



Innovation In and Out of Parlour

60 Watt and 400 Watt Power Supply Manual

Version - 1.0

Date - November 2021





Manual Versions

Version 1.0 - November 2021......First Version of Manual





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.

400 Watt 12vDC PSU60 Watt 12vDC PSUInput: 100-240vAC 50/60HzInput: 100 - 240vACOutput: Nominal 12vDCOutput: Nominal 12vDC

- The 400 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.

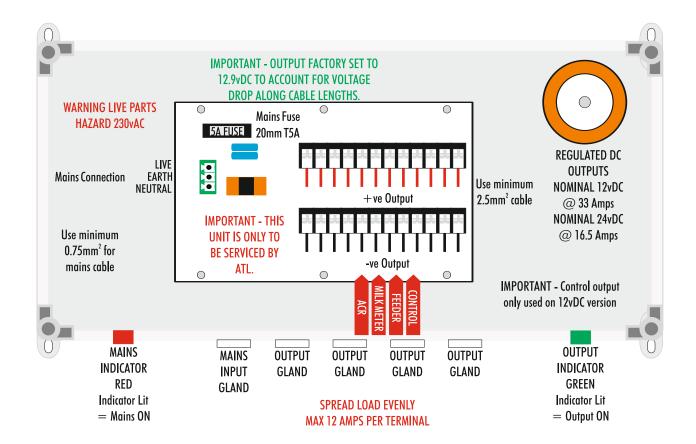
Control and Feeder Cables and Conduit

- 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.





25-0260 - 400 Watt 12vDC Power Supply or 25-0265 - 400 Watt 24vDC Power Supply



CONTROL

Connect the Auto Control and Micro M5 controls. IMPORTANT - Do not connect if 24vDC version.



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: No

Nominal 12vDC @ 33 Amps or nominal 24vDC @ 16.5 Amps

16 feeders

24 milk meters (meter flasks, shut-off valves and ACR cylinders only)

18 milk meters (meter flasks, shut-off valves, ACR cylinders and pulsators)

60 cluster remover controls (shut-off valves and ACR cylinders only)

30 cluster remover controls (shut-off valves, ACR cylinders and pulsators)

Protection Specifications:

Overload Protection: Power supply will shutdown if overloaded $110 \sim 140\%$ of rated output power. Re-power-on to recover.

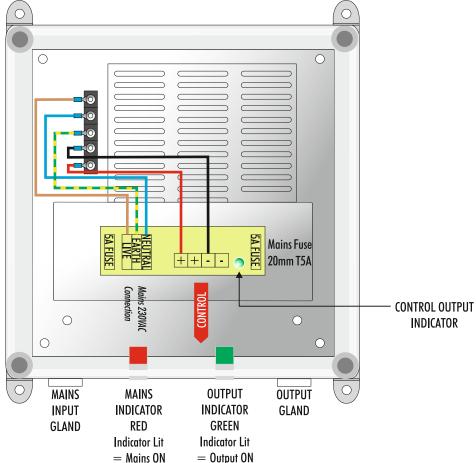
Over Temperature Protection: 70°C shutdown output voltage with auto-recovery.



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, or 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.

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

Example 1 - If 1×60 Watt 12 VDC 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 1×60 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.