Secondary DC Distribution

-48V Battery Distribution Bay 24 Inches Deep, BDFB / BDCBB

Overview

The GE Battery Distribution Fuse Bay (BDFB) or Battery Distribution Circuit Breaker Bay (BDCBB) serves as a secondary power distribution unit for -48V DC power from the battery plant to the load equipment. The H569-445 24" deep distribution bay is versatile with fuse and circuit breaker options, internal or external DC return bars, 800A, 20-position panels and a VIM1 smart meter to monitor voltage and current of each load bus.

Cabinet Options

Cabinets are 7' tall, 24" deep with a width option of 30" or 34". Each cabinet can have up to 8 20-position distribution panels. Each panel may be individually fed with an 800A load bus or multiple panels may be joined together. Load bus assemblies include a 1500A shunt and landings for four 750kcmil cables. Factory supplied shunt wiring to each panel allows cabinets to be transitioned into different load configurations in minutes for maximum flexibility.

Fuse / Circuit Breaker Panels

Distribution panels have 20 bullet-style positions that accept holders for TPS fuses up to 70amps, TLS fuses up to 125 amps, or circuit breakers up to 250A. Any fuse or circuit breaker may be installed in any position with no spacing requirements. Each panel includes its own alarm lights for power loss and fuse/breaker alarms. Hinged doors on each panel provide circuit breaker and fuse protection and prevent incorrect installation.

VIM1EC Intelligent Meter

The VIM1EC smart meter monitors voltage and current of each load center with individually configured overload thresholds, power loss and fuse/breaker alarms. Form-C relays for each of the three alarms are accessed via terminal blocks located at the top of the cabinet. The VIM1EC receives redundant power from Load A and B buses as well as an optional external Auxiliary Battery Supply (ABS) connection.
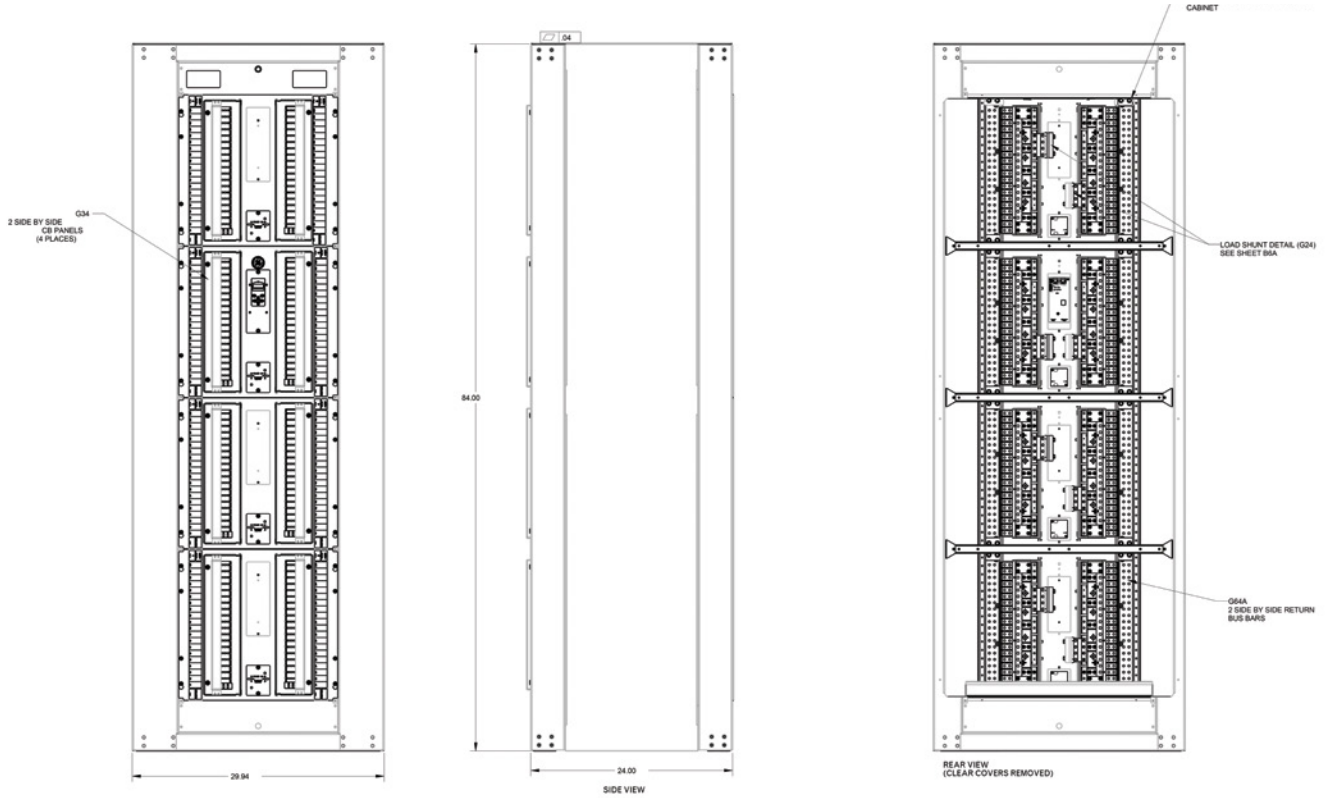
The VIM1EC provides the ability to monitor the BDCBB over intranet or internet if connected to a GE Galaxy Millennium 2 or Pulsar Plus Controller using GE's proprietary GP protocol. With the addition of the Pulsar Gateway feature, the BDCBB can be monitored independently. The Network Gateway feature allows monitoring of up to (16) BDCBBs.
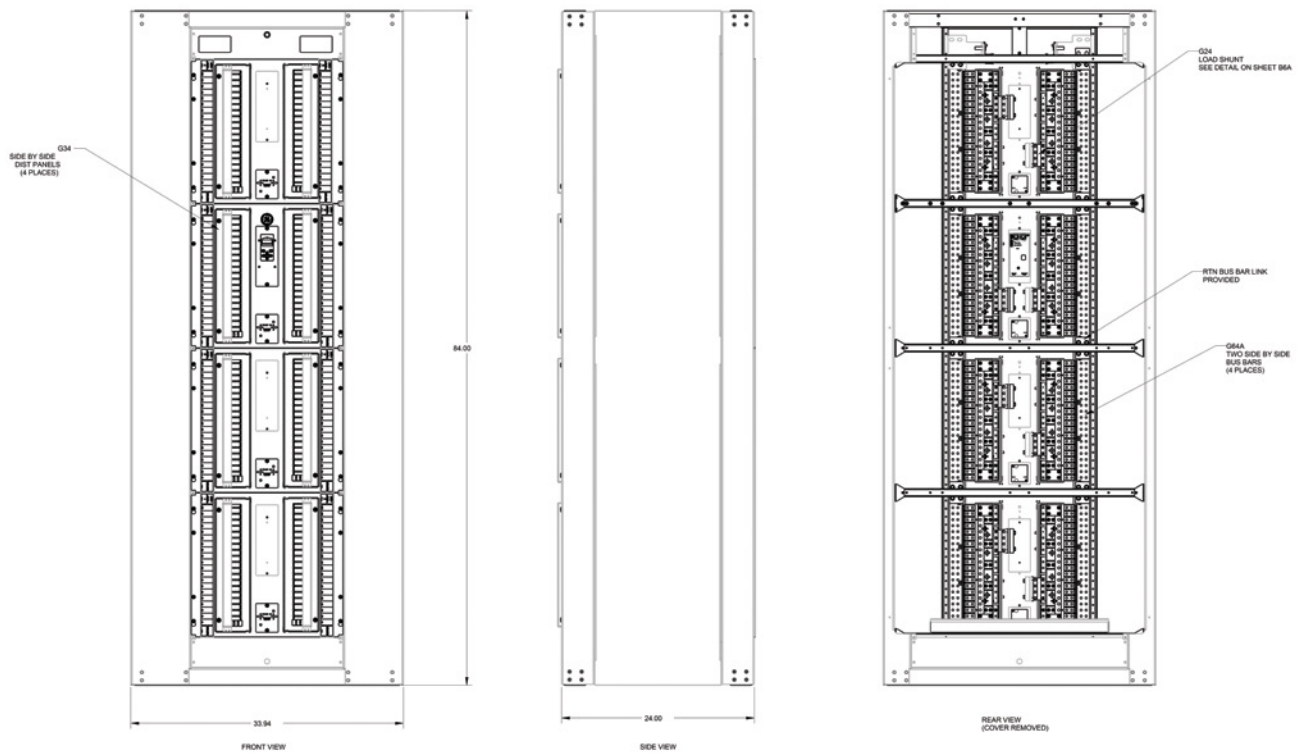
Advantages

- Telecom Central Office, MTSO, Data Center and Cable office applications

- 800 amp load centers - 2, 4, 6, or 8 loads, 2, 4, 6, or 8 panels with a capacity of up to 6400 amps per cabinet

- Digital meter interface

- Remote monitoring over Ethernet

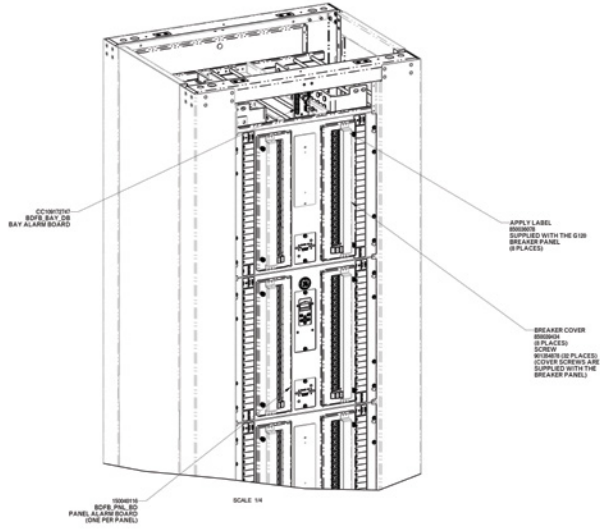- No spacing restrictions on fuse and circuit breaker protectors

Cabinet Drawings

CC10617(2V)
BDFB BAY DB
BAY ALARM BOARD

APPLY LABEL
8500260B
SUPPLIED WITH THE G120
BREAKER PANEL
(9 PLACES)

BREAKER COVER
8500604H
(9 PLACES)
SCREW
9612640/B (32 PLACES)
(COVER SCREWS ARE
SUPPLIED WITH THE
BREAKER PANEL)

15004911B
BDFB PNL BD
PANEL ALARM BOARD
(ONE PER PANEL)

SCALE 1/4

Fuse or Circuit Breaker Installation

G84
BUS BAR RETURN ASSEMBLY
TOP AND BOTTOM OH THE CABINET

SCALE 1/4

SHUNT 800A

(4) CC400570963 BOLT HH .375-16 x 1.5"
(8) CC400576152 FLAT WASHER 3/8
(4) CC400575988 LOCK WASHER 3/8
(4) CC400575086 NUT 3/8-16
TORQUE: 240 in-lbs

G24 SHUNT DETAIL
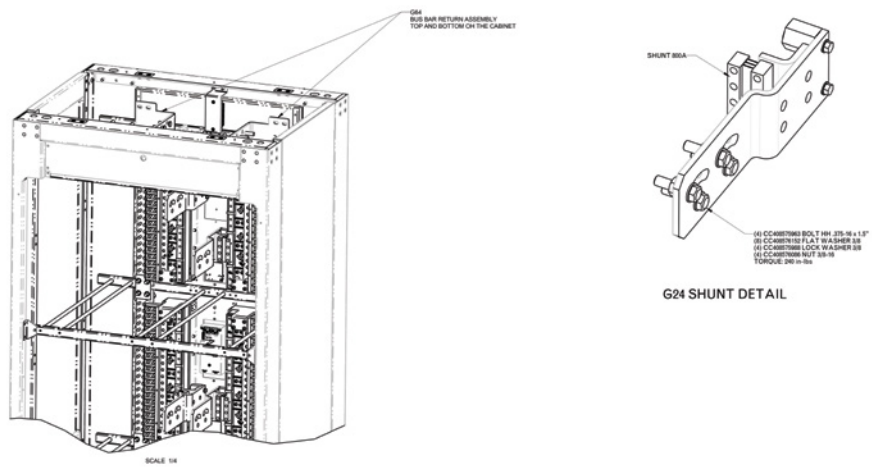
Distribution Panel Connections

G276 OR G277
BDFB NETWORK GATEWAY
LOCATED IN REAR TOP OF THE CABINET

SCALE 1/4
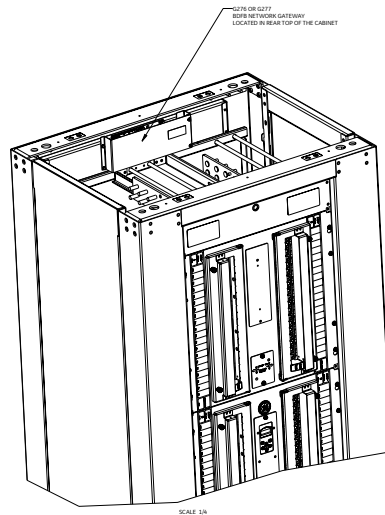
Network Gateway Card Location

Specifications

CAPACITY

Output Voltage	-48VDC
Output Current per Load	800A
Load Complement	2, 4, 6 or 8
Distribution	20-Position Panels for Bullet Style Protectors
Protectors	Bullet-Style Fuse Holders, TPS or TPL Fuses through 125A Single-Pole LEL Bullet-Style Circuit Breakers through 100A Two-Pole LEL Bullet-Style Circuit Breakers through 175A Three-Pole LEL Bullet-Style Circuit Breakers through 250A

MECHANICAL

Width	30" (762mm) or 34"(864 mm)
Depth	24"(610mm)
Height	84" / 2134mm
Weight	Est. 400lbs
Color	Data Center Black

ENVIRONMENTAL

Operating Temperature Range	0°C to +40°C (32°F to 104°F)

AGENCY CERTIFICATIONS

UL	Canada/US UL60950/UL1801
EMI/EMC	CISPR class A conducted and radiated

Step 1: Select Distribution Bays

ORDERING CODE	CABINET OPTIONS (SEE NOTES 1,2)
150046414	7' high x 30" wide x 24" deep cabinet, (8) load, (8) 20-pos panels, internal returns, meter
150044908	7' high x 34" wide x 24" deep cabinet, (8) load, (8) 20-pos panels, internal returns, meter
150050122	7' high x 30" wide x 24" deep cabinet, (8) loads, (8) position panels, internal return, meter, network gateway
150050154	7' high x 34" wide x 24" deep cabinet, (8) loads, (8) position panels, internal return, meter, network gateway

ORDERING CODE	MISCELLANEOUS SPARE/REPLACEMENT PARTS
CC109172854	VIM1 Digital Meter Assembly
150047915	BDCBB Network Gateway kit for 30" wide cabinet
150050054	BDCBB Network Gateway kit for 34" wide cabinet
CC109172747	Alarm Termination Board
CC109172730	Panel LED Alarm Board
150046950	Top Cover Kit for Group 101 (30" wide) Cabinet
150046951	Top Cover Kit for Group 103 (34" wide) Cabinet
847135662	(4) ½ inch drop-in anchors (For Zones 0,1,2)
847135688	(4) 12mm cap bolts anchors (For Zones 0,1,2,3,4)

Note 1: Load shunt connections are accessible for either top or bottom cable entry without field modification.
Note 2: Six bus links are included with each cabinet. If unused in configuration they are shipped in hardware box for field modifications.

Step 2: Select Distribution Components

Bullet Style Load Circuit Breakers

ORDERING CODE	AMPERAGE	CB POSITIONS (POLES)	MIN. WIRE GAUGE	PHOTO
407998137	3	1	10	
407998145	5	1	10	
407998152	10	1	10	
407998160	15	1	10	
407998178	16	1	10	
407998186	20	1	10	
407998194	25	1	10	
407998202	30	1	10	
408213486	40	1	8	
407998210	45	1	8	
407998228	50	1	6	
407998236	60	1	6	
407998244	70	1	2	
407998251	80	1	2	
407998269	90	1	2	
407998277	100	1	2	
CC848808551	100	2	2	
408185353	125	2	2	
408185346	150	2	1/0	
450023081	175	2	1/0	
408564941	200	3	2/0	
CC408573975	225	3	4/0	
408535752	250	3	4/0	
850019325	2-Position Adapter Bus Kit (one required for 2-pole breakers and one for internal return bus)			
850025679	3-Position Adapter Bus Kit (one required for 3-pole breakers and one for internal return bus)			

TPS/TLS Fuses

ORDERING CODE	AMPERAGE	ORDERING CODE	AMPERAGE	PHOTO
406700567	3	406700658	40	
406700583	5	406700674	50	
406700591	6	406700682	60	
406700609	10	406700690	70	
406700617	15	CC408618020	80	
406700625	20	CC408618037	90	
406700633	25	CC408618045	100	
406700641	30	CC408618061	125	
402328926	0.18 Alarm Fuse			
408548944	Bullet Fuse Holder, TFD-101-011-09 (Alarms on Blown Fuse or Fuse Head Removal)			
CC408617410	Bullet Fuse Holder, TFD-101-011-10 (Alarms on Blown Fuse Only)			

Notes

Notes

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Reliability

- Delivers decades of service
- High availability architecture

Intelligence

- Industry leading programmable digital smart monitor
- Visual, audible and remote alarms

Investment Protection

- Backward compatibility
- Flexible upgrade options

On Time Delivery

- 24/7 technical support
- Standard building blocks

Management Visibility

Galaxy Manager* software is the centralized visibility and control component of a comprehensive power management system designed to meet engineering, operations and maintenance needs. The Galaxy Manager client-server architecture enables remote access to system controllers across the power network.

- Dashboard display with one-click access to management information database
- Trend analysis
- Scheduled or on demand reports
- Fault, configuration, asset, and performance management

Training

GE offers on-site and classroom training options based on certification curriculum. Technical training can be tailored to individual customer needs. Training enables customers and partners to more effectively manage and support the power infrastructure. We have built our training program on practical learning objectives that are relevant to specific technologies or infrastructure design objectives.

Service & Support

GE field service and support personnel are trusted advisors to our customers – always available to answer questions and help with any project, large or small. Our certified professional services team consists of experts in every aspect of power conversion with the resources and experience to handle large turnkey projects along with custom approaches to complex challenges. Proven systems engineering and installation best practices are designed to safely deliver results that exceed our customers' expectations.

Warranty

GE is committed to providing quality products and solutions. We have developed a comprehensive warranty that protects you and provides a simple way to get your products repaired or replaced as soon as possible.

For full warranty terms and conditions please go to www.gecriticalpower.com.