

## DPB1U SERIES

### DC DISTRIBUTION PANELS

### 12 Breakers & Dual 150A Inputs

#### DESCRIPTION

UNIPOWER's DPB1U Series of circuit breaker panels provide distribution and overload protection for 1 to 12 circuits. The panels are only one mounting position (1.75 inches) high.

The panel provides 1 to 12 single-bus breakers or 2 to 12 dual-bus (A&B) breakers (1 to 6 per bus). The panels distribute up to a total of 300 amperes of load current from two separate 150-ampere sources with true A and B distribution and alarm capabilities.

A and B sections of the dual-bus panel are isolated and can be separately configured for 12, 24 or 48 volts and are polarity neutral. Breaker capacities are from 1 to 50 amperes.

Alarms is indicated by a dual color LED (green/red) for each bus and one Form C relay contact per bus.

A fail safe option lets the A and B sides operate redundantly from two separate feeds.

The panels come with brackets that permit mounting in either a 19- or 23-inch relay rack. They can be mounted from the front of the rack with offsets every quarter-inch front to back to align with existing rack-mounted equipment.

#### THREE YEAR WARRANTY

#### SAFETY CERTIFICATIONS

UL60950-1 2<sup>nd</sup> Edition  
 CSA22.2, No. 60950-1 2<sup>nd</sup> Edition  
 EN60950-1 2<sup>nd</sup> Edition

[www.unipowerco.com](http://www.unipowerco.com)

North America & CALA: +1 954-346-2442 • EMEA: +1 561-990-3830 • [sales@unipowerco.com](mailto:sales@unipowerco.com)



E210994



LVD2006/95/EC  
 ROHS2011/65/EU



#### STANDARD MODELS

INPUT FEEDS	MAX. # BREAKERS	AMPS EACH BUS	TOTAL AMPS	MODEL NUMBER
1	6	150	150	DPB1U-Axy
	12	150	150	DPB1U-Axy-Bxy-S
2	6 Each Bus	150	300	DPB1U-Axy-Bxy

Note: 'x' denotes the operating voltage. 'y' denotes between one and six breakers which must be specified as part of the final model number. See ordering guide on page 2 of this datasheet to specify a full model number.

#### FEATURES

- ◆ One Mounting Position High: 1.75"
- ◆ 19- or 23-Inch Rack Mounting
- ◆ Magnetic Circuit Breakers
- ◆ Single Bus with 1 to 12 Breakers
- ◆ Dual Bus (A/B) with 1 to 6 Breakers per Bus
- ◆ Operating Voltage: 12, 24 or 48VDC
- ◆ POLARITY NEUTRAL
- ◆ A & B are Isolated Loads
- ◆ A & B Can Be Separately Configured
- ◆ 1A to 50A per Breaker
- ◆ Green/Red LED Alarm
- ◆ One Form C Relay Contact per Bus (A/B)
- ◆ Rack Offset Every 1/4", Front to Back
- ◆ Fail Safe Option (special order)

## SPECIFICATIONS

Typical at 25°C Unless Otherwise Noted.

### INPUT / OUTPUT

Panel Capacity.....See Panel Configuration Table  
 Configuration  
 Single Bus.....1 to 12 Breakers  
 Dual Bus.....1 to 6 Breakers Each  
 Breaker Capacity<sup>1</sup>.....1A to 50A  
 Voltage<sup>2</sup>  
 48V Nominal.....42-60VDC  
 24V Nominal.....21-30VDC  
 12V Nominal.....10.5-15VDC  
 Polarity.....POLARITY NEUTRAL

### ALARMS

Alarm Indicator.....Dual-Color LED Per Bus  
 LED Status Indication.....Green = Normal  
 Red = Alarm  
 Off = No Power  
 Alarm Connections.....One Form C Relay Contact Per Bus

SAFETY STANDARDS.....UL69950-1 2nd Ed., CAS22.2 No.950-1 2nd Ed.,  
 EN60950-1 2nd Ed.

### ENVIRONMENTAL

Operating Temp. Range.....-10°C to +70°C  
 Storage Temp. Range.....-40°C to + 85°C  
 Humidity.....0% to 95%, Non-Condensing

### PHYSICAL SPECIFICATIONS

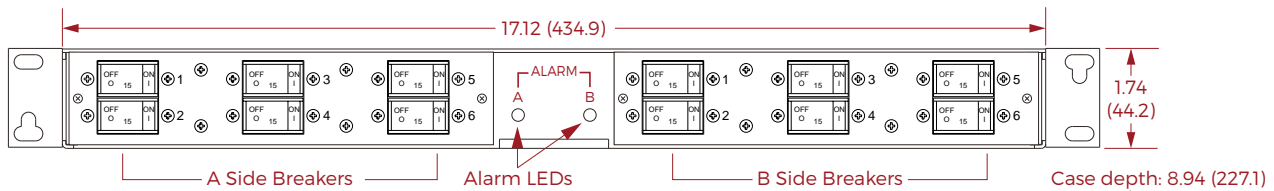
Case Material.....Steel  
 Finish.....Powder Coat Black  
 Dimensions<sup>3</sup>, Inches (mm).....1.75 H x 19.00 W x 9.00 D  
 (44.5 x 483 x 229)  
 Weight.....10.30 lbs. ( 4.67 kg.)  
 Rack Mounting Width.....19 or 23 Inches

### CONNECTIONS

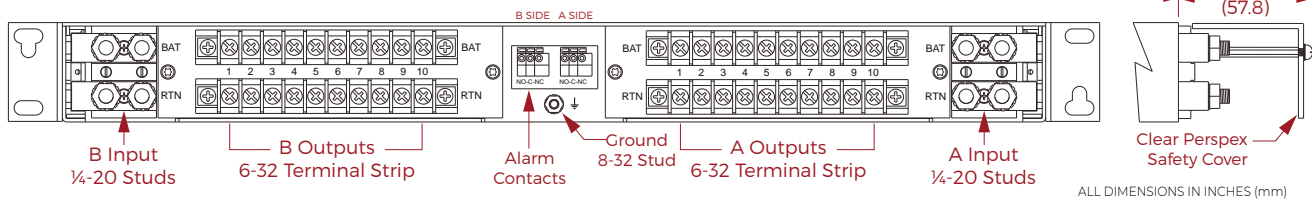
Input Connections.....Crimp Type Lug or ¼ - 20 Stud  
 Output Connections  
 1-30A.....Barrier Terminal Strips, No. 6-32  
 40A-50A.....Barrier Terminal Strips, No. 10-32  
 Chassis Ground Connection.....No. 8-32 Stud  
 Alarm Relay Connections.....Spring Clamp Terminals, 16-26AWG

NOTES: 1. See table for available breaker sizes.  
 2. See Ordering Guide to specify voltage.  
 3. For unit with fail safe option the case depth is 10.44 inches (265mm).

### FRONT VIEW



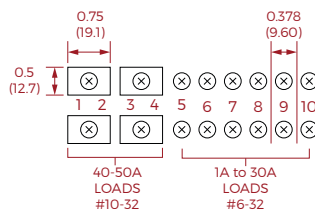
### REAR VIEW



## ORDERING GUIDE

Model No.: DPBIU-A ☐ ☐ ☐ ☐ ☐ ☐ -B ☐ ☐ ☐ ☐ ☐ ☐ -C-☐

### LOAD CONNECTION DETAIL



Recommended wire sizes:  
 30A or less - #10AWG.  
 40A or 50A - #8AWG.

### INPUT CONNECTION DETAIL

Each input bus bar uses ¼-20 Studs with a 0.625" spacing.  
 A kit of 4 two-hole lugs for #6AWG wire is available, order code 775-1434-0000.

CODE	VOLTAGE
1	48V
4	24V
6	12V

POLARITY NEUTRAL.  
 May be connected for Positive or Negative Ground operation.

BREAKERS	
CODE	AMPS
F	1
G	2.5
H	5
I	10
J	15
K	20
L	25
M	30
N	40
O	50

Clear Plastic Rear Safety Cover (supplied as standard)

CODE	OPTION
F	Fail Safe <sup>1,2</sup>
S	Single Bus 12-way <sup>2</sup>

1. 24 or 48V versions only.  
 2. Voltage and polarity for A & B sides must be the same.

- Notes: 1. If section B is not used a blank panel is installed at the factory and the "-B" in the model number is not required.  
 2. The sum of all fuse currents on either side must not exceed 150 Amperes.  
 3. When the 'S' option is specified each side of the panel is limited to 75A.  
 4. Failsafe (option F) is to special order only and uses a chassis 10.44" depth. Call sales to discuss your requirements.

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North America & CALA: +1 954-346-2442 • EMEA: +1 561-990-3830 • sales@unipowerco.com