Single-Phase Slave

The Single-Phase Slave (model PSU-20) is an affordable way to increase the capacity of your Phason slave-capable control system. A 20-amp variable AC stage controls loads such as variable-speed fans, heat lamps, or incandescent lights. Installation is simple and there is no additional configuration required; all slave units follow the programs and settings of the master control.

The following Phason controls can use Single-Phase Slaves.

- Programmable Lighting Control (models PLC-1 and PLC-2)
- Supra (models SUPRA and SUPRA-RS)
- Heat Mat Control (model HMC)

The Single-Phase Slave must be on the same phase as the master control. If you are using a Programmable Lighting Control, the more advanced Three-Phase Slave (model PLC-2SDC) does not require all units to be on the same phase, allowing you to distribute the load across all three phases.

Features

- One variable AC stage
- Expandable using additional slaves
- Rugged enclosure (corrosion resistant, water resistant, and fire retardant)
- CSA approval
- Limited warranty (two years)

Parts included

- Single-Phase Slave
- Single-Phase Slave Cable
- Four mounting screws
- Installation guide

In addition to the parts included with the PSU-20, you need to provide an external disconnect switch for the variable AC stage.

Electrical ratings

- **Input** 120 VAC, 50/60 Hz
- **Variable AC output** 2300 W at 120 VAC
  20 A at 120 VAC, general-purpose (resistive)
  14 FLA at 120/230 VAC, PSC motor
  1/2 HP at 120 VAC, 1 HP at 230 VAC, PSC motor

Installing the Single-Phase Slave

Mounting the slave unit

1. Select a location for the unit. Make sure the slave cable can reach from the master control to the slave unit. Longer slave cables are not available.
2. Remove the screws from the front cover and then gently lift it off.
3. Mount the enclosure to a wall using the four screws provided with the control. Insert the screws into the large holes in each corner of the box and then tighten.

Connecting the slave units to the master control

Follow the instructions for the type of master control (Supra, Programmable Lighting Control, or Heat Mat Control) you are using.

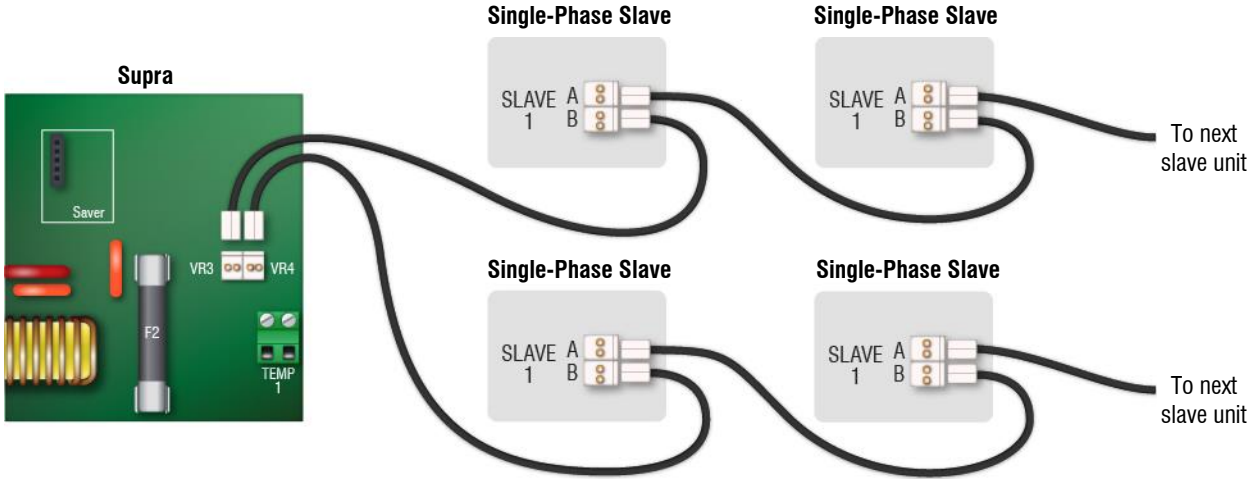
Supra

You can connect up to six Single-Phase Slaves to one Supra. For sites with three-phase power, it is preferable to use three Supras, so loads are distributed evenly across all three phases.

On the Supra, there are two connectors labeled **VR3** and **VR4**. The connectors are where you connect slave units to variable stages 3 and 4 respectively. You cannot connect slave units to variable stages 1 and 2 on a Supra.

When a slave unit is connected to **VR3**, it follows the Supra's programmed settings for variable stage 3. When a slave unit is connected to **VR4**, it follows the settings for that stage. For more information, see the **Supra user manual**.

To connect one slave unit, connect the slave cable from **VR3** or **VR4** to **SLAVE1 B**. To connect additional slave units, connect the cable from **SLAVE1 A** to **SLAVE1 B**. The example shows the connections for two slaves connected to variable 3 and two slaves connected to variable 4.

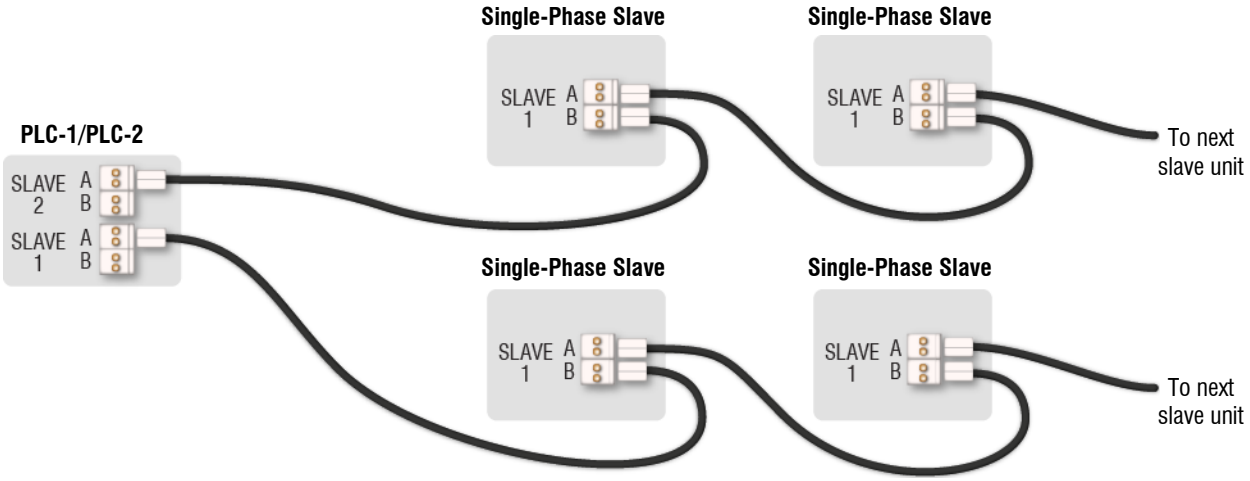


Programmable Lighting Controls (PLC-1 and PLC-2)

You can connect up to six Single-Phase Slaves to one Programmable Lighting Control. On the PLCs, there are two connectors labeled **SLAVE1** and **SLAVE2**. The connectors are where you connect slave units to variable AC stages 1 and 2 respectively.

When a slave unit is connected to variable stage 1 (**SLAVE1**), it follows the PLC's settings for the program group to which variable stage 1 is assigned. When a slave unit is connected to variable stage 2, it follows the settings for the program group to which that stage is assigned. For more information, see the **PLC user manual**.

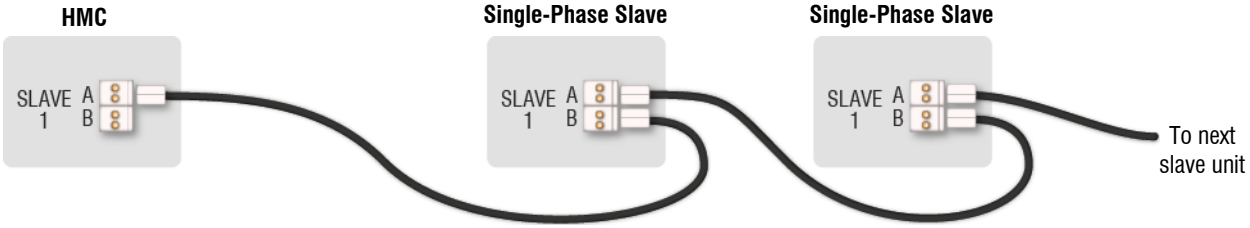
When connecting one slave unit, connect the slave cable from **SLAVE1 A** or **SLAVE2 A** to **SLAVE1 B**. When connecting additional slaves, connect the cable from **SLAVE1 A** to **SLAVE1 B**. The example shows the connections for two slaves connected to variable 1 and two slaves connected to variable 2.



Heat Mat Controls (HMC)

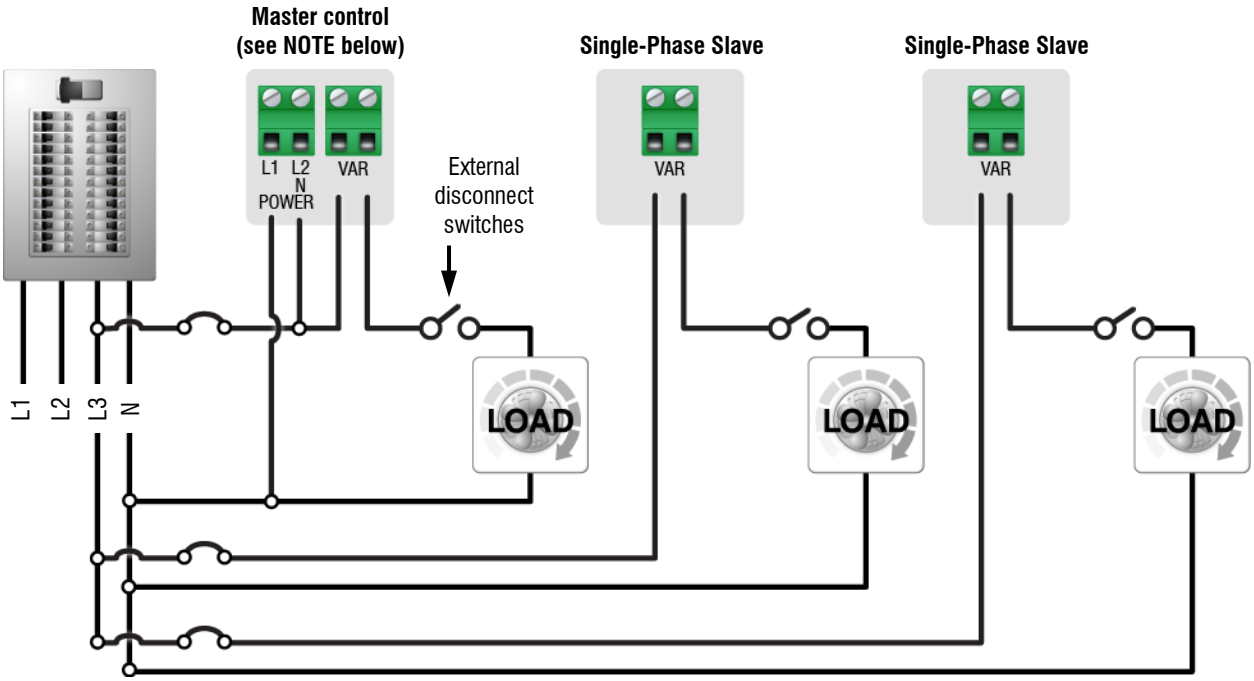
You can connect up to **six** Single-Phase Slaves to **one** Heat Mat Control. On the Heat Mat Controls, there is a connector labeled **SLAVE1**. The connector is where you connect slave units to the variable stage.

When connecting one slave unit, connect the slave cable from **SLAVE1 A** to **SLAVE1 B**. When connecting additional slaves, connect the cable from **SLAVE1 A** to **SLAVE1 B**. The example shows the connections for two slaves.



Connecting the load and incoming power

The Single-Phase Slave is for controlling loads such as variable-speed fans, heat lamps, or incandescent lights. Connect the equipment and disconnect switches as shown below.



NOTE

- ◇ If you have three-phase power and are using Single-Phase Slaves, you must connect the equipment to the same phase as the master control.
- ◇ The master control in the above diagram shows the terminals for a Programmable Lighting Control. Your master control might have different terminals. For more information, see your control's installation guide.

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