



Engineered to protect and control equipment throughout your facility

Appleton™ PlexPower™ Lighting and Power Panelboards
Product Guide





Easy To Install, Operate and Maintain.

The Appleton™ PlexPower™ Panelboards by Emerson™ use circuit breaker modules that provide explosionproof protection for standard off-the-shelf breakers – eliminating the need for a heavy cast enclosure.

Component level protection means the panelboard enclosure is lighter, more compact and easier to install. Breakers can be easily replaced, upgraded or added in the field with no bolted cover to remove, no need for sealing or rewiring and no danger of compromising flamepath integrity. A true MCCB mains breaker eliminates the need for a disconnect and fuse replacements.

There's never been a simpler, more versatile way to protect lighting, power and heat trace circuits in wet, weather exposed, corrosive or hazardous locations. Appleton™ PlexPower™ Panelboards– the new innovation in panelboard simplicity, only from Emerson™.

Simplify Panelboard Installation and Breaker Maintenance

Standard Materials

- Enclosure: stainless steel
- Hardware: stainless steel
- Bus bar: hard drawn, tin plated copper



PlexPower™ Factory Sealed Panelboard



PlexPower™ Fused Factory Sealed Panelboard

Standard Features

- Factory Sealed Panelboards features 1-, 2-, 3- pole branch breakers only.
- Fused Factory Sealed Panelboards features 3- pole branch switches with fuses.
- Ground-breaking design uses individual breaker housings to minimize the downtime and cost of servicing circuit breakers in hazardous locations
- Lighter weight enclosure is easier to install and can be quickly opened in the field for easier servicing
- No external conduit or cable seals required, making installations faster, easier, and less costly
- Horizontal and vertical coupling options for limitless installation flexibility
- 3 circuit to 54 circuit panelboard configurations are standard, with or without mains breaker; up to 60 Amps per branch breaker (contact your local representative for larger amperages)
- Uses standard, off-the-shelf main and branch circuit breakers and fuses that are easy to source, stock and service
- Supplied with standard hard drawn, tin plated copper bus bar for superior corrosion resistance
- Gland plate at the bottom of enclosure and optional gland plates on all sides can be easily field punched for cable or conduit entries
- Standard configuration includes internal actuators and a solid door; factory installed options include window door or external actuators
- Breaker modules supplied with captive bolts
- Ground and neutral bars provided as standard
- External ground lug provided as standard

Certifications

- Class I, Zone 1, AEx de IIB+H₂ T5
- Ex de IIB+H₂ T5
- Class I, Division 2, Groups B, C, D
- Class II, Division 1, Groups F, G ^①
- Class III ^①
- IP66, Type 4X ^②

^① Certification only applies without drain/breather.

^② IP66, Type 4X Certification only applies with drain/breather.

Built for the Global Marketplace

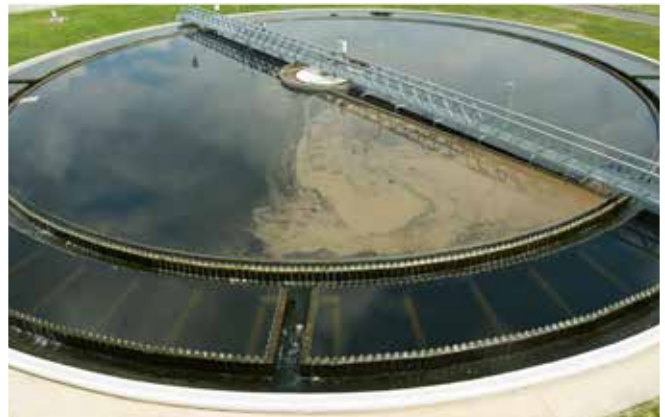
Appleton™ PlexPower™ panelboards provide explosionproof protection of lighting, heat trace and power circuits in NEC/CEC Class I, Division 2; Class I, Zone 1; and Class II hazardous locations. Indoors or outdoors, in weather exposed and corrosive environments, PlexPower™ panelboards provide the ideal electrical distribution solution for every part of your facility.

Industries and Applications

PlexPower™ panelboards provide indoor and outdoor protection and control of electrical circuits in hazardous environments. These robust and rugged panelboards are ideal for placement in wet, corrosive environments or where flammable gases or vapors are likely to be present.



Chemical and Petrochemical Manufacturing



Waste and Wastewater Treatment Facilities



Offshore Drilling Rigs



Refineries

Configured to Your Exact Requirements

PlexPower™ panelboards are available in materials to suit your needs for corrosion resistance and durability. Factory installed options allow you to specify panelboards that deliver optimal performance for every facet of your operation. When you need to upgrade, PlexPower™ is designed for easy reconfiguration and expansion in the field – with no need to seal conduit or cable entries and no need to rewire terminations.

Standard off-the-shelf Breakers

Factory Sealed Panelboards

- Available breaker modules:
 - QC Frame
 - F-Frame
- Available mains circuit breaker:
 - Up to 150 Amps, 2- or 3-pole
- Available branch circuit breakers:
 - 1-pole: 120, 277, 347 Volts, 60 Amps maximum
 - 1-pole: 120 Volts, 30 Amps, GFI or EPD
 - 2- and 3-pole: 240 Volts, 40 Amps maximum
 - 2- and 3-pole: 480, 600 Volts, 150 Amps maximum

Fused Factory Sealed Panelboards

- Available breaker modules:
 - F-Frame
- Available mains circuit breakers:
 - Up to 150 Amps maximum
- Available fuses:
 - Up to 30 Amps maximum

Standard Options

- Drain/breather, add suffix **—DV** (*with drain/breather*)
- Ground fault interrupter breakers for 120V single pole:
 - For 5 mA, add suffix **—GFI** after breaker
 - For 30 mA, add suffix **—EPD** after breaker
- External actuation, add suffix **—EXT**
- Grounded neutral, add suffix **—GN**
- Gland plate, specify suffix:
 - **GPL** = left side
 - **GPR** = right side
 - **GPT** = top side
 - **NGP** = no gland plate
- Heater for condensation,
 - For Class I, Division 2 and Class I, Zone 2 equivalency, add suffix **—HTR**
 - For Class I, Zone 1 certification, add suffix **—HTRF**
 - No change to standard certifications
- LED indicator lights, add suffix **—IL**
- Heater for panels certified to -40°C (-40°F) ambient temperature,
 - For Class I, Division 2 Groups B, C, D only, add suffix **—HTR40**
 - For Class I, Zone 1 certification, add suffix **—HTRF40**
 - No change to standard certifications
- Inverted feed, add suffix **—INV**
- Phenolic nameplate (specify legend), add suffix **—NP**
- Door padlocking provision, add suffix **—P**
- Stainless steel legend plate (specify legend), add suffix **—SP**
- Terminal blocks instead of direct wiring, add suffix **—TB**
- Window with internal actuation only, add suffix **—W**

Circuit Protection and Control Simplified

With component level protection, standard ordinary location circuit breakers can be replaced or upgraded in minutes – with no danger of compromising flamepaths. An optional mains breaker simplifies disconnection of all branch circuits for maintenance, with no disconnect fuses to replace.

Breaker Flexibility

- 1. Rugged Termination:**
Each housing connects to the panelboard by means of line terminations designed for unyielding performance through years of heavy vibrations and shocks.
- 2. Flameproof enclosure housing:**
Labyrinth joint construction and flame arrestors maintain hazardous location rating while allowing easy disassembly for servicing breakers.
- 3. Venting plate:**
Unique design of housing allows safe heat dissipation, enabling breakers to maintain their rated amperage while eliminating nuisance tripping.
- 4. Field Replaceable Components:**
Standard, off-the-shelf circuit breakers and fuses are easy to obtain and reduce inventory costs and downtime.
- 5. Field Replaceable Fuses:**
Standard, off-the-shelf fused circuit breakers are easy to obtain and reduce inventory costs and downtime.

Mains Breaker Module



Branch Breaker Module



Fused Module



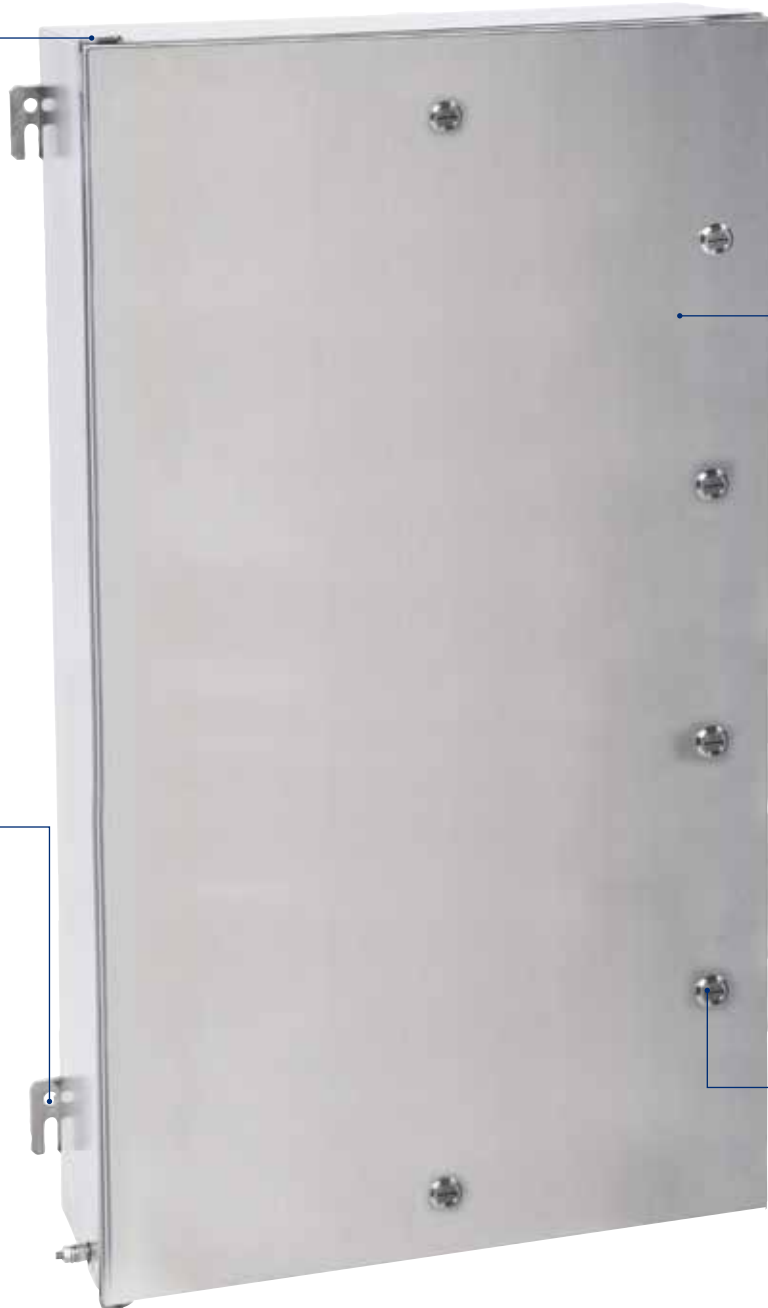
Easy to Install

Engineered to solve operational problems, PlexPower™ panelboards are built of lighter materials to install simply and securely into your existing layout. The modular design can be easily reconfigured in the field to accommodate the circuits you need – today and tomorrow.

Fused Factory Sealed Panelboard — Size E 12 Circuit

Hinges

Robust hinges allow for 180° door opening.



Cover

Self-aligning, reinforced cover is easy to open and resists twisting or deformation.

Mounting Feet

Robust hardware with welded mounting feet for greater strength.

Latches

Quarter turn latches for easy access. No danger of improperly torquing cover bolts or damaging a precision machined flamepath.

Easy to Operate

PlexPower™ panelboards are designed with the user in mind, providing instant visual confirmation of breaker position and easy access to actuators, with no heavy cover to unbolt, remove and replace.

Factory Sealed Panelboard — Size D 12 Circuit



Easy to Maintain

PlexPower™ powerboards simplify maintenance, with ample working room, a bus bar design, hard drawn branch breaker, connections and modular breaker housings that are easy to open for service.

Incoming Mains Breaker (MCCB) Or Disconnect

Optional 3-pole mains breaker up to 150 Amps for simple disconnection of all branch circuits for maintenance, with no disconnect fuses to replace.

Neutral Lug

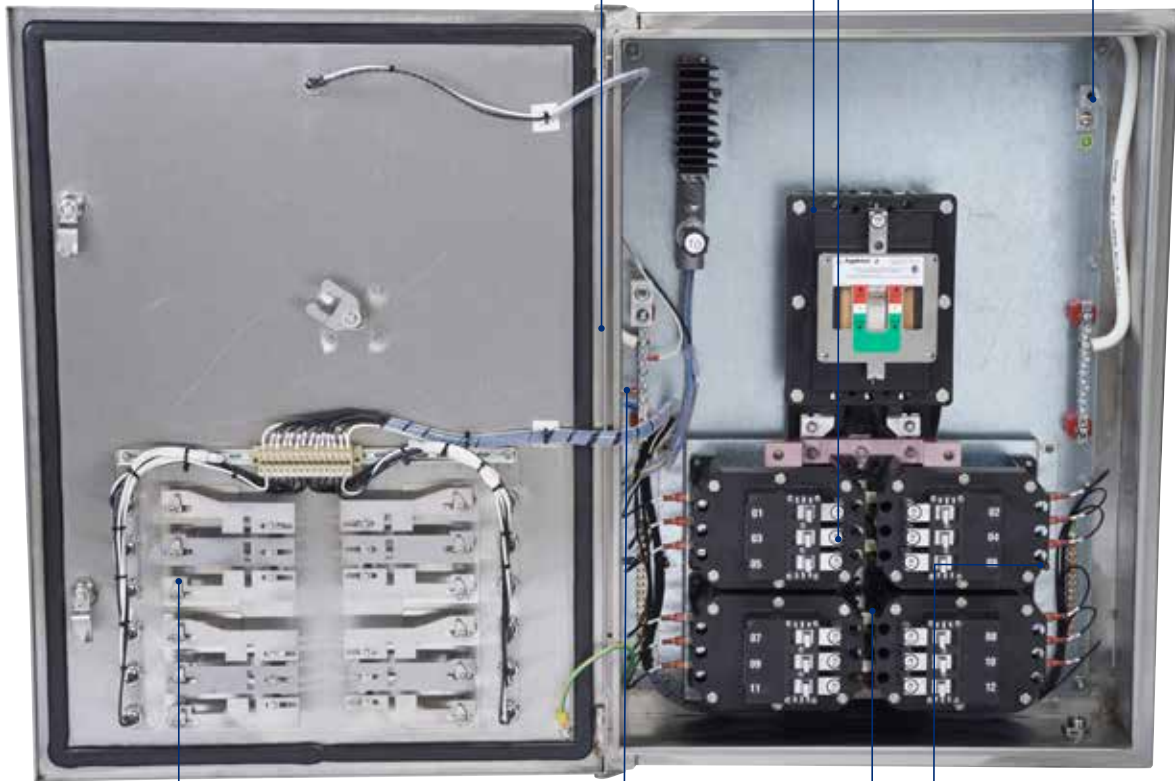
Standard neutral lug mounted on a standard neutral bus bar for incoming neutral connection.

Bus Bar

Stand hard drawn copper bus bar provides robust, reliable and efficient electrical connections in a compact space.

Ground Lug

Standard ground lug for incoming connection.



Actuators

Optional self-aligning stainless steel actuators.

Ground Bus

Standard ground lug for incoming connection.

Connection Links

Hard copper branch connections.

Factory Installed Line Connections

Simplified wiring with plenty of working room; connections are sized to accept 1-pole branch breakers up to 347 Volts/60 Amps, and 2- or 3-pole breakers up to 600 Volts/150 Amps.

Steps to Creating a Catalog Number

Factory Sealed Lighting Panelboards

RQ **S** **D1** **3** **1** | **M** **12** **100** | **1** **15** **1** | **GFI** | **—** | **▲**
Step 1 Step 2 Step 3 Step 4 Step 5 Step 6

Step 1: Choose basic catalog number from product catalog pages or from numbering guide.

Step 2: If a main breaker is desired indicate amperage rating.

Example: RQSD131M12 – 100 is a 12 circuit 3 phase panelboard c/w 100 amp main breaker.

Step 3: First digits are the quantity of breakers, second the ampere rating, and third the number of poles.

Example: 1151 is 1 breaker, 15 amps, 1 pole breaker

Step 4: This is where breaker type is indicated

Blank - standard breaker

GFI - 5 mA GFI breaker- single pole only (limited to 2 breakers per 3 circuit module)

EPD - 30 mA EPD breaker- single pole only (limited to 2 breakers per 3 circuit module)

Step 5: Repeat steps 3 and 4 for as many breaker types as required

Step 6: Options: Add option in alphanumeric order as listed PlexPower™ under Options.

Note: For panels certified to -40°C, enclosure size may need to increase. Refer to table 2 on pages 11 and 12.

Fused Factory Sealed Panelboards

RFF **S** **E1** **3** **1** | **M** **12** **100** | **1** **15** **T** | **—** | **▲**
Step 1 Step 2 Step 3 Step 4 Step 5

Step 1: Choose basic catalog number from product catalog pages or from numbering guide.

Step 2: If a main breaker is desired indicate amperage rating.

Example: RFFSE131M12 – 100 is a 12 circuit 3 phase panelboard c/w 100 amp main breaker.

Step 3: First digits are the quantity of breakers, second the fuse ampere rating, and third the type of fuse.

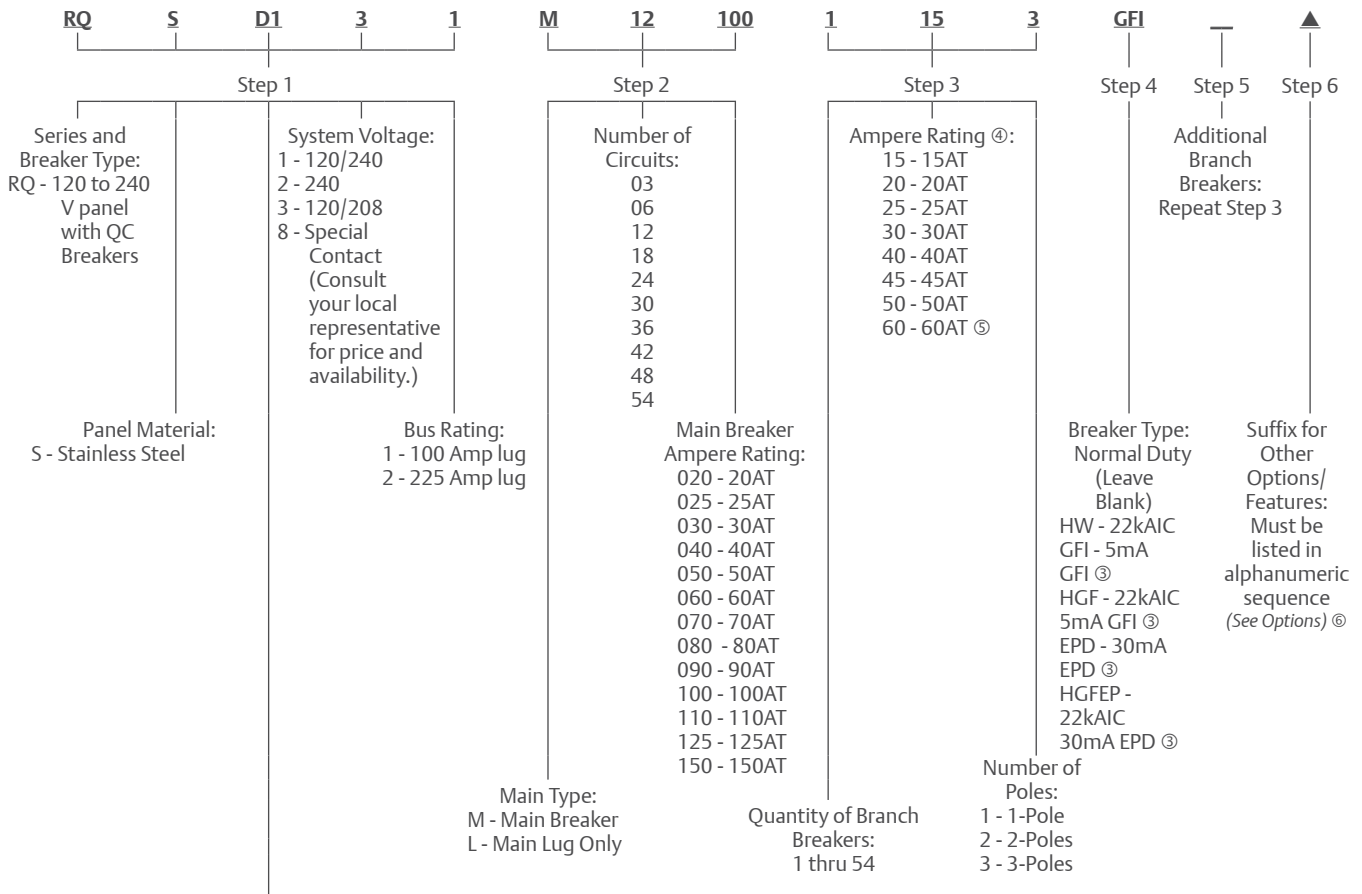
Example: 115T is 1 fuse, 15 amps, T for time delay

Step 4: Repeat step 3 for as many breaker types as required

Step 5: Options: Add option in alphanumeric order as listed PlexPower™ introduction page under Options.

Factory Sealed Lighting Panels

Standard Panelboard Catalog Logic ①②



© Panel Size: Select A1, B1, C1, D1, J1, F1, L1 or H1 stainless steel enclosure based on number of circuits

	A1	B1	C1	D1	J1	F1	L1	H1
	370x370x250	370X560X250	560x560x250	750x560x250	875x560x250	1130x560x250	1260x560x250	1500x560x250
Main Lugs Only	3	6	12	18	24	30, 36	42	48, 54
With Main Breaker	—	—	6	12	18	30	36	42, 48

For -40CC RQ Panel Sizes: Select A1, B1, C1, D1, J1, F1, L1 or H1 stainless steel enclosure based on number of circuits

	A1	B1	C1	D1	J1	F1	L1	H1
	370x370x250	370X560X250	560x560x250	750x560x250	875x560x250	1130x560x250	1260x560x250	1500x560x250
Main Lugs								
Standard Top In - Bottom Out	3	—	6	12	18	24	30	36, 42
Inverted Bottom In - Bottom Out	3	—	6	12	18	24, 30	36	42, 48
Main Breaker								
Standard Top In - Bottom Out	—	—	—	6	12	18	24	30, 36
Inverted Bottom In - Bottom Out	—	—	6	12	18	24, 30	36	42, 48

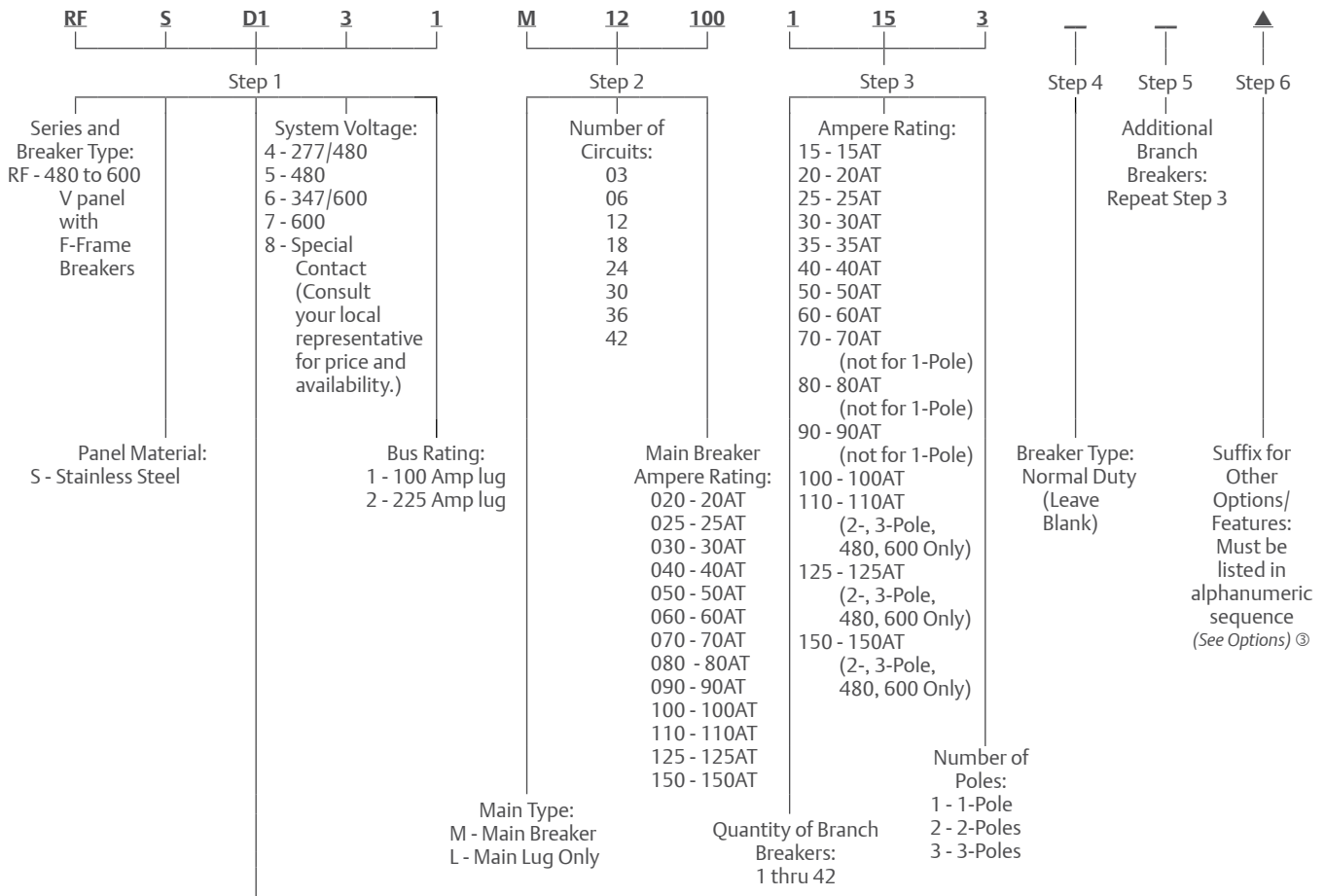
Please note the followings:

- Number of circuits shown are non GFI and non EPD breakers.
- GFI and EPD breakers number of circuits are determined as total number of circuits divided by 2. Each module will accommodate only 2 GFI or EPD maximum. Example: For 12 Circuits, no of modules = 12/2=6.

① Certification only applies without drain/breather.
 ② IP66, Type 4X Certification only applies with drain/breather.
 ③ Only 2 per 3 circuits. Only Single pole GFI/EPD available.
 ④ 40A is the maximum amperage for 2 or 3 pole branch breaker.
 ⑤ Only one 60A branch breaker is allowed per panel.
 ⑥ If using suffix -HTR40 or -HTRF40, please use table 2.

Factory Sealed Power Panels

Standard Panelboard Catalog Logic ①②



③ Panel Size: Select A1, C1, I1, E1, K1 or G1 stainless steel enclosure based on number of circuits

	A1 370x370x250	C1 560x560x250	I1 875x750x250	E1 1130x750x250	K1 1260x750x250	G1 1500x750x250
Main Lugs Only						
	3	6	12, 18	24	30	36, 42
With Main Breaker						
	—	—	12	18	24	30, 36

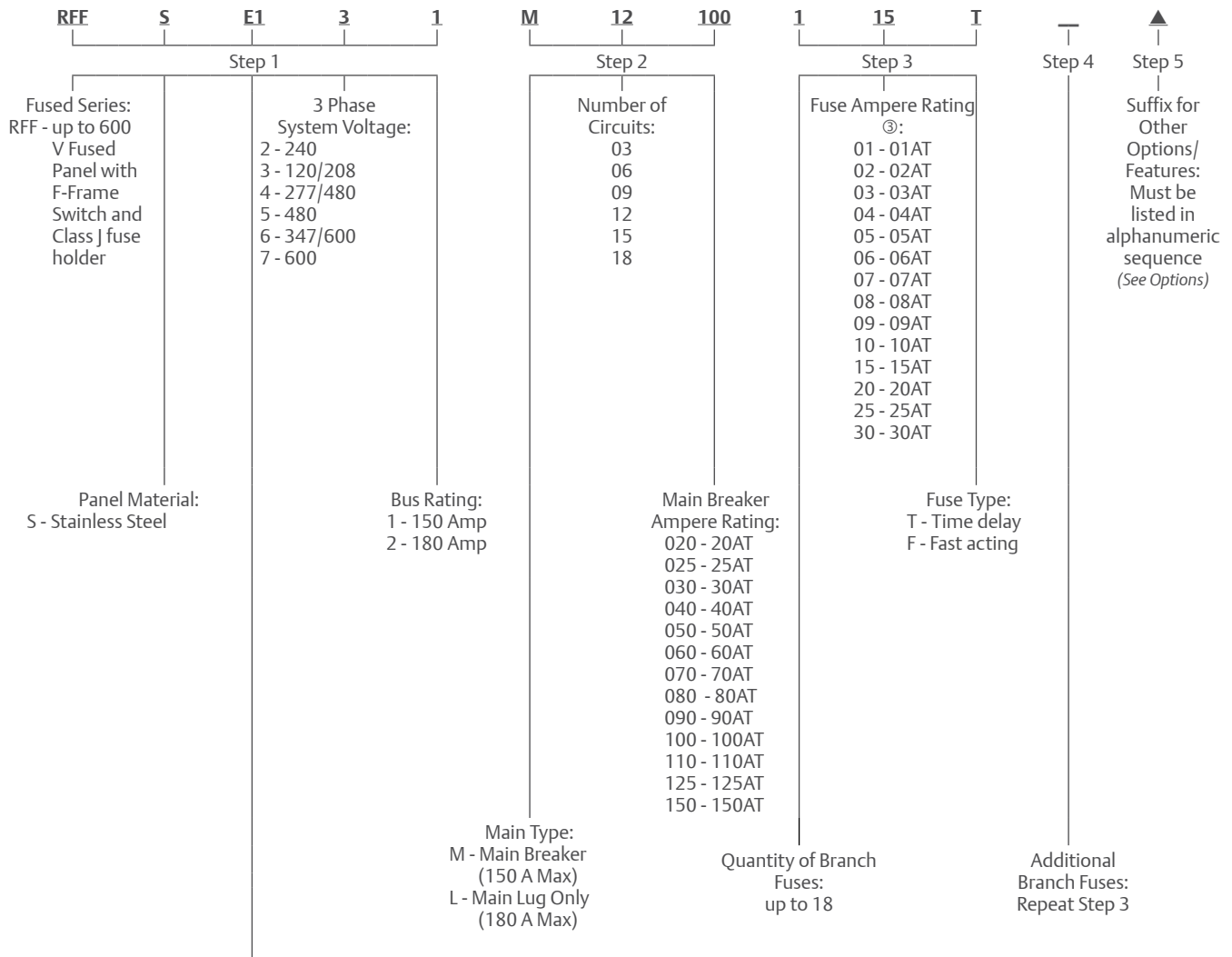
For -40°C RF Panel Sizes: Select C1, I1, E1, K1 or G1 stainless steel enclosure based on number of circuits

-40°C RF Pnel Sizes	C1 560x560x250	I1 875x750x250	E1 1130x750x250	K1 1260x750x250	G1 1500x750x250
Main Lugs					
Standard Top In - Bottom Out	3	6, 12	18	24	30
Inverted Bottom In - Bottom Out	3	6, 12	18	24	30
Main Breaker					
Standard Top In - Bottom Out	—	6	12	18	24
Inverted Bottom In - Bottom Out	—	6	12	—	18, 30

① Certification only applies without drain/breather.
 ② IP66, Type 4X Certification only applies with drain/breather.
 ③ If using suffix -HTR40 or -HTRF40, please use table 2

Fused Factory Sealed Panels

Standard Panelboard Catalog Logic ①②



Panel Size: Select enclosure based on number of circuits

Bus Amps	Main Type	I1 875x750x250	E1 1130x750x250	G1 1500x750x250
180	Main Lugs	03, 06, 09	12, 15	18
150	Main Breaker	03, 06	09, 12	15

① Certification only applies without drain/breather.

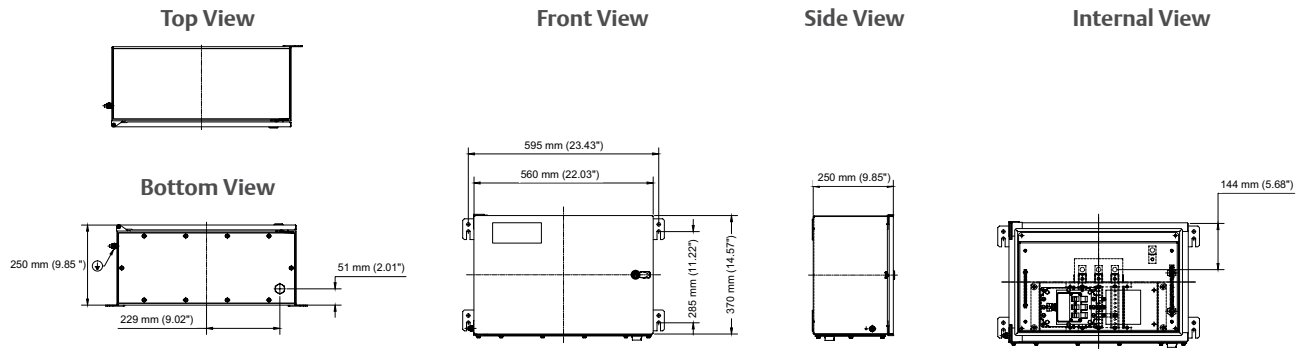
② IP66, Type 4X Certification only applies with drain/breather.

③ Fast acting fuses are available in the following amperages: 1, 3, 6, 10, 15, 20, 25 and 30.

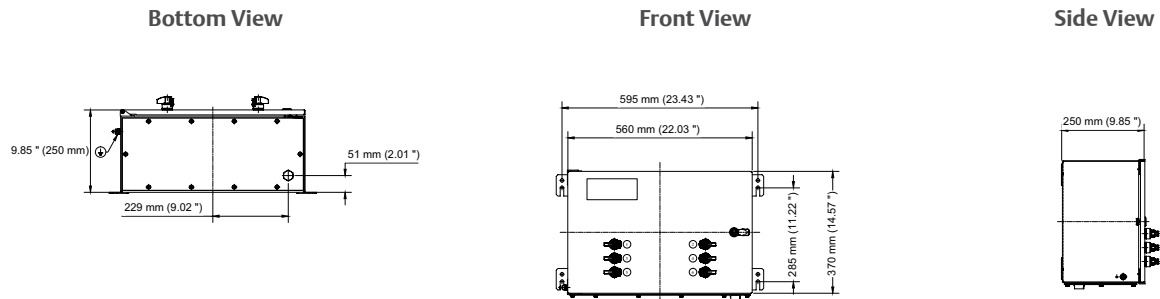
PlexPower™ Factory Sealed Panelboard QC -Frame with Main Lugs

Dimensions: Stainless Steel Enclosures

Size B 6 Circuit – Internal Actuation



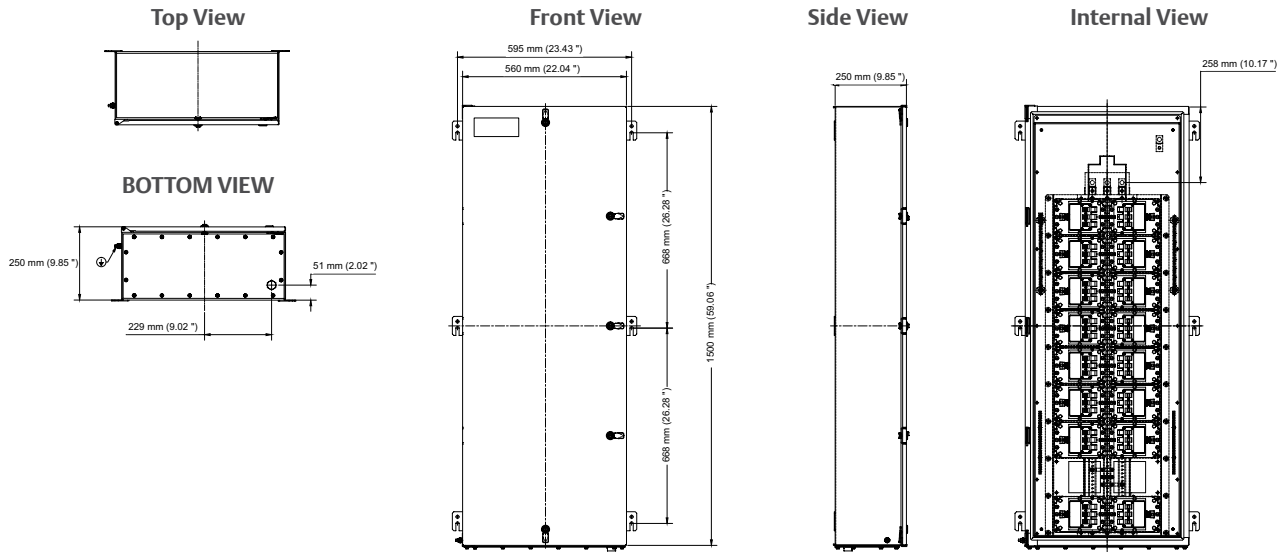
Size B 6 Circuit – External Actuation



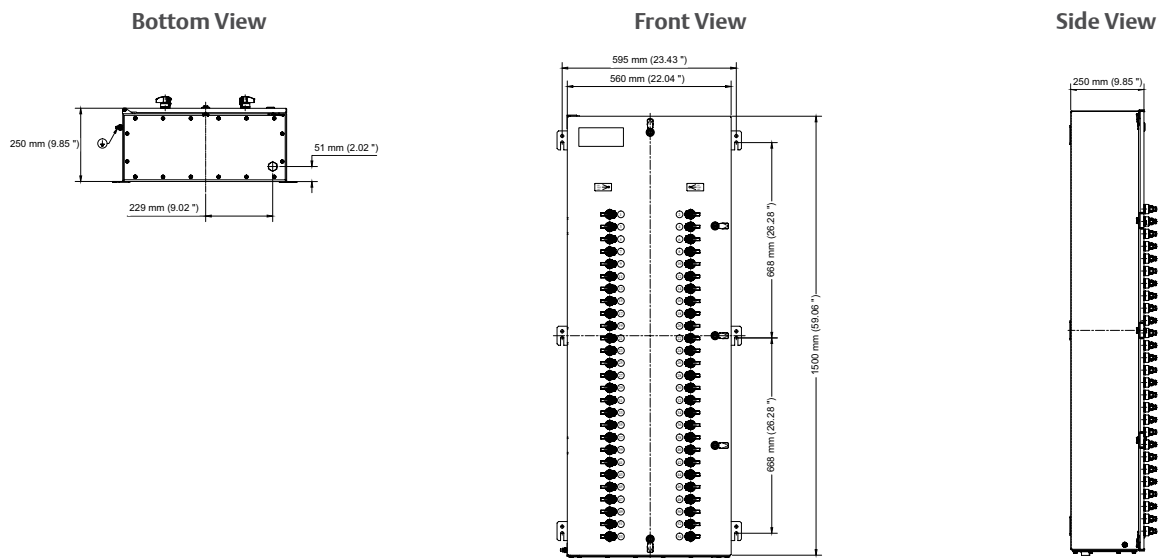
PlexPower™ Factory Sealed Panelboard QC-Frame with Main Lugs

Dimensions: Stainless Steel Enclosures

Size H 54 Circuit – Internal Actuation



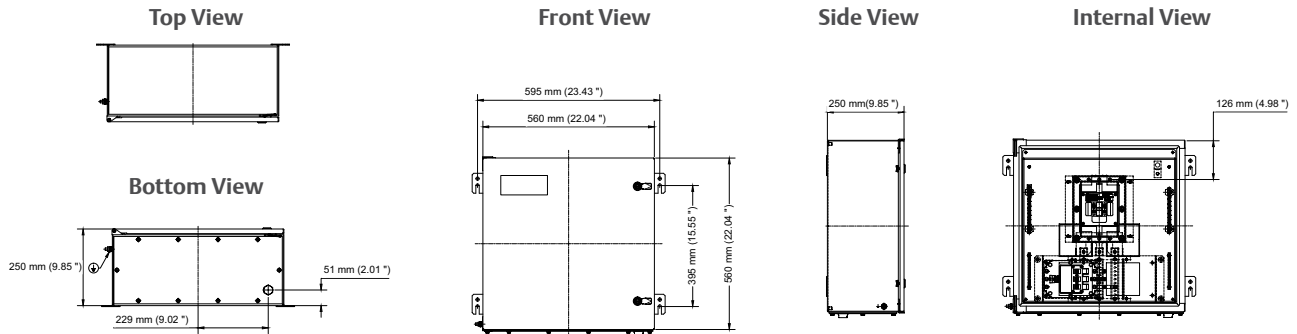
Size H 54 Circuit – External Actuation



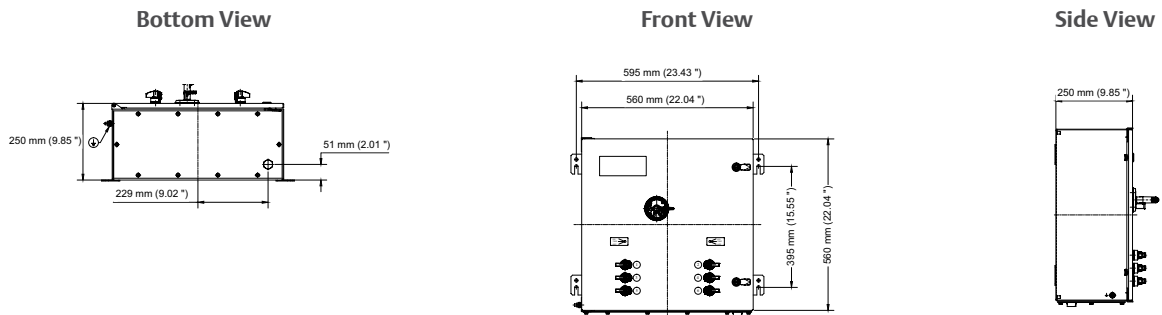
PlexPower™ Factory Sealed Panelboard QC -Frame with Main Breaker

Dimensions: Stainless Steel Enclosures

Size C 6 Circuit – Internal Actuation



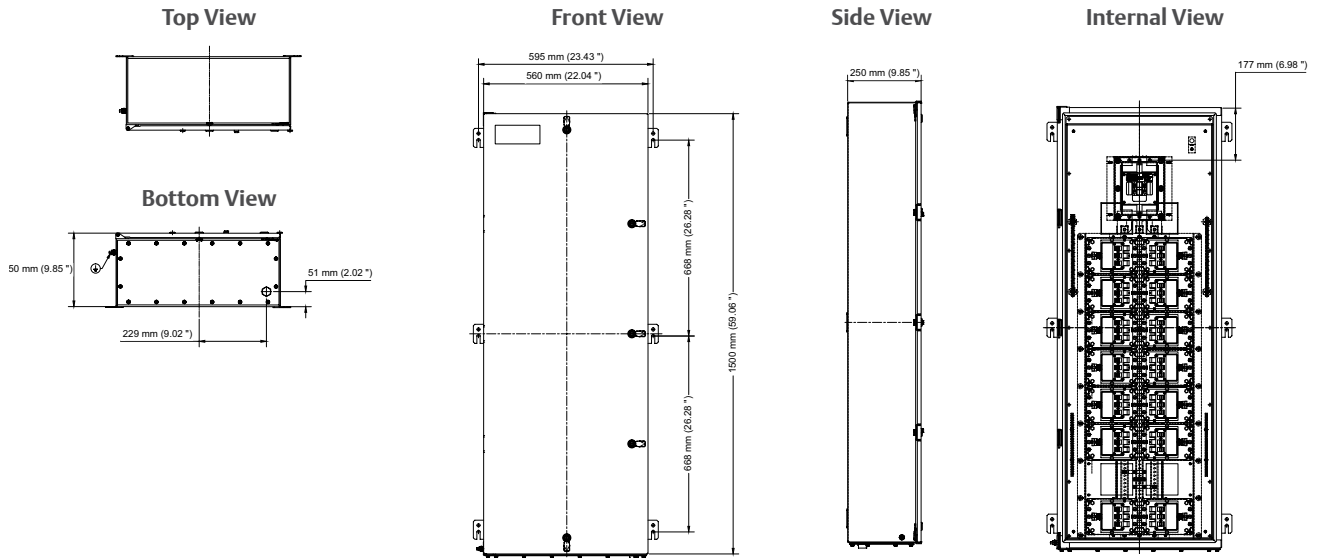
Size C 6 Circuit – External Actuation



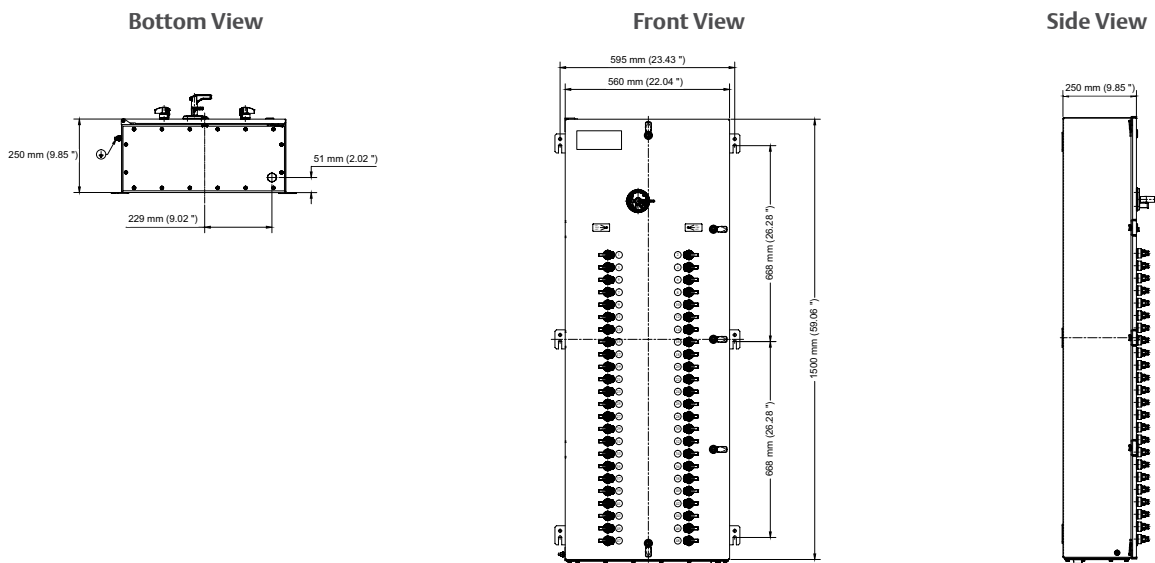
PlexPower™ Factory Sealed Panelboard QC -Frame with Main Breaker

Dimensions: Stainless Steel Enclosures

Size H 48 Circuit– Internal Actuation



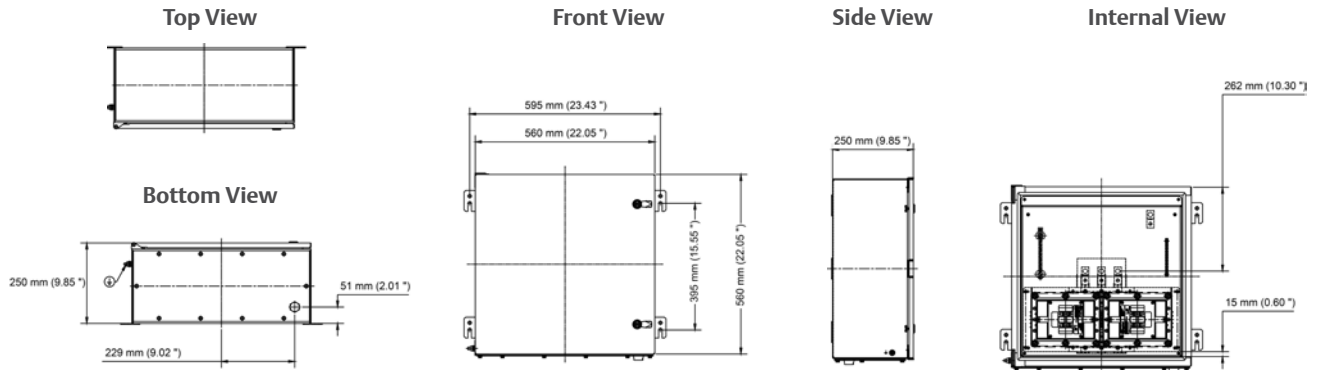
Size H 48 Circuit – External Actuation



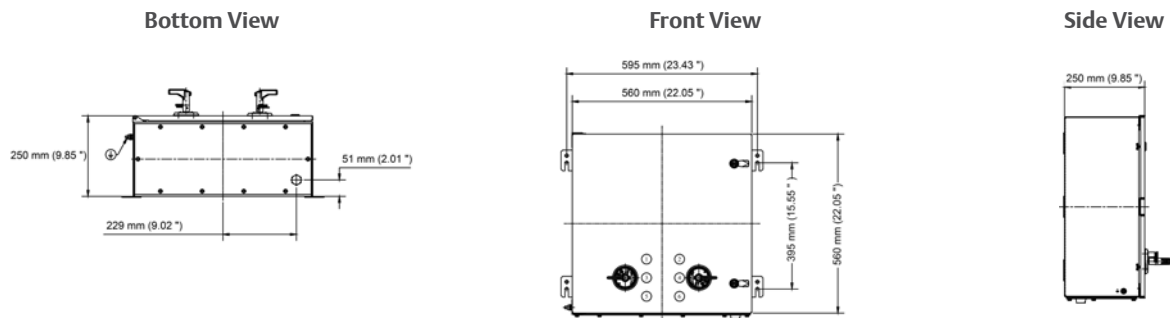
PlexPower™ Factory Sealed Panelboard F-Frame with Main Lugs

Dimensions: Stainless Steel Enclosures

Size C 6 Circuit – Internal Actuation



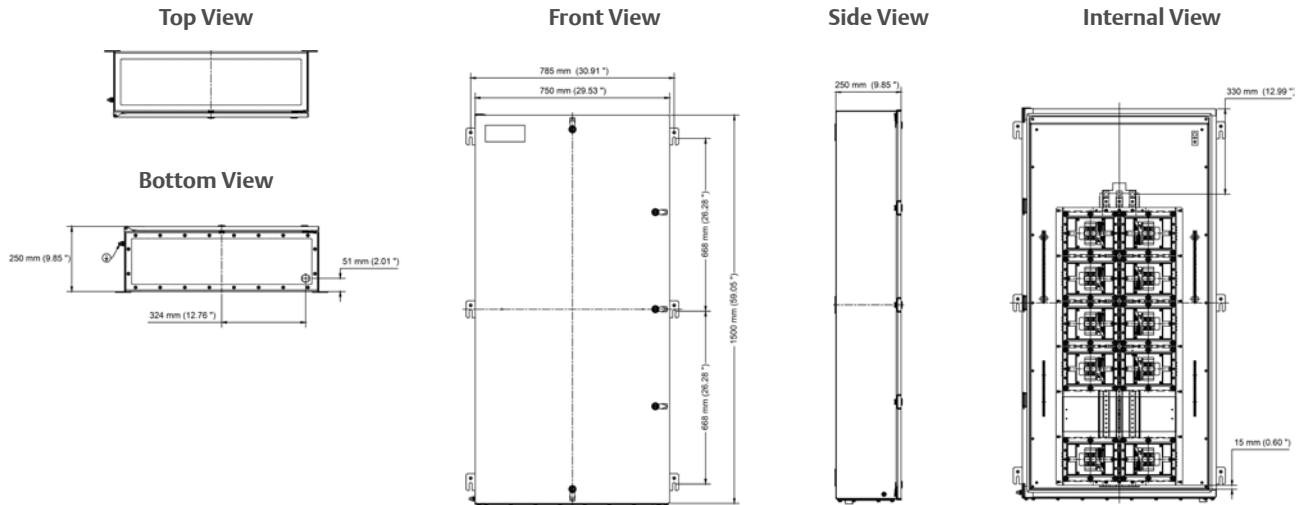
Size C 6 Circuit – External Actuation



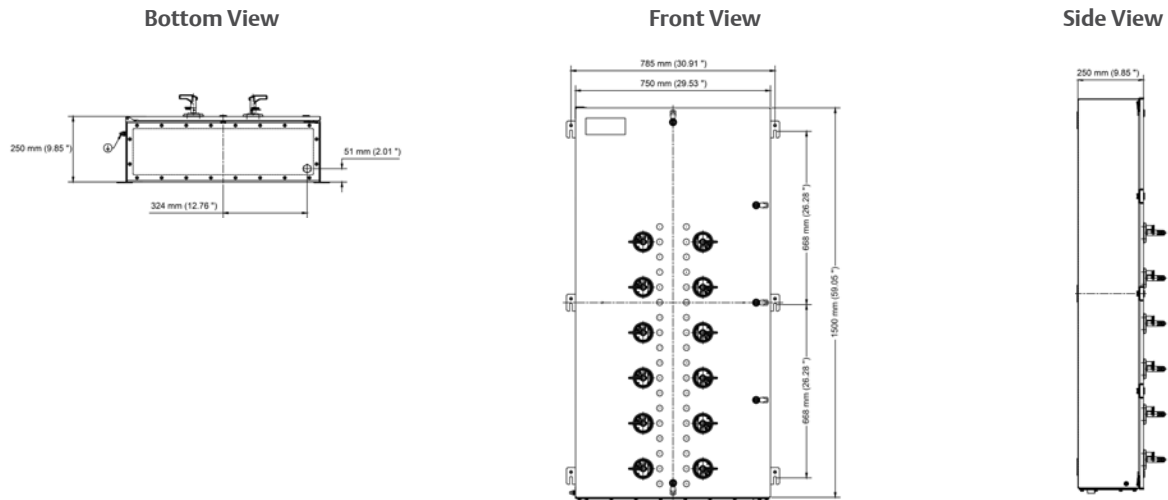
PlexPower™ Factory Sealed Panelboard F-Frame with Main Lugs

Dimensions: Stainless Steel Enclosures

Size G 36 Circuit– Internal Actuation



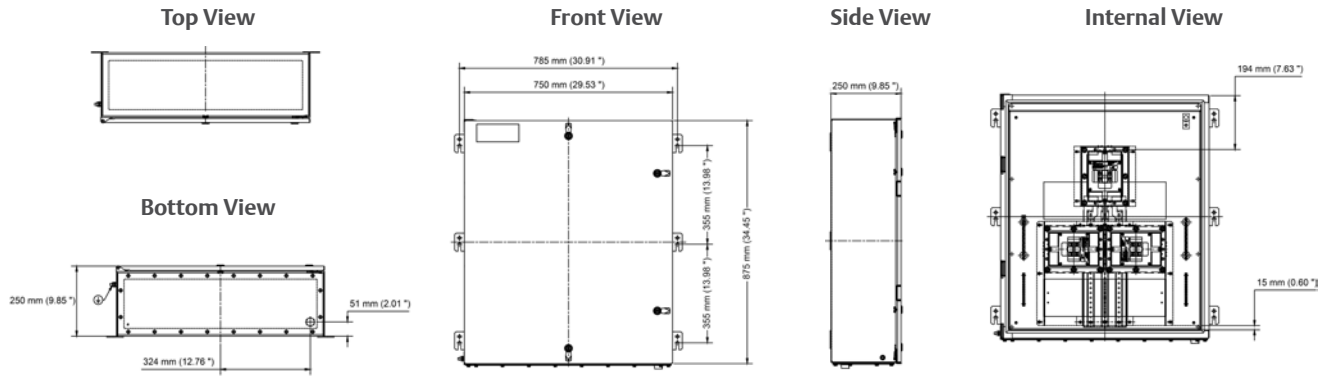
Size G 36 Circuit – External Actuation



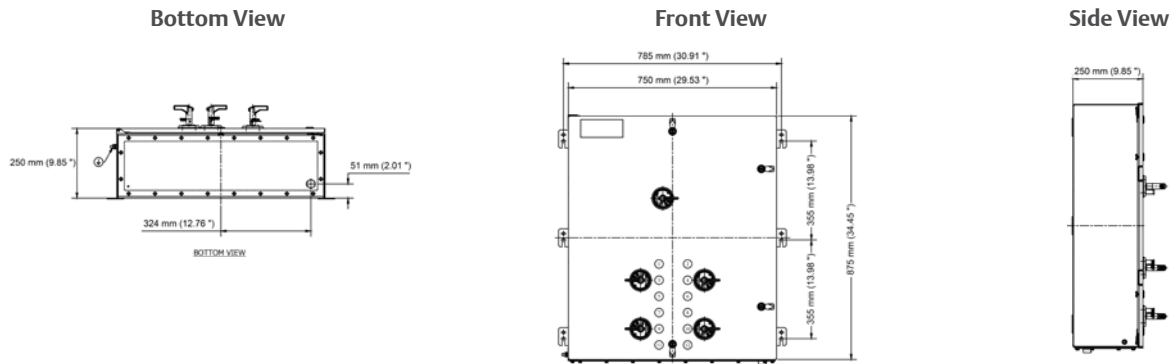
PlexPower™ Factory Sealed Panelboard F-Frame with Main Breaker

Dimensions: Stainless Steel Enclosures

Size I 12 Circuit – Internal Actuation



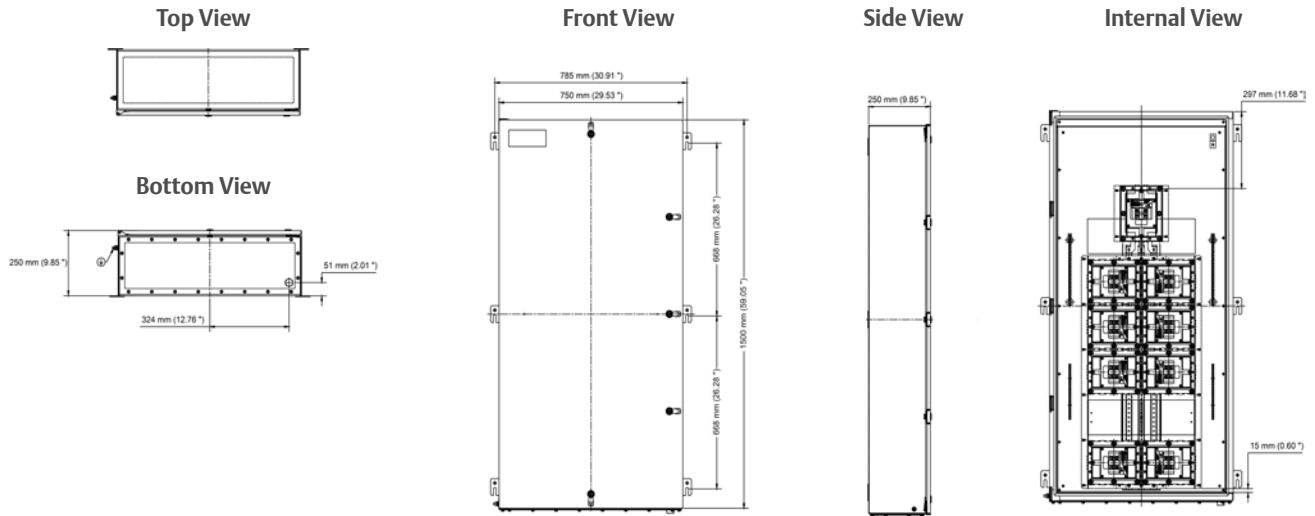
Size I 12 Circuit – External Actuation



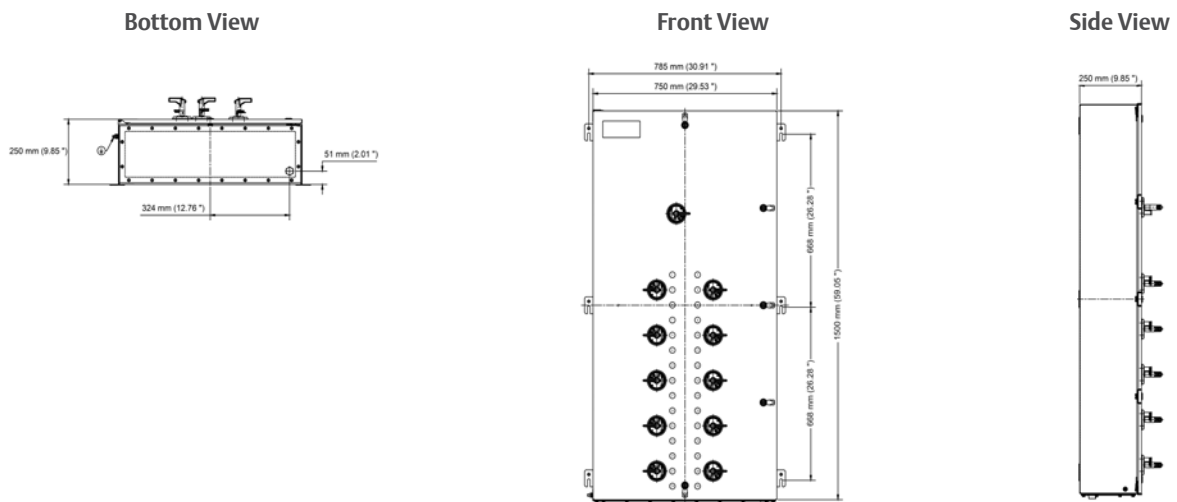
PlexPower™ Factory Sealed Panelboard F-Frame with Main Breaker

Dimensions: Stainless Steel Enclosures

Size G 30 Circuit – Internal Actuation



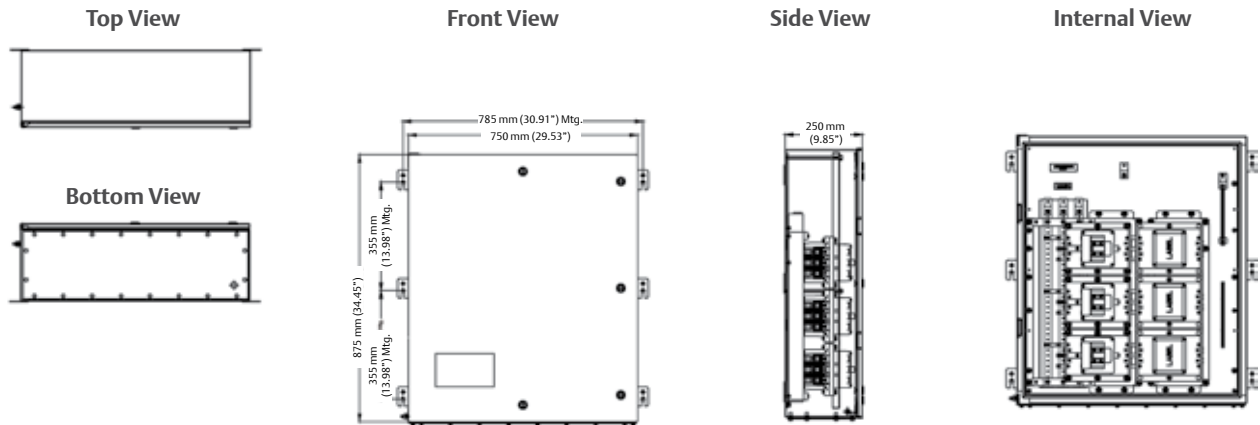
Size G 30 Circuit – External Actuation



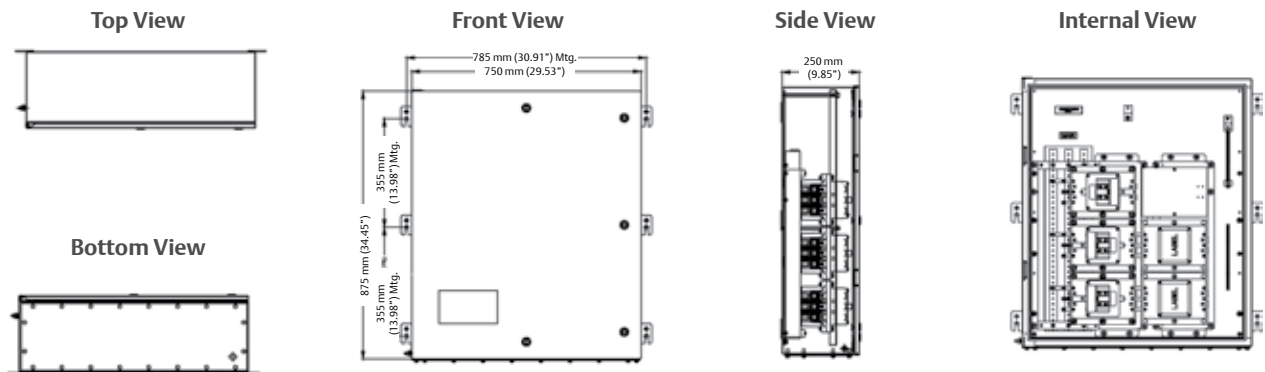
PlexPower™ Fused Factory Sealed Panelboard F-Frame

Dimensions: Stainless Steel Enclosures

Size I 09 Circuit — With Main Lugs



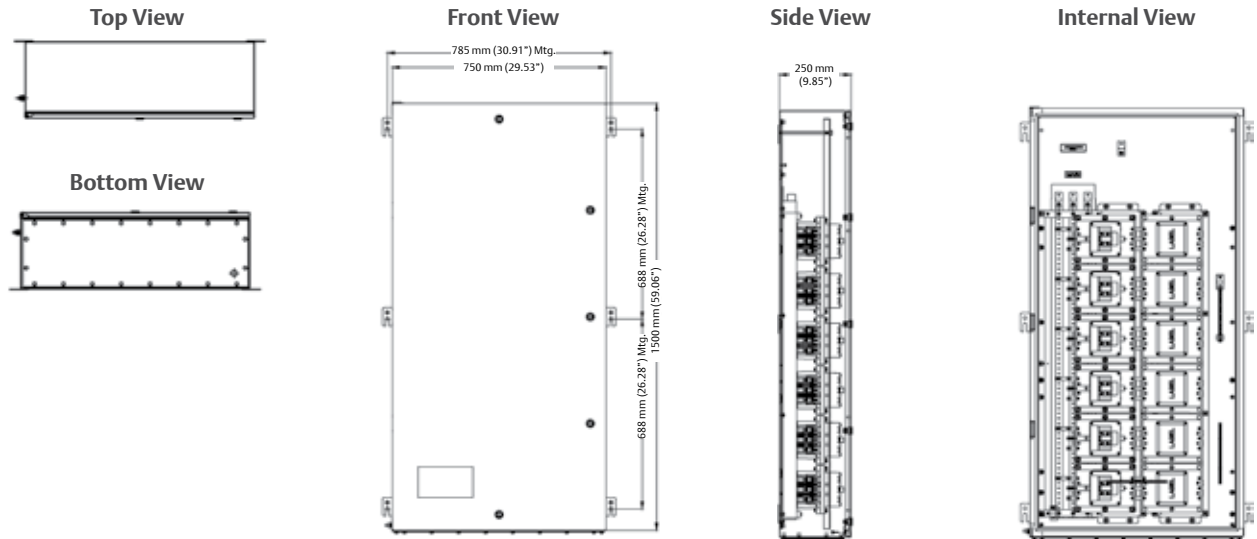
Size I 06 Circuit — With Main Breaker



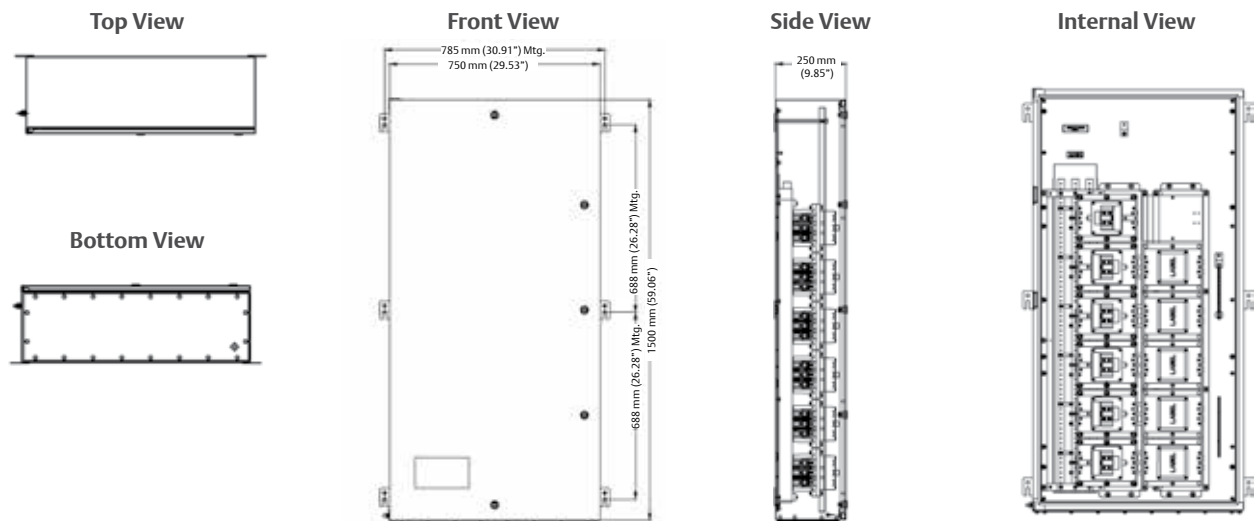
PlexPower™ Fused Factory Sealed Panelboard F-Frame

Dimensions: Stainless Steel Enclosures

Size G 18 Circuit – With Main Lugs



Size G 15 Circuit – With Main Breaker



Modular level protection that is easy to install, maintain, and operate.



APPLETON™

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EMERSON™

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