

8 G5 !8 D&\$ SERIES

&(J87 `&\$5 `FYXi bXUbWwiAcXi `Y

Features

- Ultra Slim Design
- 24 V Redundant Operation
- DIN Rail TS35 / 7.5 or 15 Installation
- Relay Contact Signal Output & Failure Alarm LED Indicator
- 3 Year Warranty



Description

The DSA-DP20 redundancy module provides a diode ORing solution for 24V nominal, DIN Rail mounted redundant power solutions up to 20A when using a single module or higher output currents when using an individual module for each redundant supply. The redundancy module also provides both volt free contacts and visual indication of power system status to support fault detection and servicing needs.

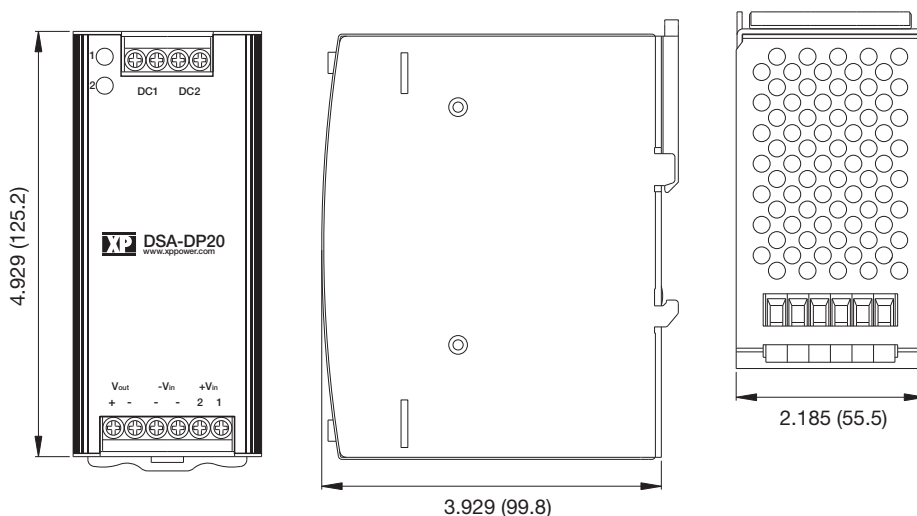
Dimensions:

DSA-DP20:
3.92 x 4.92 x 2.18" (99.8 x 125.2 x 55.5 mm)

Models & Ratings

| Input Voltage Range | Input Current | Output Current | Model Number |
|---------------------|----------------|----------------|--------------|
| 21-28 V | 20 A per input | 20 A | DSA-DP20 |

Mechanical Details



| Pin Connector | | |
|---------------|-----|-------------|
| Conn | Pin | Designation |
| Vin/ Vout | 1 | +Vout |
| | 2 | -Vout |
| | 3 | -Vin |
| | 4 | -Vin |
| | 5 | Vin 2+ |
| | 6 | Vin 1+ |
| Alarm | 1 | DC1 |
| | 2 | DC1 |
| | 3 | DC2 |
| | 4 | DC2 |

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Input

| | Minimum | Typical | Maximum | Units | Notes & Conditions |
|---------------------|---------|---------|---------|-------|--------------------|
| Input Voltage Range | 21 | | 28 | VDC | |
| Number of Inputs | | | | | 2 inputs |
| Input Current | | | 20 | A | Per input |

Output

| Characteristic | Minimum | Typical | Maximum | Units | Notes & Conditions |
|---------------------|---|---------|---------|-------|--------------------|
| Reverse Voltage | | | 30 | VDC | |
| Output Current | | | 20 | A | |
| Output Voltage Drop | | | 0.5 | VDC | |
| LED Indicators | A green LED per input indicates voltage present | | | | |

Signals

| Characteristic | Minimum | Typical | Maximum | Units | Notes & Conditions |
|----------------------|---|---------|---------|---------|--------------------|
| Input Voltage Alarm | Relay contact per input to indicate voltage present. Contacts are closed if voltage is < 20V or > 30V (±5%) | | | | |
| Relay Contact Rating | | | 30 / 1 | VDC / A | |

General

| Characteristic | Minimum | Typical | Maximum | Units | Notes & Conditions |
|----------------------|---------|---------|---------|-------|---|
| Isolation Voltage | 500 | | | VAC | Chassis to input |
| | 500 | | | VDC | Chassis to output |
| | 500 | | | VDC | Chassis to alarm contacts |
| Isolation Resistance | 100 | | | MΩ | Chassis to terminals at 500 VDC, 25 °C & 70% RH |

Environmental

| Characteristic | Minimum | Typical | Maximum | Units | Notes & Conditions |
|-----------------------|---|---------|---------|-------|---|
| Operating Temperature | -20 | | +70 | °C | See derating curve in Application Notes |
| Storage Temperature | -40 | | +85 | °C | |
| Operating Humidity | 10 | | 95 | %RH | Non-condensing |
| Vibration | 10 ~ 500 Hz, 2 g 10min. / cycle, period for 60min. each along X, Y, Z axes; Certified IEC 60068-2-6 | | | | |

EMC: Emissions

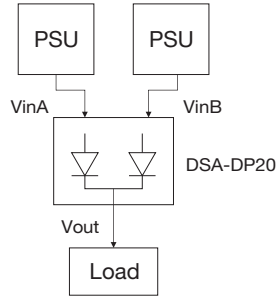
| Phenomenon | Standard | Test Level | Criteria | Notes & Conditions |
|------------|----------|------------|----------|--------------------|
| Radiated | EN55022 | Class B | | |

EMC: Immunity

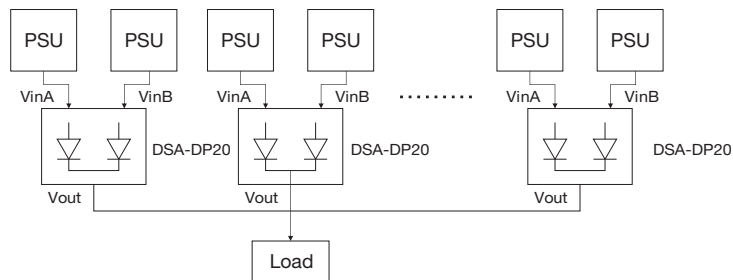
| Phenomenon | Standard | Test Level | Criteria | Notes & Conditions |
|-------------------|-------------|------------|----------|--------------------|
| Immunity | EN61204-3 | | | |
| ESD Immunity | EN61000-4-2 | 2 | A | |
| Radiated Immunity | EN61000-4-3 | 3 V/m | A | |
| EFT/Burst | EN61000-4-4 | 1 | A | |
| Surges | EN61000-4-5 | 1 | A | |
| Conducted | EN61000-4-6 | 3 Vm | A | |
| Magnetic Fields | EN61000-4-8 | 1 A/m | A | |

Application Notes

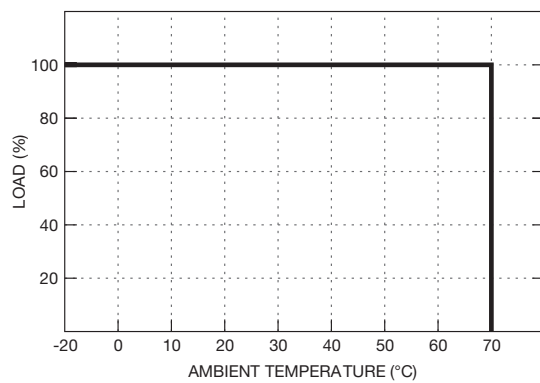
1+1 Redundancy



N+1 Redundancy



Derating Curves



Block Diagram

