

ALPF Factory Sealed Lighting – APPF Power Distribution Panelboards

Explosionproof, Dust-Ignitionproof, Watertight

NEC:

Class I, Division 1 and 2, Groups B♦, C♦, D

Class II, Division 1 and 2, Groups E, F, G

Class III

Class I, Zone 1, Group IIB +H₂

NEMA 4, 4X, 7BCD, 9EFG

Applications

- Distribution panelboards are used to furnish protection and control of electrical equipment in hazardous locations. These compact units provide a centrally controlled switching system for large quantities of branch circuits for:
 - Lighting
 - Heating
 - Small motors
 - Similar electrical equipment

Features

- Breaker operators included as standard.
- O-ring gasket insures watertight integrity.
- Factory sealed, no external seals are required for most branch circuits. All conduits must be sealed adjacent to enclosure for Class I, Division 1, Groups B and C.
- Breakers are housed in the panel section and prewired to maximum circuit capacity, then wired to numbered terminals in the wiring compartment.
- Terminal compartment is interconnected to panel section with sealing hubs, unions and poured with sealing compound.
- Permits selection of 1-, 2- or 3-pole breakers.
- Precision machined flame path between body and cover.
- Bolt on stainless steel slotted mounting feet.
- Breaker operators can be padlocked in the ON or OFF position.
- All panelboards are supplied with Cutler-Hammer † interiors.
- Chassis assemblies with mains at top (bottom optional).
- Provisions for 12, 18, 24, 30, 36 and 42 circuit 1-pole chassis.
- 100 Amp or 225 Amp main lug.
- Up to 100 Amp backfed main breaker available with main lug chassis.
- Up to 225 Amp main breaker available with main breaker chassis.
- Factory installed ground and neutral bar as standard.

Standard Materials

- Bodies and covers: copperfree (4/10 of 1% max.) aluminum
- Cover bolts: Quad-Lead®, captive, stainless steel
- Breaker operators: copperfree (4/10 of 1% max.) aluminum
- Hinges: stainless steel
- Bus bars: copper
- O-ring: neoprene

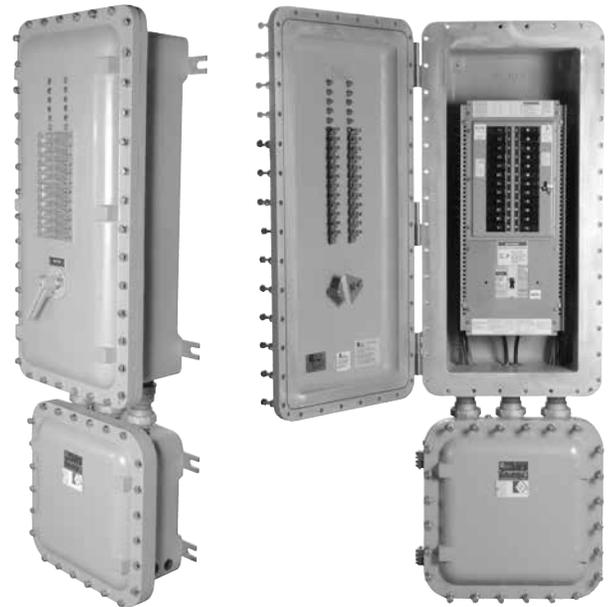
Standard Finish

- Corrosion resistant gray epoxy powder coat to provide NEMA 4X rating

Options

Must be listed in alphanumeric sequence at the end of the catalog number.

- Panel Options
 - Breather, NEMA 4X add suffix —**BR**.
 - Drain, NEMA 4X add suffix —**DN**.
 - External ground stud add suffix —**EGS**.
 - Grounding neutral lug add suffix —**GNL**.
 - Terminal breaker located at bottom, add suffix —**INV**.
 - Main breaker located at bottom, add suffix —**LB**.
 - Phenolic nameplate (specify legend) add suffix —**NP**.
 - For 50 °C (122 °F) breaker rating, add suffix —**V**.
 - For stainless steel terminal enclosure for Division 2 applications only, contact your local sales representative.



- Main Breaker Options
 - Auxiliary switch (1A or 1B) add suffix —**AS1**.
 - Auxiliary switch (2A or 2B) add suffix —**AS2**.
 - Shunt trip (specify voltage) add suffix —**ST**.
 - Under voltage release (specify voltage) add suffix —**UV**.
- Branch Breaker Option ALPF Only
 - Equipment Protection Devices (1- or 2-Pole -30 mA sensitivity) ① add suffix —**EPD**.
 - Ground Fault Interrupter (1- or 2-Pole -5 mA sensitivity) ① add suffix —**GFI**.
 - GFI Indicating Light add suffix —**L5**.
- Branch Breaker Options APPF GHB Only
 - Equipment Protection Devices (1- or 2-Pole -30 mA sensitivity) ① add suffix —**EPD**.
- Branch Breaker Options APPF F-Frame Only
 - Auxiliary switch (1A or 1B) add suffix —**AS1**.
 - Auxiliary switch (2A or 2B) add suffix —**AS2**.
 - Shunt trip (specify voltage) add suffix —**ST**.
 - Under voltage release (specify voltage) add suffix —**UV**.
- 400 Amp panel available, contact your local sales representative.

NEC Certifications and Compliances

- UL Standard: UL 1203
- UL Classified: E84577

♦ For Class I, Division 1, Groups B and C, all conduits must be sealed within 50.8 mm (2") of enclosure.

† Cutler-Hammer is a trademark of the Eaton Corporation.

① GFI Push-to-Test Buttons are standard with GFI or EPD options.

APPF Series Power Distribution Panelboards

Explosionproof, Dust-Ignitionproof, Watertight

GHB Cutler-Hammer + Circuit Breakers

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Select GHB + branch breakers as desired in panel. First and second digits are the quantity of breakers, third and fourth digits are ampere rating, the fifth digit is number of poles. Example: An 18-circuit 277/480 V 3-phase 4-wire 100 A MLO panel with 12 1-pole 20 Amp and 3 2-pole 30 Amp branch breakers should read APPFK14C18ML100-12201EPD-03302.

Catalog Numbering Guide

APPF	K	1	4	C	18	ML	100	12	20	1	EPD	—	▲
Duty: Appleton Factory Sealed Power Panel			Voltage: 4 - 277/480 (3P 4W Only) 7 - 24 Vdc 8 - 125/250 Vdc			Main Type: MB - Main Breaker ML - Main Lug Only			Ampere Rating ①: 15 - 15AT 20 - 20AT 25 - 25AT 30 - 30AT 35 - 35AT 40 - 40AT 45 - 45AT 50 - 50AT 55 - 55AT 60 - 60AT 70 - 70AT 80 - 80AT 90 - 90AT 100 - 100AT			Additional Branch Breakers: Repeat Step ①	
Panel Size: J - 12 Circuit, 100 Amp Main Lug Only K - 18 Circuit, 100 Amp Main Lug Only M - 30 Circuit, 100 or 225 Amp Main Lug Only or 18 Circuit with Main Breaker N - 42 Circuit, 225 Amp Main Lug Only or 36 Circuit with Main Breaker Q - 42 Circuit with Main Breaker			Wire System: C - 3P, 4W D - 2P, 2W for 24 Vdc			Ampere Rating: 020 - 20AT 025 - 25AT 030 - 30AT 040 - 40AT 050 - 50AT 060 - 60AT 070 - 70AT 080 - 80AT 090 - 90AT 100 - 100AT 110 - 110AT 125 - 125AT 150 - 150AT 175 - 175AT 200 - 200AT 225 - 225AT			No. of Poles ①: (include only if different from wiring system)			Suffix for Other Options/ Features: Must be listed in alphanumeric sequence (See Options)	
		Current Rating: 1 - 100 Amp 2 - 225 Amp			Number of Circuits: 12 18 24 30 36 42			Quantity of Branch Breakers ①: 1 thru 42			Breaker Type ①: Normal Duty (Leave Blank) EPD ①		

① EPD Single Phase (requires 2-Poles) 277 Vac, 30 mA.

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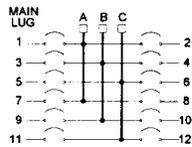
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	Number of Circuits	277/480 Volt 3-Phase 4-Wire GHB Type	Panel Size	Approximate Weight kgs (lbs)
100 Amp Main Lug Only	12	APPFJ14C12ML ▲	J	61.23 (135)
	18	APPFK14C18ML ▲	K	74.84 (165)
	24	APPFM14C24ML ▲	M	95.25 (210)
	30	APPFM14C30ML ▲	M	97.52 (215)
225 Amp Main Lug Only	18	APPFM24C18ML ▲	M	81.65 (180)
	24	APPFM24C24ML ▲	M	104.33 (230)
	30	APPFM24C30ML ▲	M	106.59 (235)
	36	APPFN24C36ML ▲	N	131.54 (290)
	42	APPFN24C42ML ▲	N	133.81 (295)
Main Breaker 100 Amp F	12	APPFM14C12MB100 ▲	M	74.84 (165)
	18	APPFM14C18MB100 ▲	M	81.65 (180)
	24	APPFN14C24MB100 ▲	N	95.25 (210)
	30	APPFN14C30MB100 ▲	N	142.88 (315)
Main Breaker 225 Amp F	18	APPFM24C18MB225 ▲	M	83.91 (185)
	24	APPFN24C24MB225 ▲	N	133.81 (295)
	30	APPFN24C30MB225 ▲	N	136.08 (300)
	36	APPFN24C36MB225 ▲	N	138.35 (305)
	42	APPFQ24C42MB225 ▲	Q	156.49 (345)

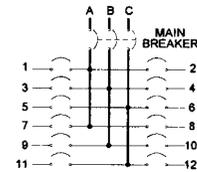
Note: For Back Fed main, replace **ML**, **MB100**, or **MB225** in part number with **BF**. For 400 Amp Main Lug, contact your local representative. Standard interrupting capacity is 14,000 AIC. For higher interrupt ratings, contact your local representative.

Typical Panelboard Wiring Diagram

3-Phase, 4-Wire Systems



Solid Neutral



Solid Neutral

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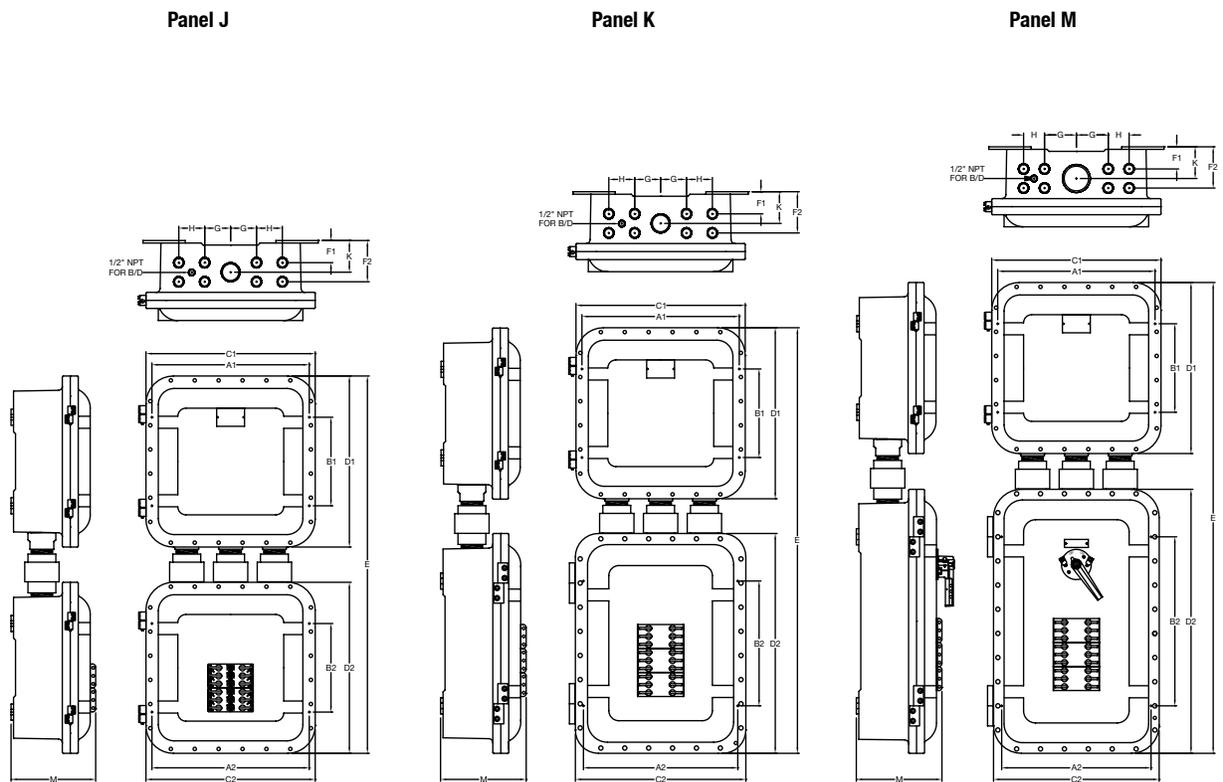
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ALPF and APPF (GHB Type) Factory Sealed Distribution Panelboard

Panel Size	Sealed Together		Top Outlets	Side Outlets	Mounting Hdw. Set
J	161606	161606/08	(1) 2" and (8) 1" NPT	—	AMH8
K	162206	161606/08	(1) 2" and (8) 1" NPT	—	AMH8
M	162806	161606/08	(1) 3" and (8) 1" NPT	—	AMH8

Dimensions in Millimeters (Inches)



Panel Size	A1	A2	B1	B2	C1	C2	D1	D2	E	F1	F2	G	H	K	M
J	501.7 (19.75)	501.7 (19.75)	279.4 (11.00)	279.4 (11.00)	539.8 (21.25)	539.8 (21.25)	539.8 (21.25)	539.8 (21.25)	1190.8 (46.88)	69.9 (2.75)	130.3 (5.13)	82.6 (3.25)	82.6 (3.25)	100.1 (3.94)	279.4 (11.00)
K	501.7 (19.75)	492.3 (19.38)	279.4 (11.00)	393.7 (15.50)	539.8 (21.25)	543.6 (21.40)	539.8 (21.25)	693.7 (27.31)	1343.2 (52.88)	69.9 (2.75)	130.3 (5.13)	82.6 (3.25)	82.6 (3.25)	100.1 (3.94)	279.4 (11.00)
M	501.7 (19.75)	476.3 (18.75)	279.4 (11.00)	533.4 (21.00)	539.8 (21.25)	528.3 (20.80)	539.8 (21.25)	833.1 (32.80)	1485.9 (58.50)	69.9 (2.75)	130.3 (5.13)	101.6 (4.00)	66.8 (2.63)	100.1 (3.94)	279.4 (11.00)

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Visit our website at www.appleton.emerson.com or contact us at (800) 621-1506.
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DISTRIBUTION EQUIPMENT: NEC/CEC HAZARDOUS LOCATION PANELBOARDS

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