## ES250 Electrostatic Spray Control Panel



# **FAULTS QUICK REFERENCE TABLE**



RED LED STATUS	FAULT
STEADY-ON	SYSTEM IN STOP MODE
SHORT, CONTINUOUS PULSING - NO PAUSES	ARC-FAULT
2 X PULSES FOLLOWED BY SHORT PAUSE	NOZZLE #1 LOW OIL PRESSURE
4 X PULSES FOLLOWED BY SHORT PAUSE	NOZZLE #1 HIGH OIL PRESSURE
6 X PULSES FOLLOWED BY SHORT PAUSE	NOZZLE #2 LOW OIL PRESSURE
8 X PULSES FOLLOWED BY SHORT PAUSE	NOZZLE #2 HIGH OIL PRESSURE
10 X PULSES FOLLOWED BY SHORT PAUSE	LOW AIR PRESSURE
12 X PULSES FOLLOWED BY SHORT PAUSE	OIL RESERVOIR LOW

Electrostatic spraying offers very controlled and direct fluid application in chain lubrication or any other oiling application. After the fluid receives an electrical charge in the nozzle body, the resulting spray will be directly attracted to the intended metal target. The "opposites attract" principle used in electrostatic spraying generates a very high spray transfer efficiency. This allows the electrostatic spray to be very low in both fluid volume and flow rate, effectively eliminating any over-spray and greatly reducing any cleanup downtime.

The ES250 Electrostatic Spray Control Panel offers an adjustable applied voltage range of 0-30,000 VDC (30 kVDC) output to the connected electrostatic single point nozzles to 6.00 in [152] generate the charge required for electrostatic spraying. This wide range allows for processor fluid-specific fine tuning to enhance the electrostatic spray pattern. From the ES250 Electrostatic Spray Control Panel, an operator can adjust the applied voltage, pump frequency, and start or stop one of the system modes.

## ES250 System Modes Prime Mode

Prime Mode cycles the pumps for a period of 60 minutes and should be used to fill the fluid lines, when empty, before spraying. Fluid should be present at the nozzle before spraying. Multiple Prime Mode cycles may be required. Prime Mode **does not** activate voltage transmission.

Pump cycle: 120 CPM •

#### Test Mode

Test Mode is active for 15 minutes and can be used to quickly check full system operation when a time limit is desired. To activate, the ES250 must be in Standby Mode with no active faults. ٠ Pump cycle: 20 - 80 CPM (adjustable)

#### Lubrication Mode

Lubrication Mode is for standard ES250 operation. Once enabled, all ES250 functions are active, including voltage transmission and fault monitoring, until the mode is stopped. Pump cycle: 20 - 80 CPM (adjustable) •

### Burst Mode

Burst Mode increases the lubrication output by 1.25x the current pump frequency setpoint. This allows for a 24-hour period of increased lubrication, when desired, without the need to change the pump cycle.

Max. pump cycle: 100 CPM •

## **ES250** Specifications

- Enclosure: Stainless Steel •
- Max. Ambient Temperature: 104° F (40° C) ٠
- Weight: 12.0 lb (5.4 kg) approx. •
- Power Requirements: 24VDC, 2.5A ٠
- Max. no. of Single Point Nozzles: 10 •
- Float Switch Input
- LED Strobe Fault Indication

**DESCRIPTION:** 

**ES250 Electrostatic Spray Control Panel** 

