



# Environmental Potentials

Power Quality For The Digital Age



## EP-2900 SERIES

Installation and Application Manual



# EP-2900 Series Full Cabinet Installation and Maintenance Manual

## Table of Contents

3	•	Safety First
3	•	Pre-Installation Preparations
4	•	EP-2900 Series Module Combinations
5	•	EP-2900 Series Application
6	•	Application Thresholds for EP-2900 Filtration Modules
8	•	Voltage Ratings & Power Source Configurations
10	•	Ground Block Installation
12	•	Installation Procedures: Mounting, Wiring, Module Installation & Replacement, Dry Contact Outputs
13	•	Maintenance
13	•	Servicing



## TEN YEAR WARRANTY

- Environmental Potentials will replace or repair any product from the EP-2900 product line as long as it was not damaged during installation or damaged from faulty installation.
- EP warranty registration card must be filled out and received by Environmental Potentials within 15 days of installation.
- This warranty is for the repair or replacement of damaged EP products only. Environmental Potentials accepts no liability, written or expressed, for the damage that may have occurred to any other equipment; nor does Environmental Potentials warranty cover any labor cost associated with replacement of such product.

**Contact Us:** [warranty@ep2000.com](mailto:warranty@ep2000.com) • 800.500.7436



**EP Technical Support:** [techsupport@ep2000.com](mailto:techsupport@ep2000.com) • 800.500.7436

**Mailing Address:** 1802 N. Carson Street, Suite 108-2132, Carson City, NV 89701

## ⚠ WARNING ⚠

ALWAYS have a professional electrician with proper safety equipment perform installation.

# Safety First

Even though EP units are designed for common installation, electricity is dangerous and only qualified personnel should attempt installation.

1. Read and understand entire contents of installation manual prior to installation.
2. Measure voltage of the electrical panel where the installation is taking place.
3. Verify that voltage and electrical configuration matches the model of the EP unit being installed.
4. If the model number does not match **DO NOT install**.
5. Turn off electrical supply prior to any installation in electrical panel.
6. Verify with voltage meter that electricity is off.
7. Ensure all connections in electrical panel are secure and all tools and equipment have been removed from electrical panel before re-energizing system.

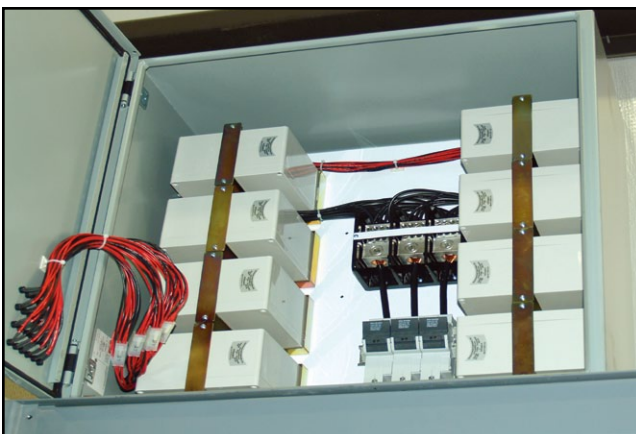
# Pre-Installation Preparations

1. Read entire contents before performing installation.
2. Verify the voltage rating of the system before installing the EP unit. Make sure the electrical system operates at or below the maximum continuous operating voltage of EP product. It should not exceed 5% of the rated nominal voltage of the unit.

**Note: If you have questions regarding voltage ratings, contact EP.**

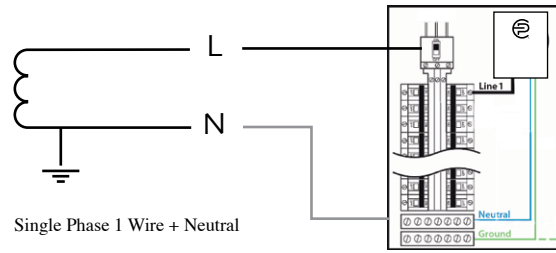
3. Check all the fuses of the electrical system before installing EP unit.
4. Make sure the power distribution configuration of the EP unit matches with the configuration of your electrical system (Delta or WYE).
5. Make sure your EP product is suitable for your application.

*Note: Call to confirm the product application.*



# Voltage Ratings & Power Source Configurations

## Single Phase Two Wire + Ground Installation

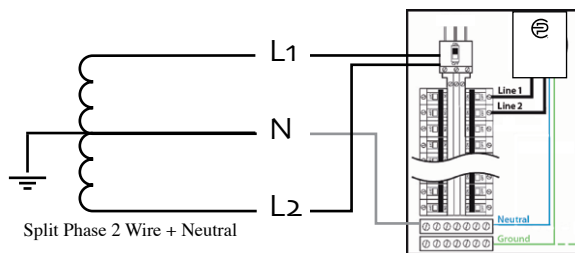


Single Phase 1 Wire + Neutral

1. Connect white neutral to neutral bus bar.
2. Next connect black phase A to phase A of the 30 A breaker.
3. **Last connect green ground to ground bus bar or panel. Ground is case ground only and should NOT be connected to neutral bus bar.**

SINGLE PHASE WYE	
PRODUCTS	
EP-2920	
EP-2940	
EP-2980	
VOLTAGE ID#	MCOV
1Y120	120 V
1Y240	240 V

## Split Phase Wye Installation

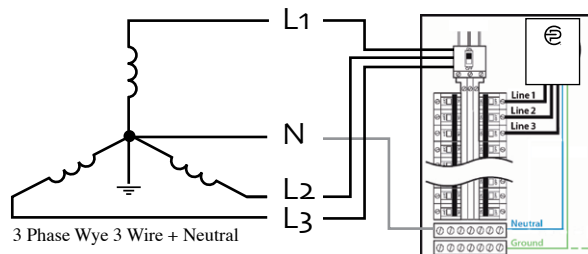


Split Phase 2 Wire + Neutral

1. Connect white neutral to neutral bus bar.
2. Next connect black phase A to phase A of the 30 A breaker.
3. Then connect black phase B to phase B of 30 A breaker.
4. **Last connect green ground to ground bus bar or panel. Ground is case ground only and should NOT be connected to neutral bus bar.**

TWO PHASE WYE	
PRODUCTS	
EP-2920	
EP-2940	
EP-2980	
VOLTAGE ID#	MCOV
1S240	120 V

## Three Phase Wye Installation

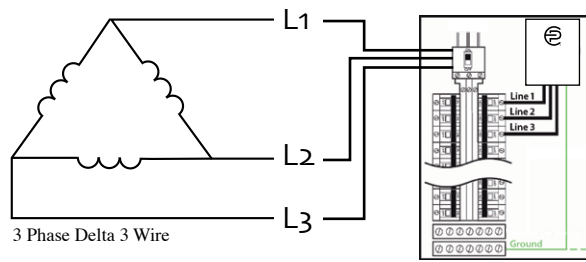


3 Phase Wye 3 Wire + Neutral

1. Connect white neutral to neutral bus bar.
2. Next connect black phase A to phase A of the 30 A breaker.
3. Then connect black phase B to phase B of 30 A breaker.
4. Then connect black phase C to phase C of 30 A breaker.
5. **Last connect green ground to ground bus bar or panel. Ground is case ground only and should NOT be connected to neutral bus bar.**

THREE PHASE WYE	
PRODUCTS	
EP-2920	
EP-2940	
EP-2980	
VOLTAGE ID#	MCOV
3Y208	120 V
3Y240	120V
3Y480	277V
3Y600	347V

## Three Phase Delta Installation



1. Connect black phase A to phase A of the 30 A breaker.
2. Next connect black phase B to phase B of 30 A breaker.
3. Then connect black phase C to phase C of 30 A breaker.
4. ***Last connect green ground to ground bus bar or panel. Ground is case ground only and should NOT be connected to neutral bus bar.***

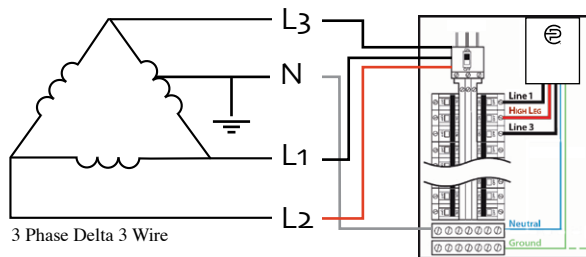
### THREE PHASE DELTA

#### PRODUCTS

EP-2920  
EP-2940  
EP-2980

VOLTAGE ID#	MCOV
3D240	240V
3D480	480V

## Three Phase High Leg Delta Installation



1. Connect black phase A to phase A of the 30 A breaker.
2. Next connect black phase B to phase B of 30 A breaker.
3. Then connect red phase C to phase C of 30 A breaker.  
**WARNING: Be sure that phase C is the HIGH LEG.**
4. ***Last connect green ground to ground bus bar or panel. Ground is case ground only and should NOT be connected to neutral bus bar.***

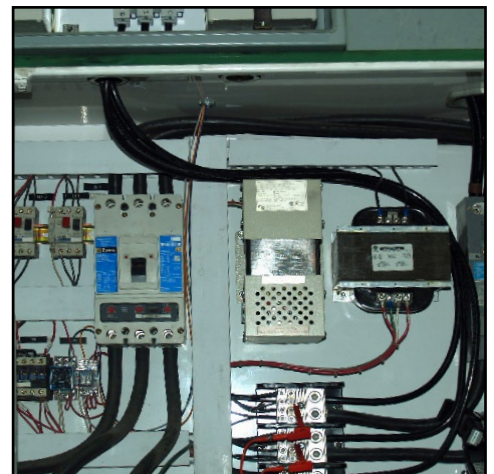
### 3 PHASE HL DELTA

#### PRODUCTS

EP-2920  
EP-2940  
EP-2980

VOLTAGE ID#	MCOV
3H240	120/ 240V

Left image shows mounted EP unit with incoming lines. Right image shows connection example . . .



# EP-2900 SERIES

