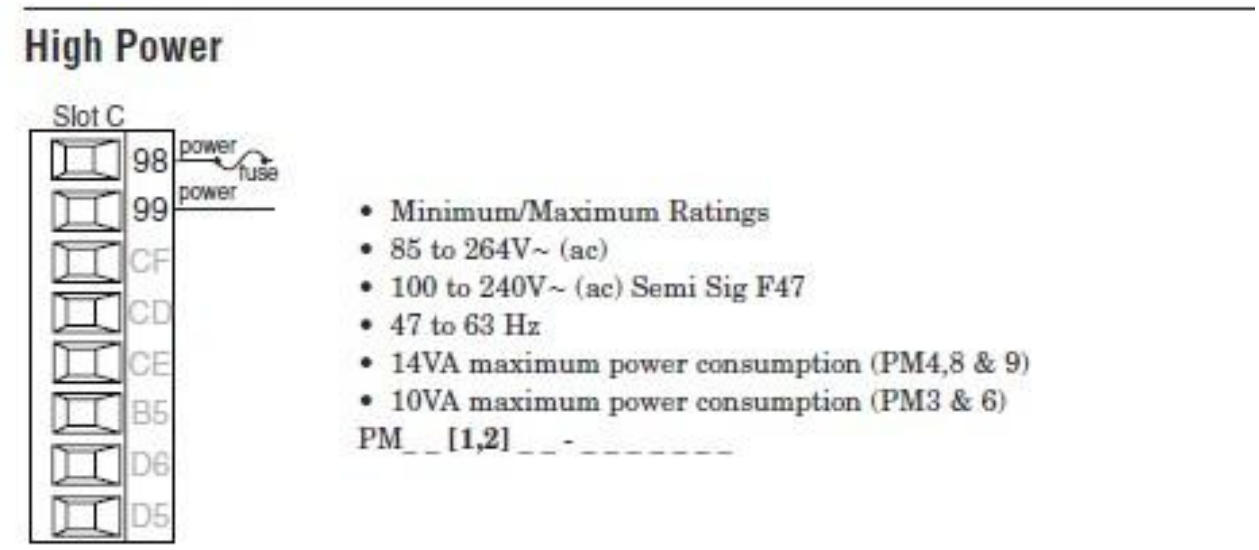
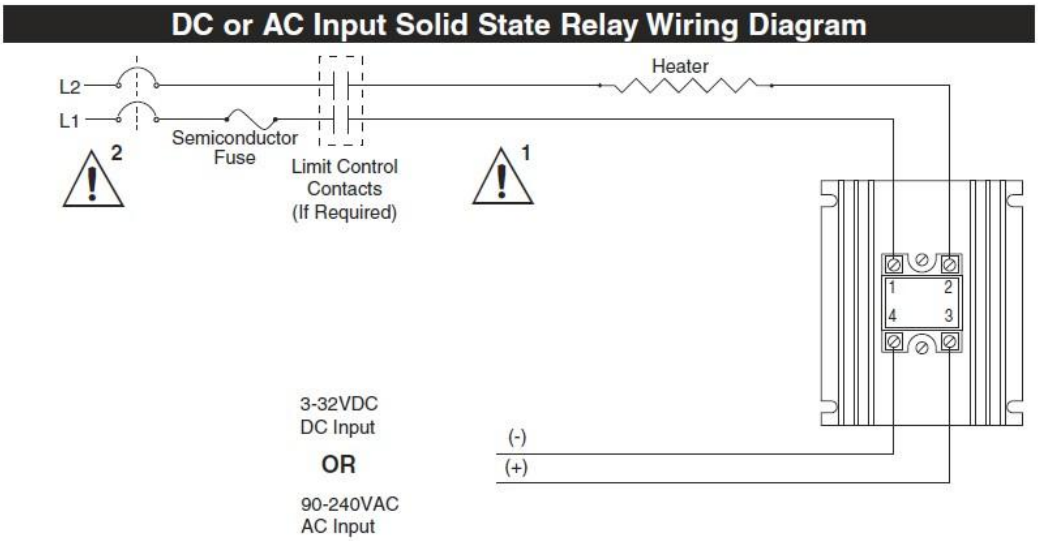
**Typical Wiring EZPM to SSR to Heaters**

Assume EZPM, SSR and Heaters all are 120 vac main power

Power Cord Input L1 (Black) is hot, L2 (White) is neutral 110vac Green is Ground, not required.

Connect L1 to EZPM Terminal 98 and SSR High Power Contact Terminal 1.
Connect SSR Terminal #2 to one of the two lead wires of the heater.
Connect L2 (Neutral) to EZPM Terminal 99 and directly to the second lead to the heater.

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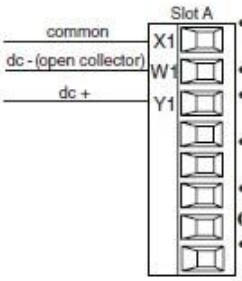
**WARNING:**

**Wiring must conform to National Electric Code (NEC) safety standards, as well as locally applicable codes. Failure to do so could result in personal injury or death.**

To operate the SSR by the EZPM, Connect the Switched DC (+) terminal Y1 to the SSR Terminal 3, and the Switched DC (–) terminal W1 to the SSR Terminal 4, which will energize the coil and make the heater circuit when the EZPM calls for heat. The EZP Terminal X1 is NOT connected in this wiring configuration.

## Output 1 Switched DC/Open Collector




**Switched DC**

- 30 mA dc maximum supply current
- short circuit limited to <50 mA
- 22 to 32V= (dc) open circuit voltage
- Use dc- and dc+ to drive external solid-state relay.
- DIN-A-MITE compatible
- single-pole: up to 4 in parallel or 4 in series
- 2-pole: up to 2 in parallel or 2 in series
- 3-pole: up to 2 in series

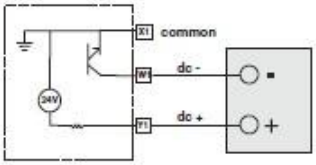
**Open Collector**

- 100 mA maximum output current sink
- 30V= (dc) maximum supply voltage
- Any switched dc output can use the common terminal.
- Use an external power supply to control a dc load, with the load positive to the positive of the power supply, the load negative to the open collector and common to the power supply negative.

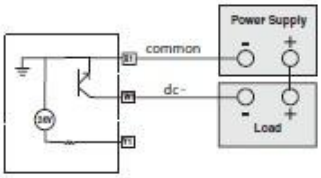
See Quencharc note.

PM _ _ _ [C] _-_ AAAA _ _

**Switched DC**

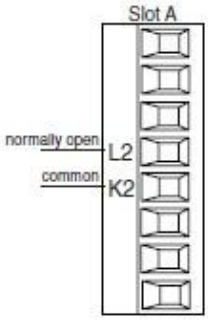



**Open Collector**




EZPM Output 2 is a type A (Normally Open) Mechanical relay, dry contact set. The contacts close when power is applied to the EZPM. This can be used as an alarm, or to power a status light to show the heaters cycling when in operation, or simply as an additional power “ON” indicator, if power is supplied to one side of the contact set, as this is not self-powered.

## Output 2 Mechanical Relay, Form A




- 5 A at 240V~ (ac) or 30V= (dc) maximum resistive load
- 20 mA at 24V minimum load
- 125 VA pilot duty @ 120/240V~ (ac), 25 VA at 24V~ (ac)
- 100,000 cycles at rated load
- Output does not supply power.
- for use with ac or dc

See Quencharc note.

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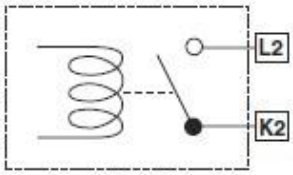
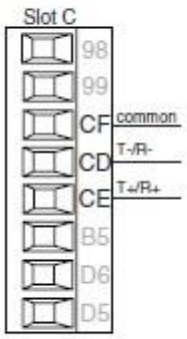


## Communication Option

EZP Controllers have Standard Bus Communications installed universally, and can be optioned for ModBus and other communication protocols. Terminals CA, CE, and CF apply.

### Standard Bus EIA-485 Communications



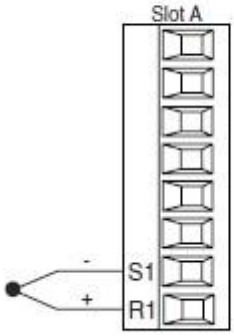

- Wire T-/R- to the A terminal of the EIA-485 port.
- Wire T+/R+ to the B terminal of the EIA-485 port.
- Wire common to the common terminal of the EIA-485 port.
- Do not route network wires with power wires. Connect network wires in daisy-chain fashion when connecting multiple devices in a network.
- Do not connect more than 16 EZ-ZONE PM controllers on a network.
- maximum network length: 1,200 meters (4,000 feet)
- 1/8th unit load on EIA-485 bus

PM _ _ _ _ _-**[A]** AAAA _ _

## Thermocouple Connection

EZPM has multiple options for Thermocouple, RTD, etc. Most common is TC at input #1

### Input 1 Thermocouple




- 2 kΩ maximum source resistance
- >20 MΩ input impedance
- 3 microampere open-sensor detection
- Thermocouples are polarity sensitive. The negative lead (usually red) must be connected to S1.
- To reduce errors, the extension wire for thermocouples must be of the same alloy as the thermocouple.

PM _ _ _ _ _-_ AAAA _ _