VeriComm® AX20A Control Panels

Applications

VeriComm® AX20A remote telemetry control panels are used in AdvanTex® AX20 Treatment Systems with single pumps for timed recirculation and with gravity discharge. Coupled with the web-based VeriComm Monitoring System, these affordable control panels give the ability to remotely monitor and control treatment system operation, with real-time efficiency to wastewater system operators and maintenance organizations, while remaining invisible to the homeowner. AX20A panels allow remote operators to change system parameters, including timer settings, from the Web interface.

Typical AX20A VeriComm® Control Panel
Standard Models: VCOM AX20A1, VCOM AX20A2

Features

Two Operating Modes
- "Normal Mode" manages day-to-day functions
- "Test Mode" suspends data collection and alarm reporting during installation and service

Data Collection and Utilization
- Compiles data logs of system conditions and events such as pump run times, pump cycles, and alarm conditions

Troubleshooting and Diagnostic Logic
- Reports suspected component failures, which then trigger alarms

Advanced Control Logic
- Activates system diagnostics in the event of a float failure or malfunction and maintains normal system operation until servicing can occur

Features, con't.

Communication and Alarm Management
- Provides remote telemetry and a web-based monitoring application for communication and alarm management (see *VeriComm Monitoring System*, NTD-CP-VCOM-1)
- Updates point values (including timer settings) and queued changes during each host communication session
- Contacts with host monthly; more frequently during alarm conditions

Multiple Communication Methods
- Call-In to VeriComm® Host (phone line or optional high speed internet)
  - Signals critical fault conditions that require immediate attention (e.g., pump failure) through automatic alarm notifications
  - Signals less-critical fault conditions (e.g., stuck float switch) through automatic alert notifications and triggers the panel's troubleshooting logic and alternative operating mode
  - Sends updates through automatic update notifications, including alarm updates or all-clear notifications following alarms/alerts, as well as normally scheduled monthly panel reports
  - Allows manual, forced communication from panel to host for updating point values and receipt of queued changes
- Real-Time, Manual Direct Panel Connection
  - Allows a local operator real-time access to detailed logged data and the ability to change point values through direct connection via RS-232 serial port from a laptop or Android® device with optional Bluetooth® kit
  - Allows a local operator to initiate an auto-answer mode in real-time to access detailed logged data and the ability to change point values via direct, forced communication at the site

Open-architecture software with password security is used during real-time, manual connections. Orenco offers BT-VCOM software as an option, but VeriComm panels require no proprietary software. VT100 protocol allows access and control from a Mac or PC computer using a simple communication program (e.g., Windows® HyperTerminal), with multilevel password protection ensuring that only qualified personnel can access the panel's data.

Status Light Indicators
- Flashing green LED for normal operation
- Yellow LEDs for status of digital inputs
- Red LEDs for status of digital outputs and modem activity

UL-recognized and FCC-approved

For more information, try our online demo at www.vericomm.net (no password required).
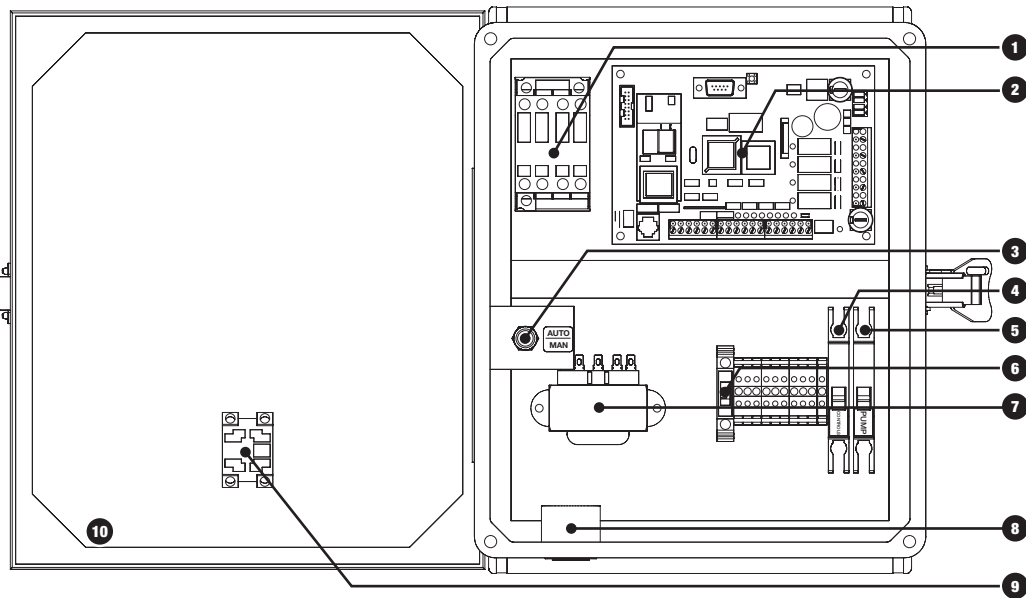
Standard Components

Feature	Specifications
1. Motor-Start Contactor	120 V, 16 FLA, 1 hp (0.75 kW), 60 hz; 2.5 million cycles at FLA (5 million at 50% of FLA) 240 V, 16 FLA, 3 hp (2.24 kW), 60 hz; 2.5 million cycles at FLA (5 million at 50% of FLA)
2. VeriComm® Remote Telemetry Unit*	ATRTU-100: 36/18 VAC (center tap transformer); 8 digital inputs, 4 analog inputs, 4 digital outputs, 0 analog outputs, on-board modem (2400 baud); LED input and output indicators; 1-year battery backup of data and program settings
3. Toggle Switch	Single-pole, single-throw, momentary manual switch; 20 A, 3/4 hp (0.75 kW).
4. Controls Circuit Breaker	10 A, OFF/ON switch; single-pole 120 V; DIN rail mounting with thermal magnetic tripping characteristics (240 V units are available for international markets)
5. Pump Circuit Breaker	20 A, OFF/ON switch; single-pole 120 V or double-pole 240 V; DIN rail mounting with thermal magnetic tripping characteristics
6. Fuse	250 VAC, 1 A
7. Transformer	120 VAC primary, 36 VCT @ 0.85 A secondary
8. Audible Alarm	95 dB at 24 in. (610 mm), warble-tone sound
9. Visual Alarm	7⁄8-in. (22-mm) diameter red lens; "Push-to-silence;" UL Type 4X rated, 1 W LED light, 120 V
10. Panel Enclosure	Measures 13.51 in. high × 11.29 in. wide × 5.58 in. deep (343 × 287 × 135 mm). UL Type 4X rated. Constructed of UV-resistant fiberglass; hinges and latch are stainless steel AX20

See VeriComm® Monitoring System (NTD-CP-VCOM-1) for details.

Optional Components

Feature	Specification(s)	Product Code Adder
Pump Run Lights	7⁄8-in. (22-mm) diameter green lens. UL Type 4X rated, 1 W LED light, 120 V	PRL
Heater	Anti-condensation heater; self-adjusting: radiates additional wattage as temperature drops	HT
UV Disinfection Compatibility	UV grounded power circuit and alarm contacts; pump disable upon UV failure	UV

Additional options available on a custom basis. Contact Orenco Controls for more information.