

# SAFE SIMPLE SECURE

## **ELCI** SENSOR AND BREAKERS



#### **Description**

The LineGard™ PGFM product family provides ELCI (equipment leakage) ground fault sensing and is designed and manufactured by North Shore Safety, a leader in innovative safety products. The PGFM series operates in tandem with an Airpax™ LEL series, UL 489 listed circuit breaker, with shunt trip and auxiliary switch manufactured by Sensata Technologies.

The **combined assembly** of the PGFM and an Airpax<sup>™</sup> breaker meets the requirements of ABYC E-11 for ground fault protection and main shore power circuit protection. The PGFM constantly monitors the current balance of the conductors (wires / cables) supplying power to the load. When a ground fault of 27mA nominal (30 mA max) occurs, the PGFM uses the LEL's shunt trip coil to signal the breaker to trip.

## **FEATURES**

- Power and fault status indicators
- Provides identification of a ground fault vs. short circuit trip
- Chemical and UV resistant enclosure
- Trip level of sensing device < 30mA (27mA nominal) at trip time of < 100mS (60mS nominal) per E-11</li>
- Protection range and operating voltage:
  0 50 Amps, 120 VAC, 120/240 VAC
- Unit operating temperature is -35°C to +66°C
- Accommodates up to 3 wires, 6 AWG, with no twisting of the wires required

## **WIRING DIAGRAM (120 VAC APPLICATION)**



AIRPAX™ LEL & IDLNK SERIES CIRCUIT BREAKER RATINGS (PER UL489)				
Voltage	Current	Frequency	Short Circuit	Poles
125VAC	0.05 to 50 amps	50/60 Hz	5,000 amps	1 to 3
120/240VAC	.05 to 50 amps	50/60 Hz	5,000 amps	2 to 3

LINEGARD™ PGFM SERIES ELCI SPECIFICATIONS			
Salt Fog (Corrosion)	ASTM B117		
Shock	33CFR183.534 - modified to supply 5,000 shocks @ 25G, instead of test standard of 1,000 shocks		
Vibration	MIL-STD-810 (random vibe 4G RMS), IEC6945 (sine sweep 5 to 100Hz for low frequency)		
Ignition Protection	SAE J1171 (UL1500)		













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## **ELC** SENSOR AND BREAKERS

## **SENSORS - 30A / 50A**







## **BREAKERS - 30A / 50A**







## STAINLESS COMBO KITS - ELCI SENSOR / BREAKER

PART NUMBER	DESCRIPTION	MATERIAL	COLOR
ELCIBRKR30SS	Combo Kit - ELCI Sensor & 30A Breaker / Stainless Steel	Stainless Steel	Stainless
ELCIBRKR50SS	Combo Kit - ELCI Sensor & 50A Breaker / Stainless Steel	Stainless Steel	Stainless

### WHITE NON-METALLIC COMBO KITS - ELCI SENSOR / BREAKER

PART NUMBER	DESCRIPTION	MATERIAL	COLOR
ELCIBRKR30PW	Combo Kit - ELCI Sensor & 30A Breaker / White Non-metallic	High Performance / Flame Resistant	White
ELCIBRKR50PW	Combo Kit - ELCI Sensor & 50A Breaker / White Non-metallic	High Performance / Flame Resistant	White

## INDIVIDUAL COMPONENTS - STAINLESS STEEL / ELCI SENSOR / BREAKERS

PART NUMBER	DESCRIPTION	MATERIAL	COLOR
ELCISENSORSS	30 Amp / 50 Amp - ELCI Sensor - Stainless Steel	Stainless Steel	Stainless
ELCI30BRKERSS	30 Amp Breaker - Stainless Steel	Stainless Steel	Stainless
ELCI50BRKERSS	50 Amp Breaker - Stainless Steel	Stainless Steel	Stainless

## INDIVIDUAL COMPONENTS - STAINLESS STEEL / ELCI SENSOR / BREAKERS

PART NUMBER	DESCRIPTION	MATERIAL	COLOR
ELCISENSORNMW	30 Amp / 50 Amp - ELCI Sensor - White Non-Metallic	High Performance / Flame Resistant	White
ELCI30BRKERNMW	30 Amp Breaker - White Non-Metallic	High Performance / Flame Resistant	White
ELCI50BRKERNMW	50 Amp Breaker - White Non-Metallic	High Performance / Flame Resistant	White









