General Information

Applications:

Circuit breaker panelboards are used in hazardous and non-hazardous areas (as shown in the individual listings):

- To provide, in one compact unit, a centrally controlled switching system for a large number of feeder or branch circuits
- For controlling lighting, heating, appliance, heat tracing, motor and similar circuits
- In locations where rough usage, moisture, dust, dirt and corrosion are a problem
- To house thermal-magnetic circuit breakers that provide disconnect means, short circuit protection and thermal time delay overload protection

Features:

Panelboards:

- All main and branch circuit wire lugs are solderless and readily accessible for fast, easy installation
- Are factory wired from main terminal blocks or main bus to line side of branch circuit breakers
- With circuit breakers in factory sealed housings (LP1, EXD and EPL), are also factory wired from the load side of branch circuit breakers to readily accessible terminal blocks
- With circuit breakers grouped in one enclosure (LP2, D2D, D2L, D2Z and D2PB factory sealed), branch circuit wires are attached directly to circuit breaker load terminals

Circuit breakers (thermal magnetic):

- Are trip-free of the handles and cannot be held closed under short circuit or overload conditions
- Four breaker types are used in panelboards manufactured by Cooper Crouse-Hinds. They are as follows:
- Quicklag® – used in LP, D2PB, EPL and D2L panelboards; 10,000 ampere symmetrical interrupting capacity

Ratings	Fed. Spec.
Single and two-pole, 120 / 240 VAC	W-C-375a, Class 1a
Two and three-pole, 240 VAC	W-C-375a, Class 1b

- EHD/FDB frame – used in EXD and D2D panelboards; 14,000 ampere symmetrical interrupting capacity - 480 VAC

Ratings	Fed. Spec.
Single-pole, 277 VAC or 125 VDC	W-C-375a, Class 2a
Two and three-pole 480 VAC or 250 VDC	N/A

Wiring Systems:

- See pages 600–601 for wiring diagrams. These are the standard systems used for single and three-phase panelboards having single, two and three-pole circuit breakers
- Standard panelboards are listed with all circuit breakers having the same number of poles and wired for one of these systems
- To meet the requirements of a specific installation, panelboards can be assembled with a combination of single, two and three-pole breakers. To accomplish this, the three individual wiring systems must have the same main service as, for example, 3-phase, 4-wire, solid neutral.

Panelboard Type	Applicable Wiring Systems
D2PB	3, 4, 5, 8, 11, 12

- Diagrams show only four, six or eight circuits; are intended to show only the phase connections of each circuit breaker and do not necessarily show their physical location in a panelboard.

Panelboards are available with the number of circuits indicated in the listings.

Standard Materials, Finishes, Options and Compliances:

- See individual listing pages

Quicklag is a registered trademark of Cutler-Hammer Inc.

Quick Selector Chart

Quick Selector Chart

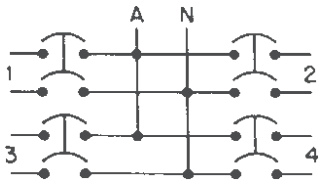
Panelboard	NEC & NEMA Certifications and Compliances	Factory Sealed	Number Circuits Max.	Breaker Frame Size	Multi-Pole Voltage Max.	Trip Rating Amps Max.	Circuit Interrupting Amps Max.	Step Down Transformer Available
D2D	Cl. I, Div. 2, Groups B, C, D NEMA: 3, 4, 7BCD, 12	Yes	30	Various	600VAC 250VDC	100	10,000	Yes
D2L	Cl. I, Div. 2, Groups B, C, D NEMA: 3, 4, 7BCD, 12	Yes	42	Quicklag®	240VAC 125VDC	100	10,000	Yes
D2PB	Cl. I, Div. 2, Groups C, D NEMA: 3, 7CD (Div. 2), 12	Yes	24	Quicklag®	240VAC	30	10,000	Yes
D2Z	Cl. I, Zone 1, Div. 2, Groups A, B, C, D NEMA: 3, 4X, 7ABCD (Div. 2), 12 Corrosion Resistant, Non-Metallic	Yes	54	CEAG	480VAC	180	10,000	No
EPL	Cl. I, Div. 1 & 2, Groups B, C, D Cl. II, Div. 1, Groups E, F, G Cl. II, Div. 2, Groups F, G Cl. III NEMA: 3, 4, 7BCD, 9EFG, 12	Yes	42	Quicklag®	240VAC 125VDC	100	10,000	No
EXD	Cl. I, Div. 1 & 2, Groups B, C, D Cl. II, Div. 1, Groups E, F, G Cl. II, Div. 2, Groups F, G Cl. III NEMA: 3, 4, 7BCD, 9EFG, 12	Yes	30	Various	600VAC 250VDC	100	10,000	No
GUSC	Cl. I, Div. 1 & 2, Groups C, D Cl. II, Div. 1, Groups E, F, G Cl. II, Div. 2, Groups F, G Cl. III NEMA: 3, 7CD, 9EFG, 12	No	2	Quicklag®	240VAC	30	10,000	No
LP1	Cl. I, Div. 1 & 2, Groups B, C, D Cl. II, Div. 1, Groups E, F, G Cl. II, Div. 2, Groups F, G Cl. III NEMA: 3, 4X, 7BCD, 9EFG, 12	Yes	36	Quicklag®	240VAC	100	10,000	No
LP2	Cl. I, Div. 2, Groups B, C, D Cl. II, Div. 2, Groups F, G Cl. III NEMA: 3, 4X, 7BCD, 9EFG, 12	Yes	36	Quicklag®	240VAC	100	10,000	Yes
N2PB	Cl. I, Div. 2, Groups C, D Cl. II, Div. 2, Groups F, G NEMA: 3, 7CD, (Div. 2), 12 Corrosion Resistant, Non-Metallic	Yes	24	Quicklag®	240VAC	30	10,000	No
NLP	NEMA 3, 12	No	30	QO/Qwik-Guard®	240VAC	100	10,000	No
XLPB	NEMA 1, 3, 3R, 4, 4X, 12	No	42	Various	600VAC	100	10,000	Yes

Quicklag is a registered trademark of Cutler-Hammer Inc. QO/Qwik-Guard is a registered trademark of Square D.

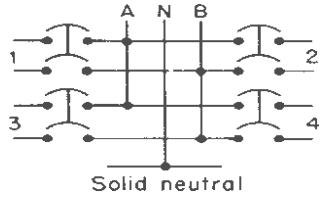
Wiring Diagrams

D2PB Panelboards

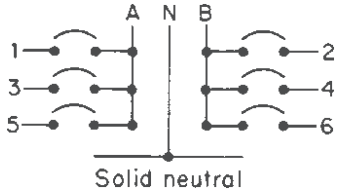
System 1
Mains—2-Wire
Branches—2-Wire
Breakers—2-Pole



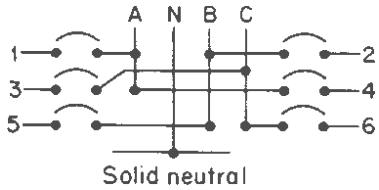
System 3
Mains—3-Wire
Branches—3-Wire
Breakers—2-Pole
Solid Neutral



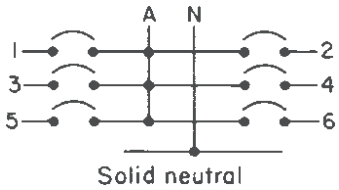
System 4
Mains—3-Wire
Branches—2-Wire
Breakers—Single-Pole
Solid Neutral



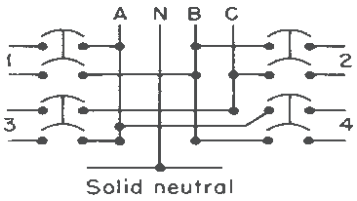
System 5
Mains—4-Wire, 3-Phase
Branches—2-Wire, 1-Phase
Breakers—Single-Pole
Solid Neutral



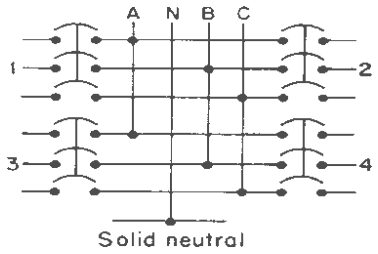
System 7
Mains—2-Wire
Branches—2-Wire
Breakers—Single-Pole
Solid Neutral



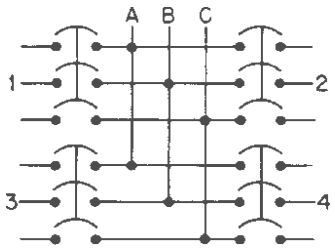
System 8
Mains—4-Wire, 3-Phase
Branches—3-Wire, 1-Phase
Breakers—2-Pole
Solid Neutral



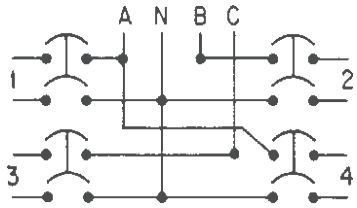
System 11
Mains—4-Wire, 3-Phase
Branches—4-Wire, 3-Phase
Breakers—3-Pole
Solid Neutral



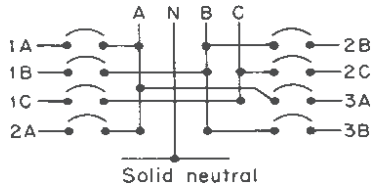
System 12
Mains—3-Wire, 3-Phase
Branches—3-Wire, 3-Phase
Breakers—3-Pole



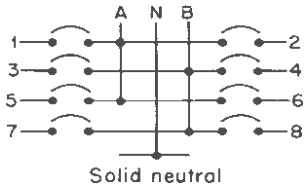
System 13
Mains—4-Wire, 3-Phase
Branches—2-Wire, 1-Phase
Breakers—2-Pole



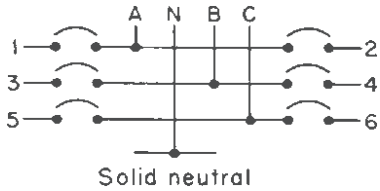
System 15
Mains—4-Wire, 3-Phase
Branches—3-Wire, 1-Phase
Breakers—Single-Pole
Solid Neutral



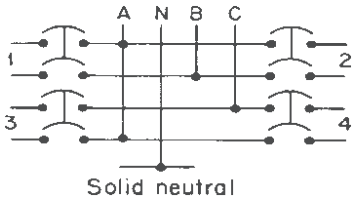
System 24
Mains—3-Wire
Branches—2-Wire
Breakers—Single-Pole
Solid Neutral



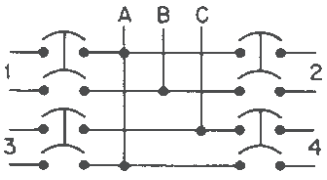
System 25
Mains—4-Wire, 3-Phase
Branches—2-Wire, 1-Phase
Breakers—Single-Pole
Solid Neutral



System 28
Mains—4-Wire, 3-Phase
Branches—3-Wire, 1-Phase
Breakers—2-Pole
Solid Neutral

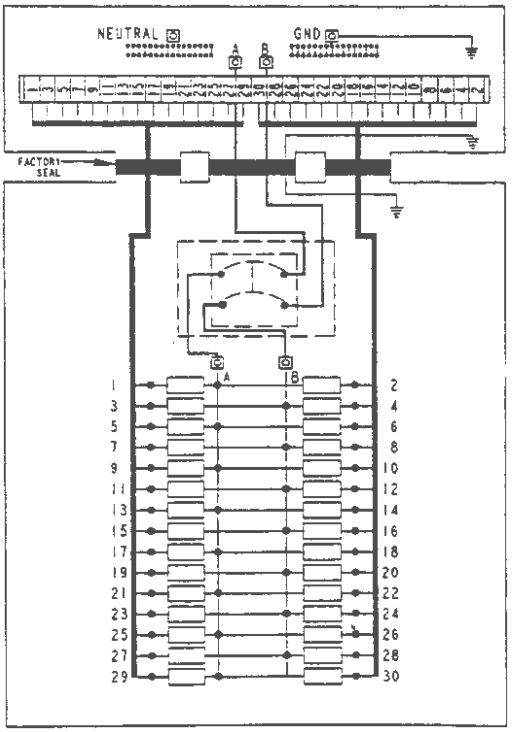


System 29
Mains—3-Wire, 3-Phase
Branches—2-Wire, 1-Phase
Breakers—2-Pole

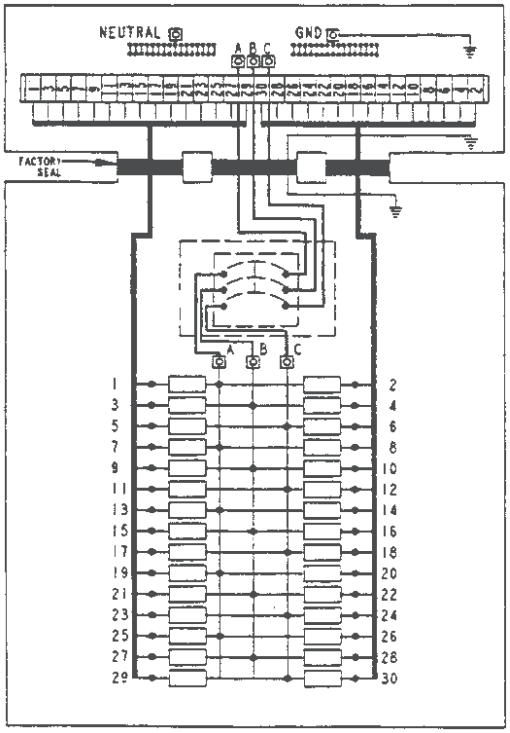


Wiring Diagrams

PowerPlus™ Power Panelboards

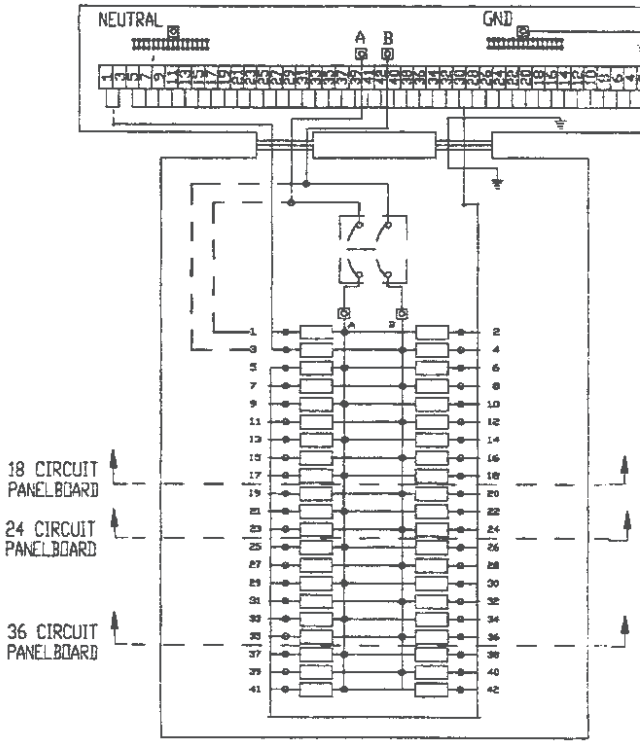


Single Phase Circuit

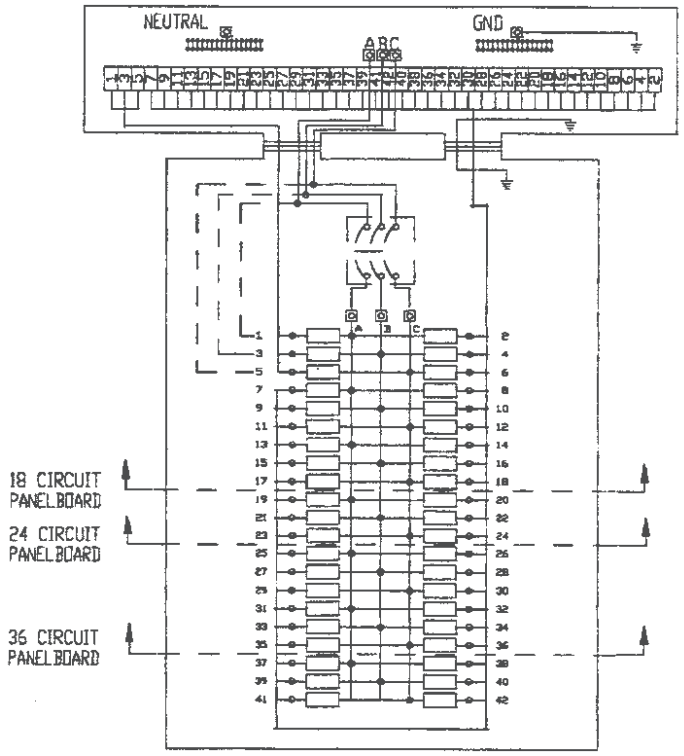


Three Phase Circuit

PowerPlus™ Lighting Panelboards



Single Phase Circuit



Three Phase Circuit

Exactra™ Panelboards

Lighting and Heat Tracing
LP1 Series
LP2 Series (Div. 2)

Cl. I, Div. 1 & 2, Groups B†, C, D
Cl. II, Div. 1, Groups E†, F, G
Cl. II, Div. 2, Groups F, G
Cl. III
NEMA 3, 4*, 4X§ 7B†CD, 9EFG, 12

CSA Enc. 3, 4*, 5
Explosionproof
Dust-Ignitionproof
Factory Sealed‡
Wet Locations
Watertight

Exactra™ Factory-Sealed Lighting Panelboards provide flexibility and labor savings when installed, and for future changes in the field. Panels are prewired to maximum circuit capacity and ratings.

Applications:

Exactra™ Factory-Sealed Lighting Panelboards are ideal:

- In areas made hazardous by the presence of flammable gases and vapors, and combustable dusts
- In areas subject to weather, dampness, and corrosion
- For branch power distribution and circuit protection for motors, valves, pumps, lighting, heat tracing, receptacles, etc.
- For indoor and outdoor applications in petroleum refineries, chemical and petrochemical plants, and other process industry facilities where similar hazards exist
- In areas where flammable vapors or gases or highly combustible dusts may be present due to accidental or abnormal conditions
- To accommodate up to 35 amp branch loads

Features and Benefits:

- Factory sealed, no external seals required for branch circuits. External seals are required for Class I, Div. 1 applications
- Fully wired for circuit breaker housing to pre-numbered terminals in wiring compartment
- External flange design allows wide unobstructed cover opening for easy wiring access
- External circuit breaker handles can be padlocked "ON" or "OFF"
- Furnished with two 3" and ten 1½" conduit openings
- Breather and drains available for each enclosure
- Available with or without main circuit breaker up to 100 amps
- Isolated neutral and ground bar provided
- Available with up to 6 GFI and/or EPD branch breakers per panel. GFI and EPD branch breakers available within the same panel
- Available with ambient compensated breakers throughout panelboard
- Stainless steel hinges allow the cover to swing wide open or be removed
- Stainless steel hex head bolts captive design prevents lost bolts
- Cast copper-free (less than 0.4%) aluminum construction for excellent corrosion resistance
- Neoprene cover gasket meets NEMA 4 / CSA Enc. 4 / IP65 requirements, provides watertight seal for superior water and corrosion protection
- Copper bus bar system

Certifications and Compliances:

LP1 panelboards

- Class I, Groups B, C, D
- Class I, Zone 1 & 2, IIB + H_2
- Class II, Groups E, F, G
- Class III
- NEMA 3, 4*, 4X§, 7B†CD, 9E†FG, 12
- CSA Enc. 3, 4*, 5
- IP65* Enclosure
- UL Classified (Standard 1203)
- cUL Classified (Certified by UL to CSA C22.2 No. 30)

LP2 Panelboards

- Class I, Division 2, Groups B†, C, D
- Class I, Zone 1 & 2, IIB + H_2
- Class II, Division 2, Groups F, G
- Class III
- NEMA 3, 4*, 4X§, 7BCD (Div 2), 9EFG, 12
- CSA Enc. 3, 4*, 5
- IP65* Enclosure
- UL Classified (Standard 1203)
- cUL Classified (Certified by UL to CSA C22.2 No. 30)

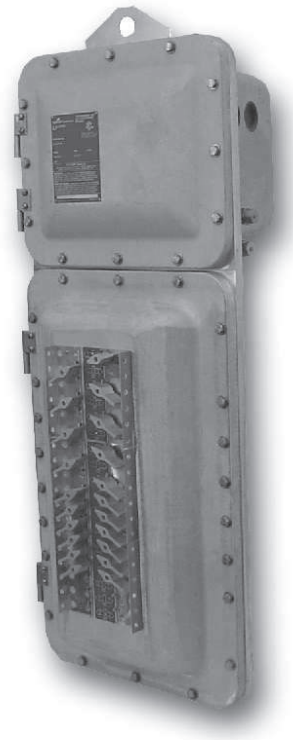
Standard Materials:

- Body and cover – cast copper-free aluminum
- Gasket – neoprene
- Operating handles – extruded aluminum (copper-free)
- Operating shafts, cover bolts, washers, GFI/EPD plungers and hinges – stainless steel
- Circuit breaker operator forks –
  - for 1 pole standard breakers - die-cast aluminum (copper-free)
  - for 1 and 2 pole GFI / EPD breakers - die-cast aluminum (copper-free)
  - for 2 and 3 pole standard breakers - stainless steel
- Lifting bracket – cold rolled steel
- Bus bar – copper

Standard Finishes:

- Aluminum – natural
- Stainless steel – natural
- Cold rolled steel – electrogalvanized

* NEMA 4/CSA Enc. 4/IP65 hosetight with breather and drain openings plugged.
† With suffix -GB.
‡ External seals required for Class I, Div. 1.
§ NEMA 4X when ordered with suffix S752 with breather and drain openings plugged.



LP1 Lighting Panelboard

COOPER Crouse-Hinds

Exactra™ Panelboards

Lighting and Heat Tracing
LP1 Series
LP2 Series (Div. 2)

Cl. I, Div. 1 & 2, Groups B†, C, D
Cl. II, Div. 1, Groups E†, F, G
Cl. II, Div. 2, Groups F, G
Cl. III
NEMA 3, 4*, 4X§ 7B†CD, 9EFG, 12

CSA Enc. 3, 4*, 5
Explosionproof
Dust-Ignitionproof
Factory Sealed‡
Wet Locations
Watertight

Electrical Ratings:

Branch Breaker (120 / 240 VAC Quicklag® Bolt On) Trip Ratings

- 1, 2, 3 pole

10, 15, 20, 25, 30, 35 amp

- GFI type 1, 2-pole (5 mA sensitivity)

15, 20, 25, 30 amp

- EPD type 1, 2-pole (30 mA sensitivity)

15, 20, 25, 30 amp

Main Breaker Trip Ratings:

- Size B & C

10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 70, 80, 90, 100 amp

2, 3-pole

Main Lugs

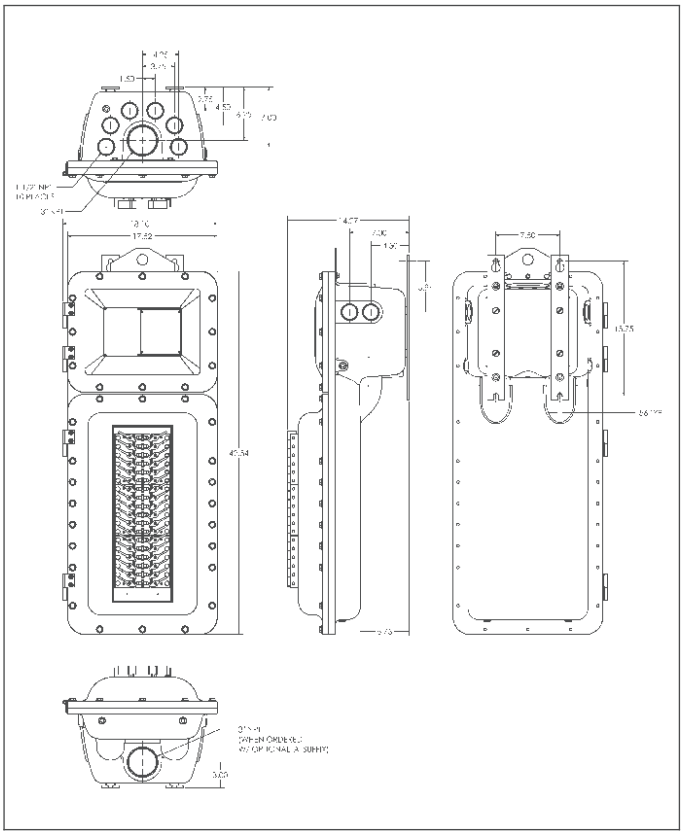
- Size B & C

100 amp

Weight

- 150 lbs.

Dimensions
In Inches:



Options:

Description	Suffix
• Alternate feed: incoming power into terminal enclosure from bottom	A
• Group B and E suitability (10A not avail.)	GB
• Lamicoid nameplate with customer-specified panel identification	LID
• Stainless steel nameplate with customer-specified panel identification	SID
• 125W@120 VAC, 250W@240 VAC internal space heater in circuit breaker enclosure	R22
• External epoxy powder coat finish	S752
• Internal and external epoxy powder coat finish	S753
• One breather and two drains per enclosure	S756V
• All conduit entries plugged with PLG recessed head plugs	S822
• All conduit entries plugged with square headed plugs	S872

Breaker Options:

Description	Suffix
• EPD branch breaker (up to 6 EPD and/or GFI per panel)	E
• GFI branch breaker (up to 6 EPD and/or GFI per panel)	G
• Ambient compensated (50°C) breakers throughout panelboard	V
• HID branch breaker for lighting loads	H

Lighting Panelboard Accessories:

Description	Cat. #
• Extra circuit breaker operator assemblies 1-pole (qty. 3)	LP K1
• Replacement cover plugs for unused circuit breaker positions (qty. 6)	LP K2
• Extra circuit breaker operator assemblies for 1 pole and 2 pole GFI/EPD breakers (qty. 3)	LP K3
• GFI/EPD "push to test" plungers (qty. 6)	LP K4
• GFI/EPD entry plugs (qty. 6)	LP K5
• Replacement mounting feet (qty. 2)	LP K6
• Extra circuit breaker operator assembies for 2 pole standard and GFI/EPD breakers	LP K7
• Extra circuit breaker operator assembies for 3 pole breakers	LP K8

Panel Capacity:

Panel Size	Max. No. of Branch Spaces: With Main Lug Only	With Main Breaker: 2-pole	With Main Breaker: 3-pole	Main Breaker Max. Amp	Available w/GFI, EPD Branch Protection
B	24	22	21	100	Yes
C	36	34	33	100	Yes

* NEMA 4/CSA Enc. 4/IP65 hosetight with breather and drain openings plugged.
† With suffix -GB.
‡ External seals required for Class I, Div. 1.
§ NEMA 4X when ordered with suffix S752 with breather and drain openings plugged.
Quicklag® is a registered trademark of Cutler-Hammer Inc.

Exactra™ Panelboards

Lighting and Heat Tracing
LP1 Series
LP2 Series (Div. 2)

Cl. I, Div. 1 & 2, Groups B†, C, D
Cl. II, Div. 1, Groups E†, F, G
Cl. II, Div. 2, Groups F, G
Cl. III
NEMA 3, 4*, 4X§ 7B†CD, 9EFG, 12

CSA Enc. 3, 4*, 5
Explosionproof
Dust-Ignitionproof
Factory Sealed‡
Wet Locations
Watertight

Ordering Information

LP1 & LP2 Factory Sealed 120 / 240 Volt Lighting Panelboards

Branch Spaces Needed	Division 1		Division 2	
	1 Phase 3 Wire	3 Phase 4 Wire	1 Phase 3 Wire	3 Phase 4 Wire
6	**LP1B106**	**LP1B306**	**LP2B106**	**LP2B306**
8	**LP1B108**	**LP1B308**	**LP2B108**	**LP2B308**
10	**LP1B110**	**LP1B310**	**LP2B110**	**LP2B310**
12	**LP1B112**	**LP1B312**	**LP2B112**	**LP2B312**
14	**LP1B114**	**LP1B314**	**LP2B114**	**LP2B314**
16	**LP1B116**	**LP1B316**	**LP2B116**	**LP2B316**
18	**LP1B118**	**LP1B318**	**LP2B118**	**LP2B318**
20	**LP1B120**	**LP1B320**	**LP2B120**	**LP2B320**
20	**LP1C120**	**LP1C320**	**LP2C120**	**LP2C320**
22	**LP1B122**	**LP1B322**	**LP2B122**	**LP2B322**
22	**LP1C122**	**LP1C322**	**LP2C122**	**LP2C322**
24†	**LP1B124†**	**LP1B324†**	**LP2B124†**	**LP2B324†**
24	**LP1C124**	**LP1C324**	**LP2C124**	**LP2C324**
26	**LP1C126**	**LP1C326**	**LP2C126**	**LP2C326**
28	**LP1C128**	**LP1C328**	**LP2C128**	**LP2C328**
30	**LP1C130**	**LP1C330**	**LP2C130**	**LP2C330**
32	**LP1C132**	**LP1C332**	**LP2C132**	**LP2C332**
34	**LP1C134**	**LP1C334**	**LP2C134**	**LP2C334**
36†	**LP1C136†**	**LP1C336†**	**LP2C136†**	**LP2C336†**
Breaker Ready■ (Empty)	**LP1B100** **LP1C100**	**LP1B300** **LP1C300**	**LP2B100** **LP2C100**	**LP2B300** **LP2C300**

† Items are not available with main circuit breaker.
■ Provided for main lug only; main breaker must be specified with amperage.

Catalog Number Example:

Lighting Panelboards can be furnished with an assortment of breaker ratings and pole configurations. Assortments may be ordered by adding the number of poles and amp rating designations to the catalog number.

Example:

A three-phase, Class I, Div. 2, Groups C, D lighting panelboard with:

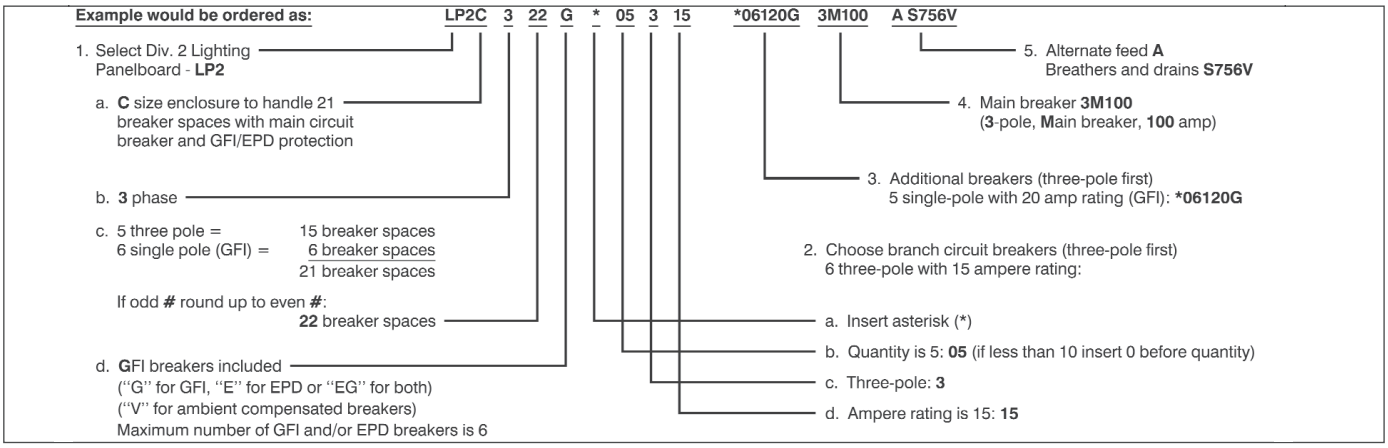
- 5 three-pole breakers – with 15 amp rating
- 6 single-pole breakers – with 20 amp GFI personnel protection
- Three-pole main breaker – with 100 amp rating
- Alternate feed option
- Breather and drain option

1. Select basic panelboard catalog number from listing:
   - Determine phase (available with single-phase or three-phase wiring).
   - Determine a total even number of breaker spaces needed to complete your desired lighting panelboard.

   Note:
   3 breaker spaces = Three-pole breaker
   2 breaker spaces = Two-pole breaker
   2 breaker spaces = Two-pole GFI (or EPD) breaker
   1 breaker space = Single-pole breaker
   1 breaker space = Single-pole GFI (or EPD) breaker
   - Review Panel Capacity table see page 603
   - If GFI or EPD breakers are to be included insert "G", "E" or "EG" after base catalog number (e.g., LP2B316G).
   - Maximum number of GFI and/or EPD breaker spaces is 6 per panel. (e.g. 6 single-pole or 3 two-pole). For more, consult factory.
   - If ambient compensated breakers are required, insert "V" (e.g. LP2B318GV).
2. Using three-pole branch breakers first, select circuit breakers for lighting panel board application:
   - Place an asterisk (*) before each quantity of circuit breakers
   - First insert the quantity of breakers needed.
   - Second insert the quantity of poles (start with three-pole breakers).

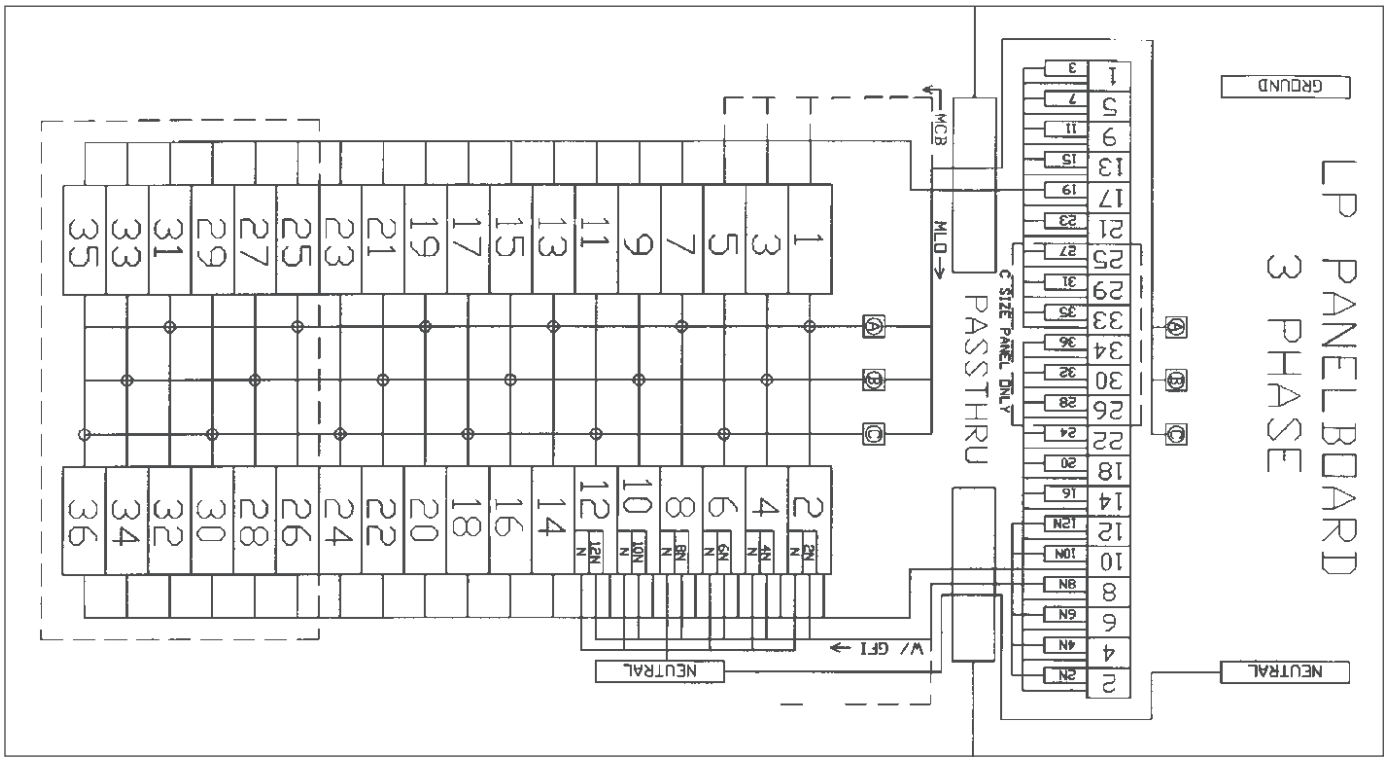
   Note: Single-phase panelboards can have single- or two-pole breakers. Three-phase panelboards can have single, two- or three-pole breakers.
   - Third insert the ampere rating needed (start with highest ampere rating).
   - Insert "G" for GFI or "E" for EPD type breakers, if desired.
3. For additional circuit breakers repeat step 2. If there are more three-poles with different amp ratings, then continue with three-pole designations. Otherwise continue with two-pole circuit breakers, and then single-pole breakers.
4. To add a main breaker, insert a space, the number of poles (2 or 3), an "M" to indicate main breaker, then indicate the amp rating (See "ratings" for trip ratings available). If no main breaker is specified, the panelboard will have main lugs. No suffix needed in catalog number for main lug only.
   For future spaces, to provide for operating mechanism without breaker write 00 (e.g. one three-pole mechanism without breaker: 01300).

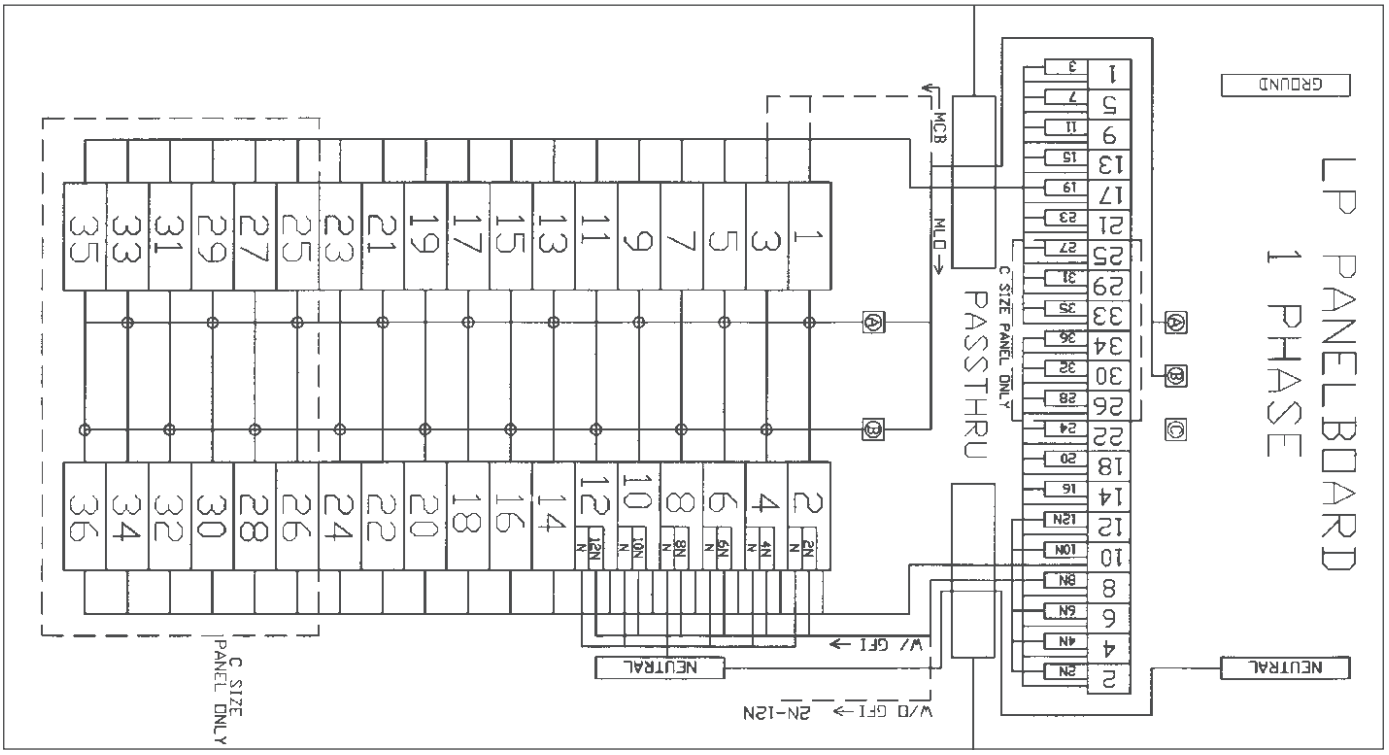
   Unused breaker positions without designations will be blanked and plugged. Complete panel will be provided for future breaker installations.



* NEMA 4/CSA Enc. 4/IP65 hosetight without suffix S756V.
‡ External seals required for Class I, Div. 1.
§ NEMA 4X when ordered with suffix S752 without suffix S756V.
†With suffix -GB.

Wiring Diagrams:





* NEMA 4/CSA Enc. 4/IP65 hosetight without suffix S756V.
‡ External seals required for Class I, Div. 1.
§ NEMA 4X when ordered with suffix S752 without suffix S756V.
†With suffix -GB.

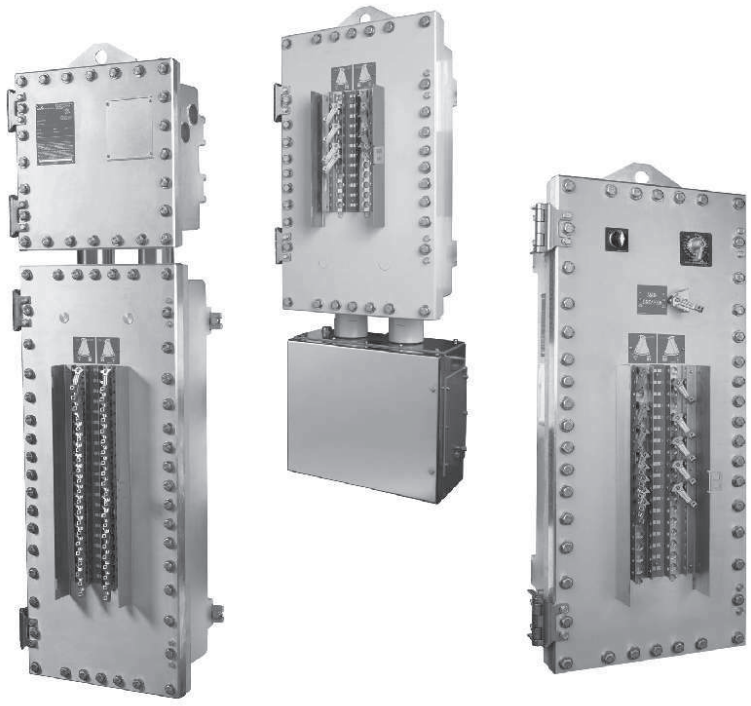
PowerPlus™ Panelboards

Lighting and Heat Tracing
EPL Series (Div. 1 & 2)
D2L Series (Div. 2)

EPL Series:
Cl. I, Div. 1 & 2, Groups B†, C, D
Cl. I, Zone 1 & 2, IIB + H_2†
Cl. II, Div. 1, Groups E, F, G
Cl. II, Div. 2, Groups F, G
Cl. III
NEMA/EEMAC 3, 4, 4X‡, 7B†CD, 9EFG, 12

D2L Series:
Cl. I, Div. 2, Groups B†, C, D
Cl. I, Zone 2, IIB + H_2†
Cl. II, Div. 2, Groups F, G
Cl. III
NEMA/EEMAC: 3, 4, 4X‡, 7B†CD, 12

PowerPlus™ Series Panelboards provide both premium factory-sealed and value non-factory-sealed solutions for the protection and distribution of lighting, power, and heat tracing circuits. This panel solution is designed, engineered, and manufactured to be the industry's safest and most dependable panelboard for hazardous area locations.



PowerPlus Premium and Value Solutions

- **Premium Solution:** PowerPlus factory-sealed panelboards are premium panelboards that provide maximum circuit flexibility with labor savings during installation, operation, and maintenance, and are accommodating for future changes in the field (order with either "S" or "A" in base part number). Panels are pre-wired to maximum circuit capacity, allowing for easy and safe replacement or installation of components in the field, while maintaining factory-sealed integrity.
- **Value Solution:** PowerPlus non-factory-sealed panelboards are value panelboards that offer maximum circuit flexibility and many of the same features and benefits of the PowerPlus premium line. This value solution is provided without terminal housing and factory wiring of circuits (order with "N" in base part number). The non-factory-sealed solution reduces initial panelboard material costs and requires field wiring to circuit breakers and external seals to be field-installed during installation.

Applications:

EPL and D2L PowerPlus™ panelboards are used:

- In areas made hazardous by the continuous or abnormal presence of flammable gases, vapors, and combustible dusts
- In areas subject to weather, dampness, and corrosion
- For branch power distribution and circuit protection to motors, valves, pumps, lighting, heat tracing, receptacles, etc.
- For indoor and outdoor applications in petroleum refineries, chemical and petrochemical plants, and other process industry facilities where similar hazards exist
- To accommodate up to 100 amp branch loads (only 3 circuits), balance is up to 50 amps

Certifications and Compliances:

EPL Series:

- NEC/CEC:
  Class I, Division 1 & 2, Groups B†, C, D
  Class I, Zone 1 & 2, IIB + H_2†
  Class II, Division 1, Groups E, F, G
  Class II, Division 2, Groups F, G
  Class III
- NEMA/EEMAC: 3, 4, 4X‡, 7B†CD, 9EFG, 12
- CSA Enc. 3, 4, 5
- UL Standard: 67, 877, 1203
- cUL (to CSA Standard C22.2 Nos. 29 & 30)
- IP65

D2L Series (Division 2):

- NEC/CEC:
  Class I, Division 2, Groups B†, C, D
  Class I, Zone 2, IIB + H_2†
  Class II, Division 2, Groups F, G
  Class III
- NEMA/EEMAC: 3, 4, 4X‡, 7B†CD, 12
- CSA Enc. 3, 4, 5
- UL Standard: 67, 877, 1077
- cUL (to CSA Standard C22.2 Nos. 29 & 30)
- IP65

Standard Materials and Finishes:

- Circuit breaker enclosure body and cover – copper-free aluminum
- Terminal housing – type 316L stainless steel ("S") or copper-free aluminum ("A")
- Gasket – neoprene (cast aluminum enclosure); foam-in-place (stainless steel enclosure)
- Operating handles – copper-free aluminum
- Operating shafts and bushings, cover bolts, washers, hinges, breather/drain, retractile springs – stainless steel
- Circuit breaker operators – non-metallic
- Lifting bracket – electrogalvanized cold rolled steel
- Chassis – silver-plated copper
- Breather cap – Delrin® non-metallic material
- Neutral and ground bar – tin-plated aluminum

† Group B and IIB + H_2 is standard on all PowerPlus panels, but requires special brackets to be installed on breakers to ensure long-term operability of circuit breakers. To order with brackets installed at factory, add suffix -GB. For field installable kit, order EPL-GB-KIT separately.
‡ NEMA 4X rating is available when ordered with suffix S752 or S753.
Delrin® is a registered trademark of DuPont.

PowerPlus™ Panelboards

Lighting and Heat Tracing
EPL Series (Div. 1 & 2)
D2L Series (Div. 2)

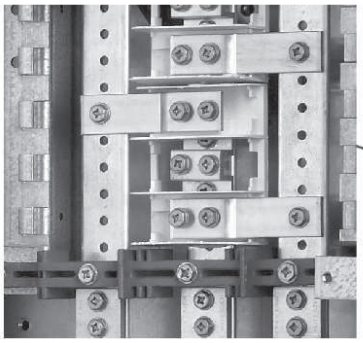
EPL Series:
Cl. I, Div. 1 & 2, Groups B†, C, D
Cl. I, Zone 1 & 2, IIB + H_2†
Cl. II, Div. 1, Groups E, F, G
Cl. II, Div. 2, Groups F, G
Cl. III
NEMA/EEMAC 3, 4, 4X‡, 7B†CD, 9EFG, 12

D2L Series:
Cl. I, Div. 2, Groups B†, C, D
Cl. I, Zone 2, IIB + H_2†
Cl. II, Div. 2, Groups F, G
Cl. III
NEMA/EEMAC: 3, 4, 4X‡, 7B†CD, 12

This corrosion-resistant Type 4X breather and drain comes standard with all PowerPlus panelboards. This permits all models to maintain their Type 4 (Type 4X with suffix S752) rating while utilizing a breather/drain solution to drain internal condensation while protecting against ingress of rain and hose water.

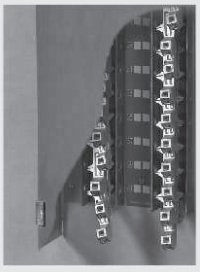
PowerPlus D2L and EPL panels are available with GFI and/or EPD breakers. This 21-position electrical test circuit allows for testing of GFI, EPD, or a combination of both in one panel. EPLDN panels are available with up to 42 GFI or EPD circuits with 225 amp main breaker.

PowerPlus panels come standard with a high-quality silver-plated copper buss system. This provides high-efficiency current flow between the main feed and branch breakers.



Each branch and main breaker handle is provided with lockout/tagout capability, which complies with OSHA lockout/tagout requirements for safety. This allows for locking in the ON or OFF position for standard maintenance checks.

Spring-loaded, quick-release, captive stainless steel cover bolts come standard. This design prevents damage to the flat joint flame path when opening and closing the cover while providing visual identification of bolt engagement.



PowerPlus panels are available with an optional hinged stainless steel ice/dust shield. This ice shield solution prevents ice and snow build-up on breaker handles to allow for proper handle function in cold/wet climate applications.

EPLCN or EXDCN*

Stainless steel hinges are engineered to provide maximum stability and allow the cover to swing fully open. This avoids misalignment of cover to the body of the enclosure and prevents the cover from obstructing interior access.

*Note: D2D / EXD panels are not available with GFI or EPD circuit breakers or electrical test circuit as standard. Please contact factory if required.

† Group B and IIB + H2 is standard on all PowerPlus panels, but requires special brackets to be installed on breakers to ensure long-term operability of circuit breakers. To order with brackets installed at factory, add suffix -GB. For field installable kit, order EPL-GB-KIT separately.
‡ NEMA 4X rating is available when ordered with suffix S752 or S753.

PowerPlus™ Panelboards

Lighting and Heat Tracing
EPL Series (Div. 1 & 2)
D2L Series (Div. 2)

EPL Series:
Cl. I, Div. 1 & 2, Groups B†, C, D
Cl. I, Zone 1 & 2, IIB + H_2†
Cl. II, Div. 1, Groups E, F, G
Cl. II, Div. 2, Groups F, G
Cl. III
NEMA/EEMAC 3, 4, 4X‡, 7B†CD, 9EFG, 12

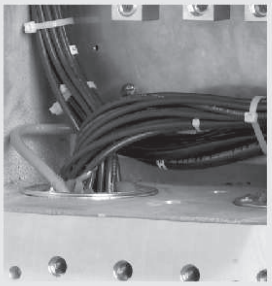
D2L Series:
Cl. I, Div. 2, Groups B†, C, D
Cl. I, Zone 2, IIB + H_2†
Cl. II, Div. 2, Groups F, G
Cl. III
NEMA/EEMAC: 3, 4, 4X‡, 7B†CD, 12

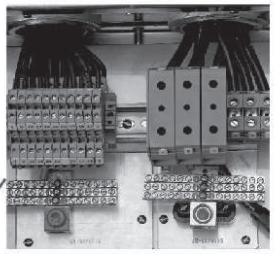
Integrated steel lifting eye is mounted on the top side of each PowerPlus panel. This provides a stable lifting position to ensure ease of mounting during the installation process.

PowerPlus cast enclosures are manufactured with an external flange design. This design allows for a wide unobstructed cover opening and provides a completely accessible interior for ease of maintenance and wiring.

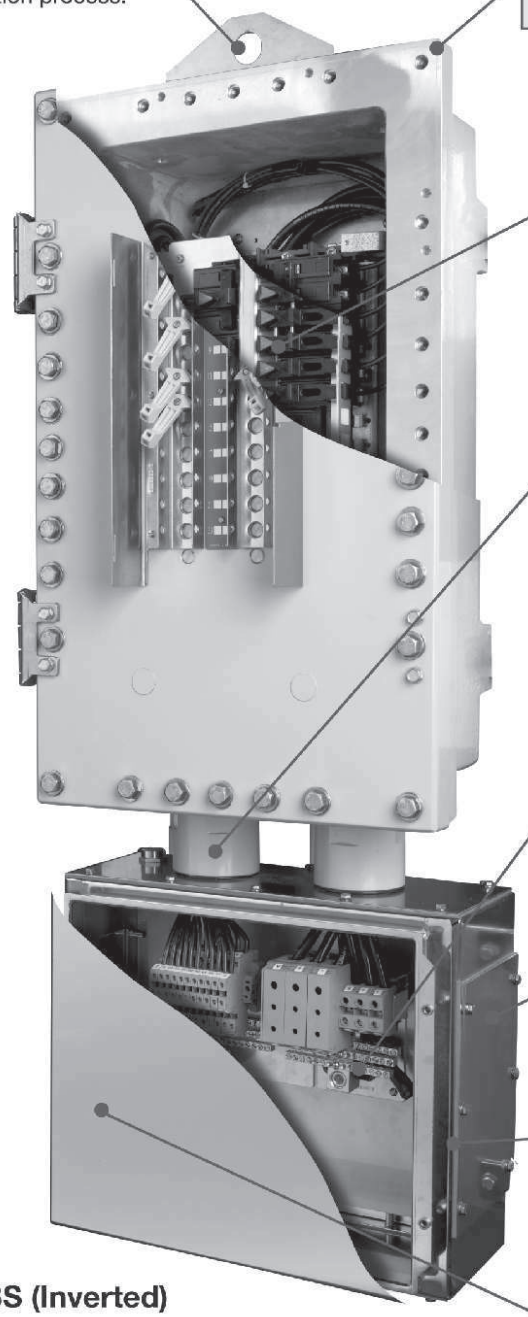
Superior self-aligning breaker operators are designed for both field and factory installation. This patent-pending design guarantees proper handle alignment when closing the cover.*

All panels with terminal housings are factory-sealed†† and fully wired for maximum available circuits. This allows PowerPlus models the ability to have additional breakers field-installed while maintaining their factory seal.





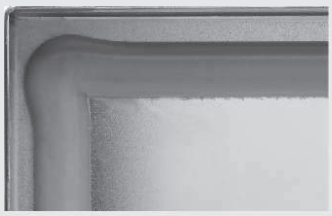
All terminal blocks come fully wired with each contact numbered for easy connecting of branch entries.



D2LBS (Inverted)
or D2DBS (Inverted)

Heavy gauge 316L stainless steel terminal housings are supplied with three removable gland plates to be used with Myers® Hubs. This design allows for the flexibility of factory- or field-drilled openings for hubs.

PowerPlus panelboards offer an industrial grade 316L stainless steel terminal housing as standard. This design offers an increased internal volume with a removable front cover for easy access during field installation and maintenance. A cast aluminum terminal housing is standard on EPL and EXD panels and available on D2L and D2D panels.



Stainless steel terminal housings offer a high-integrity gasket, providing a watertight seal to meet enclosure Type 4/CSA ENC. 4/IP65 requirements. This provides superior protection of enclosed wiring against water and corrosion. Cast aluminum enclosures are also gasketed, providing a NEMA 4 watertight seal.

* Not available in Size F offering. Spring aligning forks are standard on Size F panels.
††EPL*A and EXD*A conduit entries 2" or larger in Class I, Division 1 must be sealed within 18" of enclosure. All alternate feed entries to breaker housing (suffix A) must have an external seal within 18" of enclosure.

† Group B and IIB + H_2 is standard on all PowerPlus panels, but requires special brackets to be installed on breakers to ensure long-term operability of circuit breakers. To order with brackets installed at factory, add suffix -GB. For field installable kit, order EPL-GB-KIT separately.
‡ NEMA 4X rating is available when ordered with suffix S752 or S753.

PowerPlus™ Panelboards

Lighting and Heat Tracing
EPL Series (Div. 1 & 2)
D2L Series (Div. 2)

EPL Series:
Cl. I, Div. 1 & 2, Groups B†, C, D
Cl. I, Zone 1 & 2, IIB + H_2†
Cl. II, Div. 1, Groups E, F, G
Cl. II, Div. 2, Groups F, G
Cl. III
NEMA/EEMAC 3, 4, 4X‡, 7B†CD, 9EFG, 12

D2L Series:
Cl. I, Div. 2, Groups B†, C, D
Cl. I, Zone 2, IIB + H_2†
Cl. II, Div. 2, Groups F, G
Cl. III
NEMA/EEMAC: 3, 4, 4X‡, 7B†CD, 12

Electrical Ratings:

Branch Breakers (120/240VAC Quicklag® Bolt-On)

Trip Ratings:

- 1-, 2-, and 3-pole
- 10, 15, 20, 25, 30, 35, 40, 45, 50 amp (available in all breaker spaces in panel), 55, 60, 70, 80, 90, 100 amp (only 3 breaker spaces available for 55 to 100 amp branch breakers)
- GFI type, 1- and 2-pole (5mA sensitivity) 15, 20, 25, 30, 40 (50 amp - available 2-pole only)
- EPD type, 1- and 2-pole (30mA sensitivity) 15, 20, 25, 30, 40 (50 amp - available 2-pole only)
- HID type, 1- and 2-pole, 15, 20, 25, 30, 35, 40, 50, 60
- Available with GFI, EPD, or a combination of both in one panel with a 21-position electrical test circuit
- Ambient compensated breakers available to +50°C

Main Breaker Trip Ratings:

- 2- or 3-pole
- Size B: 10 to 100 amps
- Size C and D: 10 to 225 amps

Main Lugs:

- Size B, C, and D: 225 amp

Options:

To add the following features to the panelboard, add a dash and then the suffix to the Cat. No. When multiple suffixes are needed, add them to the Cat. No. in alpha-numeric order.

Description	Suffix
Space heater	**R22**
Square head plugs on all conduit openings	**SP**
Epoxy powder coat finish, external	**S752**
Epoxy powder coat finish, internal and external	**S753**
Recess head plugs on all conduit openings	**RP**
Stainless steel breaker operator cover (ice shield)	**HG**
Group B kit factory installed	**GB**
GFI breakers	**G**
EPD breakers	**E**
HID breakers	**H**
Ambient compensated breakers (50°C)	**V**
Lamacoid Nameplate	**LID**

A standard panelboard has conduit openings for power and branch circuits on top.

To order a panelboard with main power feed from the bottom of breaker housing, and branch entries on top (alternate)	**-A****
To order an inverted panelboard with all conduit openings for power and branch circuits on the bottom (inverted)	**-I**
To order an inverted panelboard with main power feed on top and bottom (alternate inverted)	**-A-I****

Accessories:

Gland Plates

Field installable gland plates with factory-provided aluminum Myers™ Hubs for the D2L stainless steel terminal housing (one 3-inch hub and 12 branch entry hubs - size dependent upon suffix, each kit includes 3 gland plates, 1 for the top or bottom and 1 for each side):

	Part Number
¾" branch entry hub	**D2L HUB2 KIT**
1" branch entry hub	**D2L HUB3 KIT**
1 ½" branch entry hub	**D2L HUB5 KIT**
Replacement gland plate (no hubs)	**D2L HUB0 KIT**

Circuit Breaker Operator Assemblies:

Operator Assemblies	Part Number
D2L/EPL 1-pole or 3-pole breakers	**EPL HDL13**
D2L/EPL 2-pole breakers	**EPL HDL2**

Replacement Cover Plugs:

For unused circuit breaker positions (qty. 5):

Plug Kits	Part Number
D2L/EPL Sizes B, C, D	**EPL OP PLG**

Kit for Group B

Standard panels less -GB suffix are applicable for Group B, but it is required to install brackets on breakers.

	Part Number
To order brackets factory installed	**add suffix -GB**
For field installable kit	**EPL GB KIT**

D2L/EPL Stainless Steel Breaker Operator Cover

To protect operators from ice build-up for all D2L/EPL PowerPlus panels:	Part Number
Kit for Size B panel	**EPL-HG24-KIT**
Kit for Size C and D panel	**EPL HG42-KIT**

Space Heater Kit

D2L/EPL PowerPlus Panels	**EPL R22 KIT**

Terminal Housing Mounting Plate Kit:

To adapt depth of terminal housing to same depth as breaker enclosure ***

Panel Types / Sizes	Part Number	Terminal Housing
D2L/EPL Sizes B, C, D	**EPLA-MTG-KIT**	Aluminum
D2L Sizes B, C, D	**D2LS-MTG-KIT**	Stainless

† Group B and IIB + H_2 is standard on all PowerPlus panels, but requires special brackets to be installed on breakers to ensure long-term operability of circuit breakers. To order with brackets installed at factory, add suffix -GB. For field installable kit, order EPL-GB-KIT separately.
‡ NEMA 4X rating is available when ordered with suffix S752 or S753.
** Not available in D2L/EPL Size D panels.
*** The weight of the panel is sufficiently supported by mounting of breaker enclosure.

PowerPlus™ Panelboards

Lighting and Heat Tracing
EPL Series (Div. 1 & 2)
D2L Series (Div. 2)

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Cl. II, Div. 1, Groups E, F, G
Cl. II, Div. 2, Groups F, G
Cl. III
NEMA/EEMAC 3, 4, 4X‡, 7B†CD, 9EFG, 12

D2L Series:
Cl. I, Div. 2, Groups B†, C, D
Cl. I, Zone 2, IIB + H_2†
Cl. II, Div. 2, Groups F, G
Cl. III
NEMA/EEMAC: 3, 4, 4X‡, 7B†CD, 12

Table A – Panel Capacity

Maximum Number of Breaker Spaces:

Panel Size	Max. No. of Branch Circuit Breaker Spaces: With Main Lug Only	With Main Breaker: 2-pole	With Main Breaker: 3-pole	Available Main Breaker Ampacity	Available With GFI, EPD Branch Protection
B	24	22	21	Up to 100■	Yes
C§	42	40	39	Up to 100■	Yes
		36	36	110 to 225✪	Yes
D	42	42	42	Up to 225✪	Yes

Table B – To Size Panels with GFI or EPD Branch Breakers

Maximum Number of GFI or EPD Breakers

Panel Size with Main Lug or Main Breaker	Single-Pole	Two-Pole
B	21	12 (10 with 3-pole MCB, 11 with 2-pole MCB)
C	21	14
D	EPLDN only - can go up to 42 GFI or EPD circuits. EPLDN will accommodate up to 225 amp main breaker.	

Each factory-sealed panel is equipped with 42 load wires for GFI/EPD breakers and any combination with standard branch breakers. Determine the total number of load wires required to complete your panel. You may not exceed 42 load wires.

	Load Wires Required
Single-pole breaker	1
Single-pole GFI (or EPD) breaker	2
Two-pole breaker	2
Two-pole GFI (or EPD) breaker	3
Three-pole breaker	3
	Maximum Total: 42 load wires (factory sealed)
EPLDN Panels	**Maximum Total: 82 load wires (non-factory sealed)**

† Group B and IIB + H_2 is standard on all PowerPlus panels, but requires special brackets to be installed on breakers to ensure long-term operability of circuit breakers. To order with brackets installed at factory, add suffix -GB. For field installable kit, order EPL-GB-KIT separately.
‡ NEMA 4X rating is available when ordered with suffix S752 or S753.
§ All size B and size C panels with main breaker rated up to 100 amps use a back-fed branch breaker. All size D and size C panels with main breaker rated from 110 amps to 225 amps have a dedicated location for main breaker. Size C ordered with suffix 2M00 or 3M00 are provided with 36 branch circuits for maximum breaker ampacity.
✪ Main breakers are mounted external to chassis.
■ Main breakers are chassis mounted and back-fed.

Lighting Panelboard Catalog Number Example

Example:
Class I, Division 2 / Zone 2, Group B panel with:

- 240VAC lighting panelboard
- (28) single-pole 20 amp branch breakers
- (1) single-pole 15 amp branch GFI breaker
- 225 amp 3-pole main circuit breaker

Example would be ordered as:

D2L C S 3 30G * 28 1 20 * 01 1 15G - 3 M 225 -GB

1. Select panel type
   D2L = Div. 2 / Zone 2 Panelboard
   EPL = Div. 1 & 2 / Zone 1 & 2 Panelboard
2. Select size of enclosure
   B = 24 circuit panel
   C = 42 circuit panel (36 circuit panel with main breaker greater than 100 amps)
   D = 42 circuit panel
3. Select terminal enclosure material type
   Premium Solution
   S = stainless steel terminal housing (Div. 2 / Zone 2 panels only)
   A = cast aluminum terminal housing
   Value Solution
   N = no terminal housing (non-factory-sealed - Div. 1 & 2 / Zone 1 & 2)
4. Select panel phase
   1 = single-phase electrical system
   3 = three-phase electrical system
5. Select breaker spaces
   1-pole breaker = 1 breaker space
   2-pole breaker = 2 breaker spaces
   3-pole breaker = 3 breaker spaces

   Example:

(28) 1-pole 20 amp breakers	=	28 spaces
+ (1) 1-pole 15 amp GFI breaker	=	1 spaces
Total breaker spaces	=	29
If odd, round up to even	=	**30**

   Note: GFI and EPD each require 1 additional load wire per breaker.
   Factory sealed PowerPlus panels offer a maximum of 42 load wires.
   For requirements greater than 42, consider non-factory sealed PowerPlus panels.
6. Insert asterisk (*) before each branch breaker series
7. Quantity of alike branch breakers
8. Branch breaker pole rating
   1 = single-pole breaker
   2 = 2-pole breaker
   3 = 3-pole breaker
9. Branch breaker ampere rating (numerical value represents ampere rating)
   20 = 20 amps
10. Insert asterisk (*) before each branch breaker series
11. Quantity of alike branch breakers
12. Branch breaker pole rating (see #8 above)
13. Branch breaker ampere rating
    15 = 15 amps
    G = GFI breakers
    15G = GFI with 15 amps
14. Dash indicates that main breaker follows
15. Main breaker number of poles
16. M indicates main breaker
17. Indicates main breaker amperage rating
18. Group B Option

† Group B and IIB + H_2 is standard on all PowerPlus panels, but requires special brackets to be installed on breakers to ensure long-term operability of circuit breakers. To order with brackets installed at factory, add suffix -GB. For field installable kit, order EPL-GB-KIT separately.
‡ NEMA 4X rating is available when ordered with suffix S752 or S753.

PowerPlus™ Panelboards

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D2L Series (Div. 2)

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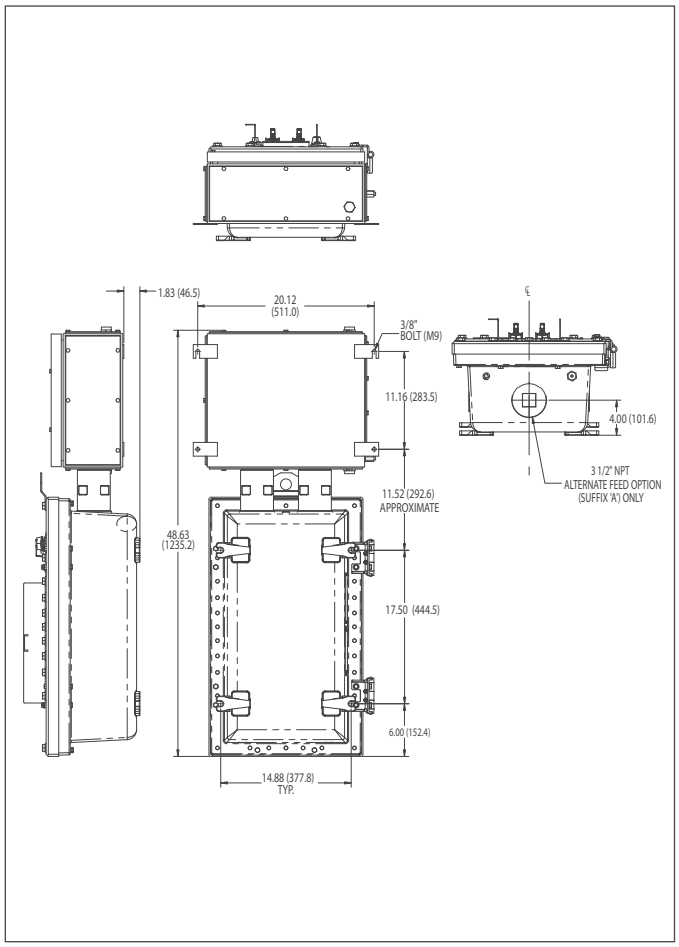
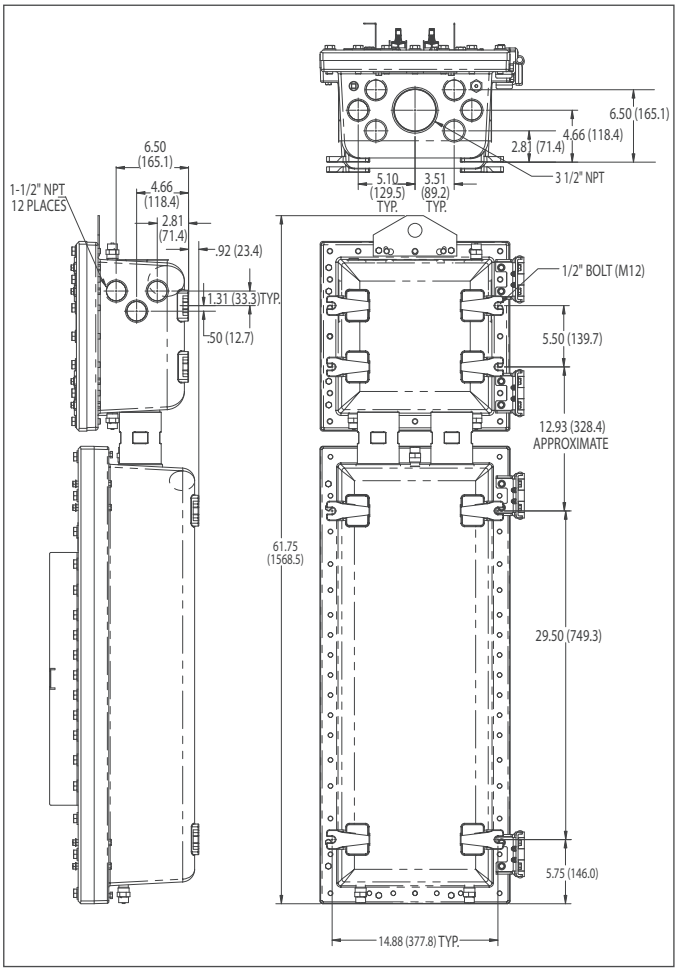
Cl. II, Div. 2, Groups F, G
Cl. III
NEMA/EEMAC 3, 4, 4X‡, 7B†CD, 9EFG, 12

D2L Series:
Cl. I, Div. 2, Groups B†, C, D
Cl. I, Zone 2, IIB + H_2†
Cl. II, Div. 2, Groups F, G
Cl. III
NEMA/EEMAC: 3, 4, 4X‡, 7B†CD, 12

Dimensions
Size B Panel*
(With Stainless Steel Terminal Housing)



Size C and D Panel*
(With Cast Terminal Housing)



† Group B and IIB + H_2 is standard on all PowerPlus panels, but requires special brackets to be installed on breakers to ensure long-term operability of circuit breakers. To order with brackets installed at factory, add suffix -GB. For field installable kit, order EPL-GB-KIT separately.
‡ NEMA 4X rating is available when ordered with suffix S752 or S753.
*Stainless steel and cast aluminum terminal housing for Sizes B, C, and D are the same. Note: Value series non-factory-sealed EPL*N panel dimensions are the breaker housing only and use standard entries shown on cast terminal housing.

PowerPlus™ Panelboards

Power
EXD Series (Div. 1 & 2)
D2D Series (Div. 2)

EXD Series:
Cl. I, Div. 1 & 2, Groups B†, C, D
Cl. I, Zone 1 & 2, IIB + H_2†
Cl. II, Div. 1, Groups E, F, G
Cl. II, Div. 2, Groups F, G
Cl. III
NEMA/EEMAC 3, 4, 4X‡, 7B†CD, 9EFG, 12

D2D Series:
Cl. I, Div. 2, Groups B†, C, D
Cl. I, Zone 2, IIB + H_2†
Cl. II, Div. 2, Groups F, G
Cl. III
NEMA/EEMAC: 3, 4, 4X‡, 7B†CD, 12

PowerPlus™ Series Panelboards provide both premium factory-sealed and value non-factory-sealed solutions for the protection and distribution of lighting, power, and heat tracing circuits. This panel solution is designed, engineered, and manufactured to be the industry's safest and most dependable panelboard for hazardous area locations.

PowerPlus Premium and Value Solutions

- **Premium Solution:** PowerPlus factory-sealed panelboards are premium panelboards that provide maximum circuit flexibility with labor savings during installation, operation, and maintenance, and are accommodating for future changes in the field (order with either "S" or "A" in base part number). Panels are pre-wired to maximum circuit capacity, allowing for easy and safe replacement or installation of components in the field, while maintaining factory-sealed integrity.
- **Value Solution:** PowerPlus non-factory-sealed panelboards are value panelboards that offer maximum circuit flexibility and many of the same features and benefits of the PowerPlus premium line. This value solution is provided without terminal housing and factory wiring of circuits (order with "N" in base part number). The non-factory-sealed solution reduces initial panelboard material costs and requires field wiring to circuit breakers and external seals to be field-installed during installation.

Applications:

EXD and D2D PowerPlus™ panelboards are used:

- In areas made hazardous by the continuous or abnormal presence of flammable gases, vapors, and combustible dusts
- In areas subject to weather, dampness, and corrosion
- For branch power distribution and circuit protection to motors, valves, pumps, lighting, heat tracing, receptacles, etc.
- For indoor and outdoor applications in petroleum refineries, chemical and petrochemical plants, and other process industry facilities where similar hazards exist
- To accommodate up to 100 amp branch loads (only 3 circuits), balance is up to 50 amps

Certifications and Compliances:

EXD Series:

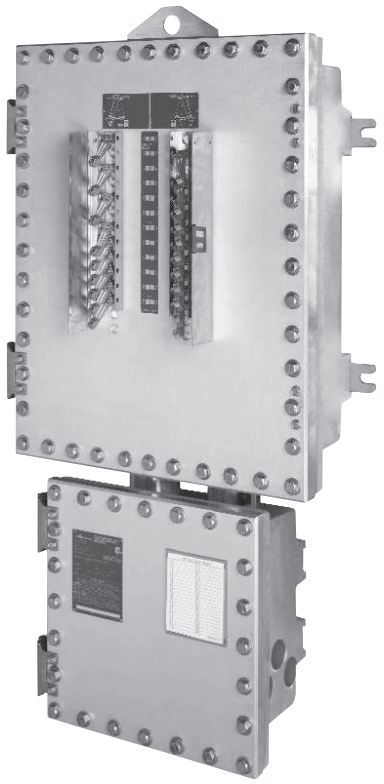
- NEC/CEC:
  Class I, Division 1 & 2, Groups B†, C, D
  Class I, Zone 1 & 2, IIB + H_2†
  Class II, Division 1, Groups E, F, G
  Class II, Division 2, Groups F, G
  Class III
- NEMA/EEMAC: 3, 4, 4X‡, 7B†CD, 9EFG, 12
- CSA Enc. 3, 4, 5
- UL Standard: 67, 877, 1203
- cUL (to CSA Standard C22.2 Nos. 29 & 30)
- IP65

D2D Series (Division 2):

- NEC/CEC:
  Class I, Division 2, Groups B†, C, D
  Class I, Zone 2, IIB + H_2†
  Class II, Division 2, Groups F, G
  Class III
- NEMA/EEMAC: 3, 4, 4X‡, 7B†CD, 12
- CSA Enc. 3, 4, 5
- UL Standard: 67, 877, 1077
- cUL (to CSA Standard C22.2 Nos. 29 & 30)
- IP65

Standard Materials and Finishes:

- Circuit breaker enclosure body and cover – copper-free aluminum
- Terminal housing – type 316L stainless steel ("S") or copper-free aluminum ("A")
- Gasket – neoprene (cast aluminum enclosure); foam-in-place (stainless steel enclosure)
- Operating handles – copper-free aluminum
- Operating shafts and bushings, cover bolts, washers, hinges, breather/drain, retractile springs – stainless steel
- Circuit breaker operators – EXD/D2D Size F: copper-free aluminum; all other types: non-metallic
- Lifting bracket – electrogalvanized cold rolled steel
- Chassis – silver-plated copper
- Breather cap – Delrin® non-metallic material
- Neutral and ground bar – tin-plated aluminum



†Group B and IIB + H_2 is standard on all PowerPlus panels, but requires special brackets to be installed on breakers to ensure long-term operability of circuit breakers. To order with brackets installed at factory, add suffix -GB. For field installable kit, order EXD-GB-KIT for Sizes B, C, and D separately.
‡NEMA 4X rating is available when ordered with suffix S752 or S753.
Delrin® is a registered trademark of DuPont.

PowerPlus™ Panelboards

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NEMA/EEMAC 3, 4, 4X‡, 7B†CD, 9EFG, 12

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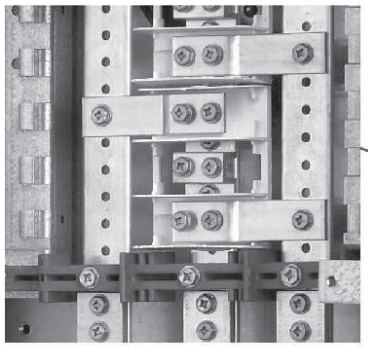
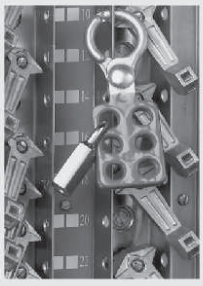
Cl. I, Zone 2, IIB + H_2†
Cl. II, Div. 2, Groups F, G
Cl. III
NEMA/EEMAC: 3, 4, 4X‡, 7B†CD, 12

This corrosion-resistant Type 4X breather and drain comes standard with all PowerPlus panelboards. This permits all models to maintain their Type 4 (Type 4X with suffix S752) rating while utilizing a breather/drain solution to drain internal condensation while protecting against ingress of rain and hose water.

PowerPlus D2L and EPL panels are available with GFI and/or EPD breakers. This 21-position electrical test circuit allows for testing of GFI, EPD, or a combination of both in one panel. EPLDN panels are available with up to 42 GFI or EPD circuits with 225 amp main breaker.

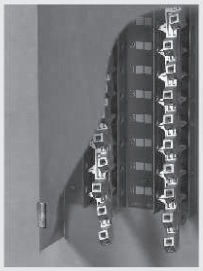
PowerPlus panels come standard with a high-quality silver-plated copper buss system. This provides high-efficiency current flow between the main feed and branch breakers.



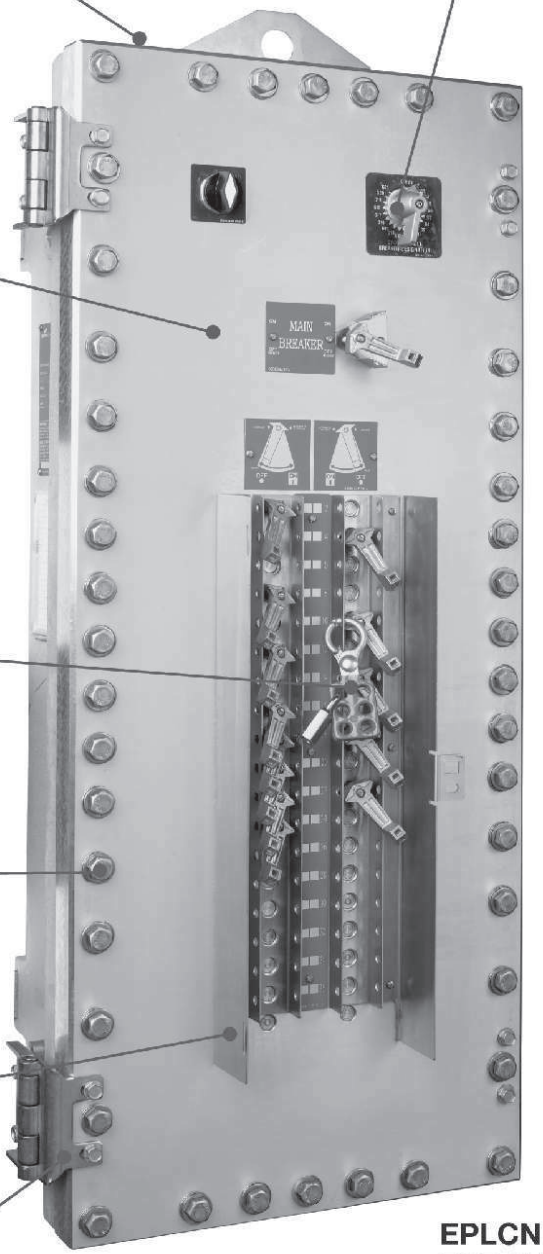


Each branch and main breaker handle is provided with lockout/tagout capability, which complies with OSHA lockout/tagout requirements for safety. This allows for locking in the ON or OFF position for standard maintenance checks.

Spring-loaded, quick-release, captive stainless steel cover bolts come standard. This design prevents damage to the flat joint flame path when opening and closing the cover while providing visual identification of bolt engagement.



PowerPlus panels are available with an optional hinged stainless steel ice/dust shield. This ice shield solution prevents ice and snow build-up on breaker handles to allow for proper handle function in cold/wet climate applications.



EPLCN or EXDCN*

Stainless steel hinges are engineered to provide maximum stability and allow the cover to swing fully open. This avoids misalignment of cover to the body of the enclosure and prevents the cover from obstructing interior access.

*Note: D2D / EXD panels are not available with GFI or EPD circuit breakers or electrical test circuit as standard. Please contact factory if required.

† Group B and IIB + H2 is standard on all PowerPlus panels, but requires special brackets to be installed on breakers to ensure long-term operability of circuit breakers. To order with brackets installed at factory, add suffix -GB. For field installable kit, order EXD-GB-KIT for sizes B, C and D separately.
‡ NEMA 4X rating is available when ordered with suffix S752 or S753.

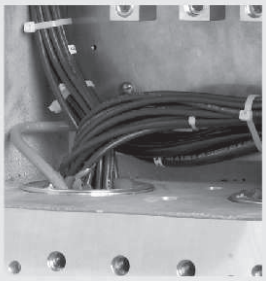
COOPER Crouse-Hinds

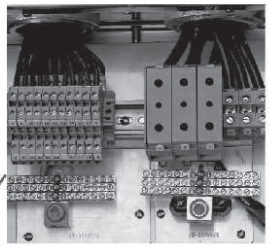
Integrated steel lifting eye is mounted on the top side of each PowerPlus panel. This provides a stable lifting position to ensure ease of mounting during the installation process.

PowerPlus cast enclosures are manufactured with an external flange design. This design allows for a wide unobstructed cover opening and provides a completely accessible interior for ease of maintenance and wiring.

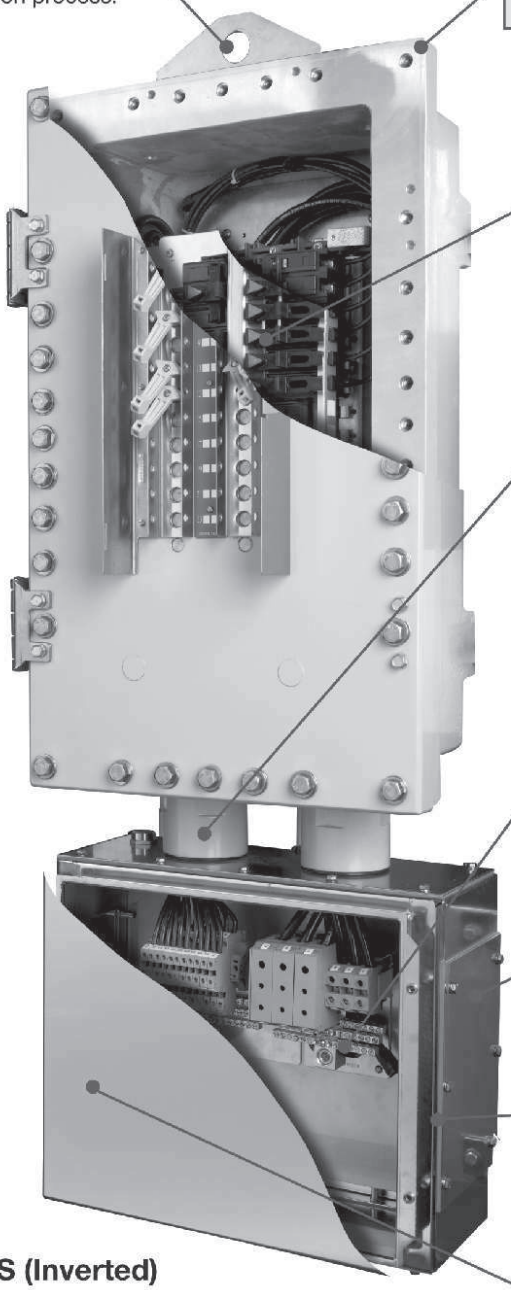
Superior self-aligning breaker operators are designed for both field and factory installation. This patent-pending design guarantees proper handle alignment when closing the cover.*

All panels with terminal housings are factory-sealed†† and fully wired for maximum available circuits. This allows PowerPlus models the ability to have additional breakers field-installed while maintaining their factory seal.





All terminal blocks come fully wired with each contact numbered for easy connecting of branch entries.



D2LBS (Inverted)
or D2DBS (Inverted)

Heavy gauge 316L stainless steel terminal housings are supplied with three removable gland plates to be used with Myers® Hubs. This design allows for the flexibility of factory- or field-drilled openings for hubs.

Stainless steel terminal housings offer a high-integrity gasket, providing a watertight seal to meet enclosure Type 4/CSA ENC. 4/IP65 requirements. This provides superior protection of enclosed wiring against water and corrosion. Cast aluminum enclosures are also gasketed, providing a NEMA 4 watertight seal.

PowerPlus panelboards offer an industrial grade 316L stainless steel terminal housing as standard. This design offers an increased internal volume with a removable front cover for easy access during field installation and maintenance. A cast aluminum terminal housing is standard on EPL and EXD panels and available on D2L and D2D panels.

* Not available in Size F offering. Spring aligning forks are standard on Size F panels.
††EPL"A and EXD"A conduit entries 2" or larger in Class I, Division 1 must be sealed within 18" of enclosure. All alternate feed entries to breaker housing (suffix A) must have an external seal within 18" of enclosure.

† Group B and IIB + H2 is standard on all PowerPlus panels, but requires special brackets to be installed on breakers to ensure long-term operability of circuit breakers. To order with brackets installed at factory, add suffix -GB. For field installable kit, order EXD-GB-KIT for sizes B, C and D separately.
‡ NEMA 4X rating is available when ordered with suffix S752 or S753.

1A PowerPlus™ Panelboards

Power
EXD Series (Div. 1 & 2)
D2D Series (Div. 2)

EXD Series:
Cl. I, Div. 1 & 2, Groups B†, C, D
Cl. I, Zone 1 & 2, IIB + H_2†
Cl. II, Div. 1, Groups E, F, G
Cl. II, Div. 2, Groups F, G
Cl. III
NEMA/EEMAC 3, 4, 4X‡, 7B†CD, 9EFG, 12

D2D Series:
Cl. I, Div. 2, Groups B†, C, D
Cl. I, Zone 2, IIB + H_2†
Cl. II, Div. 2, Groups F, G
Cl. III
NEMA/EEMAC: 3, 4, 4X‡, 7B†CD, 12

Electrical Ratings:

Branch Breakers Trip Ratings:

Panel Size	Voltage	Phase / Wire	Main Breaker Amperage	Branch Breaker
B	480Y/277	3P 4W	Up to 100	G-frame
	480Δ††	3P 3W	Up to 100	G-frame
C	480Y/277	3P 4W	Up to 100	G-frame
	480Δ††	3P 3W	Up to 100	G-frame
D	480Y/277	3P 4W	Up to 225	G-frame
	480Δ††	3P 3W	Up to 225	G-frame
F	480Y/277, 480Δ, or 600Δ††	3P 3W or 3P 4W	Up to 225	F-frame

Panel Sizes B, C, and D (G-Frame Cutler-Hammer™):

- 1-, 2-, and 3-pole: GHB 480/277Y (standard offering)
- 2- and 3-pole: GDB 480Δ (requires suffix -GDB)
- 1-, 2-, and 3-pole GBH 600Y/347 (requires suffux -GBH; contact factory)
- 15, 20, 25, 30, 35, 40, 45, 50 amp (available in all breaker spaces in panel), 60, 70, 80, 90, 100 amp (only 3 breaker spaces available)‡‡
- Ambient compensated breakers are optional to +50°C (suffix V)

Panel Size F (F-frame breaker: EHD Cutler-Hammer™ standard):

- 15, 20, 25, 30, 35, 40, 45, 50, 60, 70 amp (available in all breaker spaces in panel), 80, 90, 100 amp (only 3 breaker spaces available)
- Breaker types available†††
  - FDB: 2-, and 3-pole 600V
  - FD: 1-, 2- (277V), and 3-pole (600V)
  - HFD: 1-, 2- (277V), and 3-pole (600V)
  - EHD: 1-, 2- (277V), and 3-pole (480V)

Main Breaker Trip Ratings:

- 2- and 3-pole (contact factory for single phase sizes B, C, D)
- Size B: 15 to 100 amps
- Size C, D, and F: 15 to 225 amps

Main Lugs:

- Size B, C, and F: 225 amps
- Size D: not available; main breaker only

Ampere Interrupting Capacity:

- All size panels are certified to 10kAIC
- Breaker AIC Ratings:
  - GHB Breaker: 14kAIC at 480Y/277
  - EHD Breaker: 14kAIC at 480V

Breaker types optional with Sizes B, C, and D panel only:
- GDB Breaker: 14kAIC at 480V

Breaker types optional with Size F panel only:
- FDB Breaker: 14kAIC at 480V and 600V
- FD Breaker: 18kAIC at 600V and 35kAIC at 480V & 277V
- HFD Breaker: 25kAIC at 600V and 65kAIC at 480V & 277V

Options:

To add the following features to the panelboard, add a dash and then the suffix to the Cat. No. When multiple suffixes are needed, add them to the Cat. No. in alpha-numeric order.

Description	Suffix
Space heater	R44
Square head plugs on all conduit openings	SP
Epoxy powder coat finish, external	S752
Epoxy powder coat finish, internal and external	S753
Recess head plugs on all conduit openings	RP
Stainless steel breaker operator cover (ice shield)	HG
Group B kit factory installed	GB
GFI breakers✪	G
EPD breakers✪	E
HID breakers✪	H
Ambient compensated breakers (50ºC)	V
GDB 480Δ 3P 3W system■	GDB
FDB 600V breakers*	FDB600
FD 600V breakers*	FD600
HFD 600V breakers*	HFD600
Lamacoid Nameplate	LID

A standard panelboard has conduit openings for power and branch circuits on top.

To order a panelboard with main power feed from the bottom of breaker housing, and branch entries on top (alternate) ..... **-A****

To order an inverted panelboard with all conduit openings for power and branch circuits on the bottom (inverted) ..... **-I**

To order an inverted panelboard with main power feed on top and bottom (alternate inverted) ..... **-A-I****

†Group B and IIB + H2 is standard on all PowerPlus panels, but requires special brackets to be installed on breakers to ensure long-term operability of circuit breakers. To order with brackets installed at factory, add suffix -GB. For field installable kit, order EXD-GB-KIT for Sizes B, C, and D separately.
‡NEMA 4X rating is available when ordered with suffix S752 or S753.
††For 480Δ 3P 3W system or for 600VAC, a suffix is required. For 480Δ system, please contact factory. Note: for single-pole 480Δ, GHB breakers will be furnished for Sizes B, C, and D.
‡‡Two-pole GDB breakers are only available up to 50 amps.
†††F-frame breakers are only available in Size F panel with up to a maximum of 30 circuit spaces.
✪Please contact factory.
■Available in D2D and EXD Sizes B, C, and D only.
*Available with D2D and EXD Size F panels only.
**D2D/EXD Sizes C and D are only available with up to 36 circuits.

Accessories:

Gland Plates

Field installable gland plates with factory-provided aluminum Myers™ Hubs for the D2D stainless steel terminal housing (one 3-inch hub and 12 branch entry hubs - size dependent upon suffix, each kit includes 3 gland plates, 1 for the top or bottom and 1 for each side):

	Part Number
¾" branch entry hub	**D2D HUB2 KIT**
1" branch entry hub	**D2D HUB3 KIT**
1 ½" branch entry hub	**D2D HUB5 KIT**
Replacement gland plate (no hubs)	**D2D HUB0 KIT**

Circuit Breaker Operator Assemblies:

Operator Assemblies	Part Number
D2D/EXD All breakers panel Sizes B, C, D	**EXD HDL123**
D2D/EXD All breakers panel Sizes F	**EXD K1**

Replacement Cover Plugs:

For unused circuit breaker positions (qty. 5):

Plug Kits	Part Number
D2D/EXD Sizes B, C, D	**EXD OP PLG**
D2D/EXD Size F	**EXD K2**

Kit for Group B

Standard panels less -GB suffix are applicable for Group B, but it is required to install brackets on breakers.

	Part Number
To order brackets factory installed	**add suffix -GB**
For field installable kit (Sizes B, C, D)	**EXD GB KIT**

D2D/EXD Stainless Steel Breaker Operator Cover

To protect operators from ice build-up for all D2D/EXD PowerPlus panels:

	Part Number
D2D/EXD PowerPlus panels	**Contact Factory**

Space Heater Kit

D2D/EXD PowerPlus panels	**EXD R44 KIT**

Terminal Housing Mounting Plate Kit:

To adapt depth of terminal housing to same depth as breaker enclosure ***

Panel Types / Sizes	Part Number	Terminal Housing
D2D/EXD Sizes B, C, D	**EXDA-MTG-KIT**	Aluminum
D2D Sizes B, C, D	**D2DS-MTG-KIT**	Stainless

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*** The weight of the panel is sufficiently supported by mounting of breaker enclosure.
‡NEMA 4X rating is available when ordered with suffix S752 or S753.

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Cl. I, Zone 2, IIB + H_2†
Cl. II, Div. 2, Groups F, G
Cl. III
NEMA/EEMAC: 3, 4, 4X‡, 7B†CD, 12

Table A – Panel Capacity

Maximum Number of Breaker Spaces:

Panel Size	Max. No. of Branch Circuit Breaker Spaces: With Main Lug Only	With Main Breaker: 2-pole*	With Main Breaker: 3-pole	Available Main Breaker Ampacity	Available With GFI, EPD Branch Protection***
B	24	22	21	Up to 100■	No
C	42	40	39	Up to 100■	No
D	N/A	42	42	Up to 225✪	No
F	30	30	30	Up to 225✪	No

Table B – To Size Panels with GFI or EPD Branch Breakers

Panel Size with Main Lug or Main Breaker	Maximum Number of GFI or EPD Breakers: Single-Pole	Two-Pole
B	21	12 (10 with 3-pole MCB, 11 with 2-pole MCB)
C	21	14
D	EPLDN only - can go up to 42 GFI or EPD circuits. EPLDN will accommodate up to 225 amp main breaker.	

Each factory-sealed panel is equipped with 42 load wires for GFI/EPD breakers and any combination with standard branch breakers. Determine the total number of load wires required to complete your panel. You may not exceed 42 load wires.

	Load Wires Required
Single-pole breaker	1
Single-pole GFI (or EPD) breaker	2
Two-pole breaker	2
Two-pole GFI (or EPD) breaker	3
Three-pole breaker	3
	Maximum Total: 42 load wires (factory sealed)
EPLDN Panels	**Maximum Total: 82 load wires (non-factory sealed)**

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To order with brackets installed at factory, add suffix -GB. For field installable kit, order EXD-GB-KIT for Sizes B, C and D separately.
‡ NEMA 4X rating is available when ordered with suffix S752 or S753.
* Contact factory for single phase size B, C, or D.
✪ Main breakers are mounted external to chassis.
■ Main breakers are chassis mounted and back-fed.
***GFI, EPD for D2D/EXD are not standard options. If required, please contact factory.

Power Panelboard Catalog Number Example

Example:
Class I, Division 2 / Zone 2, Group B panel with:

- 480ΔVAC power panelboard with 3-phase, 3-wire
- (42) single-pole 20 amp branch breakers
- 225 amp 3-pole main circuit breaker

Example would be ordered as:

D2D	D	S	3	42	V	*	42	1	20	-	3	M	225	-GB	-GDB

1. Select panel type
   D2D - Division 2 / Zone 2 Panel
   EXD - Division 1 / Zone 1 Panel
2. Select size of enclosure (refer to Electrical Ratings Chart
   B = max. 24 circuit panel
   C = max. 42 circuit panel (when ordered, main circuit breaker is chassis mounted
   D = max. 42 circuit panel w/ main breaker (main circuit breaker is non-chassis mounted)
   F = max. 30 circuit panel
3. Select terminal enclosure material type
   Premium Solution
   S = stainless steel terminal housing (Sizes B, C, D only)
   A = cast aluminum terminal housing
   Value Solution
   N = no terminal housing included (non-factory-sealed)
4. Select panel phase
   1 = single-phase electrical system (consult factory for sizes B, C, D)
   3 = three-phase electrical system
5. Select breaker spaces (combined # of circuits required)†
   Example:
   Single-pole breaker = 1 circuit
   2-pole breaker = 2 circuits
   3-pole breaker = 3 circuits
6. Select breaker options
   V = ambient compensated
7. Asterisk (*) denotes breaker characteristics follow
8. Quantity of alike branch breakers
9. Branch breaker pole rating
   1 = single-pole breaker
   2 = 2-pole breaker
   3 = 3-pole breaker
10. Branch breaker ampere rating (numerical value represents ampere rating)

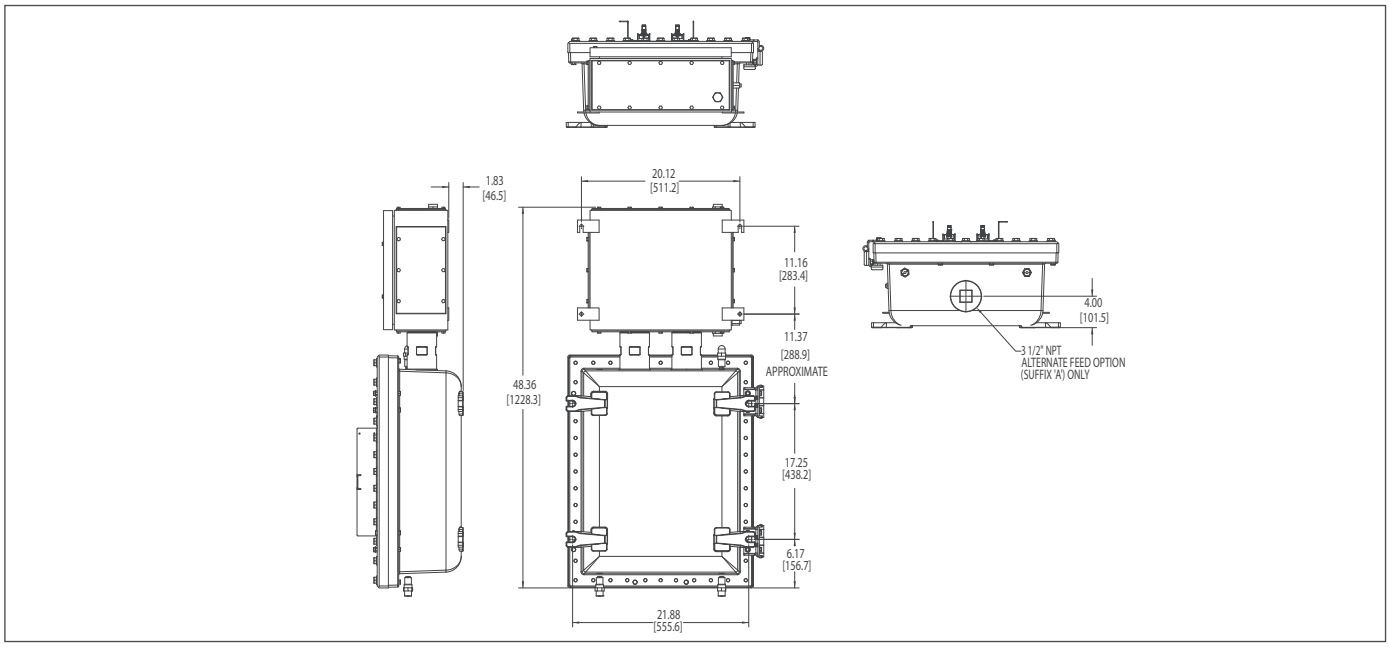
15 = 15 Amps	40 = 40 Amps
20 = 20 Amps	50 = 50 Amps
25 = 25 Amps	60 = 60 Amps
30 = 30 Amps	70 = 70 Amps
35 = 35 Amps	

11. Dash indicates that main breaker follows
12. Main breaker number of poles
13. M indicates main breaker
14. Indicates main breaker amperage rating
    Size B: 15 to 100 amps
    Sizes C, D, and F: 15 to 225 amp
15. Options
    GB = Group B Kit factory-installed
    GDB = GDB frame breakers with 480Δ 3P 3W System

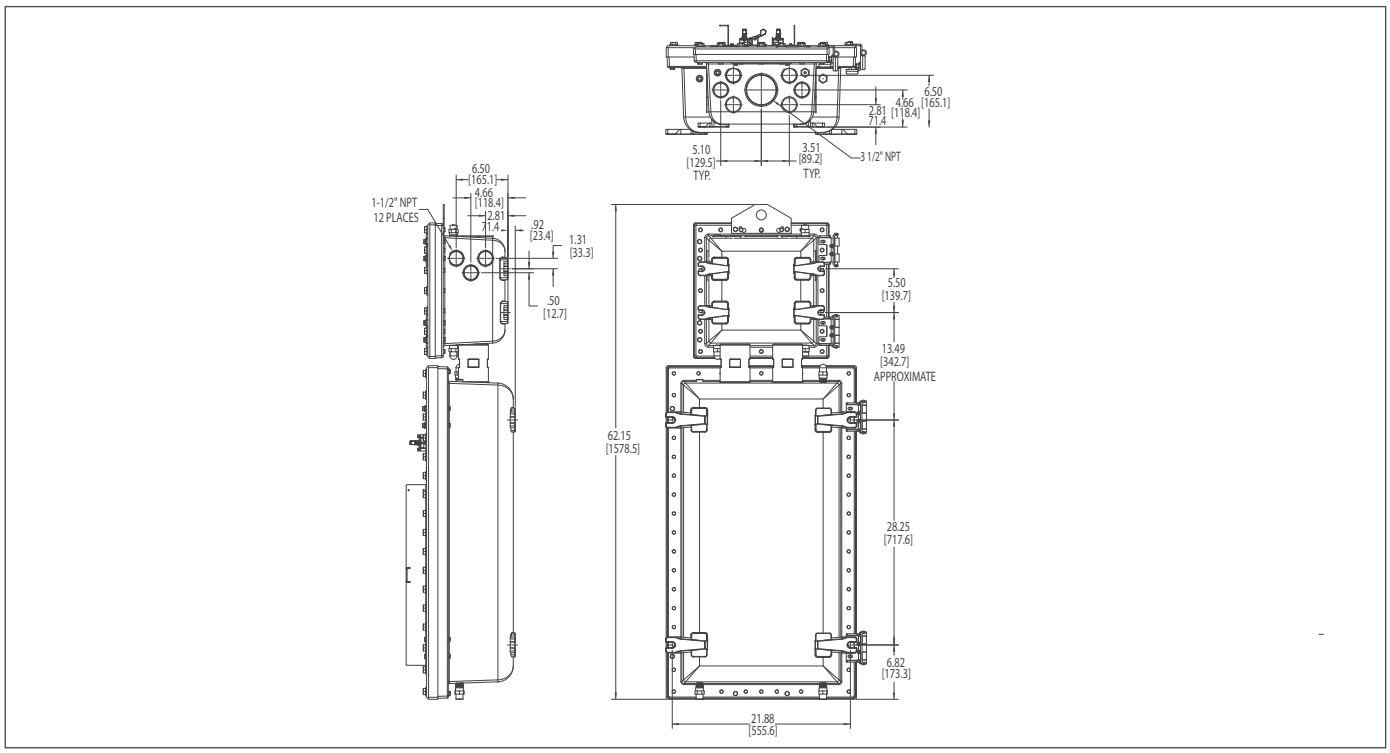
†Even number of breaker spaces is required. For odd number of spaces, round up to next even number.

† Group B and IIB + H2 is standard on all PowerPlus panels, but requires special brackets to be installed on breakers to ensure long-term operability of circuit breakers. To order with brackets installed at factory, add suffix -GB. For field installable kit, order EXD-GB-KIT for sizes B, C and D separately.
‡ NEMA 4X rating is available when ordered with suffix S752 or S753.

Dimensions
Size B Panel*
(With Stainless Steel Terminal Housing)



Size C and D Panel*
(With Cast Aluminum Terminal Housing)



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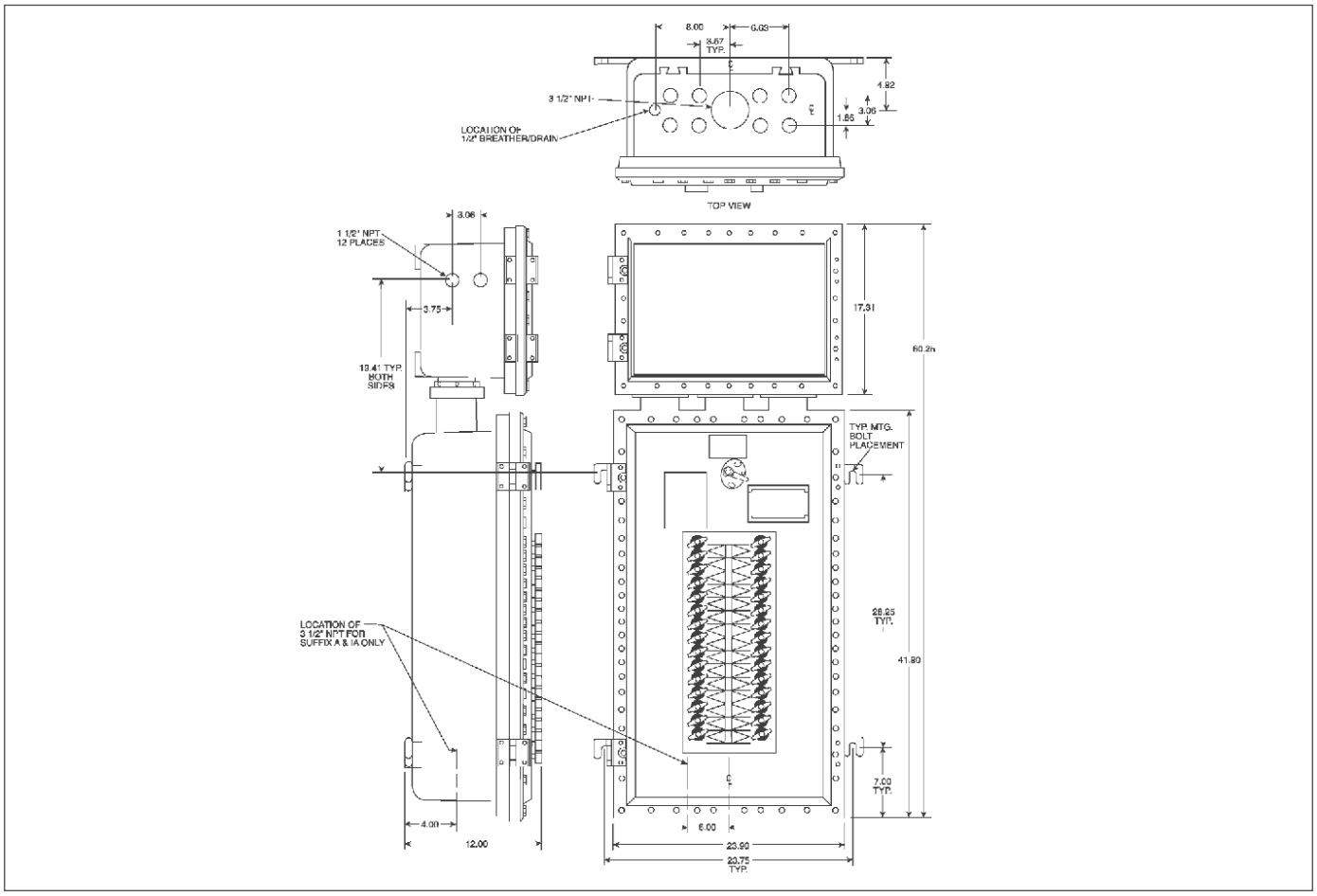
‡ NEMA 4X rating is available when ordered with suffix S752 or S753.
*Stainless steel and cast aluminum terminal housing for sizes B, C, and D panels have same dimensions.
Note: Value series non-factory-sealed EXD*N panel dimensions are the breaker housing only and use standard entries shown on cast terminal housing.

Size F Panel



† Group B and IIB + H2 is standard on all PowerPlus panels, but requires special brackets to be installed on breakers to ensure long-term operability of circuit breakers. To order with brackets installed at factory, add suffix -GB. For field installable kit, order EXD-GB-KIT for sizes B, C and D separately.
‡ NEMA 4X rating is available when ordered with suffix S752 or S753.
*Stainless steel and cast aluminum terminal housing for sizes B, C, and D panels have same dimensions.
Note: Value series non-factory-sealed EXD*N panel dimensions are the breaker housing only and use standard entries shown on cast terminal housing.