

PLS-1 installation guide

The Power Loss Sensor (PLS-1) works with the Local Environment Monitor (LEM) and OMNI-Site Watcher to continuously monitor single-phase, 120 VAC power.

The PLS-1 is designed to monitor the power for a single power line. Using multiple sensors, you can monitor additional circuits, zones, or rooms at your site. You can connect up to six sensors to a single LEM.



How power loss detection works

The voltage sensor has an adjustable dropout voltage of 90 to 103 V. When the voltage drops below the dropout value, the relay on the PLS-1 opens, signaling the Local Environment Monitor.

If the power stays off longer than the fault duration, the LEM signals the OMNI-4000 software that there is an alarm condition. If you have the OMNI-Alert alarm notification system installed and the alarm is set to active, OMNI-Alert dials the contacts on its call list and notifies them about the condition.

For more information about the Local Environment Monitor, OMNI-Site Watcher, or OMNI-Alert, contact Phason or visit www.phason.ca.

Installing the PLS-1

Read all instructions before installing the PLS-1. Follow all instructions in the order they are listed.

The following parts are included with the PLS-1:

- ◆ General-purpose relay
- ◆ Eight-pin relay socket
- ◆ Mounting rail
- ◆ Voltage-sensing relay
- ◆ Relay socket
- ◆ Installation guide

In addition to the parts included, you need to provide the following:

- ◆ Non-metallic, corrosion-resistant, fire-retardant enclosure
- ◆ AWM general-purpose wire, 14 AWG recommended

Electrical ratings

- ◆ Input: 120 VAC
- ◆ Dropout: 90 to 103 V
- ◆ Pickup: 105 V



Connecting a PLS-1 to a Local Environment Monitor adds 100 mA to the LEM's current draw. **Make sure you do not exceed the limits of the LEM's power supply.**



Before installing or servicing the PLS-1, switch off the power at the source.

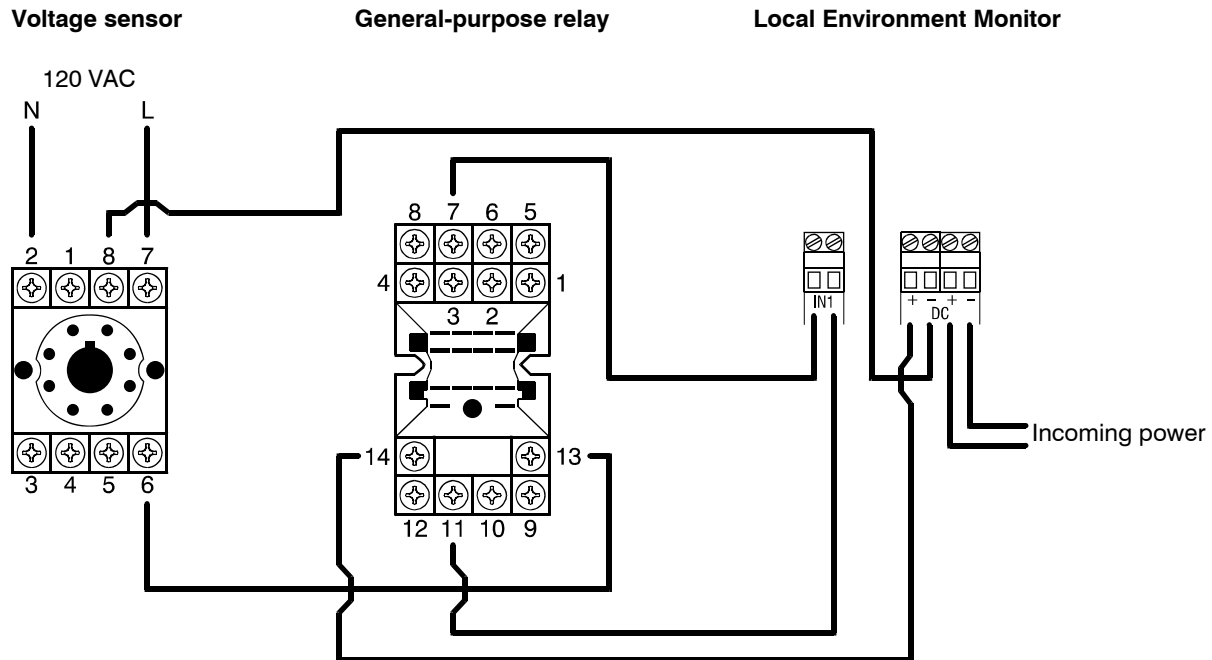
Mounting the PLS-1

Mount the PLS-1 in a non-metallic, corrosion-resistant, fire-retardant enclosure.

1. Mount the rail in the enclosure.
2. Connect the sockets to the rail.

Connecting the PLS-1 to the Local Environment Monitor

Connect the PLS-1 to the LEM as shown below.



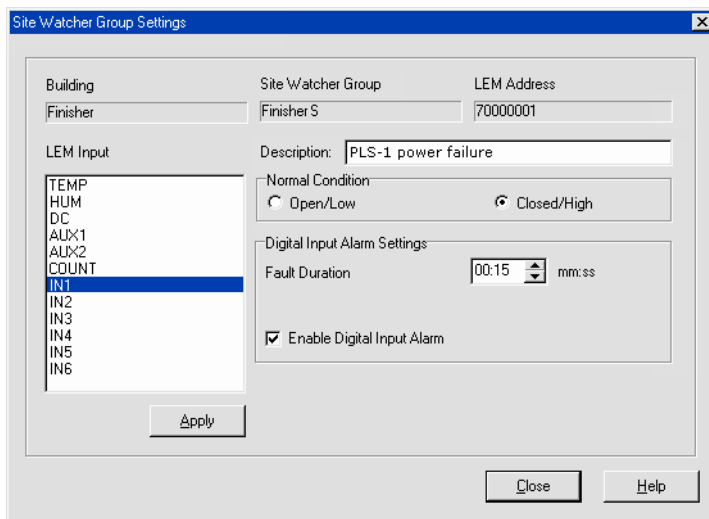
Finishing the installation

1. Verify all wires are properly connected to the correct terminals.
2. Plug the voltage sensor and relay into their sockets.
3. Switch on the power.
4. Fasten the cover to the enclosure.

Setting up the power fail alarm in OMNI-Site Watcher

After connecting the PLS-1 to the LEM, you need to set up the alarm in OMNI-Site Watcher. For more information, see your OMNI-Site Watcher user manual.

For the LEM that the PLS-1 is connected to, select the input (IN1 in this example), and then select the settings as shown below.



When there is a power failure for longer than the fault duration (15 seconds in this example), the LEM signals the OMNI-4000 that there has been an alarm.