

LVD1U SERIES

LOW VOLTAGE DISCONNECT PANELS

70A @ 24V & 48V

DESCRIPTION

Unipower's LVD1U Series of low-voltage disconnect panels are designed for maximum flexibility. They can be connected for either load or battery disconnect. The one mounting position (1.75 inches) high panels can be configured as single or dual (A/B) disconnects.

The disconnect contactor is rated at 70 amperes. A 100-ampere max. battery circuit breaker is also incorporated into each unit.

An optional bypass switch allows the user to bypass the LVD contactor. An LVD or battery breaker alarm is indicated by a red LED. Form C relay contacts also indicate an LVD or battery breaker alarm.

The A and B sections of the dual LVD panel can be separately configured for 24 or 48 volts and positive or negative ground. 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 from front to back to align with existing rack-mounted equipment.

TWO YEAR WARRANTY

SAFETY CERTIFICATIONS

UL1950
CSA22.2, No. 60950
EN60950

www.unipowerco.com

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L V DISCONNECT PANELS

BASE MODEL	CONFIGURATION
LVD1U-B	+/-48V, 70A
LVD1U-A-B	+/-24V, 70A

To define order code see configuration guide on page 2.

FEATURES

- ◆ One Mounting Position High: 1.75"
- ◆ 19- or 23-Inch Rack Mounting
- ◆ Single or Dual (A/B) LVDs
- ◆ Current Capacity: 70A per Load
- ◆ Operating Voltage: 24 or 48VDC
- ◆ Positive or Negative Ground
- ◆ Red LED Alarm
- ◆ Form C Relay Contacts
- ◆ LVD in Series with Battery or Load
- ◆ Battery Circuit Breaker: 100A
- ◆ LVD Bypass Switch, Optional
- ◆ Rack Offset Every 1/4", Front to Back

SPECIFICATIONS

INPUT/OUTPUT

LVD Capacity	70A Per Load, 140A Total
Battery Current, Max.	100A
Configuration	Single or Dual LVD
Voltage ¹	
48V Version	42-59VDC
24V Version	22-29VDC
Polarity ¹	Positive or Negative Ground
LVD Connection	In Series with Battery or Load
LVD Disconnect Voltage ²	
48V Version	42.5 VDC
24V Version	21.25 VDC
LVD Reconnect Voltage ²	
48V Version	49.0 VDC
24V Version	24.5 VDC

ALARMS

Alarm Indicator	Red LED
LED Status Indication	Red = LVD Contactor Open or Battery Breaker Open Off = Normal
Alarm Connections	Form C Relay Contacts

SAFETY STANDARDSUL1950, CSA22.2 No. 60950, EN60950

ENVIRONMENTAL

Operating Temp. Range	-10°C to +70°C
Storage Temp. Range	-40°C to + 85°C
Environment	Pollution Degree 2
Humidity	0% to 95%, Non-Condensing
ESD	Bellcore GR-1089-Core and EN61000-4-2
MTBF, 35°C (Bellcore)	200,000 Hours
Cooling	Natural Convection
Acoustic Noise	None

PHYSICAL SPECIFICATIONS

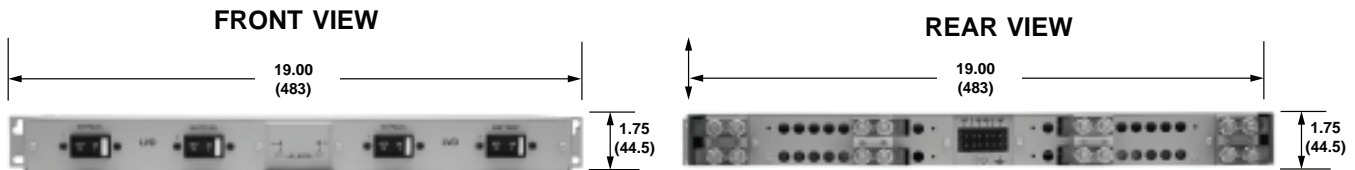
Case Material, Finish	Steel, Powder Coat Gray
Case Dimensions, Inches (mm)	1.73h x 17.12w x 8.94d (43.9 x 434.9 x 227.1)
Mounting	19" or 23" (using supplied mounting hardware)
Weight	9.15 lbs. (4.15 kg.)

CONNECTIONS

Input, Output, Battery	Crimp Type Lug or ¼ - 20 Studs
Chassis Ground Connection	No. 8-32 Stud
Alarm Connections	0.045" sq. Wirewrap Pins

Notes:

1. See Ordering Guide to specify voltage and polarity.
2. These voltages are adjustable at factory.



DIMENSIONS IN INCHES (mm).

ORDERING GUIDE

CODE	OPTION
S	Bypass Switch
X	No Bypass Switch

CODE	OPTION
C	Rear Cover (Clear Plastic)

Model No.: LVD1U-A **-B**

CODE	VOLTAGE & POLARITY
1	-48V (Pos. Gnd.)
2	+48V (Neg. Gnd.)
3	-24V (Pos. Gnd.)
4	+24V (Neg. Gnd.)

Notes:

1. If section A is not specified, a blank panel is installed.
2. Crimp type lugs, two-hole for 6AWG cable, are recommended for the bus bar connections.
For a kit of 4 lugs order pt. no. 775-1434-0000.

ALARM PIN CONNECTIONS			
PIN	FUNCTION	PIN	FUNCTION
1	A side - Relay Contact - NO	7	B side - Relay Contact - NO
2	A side - Relay Contact - Common	8	B side - Relay Contact - Common
3	A side - Relay Contact - NC	9	B side - Relay Contact - NC
4	Alarm Board Power In -Ve	10	Alarm Board Power In -Ve
5	Alarm Board Power In -Ve	11	Alarm Board Power In -Ve
6	Alarm Board Power In +Ve	12	Alarm Board Power In +Ve