ELECTRICAL

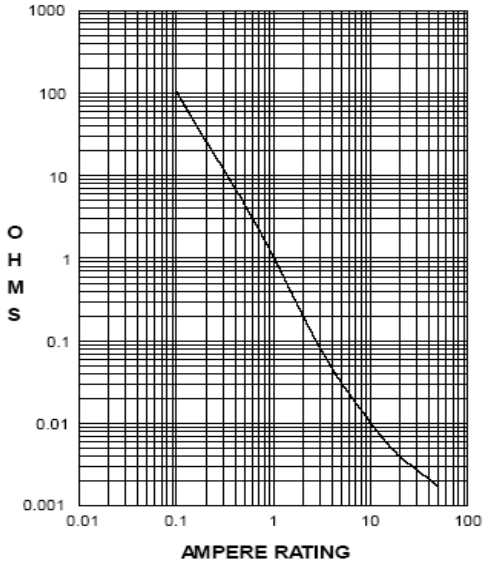
Current Rating ..... 1 - 50 Amps Max.
Voltage Rating ..... 120 VAC, 120/240 VAC

Dielectric Strength ..... 1960 VAC, 60Hz for 1 minute between all electrically isolated terminals

Insulation Resistance ..... Minimum of 100 Megohms@500VDC

Impedance ..... (Across Circuit breaker only)

IMPEDANCE VALUES
Across Line and Load Terminals



Current (amps)	Tolerance (%)
1.0-5.0	+/-15
5.1-20.0	+/-25
20.1-50	+/-35

Leakage current trip level ..... 30 mA & 5±1 mA

Leakage Current Trip Time .....
For 30 mA leakage trip
<= 22.2mA, Shall not trip
30mA, shall trip within 0.1 seconds
The above complies with UL-1053 & ABYC E11

For 5±1 mA leakage trip ≤ 25 ms
The above complies with UL-943 & ABYC E11

Operating Frequency .....
50/60 Hz for 30 mA leakage trip
60 Hz for 6 mA leakage trip

Indicator .....
Two or Three integrated LEDs, Red, Green and Amber
- Green LED On, Red LED Off – Line Voltage is present, the breaker is closed, and the device is protecting the circuits against over current and leakage current.

	• Green LED Off, Red LED On – The device has detected leakage current and has opened the circuit breaker. • Green LED Flashing, Red LED Off – The circuit breaker has opened due to over current or has been turned off manually. • Green LED Off, Red LED Off – Line voltage is not present. • Amber LED On – Hot and Neutral Reversed.
Grounded Neutral Protection	When neutral is grounded on load side of circuit
Hot/Neutral Reversal Protection	Optional. Protects against hot and neutral reversed wiring
Test Button	Located on Ground Fault Module.
Overload	50 operations @ 600% of rated current on Breakers
Other	The ELCI trips an integrated hydraulic magnetic breaker when a leakage to ground fault or grounded neutral fault is detected. A reversed Line/Load connection to the circuit breaker shall not cause damage to the device.
EMI	
Immunity to Conducted Disturbances, Induced by RF Fields	IEC 61000-4-6, 0.5V 150KHz ~ 230 MHz
Supplemental voltage surge immunity test	2kV@1kA & 6kV@3kA (Tripping permitted)
Surge current	6kV @ 10 kA
Inrush	12 times rated current for one half of AC cycle
Interrupt Capacity	5,000 Amps
MECHANICAL	
Endurance	10,000 "On-Off" Operations @ 6 per minute; with Rated current & Voltage
Trip Free	Trips on Short circuit, overload, leakage to ground or grounded neutral, even when actuator is forcibly held in the "On" position.
ENVIRONMENTAL	
Environmental	Designed and tested in accordance with the requirements of Specification Mil-PRF-55629 and Mil-STD-202G
Operating Temperature	-35 ºC to +85 ºC
Vibration	0.06” excursion@10-55 Hz, 10G@55-500 Hz (at rated current per Method 204C, Test Condition A). Instantaneous and ultra-short curves tested at 90% of rated current.
Shock	100G, 6 ms, sawtooth at rated current per Method 213, Test Condition “I”.

Impact	5 ft-lbs using 2-inch diameter steel sphere
Thermal Shock	Method 107D, Condition A (5-cycle @ -55ºC to +25ºC to +85ºC to +25ºC)
Moisture Resistance/Humidity	93% RH @ 30ºC for 168 Hours.
Ignition Protection	UL-1500.
Ingress Protection	IP65 above mounting panel.
Corrosion	UL-943-6.21, 3 weeks Humidity: 30±2ºC, 70±2% relative humidity, Mixed Flowing Gases: 100 ppb H2S 20 ppb Cl2 200±50 ppb NO2,

PHYSICAL

Number of Poles	2-pole (1 Circuit Breaker + 1 GFCI Sensor Module), 120V. 3-pole (2 Circuit Breakers + 1 GFCI Sensor Module), 120/240V or 120V with Neutral Break. 4-pole (3 Circuit Breakers + 1 GFCI Sensor Module), 120/240 with Neutral Break.
Termination	Circuit Breaker Line Side: #10-32 or M5 threaded studs. AWG#8 Neutral pigtail.
Mounting	Front Panel, #6-32 and M3 threaded inserts.
Actuator	Handle, Flat Rocker, Curved Rocker (with or without rocker guard), Push-to-Reset Rocker.
Internal Circuit Configuration	Circuit Breaker, Series Trip Switch only (without over-current protection)
Weight	TBD
Standard Color	Housing – Black, Test Button – White, Button Text – White. Fault Indicator – Red, Power Indicator - Green

Agency Approvals

Agency Approvals	UL-943, UL-489, UL-1077, UL-1053, UL-1500, CSA, ABYC E11

Test Document #

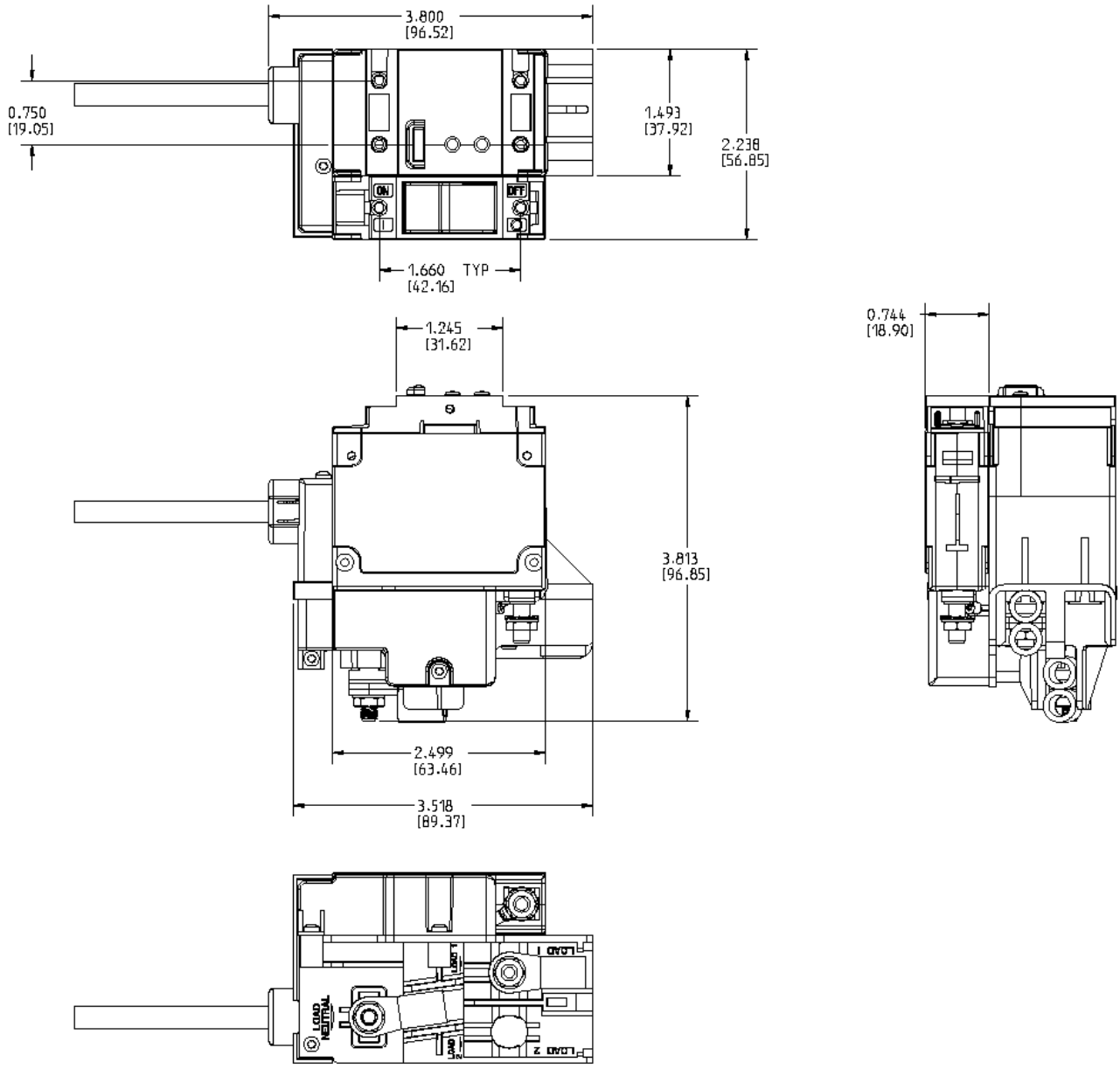


Figure 1 - 120 VAC Configuration

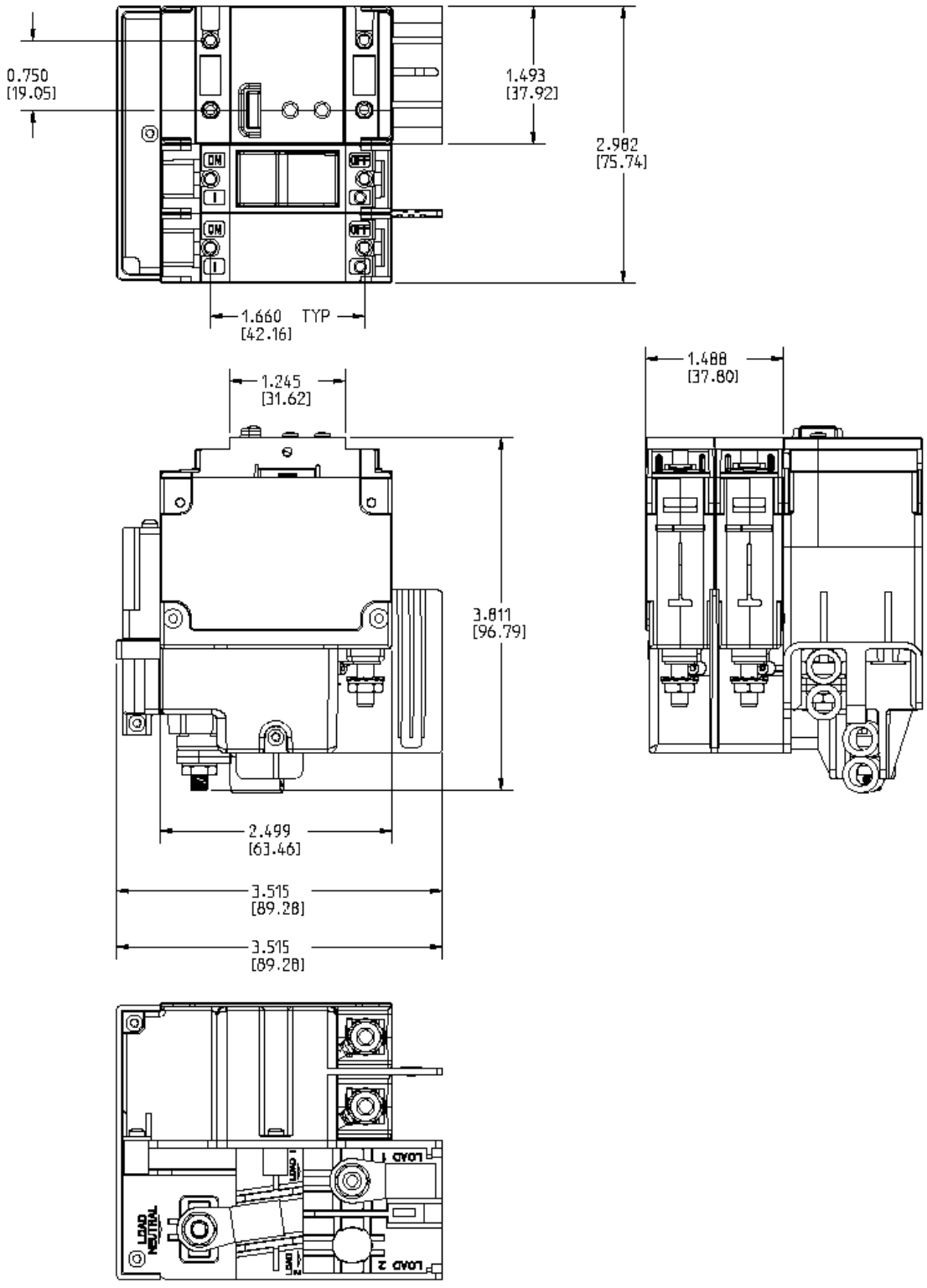


Figure 2 - 120 VAC with Neutral Switching

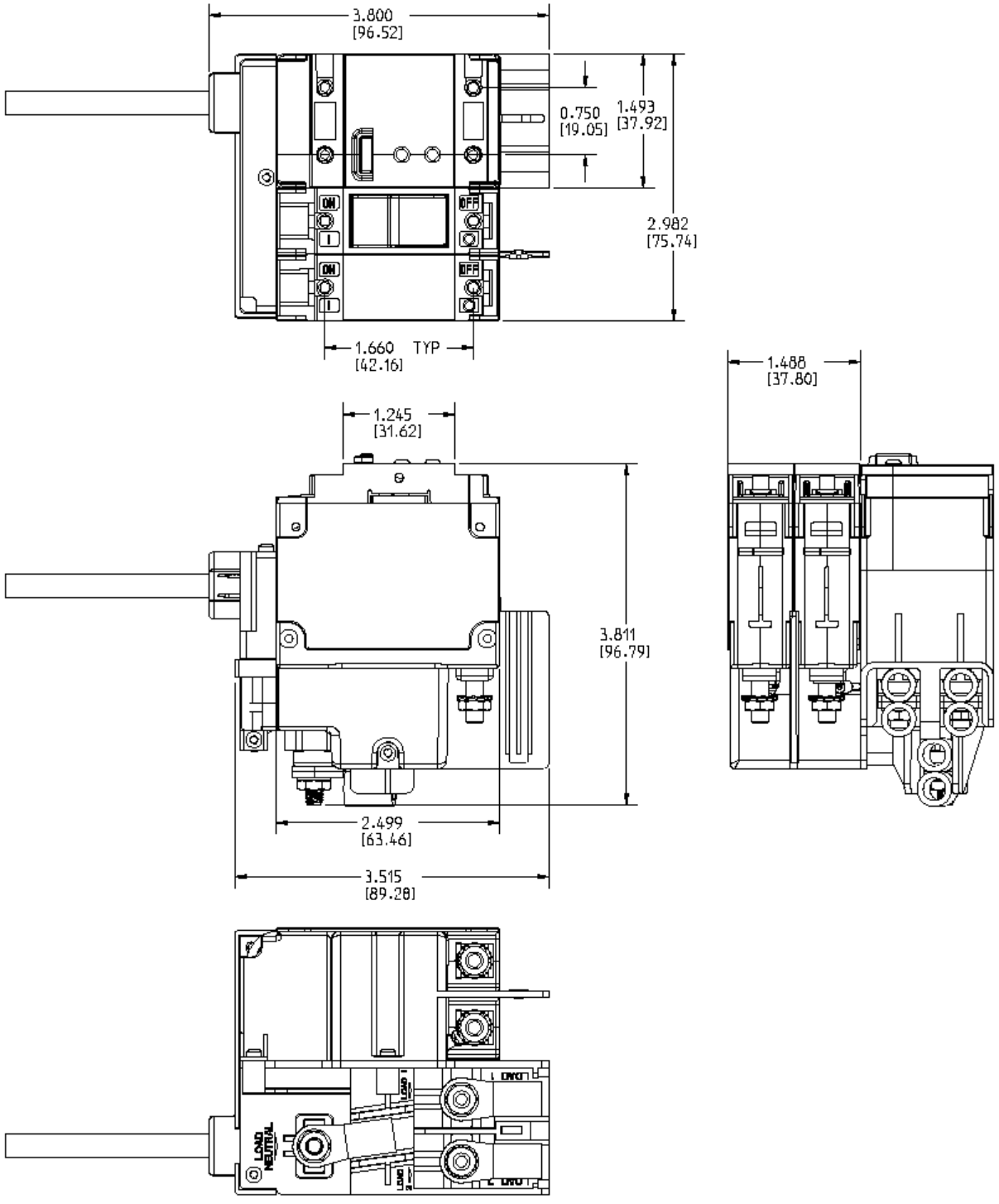


Figure 3 - 120/240 VAC Configuration

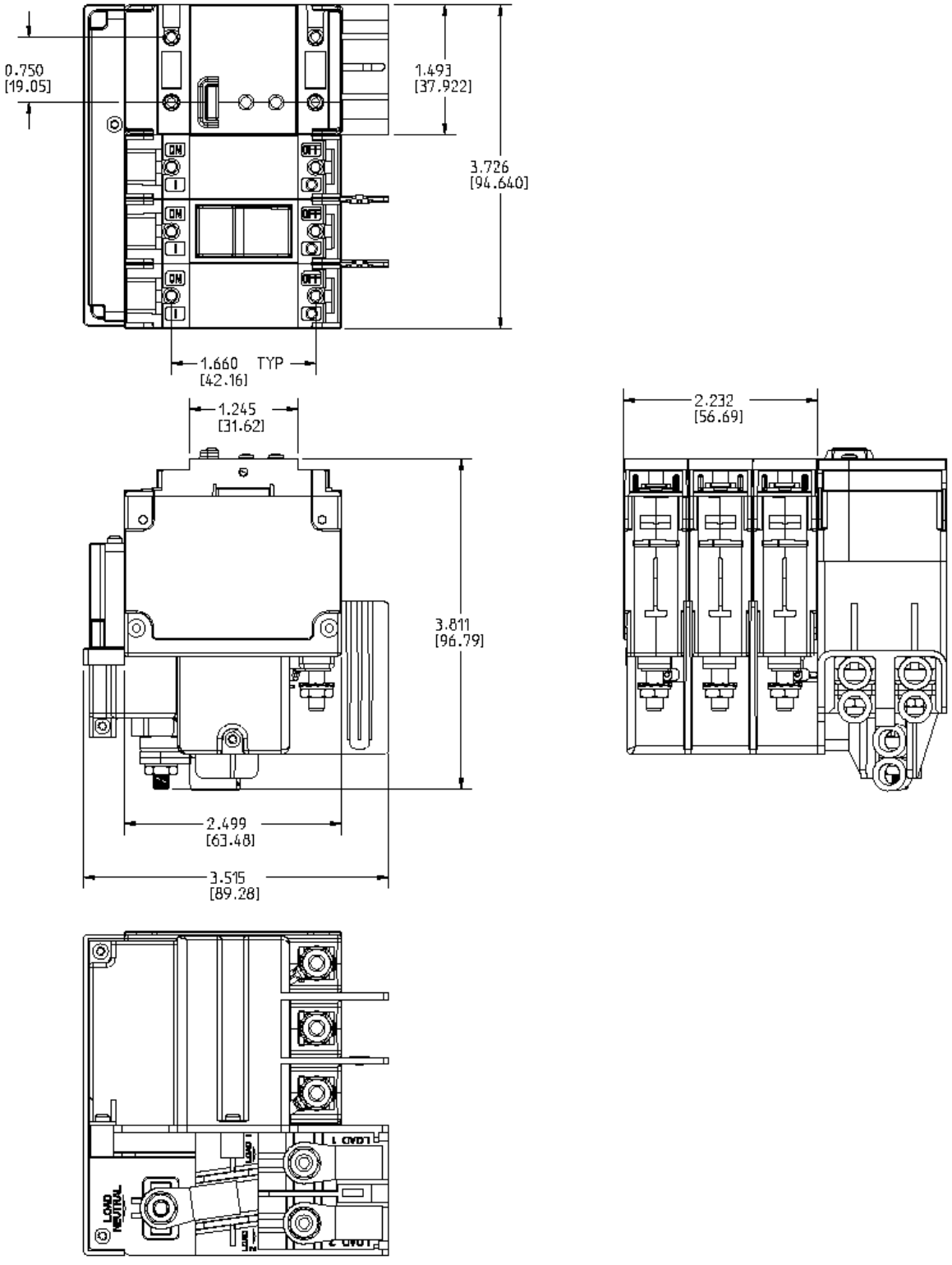


Figure 4 - 120/240 VAC with Switched Neutral

Prepared By:_____ Date:_____
Project Leader

Reviewed By:_____ Date:_____
Manager, Standards and Testing

Reviewed By:_____ Date:_____
Director, NPD

Approved By:_____ Date:_____
Marketing

Approved By:_____ Date:_____
VP, Global Engineering

Approved By:_____ Date:_____
Customer Representative