Shock

Operation: all planes/directions, 5G peak, 11 ms

Storage: all planes/directions, 100G peak, 11 ms

Corrosion

Office environment. Indoor use only.

Approvals

Listed under UL 873, UL94-V0/5VB (plastic), and UL, Canada.

Standard compliance

CE Mark, ASHRAE 90 and ASHRAE 62-99 compliant.

NOTE: Compliance standards subject to change without notice.

Field-installed accessories

Supply air temperature sensor — The 33ZCSENSAT supply air temperature sensor is required for all applications to monitor the temperature of the air delivered. A second supply air temperature sensor set to thermostat mode (or a space temperature sensor) must be installed in the return air for proper economizer and IAQ (indoor air quality) control.

Space temperature sensor with override button — The space temperature sensor monitors room temperature which is used by the PremierLink controller to determine the temperature of conditioned air that is allowed into the space.

Field-installed accessories (cont)

The 33ZCT55SPT (T55) space temperature sensor with override button is required for all applications. The space temperature sensor monitors room temperature which is used by the PremierLink™ controller to determine the temperature of conditioned air that is allowed into the space.

Space temperature sensor with override button and set point adjustment — The 33ZCT56SPT (T56) space temperature sensor with override button and set point adjustment can be used in place of the 33ZCT55SPT (T55) space temperature sensor if local set point adjustment is required. The space temperature sensor monitors room temperature which is used by the PremierLink controller to determine the temperature of conditioned air that is allowed into the space.

T58 communicating sensor with override button, set point adjustment, and manual fan control — The 33ZCT58SPT (T58) communicating room sensor with override button, set point adjustment, and manual fan control can be used in place of the 33ZCT55SPT space temperature sensor. The T58 communicating room sensor measures and maintains room temperature by communicating with the controller.

System Pilot™ (33PILOT-01) — The System Pilot device is a communicating room sensor with override button and set point adjustment that can be used in place of the T56 space temperature sensor. The System Pilot communicating room sensor measures and maintains room temperature by communicating with the controller.

The System Pilot device can be also be used to install, commission, and monitor a PremierLink controller, a 3V™ zoning system, a universal controller, and all other devices operating on the CCN system. The System Pilot device has a hardware clock and can be used as CCN time broadcaster.

Humidity sensor — The relative humidity sensor (33ZCSENSRH-01) is required for dehumidification control. The rooftoop unit must be equiped with necessary accesories to perfom dehumidification. The sensor can also be used for monitoring only.

NOTE: The relative humidity sensor and outdoor CO_2 sensor cannot be installed on the same zone controller.

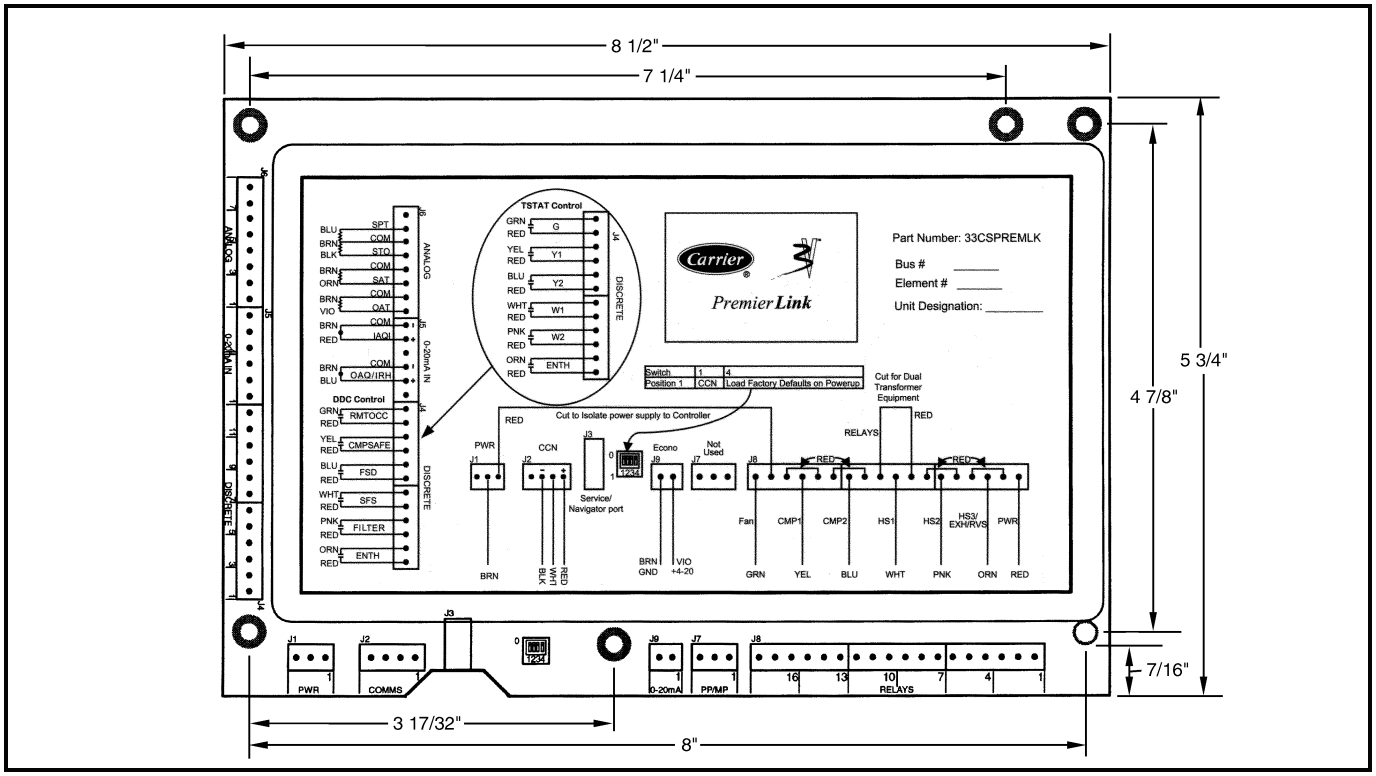
CO_2 sensor — Three different CO_2 sensors are available for monitoring space indoor-air quality.

The 33ZCSENCO2 sensor is an indoor, wall-mounted sensor with an LED (light-emitting diode) display. The sensor has an analog output (0 to 10 vdc or 4 to 20 mA) over a range of 0 to 2000 ppm. An SPDT contact is provided to close at 1000 ppm with a hysteresis of 50 ppm.

The 33ZCT55CO2 sensor is an indoor, wall-mounted sensor without display. The CO_2 sensor also includes a space temperature sensor with override button.

The 33ZCT56CO2 sensor is an indoor, wall-mounted sensor without display. The CO_2 sensor also includes a space temperature sensor with override button and temperature offset.

Dimensions



Anzures

Su socio estratégico en soluciones de control

Conózcanos en nuestra web

Somos expertos en el desarrollo, instalación y mantenimiento de Sistemas de Control. Proveemos soluciones integrales de automatización y control para todo tipo de Edificios Inteligentes.

Ir a anzures.com.ar

Descubra nuevas soluciones

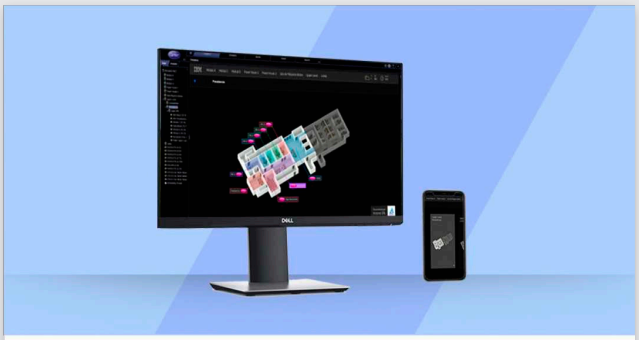
Conozca nuestra serie de documentos con soluciones integrales que mejoran el control y la eficiencia, y nuestros últimos casos de éxito.

Ir a anzures.com.ar/soluciones

Explore otros equipos

Encuentre los productos necesarios para la gestión de edificios inteligentes o industrias; controladores BACnet HVAC, sistemas Carrier Confort Network, sensores y add-ons.

Ir a anzures.com.ar/productos



Pruebe nuestra demo i-Vu

Experimente nuestra interfaz gráfica para el control de equipos que se encuentran en los sistemas de edificios e industrias.
Interactue como si fuera un operador mediante el sistema i-Vu.

Ir a anzures.com.ar/sistema

Email
ivupro@anzures.com.ar

Web
anzures.com.ar

Redes sociales

Teléfono
+54 11 6012 5590