

Installation and Setup Guide.
SmartFill v10 (with ACME CS6000 Totaliser).

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Contents

1	Safety Warnings.	3
2	General Description.	3
3	Specifications.	3
3.1	Supply Voltage / Current.	3
3.2	Switching Relay Specifications.	3
3.2.1	SmartFill Board Relays.	3
3.2.2	Acme Switching Relay.	3
4	Smart-Fill Commissioning Report.	4
5	SmartFill Installation.	5
5.1	Mounting the SmartFill Enclosure.	5
5.1.1	Enclosure Specifications / Dimensions.	6
5.2	Pulser Installation.	7
5.2.1	LC Flowmeter Mechanical Installation.	7
5.3	Pulser Wiring Connections.	7
5.3.1	Acme EPU100 / EPU200 Electrical Connections.	7
5.4	Power Supply / Control Wiring Connections.	8

List of Tables

List of Figures

1	SmartFill Model A1001 Enclosure Dimensions	6
2	Acme EPU100 / EPU200 Wiring.	7
3	Power / Control Wiring.	8

1 Safety Warnings.

- The SmartFill enclosure is **NOT rated for use in hazardous / flammable zones.**
- It is the responsibility of the installer to carry out all installation work to the relevant Australian Standards, and to ensure that the SmartFill system is located in a suitable / approved zone. The manufacturers can not advise on the regulations affecting the location / wiring requirements.
- All wiring into and out of the enclosure is to be a maximum of 24v.
- 240v mains power MUST NOT be run into the SmartFill enclosure, as the operators are required to open the door to download data etc.

2 General Description.

- The Version 10 SmartFill is an NMI approved access control / data recording system, primarily intended for use dispensing diesel fuel.
- The SmartFill electronics provide access control and data recording.
- An ACME CS6000 Totaliser is built into the SmartFill enclosure, and is the measuring device and quantity indicator.
- The SmartFill electronics communicate with the CS6000 to start / monitor / stop a fuel issue, and to receive measurement data.

3 Specifications.

3.1 Supply Voltage / Current.

- The supply voltage to the system is 12 or 24vdc.
- Current draw is up to 3 Amps depending on options fitted.
- A minimum 3 Amps power supply is required.

3.2 Switching Relay Specifications.

3.2.1 SmartFill Board Relays.

- The switching relays are voltage free (dry), normally open contacts.
- The contact rating for the switching relays is 5 Amps at 30 vdc.
- The Main (Hose 1) relay contact has an on board 5A protection fuse.
- The Aux (Hose 2) relay contact is not fuse protected, and an external fuse must be fitted.
- The Aux (Hose 2) relay is only used when the Mode setting in the SmartFill is set for the system to operate 2 control valves, in which case it will prompt the driver to enter hose 1 or 2.

3.2.2 Acme Switching Relay.

- The Acme switching relay is normally used to switch the pump, while the SmartFill relays are normally used to switch individual hose solenoids etc.
- The Acme relay is a voltage free (dry), normally open contact.
- The Acme relay contact rating is maximum 3 Amps at 28v dc / ac.

4 Smart-Fill Commissioning Report.

1. **SmartFill Serial Number.**

2. **Installing Company Name.**

3. **Installer name.**

4. **Wiring Checklist.**

- (a) All wiring is neat / safe and installed to relevant Australian Standards.
- (b) All cables are insulated with tape where the insulation is trimmed back to avoid stray shielding wires etc.
- (c) No excess or loose wiring exists where it could chaff against the circuit boards etc.
- (d) All wiring is in conduit where required.
- (e) Correct type cabling is used for each application.
- (f) All wiring terminations use bootlace ferrules.
- (g) All cable entries are through sealed glands, and there are no opening in the enclosure to allow entry of moisture or dirt etc.

5. **Settings Checklist.**

- (a) Discuss the MODE options with the client, and select the most suitable setup for them.
- (b) Ensure the Walktime (no flow timeout) is set to best suit the clients operation.
- (c) For multiple location SmartFills, ensure site numbers are set correctly for each site.

6. **Calibration.**

- (a) Check the flow meter calibration, ensure the Acme and the SmartFill both record the fuel delivery accurately.
- (b) RECORD the Acme CS6000 kfactor.
- (c) Ensure that any calibration sealing devices are sealed where required.

7. **NMI approved systems.**

- (a) Check that the printer warning appears if there is no printer fitted, or no paper in the printer.
- (b) Correct certification procedure has been carried out and completed.

8. **Final handover checklist.**

- (a) Vehicle Keys and PIN numbers used for testing have been cleared from the system.
- (b) Memory has been cleared.

9. **Photos have been taken of**

- (a) The wiring inside the SmartFill box.
- (b) The exterior of the SmartFill box.
- (c) The SmartFill and associated flow meters / pumps etc.

5 SmartFill Installation.

5.1 Mounting the SmartFill Enclosure.

5.1.1 Enclosure Specifications / Dimensions.



Figure 1: SmartFill Model A1001 Enclosure Dimensions

5.2 Pulsar Installation.

5.2.1 LC Flowmeter Mechanical Installation.

5.3 Pulsar Wiring Connections.

5.3.1 Acme EPU100 / EPU200 Electrical Connections.

Acme Pulsar Wiring. EPU100 / EPU200.

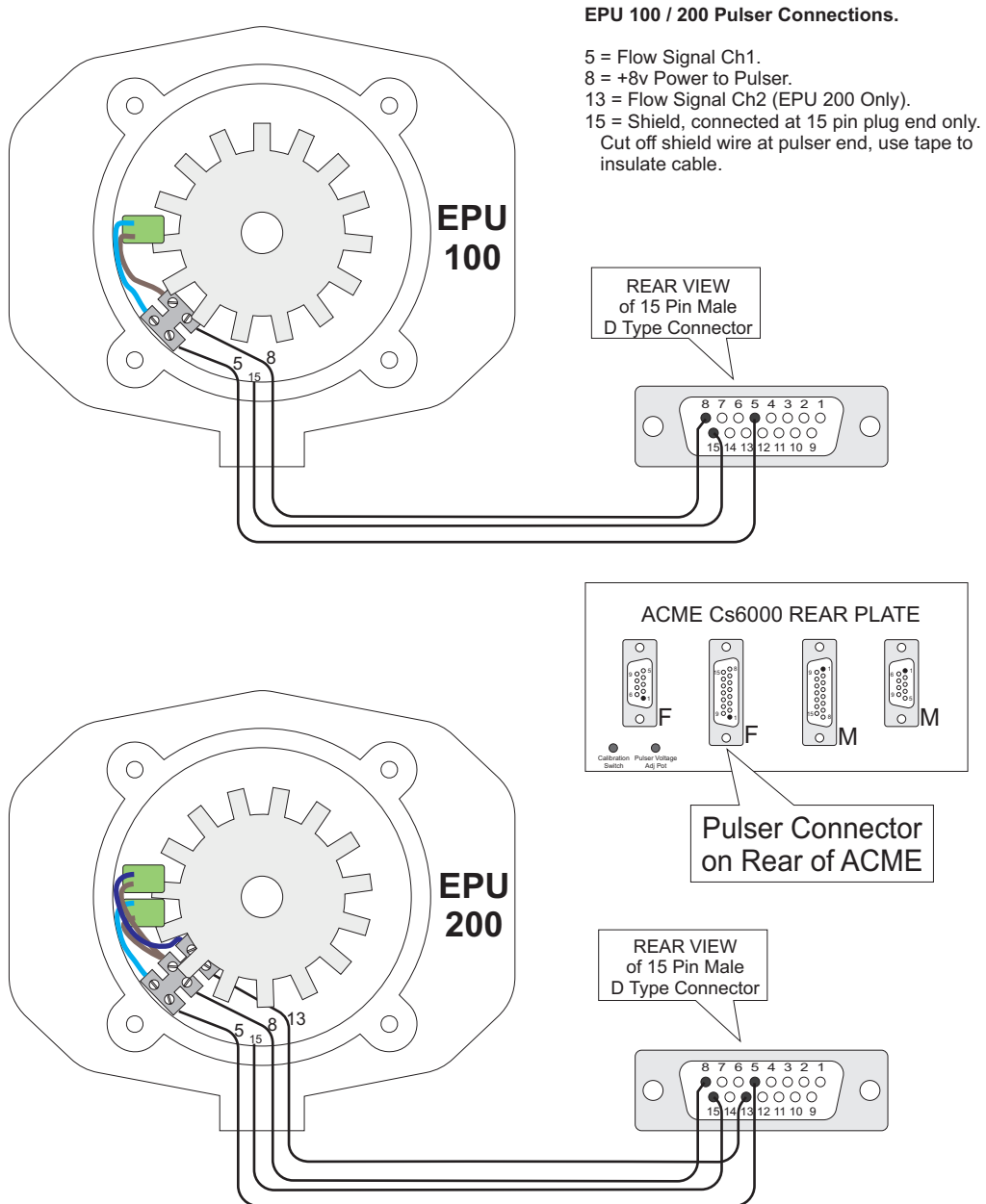


Figure 2: Acme EPU100 / EPU200 Wiring.

5.4 Power Supply / Control Wiring Connections.

Wiring instructions
for Smart-Fill version 9.4.7 NMI Acme
for control of single pump / flowmeter with 2 hoses.

MODE value 32768 turns on hose
number requesting on this model.

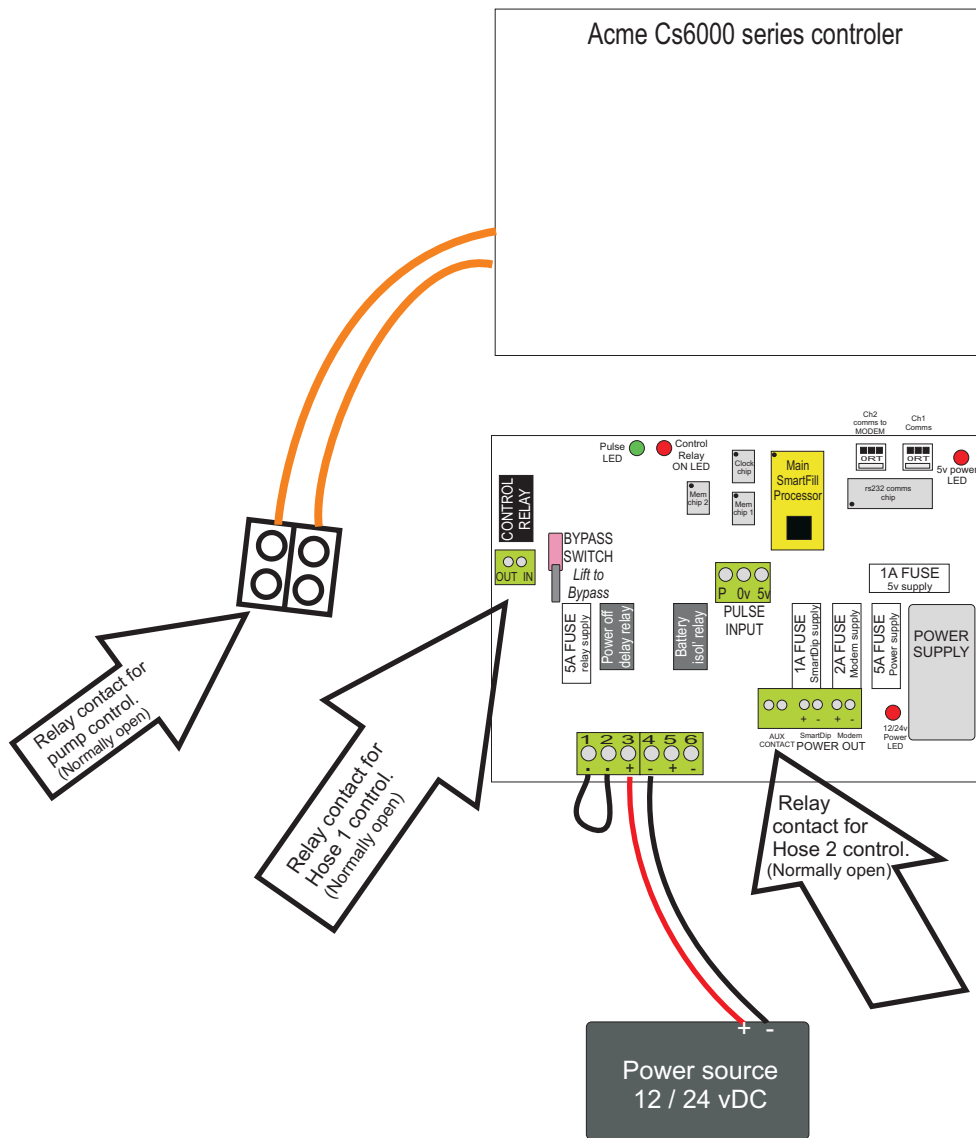


Figure 3: Power / Control Wiring.

