



AQR3-8C1R Power Supply

The AQR3-8C1R power supply with battery charger/backup and supervision is a dual voltage switching power supply with a fire transfer relay that uses any AC power source from 90-240VAC/43-63Hz to provide up to 3 Amps @ 12VDC or 1.5 Amps @ 24VDC total output.

FEATURES:

- Clean, steady, accurate power output for best performance of access control equipment
- Field-selectable dual voltage 3A/1.5A @ 12/24VDC
- Compact modules for smaller footprint
- Universal transformer compatible with most international power
- Works in AC brownout down to 60 VAC
- Faster battery recharging under full load
- Automatic low-battery disconnect prevents deep discharge, maintains battery life
- Self-resetting circuit breakers for common conditions including:
 - Overcurrent
 - Thermal runaway
 - Reverse battery hookup
- Class 2 power limited output
- Eight (8) channel power distribution with fire relay trigger
 - Channels individually selectable to ON/OFF/Always ON in response to fire relay
 - Power limited protected outputs, each with a green status LED indicator
 - Main power green/red LED indicates AC, DC or Reversed DC input
 - Main fuse/power pull to disconnect board from input power
 - Latching or non-latching
- Fuse protected against surge for AC input and DC output
- SPDT Form C outputs for remote monitoring of:
 - AC failure
 - Low battery
 - Trigger status
- Made in USA
- MagnaCare Lifetime Replacement No Fault Warranty
- UL and ULC Listed

SPECIFICATIONS: AQD3-8C1R

Power Module: AQD3

Electrical

Input Voltage Operating Range

90-240VAC
47-63Hz

Maximum Output Voltage

36 VA
3 Amps @ 12VDC
1.5 Amps @ 24VDC

Continuous Output Voltage

33.5 VA
2.8 Amps @ 12VDC
1.4 Amps @ 24VDC

Voltage Range

9.8 – 13.7VDC/ 13.65 typical
20.0 – 27.5VDC/ 27.3 typical

Operating Frequency

66KHz

Onboard Power Output

One (1) Class 2 Power Limited

Fuse Protection

AC fuse: GMA-2 2 Amp
Battery: PTC 3 Amp
Current Overload: PTC, self-resetting
Thermal Runaway: PTC, self-resetting

Supervision/Monitoring

AC ON LED indicator: 6mA
DC ON LED indicator: 6mA
AC Fail notification: SPDT Form C 2 Amp
Low Battery: SPDT Form C 3 Amp

Regulatory

UL 294
UL 603
ULC-S318-96
ULC-5533-02

RoHS lead free

Distribution Board: -8C1R

Electrical

Board power use with no load: 90-160mA

Maximum Output Per Channel

8 channels @ 1.23A/channel, Power Limited

Supervision

Trouble/Triggered Form C: 2A
Green LED per channel

Fuses

Output: PTC 1.23A/channel
Holds current at 130°F
Main Fuse/Power Pull: 15A ATO

Relay

Reverse Polarity Trigger:
Input: 30VDC max Voltage
Trigger: +/-20% input voltage

EOL Trigger:

Input: 2.2K ohms
Trigger: +/- 50% resistance on wire pair

Transfer Relay: 15Amps max

Mechanical

Dimensions

Enclosure: 14" x 9" x 3.5"

Power Board: 3.73" x 4.84" x 2"

Mounting: 3.41" x 4.5"

Fire Transfer Relay: 4.84" x 3.88" x .75"
Mounting: 3.41" x 4.50"

Shipping Weight: 8.10 lbs



