Quick Start Guide

Spray Irrigation · Time Dose + UV | 120 VAC · Single Phase · Dual Feeds | Failsafe Lockout

ENGINEERED & MANUFACTURED FOR AKHA MANUFACTURING, LLC · HYDRO-ACTION® SYSTEMS

DOCUMENT VERSION **1.0**
MODEL **CP-001-3-0006**
CONDENSED FROM **Operation Manual v3.0 (August 2026)**
SYSTEM PLATFORM **Hydro-Action®**

DATE **August 2026**
UL FILE NUMBER **E547664**
COMPLIANCE **UL 508A Listed**
WEB **hydro-action.com**

⚠ READ FIRST — THIS PANEL HAS TWO SEPARATE 120 V FEEDS

Main power (terminal 1) and a dedicated control circuit (terminal 2) that keeps the alarm system live when main power is lost. **The control circuit remains energized even when the main breaker is OFF — disconnect BOTH feeds and verify with a voltage tester before opening this panel.** Neutrals from both feeds must land on the same neutral bus in the feeder panel.

WHAT THIS PANEL DOES

The CP-001-3-0006 powers and supervises the aeration compressor, continuously powers and monitors the UV disinfection lamp through a PRI-51 current monitoring relay, and runs a time-dosed spray/dose pump on an Elko SHT-13/2 Wi-Fi smart timer. Protection is failsafe: air pressure loss or a UV lamp fault raises the alarm and locks out the pump so under-treated effluent cannot be dispersed. High water raises the alarm only — the pump stays on schedule to bring the level down.

START-UP

1. Verify all field wiring against Connection Diagram v1.3 and confirm the customer-supplied UV lamp is installed in the ballast socket.
2. Energize the dedicated control circuit feed (terminal 2) — the alarm system is now live.
3. Energize main power (terminal 1). The compressor starts immediately and runs continuously.
4. Allow the UV lamp 1–2 minutes of warm-up. Program the SHT-13/2 on **Channel 1** — Channel 2 is spare and drives nothing.
5. Prove every protection before leaving the site: interrupt the airline (alarm + pump lockout), interrupt the UV lamp (alarm + lockout), lower the pump level float (no dose, no alarm), and lift the high water float (alarm only — pump unaffected). Verify the silence push-button and record the hour meter reading.

SUPPORT & WARRANTY — AKHA MANUFACTURING, LLC

ALL technical support, warranty claims, service questions, and callbacks for this panel are handled by AKHA Manufacturing, LLC.

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Legacy Controls provides manufacturing and warranty support to AKHA Manufacturing, LLC and does not accept direct inquiries or claims from end users or installers for this product line.

ALARMS & LOCKOUTS

CONDITION	PANEL RESPONSE
Air pressure loss	Alarm · spray/dose pump LOCKED OUT
UV lamp fault / end-of-life	Alarm · spray/dose pump LOCKED OUT
Insufficient dose level (pump level float 5–6)	Timer cannot engage the pump — no alarm
High water (alarm float across 7–8)	Alarm ONLY — pump stays on schedule by design
Main power loss	Alarm system remains live on the control circuit feed

FAILSAFE Never bypass the air loss or UV fault lockouts. They clear automatically when the condition is corrected. High water is intentionally alarm-only — when treatment is healthy, the panel keeps dosing.

QUICK SPECIFICATIONS

PARAMETER	SPECIFICATION
Supply	120 VAC, 60 Hz, single phase — dual feeds: main power + dedicated control circuit
Total FLA / SCCR	25 A · SCCR 5 kA
Spray / Dose Pump	120 V, 1 HP (20 FLA) — integral motor overload required
Compressor (Air Pump)	120 V, ¼ HP (5.0 FLA) — integral motor overload required
Panel Branch Protection	CB1 20 A pump · CB2 5 A compressor · CB3 5 A control
Feeder Protection	Field supplied, upstream: 30 A main feed · 5 A control feed
Timer	Elko SHT-13/2 Wi-Fi — Channel 1 spray output (15/18) · Channel 2 spare
UV Supervision	Elko EP PRI-51 current relay · ENI-T8-32-P2SC-N ballast · lamp customer supplied
Alarm System	Beacon + horn with silence push-button — on the control circuit
Enclosure / Wiring	NEMA 4X polycarbonate · 26–10 AWG copper, 600 V, 60 °C · torque 0.79 N·m (7.0 in-lbs)

SERVICE ESSENTIALS

- Biannually: clean the compressor intake filter, verify the air pressure switch, and test the beacon, horn, and silence button.
- Biannually: confirm the SHT-13/2 is in AUTO with the correct Channel 1 schedule and record the hour meter reading.
- Annually: re-torque all terminal screws to 0.79 N·m (7.0 in-lbs).
- Adjust the PRI-51 threshold only after replacing the UV lamp or ballast — per Operation Manual Section 7. Do not adjust during routine service.
- There are no overload devices in this panel — both motors carry integral overload protection.

FULL OPERATION MANUAL ONLINE

This guide condenses Operation Manual v3.0. Scan the code, or the matching label on the inner panel door, for the complete manual — wiring, SHT-13/2 programming, PRI-51 supervision, maintenance, troubleshooting, and warranty.

www.legacy-controls.com/panels/CP-001-3-0006/

SCAN FOR MANUAL

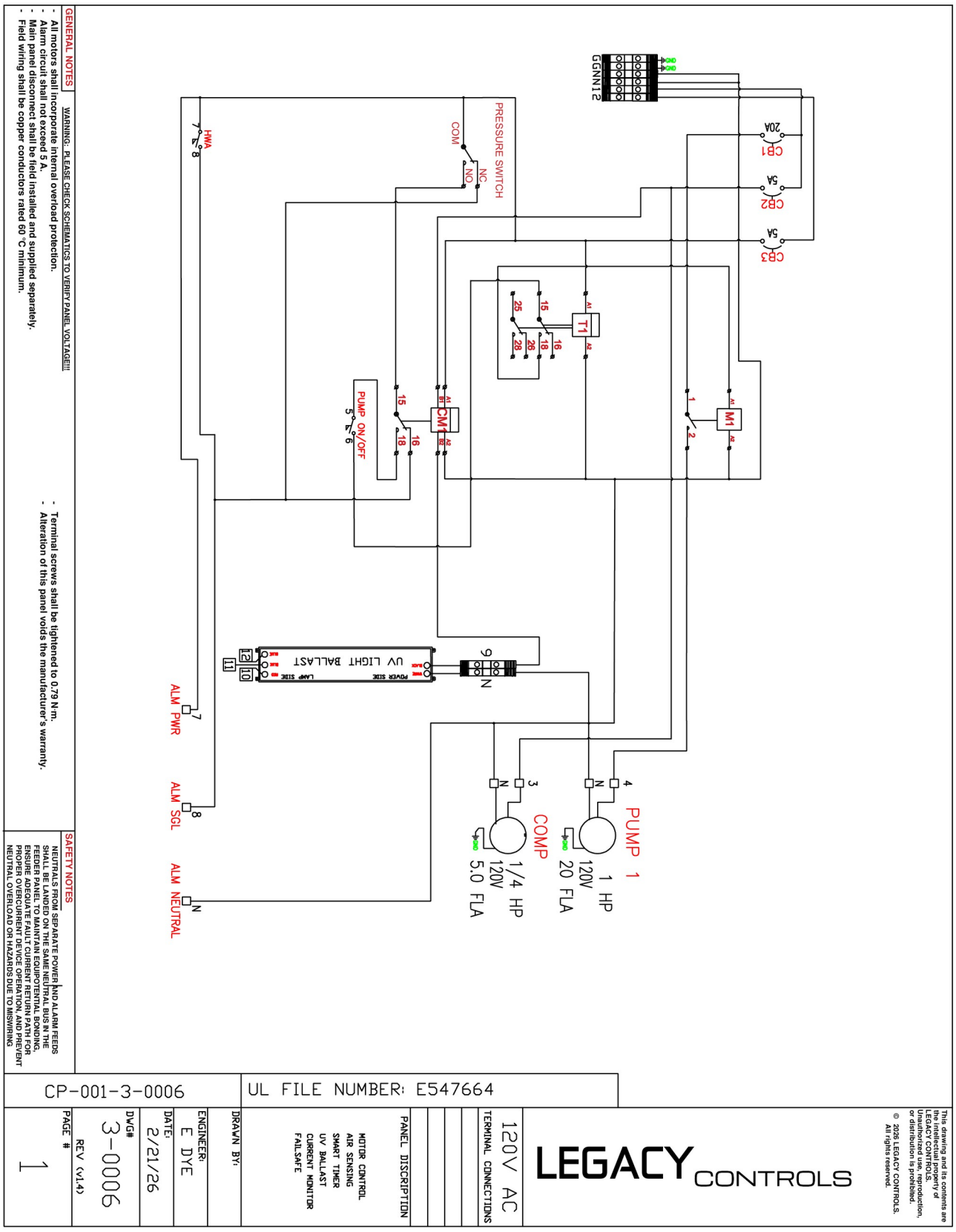

FIGURE 1 — LINE DRAWING v1.4 (REFERENCE)

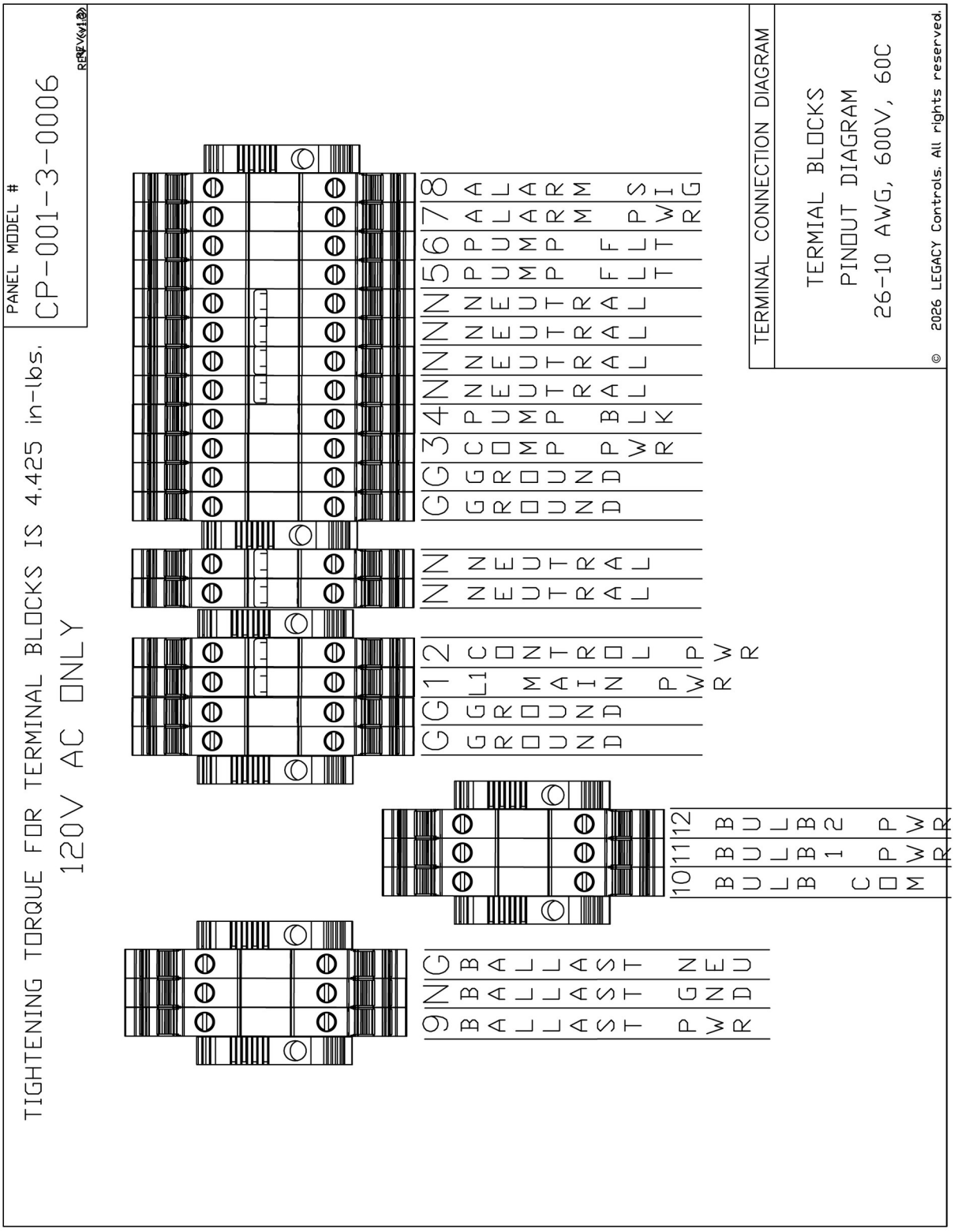

FIGURE 2 — CONNECTION DIAGRAM v1.3 (REFERENCE)