

Duplex Pump Control Panel — Three-Phase

230 VAC · 3-Phase | Duplex · Automatic Alternation | 3 HP · Float Control
DESIGNED & MANUFACTURED BY LEGACY CONTROLS · MIMS, FLORIDA · UL 508A LISTED

PRODUCT OVERVIEW

UL 508A Listed duplex control panel for two 3 HP, 230 V three-phase pumps. One three-phase feed powers everything — 120 V control power is derived internally, so no incoming neutral is required. The lead pump seals in for full drawdown, the alternator swaps lead and lag every cycle, a Both-Pump float escalates during high demand, and a separately fused high water alarm annunciates without calling any pump.

KEY FEATURES

- Two 3 HP · 230 V 3Φ pump circuits · 30 A branch breakers
- Lead/lag alternation every cycle — TELE E1ZMLA10
- Full-drawdown seal-in float logic — Off · On · Both-Pump · Alarm
- In-panel Class 10A adjustable overload protection per pump
- Internally derived, fused 120 V control power — no neutral required
- Fused alarm branch — globe, 95 dB buzzer, test + silence
- HAND / OFF / AUTO selector and run light per pump

PANEL IDENTIFICATION

MODEL
LC-9100
SERIES
9000 · Three-Phase Duplex
UL FILE NUMBER
E547664
DOCUMENTATION
Operation Manual v1.1 · Schematic Set Rev C
KEY COMPONENT
TELE E1ZMLA10 Alternator
ENCLOSURE
Polycase ZH-161407 · NEMA 4X

⚠ READ FIRST — 230 V 3-PHASE SUPPLY

Three phase conductors plus ground — no incoming neutral. Control power is derived internally (T1 jumpered H1–H3 · H2–H4 for 230 V). Verify jumpers and supply voltage before energizing, and verify pump rotation at commissioning.

TECHNICAL SPECIFICATIONS

PARAMETER	SPECIFICATION
Model / Retail	LC-9100 — 9000 Series Three-Phase Duplex
Supply	230 VAC, 60 Hz, 3-phase — 3 conductors + ground (no neutral required)
Pump Circuits	Two · 230 V 3Φ · 3 HP, 9.6 FLA each — 30 A 3-pole branch breakers (CB1 · CB2)
Overload Protection	In-panel thermal overload per pump · 9–12.5 A, Class 10A — set to 9.6 A
Control Circuit	CB3 15 A 2-pole → F1/F2 1.25 A fuses → T1 150 VA 230/120 V → F4 2 A branch
Alarm Circuit	Separately fused (F3 2 A, also feeds the Both-Pump float) — globe · buzzer · test · silence
Total FLA / SCCR · Feeder	[CONFIRM AT RELEASE] · feeder protection field supplied upstream
Floats & Controls	Four N.O. floats (Off · On · Both-Pump · Alarm) · two HOA selectors · run lights
Enclosure / Field Wiring	Polycase ZH-161407 NEMA 4X polycarbonate · copper 60 °C min · DK4N 5.3 in-lbs (0.6 N·m) · DK10N per block marking
Compliance	UL 508A Listed · File E547664 · NFPA 70 (NEC)

FLOAT FUNCTIONS & ALARM ARCHITECTURE

FLOAT (LOWEST → HIGHEST)	TERMINALS	FUNCTION
Off	12 & 13	Makes on rise to arm the pump call; on fall shuts the pumps off — full drawdown
On	10 & 11	Picks the seal-in float relay and starts the lead pump through the alternator
Both-Pump	14 & 15	Runs both pumps during high demand (AUTO only) — no alarm · fed from the F3 branch
High Water Alarm	16 & 17	Alarm globe + buzzer on the separately fused branch — calls no pump

OPERATION & PROGRAMMING REFERENCE Step-by-step installation, commissioning, alternator programming, and troubleshooting are provided in the LC-9100 Operation Manual v1.1, with the complete Schematic Set (Sheets 1–5, Rev C As-Built) reproduced in Section 4.

SUPPORT & WARRANTY

End users: contact the authorized dealer or installer who supplied the system for all service and warranty claims.

Dealer & sales inquiries:

Legacy Controls

PO Box 457, Mims, Florida 32754
Legacy-Controls.com

Two (2) year limited warranty to the original purchaser, administered through the authorized dealer.

COMPLIANCE & NOTES

- Installation by qualified personnel only, per NEC and UL 508A
- Field-supplied main disconnect required; verify with a voltage tester before opening
- Feeder protection is field supplied at the main panel
- Verify pump rotation at commissioning — swap two phase conductors at the pump terminals if reversed
- Overload dials set to motor nameplate FLA (3 HP: 9.6 A) before energizing
- Any alteration, modification, or unauthorized repair voids the UL listing and warranty
- See LC-9100 Operation Manual v1.1 and Schematic Set Sheets 1–5, Rev C