



Gallagher

Power Supply, 8A (with Monitoring Board)

Installation Note

Gallagher Power Supply, 8A (with Monitoring Board): C200440



ATTENTION: This equipment contains components that can be damaged by electrostatic discharge. Ensure both you and the equipment are earthed before beginning any servicing.

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1 Introduction

The Gallagher Power Supply is an 8 A power supply capable of powering access control hardware and charging 12 V batteries. The power supply provides two alarm outputs for monitoring battery low voltage and mains failure.

Important: This power supply has a maximum charging current being supplied to the Battery Charging circuit of 0.5A. This is sufficient only to charge and maintain a maximum of FOUR 7Ah batteries or a capacity of 28Ah worth of batteries.

If the system this power supply is connected to requires a backed-up power supply longer than 28Ah it may be worth choosing a different power supply.

2 Shipment Contents

Check the shipment contains the following items:

- 1 x Gallagher Power Supply, 8A (complete with monitoring board)
- Battery connection wires (2K0774 and 2K0775)

Note: You will need to purchase locally a standard IEC mains lead to fit the power supply.

3 Mounting the Power Supply

The power supply is designed for mounting in the Gallagher Dual Cabinet (C200104), and is included in (C200105), but may be secured in other cabinets via the screw mounting tab at the top of the unit.

3.1 Mounting the Power Supply in the Gallagher Dual Cabinet

1. Place the power supply in the bottom left position of the Gallagher Dual Cabinet.
2. Fix the power supply in place using the nut and washer provided with the cabinet.
3. Wire in the mains power using a standard IEC mains lead connected to the power supply.
4. Using the battery wires provided, connect one or more batteries to the power supply. The red wire should connect to the red/positive terminal(s) on the battery and the black wire should connect to the black/negative terminal(s).

Notes:

- The power supply will operate on batteries alone.
- Ensure that only 12 V batteries are used.
- Once the Gallagher PCBs have been installed, all PCBs can be connected to the DC power supply.

4 Power Supply

The power supply fits inside the Gallagher Dual Cabinet. It is capable of powering the hardware under normal operating conditions, as well as charging 12 V batteries.

Two LEDs indicate visually whether the mains supply is within the required range and whether the battery is above a certain voltage.

Notes:

- There is a discharge time on the mains detection circuitry that may cause a time delay of up to 10 seconds between a mains drop out and the generation of an alarm and a change in LED.

- The battery charge circuit has a delayed on time and may not start charging until 60 seconds after powering on.

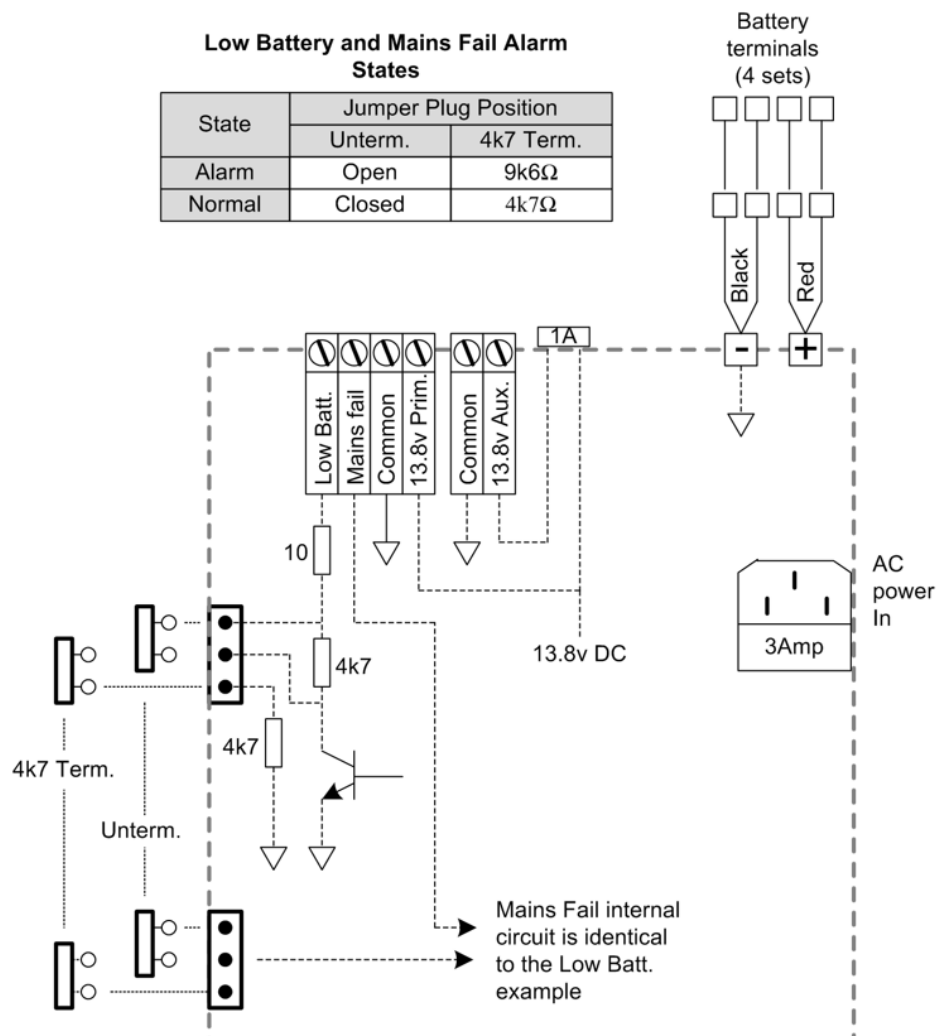
5 Power Supply Alarms

The power supply is supplied with two alarm outputs suitable for connection to a Gallagher Controller or Gallagher expansion PCB to provide monitoring battery low voltage and mains fail states.

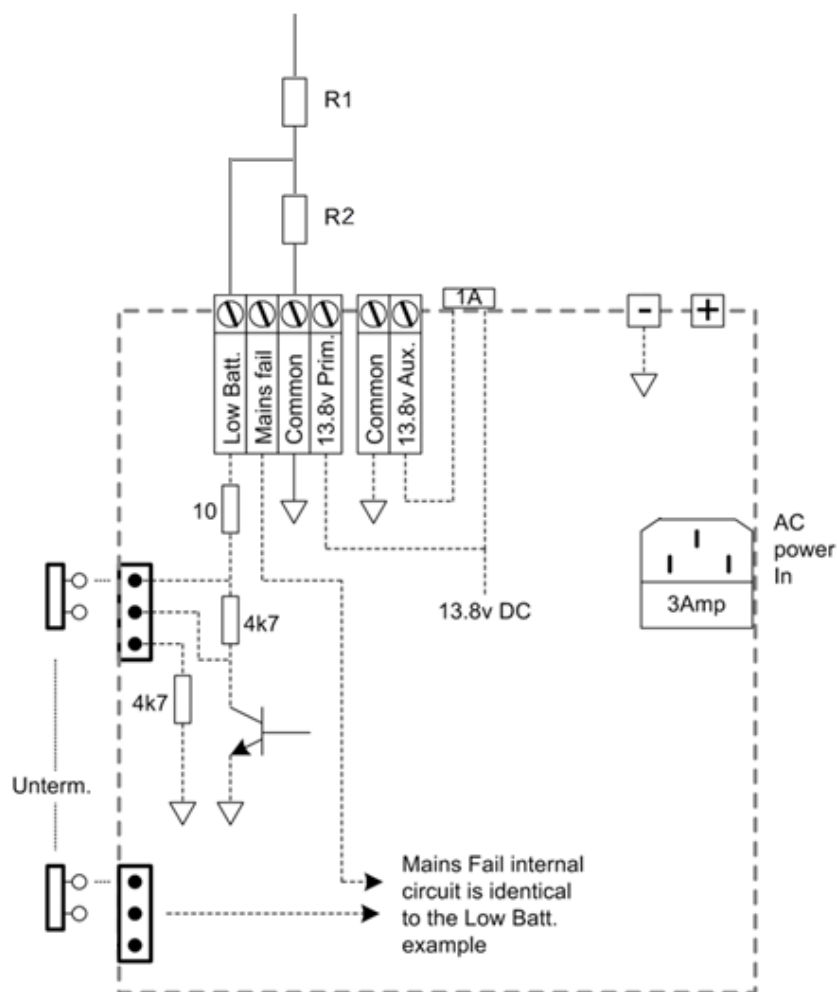
Each output has associated jumper plugs to allow field selection of either standard 4 state 4k7 ohm terminated or un-terminated outputs. Please refer to the above drawing for details.

6 Wiring

The following diagram shows connection details for the power supply:



The following diagram shows connection details for an alternate set of resistor values if you have selected a different resistor value to use on the controller:



7 Battery Low Indication

The battery low alarm will be triggered when the battery charge falls below approximately 11.4 V. During normal operating conditions, the battery low output is a latched output. When the mains fails, the battery goes into continuous check mode, checking the battery continuously instead of every 4 minutes (still latched every 8 seconds).

Note: If a fault condition occurs in the mains input, the output will no longer be latched.

When a new battery is installed and charged, it is recommended that the installer push the "battery test" button for approximately 20 seconds, to ensure that the battery is OK. A faulty battery will cause a low battery alarm to be generated.

Note: Users are reminded to follow the replacement and maintenance instructions listed by the battery manufacturer.

8 Mains Fail

The mains fail alarm will be triggered when the mains voltage falls below approximately 87 V or when the mains voltage rises above approximately 259 V.

Note: There is a discharge time on the mains detection circuitry that may cause a time delay of approximately 10 seconds between a mains drop out and the generation of an alarm and a change in LED.

IMPORTANT: Do not apply voltage directly to the battery low or mains fail Outputs, as this will damage the monitoring circuitry, rendering the power supply unusable.

9 Technical specifications

Input Voltage:	100 - 240 V AC (3 A slow-blow fused)
Output Voltages:	Primary 13.8 V Auxiliary 13.3 V (1 A time lag fused)
Output Current:	8A *
Battery charging current:	0.5A (independent of other outputs)
Power Rating:	150 W
Low battery alarm output:	Jumper selectable open/closed or 4 state 4k7 ohm terminated
Mains fail alarm output:	Jumper selectable open/closed or 4 state 4k7 ohm terminated
Operating Temperature:	-10 °C to +50 °C (+14 °F to +122 °F)
Unit dimensions:	Height 265 mm Width 110 mm Depth 40 mm

* Consisting of a 7A primary output 1A auxiliary output.

10 Approvals and Compliance Standards

FCC

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: Changes or modifications not expressly approved by Gallagher Limited could void the user's authority to operate this equipment.

AS/NZS IEC 60839.11.12019 Grade 4, Class II

