Class I, Div. 1 & 2, Groups B,C,D
Class I, Zones 1 & 2, Groups IIB+H_2, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III, Div. 1 & 2
NEMA 3, 4, 4x, 7(B,C,D) 9(E,F,G)

UL Classified — File E83969
See files for details or call Killark.
CSA Certified-File LR 11713 for B7L

FEATURES-SPECIFICATIONS

PRISM®

Applications
- Hazardous locations due to the presence of flammable gases or vapors, combustible dust or easily ignitable fibers and flyings, and areas subject to corrosion, weather and dampness
- Petroleum refineries, chemical and petrochemical plants with indoor and outdoor processes
- Applications requiring overcurrent and short circuit protection of lighting, appliances, heating and motor circuits

Features
- NEMA 4, 4x rated for protection from hose directed water and corrosion
- Standard electrical components: B7L-Cutler-Hammer Quicklag Breakers B7P-Cutler-Hammer Series C Breakers
- B7L and B7P furnished with copper buss
- Main lugs. Mechanical solderless type, approved for CU or AL conductors
- Solid Neutral standard. Single phase 3 wire. Three phase 4 wire
- Copper ground bar standard
- Main and branch breaker handles can be padlocked in “ON” or “OFF” position
- Top feed panel standard with bottom feed optional
- Hinged cover, installed as standard
- Quick release, captivated coverbolts of 316 stainless steel

Standard Materials
- Enclosure: Copper-free aluminum (less than 4/10 of 1%)
- Main Breaker Handle: Copper-free aluminum
- Cover bolts: 316 grade stainless steel
- Flange Gasket “O” Ring: Buna-N Nitrile
- Branch Breaker Operators: Valox Thermoplastic Polyester handle molded onto 316 stainless steel shaft with neoprene “O” ring
- Hinges: Copper-free aluminum with stainless steel pin and hardware
- Mounting Lugs: 1/4" thick aluminum

Panel Selection Factors
Basic information required when specifying panelboards is as follows:
- Environment
- Service (Voltage/Frequency/Phase)
- Interrupting capacity
- AMP Rating of Main (Lugs only or Breaker)
- Branch Breaker (Type/Number of Poles/Amperage)

Ordering Information
Specifying and ordering a complete panelboard assembly requires the selection of three components. (1) Basic Panel (2) Branch Breaker and (3) Options (if required). This method of cataloging permits a wide variety and maximizes circuit flexibility in our panelboard offering. Components supplied in each of these selections include:

1) Basic Panelboard Enclosures (page DE12)
- Explosion-proof enclosure consisting of box and cover
- Cover predrilled and plugged for maximum number of branch breaker handles (handles not supplied)
- Box supplied with conduit openings
- Main circuit breaker and external handle (when specified)
- Panelboard internal chassis with buss bars but less branch circuit breakers

2) Branch Circuit Breakers (page DE14)
- Internal circuit breaker
- External handle mechanism with internal tripping mechanism
- Test pushbutton for GFI (when ordered)
- Lockout shield with on-off-trip-reset identification

3) Options - Accessories (page DE14)

Ordering Example
Specification is for a 3 phase 120/208 volt panel with 100 Amp main lugs complete with (4) single pole 20 Amp (2) double pole 20 Amp and (1) three pole 30 Amp branch breakers.

Branch Breaker Total =

(4) 1 Pole = 4 Poles Total
(2) 2 Pole = 4 Poles Total
(1) 3 Pole = 3 Poles Total
Total 11 Branch Poles

Specification/Ordering Example

B7L20 - 312 - ML100 (Basic panelboard enclosure) with:

(4) B7BLA1020 (1 Pole 20 Amp Branch)
(2) B7BLA2020 (2 Pole 20 Amp Branch)
(1) B7BLB3030 (3 Pole 30 Amp Branch)

Catalog Logic
See page DE15 for panelboard catalog number logic for basic enclosures.

HUBBELL®
KILLARK®

Cutler-Hammer type BA circuit breaker 1 - 2 or 3 pole.
Catalog numbers on this page are for the basic panelboard enclosure only with a panel interior chassis containing main lugs or main breaker as illustrated. Internal branch breakers and external handles are NOT included in the basic enclosure catalog number and must be ordered as separate items.

Branch circuit loads
The interior panel chassis supplied in B7L panel is limited to a maximum of 140 amperes at any one connection point. Breakers of 50 thru 100 amps must be installed opposite breakers of smaller amperage so as not to exceed the 140 ampere limitation.

CIRCUIT BREAKER RATINGS			
TYPE	NO. OF POLES	VOLT	AMPERES SYMMETRICAL
BAB*	1	120	10,000 AIC
BAB*	2	120/240	10,000 AIC
BAB*	3	240	10,000 AIC
BABSWN*	1	120/240	10,000 AIC
BABSWN*	2	120/240	10,000 AIC
QGBF	1	120	10,000 AIC
QGBF	2	120/240	10,000 AIC
QGBFEP	1	120	10,000 AIC
QGBFEP	2	120/240	10,000 AIC

**Type BAB also rated for 80V DC at 5,000 AIC.*

Class I, Div. 1 & 2, Groups B,C,D
Class I, Zones 1 & 2, Groups IIB+H_2, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III, Div. 1 & 2
NEMA 3, 4, 4x, 7(B,C,D) 9(E,F,G)

Classified — File E83969
See files for details or call Killark.
Certified-File LR 11713

B7L PANEL WITHOUT MAIN BREAKER (MAIN LUGS ONLY) LESS BRANCH BREAKERS

ELECTRICAL RATING	MAIN LUG RATING	NUMBER OF BRANCH POLES	CATALOG NUMBER BASIC ENCLOSURE AND CHASSIS	ENCLOSURE BOX SIZE	MAIN WIRE RANGE
Single phase 3 wire with solid neutral 120/240 VAC	100	12	**B7L20 - 112 - ML100**	A	E
	100	18	**B7L29 - 118 - ML100**	B	G
	225	18	**B7L29 - 118 - ML225**	B	F
	100	24	**B7L29 - 124 - ML100**	B	G
	225	24	**B7L41 - 124 - ML225**	C	F
	100	30	**B7L41 - 130 - ML100**	C	G
	225	30	**B7L41 - 130 - ML225**	C	F
	225	36	**B7L41 - 136 - ML225**	C	F
	225	42	**B7L41 - 142 - ML225**	C	F
Three phase 4 wire with solid neutral 120/208 VAC	100	12	**B7L20 - 312 - ML100**	A	E
	100	18	**B7L29 - 318 - ML100**	B	G
	225	18	**B7L29 - 318 - ML225**	B	F
	100	24	**B7L29 - 324 - ML100**	B	G
	225	24	**B7L41 - 324 - ML225**	C	F
	100	30	**B7L41 - 330 - ML100**	C	G
	225	30	**B7L41 - 330 - ML225**	C	F
	225	36	**B7L41 - 336 - ML225**	C	F
	225	42	**B7L41 - 342 - ML225**	C	F

B7L PANEL WITH MAIN BREAKER LESS BRANCH BREAKERS

ELECTRICAL RATING	MAIN BREAKER FRAME	MAIN BREAKER AND RATING	NUMBER OF BRANCH POLES	CATALOG NUMBER BASIC ENCLOSURE AND CHASSIS	ENCLOSURE BOX SIZE	MAIN WIRE RANGE
Single phase 3 wire with solid neutral 120/240 VAC	EHD	100	12	**B7L29 - 112 - MBE100**	B	H
	EHD	100	18	**B7L41 - 118 - MBE100**	C	H
	EHD	100	24	**B7L41 - 124 - MBE100**	C	H
	ED	225	24	**B7L41 - 124 - MBC225**	C	I
	EHD	100	30	**B7L41 - 130 - MBE100**	C	H
	ED	225	30	**B7L41 - 130 - MBC225**	C	I
	ED	225	36	**B7L50 - 136 - MBC225**	D	I
	ED	225	42	**B7L50 - 142 - MBC225**	D	I
Three phase 4 wire with solid neutral 120/208 VAC	EHD	100	12	**B7L29 - 312 - MBE100**	B	H
	EHD	100	18	**B7L41 - 318 - MBE100**	C	H
	EHD	100	24	**B7L41 - 324 - MBE100**	C	H
	ED	225	24	**B7L41 - 324 - MBC225**	C	I
	EHD	100	30	**B7L41 - 330 - MBE100**	C	H
	ED	225	30	**B7L41 - 330 - MBC225**	C	I
	ED	225	36	**B7L50 - 336 - MBC225**	D	I
	ED	225	42	**B7L50 - 342 - MBC225**	D	I

B7L PANEL WITH BACK FEED MAIN BREAKER LESS BRANCH BREAKERS

ELECTRICAL RATING	MAIN BREAKER FRAME	MAIN BREAKER AND RATING	NUMBER OF BRANCH POLES	CATALOG NUMBER BASIC ENCLOSURE AND CHASSIS	ENCLOSURE BOX SIZE	MAIN WIRE RANGE
Single phase 3 wire with solid neutral 120/240 VAC	BAB	100	12	**B7L29 - 112 - MBB100**	B	J
	BAB	100	18	**B7L29 - 118 - MBB100**	B	J
	BAB	100	24	**B7L41 - 124 - MBB100**	C	J
	BAB	100	30	**B7L41 - 130 - MBB100**	C	J
Three phase 4 wire with solid neutral 120/208 VAC	BAB	100	12	**B7L29 - 312 - MBB100**	B	J
	BAB	100	18	**B7L29 - 318 - MBB100**	B	J
	BAB	100	24	**B7L41 - 324 - MBB100**	C	J
	BAB	100	30	**B7L41 - 330 - MBB100**	C	J

NOTE: Main breaker panel includes main breaker and its price in basic enclosure part number. Refer to page DE14 for branch breaker ordering information.

Cutler-Hammer Series "C" Circuit Breakers 1-2 or 3 pole.
Catalog numbers on this page are for the basic panelboard enclosure only with a panel interior chassis containing main lugs or main breaker as illustrated. Internal branch breakers and external handles are NOT included in the basic enclosure catalog number and must be ordered as separate items.

Class I, Div. 1 & 2, Groups B,C,D
Class I, Zones 1 & 2, Groups IIB+H_2, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III, Div. 1 & 2
NEMA 3, 4, 4x, 7(B,C,D) 9(E,F,G)

UL UL Classified — File E83969
See files for details or call Killark.

FEATURES-SPECIFICATIONS

B7P CIRCUIT BREAKER RATINGS

TYPE	NUMBER OF POLES	MAXIMUM VOLTS		AMPERES SYMMETRICAL					
		AC	DC	240AC	277AC	480AC	600AC	125DC	250DC
EHD	1	277	125	—	14000	—	—	10000	—
EHD	2&3	480	250	18000	—	14000	—	—	10000
FDB	2&3	600	250	18000	—	14000	14000	—	10000

B7P PANEL WITHOUT MAIN BREAKER (MAIN LUGS ONLY) LESS BRANCH BREAKERS

ELECTRICAL RATING	MAIN LUG RATING	NUMBER OF BRANCH POLES	CATALOG NUMBER ENCLOSURE AND CHASSIS	ENCLOSURE BOX SIZE	MAIN WIRE RANGE
3 Phase 4 Wire with solid neutral up to 600 VAC	100	6	**B7P20 - 306 - ML100**	A	K
	100	12	**B7P29 - 312 - ML100**	B	K
	225	12	**B7P29 - 312 - ML225**	B	L
	225	18	**B7P41 - 318 - ML225**	C	L
	100	21	**B7P41 - 321 - ML100**	C	K
	225	27	**B7P50 - 327 - ML225**	D	M

B7P PANEL WITH MAIN BREAKER LESS BRANCH BREAKERS

ELECTRICAL RATING	MAIN BREAKER			NUMBER OF BRANCH POLES	CATALOG NUMBER ENCLOSURE AND CHASSIS	ENCLOSURE BOX SIZE	MAIN WIRE RANGE
	MAX. VOLTS	AMPS	FRAME				
3 Phase 4 Wire with Solid Neutral Up to 600 VAC	480	100	EHD	6	**B7P29 - 306 - MBE100**	B	K
	600	100	FDB	6	**B7P29 - 306 - MBF100**	B	K
	600	225	JDB	12	**B7P41 - 312 - MBJ225**	C	L
	480	100	EHD	15	**B7P41 - 315 - MBE100**	C	K
	600	100	FDB	15	**B7P41 - 315 - MBF100**	C	K
	600	225	JDB	18	**B7P50 - 318 - MBJ225**	D	L
	480	100	EHD	21	**B7P50 - 321 - MBE100**	D	N
	600	100	FDB	21	**B7P50 - 321 - MBF100**	D	N

PANEL WITH BACK FEED MAIN BREAKER LESS BRANCH BREAKERS

ELECTRICAL RATING	MAIN BREAKER			NUMBER OF BRANCH POLES	CATALOG NUMBER ENCLOSURE AND CHASSIS	ENCLOSURE BOX SIZE	MAIN WIRE RANGE
	MAX. VOLTS	AMPS	FRAME				
3 Phase 4 Wire with solid neutral up to 600 VAC	480	100	EHD	9	**B7P29 - 309 - MBE100**	B	K
	600	100	FDB	9	**B7P29 - 309 - MBF100**	B	K
	480	100	EHD	18	**B7P41 - 318 - MBE100**	C	K
	600	100	FDB	18	**B7P41 - 318 - MBF100**	C	K
	480	100	EHD	24	**B7P50 - 324 - MBE100**	D	K
	600	100	FDB	24	**B7P50 - 324 - MBF100**	D	K

NOTE: Main breaker panel includes main breaker and its price in basic enclosure part number. Refer to page DE14 for branch breaker ordering information. See page DE15 for enclosure dimensions.

BRANCH BREAKERS ACCESSORIES/OPTIONS

BRANCH CIRCUIT BREAKERS

NUMBER OF POLES PER BREAKER	TRIP AMP RATING	B7L SERIES LIGHTING PANEL				B7P SERIES POWER PANEL	
		BAB FRAME STANDARD	BAB FRAME SWITCH NEUTRAL	QBGF GROUND FAULT 5MA	QBGEP EQUIPMENT PROTECTION 30MA	EHD FRAME 480 VAC MAX.	FDB FRAME 600 VAC MAX.
(1) Single Phase 120 Volt	SPACE	B7BLA1000	—	B7BLC1000	B7BLE1000	B7BPK1000	—
	15	B7BLA1015	—	B7BLC1015	B7BLE1015	B7BPK1015	—
	20	B7BLA1020	—	B7BLC1020	B7BLE1020	B7BPK1020	—
	30	B7BLA1030	—	B7BLC1030	B7BLE1030	B7BPK1030	—
	40	B7BLA1040	—	B7BLC1040	B7BLE1040	B7BPK1040	—
	50	B7BLA1050	—	—	—	B7BPK1050	—
	60	B7BLA1060	—	—	—	B7BPK1060	—
	70	B7BLA1070	—	—	—	B7BPK1070	—
	90	—	—	—	—	B7BPK1090	—
	100	B7BLA1100	—	—	—	B7BPK1100	
(2) Double Pole 120/240 Volt	SPACE	B7BLA2000	B7BLF2000	B7BLC2000	B7BLE2000	B7BPK2000	B7BPL2000
	15	B7BLA2015	B7BLF2015	B7BLC2015	B7BLE2015	B7BPK2015	B7BPL2015
	20	B7BLA2020	B7BLF2020	B7BLC2020	B7BLE2020	B7BPK2020	B7BPL2020
	30	B7BLA2030	B7BLF2030	B7BLC2030	B7BLE2030	B7BPK2030	B7BPL2030
	40	B7BLA2040	—	B7BLC2040	B7BLE2040	B7BPK2040	B7BPL2040
	50	B7BLA2050	—	B7BLC2050	B7BLE2050	B7BPK2050	B7BPL2050
	60	B7BLA2060	—	—	—	B7BPK2060	B7BPL2060
	70	B7BLA2070	—	—	—	B7BPK2070	B7BPL2070
	90	B7BLA2090	—	—	—	B7BPK2090	B7BPL2090
	100	B7BLA2100	—	—	—	B7BPK2100	B7BPL2100
(3) Three Pole 120/240 Volt	SPACE	B7BLB3000	B7BLF3000	—	—	B7BPK3000	B7BPL3000
	15	B7BLB3015	B7BLF3015	—	—	B7BPK3015	B7BPL3015
	20	B7BLB3020	B7BLF3020	—	—	B7BPK3020	B7BPL3020
	30	B7BLB3030	B7BLF3030	—	—	B7BPK3030	B7BPL3030
	40	B7BLB3040	—	—	—	B7BPK3040	B7BPL3040
	50	B7BLB3050	—	—	—	B7BPK3050	B7BPL3050
	60	B7BLB3060	—	—	—	B7BPK3060	B7BPL3060
	70	B7BLB3070	—	—	—	B7BPK3070	B7BPL3070
	90	B7BLB3090	—	—	—	B7BPK3090	B7BPL3090
	100	B7BLB3100	—	—	—	B7BPK3100	B7BPL3100
	110	—	—	—	—	—	B7BPL3110
	125	—	—	—	—	—	B7BPL3125
	150	—	—	—	—	—	B7BPL3150

MODIFICATIONS

CATALOG NUMBER	DESCRIPTION
SU3	Drain and breather①NEMA 3, 7CD, 9 EFG
SU3B	Drain and breather①NEMA 3, 7BCD, 9EFG
KIT-251	Grounding kit, 100 AMP
KIT-252	Grounding kit, 225 AMP
B7SF	Special baked epoxy finish
B7EYEBOLT	Eye bolts for ease of installation②
B7ML225	Change 100 amp buss to 225 amp B7P series
B7MLBTM	Main lugs at bottom
B7SPNPT	Change standard conduit size and location
B7GSN	Kit to ground neutral bar

** To be ordered as separate item with notation on order for assembly into enclosure.*
① Installation of drain and breather will void the NEMA 4-4X Rating of panelboard. Drain and breather will be installed into a standard conduit opening provided in box.
② Lifting eyebolts are installed in two conduit openings located in top of box and are to be removed after installation.

Branch Breaker Notes:

1) B7L panels are factory drilled for maximum number of single pole branch breaker handles and B7P for maximum number of 3 pole branch breaker handles as standard.
2) Part numbers illustrated above include external handle, trip mechanism, locking tab and internal breaker. Refer to page DE11 for complete ordering information and examples.
3) Space = External handle, shaft and trip mechanism installed to allow for future installation of breaker.
4) Ground Fault & Equipment protection breakers include external pushbutton for each breaker to test ground fault sensing circuit and the mechanical operation of breaker.
5) Switch Neutral Breaker note. A two pole breaker has one pole for breaking from main buss and one pole that breaks neutral. Three pole breaker consists of two poles for breaking from main buss and one pole that breaks neutral.

Catalog Logic- for basic Panelboard Enclosures

B7 L 20 - 1 - 12 ML 100

Constant For PRISM Series Enclosures

L - Lighting
P - Power

Nominal Inside Length of Box 20-29-41-50

1 - Single Phase
3 - Three Phase

Number Of Branch Poles

Mains Amp Rating
NOTE: Change if lower amperage main breaker is required, Example MBB60 for 60 AMP main.

Mains ML - Main Lugs Only

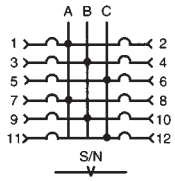
MBB	Main Breaker	BAB
MBC		ED
MBE		EHD
MBF		FDB
MBJ		JD

WIRE SIZES									
E	F	G	H	I	J	K	L	M	N
#12-#1	#6-250MCM	#12-1/0	#14-1/0	2/0-250MCM	#14-#1	#6-2/0	#6-4/0	#2-4/0	#2-2/0

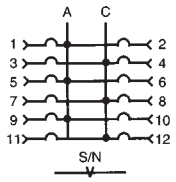
Wiring Diagrams B7L Series

(Note: B7P Series are single column)

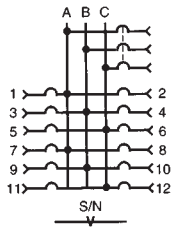
Main Lug Only
Three Phase 4-Wire
Solid Neutral
120/208 VAC



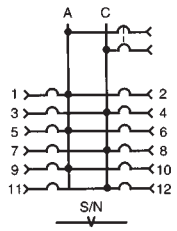
Main Lug Only
Single Phase 3-Wire
Solid Neutral
120/240 VAC



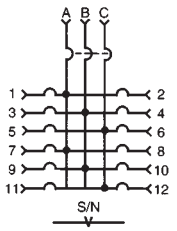
Back Feed
Main Breaker
Three Phase 4-Wire
Solid Neutral
120/208 VAC



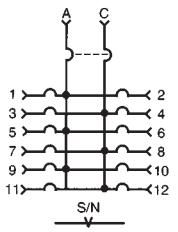
Back Feed
Main Breaker
Single Phase 3-Wire
Solid Neutral
120/240 VAC



Vertical
Main Breaker
Three Phase 4-Wire
Solid Neutral
120/208 VAC



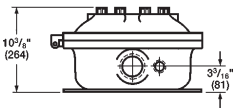
Vertical
Main Breaker
Single Phase 3-Wire
Solid Neutral
120/240 VAC

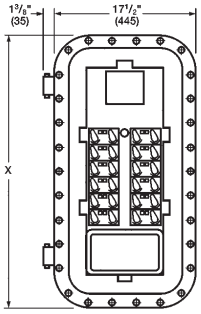


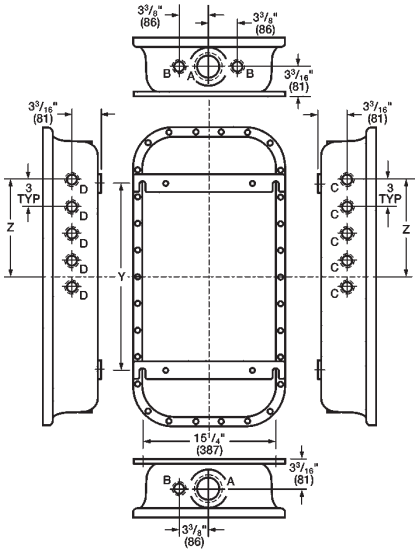
DIMENSIONS										
ENCLOSURE BOX SIZE		X	Y	CONDUIT SIZE		Z	CONDUIT QUANTITY			
LETTER	BASE BOX NUMBER①			A	B,C,D		A	B	C	D
A	MXB-13207	24-3/4"(629)	13"(330)	2"	1"	6-7/8"(175)	2	3	3	4
B	MXB-13297	33-3/8"(848)	21"(533)	2-1/2"	1"	10-7/8"(276)	2	3	4	5
C	MXB-13417	45-3/8"(1153)	33"(838)	3"	1"	16-7/8"(429)	2	3	5	6
D	MXB-13507	54-3/8"(1381)	42"(1067)	3"	1"	21-3/8"(543)	2	3	6	7

①*See pages DE12 and DE13 for complete enclosure ordering information.*

Dimensions







HUBBELL
KILLARK®