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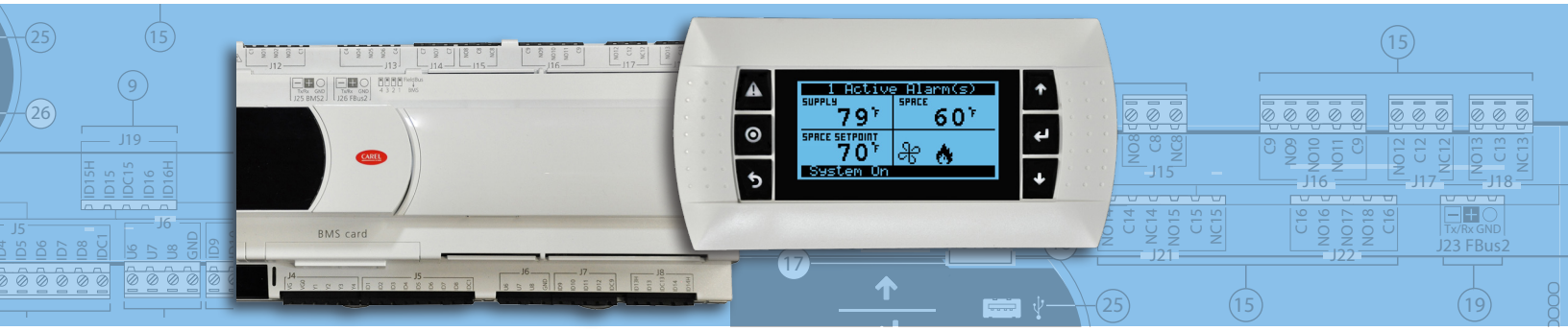
DATASHEET



CONTROLS

OPTIMIZE PERFORMANCE WITH INNOVENT EMBEDDED CONTROLS

Innovent custom air handling units include a sophisticated controls platform for reliable and efficient operation across a wide range of operating temperatures. Factory-mounted controls optimize unit performance and component life.

PRE-CONFIGURED RELIABLE CONTROL

Innovent's factory-programmed controls provide the following benefits:

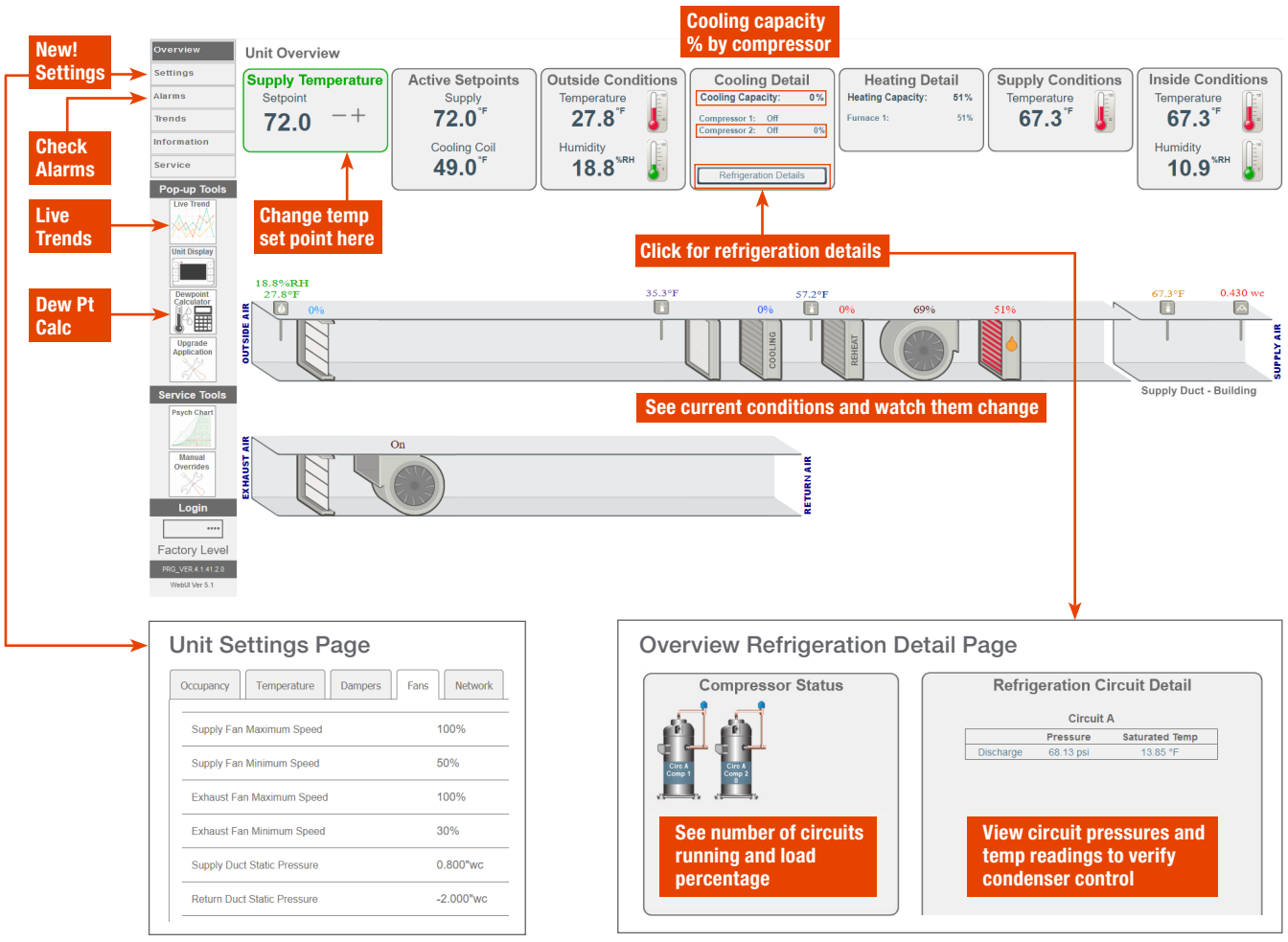
- **Intuitive operation** using a standard web user interface or handheld display
- **Proven DX refrigeration control** of compressor staging, condensers, and oil management
- **Energy-efficient sequences** including control of condensing pressure, energy recovery, inverter scroll compressors, and CO_2
- **Advanced comfort control** including independent temperature and humidity control, and multiple- or single-zone VAV
- **Smooth start-ups** with selectable sequences and factory defaults

GAIN THE BIG-SCREEN ADVANTAGE WITH WEB UI

A handheld keypad/display is good for at-the-unit quick checks and changes. But for easier access, Innovent's embedded web pages provide comprehensive access from a phone, tablet, or laptop web browser. And, the Web User Interface (Web UI) is standard with every Innovent controller.

View or modify multiple data points on each intuitively-organized web page, which is much faster than scrolling through small, handheld keypad screens.

AT A GLANCE, THIS IS WHAT YOU WILL SEE

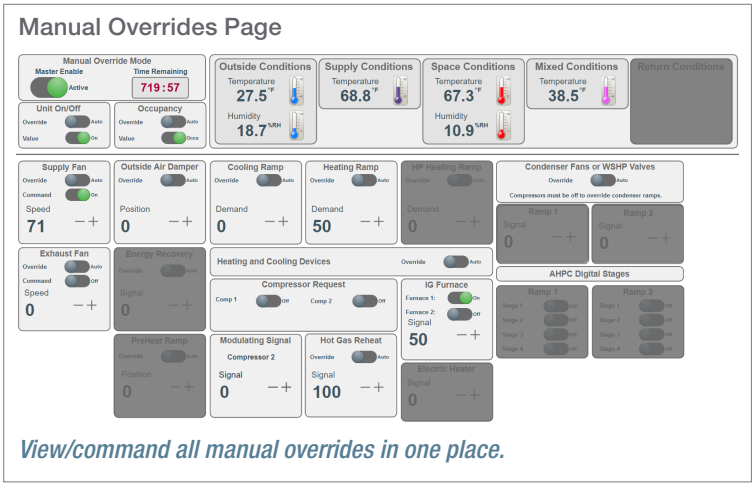


INNOVENT WEB UI: KEY FEATURES

- **Standard with every Innovent controller,** Web UI is a set of web pages embedded into the controller and accessed using Ethernet at the unit or through a standard web browser via the building's network.
- **The Overview page allows a quick system glance** where it's easy to change a set point, view actual space and outdoor conditions, and check on current heating/cooling performance.
- **Change multiple settings on the Unit Settings page** including occupancy schedule, temperature set points, damper position, and BMS/network settings.
- **The Trends page displays auto trending of all factory I/O points for a rolling seven-day period,** logged every minute. View all or some logged data for all sensor values, set points, and control outputs, or use the live trend function for just-in-time data.
- **The Alarms page allows one-click access to all alarms,** current and previous. The alarms snapshot captures operating conditions preceding an alarm condition, making troubleshooting much easier.
- **The Service page displays content most useful for system analysis** including a list of all I/O points, and access to manual overrides to confirm proper operation.
- **The Refrigeration Detail page** provides information about compressor status, circuit pressures, and temperatures — all without the need to connect gauges!

INDISPENSABLE DURING START-UP AND OPERATION

- **At installation, start-up, and commissioning** connect a laptop to access the simple start-up tool. Make use of convenient manual override and trending functions to confirm proper operation.
- **During daily operation** use the Home or Settings pages for an at-a-glance system check, or change settings without going up to the roof.
- **When servicing or troubleshooting** check the Alarms page, get a bigger picture by viewing the last seven days of minute-by-minute trending, or view the Refrigeration Detail page to learn more about operating performance.



View/command all manual overrides in one place.

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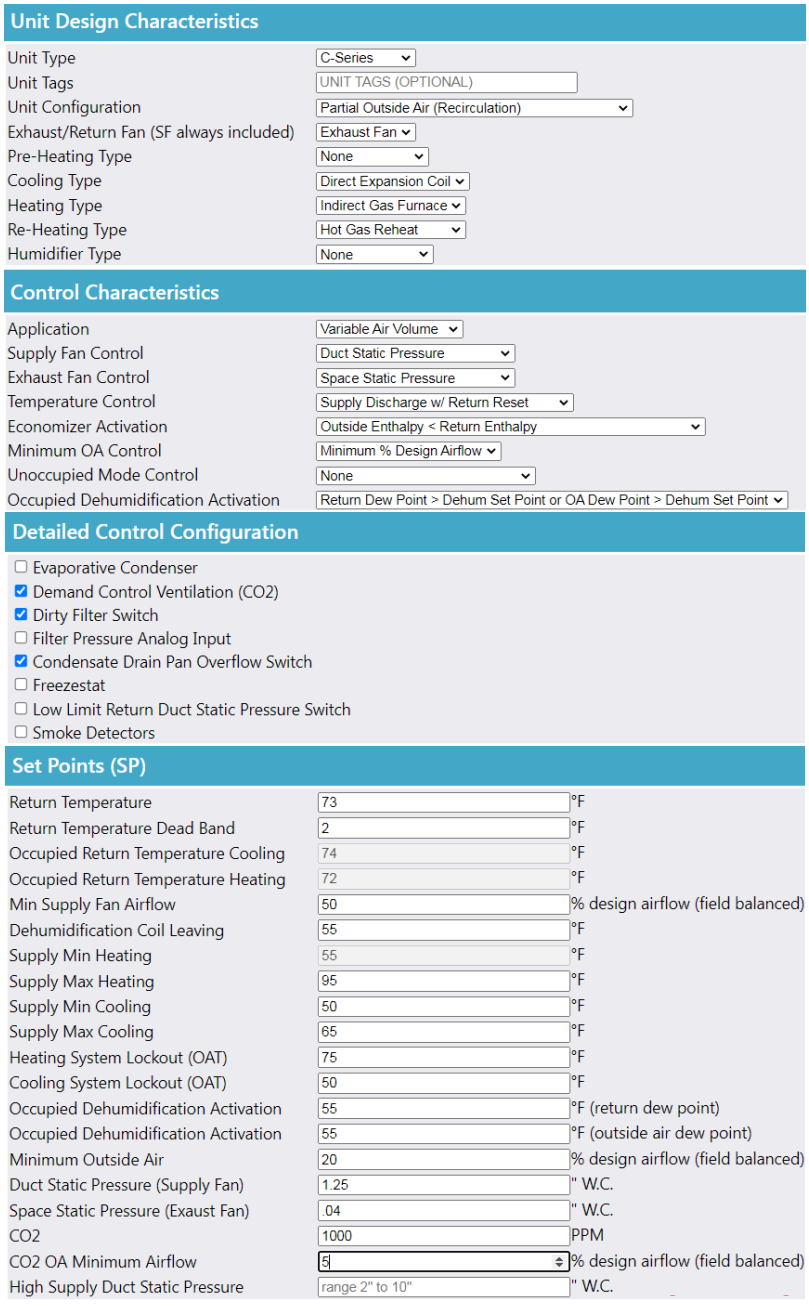
FLEXIBLE, PROVEN CONTROL SEQUENCES

While an Innovent air handler may be unique, Innovent control sequences are pre-engineered with a high degree of flexibility. Choose from temperature control sequences like supply air control, space reset, single zone VAV, or CO_2 demand ventilation. Depend upon sophisticated compressor envelope control to deliver the right level of cooling while protecting the compressor. Add options like airflow management or pressurization control to meet the needs of your specific application.



Unit Design Characteristics

Unit Type	C-Series
Unit Tags	UNIT TAGS (OPTIONAL)
Unit Configuration	Partial Outside Air (Recirculation)
Exhaust/Return Fan (SF always included)	Exhaust Fan
Pre-Heating Type	None
Cooling Type	Direct Expansion Coil
Heating Type	Indirect Gas Furnace
Re-Heating Type	Hot Gas Reheat
Humidifier Type	None

Control Characteristics

Application	Variable Air Volume
Supply Fan Control	Duct Static Pressure
Exhaust Fan Control	Space Static Pressure
Temperature Control	Supply Discharge w/ Return Reset
Economizer Activation	Outside Enthalpy < Return Enthalpy
Minimum OA Control	Minimum % Design Airflow
Unoccupied Mode Control	None
Occupied Dehumidification Activation	Return Dew Point > Dehum Set Point or OA Dew Point > Dehum Set Point

Detailed Control Configuration

- [ ] Evaporative Condenser
- [x] Demand Control Ventilation (CO2)
- [x] Dirty Filter Switch
- [ ] Filter Pressure Analog Input
- [x] Condensate Drain Pan Overflow Switch
- [ ] Freezestat
- [ ] Low Limit Return Duct Static Pressure Switch
- [ ] Smoke Detectors

Set Points (SP)

Return Temperature	73	°F
Return Temperature Dead Band	2	°F
Occupied Return Temperature Cooling	74	°F
Occupied Return Temperature Heating	72	°F
Min Supply Fan Airflow	50	% design airflow (field balanced)
Dehumidification Coil Leaving	55	°F
Supply Min Heating	55	°F
Supply Max Heating	95	°F
Supply Min Cooling	50	°F
Supply Max Cooling	65	°F
Heating System Lockout (OAT)	75	°F
Cooling System Lockout (OAT)	50	°F
Occupied Dehumidification Activation	55	°F (return dew point)
Occupied Dehumidification Activation	55	°F (outside air dew point)
Minimum Outside Air	20	% design airflow (field balanced)
Duct Static Pressure (Supply Fan)	1.25	" W.C.
Space Static Pressure (Exaust Fan)	.04	" W.C.
CO2	1000	PPM
CO2 OA Minimum Airflow	5	% design airflow (field balanced)
High Supply Duct Static Pressure	range 2" to 10"	" W.C.

Innovent software, shown here, demonstrates a high degree of flexibility within a pre-engineered control platform.

LEARN MORE

- Contact your Innovent Representative to learn more or to see an interactive demo of Innovent's Web UI.
- Visit the Innovent website for more information about Innovent products and applications expertise.

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BUILT **TO ORDER.** BUILT **FOR EFFICIENCY.** BUILT **TO LAST.**