Sollatek Automatic Stabilised Protector (ASP)

USER INSTRUCTION

(XX=AMPS vv=INPUT/OUTPUT VOLTAGE

example ASP04-22 is 4Amps at 220V and ASP04-11 is 4Amps at 110V)

The ASP is a device designed for OEM (Original Equipment Manufacture) applications. It will correct the mains voltage in case of over-voltage, brown-outs, dips, sags and surges. The Sollatek ASP has very wide input range and therefore can provide clean stable output in very severe conditions. However, in extreme voltages, to protect your appliance the ASP will **disconnect** the mains. Once the input becomes within the correction range of the ASP, the wait Yellow LED indicate for the wait time duration, after which the ASP will re-connect and the Green LED will indicate.

CONNECTING THE ASP

The Sollatek ASP is very simple to connect (please refer to the relevant diagram opposite)

1. Ensure that the mains supply is switched off.

2. Connect the main Live wire to the LIVE IN terminal of the ASP

3. Connect the main NEUTRAL wire to the NEUTRAL IN terminal of the ASP.

4. Connect the LIVE OUT terminal of the ASP to your appliance's LIVE IN.

5. Connect the NEUTRAL to your appliance's NEUTRAL. (i.e. the NEUTRAL is shared)

6. Connect protective earth to the metal work of the ASP transformer.

7. You are now ready to switch the mains on. There will be delay of around 3 minutes on first switching on. Please refer to the OPERATION below.

OPERATION OF THE ASP

1. When first switching the mains power on, the ASP will wait (Yellow LED ON) around 3 minutes to ensure the mains is good and stable. The LOAD is OFF at this stage.

** During test, you can bypass the 3 minute delay by shorting J1 (refer to diagram)

2. If the mains voltage remains good, the ASP will connect the power to the load (Green LED ON).

3. If the mains voltage is below or above the stabilisation range (see next page) then the ASP will switch the power off to your load to protect it (Red LED ON).

4. Red and Yellow LEDs will flash alternately to indicate a fault condition or 'unreasonable' measurement and the ASP will disconnect.

Please refer to the back page for full evaluation procedure of the Sollatek ASP.

Instructions ASPXX-vv Rev 3.0 Oct 99 Stock No. 74135205

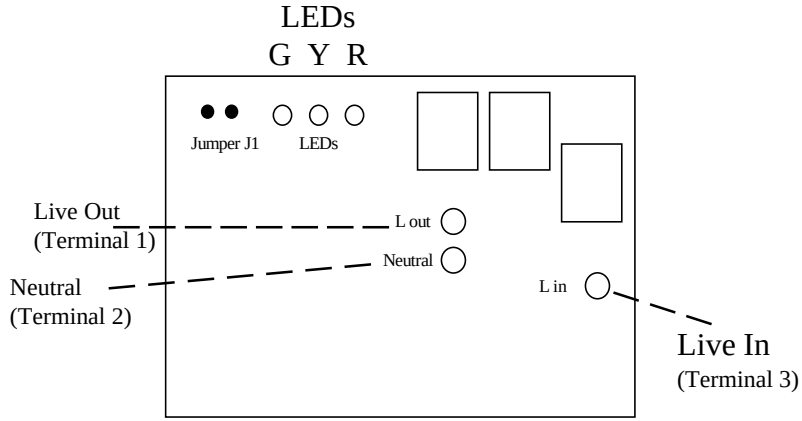

Diagram for ASP models up to 8Amps

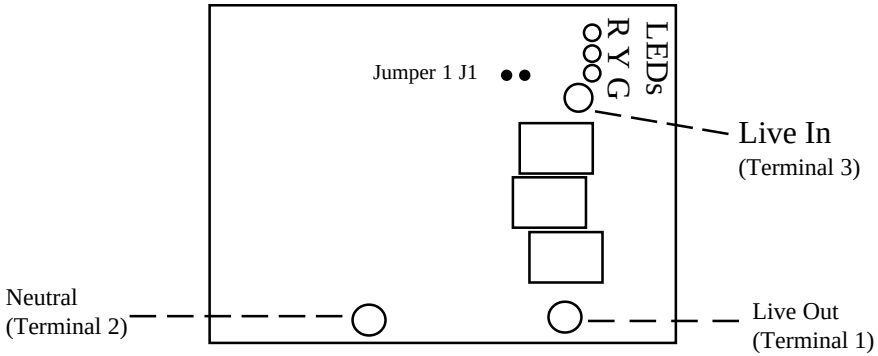

Diagram for ASP models from 9Amps up to 13Amps

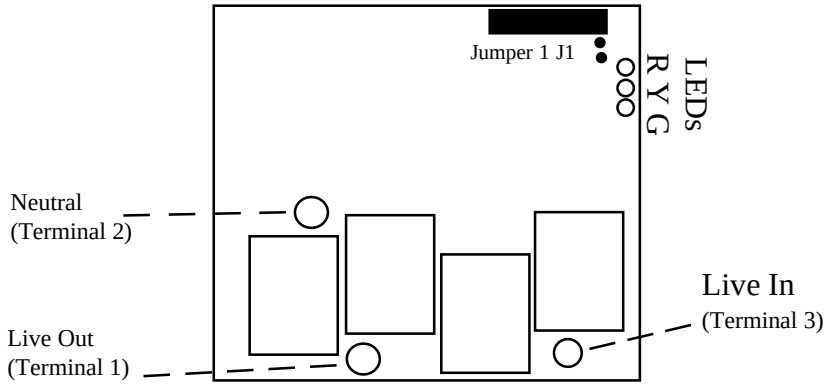

Diagram for ASP models from 14Amps up to 24Amps

Customer Evaluation Test
ASPXX-vv (XX=Amps , vv=Voltage)

The following test procedure is for both 110V units and 230V units. Please refer to the tables

If results vary then the following has to be checked whether;

- **The test engineer is carrying out the correct test - please see below.**
- **The unit being tested is not of Standard Settings. i.e. Different settings have been requested from Sollatek.**
- **The test equipment is correctly calibrated.**
- **Ensure the units are not being tested on a Generator. Some Gensets produce a vast amount of spurious spikes, which can alter the result or can cause harmonic distortion that can again alter the results.**

The correct test procedure is as follows:

1. **Connect the ASP to a power source and ensure supply to the ASP is at a good starting voltage (i.e. Vn). The AMBER LED is ON.**

2. **Wait for about 3 minutes. The ASP output will be connected. The Green LED is now ON. Measure the Output voltage, this should be the same as the input voltage *(please refer to the input/output table.)***

USEFUL TIP:
To bypass the 3-minute wait period, short out the test pins (J1) on the PCB as shown in the diagram on previous page.

3. **Slowly decrease the ASP input voltage. The ASP will correct the voltage so that the output voltage will be stabilised. *(Please refer to the input/output table to establish the predicted output voltage.)***

4. **Continue decreasing the ASP input voltage until disconnection (LVD). RED LED is now ON. This is under-voltage disconnect.**

5. **Increase the voltage slowly until the AMBER LED lights. This is the reconnection voltage. Wait 3 minutes. The output from the ASP will be reconnected.**

6. **Slowly increase the ASP input voltage above Vn. The ASP will correct the voltage so that the output voltage will be stabilised. *(Please refer to the input/output table to establish the predicted output voltage.)***

7. **Increase the voltage until the RED LED lights and the output is disconnected (HVD). This is over-voltage disconnect.**

8. **Reduce the voltage until the AMBER LED lights indicating the Wait State. After 3 minutes the output will be reconnected. The GREEN LED will show. This is high voltage reconnect.**

Input/Output Voltage Table for 230V units

	Input	Output
LVD	145	OFF
	146	185
	155	196
	165	208
	175	221
	185	233
	195	221
	205	232
	210	237
Vn	215	215
	225	225
	235	235
	240	240
	245	218
	255	228
	265	237
	275	246
	285	255
	290	259
HVD	291	OFF

Input/Output Voltage Table for 110V units

	Input	Output
LVD	75	OFF
	77	98
	82	104
	87	110
	92	116
	97	110
	102	116
	105	119
	107	107
Vn	112	112
	118	118
	120	120
	123	109
	128	114
	133	118
	137	123
	142	127
	145	129
HVD	146	OFF

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