# **Distributor Stock – Type P1 Panelboards**

### Lug Kits — Main or Feed Thru

Amp Rating	Mat.	Wire Range (includes Neutral)	Service	Original P1 Catalog No.	Revised P1 Catalog No.
	AL	(1) #6 AWG-	1 Phase	MLKA1	MLKA1A
250	AL	350 kcmil (CU or AL)	3 Phase	MLKA3	MLKA3A
250	cυ	(1) #6 AWG-	1 Phase	MLKC1	MLKC1A
		350 kcmil (CU or AL)	3 Phase	MLKC3	MLKC3A
	AL	(2) 1/0 - 250 kcmil or (1) #2 AWG-600 kcmil	1 Phase	4MLKA1	4MLKA1A
400	AL		3 Phase	4MLKA3	4MLKA3A
400	CU <sup>(2)</sup>	J (2) 1/0 - 4/0 or (1) 1/0 - 600 kcmil	1 Phase	4MLKC1	4MLKC1A
	CU		3 Phase	4MLKC3	4MLKC3A
400		(1) AL 1/0-750 kcmil	1 Phase	-	4MLKA1B
400	AL	(2) AL/CU 250kcmil max. [max.(1) 600 kcmil CU wire]	3 Phase	-	4MLKA3B

#### Breaker Mounting Kits 250A Max. - Main or Subfeed w/o Breaker

Ampere Rating	Breaker Types	Service	Original P1 Catalog No.	Revised P1 Catalog No. <sup>②</sup>
100A	BL, BLH, HBL	1-Phase	MBKBL1	MBKBL1A
		3-Phase	MBKBL3	MBKBL3A
100A	BQD	1 Dh	—	
125A	NGB, HGB, LGB	1-Phase	MBKNB1	MBKBC1NBA
100A	BQD	0 Dharas	MBKBC3	
125A	NGB, HGB, LGB	3-Phase	MBKNB3	MBKBC3NBA
125A	ED4, ED6, HED4, HHED6	1-Phase	MBKED1	MBKED1A
		3-Phase	MBKED3	MBKED3A
225A	QJ2, QJH2, QJ2H	1-Phase	MBKQJ1	MBKQJ1A
		3-Phase	MBKQJ3	MBKQJ3A
225A <sup>3</sup>	QR2, QRH2, HQR2,	1-Phase	MBKQR1	MBKQR1A
	HQR2H	3-Phase	MBKQR3	MBKQR3A
250A	FXD6, FD6, HFD6,	1-Phase	MBKFD1	MBKFD1A
	HFXD6	3-Phase	MBKFD3	MBKFD3A
400A <sup>①</sup>	JXD2, JD6, JXD6,	1-Phase	MBKJD1	MBKJD1A
	HJD6, HJXD6	3-Phase	MBKJD3	MBKJD3A

<sup>①</sup> 400 amp kit is for main only — not allowed for subfeed breaker.

Image: MBKBFA kit is available to mount BL/BQD/xGB 2-pole or 3-pole in unit space as a "Back-Fed Main". This occupies branch space and reduces circuit count by 2 or 3 positions. (includes) Neutral Lug, "MAIN" label and instructions).
Although QR is rated 250A, it is limited to 225A in panelboard.

#### Copper Neutral Lug Kits - 250A

	CNKL18	Use 30 ckt kit
2 or 4 Branch Neutral Strips.	CNKL30	CNLK30A
1 Main Neutral Lug, Hardware	CNKL42	CNLK42A
	—	CNLK54A
2	or 4 Branch Neutral Strips, Main Neutral Lug, Hardware	of 4 Branch Neutral Ottips,

#### 2/0 Neutral Lug Kits - 250A and 400A

18		—	Use 30 ckt kit
30	2 or 4 Branch Neutral Strips,	_	LNLK30A
42	Hardware	_	LNLK42A
54, 66		_	LNLK54A

#### 200% Neutral Lug Kits/250A

18		2NLK18	Use 30 ckt kit
30	2 or 4 Branch Neutral Strips,	2NLK30	2NLK30A
42	2 Main Neutral Lugs, Hardware	2NLK42	2NLK42A
54, 66		_	2NLK54A

#### 200% Neutral Lug Kits/400A

42NLK30A
42NLK42A
42NLK54A

NOTES:

Original P1 kits will not work with Revised P1 interiors if the chart shows different part numbers for each. OPDF can be downloaded (at no cost) and printed at this location: <sup>®</sup> Revised P1 kits will not work with Original P1 interiors if the chart shows different part numbers for each.

Isield installable Service Entrance Barrier kits are now available as required by UL67 (In COMPAS, you must select Service Entrance Required).



**MBKFD3A** 



**MBKQJ3A** 



Catalog #	Description
BK1	Bonding Kit for 400A max. Original P1 Panels
BK1A	Bonding Kit for 400A max. Revised P1 Panels
BK2	Bonding kit for S1/S2 400 & 600
BK3	Bonding kit for S3 Panel
IMK1	Interior Adjusting Kit
11-1824-01	Directory Card Holder
LPDC01	Directory Card (Pack of 10; ref. 12-1110-01)
МСНК	Metal Card Holder Kit
NBK03	Number Strips 1–42. Stick-on type (P1 Panels only)
NBK04	Number Strips 43–84. Stick-on type (P1 Panels only)
NBK05	Number Strips 85–126. Stick-on type (P1 Panels only)
NBK06	Number Strips 127–168. Stick-on type (P1 Panels only)
EGK	AL Ground Bus 44 Connections
ECGK	CU Ground Bus 44 Connections
IGK	Insulated AL Ground Bus
ICGK	Insulated CU Ground Bus
SEBKRP1V1 <sup>3</sup>	FD, QJ, QR Service Entrance Barrier Kit (Revised P1)
SEBKRP1V2 <sup>3</sup>	ED Service Entrance Barrier Kit (Revised P1)
SEBKRP1V3 <sup>3</sup>	BQD Service Entrance Barrier Kit (Revised P1) back-fed
SEBKRP1V4 <sup>3</sup>	xGB Service Entrance Barrier Kit (Revised P1) back-fed
SEBKRP1V5 <sup>3</sup>	BL/BQD/xGB Service Entrance Barrier Kit (RP1 in main space)
SEBKP1P2P3V1 <sup>3</sup>	JD, LD Service Entrance Barrier Kit (RP1, P1, P2, P3)
EWK1	End Wall Kit with Knockouts (20" W x 5.75" DP)
EWK2	End Wall Kit with Knockouts (24" W x 7.75" DP)
EBF1	NEB/HEB Filler Plate
P1SCRWS	Package of 42 breaker mounting screws for P1
DFFP1	1" Branch circuit filler plate (used for BL/BQD/xGB/ xGB2/ED blank positions) (suitable for replacing QF3 in P1 thru P5 Panelboards and Switchboards)
P1CONBPHCU <sup>①</sup>	Connector kit – 6 pcs. B-phase Copper
P1CONBPHAL <sup>①</sup>	Connector kit – 6 pcs. B-phase Aluminum
P1CONACPHCU <sup>®</sup>	Connector kit – 6 pcs. A or C-phase Copper
P1CONACPHAL <sup>①</sup>	Connector kit – 6 pcs. A or C-phase Aluminum
MBKQRFK	P1/Revised P1 Filler for 1PH/3PH QR. Horizontal mount only.
ANSI/NEMA PB 1.1-2013	General Instructions for Proper Installation, Operation, and Maintenance of Panelboards Rated 600 Volts or Less (O&M Manual) <sup>®</sup>

1) Replacement parts only.

as required by UL67. (In COMPAS, you must select Service Entrance Required.)

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# **Panelboards**

# **Circuit Breaker / Lighting and Distribution**

# Table P1-13 – Main Breaker Gutter Dimensions Inches (mm)

Main	Max. Interrupting F	Neutral Location	
Breaker	20" wide box	24" wide box	20" wide box
BL, BLH, HBL <sup>2</sup>	8.680 (220)3	10.690 (272)3	10.500 (267)
BQD <sup>2</sup>	7.880 (200) <sup>3</sup>	9.880 (251) <sup>③</sup>	10.500 (267)
NGB, HGB, LGB <sup>2</sup>	7.770 (197)③	9.770 (248)③	10.500 (267)
ED4, ED6, HED4	6.125 (156)	8.125 (206)	10.500 (267)
QJ2, QJH2, QJ2H	6.500 (165)	8.500 (216)	10.500 (267)
QR2, QRH2, HQR2, HQR2H	6.500 (165)	8.500 (216)	10.500 (267)
FD6, FXD6, HFD6, HFXD6	5.250 (133)	7.250 (184)	10.500 (267)
JD6, JXD6 <sup>①</sup>	15.000 (381)	15.000 (381)	26.500 (674)

<sup>①</sup> JD frame mounted vertically.

#### ② For Revised P1 with Back-fed Main option, use Side Gutter Wiring Spec Table P1-15.

<sup>(3)</sup> These dimensions are for Revised P1 only. See Original P1 cut sheets for valid dimensions if needed (P1 production prior to January 2015).

#### Table P1-14 – Main Lug End Gutter Dimensions Inches (mm)

Amp	End Gutter		Neutral Location	
Rating	20" wide box	24" wide box	20" wide box	24" wide box
125	9.500 (242)	9.500 (242)	10.500 (267)	10.500 (267)
250	9.500 (242)	9.500 (242)	10.500 (267)	10.500 (267)
400	25.500 (648)	25.500 (648)	26.750 (680)	26.750 (680)

NOTE: Feed-thru lug and neutral wire bending space is 15.000" and 16.250" respectively on 400A panel.

<- B -÷

<- C→

**←**D→

**←**E →

← F →

Fig P1-1

BL, BLH, HBL

BLF, BLHF

BOD

BL, BLH, HBL

BLF, BLHF

BOD

NGB, HGB, LGB NGB, HGB, LGB

ED4, ED6, HED4, HHED6

QR2, QRH2, HQR2, HQR2H FXD6, FD6, HFD6

Panel Width

20 in. (508 mm)

QJ2, QJH2, QJ2H

A→

← B →

<- C →

# Table P1-15 – Side Gutter Wiring Space Inches (mm) (Fig P1-1)

Reference Letter	Panel Width 20″	Panel Width 24" Optional
A②	6.375 (167)	8.375 (213)
<b>B</b> <sup>②</sup>	5.500 (140)	7.500 (191)
<b>C</b> <sup>2</sup>	5.000 (127)	7.000 (178)
D	6.125 (156)	8.125 (206)
E	6.500 (165)	8.500 (216)
F	5.250 (133)	7.250 (184)

<sup>①</sup> Subfeed mounting limit 1 per panel.

#### (2) For all Revised P1 panels using BL/BQD or xGB breakers as mains in back-fed position, use this chart for wiring space.



Feed-Thru (FT)



Non-Feed-Thru (NFT)

### **Miscellaneous Parts and Accessories**

Catalog #	Description			
BK1	Bonding Kit for 400A max. Original P1 Panels			
BK1A	Bonding Kit for 400A max. Revised P1 Panels			
BK2	Bonding kit for S1/S2 400 & 600			
BK3	Bonding kit			
IMK1	Interior Adjusting Kit			
11-1824-01	Directory Card Holder			
LPDC01	Directory Card (Pack of 10; ref. 12-1110-01)			
МСНК	Metal Card Holder Kit			
NBK03	Number Strips 1-42. Stick-on type (P1 Panel only			
NBK04	Number Strips 43–84. Stick-on type; Use w/ P1 series Panels			
NBK05	Number Strips 85–126. Stick-on type; Use w/ P1 series Panels			
NBK06	Number Strips 127–168. Stick-on type; Use w/ P1 series Panels			
EGK	AL Ground Bus 44 Connections			
ECGK	CU Ground Bus 44 Connections			
IGK	Insulated AL Ground Bus			
ICGK	Insulated CU Ground Bus			
SEBKRP1V1 <sup>3</sup>	FD, QJ, QR Service Entrance Barrier Kit (Revised P1)			
SEBKRP1V2 <sup>3</sup>	ED Service Entrance Barrier Kit (Revised P1)			
SEBKRP1V3 <sup>3</sup>	BQD Service Entrance Barrier Kit (Revised P1) back-fed			
SEBKRP1V4 <sup>3</sup>	xGB Service Entrance Barrier Kit (Revised P1) back-fed			
SEBKRP1V5 <sup>3</sup>	BL/BQD/xGB Service Entrance Barrier Kit (RP1 in main space)			
SEBKP1P2P3V1 <sup>3</sup>	JD, LD Service Entrance Barrier Kit (RP1, P1, P2, P3)			
EWK1	End Wall Kit with Knockouts (20" W x 5.75" DP			
EWK2	End Wall Kit with Knockouts (24" W x 7.75" DP			
EBF1	NEB/HEB Filler Plate			
P1SCRWS	Package of 42 breaker mounting screws for P1			
DFFP1	1" Branch circuit filler plate (used for BL/BQD/ xGB/xGB2/ED blank positions) (suitable for replacing QF3 in P1 thru P5 Panelboards and Switchboards)			
P1CONBPHCU <sup>①</sup>	Connector kit – 6 pcs. B-phase Copper			
P1CONBPHAL <sup>①</sup>	Connector kit – 6 pcs. B-phase Aluminum			
P1CONACPHCU <sup>①</sup>	Connector kit – 6 pcs. A or C-phase Copper			
P1CONACPHAL <sup>①</sup>	Connector kit – 6 pcs. A or C-phase Aluminum			
MBKQRFK	P1/Revised P1 Filler for 1PH/3PH QR. Horizontal mount only.			
ANSI/NEMA PB 1.1-2013	General Instructions for Proper Installation, Operation, and Maintenance of Panelboards Rated 600 Volts or Less (O&M Manual) <sup>©</sup>			

① Replacement parts only.

2 PDF can be downloaded (at no cost) and printed at: www.nema.org/standards/pages/Panelboards.aspx ③ Factory installed and Field installable Service Entrance

Barrier kits are now available as required by UL67. (In COMPAS, you must select Service Entrance Required.)



Example of Back-fed xGB Main breaker installed

**Type P3 Panelboard Kits and Accessories** 

# B H

# Standard Enclosures

			mber		
Box Height	Type 1 Standard Trim				
(in.)	Box	Surface	Flush	Type 3R	Type 3R/12
56	24WD56	P3S56	P3F56	24NRD56	24WPD56
62	24WD62	P3S62	P3F62	24NRD62	24WPD62
68	24WD68	P3S68	P3F68	24NRD68	24WPD68
74	24WD74	P3S74	P3F74	24NRD74	24WPD74
80	24WD80	P3S80	P3F80	24NRD80	24WPD80

# **Options For Type 1 Trims**

Items must be ordered as manual line item on factory Hinged trim – Add "H" suffix Door-in-door – Add "D" suffix Metal card holder – Add "M" suffix

# **Breaker Kits and Accessories**

Kit Number	Description	Contents
BBKB32 (P2/P3)	BL/BQD 6-pole 3" branch breaker kit	Kit contains top barrier, (3) A/C connectors, (1) B connector, hardware
BBKNB32 (P2/P3)	NGB, HGB, LGB 6-pole 3" branch breaker kit	Kit contains top barrier, (3) A/C connectors, (1) B connector, hardware
BBKGB32 (P2/P3)	NGB2, HGB2, LGB2 6-pole 3" branch breaker kit	Kit contains top barrier, (3) A/C connectors, (1) B connector, hardware
BBKEB32 (P3)	NEB/HEB 6-pole 3" branch breaker kit	Kit contains top barrier, (3) A/C connectors, (1) B connector, hardware
BBKED32 (P2/P3)	ED 6-pole 3" branch breaker kit	Kit contains breaker support, inter-phase barriers, (3) A/C connectors, (1) B connector, hardware
BBKQ2 (P3)	Branch breaker kit for 2 and 3-pole QJ twin mount	Kit contains all connectors and cover plates necessary to mount both 2 and 3-pole breakers
BBKQR1 <sup>①</sup>	P2 branch BKR strap kit for single QR 1-phase/3- phase.	Kit contains all connectors and cover plates necessary to mount both 2 and 3-pole breakers
BBKQR2 <sup>①</sup>	P3 twin BKR mounting kit for QR 1-phase/3-phase.	Kit contains all connectors and cover plates necessary to mount both 2 and 3-pole breakers
DFK1	BL, BQD, ED deadfront kit for 1" pole breakers	Center strips 3", 6", 9", 15", 21" plus mounting hardware
DFFP3	Deadfront filler 3"	3" empty space filler and hardware
DFFP6	Deadfront filler 6"	6" empty space filler and hardware
P3BK1	P3 bonding kit	Bonding strap and hardware
EBF1	HEB/NEB Filler Plate	Filler Plate
BBKQRP1FK	P2 Filler for QR. Horizontal or vertical mount. 1-phase/3-phase.	Kit contains all cover plates necessary to change from QJ to QR both 2 and 3-pole breakers.
BBKQRP2FK	P3 Filler for QR. Dual mount horizontal. 1-phase/3-phase.	Kit contains all cover plates necessary to change from QJ to QR both 2 and 3-pole breakers. For 1-phase panel, both breakers must change from QJ to QR, cannot have one of each installed.
SEBKP3V1 <sup>2</sup>	Service entrance barrier kit CFD, FD (P3 only)	Kit contains barrier, mounting brackets, and hardware
SEBKP1P2P3V1 <sup>2</sup>	JD, LD Service Entrance Barrier Kit (RP1, P1, P2, P3)	Kit contains barrier, mounting brackets, and hardware
SEBKP3V3	FD, QJ, QR Horizontal Main Service Entrance Barrier (P2, P2 with SEM3, P3)	Kit contains barrier, mounting brackets, and hardware

<sup>①</sup> Although QR is rated 250A, it is limited to 225A in panelboard.

@ Factory installed and Field installable Service Entrance Barrier kits are now available as required by UL67. (In COMPAS, you must select Service Entrance Required.)

# Type P1, P2, and P3 Panelboards

# **Miscellaneous Parts and Accessories**

Catalog Number	Description	
EGK	Al Ground Bus 44 Connections	
BK1	Bonding kit for 250A max. and all P1 panels	
IMK1	Interior Adjusting Kit	
11-1824-01	Directory Card Holder	
LPDC01	Directory Card	
NBK3	Number Strips 1-42. Snap-in type; Use w/P2 & P3 series Panels	
NBK4	Number Strips 43-84. Snap-in type; Use w/P2 & P3 series Panels	
NBK5	Number Strips 85-126. Snap-in type; Use w/P2 & P3 series Panels	
NBK6	Number Strips 127-168. Snap-in type; Use w/P2 & P3 series Panels	
NBK7	Number Strips 169-210. Snap-in type; Use w/P2 & P3 series Panels	
NBK8	Number Strips 211-252. Snap-in type; Use w/P2 & P3 series Panels	
ECGK	Cu Ground Bus 44 Connections	
IGK	Insulated AI Ground Bus	
ICGK	Insulated Cu Ground Bus	
EWK2	End Wall Kit with Knockouts (24" W x 7.75" DP)	
DFFP1	1" Filler Plate (used for BL/BQD/xGB/xGB2/ED blank positions) (Suitable for replacing QF3 in P1 thru P5 Panelboards and Switchboards)	
ANSI/NEMA PB 1.1-2013	General Instructions for Proper Installation, Operation, and Maintenance of Panelboards Rated 600 Volts or Less (O&M Manual) <sup>①</sup>	

<sup>®</sup> PDF can be downloaded (at no cost) and printed at this location: http://www.nema.org/standards/pages/Panelboards.aspx