LBD-Series:

Battery Disconnect Panels

The LBD-Series Battery Disconnect Panels provide battery protection in rack mount and enclosure style while freeing up valuable real estate within your cabinet.

The LBD-Series battery disconnect panels were designed with performance, style and size in mind. Carling Technologies has packed this product line with ratings up to 700A, interrupt capacity of 50,000A, PDC voltage ratings of -36 to -60 VDC and in sizes starting as small as 1 rack unit (1RU) x 19", up to 3RU.

The LBD-Series addresses the demanding requirements associated with today's Telecommunication Networks.

General Specifications

Standards:	UL Listed
Dimensions:	Rack mounts to EIA standard EIA-310-D, 1-3RU, 19" or 23" panel
Enclosure:	14 gauge Galvaneel steel w/ powder coat finish, & Bare metal ground.
Current Ratings:	250 amps/ 1RU;400 amps/2RU 700 amps/3RU
Circuit Breaker Voltage Ratings:	125 vdc
Interrupting Capacity:	50,000 amps @ 60 vdc
Alarm Feature:	Std. 1 form C contact for power ON/OFF, 1 form C, Contact for breaker OFF/TRIPPED.
Ambient Temperature:	-40°C to +60°C
LED indicators:	Green lamp for power indication. Red lamp for alarm indication.
Rack Mount Insulators:	UL94V-0 material over all live parts.
Meter Shunt Option:	Optional meter shunt provides 25m V at rated current.
Chassis Ground:	Bare metal to rack mount flange & 1/4 - 20 stud to bare metal.
Lug Connections:	Busbars accept 2-hole std. telecom lugs up to 750 mcm cable. 1 lug-up to 250 amps; 2 lugs-up to 400 amps; 3 lugs- up to 700 amps. Lugs can be mounted on either or both sides. Lugs can be through bolted on each side of the bus bar, doubling lug capacity.
Lugs Required:	1.75" hole spacing, 1/2: bolt lug, max. 1.75" wide

Features & Benefits

- Panel incorporates Carling F-Series high amperage hydraulic/magnetic breakers: providing a superior level of performance.
- Each panel is sized for maximum protection in the smallest size possible to conserve valuable cabinet space. Starting with a compact 1RU x 19" rack rated up to 250 amps @ 60 vdc with a 50,000 AIC.
- Front panel access.
- Insulator covers are standard to protect live parts once the panel is installed.
- Front panel is provided with a circuit breaker handle guard to protect from unintentional operation.
- LED indications are standard for visual monitoring.
- The LBD provides, as a standard, a circuit breaker alarm feature to alert breaker trip or off conditions.
- Voltage, or current monitoring, and remote shut down options are offered.
- Cable connections on thick silver plated, copper busbars, which accept standard 2-hole telecom lugs from 1 AWG to 750 MCM sizes.
- Lugs can be mounted on either or both sides of the bus bars.

LBD-Series Ordering Scheme

LBD	P	1	-	1	-	810	-	A	-	A	-	0	-	0	-	A
1 Series	2 Style	3 Rack Size		4 Function		5 Current Rating		6 Bus Bar Type		7 Metering Shunt		8 Remote Disconnect		9 Special Options		10 Approvals

1 SERIES
LBD

2 STYLE
P Rack Mount
E Enclosure/Wall Mount

3 RACK SIZE
1 19" rack
2 23" rack
E Enclosure

4 FUNCTION
0 Switch Only
1 Series Trip
2 Series Trip with Aux. Switch
3 Mid-trip with Alarm Switch

5 CURRENT RATING
810 100 amp (1RU)
820 200 amp (1RU)
825 250 amp (1RU)
840 400 amp (1RU)
860 600 amp (1RU)
870 700 amp (1RU)

6 BUS BAR TYPE
A figure 1
B figure 1 w/ PEM studs

7 METERING SHUNT
0 No shunt
A Metering shunt

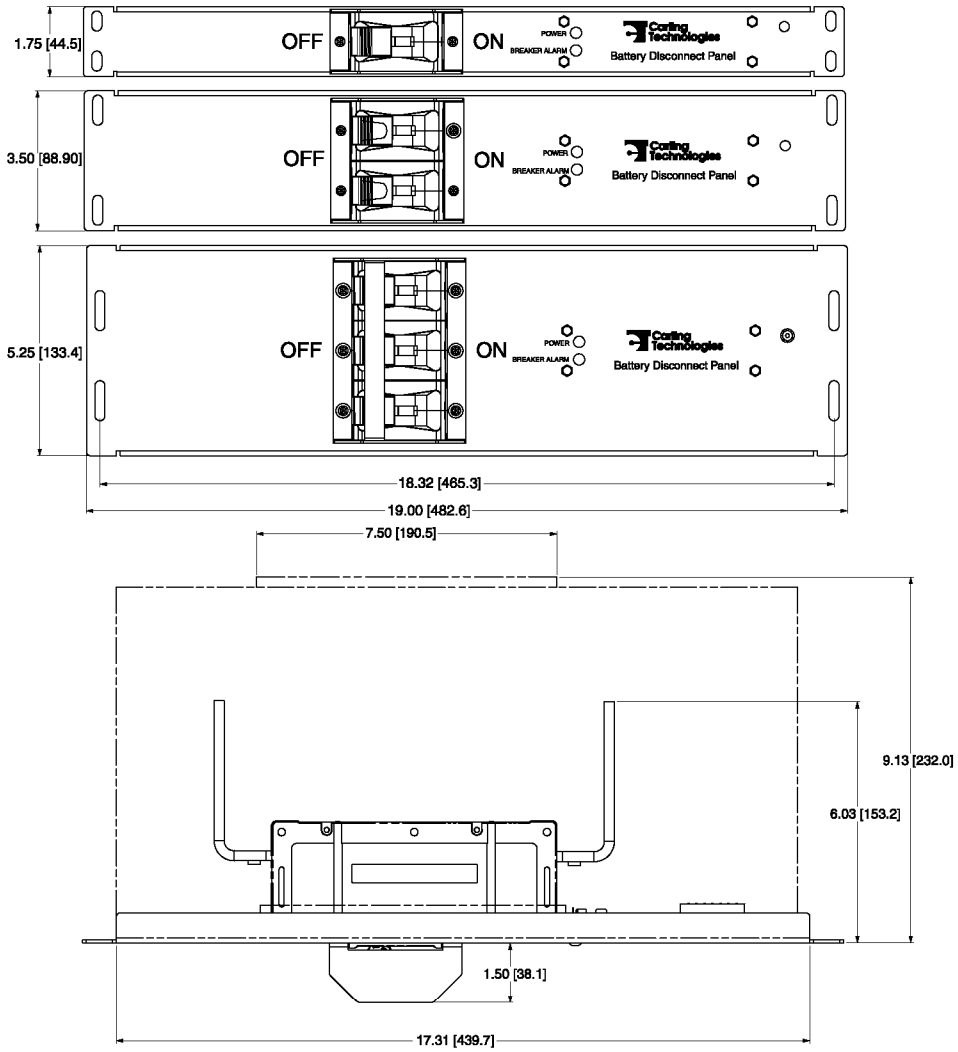
8 REMOTE DISCONNECT VOLTAGE
0 No remote option
A 24 vdc
B 48 vdc
C 120 vdc
D 240 vdc

9 SPECIAL OPTIONS
0 None
X Consult factory

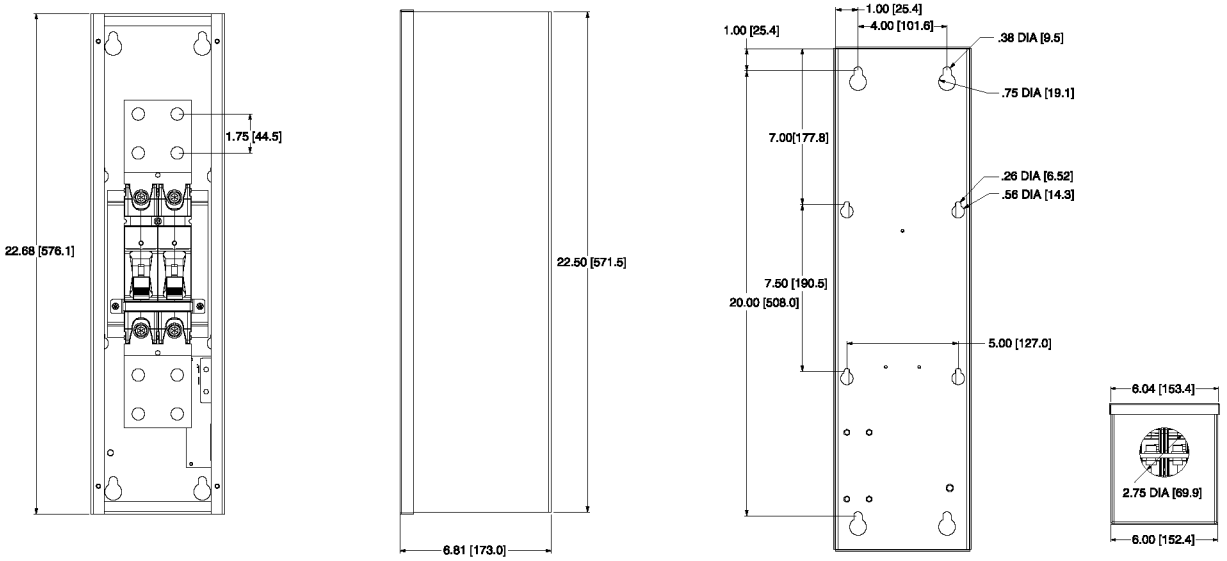
10 APPROVALS
A No approvals
B UL Listed

NOTES:
Circuit breakers are provided with a DC medium delay curve.
1 Current & voltage monitoring are available as special options. Select X in position 9, and advise factory.

LBD-Series Rack Mount Dimensional Specifications



LBD-Series Wall Mount Dimensional Specifications



Circuit Breakers

Circuit breakers can be ordered separately to upgrade or reconfigure panel at a later date. Standard circuit breaker part numbers are listed on the chart below. For other ratings, consult factory.

General Specifications:
UL489, CSA and VDE approved
10,000 amp interrupting capacity

F-SERIES TIME DELAY VALUES

TRIP TIME (SECONDS)	PERCENT OF RATED CURRENT								
	Delay	100%	125%	150%	200%	400%	600%	800%	1200%
	14	No trip	10.0-110	.600-40.0	2.50-15.0	.500-3.00	.180-1.00	.010-.280	.008-.080