

AdaptiView™ Chiller Control Comparison

For RTAC Air-Cooled Chillers



Trane Tracer™ CH530 control panels were offered on air-cooled Series R, model RTAC chillers built from 2001 through 2024. These panels have many of the control features of new AdaptiView™ panels. However, they have limited communications and service interface capabilities. For improved user communications, logging and servicing capabilities, and compatibility with Trane Intelligent Services (TIS), Trane Service recommends that these panels be upgraded to new Trane Tracer AdaptiView™ control panels.



Tracer™ CH530



AdaptiView™

Features	Tracer CH530 Control Panel	Tracer AdaptiView Control Panel	AdaptiView Benefits
Base Technology	Networked digital sensors and display, controlled by Tracer DynaView™ controller with monochrome graphic display.	Networked digital sensors and display, controlled by Tracer UC800 digital controller and Tracer OD color graphic display.	Provides unit control flexibility and monitoring not possible with early generation digital controls.
Primary Repair Components	Modular digital component design that minimizes cost of individual service parts and all components are used in Trane present production equipment.	Modular digital component design that minimizes cost of individual service parts and all components are used in Trane present production equipment. AdaptiView uses pluggable-style connectors for easy component replacement.	Repair components are in stock and affordable. Cable kits available as an option when upgrading to AdaptiView.
Trane Communications Capability	Tracer communications protocol (Comm3/Comm4) is supported.	Supported: BACnet, modules RTU, LON, or generic BAS Not supported: Comm3/Comm4	The only Trane Communications capability offered with RTAC was Comm3. Comm3 will no longer be supported with AdaptiView. A greater choice of open protocols provides flexibility and speed. Software and firmware is upgradeable to eliminate phaseouts. Customers will need to upgrade to one of these options if they are still using Comm3.
Facility Communications Capability	Native LonTalk™. Requires Tracer Summit for Modbus and BACnet communications capability with facility communications systems.	Native LonTalk™, BACnet, and Modbus® communications capability.	Communicates with leading commercial and industrial building management systems. No intermediate panel needed.
Temperature Control Strategy	Same Feedforward control as AdaptiView.	Feedforward Adaptive Control uses open-loop, PID predictive control strategy designed to anticipate and compensate for load changes. It uses evaporator entering-water temperature as an indication of load change.	Responds faster and maintains stable leaving-water temperatures. It also eliminates the inherent proportional error seen with deadband controls.

Features	Tracer CH530 Control Panel	Tracer AdaptiView Control Panel	AdaptiView Benefits
Chiller Protective Control Strategy	Same adaptive protection strategies as AdaptiView™.	Adaptive protection strategies - The Tracer™ controller monitors chiller refrigerant temperatures, refrigerant pressures and electrical phase imbalances and adjusts chiller operation when conditions approach alarm limits.	Helps to maximize the ability to keep the chiller running under adverse phase imbalance and refrigerant conditions.
Motor/Power Protective Control Strategy	Same advanced starter protections as AdaptiView.	Advanced motor/power protection - Digital control protection from current overload, phase imbalance, phase loss, and over and under voltage variations.	Digital controls are more accurate and faster than analog overload controls. Also, AdaptiView provides voltage imbalance and dry run protections that address important causes of chiller failures.
Power Failure Recovery Strategy	Same adaptive fast restart method as AdaptiView.	Fast Restart - If the chiller shuts down on a nonlatching diagnostic, the diagnostic has 60–70 seconds to clear itself and initiate a fast restart.	Typically restarts 60-70 seconds after a power failure.
Performance Monitoring Capability	Same performance monitoring parameters as AdaptiView.	Capable of measuring entering and leaving water, oil temperature and compressor phase amps.	Allows users to monitor and diagnose chiller operation trends.
Logging and Reporting	Current status and alarms are indicated on monochrome LCD display.	Recorded data logs include ASHRAE 3 report, Custom report, Graphical custom historical data log, and 100 alarm log.	Allows users to monitor and diagnose chiller operation trends.
Setpoint Saving and Backup	Setpoints can be edited and stored for backup using Tracer TechView™.	All unit configurations and setpoints are recorded digitally via Tracer TU allowing complete backup and restoring of unit operating parameters.	Speeds replacement and assures accuracy in case the panel requires repair.



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