† Quicklag is a registered trademark of Cutler-Hammer Inc.

## Application:

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 & 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 asymmetrical 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 & D2D panelboards; 14,000 ampere asymmetrical 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:
- The wiring diagrams shown on page 512 and 513 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 shown on page 512 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

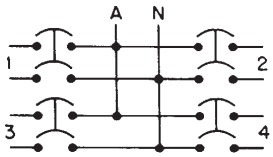
| Panel-board | NEC & NEMA Certifications and Compliances | Factory Sealed | Number Circuits Max. | Breaker Frame Size | Applicable Wiring Systems | Multi-Pole Voltage Max. | Trip Rating Amps Max. | Circuit Interrupting Amps Max. | Step Down Trans-former Available |
|---|---|---|---|---|---|---|---|---|---|
| **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® | All | 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® | All | 240VAC | 100 | 10,000 | Yes |
| **D2PB** | Cl. I, Div. 2, Groups C, D; NEMA: 3, 7CD (Div. 2), 12 | Yes | 24 | Quicklag® | 1, 3, 4, 5, 7, 8, 11, 12, 13, 15, 24, 25, 28, 29 | 240VAC | 30 | 10,000 | Yes |
| **Unibody** | 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 | 24-Lighting 18-Power | EDB/QOB | All | 480VAC | 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 | EHD/FDB | All | 600VAC 250VDC | 100 | 10,000 | No |
| **D2D** | Cl. I, Div. 2, Groups B, C,D NEMA: 3, 4, 7BCD, 12 | Yes | 30 | EHD/FDB | All | 600VAC 250VDC | 100 | 10,000 | Yes |
| **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® | All | 240VAC 125VDC | 100 | 10,000 | No |
| **D2L** | Cl. I, Div. 2, Groups B, C, D NEMA: 3, 4, 7BCD, 12 | Yes | 42 | Quicklag® | All | 240VAC 125VDC | 100 | 10,000 | Yes |
| **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® | Not applicable | 240VAC | 30 | 10,000 | No |
| **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® | 3, 4, 5, 8, 24, 25 | 240VAC | 30 | 10,000 | No |
| **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® | All | 480VAC | 180 | 10,000 | No |



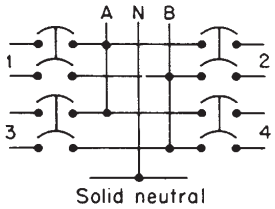
Quicklag is a registered trademark of Cutler-Hammer Inc.

## Wiring Diagrams for D2PB Panelboards

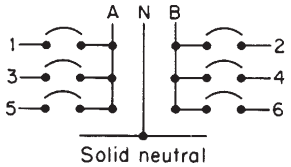
**System 1**
Mains—2-Wire
Branches—2-Wire
Breakers—2-Pole



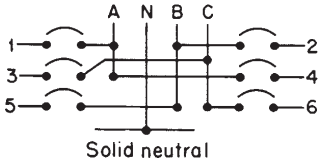

**System 3**
Mains—3-Wire
Branches—3-Wire
Breakers—2-Pole
Solid Neutral



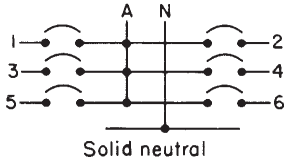

**System 4**
Mains—3-Wire
Branches—2-Wire
Breakers—Single-Pole
Solid Neutral



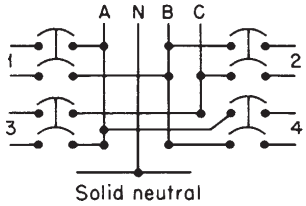

**System 5**
Mains—4-Wire, 3-Phase
Branches—2-Wire, 1-Phase
Breakers—Single-Pole
Solid Neutral



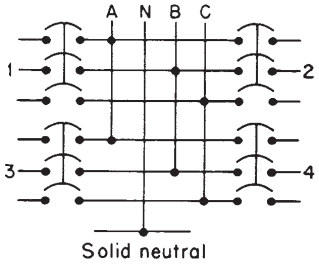

**System 7**
Mains—2-Wire
Branches—2-Wire
Breakers—Single Pole
Solid Neutral



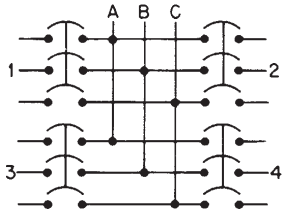

**System 8**
Mains—4-Wire, 3-Phase
Branches—3-Wire, 1-Phase
Breakers—2-Pole
Solid Neutral



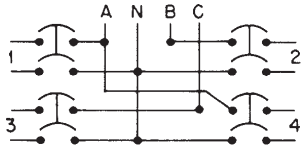

**System 11**
Mains—4-Wire, 3-Phase
Branches—4-Wire, 3-Phase
Breakers—3-Pole
Solid Neutral



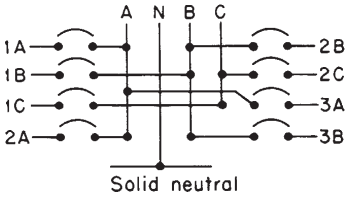

**System 12**
Mains—3-Wire, 3-Phase
Branches—3-Wire, 3-Phase
Breakers—3-Pole



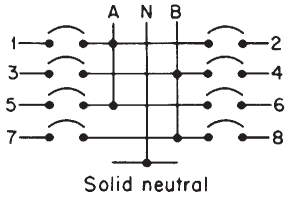

**System 13**
Mains—4-Wire, 3-Phase
Branches—2-Wire, 1-Phase
Breakers—2-Pole



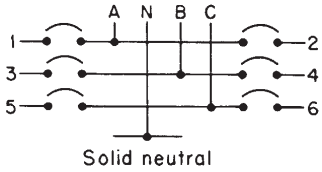

**System 15**
Mains—4-Wire, 3-Phase
Branches—3-Wire, 1-Phase
Breakers—Single-Pole
Solid Neutral



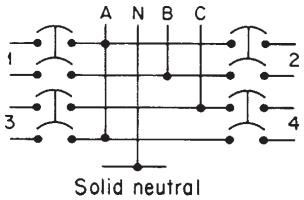

**System 24**
Mains—3-Wire
Branches—2-Wire
Breakers—Single-Pole
Solid Neutral



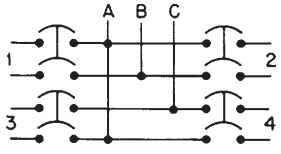

**System 25**
Mains—4-Wire, 3-Phase
Branches—2-Wire, 1-Phase
Breakers—Single-Pole
Solid Neutral



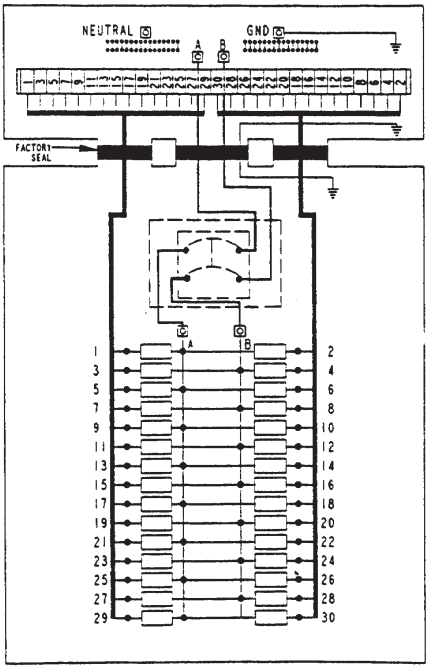

**System 28**
Mains—4-Wire, 3-Phase
Branches—3-Wire, 1-Phase
Breakers—2-Pole
Solid Neutral



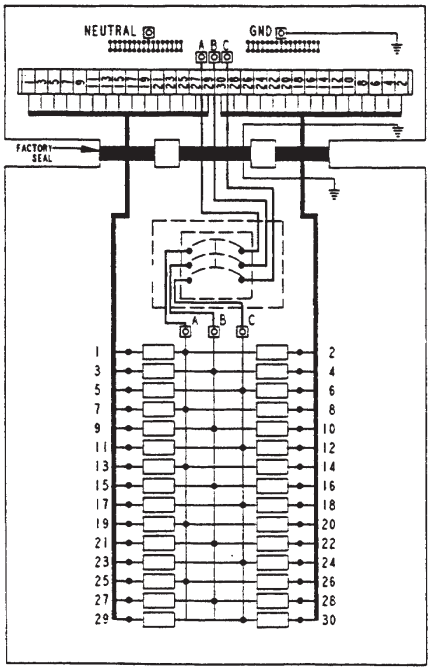

**System 29**
Mains—3-Wire, 3-Phase
Branches—2-Wire, 1-Phase
Breakers—2-Pole



## Wiring Diagram for PowerPlus™ Power Panelboards

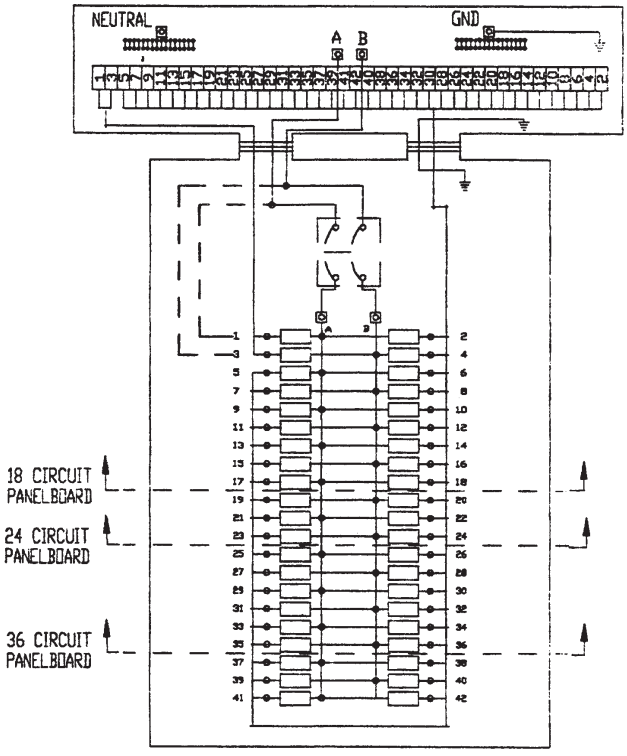



Single Phase Circuit

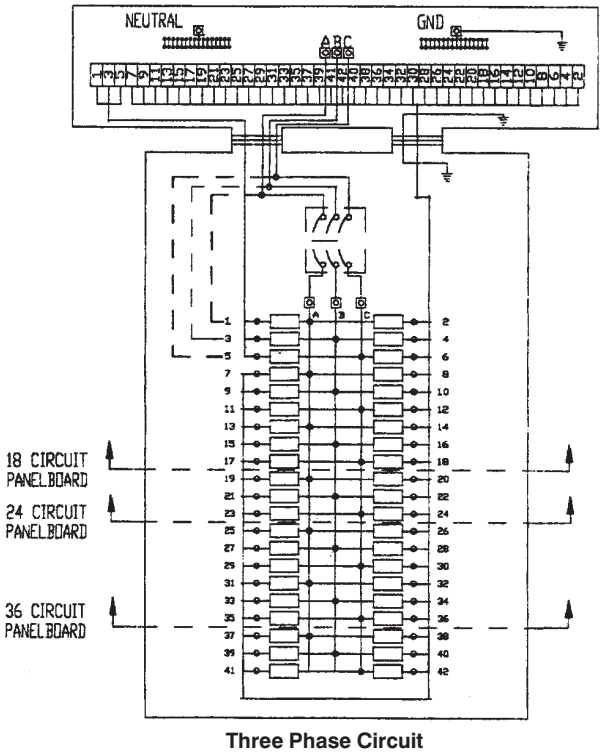



Three Phase Circuit

## Wiring Diagram for 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 petrol chemical 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 1 ½″ 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 pannel. 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
- Actuators automatically align to breaker handles as door is closed
- Neoprene cover gasket meets NEMA Type 4 / CSA Enc. 4 / IP65 requirements, provides watertight seal for superior water and corrosion protection
- Copper bus bar system.

## 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 operators - die cast aluminum (copper-free)
- Lifting bracket - cold rolled steel
- Bus bar - copper

## Standard Finishes:

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

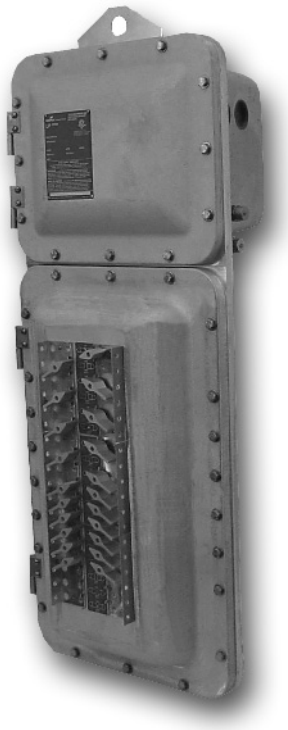
## Certifications and Compliances:

**LP1 panelboards**

- Class I, Groups B, C, D
- Class I, Zone 1 & 2, Ex de IIB + $H_2$
- Class II, Groups E, F, G
- Class III
- NEMA Type 3, 3R, 4*, 4X**, 7B†CD; 9E†FG, 12
- CSA Enc. 3, 4*, 5
- IP65* Enclosure
- UL Listed (Standard: 67, 877, 2279)
- cUL Listed (Certified by UL to CSA C22.2 Nos. 29 & 30)

**LP2 Panelboards**

- Class I, Division 2, Groups B†, C, D
- Class I, Zone 1 & 2, Ex de IIB + $H_2$
- Class II, Division 2, Groups F, G
- Class III
- NEMA Type 3, 3R, 4*, 4X**, 7BCD (Div 2), 9EFG, 12
- CSA Enc. 3, 4*, 5
- IP65* Enclosure
- UL Listed (Standard: 67, 877 (DIV. 2))
- cUL Listed (Certified by UL to CSA C22.2 Nos. 29 & 30)



**LP1 Lighting Panelboard**

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

# 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

**1A**

## 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

Quicklag® is a registered trademark of Cutler-Hammer Inc.

## Options:

| | 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 & 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 |

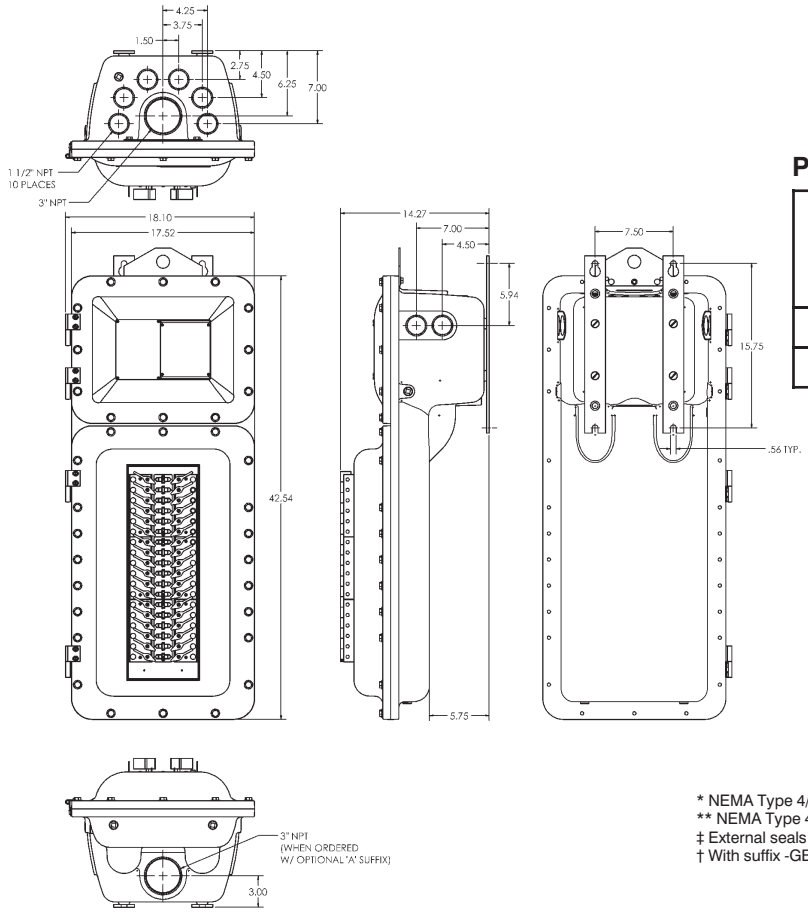
## Breaker Options:

| | Suffix to add to base Cat. # |
|---|---|
| • 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:

| | |
|---|---|
| • 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 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 |

## Dimensions (Inches):




## Panel Capacity:

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

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




US: 1-866-764-5454 CAN: 1-800-265-0502

# 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** 7BCD, 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:
   Three-pole breaker = 3 breaker spaces
   Two-pole breaker = 2 breaker spaces
   Two-pole GFI (or EPD) breaker = 2 breaker spaces
   Single-pole breaker = 1 breaker space
   Single-pole GFI (or EPD) breaker = 1 breaker space

   - Review Panel Capacity table on page 515
   - 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-polebreakers).
   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.

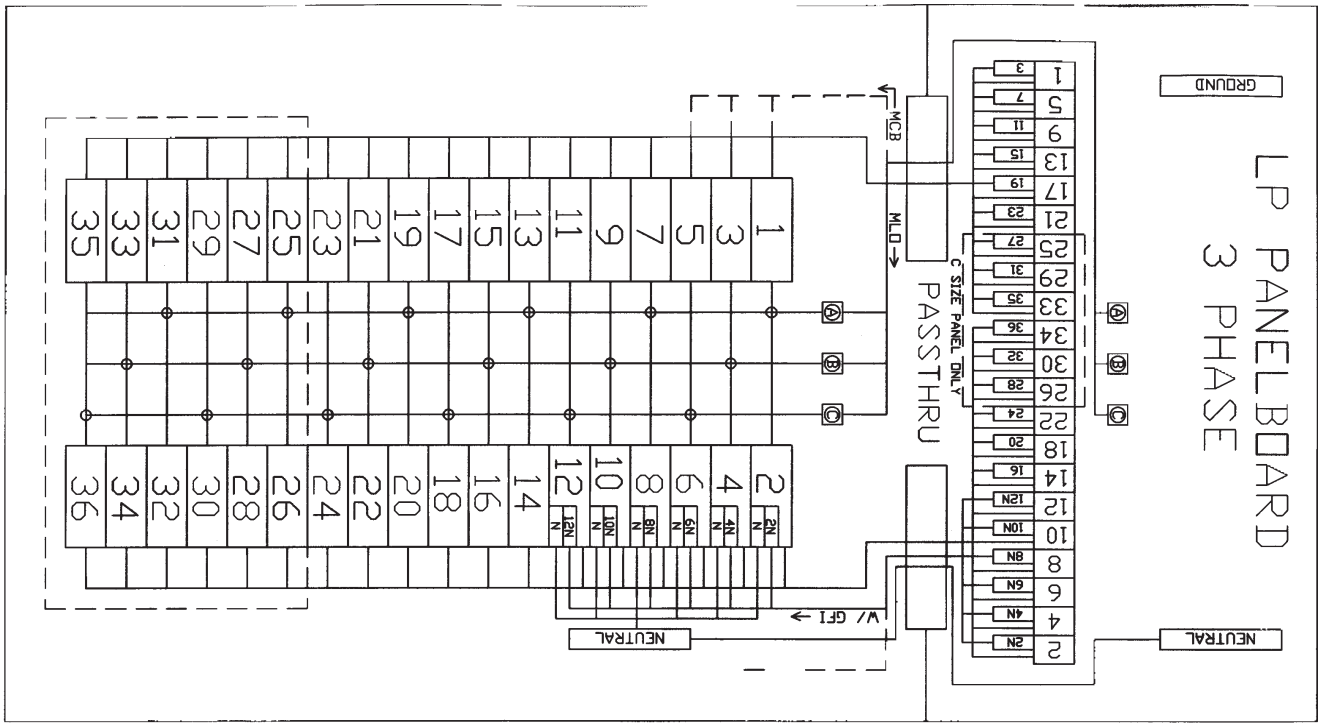
**Example would be ordered as:** LP2C 3 22 G * 05 3 15 *06120G 3M100 A S756V

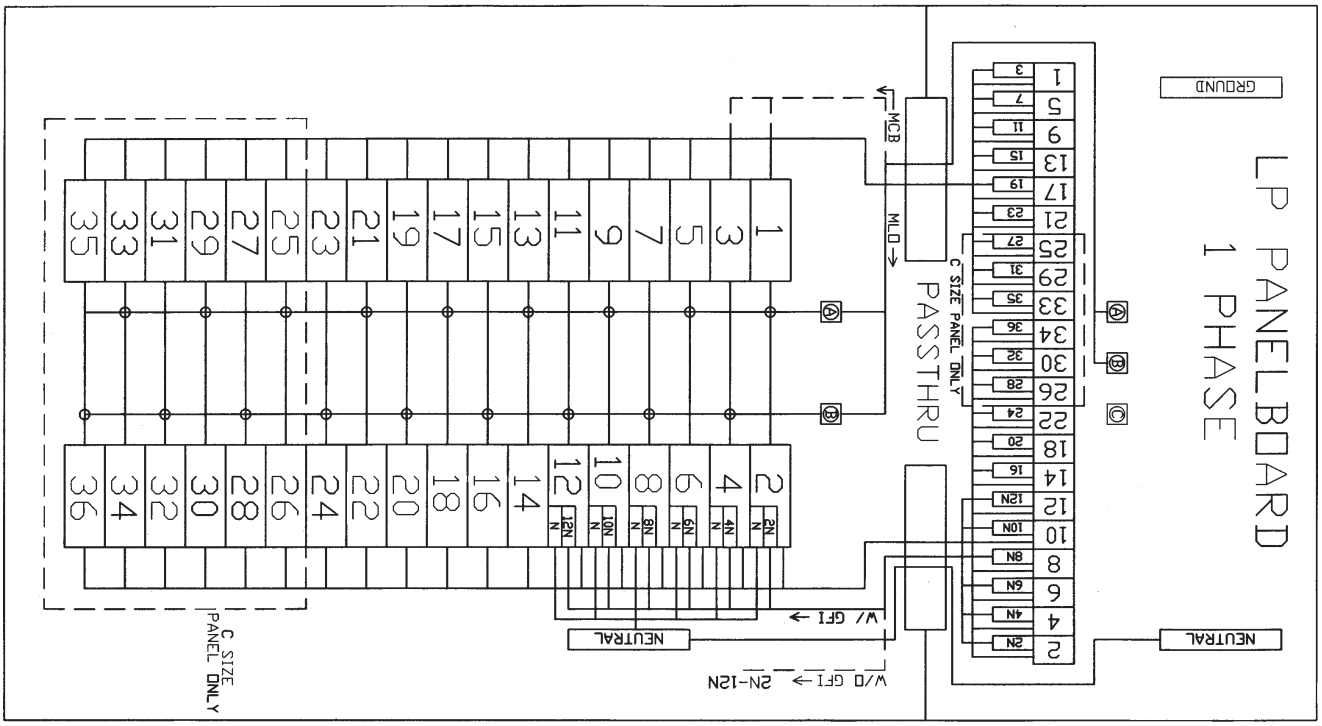
1. Select Div. 2 Lighting Panelboard - **LP2**
   a. **C** size enclosure to handle 21 breaker spaces with main circuit breaker and GFI/EPD protection
   b. **3** phase
   c. 5 three pole = 15 breaker spaces
      6 single pole (GFI) = 6 breaker spaces
      21 breaker spaces
      If odd **#** round up to even **#**:
      **22** breaker spaces
   d. **G**FI breakers included
      (''G'' for GFI, ''E'' for EPD or ''EG'' for both)
      (''V'' for ambient compensated breakers)
      Maximum number of GFI and/or EPD breakers is 6
2. Choose branch circuit breakers (three-pole first)
   6 three-pole with 15 ampere rating:
   a. Insert asterisk (*)
   b. Quantity is 5: **05** (if less than 10 insert 0 before quantity)
   c. Three-pole: **3**
   d. Ampere rating is 15: **15**
3. Additional breakers (three-pole first)
   5 single-pole with 20 amp rating (GFI): ***06120G**
4. Main breaker **3M100**
   (**3**-pole, **M**ain breaker, **100** amp)
5. Alternate feed **A**
   Breathers and drains **S756V**

✓ Available with Lightning Service™ delivery. See Section G for complete details.

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

## Wiring Diagrams:



# PowerPlus™ Panelboards

## Lighting and Heat Tracing
## EPL Series
## D2L 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‡, 7BCD, 9EFG, 12

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

PowerPlus factory sealed Panelboards provide flexibility and labor savings when installed, and for future changes in the field. Panels are prewired to maximum circuit capacity and ratings with field replaceable factory sealed components.

## Applications:

EPL and D2L PowerPLUS panelboards are used:

- in areas made hazardous by the presence of flammable gases and 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.
- in areas where flammable vapors or gases or highly combustible dusts may be present due to accidental or abnormal conditions.
- to accommodate up to 100 amp branch loads (only 3 circuits). Balance is 50 amp.

## Standard Materials:

- Body and cover–cast copper-free aluminum
- Gasket – neoprene
- Operating handles – extruded aluminum (copper-free)
- Operating shafts and bushings, cover bolts, washers, and retractile springs – stainless steel
- Circuit breaker operators – die cast aluminum (copper-free)
- Lifting bracket – cold rolled steel
- Hinges – Stainless Steel

## Standard Finishes:

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

## Certifications and Compliances:

### EPL Series:

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

### D2L Series (Division 2):

- NEC/CEC:
  Class I, Division 2, Groups B†, C,D
- NEMA/EEMAC: 3, 4‡, 7B†CD, 12
- CSA ENC. 3, 4, 5
- UL Standard: 67, 877
- cUL (to CSA Standard C22.2 Nos. 29 & 30)
- IP65

* External seals required for Class I, Group B, Div. 1.

† Group B and E suitability with suffix GB; see options listings.

‡ NEMA 4 hosetight with breather and drain openings plugged.

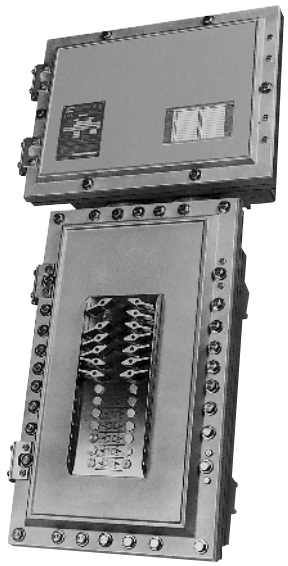
## Features:

- Factory-sealed, no external seals required for most branch circuits.*
- Fully wired from circuit breaker housing to pre-numbered terminals in wiring compartment.
- Stainless Steel hinges allow the cover to swing well out of the way.
- Stainless steel, quick release, captive hex-head bolts with spring loaded action provide a clear indication that cover bolts are fully retracted from body.
- Cast copper-free aluminum construction (less than 0.4 of 1%) provides excellent resistance to corrosion.
- External flange design–wide unobstructed cover opening provides a completely accessible interior for wiring.
- Neoprene cover gasket provides a watertight seal to meet NEMA 4/CSA ENC. 4/IP65 requirements, and provides superior protection for enclosed equipment against water and corrosion.
- External operating handles for circuit breakers can be padlocked in either ''ON'' or ''OFF'' positions.
- Furnished with (1) 3 ½″ and (12) 1 ½″ conduit openings, all with Cooper Crouse-Hinds LNR conduit liner bushings.
- Available with or without main circuit breaker.
- Breather and drain provided for each enclosure.
- Isolated neutral and ground bar provided.
- Aluminum bus is standard

## Electrical Ratings:

Branch Breaker (120/240VAC Quicklag® Bolt-ON) Trip Ratings:
1, 2, 3-pole
10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 70, 80, 90, 100 amp

- GFI type, 1, 2-pole (5mA sensitivity) 15, 20, 25, 30, (40 amp - available 2 pole only)
- EPD type, 1 2-pole(30mA sensitivity) 15, 20, 25, 30, (40 amp - available 2 pole only)



D2LB Lighting Panelboard

## Options:

To add the following special features to the panelboard, just 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.

Epoxy finish, external . . . . . **S752**
Epoxy finish, internal and external . . . . . **S753**
Square head plugs on all openings . . . . **S872**
Stainless steel terminal housing . . . . . **S871**
Plexiglass breaker operator cover. . . . . **S877**
For EPL less terminal housing . . . . . **S836**
Groups B and E suitability . . . . . **GB**

- **A standard panelboard (field wiring enclosure on top) has conduit openings for power and branch circuits on top.**
- **To order a panelboard with main power feed from the bottom, and branch circuits on top. (Alternate) add . . . . . -A**
- To order an inverted panelboard (field wiring enclosure on bottom) with conduit openings for power and branch circuits on the bottom, (Inverted) add. . . . . **-I**
- To order an inverted panelboard with main power feed on top, branch circuits on the bottom, (Alternate inverted) combine the above options . . . . . **-A-I**
- Ambient compensated breakers, add suffix **V** after base catalog number (i.e. **D2LC324V**)

# PowerPlus™ Panelboards

## Lighting and Heat Tracing
## EPL Series
## D2L 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‡, 7B†CD, 9E†FG, 12

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

### Main Breaker Trip Ratings:
Size A/B up to 100 amp
- 2, 3-pole
  Size C: 100, 125, 150, 175, 200, 225 amp
- Less than 100A - consult factory

### Main Lugs
B, C size: 225 amp

## Lighting Panelboard Accessories:
Extra circuit breaker operator assemblies
(qty. 3) 1-Pole, GFI, EPD . . . . . **EPL K1**
2-Pole, 3-Pole . . . . . **EPL K3**
Replacement cover plugs for unused circuit breaker positions
(qty. 5) . . . . . **EPL K2**

## Ordering Information:
**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:*
Three-pole breaker = 3 breaker spaces
Two-pole breaker, Two-pole GFI (or EPD) breaker = 2 breaker spaces
Single-pole breaker, Single-pole GFI (or EPD) breaker = 1 breaker space

- Review Table A
- If GFI or EPD breakers are to be included insert ''G'' or ''E'' after base catalog number and review Table B. (eg. D2LB318G)
  *NOTE:* GFI breakers cannot be mixed with EPD breakers in the same panel.

**2.** Using three-pole breakers first, select circuit breakers for lighting panelboard application:
- Place an asterisk (*) before each quantity of circuit breakers.
- First # is number of breakers needed (less than 10 insert 0 before quantity. e.g., 09).
- Second # is number 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 # is 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.

† ‡ – See page 518.

✓ – available with Lightning Service™ delivery. See Section G for complete details.

**4.** To add a main breaker, insert a dash (-), the number of poles (2 or 3), an ''M'' to indicate main breaker, then indicate the amp rating. (See ''electrical ratings'' for trip ratings available.) Three phase panelboards can only have a three-pole main breaker. If no main breaker is specified, the panelboard will have main lugs. No suffix needed in Cat. No. for main lug only.

**Lighting panelboards are available with three 100 amp branch spaces maximum with balance up to 50 amps. For future spaces, to provide for operating mechanism without breaker write 00.** ***(Example: One 3-pole mechanims without breaker: 01300.)***

**Unused breaker positions without designations will be blank and plugged, complete panel will be prewired for future breaker installations.**

## *EPL and D2L Factory Sealed 120/240 Lighting Panelboards*

| Breaker Spaces Needed | DIVISION 1 | | DIVISION 2 | |
|---|---|---|---|---|
| | 1 Phase 3 Wire | 3 Phase 4 Wire | 1 Phase 3 Wire | 3 Phase 4 Wire |
| 14 | EPLB114✓ | EPLB314✓ | D2LB114✓ | D2LB314✓ |
| 16 | EPLB116✓ | EPLB316*✓ | D2LB116✓ | D2LB316*✓ |
| 18 | EPLB118✓ | EPLB318✓ | D2LB118✓ | D2LB318✓ |
| 20 | EPLB120✓ | EPLB320✓ | D2LB120✓ | D2LB320✓ |
| 20 | EPLC120✓ | EPLC320✓ | D2LC120✓ | D2LC320✓ |
| 22 | EPLB122✓ | EPLB322*✓ | D2LB122✓ | D2LB322✓ |
| 22 | EPLC122✓ | EPLC322✓ | D2LC122✓ | D2LC322✓ |
| 24* | EPLB124*✓ | EPLB324*✓ | D2LB124*✓ | D2LB324*✓ |
| 24 | EPLC124✓ | EPLC324✓ | D2LC124✓ | D2LC324✓ |
| 26 | EPLC126✓ | EPLC326✓ | D2LC126✓ | D2LC326✓ |
| 28 | EPLC128✓ | EPLC328✓ | D2LC128✓ | D2LC328✓ |
| 30 | EPLC130✓ | EPLC330✓ | D2LC130✓ | D2LC330✓ |
| 32 | EPLC132✓ | EPLC332✓ | D2LC132✓ | D2LC332✓ |
| 34 | EPLC134✓ | EPLC334✓ | D2LC134✓ | D2LC334✓ |
| 36 | EPLC136✓ | EPLC336✓ | D2LC136✓ | D2LC336✓ |
| 38* | EPLC138*✓ | EPLC338*✓ | D2LC138*✓ | D2LC338*✓ |
| 40* | EPLC140*✓ | EPLC340*✓ | D2LC140*✓ | D2LC340*✓ |
| 42* | EPLC142*✓ | EPLC342*✓ | D2LC142*✓ | D2LC342*✓ |
| Breaker Ready (Empty) ♦ ▲ | EPL(B OR C)100✓ | EPL(B OR C)300 | D2L(B OR C)100 | D2L(B OR C)300 |

★ Items are not available wilth a Main Circuit Breaker, see Table A.
♦ Provided for Main Lug Only; Main breaker must be specified with amperage. Panels to accommodate GFI or EPD breakers must be ordered with at least one such breaker installed.
▲ Not available for GFI or EPD installations.

## *Table A – Panel Capacity*
Maximum Number of Breaker Spaces:

| Panel Size | Max. No. of Branch Spaces | | | Main Breaker Max. Amp. | Available w/GFI, EPD Branch Protection |
|---|---|---|---|---|---|
| | w/Main Lug Only | w/Main Breaker | | | |
| | | 2-pole | 3-pole | | |
| B | 24 | 22 | 21 | 100 | Yes |
| C | 42 | 36 | 36 | 225 | Yes |



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‡, 7B†CD, 9E†FG, 12

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

### 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 2P MCB) |
| C | 21 | 14 |

| | | 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** |

Each panel is equipped with 42 load wires to cover these accommodations and any combination with standard branch breakers. To determine the total number of load wires required to complete your panel:

## Lighting Panelboard 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 B, C, D lighting panelboard with:
- (1) three-pole breaker with 100 amp rating.
- (2) two-pole breakers–both with 30 amp GFI personnel protection.
- (10) one-pole breakers–with 20 amp rating.
- Three-pole main breaker–with 100 amp rating.

**Example would be ordered as:**

**D2L B 3 18 G * 01 3 100 *02230G *10120 –3M100 –GB**

1. Select Div. 2 Lighting panelboard **– D2L**
   **a. B** size enclosure to handle 17 circuits with main circuit breaker and GFI/EPD protection
   **b. 3** phase
   **c.** (1) three-pole = 3 breaker spaces
   + (2) two-pole (GFI) = 4 breaker spaces
   + (10) single-pole = 10 breaker spaces
   **17** breaker spaces
   If odd # round up to even #:
   **18** breaker spaces
   **d.** GFI breakers included (Use ''E'' for EPD)
   Verify load wires required w/panel size (Table B)
   (1) three pole = 3 load wires
   (2) two-pole = 6 load wires
   (10) single-pole = 10 load wires
   19 load wires
   (42 load wires available)

2. Choose branch circuit breakers (3-pole first)
   - (1) three-pole with ampere rating
     a. Insert Asterisk *****
     b. Quantity is 1: **01**
     (if less than 10 insert 0 before quantity)
     c. Three-pole: **3**
     d. Ampere Rating is 100:**100**

3. Additional breakers (three-pole first)
   - (2) two-pole w/30 ampere rating (GFI) . . . . . ***02230G**
   - (10) single-pole w/20 ampere rating . . . . . ***10120**

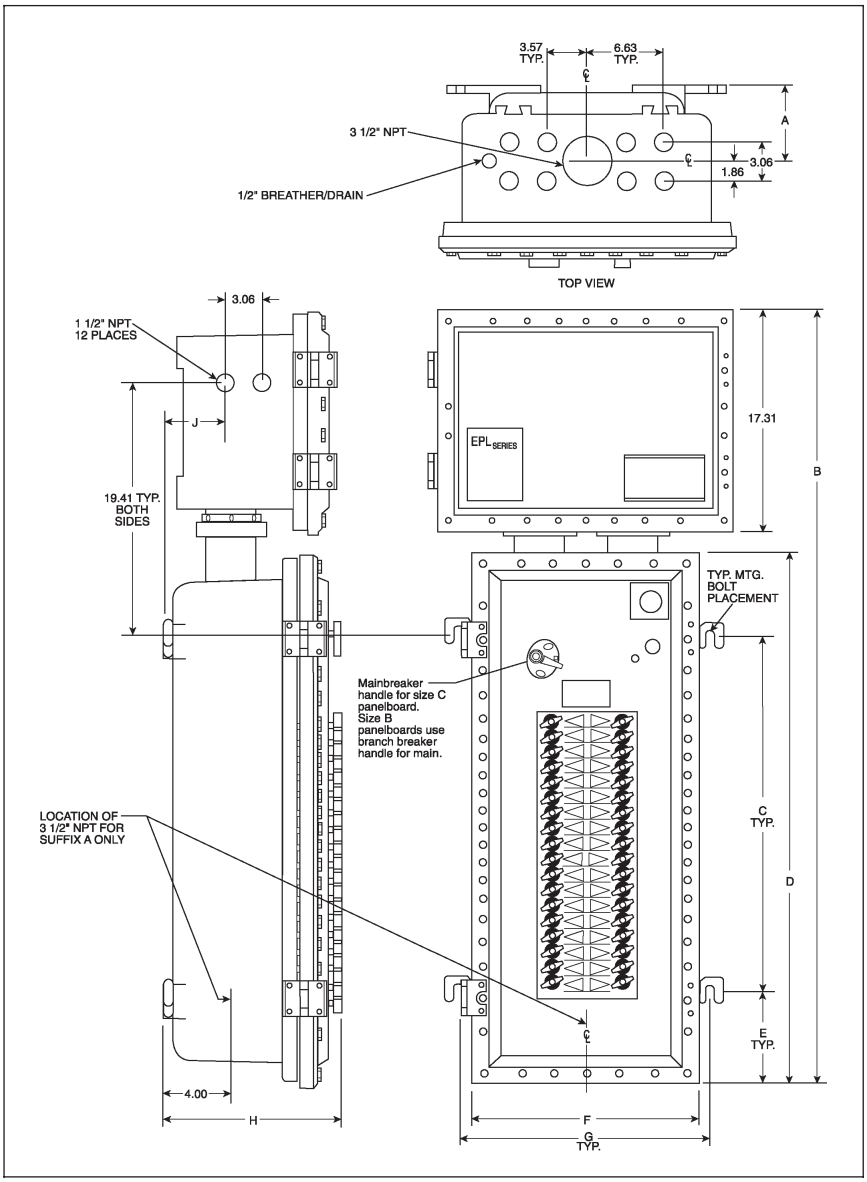
   (For operating mechanisms with no breaker supplied, add ''00'' for amperage)

4. Main Breaker **–3M100**
   - (**3**-pole, **M**ain breaker, **100** Amp)
   - No main supplied **–3M00**

5. Group B construction **-GB**

† ‡ – See page 518.

## Dimensions




### *Lighting Panelboard Panel Size*

| Dimension (inches) | EPLB D2LB | EPLC D2LC |
|---|---|---|
| A | 4.92 | 4.92 |
| B | 47.87 | 60.25 |
| C | 17.50 | 29.50 |
| D | 29.56 | 41.90 |
| E | 6.03 | 7.00 |
| F | 17.56 | 17.90 |
| G | 15.62 | 15.12 |
| H | 12.00 | 12.00 |
| J | 3.75 | 3.75 |

*Dimensions are approximate; not for construction purposes.

† ‡ – See page 518.

# Unibody™ Panelboards

**Lighting and Heat Tracing**
**EPLU Series**
**D2LU Series (Div. 2)**

**Power**
**EXDU Series**
**D2DU 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‡, 7BCD, 9EFG, 12

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



Unibody factory sealed Panelboards provide flexibility and labor savings when installed, and for future changes in the field. Panels are prewired to maximum circuit capacity and ratings with field replaceable factory sealed components in a single cast body with 2 covers.

## Applications:

Unibody panelboards are used:
- in areas made hazardous by the presence of flammable gases and 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.
- in areas where flammable vapors or gases or highly combustible dusts may be present due to accidental or abnormal conditions.
- to accommodate up to 100 amp branch loads.

## Standard Materials:

- Body and cover–cast copper-free aluminum
- Gasket – neoprene
- Operating handles – extruded aluminum (copper-free)
- Operating shafts and bushings, cover bolts, washers, and retractile springs – stainless steel
- Circuit breaker operators – die cast aluminum (copper-free)
- Lifting bracket – cold rolled steel
- Hinges – stainless steel

## Standard Finishes:

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

## Accessories:

Extra circuit breaker operator assemblies for EXDU and D2DU (qty. 3) . . . . . **EXDU K1**

Replacement cover plugs for unused circuit breaker positions for EXDU and D2DU (qty. 5) . . . . . **EXDU K2**

Extra circuit breaker operator assemblies (qty. 3) for EPLU and D2LU . . . . . **EPLU K1**

Replacement cover plugs for unused circuit breaker positions for EPLU and D2LU (qty. 5) . . . . . **EPLU K2**

* External seals required for Class I, Group B, Div. 1.

‡ NEMA 4 hosetight with breather and drain openings plugged.

## Features:

- Factory-sealed, no external seals required for most branch circuits.*
- Fully wired from circuit breaker housing to pre-numbered terminals in wiring compartment.
- Stainless steel hinges allow the cover to swing well out of the way.
- Stainless steel, quick release, captive hex-head bolts with spring loaded action provide a clear indication that cover bolts are fully retracted from body.
- Cast copper-free aluminum construction (less than 0.4 of 1%) provides excellent resistance to corrosion.
- External flange design–wide unobstructed cover opening provides a completely accessible interior for wiring.
- Neoprene cover gasket provides a watertight seal to meet NEMA 4/CSA ENC. 4/IP65 requirements, and provides superior protection for enclosed equipment against water and corrosion.
- External operating handles for circuit breakers can be padlocked in either ''ON'' or ''OFF'' positions.
- Furnished with (1) 3 ½″ and (12) 1 ½″ conduit openings, all with Cooper Crouse-Hinds LNR conduit liner bushings.
- Available with or without main circuit breaker.
- Breather and drain provided for each enclosure.
- Isolated neutral and ground bar provided.

## Options:

To add the following special features to the panelboard, just 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.

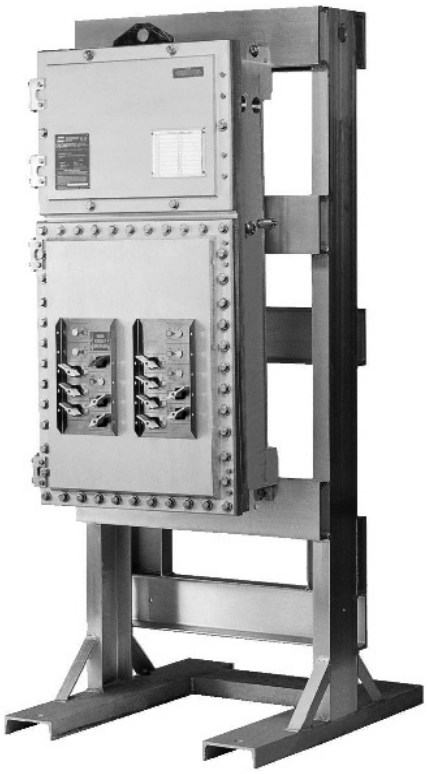
Epoxy finish, external . . . . . **S752**
Epoxy finish, internal and external . . . . . **S753**
All conduit entries plugged with PLG recessed head plugs. . . . . **S822**
All conduit entries plugged with square head plugs. . . . . **S872**

A standard panelboard (field wiring enclosure on top) has conduit openings for power and branch circuits on top.

To order a panelboard with main power feed from the bottom, and branch circuits on top. (Alternate) add. . . . . **-A**

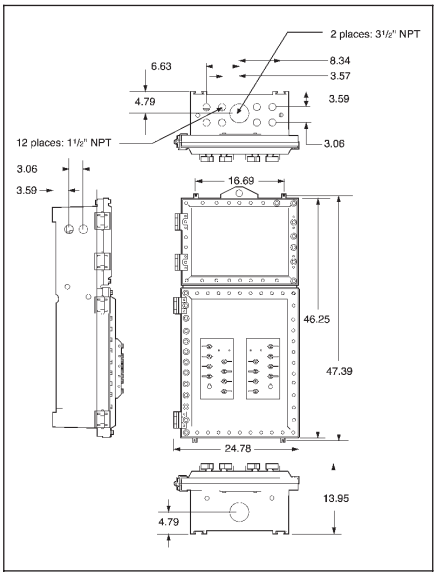
To order an inverted panelboard (field wiring enclosure on bottom) with conduit openings for power and branch circuits on the bottom, (Inverted) add . . . . . **-I**

To order an inverted panelboard with main power feed on top, branch circuits on the bottom, (Alternate inverted) combine the above options . . . . . **-A-I**



D2LU Lighting Panelboard

## Dimensions** (inches)




** Dimensions are approximate, not for construction purposes.

# Unibody™ Panelboards

**Lighting and Heat Tracing**
**EPLU Series**
**D2LU Series (Div. 2)**

**Power**
**EXDU Series**
**D2DU 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‡, 7BCD, 9EFG, 12

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

## Lighting and Heat Tracing

### Electrical Ratings:

**Branch Breaker (120/240 VAC Bolt-On QO® type) Trip Ratings:**

- 1, 2, 3-pole: 10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100 amp
- GFI type (5 mA sensitivity)
  1 pole: 15, 20, 25, 30 amp
  2 pole: 15, 20, 25, 30, 40, 50 amp
- EPD type (30 mA sensitivity)
  1 & 2-pole: 15, 20, 25, 30 amp)
  (EPD = equipment protection device)

**Main Breaker Trip Ratings:**

- 2 or 3-pole: 10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100 amp

**Main Lugs:** 100 amp maximum

### Ordering Information

See ordering information of the PowerPlus Lighting Panelboards. The Unibody catalog numbers follow the same system except the fourth character is a ''U''. Use the following tables to determine the maximum number of branch circuits and their catalog numbers.

*Note:*

| | |
|---|---|
| Three-pole breaker | = 3 circuits |
| Two-pole breaker | = 2 circuits |
| Single-pole breaker | = 1 circuits |
| Two-pole breaker GFI or EPD | = 3 circuits |
| Single-pole breaker GFI or EPD | = 2 circuits |

QO is a registered trademark of Square D Company

### Maximum Number of Branch Circuits

| Type of Circuits | Main Lug Only (MLO) Circuits | With Main Circuit Breaker Circuits | |
|---|---|---|---|
| | | Single Phase | Three Phase |
| Total number | 24 | 22 | 21 |
| Branches up to 100 Amp | 3 | 3 | 3 |
| Branches up to 50 Amp | 21 | 19 | 18 |
| Single-pole GFI/EPD | 21 | 21 | 21 |
| Two-pole GFI/EPD | 12 | 11 | 10 |

*Note:* For applications up to 42 circuits, use the PowerPlus™ EPLC or D2LC series.

### EPLU and D2LU Factory-Sealed 120/240 Volt Lighting Panelboards

| Branch Circuits Needed | DIVISION 1 | | DIVISION 2 | |
|---|---|---|---|---|
| | 1 Phase 3 Wire | 3 Phase 4 Wire | 1 Phase 3 Wire | 3 Phase 4 Wire |
| 0 | EPLU100✓ | EPLU300✓ | D2LU100✓ | D2LU300✓ |
| 6 | EPLU106✓ | EPLU306✓ | D2LU106✓ | D2LU306✓ |
| 8 | EPLU108✓ | EPLU308✓ | D2LU108✓ | D2LU308✓ |
| 10 | EPLU110✓ | EPLU310✓ | D2LU110✓ | D2LU310✓ |
| 12 | EPLU112✓ | EPLU312✓ | D2LU112✓ | D2LU312✓ |
| 14 | EPLU114✓ | EPLU314✓ | D2LU114✓ | D2LU314✓ |
| 16 | EPLU116✓ | EPLU316✓ | D2LU116✓ | D2LU316✓ |
| 18 | EPLU118✓ | EPLU318✓ | D2LU118✓ | D2LU318✓ |
| 20 | EPLU120✓ | EPLU320✓ | D2LU120✓ | D2LU320✓ |
| 22 | EPLU122✓ | EPLU322✓ | D2LU122✓ | D2LU322✓ |
| 24 | EPLU124✓ | EPLU324✓ | D2LU124✓ | D2LU324✓ |

## Power Distribution

### Electrical Ratings:

**Branch Breaker Trip Ratings:**

- 1-pole: 15, 20, 25, 30, 35, 40, 45, 50, 60, 70 amp
- 2 & 3-pole: 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100 amp

**Main Breaker Trip Ratings:**
2 or 3-pole: 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100 amp

**Main Lug Only Rating:**
150 amp maximum

**Circuit Capacity**
Maximum number of breaker spaces:

| | |
|---|---|
| Single-pole | 18 |
| Two-pole | 8 |
| Three-pole | 6 |

### Ordering Information

See ordering information of the PowerPlus Power Panelboards. The Unibody catalog numbers follow the same system except the fourth character is a ''U''. Use the following tables to determine the maximum number of branch circuits and their catalog numbers.

*Note:* The number of circuits is equal to the number of poles for a given power panelboard circuit breaker.

✓ – available with Lightning Service™ delivery.
See Section G for complete details.

### Maximum Number of Branch Circuits

| Type of Circuit | Main Lug Only (MLO) Circuits | With Main Circuit Breaker Circuits | |
|---|---|---|---|
| | | Single Phase | Three Phase |
| Total number | 18 | 16 | 15 |
| Branches up to 100 Amp | 3 | 3 | 3 |
| Branches up to 70 Amp | 15 | 13 | 12 |

*Note:* For applications up to 30 circuits, use the PowerPlus™ EXDC or D2DC series.

### EXDU and D2DU Factory-Sealed 480 Volt Power Panelboards

| Branch Circuits Needed | DIVISION 1 | | DIVISION 2 | |
|---|---|---|---|---|
| | 1 Phase 3 Wire | 3 Phase 4 Wire | 1 Phase 3 Wire | 3 Phase 4 Wire |
| 0 | EXDU100✓ | EXDU300✓ | D2DU100✓ | D2DU300✓ |
| 6 | EXDU106✓ | EXDU306✓ | D2DU106✓ | D2DU306✓ |
| 8 | EXDU108✓ | EXDU308✓ | D2DU108✓ | D2DU308✓ |
| 10 | EXDU110✓ | EXDU310✓ | D2DU110✓ | D2DU310✓ |
| 12 | EXDU112✓ | EXDU312✓ | D2DU112✓ | D2DU312✓ |
| 14 | EXDU114✓ | EXDU314✓ | D2DU114✓ | D2DU314✓ |
| 16 | EXDU116✓ | EXDU316✓ | D2DU116✓ | D2DU316✓ |
| 18 | EXDU118✓ | EXDU318✓ | D2DU118✓ | D2DU318✓ |

* External seals required for Class I, Group B, Div. 1.
‡ See page 522.

# 1A PowerPlus™ Panelboards

**Power**
**EXD Series**
**D2D 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‡, 7B†CD, 9E†FG, 12

Explosionproof
Dust-Ignitionproof
Wet Locations
Watertight
Factory Sealed*

## Applications:

EXD and D2D PowerPlus panelboards are used:
- in areas made hazardous by the presence of flammable gases and vapors, and combustible dusts.
- in areas subject to weather, dampness and corrosion.
- 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 100 amp branch loads.

## Standard Materials:

- Body and cover – cast copper-free aluminum
- Gasket – neoprene
- Hinges – Stainless steel
- Operating handles – extruded aluminum (copper-free)
- Operating shafts and bushings, cover bolts, washers, and retractile springs – stainless steel
- Circuit breaker operators – die cast aluminum (copper-free)
- Lifting bracket – cold rolled steel

## Standard Finishes:

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

## Certifications and Compliances:

**EXD Series:**
- NEC/CEC: Class I, Division 1 & 2, Groups B†,C,D
  Class II, Division 1, Groups E†,F,G, Class II, Division 2, Groups F,G,
  Class III
- NEMA/EEMAC: 3, 4‡, 7BCD, 9EFG, 12
- UL Standard: 67, 877
- cUL (to CSA Standard C22.2 Nos. 29 & 30)

**D2D Series: (Div. 2)**
- NEC/CEC: Class I, Division 2, Groups B†,C,D
- NEMA/EEMAC: 3, 4‡, 7BCD, 12
- UL Standard: 67, 877
- cUL (to CSA Standard C22.2 Nos. 29 & 30)

## Features:

- Factory-sealed, no external seals required for branch circuits.*
- Fully wired from circuit breaker housing to pre-numbered terminals in wiring compartment.
- Stainless steel hinges allow the cover to swing well out of the way.
- Stainless steel, quick release, captive hex-head bolts with spring loaded action provide a clear indication that cover bolts are fully retracted from body.
- Cast copper-free aluminum construction (less than 0.4 of 1%) provides excellent resistance to corrosion.
- Copper bus is standard

## Features: (continued)

- External flange design – wide unobstructed cover opening provides a completely accessible interior for wiring.
- Neoprene cover gasket provides a watertight seal to meet NEMA 4 requirements, and provides superior protection for enclosed equipment against water and corrosion.
- External operating handles for circuit breakers can be padlocked in either ''ON'' or ''OFF'' positions.
- Furnished with (1) 3½″ and (12) 1½″ conduit openings, all with Cooper Crouse-Hinds LNR conduit liner bushings.
- Available with or without main circuit breaker.
- Breathers and drains provided as standard for each enclosure

## Options:

To add the following special features to the panelboard, just 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.

Epoxy finish, external . . . . . **S752**
Epxoy finish, internal and external . . . . . **S753**
Stainless steel terminal housing . . . . . **S871**
Square head plugs in all openings . . . . . **S872**
EXD less terminal housing . . . . . **S836**
Groups B and E suitability . . . . . **GB**
Supplied with 600 VAC FDB frame breakers . . . . . **FB600**
- Supplied with 600 VAC FD Frame breakers . . . . . **FD600**
- Supplied with 600 VAC HFD Frame breakers. . . . . **HFD600**

A standard EXD and D2D (field wiring enclosure on top) has conduit openings for power and branch circuits on top.

To order a panelboard with main power feed from the bottom, and branch circuits on top, (**A**lternate) add. . . . . **–A**
To order an inverted EXD or D2D (field wiring enclosure on bottom) with conduit openings for power and branch circuits on the bottom, (**I**nverted) add . . . . . **–I**
To order an inverted panelboard with main power feed on top, branch circuits on the bottom (**I**nverted **A**lternate) combine suffixes, eg.. . . . . **–A-I**

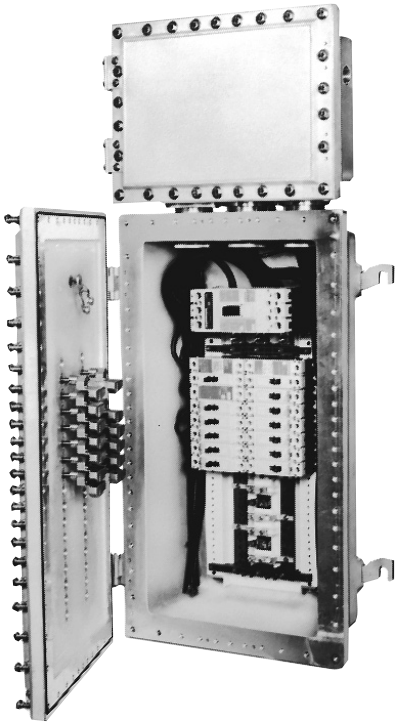
## Accessories:

Extra circuit breaker operator assemblies (qty. 3) . . . . . **EXD K1**
Replacement cover plugs for unused circuit breaker positions (qty. 5) . . . . . **EXD K2**

## Circuit Capacity:

Maximum Number of Breaker Spaces:

| | |
|---|---|
| Single-pole | 30 |
| Two-pole | 14 |
| Three-pole | 10 |



**EXD Panelboard**
**Weight – 490lbs.**

## Circuit Breaker Ratings:

(Cutler-Hammer, Series C)

**Circuit Breaker Trip Ratings:**
15, 20, 30, 40, 50, 60, 70, 80, 90, 100 amp
- EHD frame circuir breakers
  Single-Pole – 277 VAC or 125 VDC
  Two and Three-Pole – 480 VAC or 250 VDC
- FDB frame (600 VAC) available, see options

**Main Breaker Trip Ratings:**
70, 100, 150, 200, 225 amp
- JDB frame circuit breakers
  Two and Three-Pole – 600 VAC or 250 VDC
  Main Lugs: 225 amp

† Group B and E suitability with suffix GB; see options.
‡ NEMA 4 hosetight with breather and drain openings plugged
* External seals required for Class I, Group B, Div. 1.

## Ordering Information:

**1.** Select basic panelboard catalog number from listing:
- Determine phase (power panelboards are available with single-phase or three-phase wiring).
- Determine a total even number of circuits needed to complete your desired power panelboard.

*NOTE:*
Three-pole breaker = 3 circuis
Two-pole breaker = 2 circuits
Single-pole breaker = 1 circuit

**2.** Select circuit breaker for power panelboard application:
- Place an asterisk (*) before each quantity of circuit breakers.
- First # is number of breakers needed (less than (10) insert 0 before quantity).
- Second # is number of poles (start with three-pole breakers).
- Third # is the ampere rating needed (start with highest ampere rating).

*NOTE:* Single phase panelboards can have single or two-pole breakers. Three phase panelboards can have single, two, or three-pole breakers.

**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 dash (–), the number of poles (2 or 3), an ''M'' to indicate main breaker, then indicate the amp rating (Main breakers are available with 70, 100, 150, 200, or 225 amp ratings). Single phase panelboards can have a two-pole or three-pole main breaker. If no main breaker is specified, the panelboard will have main lugs. No suffix needed in Cat. No. for main lug only.

**Power panelboards are available with three 80-100 amp branch circuits maximum, with balance up to 70A. For future spaces, to provide for operating mechanism without breaker, write 00. *(Ex. One 3 pole mechanism without breaker: 01300).***

**Unused breaker positions without designations will be plugged; complete panel will be prewired for future breaker installations.**

## Catalog Number Example:

A three phase, Class I, Div. 1 power panelboard with:
- (2) three-pole breakers – both with 50 amp rating
- (3) two-pole breakers – each with 30 amp rating
- (10) single-pole breakers – each with 20 amp rating
- (8) single-pole breakers – each with 15 amp rating
- Three-pole main breaker – with 150 amp rating
- Inverted with alternate feed

## Ordered as:

**EXDC 3 30 * 02 3 50 *03230 *10120 *08115 –3M150 –A-I**

1. Select power panelboard **–EXDC**
   a. 3 phase
   b. (10) single poles = 10 circuits
   + (8) single poles = 8 circuits
   + (3) two poles = 6 circuits
   + (2) three poles = 6 circuits
   **30** circuits

2. Choose circuit breakers (3-pole first)
   - (2) three-poles with ampere rating
   a. Insert Asterisk *
   b. Quantity is 2: **2**
   (if less than (10) insert 0 before quantity)
   c. Three-pole: **3**
   d. Ampere Rating is 50:**50**

3. Additional breakers (three-pole first)
   - (3) two-pole w/30 ampere rating . . . . . ***03230**
   - (10) single-pole w/20 ampere rating . . . . . ***10120**
   - (8) single-pole w/15 ampere rating . . . . . ***08115**
   - For operating mechanism with no breaker supplied, add ''00'' for amperage

4. Main Breaker **–3M150**
   - (**3**-pole, **M**ain breaker, **150** Amp)
   - No main supplied **–3M00**

5. Inverted and Alternate feed **–A-I**

† See page 524.
* See page 524.
‡ See page 524.

# PowerPlus™ Panelboards

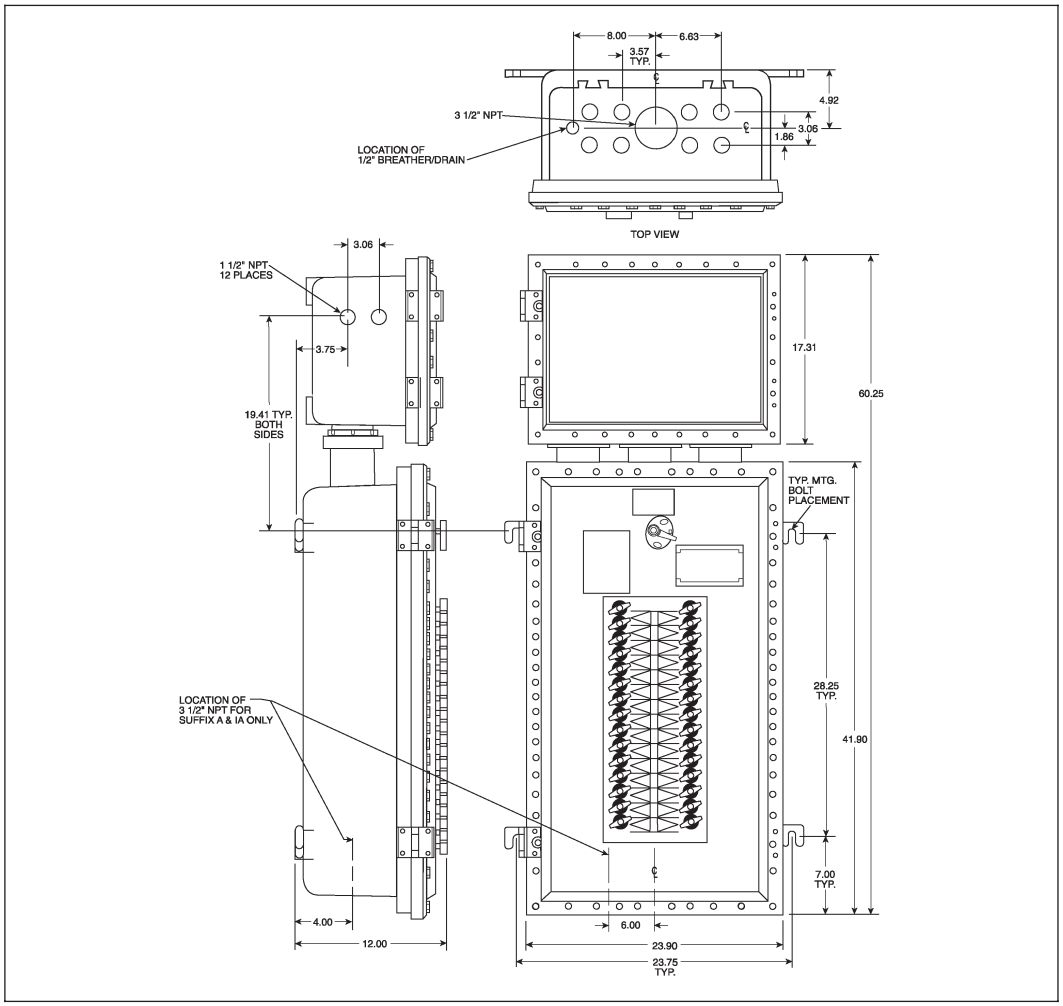
**Power**
**EXD Series**
**D2D Series (Div. 2)**

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‡, 7B†CD, 9E†FG, 12

## EXD and D2D Factory-Sealed 480 Volt Power Panelboards

| | DIVISION 1 | | DIVISION 2 | |
|---|---|---|---|---|
| **Circuits** | **1 Phase, 3 Wire** | **3 Phase, 4 Wire** | **1 Phase, 3 Wire** | **3 Phase, 4 Wire** |
| 6 | EXDC106✓ | EXDC306✓ | D2DC106✓ | D2DC306✓ |
| 8 | EXDC108✓ | EXDC308✓ | D2DC108✓ | D2DC308✓ |
| 10 | EXDC110✓ | EXDC310✓ | D2DC110✓ | D2DC310✓ |
| 12 | EXDC112✓ | EXDC312✓ | D2DC112✓ | D2DC312✓ |
| 14 | EXDC114✓ | EXDC314✓ | D2DC114✓ | D2DC314✓ |
| 16 | EXDC116✓ | EXDC316✓ | D2DC116✓ | D2DC316✓ |
| 18 | EXDC118✓ | EXDC318✓ | D2DC118✓ | D2DC318✓ |
| 20 | EXDC120✓ | EXDC320✓ | D2DC120✓ | D2DC320✓ |
| 22 | EXDC122✓ | EXDC322✓ | D2DC122✓ | D2DC322✓ |
| 24 | EXDC124✓ | EXDC324✓ | D2DC124✓ | D2DC324✓ |
| 26 | EXDC126✓ | EXDC326✓ | D2DC126✓ | D2DC326✓ |
| 28 | EXDC128✓ | EXDC328✓ | D2DC128✓ | D2DC328✓ |
| 30 | EXDC130✓ | EXDC330✓ | D2DC130✓ | D2DC330✓ |
| Breaker ready (empty) | EXDC100✓ | EXDC300✓ | D2DC100✓ | D2DC300✓ |

## Dimensions (inches):




‡† See page 524.
✓ – available with Lightning Service™ delivery. See Section G for complete details.

# D2Z Zone 1 Division 2 Panelboards

## Non metallic Factory Sealed 1, 2, 3, 4 pole breakers

CL. I, Div. 2, Groups A, B, C, D
CL. I, Zone 1, Groups A, B, C, D
CL. II, Div. 1, Groups E, F, G

AEx de II C T4, T6
Ex de IIC T4, T6
EEx de IIC T4, T6
NEMA 4X, IP 66

## Applications:

D2Z panelboards are designed specifically for use in:
- Class 1, Zone 1, Division 2, Groups A, B, C, D hazardous areas where flammable vapors or gases may be present due to accident or abnormal locations.
- in damp, wet or corrosive locations.
- indoors or outdoors in Zone 1, Division 2 areas of petroleum refineries, chemical and petrochemical plants, and other process industry facilities.

## Features:

- UL, cUL, PTB certified for Class 1, Zone 1, Division 2 hazardous areas.
- Fiberglass-reinforced polyester enclosures:
  - Nonmetallic, corrosion-free.
  - Increased safety Ex-e protection.
  - Impact resistant.
  - NEMA 4X, IP 66 protection.
  - Enclosure meets UL 94-VO.
  - UV rated.
- Unique design allows for panels with more than 42 circuits.
- Main disconnect switches 40, 80, 125, 180A
- Optional flameproof Ex-d fusing of main disconnect.
- Flameproof Ex-d encapsulated branch breakers:
  - Thermal-magnetic protection up to 40A.
  - Auxiliary contacts (mechanical or electrical).
  - Lockout on components.
  - Prewired to Increase Safety Ex-e terminal blocks.
  - GFI branch breakers (EPDs).
- Clear, NEMA 4X window, hinged for actuation or breakers.
- Double lockout on windows and breakers.
- Brass plates for hub or cable gland entries.
- Enclosures can be mounted on switchrack frames or walls.
- Completely wired ready for connection to terminal blocks.

## Certificates and Compliances

| | |
|---|---|
| Certifications | PTB – No. Ex-94C. 1037, UL, cUL |
| Degree of Protection | NEMA 4X<br>IP 66 to IEC 529 |
| UV Resistance | ISO 4892/EN 50 014 |
| Enclosure Material | Glass-reinforced polyester. |
| Temperature Ratings | –55°C to 55°C |
| Rated Voltage | 480 VAC |
| Rated Current | Max. 180A |

- NEC: Class I, Division 2, Groups A, B, C, D
  Class I, Zone 1, Groups A, B, C, D
- CEC: Class I, Division 2, Groups A, B, C, D
  Class I, Zone 1, Groups A, B, C, D
  Class II, Division 1, Groups E, F, G
- UL Standards: 67, 877
- CSA Standards: C22.2 Nos. 29 & 30

## Note:

D2Z Series panelboards are now available with 316L stainless steel enclosures. This material is ideal for wash down and corrosive areas requiring product endurance in adverse locations. To order, simply add suffix ''S860'' to catalog number.

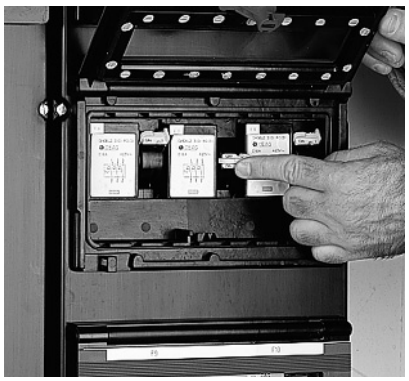
# D2Z Zone 1 Division 2 Panelboards

## Non metallic Factory Sealed 1, 2, 3, 4 pole breakers

CL. I, Div. 2, Groups A-D
CL. I, Zone 1, Groups A-D
CL. II, Div. 1, Groups E, F, G

AEx de II C T4, T6
Ex de IIC T4, T6
EEx de IIC T4, T6
NEMA 4X, IP 66

Technical Data



- **Large windows** permit easy viewing and quick access to breakers without opening the enclosures.
- **Lockouts** standard for both windows and breakers
- **Up to 6 single-pole breakers** can be installed under one window.
- **NEMA 4X, IP 66 protection.**
- **Window locks** with 5⁄16″ (8mm) Allen Key.

**Main Switch**

- 40A main switch, 4-pole, optional fusing in enclosure with window(s).
- 80, 125 and 180A main switch, 4-pole, optional fusing in enclosure.

| Branch Circuit Breakers 1-pole, 2-pole, 3-pole, 4-pole; with EPD protection 1-pole + Neutral, 2-pole; 2, 6, 10, 16, 20, 25, 32 and 40 Amps | |
|---|---|
| Explosion Protection | EEx de IIC T6<br>AEx de IIC T6<br>Class I, Zone 1, Div. 2 Groups A, B, C, D<br>Class II, Div. 1 Groups E, F, G, cUL |
| Certifications | UL, cUL<br>PTB - No. Ex-94.C. 1035 U<br>PTB 98 ATEX 1087 U |
| Rated Operating Voltage | Up to max. 480 VAC |
| Rated Current | Up to 40A, See page 1A-28 |
| Rated Switching Capacity | 10k AIC |
| Tripping Characteristics | ‘‘B’’ or ‘‘K’’* |
| Tripping Current for EPDs | 30mA (up to 300mA on request) |
| Enclosure Materials | Fiberglass-reinforced polyester |

| Optional Auxiliary/Signal Contacts** | |
|---|---|
| Rated Voltage | 250 VAC |
| Rated Current | 5A |

* ‘‘B’’ Branch breakers are used for all general applications such as lighting and heat-tracing.
Type ‘‘K’’ breakers are used for MOVs and portable power. Contact factory for other application.

** Aux contacts indicate mechanical or electrical tripping
Signal contacts indicate only electrical tripping and are used primarily on heat-tracing circuits.
Branch breakers with signal contacts require next larger breaker enclosure.

| Main Disconnect Switch 40, 80, 125, 180A, 4-pole | | | | | |
|---|---|---|---|---|---|
| Explosion Protection | EEx de IIC T6<br>AEx de IIC T6<br>Class I, Zone 1, Div. 2 Groups A, B, C, D<br>Class II, Div. 1 Groups E, F, G, cUL | | | | |
| Certifications | 40-180A | UL, cUL<br>PTB 98 ATEX 1031 U | | | |
| | 40A | PTB – No, Ex-93C. 1028U | | | |
| | 80A | PTB – No. Ex-85B. 1055U | | | |
| | 125/180A | PTB – No. Ex-86B. 1048U | | | |
| Rated Operating Voltage | Up to 690 VAC | | | | |
| Motor Switching Capacity AC3*** | Type | 230V | 400V | 500V | 690V |
| | 40A | 40A | 40A | 40A | 40A |
| | 80A | 80A | 80A | 80A | 80A |
| | 125A | 125A | 125A | 125A | 125A |
| | 180A | 180A | 180A | 150A | 150A |

*** See IEC 947-4-1: 1990.

# D2Z Zone 1 Division 2 Panelboards

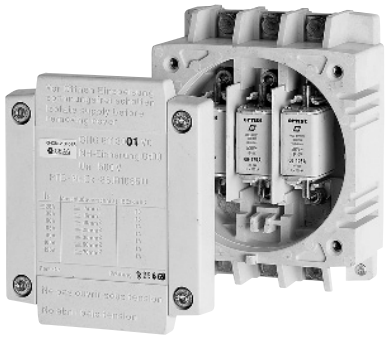
## Non metallic Factory Sealed 1, 2, 3, 4 pole breakers

CL. I, Div. 2, Groups A-D
CL. I, Zone 1, Groups A-D
CL. II, Div. 1, Groups E, F, G

AEx de II C T4, T6
Ex de IIC T4, T6
EEx de IIC T4, T6
NEMA 4X, IP 66

| Main Fuse, 3-pole | | |
|---|---|---|
| Explosion Protection | EEx de IIC T4, T6<br>AEx de IIC T4, T6<br>Class 1, Zone 1, Div. 2 Groups A, B, C, D | |
| Certifications | UL, cUL<br>PTB – No. Ex-86.B.1065U | |
| Rated Operating Voltage | Up to max. 500 VAC | |
| Rated Current | Current | Temperature Class |
| | 25A | T6 |
| | 35A | T5 |
| | 50A | T4 |
| | 63A | T4 |
| | 80A | T4 |
| | 100A | T4 |
| | 125A | T4 |

Recommended manufacturer: Cooper Bussman type NH00G fuses for general use or N00M for motor applications.
Specify Amperage (Fuses not provided)



● **Main Fuse, type NH**

| Standard Entries | | |
|---|---|---|
| | **Brass gland plate with Zone 1 Myers adapter hubs: (STM series)** | **Metric Entries (remove hubs)** |
| Main supply | (1) 2″ + (3) 1″ | (1) M63 + (3) M32 |
| Branches | (9) ¾″ | (9) M25 |

● **Universal Wiring** – Zone 1 Myers® adapter hubs for conduit or Terminator™ cable glands.
● **Stainless Steel Hubs** – available upon request.

# D2Z Zone 1 Division 2 Panelboards

## Non metallic Factory Sealed 1, 2, 3, 4 pole breakers

CL. I, Div. 2, Groups A-D
CL. I, Zone 1, Groups A-D
CL. II, Div. 1, Groups E, F, G

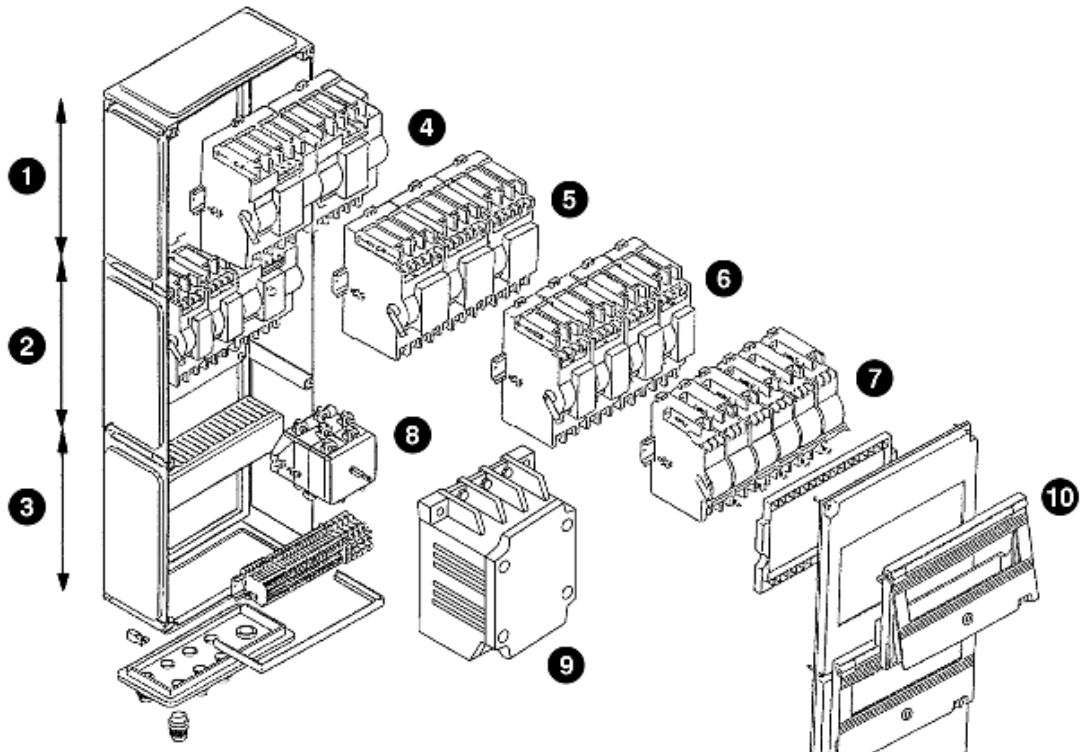
AEx de II C T4, T6
Ex de IIC T4, T6
EEx de IIC T4, T6
NEMA 4X, IP 66



## How to Build D2Z Distribution Panels

Example of D2Z distribution panel with built-in components under the window.
(available mounting width = 213mm)

**D2Z panel with 3 mounting spaces**




1. Mounting Space – 190mm
2. Mounting Space – 190mm
3. Mounting Space – 190mm
4. (2) 4 pole breakers – width 106mm each
5. (3) 3 pole breakers – width 70mm each
6. (4) 2 pole breakers – width 53mm each
7. (6) 1 pole breakers – width 35mm each

available mounting width – 213mm

8. 40A main switch, 4-pole. 1 mounting space required
9. Main fuse. 1 mounting space required in place of 1 window
10. Window

# D2Z Zone 1 Division 2 Panelboards

## Non metallic Factory Sealed 1, 2, 3, 4 pole breakers

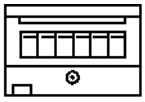
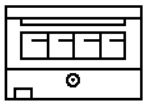
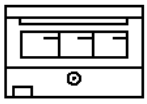
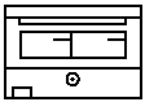
CL. I, Div. 2, Groups A-D
CL. I, Zone 1, Groups A-D
CL. II, Div. 1, Groups E, F, G

AEx de II C T4, T6
Ex de IIC T4, T6
EEx de IIC T4, T6
NEMA 4X, IP 66

## Ordering Procedure

### Step 1: Window

Determine the number of windows required from the following chart based on the number of branch breakers. Multiply **breaker space** by **number of breakers**. Round the sum total to the next highest whole number to determine required windows. *i.e. For (8) 1-pole and (2) 2-pole breakers: (8 x 0.16) + (2 x 0.25) = 1.78 → 2 windows required.*

| | Max. No. Per Window | Branch Circuit Breakers (max 40A) | Space Required For Each Breaker |
|---|---|---|---|
|  | 6 | 1-pole | .16 |
|  | 4 | 2-pole<br>1-pole with EPD<br>1-pole with signal contact | .25 |
|  | 3 | 3-pole<br>1-pole + Neutral with signal contact<br>2-pole with signal contact | .33 |
|  | 2 | 4-pole<br>2-pole with EPD<br>3-pole with signal contact | .50 |

### Step 2: Disconnect Switch

If a disconnect switch is required, select suffix from table.

| Main Switch Disconnect | | |
|---|---|---|
| 40 | –3S* 40 | –2S* 40 |
| 80 | –3S* 80 | –2S* 80 |
| 125 | –3S* 125 | –2S* 1250 |
| 180 | –3S 180 | — |

*Add F if fuses required. Fuses supplied by others. See page 529

# D2Z Zone 1 Division 2 Panelboards

## Non metallic Factory Sealed 1, 2, 3, 4 pole breakers

CL. I, Div. 2, Groups A-D
CL. I, Zone 1, Groups A-D
CL. II, Div. 1, Groups E, F, G

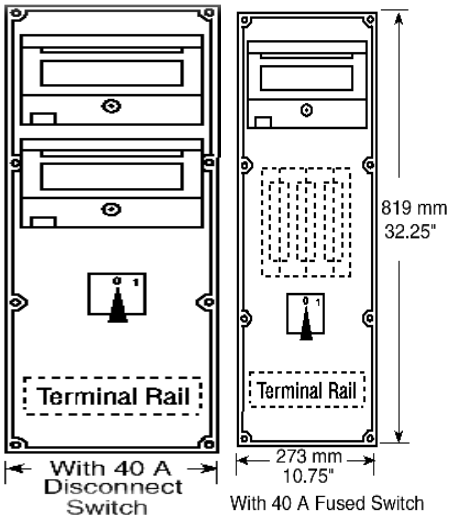
AEx de II C T4, T6
Ex de IIC T4, T6
EEx de IIC T4, T6
NEMA 4X, IP 66

## Step 3: Panel Size

**Determine Panel Size Based on Windows Required**

| Number of Windows Required | Type Required | Disconnect |
|---|---|---|
| 1, 2 | A mini panel | 40A disconnect – Integral |
| 3 | B panel | Optional – Adjacent |
| 4 – 6 | C panel | Optional – Adjacent |
| 7 – 9 | D panel | Optional – Adjacent |

## Mini Panels Type A



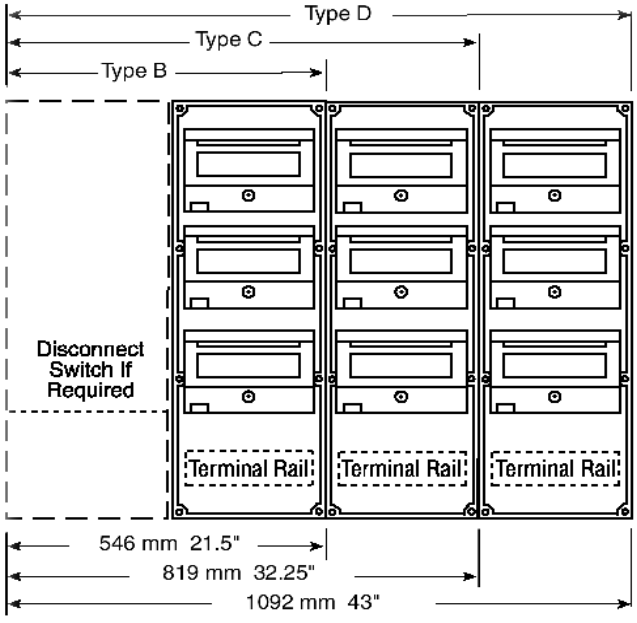

**Ordering Information for Type A Mini Panels with Main Switch**

| 40A 3-Phase | 40A Fused 3-Phase | Quantity of Single Circuits |
|---|---|---|
| D2Z A306 * – 3S40 | D2Z A306 * – 3SF40 | 6 |
| D2Z A308 * – 3S40 | | 8 |
| D2Z A310 * – 3S40 | | 10 |
| D2Z A312 * – 3S40 | | 12 |

| Single Phase | Single Phase | Quantity of Single Circuits |
|---|---|---|
| D2Z A106 * – 2S40 | D2Z A106 * – 2SF40 | 6 |
| D2Z A108 * – 2S40 | | 8 |
| D2Z A110 * – 2S40 | | 10 |
| D2Z A112 * – 2S40 | | 12 |

* See page 534 to complete catalog number

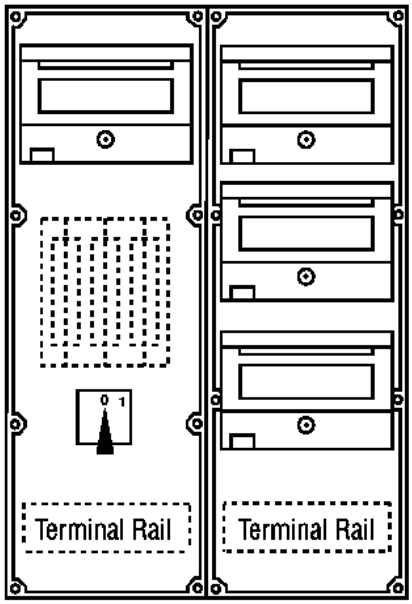
## Panels Type B, Type C, Type D



## Step 4: Conduit/Cable Entries

Determine if additional entries are required on sides B and C. All panels are supplied with bottom entries (Side A), 1 main supply and remainder as branches.

*Example: Size D panels with disconnect switch, have 1 main supply and 3 branch plates as standard.*




**Main Entries**

| Type | Entries | Location |
|---|---|---|
| Main Supply | (1) 2″ + (3) 1″ | A (Standard) |
| Branches | (9) ¾″ (B panel) | A (Standard) |
| | (18) ¾″ (C panel) | A (Standard) |
| | (27) ¾″ (D panel) | A (Standard) |
| Branches | (9) ¾″ | B (Optional) left side |
| | (9) ¾″ | C (Optional) left side |

**Terminal Wiring**

| Supply Circuits | | | Branch Circuits | | |
|---|---|---|---|---|---|
| Amperage | $mm^2$ | AWG | Amperage | $mm^2$ | AWG |
| 40 | 16 | 6-18 | 10 | 4 | 12-22 |
| 80 | 35 | 2-6 | 15 | 4 | 12-22 |
| 125 | 70 | 8-2/0 | 20 | 10 | 6-14 |
| 180 | 95 | 6-3/0 | 40 | 16 | 6-18 |

# D2Z Zone 1 Division 2 Panelboards

## Non metallic Factory Sealed 1, 2, 3, 4 pole breakers

CL. I, Div. 2, Groups A-D
CL. I, Zone 1, Groups A-D
CL. II, Div. 1, Groups E, F, G

AEx de II C T4, T6
Ex de IIC T4, T6
EEx de IIC T4, T6
NEMA 4X, IP 66

## How to Build a Catalog Number ‡

| Panel Family | Quality Branch Panels | Phase | Circuits | Quantity poles/amps* | Main | | Branch Entries |
|---|---|---|---|---|---|---|---|
| D2Z | C | 3 | 40EAX | *06340 | -3SF125 | -S848 | -BC |

**Class I, Div. 2, Groups A, B, C, D; Zone 1, AEx & Ex de IIC panelboards**

**Panel Type – see step 3 (No. of enclosures) (A, B, C, or D)**

**1 – single-phase 3 – 3-phase**

**Circuit Breaker Total: (see page 531)**

| | | |
|---|---|---|
| **(12)** | single-pole | = 12 circuits |
| +**(6)** | three-pole | = 18 circuits |
| +**(2)** | single-pole EPD | = 4 circuits |
| +**(5)** | single-pole w/ Aux contacts | = 5 circuits |
| | | 39 circuits → **40 circuits** |

If an odd number, round up to an even number.

Add suffix if included: **E** for EPD, **AX** for auxiliary contacts, **SC** for signal contacts, **K** for MOVs and portable power

**Choose Circuit Breakers (2, 6, 10, 16, 20, 25, 32 or 40 Amp)**
(3-pole first – Options, then 2-pole then single-pole)
a. Insert Asterisk*
b. Quantity is 6: **06**
(if less than 10, insert 0 before quantity)
c. Three-pole: **3**
d. Ampere Rating (max 40): **40** (if less than 10, insert 0 before amperage)
Options **"E"** for EPD
**"AX"** for auxiliary contacts
**"SC"** for signal contacts
**"K"** for MOVs and portable power, 480 VAC only

**Select disconnect switch (see step 2, page 531) if required**
(**3**-phase, 4-pole Main **S**witch, **F**used, **125** A)

**480 VAC, 10 kAIC Breakers – S848**

**Branch Entries**
(Side A [bottom] standard)
B – Side B left side
C – Side C right side

## Example Order Number: D2Z C 3 40EAX * 06340 * 12120 * 02120E * 05110AX-3SF125-BC

| | | |
|---|---|---|
| (6) 3-pole/40A | = | ***06340** |
| (12) single-pole/20A | = | ***12120** |
| (2) single-pole/20A EPD | = | ***02120E** |
| (5) single-pole/10A w/Aux contacts | = | ***05110AX** |

For other panels or options, consult factory
‡ For a D2Z panelboard with 316 stainless steel enclosure, add suffix ''S860'' to catalog number

# D2Z Zone 1 Division 2 Panelboards

## Non metallic Factory Sealed 1, 2, 3, 4 pole breakers

CL. I, Div. 2, Groups A-D
CL. I, Zone 1, Groups A-D
CL. II, Div. 1, Groups E, F, G

AEx de II C T4, T6
Ex de IIC T4, T6
EEx de IIC T4, T6
NEMA 4X, IP 66

## Spare Component Information

**Lighting Circuits Order Code**
10k AIC, max. 480 VAC

1-pole
6/window
SIA 001

2-pole
4/window
SIA 002

3-pole
3/window
SIA 003

4-pole
2/window
SIA 004

**Please state rated current on order:**
**2, 6, 10, 16, 20, 25, 32 or 40A.**

**Optional:**
Auxiliary contact – SAH 001
Signal contact – SAS 001 (in the case of branch breakers with signal contacts, the next largest component size is used)

**Example:**
SIA 001-20 – SAH001
Single Pole, 20A with auxiliary contacts

**Heat-Tracing Order Code**
EPD with 10k AIC, 30mA leakage, max. 480 VAC

1-pole + N
4/window
FSS 002

2-pole
2/window
FSS 004

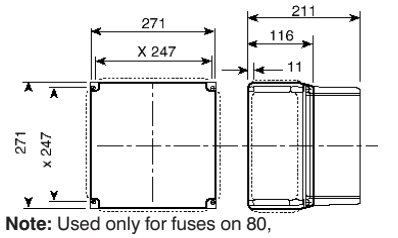
**Please state rated current on order:**
**6, 10, 16, 20, 25, 32 or 40A.**

**Optional:**
With auxiliary contact – FSH 001
With signal contact in Size 4 component – FSS001

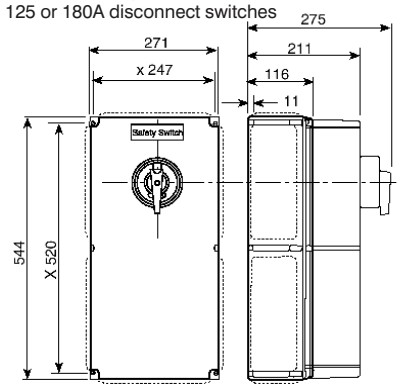
**Example:**
FSS 004 - 30 – FSS001
EPD, 30A, 30mA with signal contact

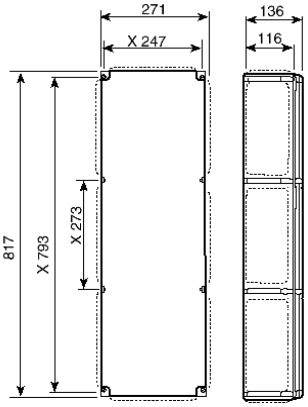
## Dimensions

Dimensions in mm X = mounting dimensions

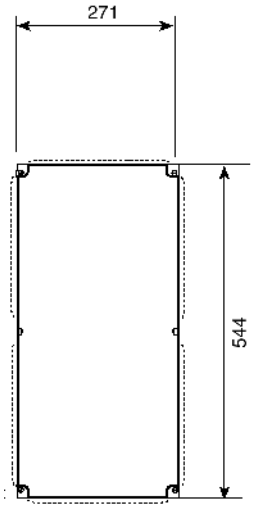



**Note:** Used only for fuses on 80, 125 or 180A disconnect switches




**Note:** Used only for fuses on 80, 125 or 180A disconnect switches without fuses.




**Note:** Used for
– 40A switch with fuses and 1 window or
– 40A switch and 2 windows, or
– 3 windows of branch breakers.

# D2PB Division 2 Circuit Breaker Panelboards

## Factory Sealed, Single & Two-Pole Circuit Breakers

Cl. I, Div. 2, Groups C,D
NEMA 3,7CD (Div. 2),12
Dusttight
Raintight

Wet Locations

## Application:

D2PB panelboards are designed specifically for use:

- in Class 1, Division 2, Groups C, D hazardous areas where flammable vapors or gases may be present due to accident or abnormal locations
- in damp, wet or corrosive locations
- indoors or outdoors in Division 2 areas of petroleum refineries, chemical and petrochemical plants, and other process industry facilities

For general application, circuit breaker and wiring system information, refer to pages 510 to 513.

## Features:

- Enclosures are of external flange design, which makes the interior completely accessible when the cover is removed
- Provided with concealed mounting, which is made possible by having four clearance holes for lag screws or mounting bolts in the back of the enclosure, one in each corner.
- The interior sub-assembly, consisting of a mounting plate, main terminal blocks, and circuit breakers, is removable as a complete unit
- Ample gutter space is provided for ease of field wiring
- Circuit breakers are contained in compact, individual factory sealed enclosures suitable for Class 1, Division 2, Groups C, D hazardous areas. The individual enclosures are easily removed and replaced, therefore changing or adding individual circuit breakers will not present a problem
- The main cover, which is gasketed to exclude dirt and moisture, is attached to the body with hex head bolts and is removed only when installing the panelboard or making wiring changes. In the center of the main cover is a gasketed hinged door, which provides access only to the circuit breaker operating handles, and is held closed by two quick-release catches. The door can be locked by as many as 3 padlocks to prevent unauthorized operation
- Tapped conduit openings are provided for main conduit and branch circuits, as shown in the dimensional information. Standard openings can be reduced or plugged to meet most installation requirements
- Circuit breakers are arranged in two vertical rows and have the circuit numbers marked on the handles. The left row is numbered 1, 3, 5, 7, etc. and the right row 2, 4, 6, 8, etc. Identifying information may be typed on the circuit directory card attached to the inside of the hinged door

## Standard Materials:

- Bodies, covers and hinged doors – copper-free aluminum
- Breaker operating handles – type 6/6 nylon
- Interior parts – sheet steel

## Standard Finishes:

- Copper-free aluminum – natural
- Type 6/6 nylon – natural (black)
- Sheet steel – electrogalvanized with chromate finish

## Size Ranges:

| Panel Size | Max. No. of Breakers | |
|---|---|---|
| | Single-Pole | Two-Pole |
| 1 | 12 | 6 |
| 2 | 24 | 12 |

## Electrical Rating Ranges:

- Circuit breakers
- Single-pole – 120/240vac max
- Two-pole – 120/240vac max
- Trip ratings – 15, 20 and 30 amp

## Certifications and Compliances:

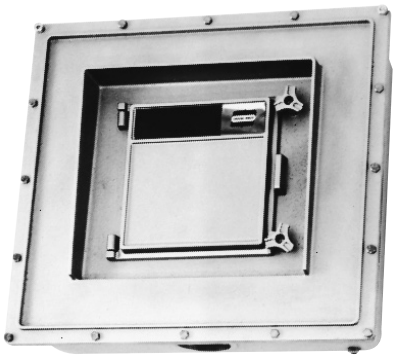
- NEC: Class I, Division 2, Groups C, D
- NEMA: 3, 7CD (Division 2), 12
- UL Standard: 67, 877

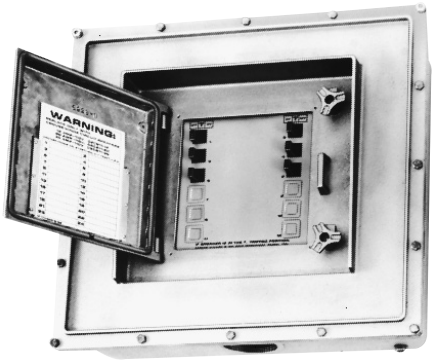
## Options:

- Panelboard provided with operating handle lockouts for lockout in ON or OFF positions. Stainless steel lockout frame integral to panel faceplate.

| D2PB Size | Use Suffix: |
|---|---|
| 1 | –L12 |
| 2 | –L24 |

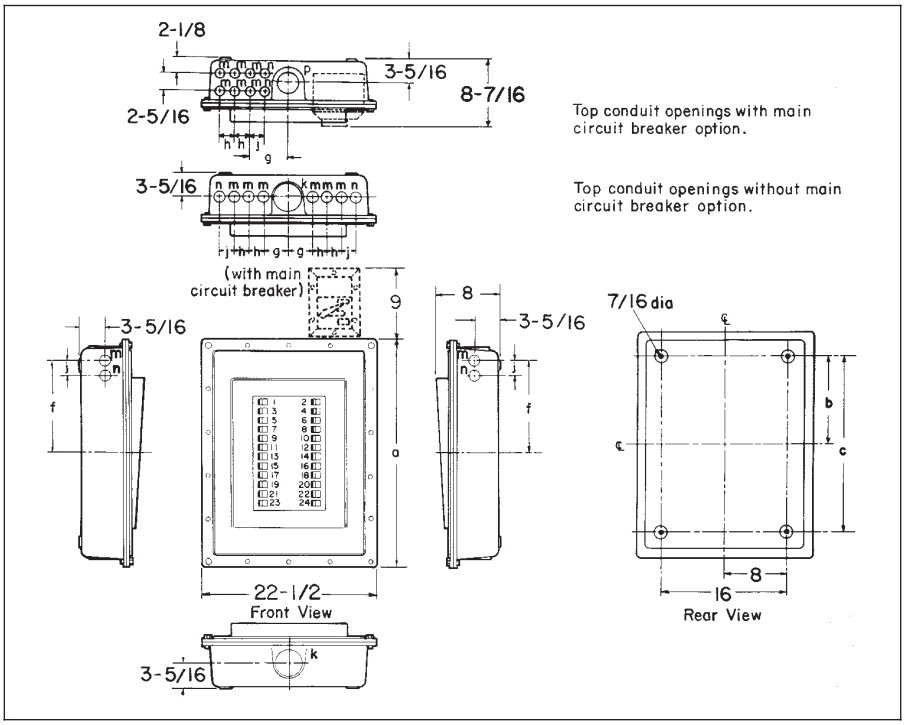
- Circuit breaker operating handle lockout – order D2PB02.
- Branch conduit entries furnished with Cooper Crouse-Hinds type PLG plugs . . . . S822.
- Square head plugs in all openings . . . . . S872
- Assortment of single-pole and two-pole circuit breakers and trip ratings – see listings.
- Main breaker – see ordering information
- Branch circuit conduit openings located at bottom instead of at top – use suffix INV
- Drilled and tapped conduit openings other than standard – available on special order – specify
- Wiring system other than those listed – See pages 512 – specify
- Breather and drain – use suffix DV






## Dimensions (in inches)

Dimensions are approximate, not for construction purposes.







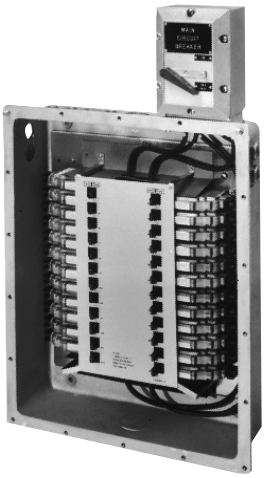

COOPER Crouse-Hinds

# D2PB Division 2 Circuit Breaker Panelboards

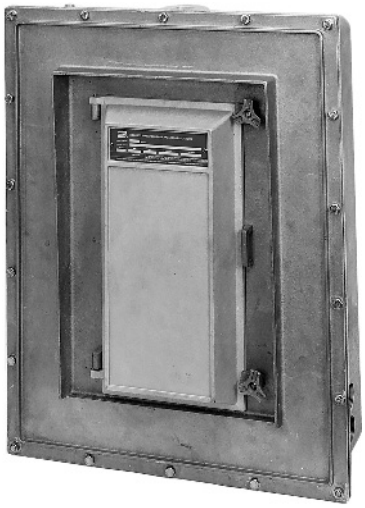
## Factory Sealed, Single & Two-Pole Breakers

Cl. I, Div. 2, Groups C,D
NEMA 3,7CD (Div. 2),12
Dusttight
Raintight

Wet Locations



D2PB with Main Breaker Option



D2CB12-20

## Ordering Information:

Panelboards are available with single-pole and two-pole, 15, 20, or 30 ampere circuit breakers. To order a panelboard with all breakers of the same rating, add the desired rating as a suffix to the Cat. No. For example, the 12 circuit D2PB1512 panelboard with all the circuit breakers rated at 20 amperes would be ordered as D2PB1512-20.

Panelboards shown below can also be furnished with an assortment of single-pole and two-pole breakers and breaker ampere ratings. To order, the quantities of breakers and ampere ratings are added as a suffix to the Cat. No. The total number of poles will determine the panel size (24 poles maximum), and the wiring systems must be compatible when combining single- and two-pole circuit breakers. For example, a typical D2PB panelboard with a combination of 3 single-pole 15 ampere, 3 single-pole 20 ampere, 2 single-pole 30 ampere, 4 two-pole 20 ampere, and 4 two-pole 30 ampere circuit breakers would be ordered as D2PB2508-315-320-230-808-420-430. The total number of poles is 24 and wiring systems 5 and 8 are compatible 4 wire, 3 phase.

The D2PB with a main breaker is available up to 100 amps. To order D2PB with main breaker, add the appropriate suffix. Example: D2PB1512-15 with three-pole, 100 amp main circuit breaker would be ordered as D2PB1512-15-3M100. If two-pole main is required, change the number 3 to 2. If a lower trip rating than 100 is required, the suffix will change accordingly.

## Replacement Circuit Breaker Assemblies

Where D2PB (and N2PB) panelboards have been ordered with less than the maximum number of circuit breakers, breakers can easily be added in the field. Circuit breaker assemblies for field addition or replacement are listed below; they consist of the breaker itself in its factory sealed Class I, Division 2, Groups C, D enclosure, and necessary mounting hardware. These assemblies are not suitable for use as individually mounted units.

**Circuit Breaker Assemblies**

| Ampere Rating | Single-Pole Cat. # | Two-Pole Cat. # |
|---|---|---|
| 15 | D2CB11-15 | D2CB12-15 |
| 20 | D2CB11-20 | D2CB12-20 |
| 30 | D2CB11-30 | D2CB12-30 |

† Add ampere rating. See ordering information.

‡ 1/0 lug, rated 125 amps. takes wire sizes #6 to 1/0; 4/0 lug, rated 225 amps. takes wires sizes 1/0 to 4/0.

♦ For description of these standard wiring systems, see page 512.

| Max. No. of Breakers | | | | Single-Pole Circuit Breakers | | Two-Pole Circuit Breakers | |
|---|---|---|---|---|---|---|---|
| Single-Pole | Two-Pole | Panel Size | Main Lug Size‡ | Wiring System 4 ♦ Mains: 3-Wire Branches: 2-Wire Solid Neutral Cat. # | Wiring System 5 ♦ Mains: 4-Wire, 3-Phase Branches: 2-Wire Solid Neutral Cat. # | Wiring System 3 ♦ Mains: 3-Wire Branches: 3-Wire Solid Neutral Cat. # | Wiring System 8 ♦ Mains: 4-Wire, 3-Phase Branches: 3-Wire, 1-Phase Solid Neutral Cat. # |
| 6 | | 1 | 1/0 | D2PB1406-† | D2PB1506-† | | |
| 8 | 4 | | | D2PB1408-† | D2PB1508-† | D2PB1304-† | D2PB1804-† |
| 10 | 5 | | | D2PB1410-† | D2PB1510-† | D2PB1305-† | D2PB1805-† |
| 12 | 6 | | | D2PB1412-† | D2PB1512-† | D2PB1306-† | D2PB1806-† |
| 12 | 6 | 2 | 4/0 | D2PB2412-† | D2PB2512-† | D2PB2306-† | D2PB2806-† |
| 14 | 7 | | | D2PB2414-† | D2PB2514-† | D2PB2307-† | D2PB2807-† |
| 16 | 8 | | | D2PB2416-† | D2PB2516-† | D2PB2308-† | D2PB2808-† |
| 18 | 9 | | | D2PB2418-† | D2PB2518-† | D2PB2309-† | D2PB2809-† |
| 20 | 10 | | | D2PB2420-† | D2PB2520-† | D2PB2310-† | D2PB2810-† |
| 22 | 11 | | | D2PB2422-† | D2PB2522-† | D2PB2311-† | D2PB2811-† |
| 24 | 12 | | | D2PB2424-† | D2PB2524-† | D2PB2312-† | D2PB2812-† |

## Dimensions

| Panel Size Without Main C.B. | Overall and Mounting Dimensions (In.) | | | Conduit Openings: Spacing (In.) | | | | Size (In.) | | | | Quantity | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | a | b | c | f | g | h | j† | k | m | n* | p | Main | Branches |
| 1 | 20¾ | 8 | 16 | 7¾ | 3½ | 2 | | 3 | 1¼ | | | 2 | 8 |
| 2 | 28¼ | 11¾ | 23½ | 11⅜ | 3 1/16 | 1 15/16 | 1 15/16 | 3 | 1¼ | 1¼ | | 2 | 12 |
| **Panel Size With Main C.B.** | | | | | | | | | | | | | |
| 1 | 20¾ | 8 | 16 | 7¾ | 5 | 1 15/16 | | | 1¼ | | 2½ | 2 | 8 |
| 2 | 28¼ | 11¾ | 23½ | 11⅜ | 5 | 1 15/16 | 1 15/16 | | 1¼ | 1¼ | 2½ | 2 | 12 |

* Conduit opening "n" not supplied on panel size 1.

# 1A D2PB, D2L, D2D Circuit Breaker Panelboard Assemblies

## with Transformer

Cl. I, Div. 2, Groups B†,C,D
NEMA 3,4‡,7B†CD (Div. 2),12
Wet Locations
Watertight‡

## Application:

D2PB, D2L, D2D circuit breaker panelboard assemblies with transformers are for use:
- in Class I, Division 2, Group C,D hazardous areas where, due to accident or abnormal operations, flammable vapors or gases may be present, and which are subject to weather, dampness and corrosion
- indoors or outdoors in Division 2 areas such as petroleum refineries, chemical and petrochemical plants, and other process industry facilities
- where high voltage supply must be stepped down to the lower voltage necessary to serve lighting, heating, appliance, heat tracing, motor and similar circuits

For general information on panelboard applications, circuit breakers and wiring systems, refer to pages 510 to 513.

## Features:

- The factory assembled panelboard and transformer are on one compact frame, suitable for either wall or pole mounting. Wiring between the transformer secondary and main lugs of the panelboard is accomplished at the factory.
- Easy to install and wire. The main feed is connected to the transformer primary and the branch circuits are wired to the panelboard terminal blocks.
- The assembly can be installed in the load area to reduce the length of runs of low voltage branch circuits.
- Panelboards used are standard D2PB, D2L, or D2D units with circuit breakers listed in this section.
- Transformers are compound filled or epoxy filled to completely seal out moisture and dirt.

## Standard Materials:

- Frames – structural aluminum
- Mounting hardware – stainless steel
- Transformer enclosure – sheet steel, welded
- For panelboard materials, see individual listing pages

## Standard Finishes:

- Aluminum – natural
- Stainless steel – natural
- Sheet steel – primed and painted
- For panelboard finishes, see individual listing pages

## Options:

- Material – structural steel frames
- Finish – primed and painted or hot dip galvanized
- For options available on the panelboards themselves, see individual listings pages

## Size Ranges:

**Transformers**
- single or three-phase – 5kVA to 30kVA

**Panelboards**

| | Max. No. of Breakers | | |
|---|---|---|---|
| | Single-pole | Two-pole | Three-pole |
| D2PB | 24 | 12 | |
| D2L | 42 | 20 | 14 |
| D2D | 30 | 14 | 10 |

## Electrical Rating Ranges:

- Transformers – 480 volt primary
- Transformers – 120/240 volt secondary
- Panelboards – see individual listings

## Certifications and Compliances:

- NEC/CEC: Class I, Division 2, Group B†,C,D
- NEMA/EEMAC: 3, 4‡, 7B†CD (Division 2), 12
- UL Standard: 67, 1604
- CSA Standard: C22.2 No. 213

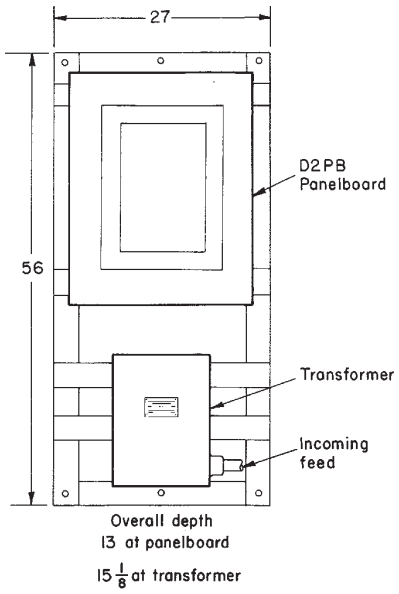
† D2L, D2D with GB suffix and breather and drain holes plugged.
‡NEMA 4 hosetight with breather and drain openings plugged.

# D2PB, D2L, D2D Circuit Breaker Panelboard Assemblies

## with Transformer

Cl. I, Div. 2, Groups B†,C,D
NEMA 3,4‡,7B†CD, (Div. 2),12
Wet Locations
Watertight‡

## Typical Assembly*




**24 Circuit D2PB panelboard with single-phase transformer**

### Ordering Check List

**1.** Select the D2PB, D2L, D2D panelboard required, together with any applicable options or special features. See individual listing pages.

Cat. No. _____

**2.** Provide the following information, necessary for selection of the correct transformer:

Primary voltage _____

Secondary voltage: _____

kVA rating _____

Taps – number and percent _____

Frequency (60 cycle unless otherwise specified) _____

Single or three-phase _____

Other requirements _____

* Dimensions are approximate, not for construction purposes.

† D2L, D2D with GB suffix and breather and drain holes plugged.
‡ NEMA 4 hosetight with breather and drain openings plugged.



# 1A GUSC Circuit Breaker Load Centers

## with Quicklag®* Circuit Breakers

Cl. I, Div. 1 & 2, Groups B**,C,D Explosionproof
Cl. II, Div. 1, Groups E,F,G Dust-Ignitionproof
Cl. II, Div. 2, Groups F,G Raintight
Cl. III Wet Locations

## Application:

GUSC circuit breaker load centers are used in:

- areas which are hazardous due to the presence of flammable vapors, gases or highly combustible dusts, and which are subject to weather, dampness and corrosion
- indoors or outdoors at petroleum refineries, chemical and petrochemical plants and other process industry facilities where similar hazards exist

For general application and circuit breaker information, refer to pages 510 and 511.

## Features:

- Compact rectangular enclosures with round threaded covers.
- External operating handles can be padlocked in either ''ON'' or ''OFF'' positions.
- Not furnished with internal wiring as field wiring connections are made directly to circuit breaker line and load terminals. To meet varying grounding requirements, an insulated neutral terminal block is provided and is equipped with a removable grounding jumper.
- Bodies have 1″ vertical throughfeed hubs.

## Standard Materials:

- Bodies – *Feraloy*® iron alloy
- Covers and operating handles – copper-free aluminum
- Operating shafts – stainless steel
- Interior parts – sheet steel

## Standard Finishes:

- *Feraloy* iron alloy – electrogalvanized and aluminum acrylic paint
- Copper-free aluminum – natural
- Stainless steel – natural
- Sheet steel – electrogalvanized with chromate finish

## Size Ranges:

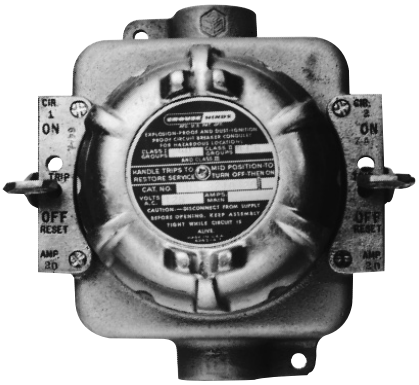
| Max. No. of Breakers | |
|---|---|
| **Single-pole** | **Two-pole** |
| 2 | 1 |

## Electrical Rating Ranges:

- Quicklag circuit breakers: single-pole, 240vac max.; two-pole, 240vac max.
- Trip ratings: 10, 15, 20, 30 and 40 amp.

## Certifications and Compliances:

- NEC: Class I, Div. 1 & 2, Groups B**,C,D
  Class II, Div. 1, Groups E,F,G
  Class II, Div. 2, Groups F,G
  Class III
- NEMA: 3,7BCD,9EFG,12
- UL Standard: 877




**Single gang**

## Options:

- The following special options are available from factory by adding suffix to Cat. No.:

| Description | Suffix to be Added to Encl. Cat. # |
|---|---|
| Breather and drain (Class I and Class II) | S198V |
| Breather and drain (Class I and Class II, Groups F,G) | S454V |
| Assortment of single and two-pole circuit breakers and trip ratings | Specify |

* Quicklag is a registered trademark of Cutler-Hammer Inc.

** See listings for catalog numbers which are suitable for use in Group B hazardous locations. Seals must be installed within 1½″ of all conduit openings.

# GUSC Circuit Breaker Load Centers

## with Quicklag®* Circuit Breakers

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

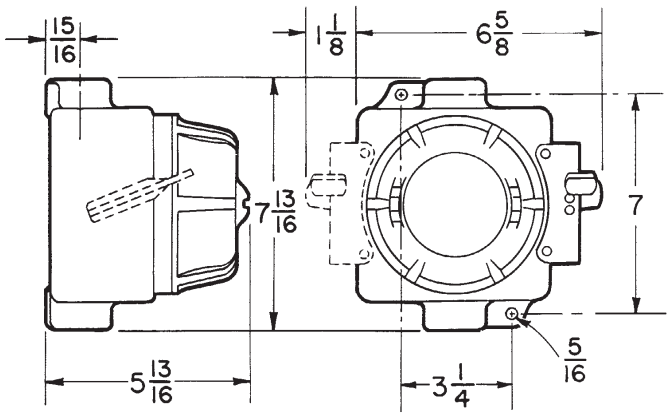
Explosionproof
Dust-Ignitionproof
Raintight
Wet Locations



| Circuit Breaker Information | | | Load Center With Circuit Breaker | | |
|---|---|---|---|---|---|
| No. of Breakers | Poles | Ampere Rating | Hub Size | Standard Units Cat. # | Group B Units Cat. # |
| 1 | 1 | 10 | 1 | GUSC3110-10 | GUSC3110-10-GB |
| 1 | 1 | 15 | 1 | GUSC3110-15 | GUSC3110-15-GB |
| 1 | 1 | 20 | 1 | GUSC3110-20 | GUSC3110-20-GB |
| 1 | 1 | 30 | 1 | GUSC3110-30 | GUSC3110-30-GB |
| 1 | 1 | 40 | 1 | GUSC3110-40 | GUSC3110-40-GB |
| 2 | 1 | 10 | 1 | GUSC3210-10 | GUSC3210-10-GB |
| 2 | 1 | 15 | 1 | GUSC3210-15 | GUSC3210-15-GB |
| 2 | 1 | 20 | 1 | GUSC3210-20 | GUSC3210-20-GB |
| 2 | 1 | 30 | 1 | GUSC3210-30 | GUSC3210-30-GB |
| 2 | 1 | 40 | 1 | GUSC3210-40 | GUSC3210-40-GB |
| 1 | 2 | 10 | 1 | GUSC3120-10 | GUSC3120-10-GB |
| 1 | 2 | 15 | 1 | GUSC3120-15 | GUSC3120-15-GB |
| 1 | 2 | 20 | 1 | GUSC3120-20 | GUSC3120-20-GB |
| 1 | 2 | 30 | 1 | GUSC3120-30 | GUSC3120-30-GB |
| 1 | 2 | 40 | 1 | GUSC3120-40 | GUSC3120-40-GB |

## Dimensions (in inches)

**GUSC single gang**




Dimensions are approximate, not for construction purposes.

** Group B units must have seals installed within 1½" of all conduit openings.

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