

Selecting the Proper Voltage for Dulcodes A UV Plants (Electronic Ballasts)

- 1x1A & 1x2A are only available in 208-240 VAC, single phase.
- All other models are available in 208-240 VAC or 480 VAC, three phase. Each UV unit has a specific part number based on power option. The UV plants can be retrofitted in the field in the event that a change is needed based on site conditions. (Conversion kit required)

Typical voltages you will encounter:

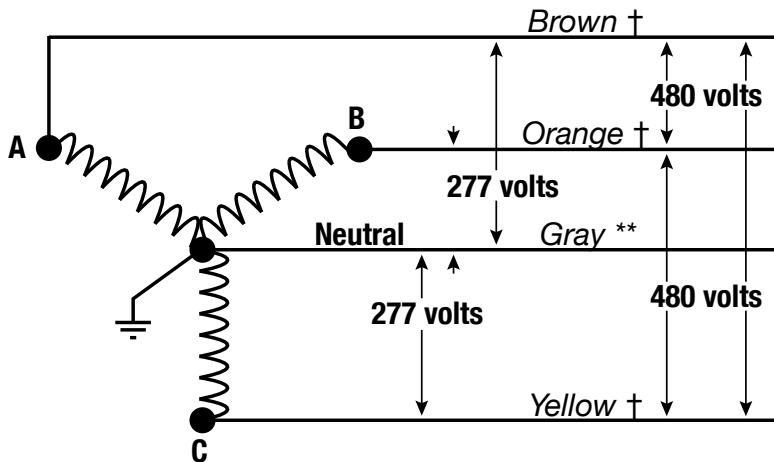
- 240 Volt, 1 Phase
- 208-240 Volt, 3 Phase
- 277/480 Volt, 3 Phase, 4 wire (with neutral), “WYE” type connection
- 480 Volt, 3 Phase, 3 wire (no neutral), “Delta” type connection



All models rated for 480 Volt require the 4 wire service (“WYE” type connection), since the neutral connection is needed to power the ballasts at 277 Volt (internal to the UV cabinet).

Below is a “WYE” type wiring diagram showing the connection for 277 Volt. The old **S** plants or magnetic ballasts utilized 400 V for the ballast and therefore NO neutral was required. From our experience and from the literature of our competitors, this is typical with most medium pressure UV units sold in aquatics.

277/480 Volt Three Phase Four Wire System (WYE Connected)



- † - A phase ungrounded conductor colored **Brown**
- † - B phase ungrounded conductor colored **Purple**
- † - C phase ungrounded conductor colored **Yellow**
- ** - Grounded neutral conductor colored **Gray**

FAQs:

Q: Will the 480 Volt, 3 Phase, 3 wire service work to power my system?

A: No, however there may be a 208/230 service available and the unit can be field upgraded.

Q: Do the 208/240 Volt units require a neutral?

A: No, although these voltages do sometimes have a neutral connection, it is not used within the system. At 208-240 Volt, 3 Phase, either a 3 wire or 4 wire service will work fine.

Q: Does the 1x1S require a Neutral?

A: No, it is a magnetic ballast and utilizes 400 Volts.