



**Innovation In and
Out of Parlour**

60 Watt and 396 Watt Power Supply Manual

Version 1.1

Date - August 2016

For Part Numbers

25-0200 - 396 Watt 12vDC Power Supply

25-0210 - 396 Watt 12vDC Power Supply with Timing Pulse

25-0225 - 60 Watt 12vDC Power Supply



Manual Versions

Version 1.0 - January 2010

Version 1.1 - August 2016

First Version of Manual

Updated to include New Filter PCB



Good Practice

Mains Supply

- A separate mains supply and earth running directly from the consumer meter is essential.
- Avoid routing the mains cable to the power supply close to other supplies, especially those providing intermittent current. For example, motors that are starting and stopping continually or high power heaters with thermostatic control.
- Terminate in a sealed, fused, double pole switched outlet fitted with a 13Amp (Type 1362) fuse or trip. A 3-pin ring main socket is not suitable in parlour conditions. All mains cabling must be contained in a firmly secured durable conduit.

Power Supply Location

- Fix the power supply to a wall or suitable brackets in a well ventilated area sufficiently high to avoid physical contact or damage, leaving a gap of at least 250mm (10") between the top of the power supply casing and the ceiling.
- Position the power supply so that the output (low DC voltage) cables are as short as possible even if this means extending the mains supply.

Output Voltages

- ATL power supply outputs are factory set and should not be adjusted.

396 Watt 12vDC PSU

Input: 100 - 240vAC.

Output: Nominal 12vDC.

60 Watt 12vDC PSU

Input: 100 - 240vAC

Output: Nominal 12vDC.

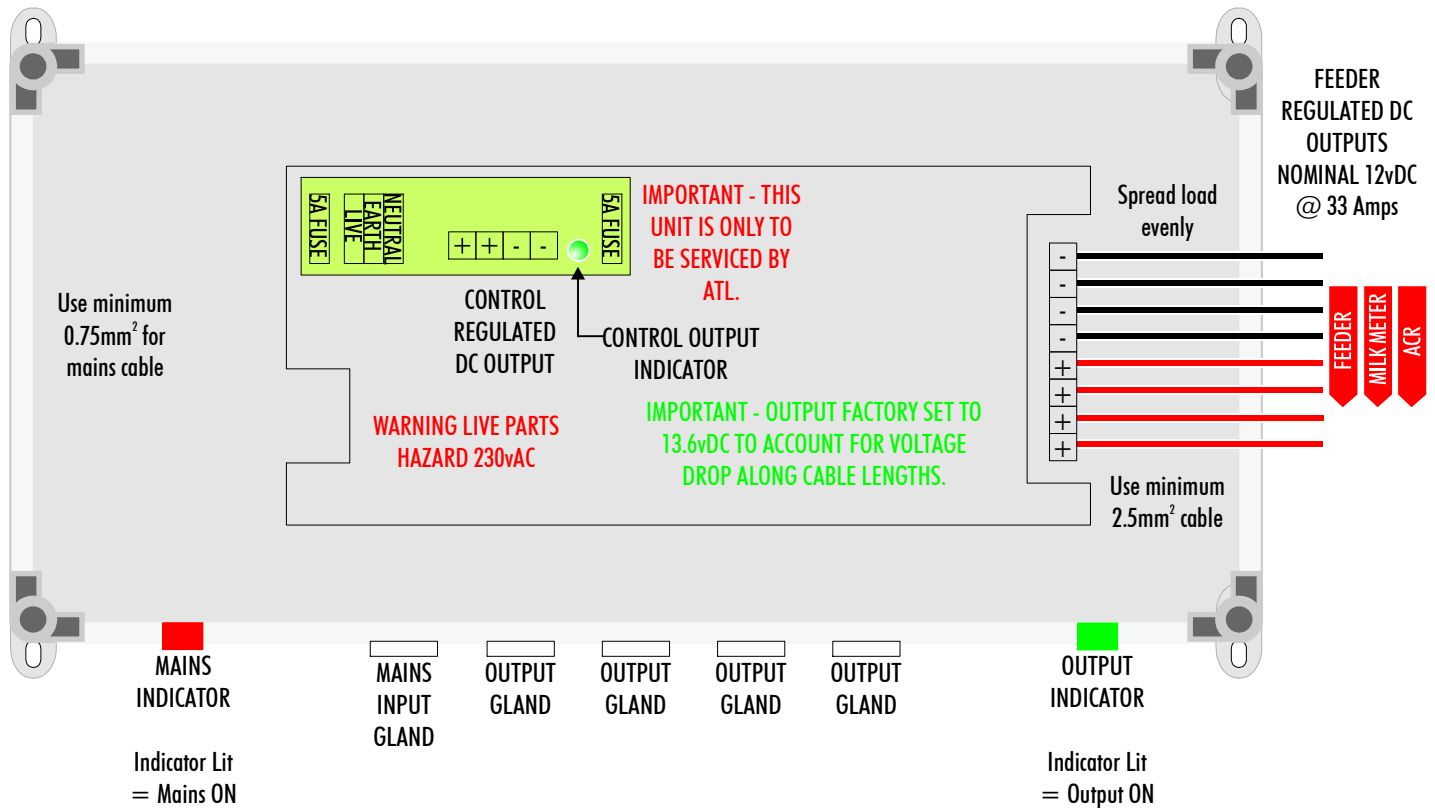
- The 396 Watt 12vDC and 60 Watt 12vDC power supplies have a thermal cutout and overload protection which removes power from the outputs in the event of an overload.
- There are two indicators fitted to the base of the power supply casing; red indicates that the mains is present and green that the output supply is available.

Control and Feeder Cables and Conduit

- Cables must be kept as short as possible running directly from point to point. Cut out any excess cable rather than leaving it coiled.
- Wherever possible cables should be contained in a waterproof conduit using the correct csa cable specified in the diagrams.
- Entries must be made into the bottom of power supply or control casings but never into the top. This will invalidate the warranty.
- Strip existing cables back to bright copper before connection.
- Keep multi-core cables away from other cables especially those carrying mains or heavy currents. Cross only at 90° where necessary and do not enclose in conduit with other cables.
- DO NOT run power cables from feeder power supply to feeder relay card in control in the same conduit as ATL data bus cables, as this may cause the system to function incorrectly.



25-0200 - 396 Watt 12vDC Power Supply



CONTROL

Connect the Auto Control and MicroM3S controls and the control supply on the Out of Parlour Interface (NB - Do not connect Out of Parlour Interface feeder supply) to this output.

Output Specification: Nominal 12vDC @ 4 Amps

IMPORTANT - DO NOT CONNECT DIGITAL CONTROLS, FEEDERS OR MILK METERS TO THIS OUTPUT AS NOT RATED FOR CURRENTS ASSOCIATED WITH THESE PRODUCTS.

FEEDER MILK METER ACR

Connect abreast feeders, herringbone feeders, Digital Feeder Controls, cluster removers, milk meters and the feeder supply on the Out of Parlour Interface to this output.

Output Specification: Nominal 12vDC @ 33 Amps
 16 feeders
 24 milk meters (meter flasks, shut-off valves and ACR cylinders only)
 60 cluster remover controls (shut-off valves and ACR cylinders only)

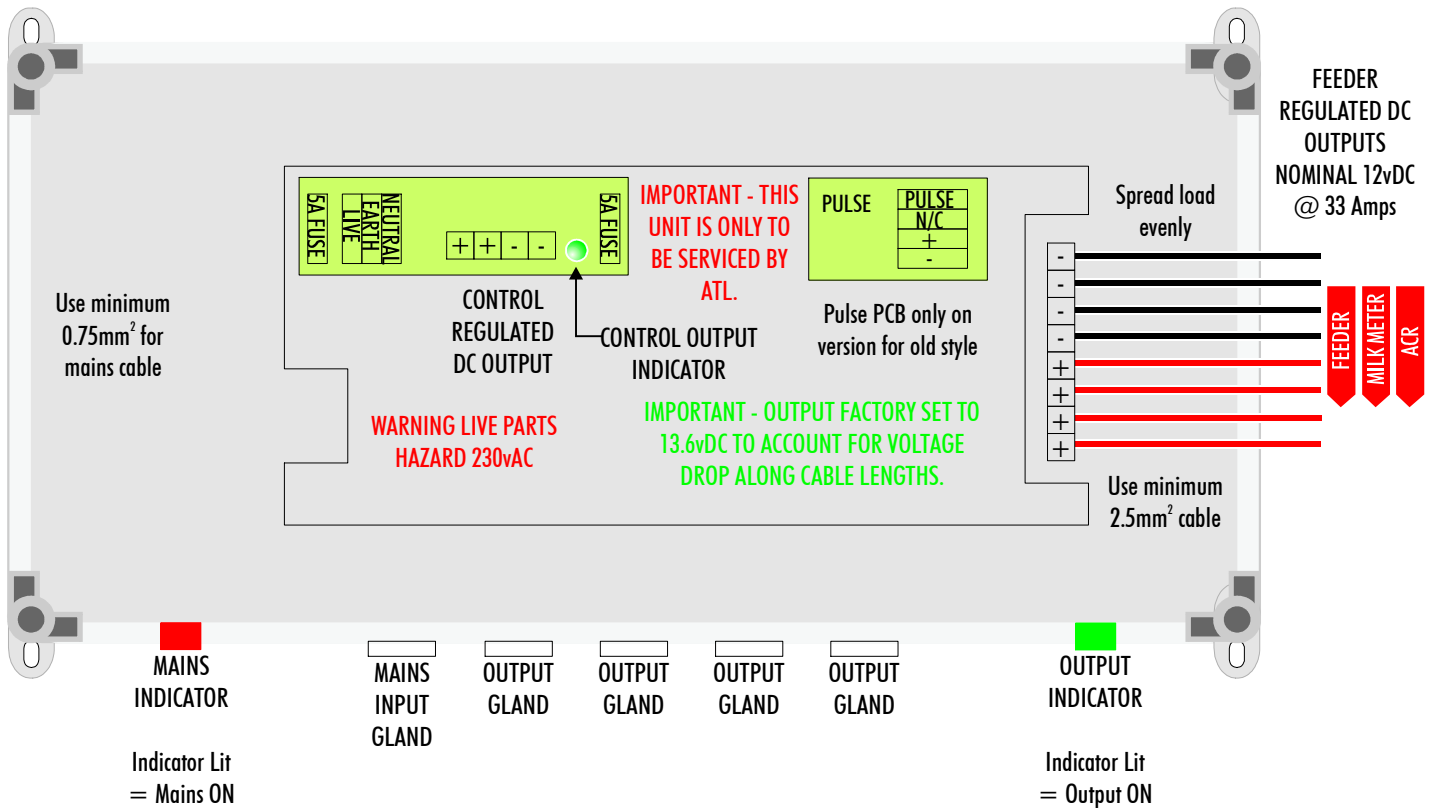
Protection Specifications:

Overload Protection: Power supply will shutdown after 3 seconds if overloaded 105 ~ 130% of rated output power. Re-power-on to recover.

Over Temperature Protection: 95°C ±5°C shutdown output voltage with auto-recovery.



25-0210 - 396 Watt 12vDC Power Supply with Digital Timing Pulse



PULSE Timing pulse output for Digital Controls without internal pulse. For calibration please see Digital Control manual.

FEEDER Connect abreast feeders, herringbone feeders, and digital controls to this output.

CONTROL

Output Specification: Nominal 12vDC @ 33 Amps
16 feeders

Protection Specifications:

Overload Protection: Power supply will shutdown after 3 seconds if overloaded 105 ~ 130% of rated output power. Re-power-on to recover.

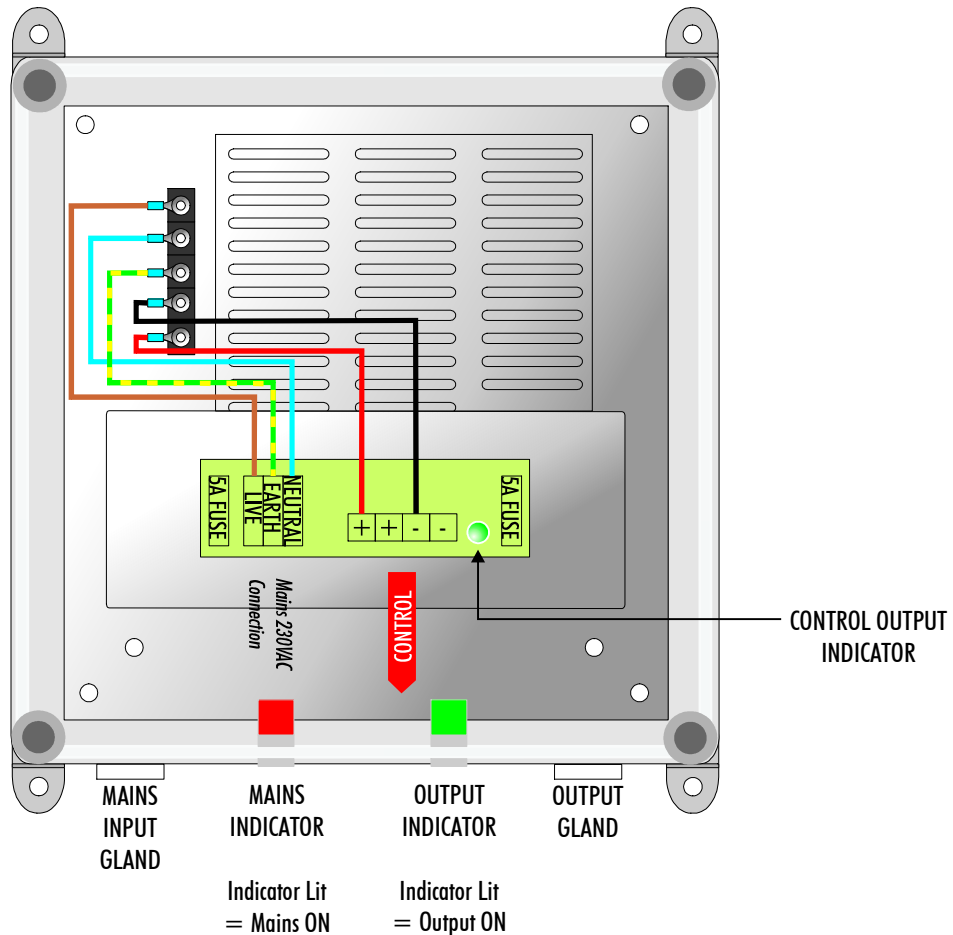
Over Temperature Protection: 95°C ±5°C shutdown output voltage with auto-recovery.

25-0225 - 60 Watt 12vDC Power Supply



WARNING: DISCONNECT THE MAINS SUPPLY BEFORE REMOVING THE POWER SUPPLY COVER

IMPORTANT - OUTPUT FACTORY SET TO 14vDC TO ACCOUNT FOR VOLTAGE DROP ALONG CABLE LENGTHS.



CONTROL

Connect the Auto Control, MicroM3S Control, Auto-ID system, and the Pegasus Gate system to this output.

Output Specification: Nominal 12vDC @ 4 Amps

IMPORTANT - DO NOT CONNECT DIGITAL CONTROLS, FEEDERS OR MILK METERS TO THIS OUTPUT AS NOT RATED FOR CURRENTS ASSOCIATED WITH THESE PRODUCTS.

NB - Only use 1 x 60 Watt 12vDC power supply per item otherwise systems will not function correctly.

Example 1 - If 1 x 60 Watt 12vDC power supply is used to power an Auto-ID system and Pegasus Gate system, the current required at switch on is too high and will result in the relays on the stall select modules 'chattering'.

Example 2 - If 1 x 60 Watt 12vDC power supply is used to power an Auto-ID system or Pegasus Gate system and MicroM3S control, the range on the Auto-ID system or Pegasus Gate system could be significantly reduced.