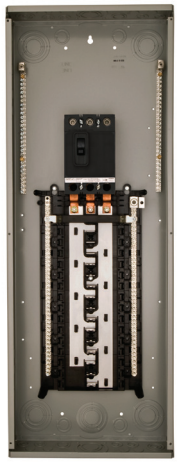
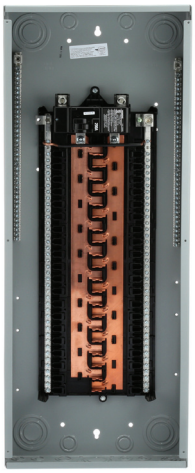
Load Centers & Circuit Breakers



PL Series Load Center

Generator Ready Load Center

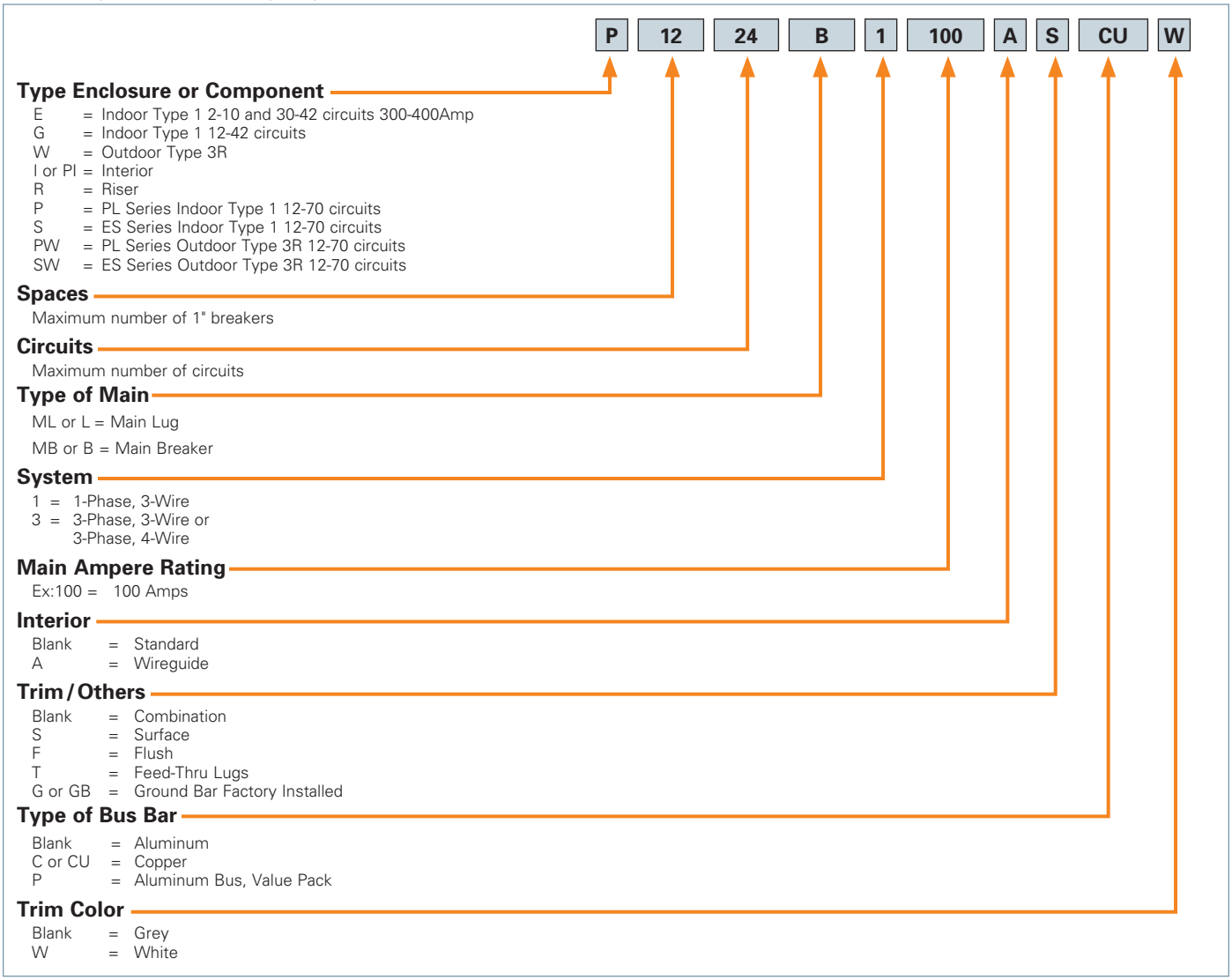


WireGuide Load Center

Scan to connect online to the most up-to-date version of this Section of SPEEDFAX.

Contents

Catalog Numbering System



Products Shown In Sections 1 of this Speedfax Meet or Exceed the Following Standards.

- UL50 — Electric Cabinets and Boxes
- UL67 — Electric Panelboards
- UL486 — Wire Connectors
- UL489 — Molded-Case Circuit Breakers
- UL869 — Service Equipment
- UL943 — Ground Fault interrupters (Class A — Personnel Protection)
- Federal Specification W-P-115b — Panel Power Distribution
- Federal Specification W-C-375B — Circuit Breakers
- NEC
- NEMA 250

Underwriters' Laboratories, Inc. Reference File Numbers:

- Series Connected Circuit Breaker Information is recognized by UL under file #E10848(N)
- Load Centers Listed by UL under file #E10703
- Load Centers UL recognized components found under file #E10703, Volume 6 and 7. (Also referenced under the recognized components directory — section QEUY2)
- EQ Circuit Breakers are Listed by UL under file #E82615

Load Centers

Siemens PL and ES Series Load Centers™ Overview

PL Series:

- Convertible
- Invertible①
- Flush or Surface Mount Combination Cover①
- Insta-wire neutrals & grounds
- Ground bars included
- Copper busbars
- Dual neutrals on all configurations
- Carton-in-carton packaging
- Lifetime warranty

ES Series:

- Invertible①
- Flush or Surface Mount Combination Cover①
- Insta-wire neutrals & grounds
- Aluminum busbars
- Single sided neutral on 24 circuits and below
- Single piece carton packaging
- 10 year warranty

PL Series 1-phase

PL Series 3-phase

ES Series 1-phase

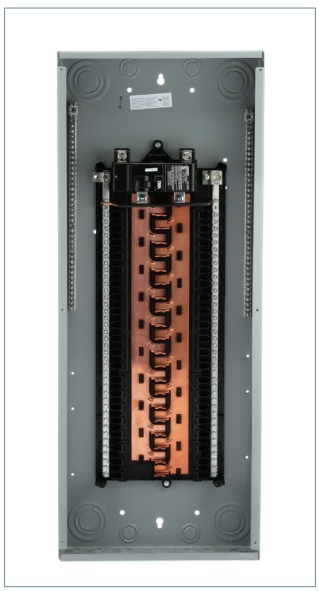
ES Series 3-phase

NEW WireGuide™ Load Centers and Breakers

WireGuide load centers accept new AFCIs with shortened neutral wires that slide directly into the neutral bar.

Features

- Over 4 inches of breaker wire bending space
- 11 SKUs each available in both grey and white①
- Pre-trimmed and ready to install neutral wires have an "Oops Loop" if extra wire is needed
- Full length neutral bars
- Decreased installation time
- WireGuide breakers available by adding "WG" suffix to existing catalog numbers. See page 1-35 for more details.



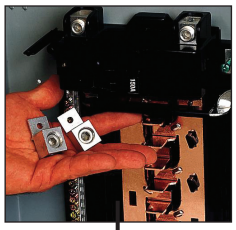
WireGuide Load Centers

Combination Type AFCI WireGuide Breaker

① Applies only to NEMA 1 ES and PL Load Centers

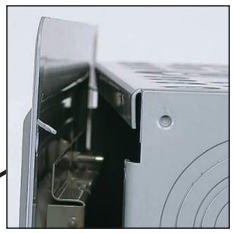
PL Series Load Centers

Features



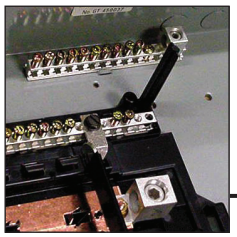
All devices convertible from main lug to main breaker and vice versa.

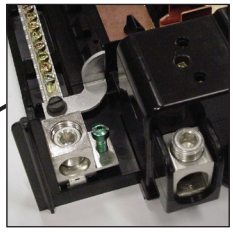
Invertible for bottom feed application.①



Mounting tabs on the trim hold it in place on the load center, freeing up both hands to drive the trim screws.

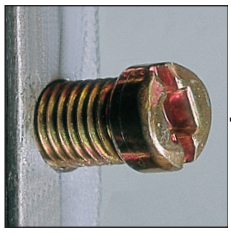
All devices are provided with 2 factory installed ground bars.

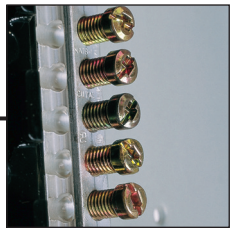




The pre-positioned bond screw eliminates bond strap/screw assemblies, and reduces the risk of losing components in the field.

Combination head screw on the neutrals, ground, trim, upper pan, and bond screw provide installation flexibility.

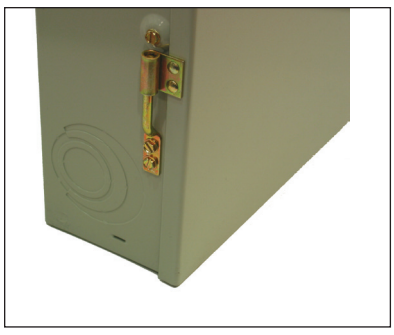




The patented INSTA-WIRE™ neutral/ground system allows for faster installation because screws are backed out, ready for wire insertion. The visible neutral and grounds system aids in the insertion of conductors.

A rigid, sturdy base pan provides the ruggedness required for the most harsh applications.

Copper Bus



The outdoor enclosure has a slide hinge door for the easiest installation and can be removed by backing out only one screw.

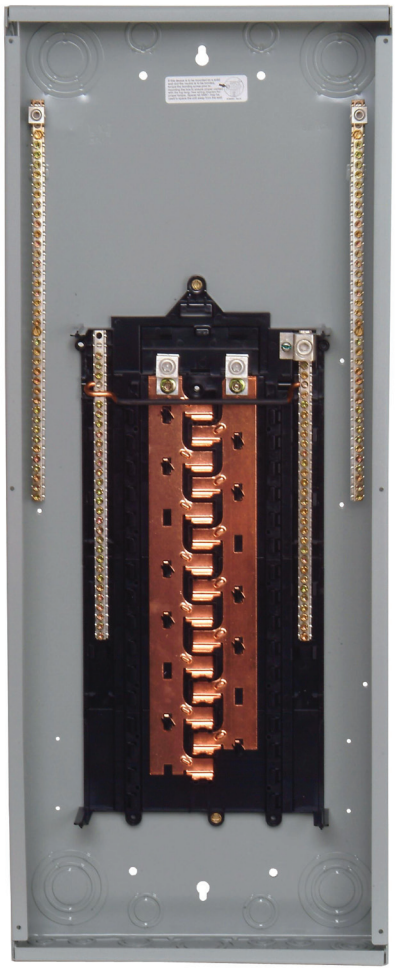
PL Series Load Centers ship with trims packaged separately.

① Applies only to NEMA 1 ES and PL Load Centers

The PL Series Load Center product line provides a wide array of variation to meet any application need.

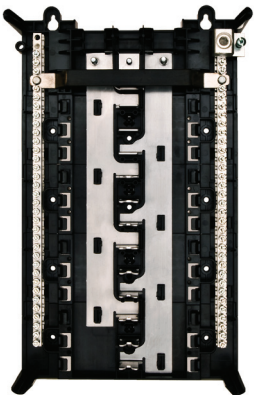
The following offering is available in the PL Series product line:

- 12-70 Circuits/Spaces
- Indoor and Outdoor enclosures
- 100 to 225 Amp
- Main Lug and Main Breakers
- Un-assembled offering in 3-phase



PL Series
1-phase Main Lug

PL Series
3-phase Main Breaker



Un-assembled 3-phase

PL Series 1-Phase Main Lug & Main Breaker Load Centers

1-phase, 3-wire SN, 120/240 Volts AC

Main Breaker/Convertible Load Centers①

Copper Bus⑦

12-70 Circuits / 100-225 Amperes

60/75°C Rated 22,000A IR②

Amp Rating	No. of Spaces	Indoor Enclosure – NEMA Type 1					Outdoor Enclosure – NEMA Type 3R		
		No. of Circuits	PL Catalog Number	No. of Circuits	PL with WireGuide Interior Catalog Number⑨	NEMA 1 - Enclosure Height (inches)③	No. of Circuits	Catalog Number	NEMA 3R - Enclosure Height (inches) ④
100	12	24	P1224B1100CU	—	—	18	24	PW1224B1100CU	21
	16	24	P1624B1100CU⑨	—	—	21	24	PW1624B1100CU	23
	20	20	P2020B1100CU	40	P2040B1100ACU	24	20	PW2020B1100CU	27
		24	P2024B1100CU				—	—	—
	24	24	P2424B1100CU	48	P2448B1100ACU	24	—	—	—
	30	30	P3030B1100CU	60	P3060B1100ACU	30	—	—	—
		40	—	—	—	—	40	PW3040B1100CU	35
125	30	30	P3030B1125CU⑨	60	P3060B1125ACU	30	40	PW3040B1125CU	35
150	20	30	P2030B1150CU	40	P2040B1150ACU	24	—	—	—
		30	—	—	—	—	30	PW2030B1150CU	27
	30	30	P3030B1150CU	60	P3060B1150ACU	30	—	—	—
		40	—	—	—	—	40	PW3040B1150CU	35
200	20	40	P2040B1200CU	40	P2040B1200ACU	30	40	PW2040B1200CU	27
	30	40	P3040B1200CU	60	P3060B1200ACU	36	40	PW3040B1200CU	35
			P3040B1200⑧⑨	60	P3060B1200A⑧	36	—	—	—
	40	40	P4040B1200CU⑨	80	P4080B1200ACU	36	40	PW4040B1200CU	38
			P4040B1200⑧⑨	80	P4080B1200A⑧	36	—	—	—
	54	70	P5470B1200CU	80	P5480B1200ACU	44	—	—	—
225	42	60	P4260B1225CU⑨	80	P4280B1225ACU	39	60	PW4260B1225CU	42
	54	70	P5470B1225CU⑨	80	P5480B1225ACU	44	—	—	—

Single phase factory installed 22kA IR main circuit breaker offers 22/10kA IR series combination rating when using 10kA type QP, QT, QPF, QE, QN, and QAF2/QAF2C branch breakers.

Main Lug/Convertible Load Centers⑥

Copper Bus⑦

12-70 Circuits / 125-225 Amperes

60/75° Rated 100,000A IR

Amp Rating	No. of Spaces	Indoor Enclosure - NEMA Type 1					Outdoor Enclosure - NEMA Type 3R		
		No. of Circuits	PL Catalog Number	No. of Circuits	PL with WireGuide Interior Catalog Number⑨	NEMA 1 - Enclosure Height (inches)③	No. of Circuits	Catalog Number	NEMA 3R - Enclosure Height (inches)④
125	12	12	P1212L1125CU⑤	—	—	18	12	PW1212L1125CU⑤	21
		24	P1224L1125CU⑤	—	—	18	24	PW1224L1125CU⑤	21
	16	24	P1624L1125CU	—	—	21	24	PW1624L1125CU	23
	20	20	P2020L1125CU⑨	40	P2040L1125ACU	24	—	—	—
		24	P2024L1125CU			24	—	—	—
	24	40	P2440L1125CU⑨	48	P2448L1125ACU	24	—	—	—
	30	40	P3040L1125CU⑨	60	P3060L1125ACU	30	40	PW3040L1125CU	35
	40	40	P4040L1125CU⑨	80	P4080L1125ACU	36	—	—	—
150	20	30	P2030L1150CU	40	P2040L1150ACU	24	30	PW2030L1150CU	27
200	12	24	P1224L1200CU	—	—	24	24	PW1224L1200CU⑤	23
	20	40	P2040L1200CU	40	P2040L1200ACU	30	40	PW2040L1200CU	27
	24	40	P2440L1200CU	48	P2448L1200ACU	30	—	—	—
	30	30	P3030L1200CU	60	P3060L1200ACU	36	—	—	—
		40	P3040L1200CU⑨				40	PW3040L1200CU	35
		54	P3054L1200CU				54	PW3054L1200CU	35
		40	P3040L1200⑧⑨	60	P3060L1200A⑧	36	—	—	—
	40	40	P4040L1200CU⑨	80	P4080L1200ACU	36	40	PW4040L1200CU	38
		40	P4040L1200⑧	80	P4080L1200A⑧	36	—	—	—
225	12	24	—	—		—	24	PW1224L1225CU	23
	42	60	P4260L1225CU⑨	80	P4280L1225ACU	39	60	PW4260L1225CU	42
	54	70	P5470L1225CU	80	P5480L1225ACU	44	—	—	—

① Suitable for use as service equipment.
② May be installed on higher rated systems when protected by a circuit breaker with a higher AIR rating.
③ Indoor enclosures are 14 1/4" wide by 3 7/8" deep.
④ Outdoor enclosures are 14 1/2" wide by 4 1/4" deep.
⑤ Suitable for use as service entrance equipment when not more than six main disconnecting means are provided. See article 230.71 of the NEC®.
⑥ 125A load centers will accept MBK100A and MBK125A. 150A load centers will accept MBK150A. 200A load centers will accept MBK200A and MBK150A. 225A load centers will accept MBK225A, MBK200A, MBK150A.
⑦ Copper bus load centers are recommended for those applications where the environment may be severe (i.e. far and coastal areas).
⑧ Includes all PL Series features with aluminum bussing.
⑨ Available (made to order) in white by adding "W" to the end of the part number.

PL Series 1-Phase Special Application Load Centers

1-phase, 3-wire SN, 120/240 Volts AC

Split Ground Series Main Lug Convertible Load Centers — Copper Bus

12-60 Circuits / 125-200 Amperes — 60/75° Rated, 100,000A IR

Branch Circuits			Indoor Enclosure – NEMA Type 1	
Amp Rating	No. of Spaces	No. of Circuits	Catalog Number	Enclosure Height (inches)②
125	12	24	**P1224L1125CUSG**	18
125	16	24	**P1624L1125CUSG**	21
125	20	30	**P2030L1125CUSG**	24
125	24	30	**P2430L1125CUSG**	24
150	20	30	**P2030L1150CUSG**	24
200	30	40	**P3040L1200CUSG**	36
200	30	40	**P3040L1200SG**①	36
200	40	40	**P4040L1200CUSG**	36
200	40	40	**P4040L1200SG**①	36
225	40	60	**P4260L1225CUSG**	39

Split Ground Series Main Breaker Convertible Load Centers — Copper Bus

40 Circuits / 200 Amperes — 60/75° Rated, 22,000A IR③

Branch Circuits			Indoor Enclosure – NEMA Type 1	
Amp Rating	No. of Spaces	No. of Circuits	Catalog Number	Enclosure Height (inches)②
200	40	40	**P4040B1200CUSG**	36

First Surge PL Load Centers — Copper Bus

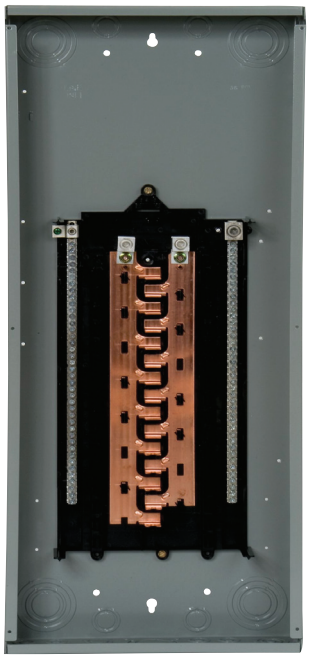
54-60 Circuits — 60/75° Rated, 22,000A IR

Amp Rating	No. of Spaces	No. of Circuits	Catalog Number	Surge Protection	Enclosure Height (inches)②
200	30	54	**P3054B1200S140**	**140kA**	36
200	40	60	**P4060B1200S140**	**140kA**	42

Outdoor Trailer Panels — Copper Bus

16 Circuits / 200 Amperes — 60/75° Rated, 22,000A IR⑤

Amp Rating	No. of Spaces	No. of Circuits	Catalog Number	Main Breaker		Enclosure Height (inches)④
200	8	16	**PW0816L1200TC**	MBK150A or MBK200A	Field Installed	23
200	8	16	**PW0816B1200TC**	MBK200A	Factory Installed	23



Split Ground Load Centers have factory installed 100% neutral with factory bonded 75% ground. No neutral tie strap.

① Includes all PL Series features with aluminum bussing.
② Indoor enclosures are 14 1/4" wide by 3 7/8" deep.
③ May be installed on higher rated systems when protected by a circuit breaker with a higher AIR rating.
④ Outdoor enclosures are 14 1/2" wide by 4 1/4" deep.
⑤ Main lug panel rated 100,000A IR.
⑥ Load centers with white trim have increased lead time of 3-4 weeks. Sold in pallet quantities only.
⑦ Load centers with CUW suffix indicates copper bus with white trim. Load centers with W suffix only indicates aluminum bus with white trim.

PL Series 3-Phase Main Lug & Main Breaker Load Centers

3-phase, 3-wire, 240 Volt AC or 3-phase, 4-wire, 120/240 or 120/208 Volts AC

Main Breaker/Convertible Load Centers — Copper Bus⑧⑩

30-70 Circuits / 100-225 Amperes — 60/75°C Rated 22,000A IR①

Branch Circuits			Indoor Enclosure – NEMA Type 1		Outdoor Enclosure – NEMA Type 3R	
Amp Rating	No. of Spaces	No. of Circuits	Catalog Number	Enclosure Height (inches)③	Catalog Number	Enclosure Height (inches)④
100	12	24	**P1224B3100CU②**	24	—	—
100	30	42	**P3042B3100CU②**	30	—	—
125	30	30	**P3030B3125CU**	39	—	—
150	24	42	**P2442B3150CU**	36	—	—
150	42	42	**P4242B3150CU**	42	—	—
200	30	54	**P3054B3200CU**	39	**PW3054B3200CU**	38
200	42	60	**P4260B3200CU⑪**	42	**PW4260B3200CU**	42
225	42	60	**P4260B3225CU**	42	—	—
225	42	60	**P4260B3225TCU⑥**	49	—	—
225	54	70	**P5470B3225CU**	49	—	—

Main Lug/Convertible Load Centers⑤ — Copper Bus⑧⑩

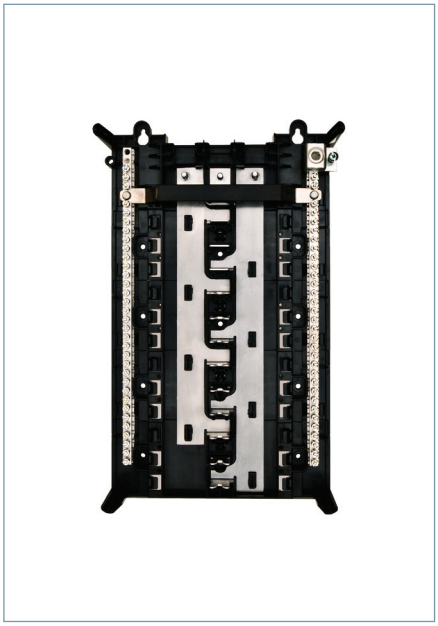
12-70 Circuits / 125-225 Amperes — 60/75° Rated 100,000A IR⑨

Branch Circuits			Indoor Enclosure – NEMA Type 1		Outdoor Enclosure – NEMA Type 3R	
Amp Rating	No. of Spaces	No. of Circuits	Catalog Number	Enclosure Height (inches)③	Catalog Number	Enclosure Height (inches)④
125	12	24	**P1224L3125CU⑦**	21	**PW1224L3125CU⑦**	21
200	24	42	**P2442L3200CU**	36	**PW2442L3200CU**	35
200	30	54	**P3054L3200CU**	39	**PW3054L3200CU**	38
225	42	60	**P4260L3225CU**	42	**PW4260L3225CU⑩**	42
225	54	70	**P5470L3225CU**	49	—	—

① May be installed on higher rated systems when protected by a circuit breaker with a higher AIR rating.
② Back fed main breaker.
③ Indoor enclosures are 14 1/4" wide by 3 7/8" deep.
④ Outdoor enclosures are 14 1/2" wide by 4 1/4" deep.
⑤ Suitable for use as service entrance equipment when not more than six main disconnecting means are provided. See article 230.71 of the NEC®.
⑥ Includes factory installed feed through lugs and is also non-convertible.
⑦ Non-convertible to main breaker.
⑧ All load centers are provided with tin plated copper bus bars.
⑨ Rated 100,000A IR in series with breakers listed on wiring diagram.
⑩ All load centers are provided with tin-plated copper bus bars.
⑪ Available (made to order) in white by adding "W" to the end of the part number

PL Series 3-Phase Unassembled Load Centers

3-phase, 3-wire, 240 Volt AC or 3-phase, 4-wire, 120/240 or 120/208 Volts AC



Main Breaker Convertible Unassembled Load Centers — Copper Bus⑤
24-70 Circuits / 100-225 Amperes — 60/75°C Rated 22,000A IR①

Interiors				Enclosure		Trim Kit	
Amp Rating	No. of Spaces	No. of Circuits	Interior Catalog Number	Enclosure Height (inches)③	Enclosure Catalog Number	No. Breaker Spaces	Trim Catalog Number⑤
100	30	42	**PI3042B3100CU②**	30	**3PE30**	30	**PT3042B3100**
150	24	42	**PI2442B3150CU**	36	**3PE36**	24	**PT2442X3150**
200	30	54	**PI3054B3200CU**	39	**3PE39**	30	**PT3054X3200**
200	42	60	**PI4260B3200CU**	42	**3PE42**	42	**PT4260X3200**
225	54	70	**PI5470B3225CU**	49	**3PE49**	54	**PT5470X3225**

Main Lug Convertible Unassembled Load Centers — Copper Bus⑤
12-70 Circuits / 125-225 Amperes — 60/75° Rated 100,000A IR⑥

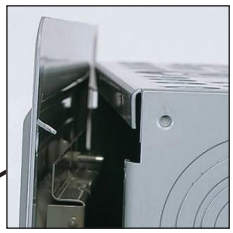
Interiors				Enclosure		Trim Kit	
Amp Rating	No. of Spaces	No. of Circuits	Interior Catalog Number	Enclosure Height (inches)③	Enclosure Catalog Number	No. Breaker Spaces	Trim Catalog Number④
125	12	24	**PI1224L3125CU**	21	**3PE21**	12	**PT1224L3125**
200	24	42	**PI2442L3200CU**	36	**3PE36**	24	**PT2442X3200**
200	30	54	**PI3054L3200CU**	39	**3PE39**	30	**PT3054X3200**
225	42	60	**PI4260L3225CU**	42	**3PE42**	42	**PT4260X3225**
225	54	70	**PI5470L3225CU**	49	**3PE49**	54	**PT5470X3225**

① May be installed on higher rated systems when protected by a circuit breaker with a higher AIR rating.
② Back fed main breaker.
③ Indoor enclosures are 14 1/4" wide by 3 7/8" deep.
④ Trim catalog numbers with a "B" indicate for use with main breaker and is not convertible. "L" indicates for use with main lug and is not convertible. "X" indicates can be used with convertible interior.
⑤ All load center interiors are provided with tin plated copper bus bars.
⑥ Rated 100,000A IR in series with breakers listed on wiring diagram.

ES Series Load Centers

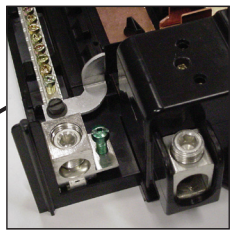
Features

Invertible for bottom feed application.①



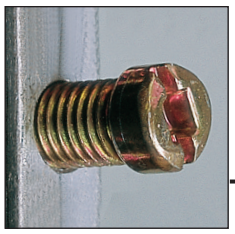
Mounting tabs on the trim hold it in place on the load center, freeing up both hands to drive the trim screws.

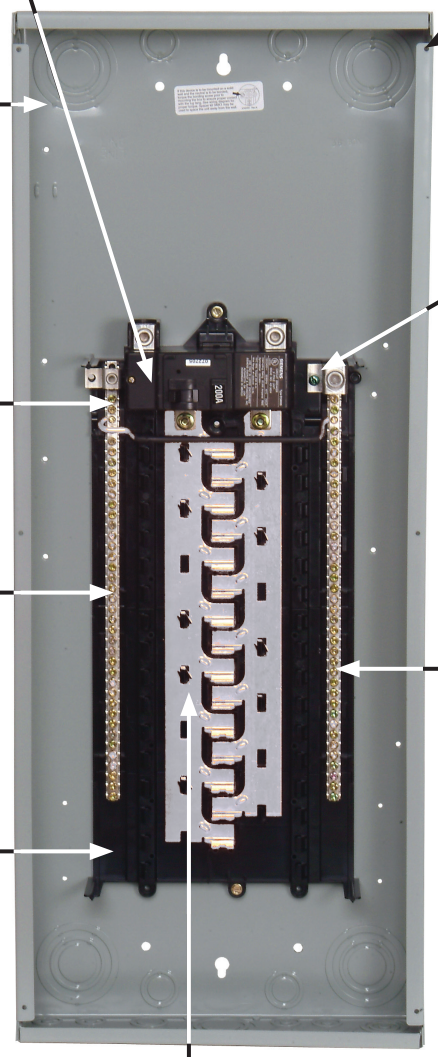
Ground bar field installed (select skus with "G" suffix will have ground bar factory installed).



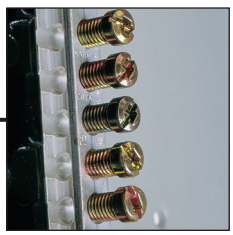
The pre-positioned bond screw eliminates bond strap/screw assemblies, and reduces the risk of losing components in the field.

Combination head screw on the neutrals, ground, trim, upper pan, and bond screw provide installation flexibility.





Single side inboard neutral on 24 circuits and below; dual on 30 circuits and above.



The patented INSTA-WIRE™ neutral/ground system allows for faster installation because screws are backed out, ready for wire insertion. The visible neutral and grounds system aids in the insertion of conductors.

A rigid, sturdy base pan provides the ruggedness required for the most harsh applications.

Aluminum bus.

The outdoor enclosure has a slide hinge door for the easiest installation and can be removed by backing out only one screw.

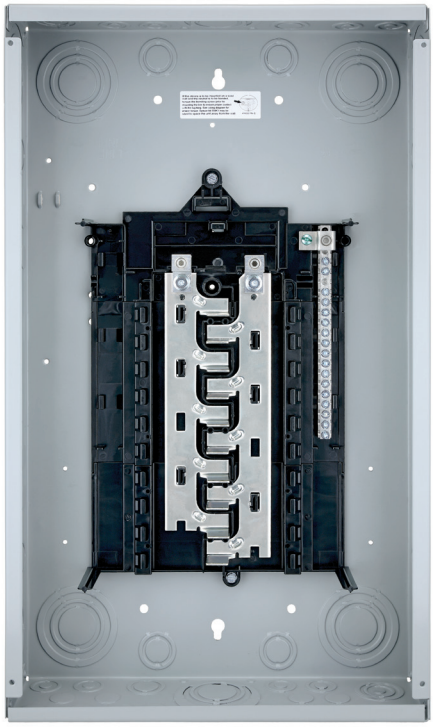
ES Series Load Centers ship in single piece carton.

① Applies only to NEMA 1 ES and PL Load Centers

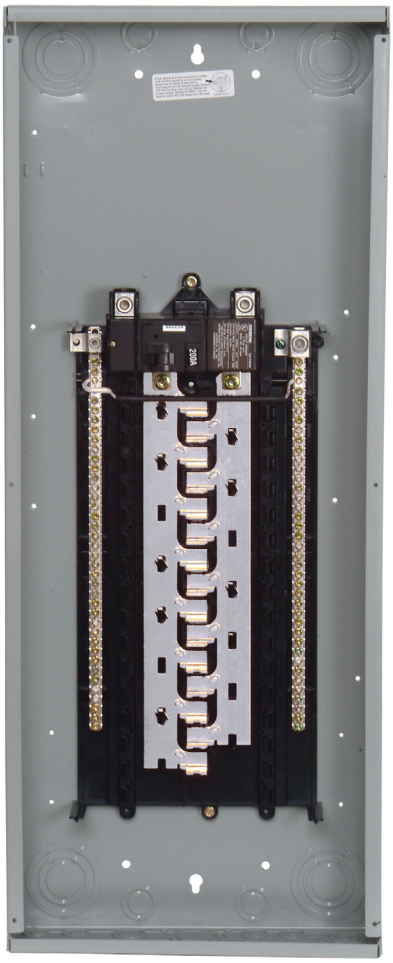
The ES Series Load Center product line provides a wide array of variation to meet any application need.

The following offering is available in the ES Series product line:

- 12-70 Circuits/Spaces
- Indoor and Outdoor enclosures
- 100 to 225 Amp
- Main Lug and Main Breakers
- Value packs – a mix of branch breakers provided with the load center.



ES Series
1-phase Main Lug
125A, 12-24 circuits



ES Series
1- phase Main Breaker
125- 225A, 30-70 circuits

ES Series
3-phase Main Breaker

ES Series 1-Phase Main Lug & Main Breaker Load Centers

1-phase, 3-wire SN, 120/240 Volts AC

Main Breaker①

Aluminum Bus

12-70 Circuits / 100-225 Amperes

60/75°C Rated 22,000A IR②

Amp Rating	No. of Spaces	Indoor Enclosure – NEMA Type 1					Outdoor Enclosure – NEMA Type 3R		
		No. of Circuits	ES Catalog Number	No. of Circuits	ES with WireGuide Interior Catalog Number⑧	NEMA 1 - Enclosure Height (inches)③	No. of Circuits	Catalog Number	NEMA 3R - Enclosure Height (inches)④
100	10	20	S1020B1100	—	—	18	—	—	—
	12	24	S1224B1100	—	—	18	24	SW1224B1100	21
	16	24	S1624B1100⑧	—	—	21	24	SW1624B1100	23
	20	20	S2020B1100	40	S2040B1100A	24	20	SW2020B1100	27
		24	S2024B1100				—	—	—
	30	30	S3030B1100⑧	60	S3060B1100A	30	—	—	—
125	12	24	—	—	—	—	24	SW1224B1125	21
	16	24	S1624B1125	—	—	21		—	—
		32	—	—	—	—	24	SW2024B1125	27
	24	24	S2424B1125⑧	48	S2448B1125A	24	24	SW2424B1125	27
	30	30	S3030B1125⑧	60	S3060B1125A	30	—	—	—
		40	S3040B1125				40	SW3040B1125	35
150	16	30	S1630B1150	—	—	24	—	—	—
	20	30	S2030B1150	40	S2040B1200A	24	—	—	—
	24	30	S2430B1150	48	S2448B1200A	30	—	—	—
	30	30	S3030B1150⑧	60	S3060B1150A	30	—	—	—
		40	S3040B1150				40	SW3040B1150	35
	40	40	—	—	—	—	40	SW4040B1150	38
200	16	32	S1632B1200	—	—	24	—	—	—
	20	40	S2040B1200	40	S2040B1200A	30	40	SW2040B1200	27
	24	40	S2440B1200	48	S2448B1200A	30	—	—	—
	30	40	S3040B1200⑧	60	S3060B1200A	36	40	SW3040B1200	35
	40	40	S4040B1200⑧	80	S4080B1200A	36	40	SW4040B1200	38
	42	60	S4260B1200	80	S4280B1200A	39	—	—	—
	54	70	S5470B1200	80	S5480B1200A	44	—	—	—
225	42	60	S4260B1225	80	S4280B1225A	39	60	SW4260B1225	42
	54	70	S5470B1225	80	S5480B1225A	44	—	—	—

Main Lug

Aluminum Bus

12-70 Circuits / 125-225 Amperes

60/75° Rated 100,000A IR

Amp Rating	No. of Spaces	Indoor Enclosure - NEMA Type 1					Outdoor Enclosure - NEMA Type 3R		
		No. of Circuits	ES Catalog Number(6)	No. of Circuits	ES with WireGuide Interior Catalog Number⑥⑧	NEMA 1 - Enclosure Height (inches)③	No. of Circuits	Catalog Number	NEMA 3R - Enclosure Height (inches)④
125	12	12	S1212L1125⑤	—	—	18	12	SW1212L1125⑤	21
		24	S1224L1125⑤	—	—	18	24	SW1224L1125⑤	21
	16	24	S1624L1125	—	—	21	24	SW1624L1125	21
	20	20	S2020L1125⑧	40	S2040L1125AG	21	—	—	—
		20	S2020L1125G⑧				——	—	—
		24	S2024L1125				—	—	—
		24	S2024L1125G				—	—	—
	24	24	S2424L1125⑧	48	S2448L1125AG	24	24	SW2424L1125	27
		24	S2424L1125G⑧				—	—	—
		40	S2440L1125⑧				—	—	—
		40	S2440L1125G				—	—	—
	30	40	S3040L1125⑧	—	S3060L1125AG	30	40	SW3040L1125	29
		40	S3040L1125G⑧	—			—	—	—
	40	40	S4040L1125	80	S4080L1125AG	36	—	—	—
150	20	30	S2030L1150⑧	40	S2040L1150AG	24	30	SW2030L1150	27
200	12	24	S1224L1200⑤		—	21	24	SW1224L1200⑤	21
	20	40	S2040L1200	40	S2040L1200AG	24	40	SW2040L1200	27
	24	40	S2440L1200⑧	48	S2448L1200AG	30	—	—	—
	30	30	S3030L1200⑧	60	S3060L1200AG	30	—	—	—
		40	S3040L1200⑧				40	SW3040L1200	35
		54	S3054L1200				54	SW3054L1200	35
		40	S3040L1200L50⑦	—	—	36	—	—	—
	40	40	S4040L1200⑧	80	S4080L1200AG	36	40	SW4040L1200	35
225	12	24	—	—	—	—	24	SW1224L1225	23
	42	60	S4260L1225	80	S4280L1225AG	36	60	SW4260L1225	38
	54	70	S5470L1225	80	S5480L1225AG	42	—	—	—

① Suitable for use as service equipment.
② May be installed on higher rated systems when protected by a circuit breaker with a higher AIR rating.
③ Indoor enclosures are 14 1/4" wide by 3 7/8" deep.
④ Outdoor enclosures are 14 1/2" wide by 4 1/4" deep.
⑤ Suitable for use as service entrance equipment when not more than six main disconnecting means are provided. See article 230.71 of the NEC®.
⑥ ES Series single phase skus with a "G" suffix have ground bar included (factory installed).
⑦ Line and Neutral Lug Wire Range: 500 kcmil - #2 AL/CU
⑧ Available (made to order) in white by adding "W" to the end of the part number.

ES Series 1-Phase Unassembled Load Centers

1-phase, 3-wire SN, 120/240 Volts A

Features

- Available for the most popular ES Load Centers
- Gives the ability to order in bulk
- Enclosures will have minimal packaging for less hassle and waste at the job site
- Keeps the covers separate to prevent damage or theft
- Includes full size cardboard covers to keep the interior safe during painting
- All main lug panels include factory installed ground bars

Main Breaker ES Unassembled Load Centers①

Aluminum Bus

24-40 Circuits / 125-200 Amperes

60/75° Rated 22,000A IR②

Amp Rating	Box Catalog Number	Main	No. of Spaces	No. of Circuits	Dimensions			Trim Catalog Number	Pallet Quantity
					Height	Width	Depth		
125	**SB2424B1125**	Main Breaker	24	24	24	14.5	4.25	**ST2424B1125**	36
200	**SB3040B1200**	Main Breaker	30	40	36	14.5	4.25	**ST3040B1200**	30
200	**SB4040B1200**	Main Breaker	40	40	36	14.5	4.25	**ST4040B1200④**	30

Selectable Main ES Unassembled Load Centers③

Aluminum Bus

30-40 Circuits / 200 Amperes

Amp Rating	Box Catalog Number	Main	No. of Spaces	No. of Circuits	Dimensions			Trim Catalog Number	Pallet Quantity
					Height	Width	Depth		
150/200	**SB3040C1200G**	Convertible	30	40	36	14.5	4.25	**ST3040X1200**	30
150/200	**SB4040C1200G**	Convertible	40	40	36	14.5	4.25	**ST4040X1200**	30

Main Lug ES Unassembled Load Centers③

Aluminum Bus

24-40 Circuits / 125-200 Amperes

60/75° Rated 100,000A IR

Amp Rating	Box Catalog Number	Main	No. of Spaces	No. of Circuits	Dimensions			Trim Catalog Number	Pallet Quantity
					Height	Width	Depth		
125	**SB2440L1125G**	Main Lug	24	40	24	14.5	4.25	**ST2440L1125**	36
125	**SB3040L1125G**	Main Lug	30	40	30	14.5	4.25	**ST3040L1125**	36
200	**SB3040L1200G**	Main Lug	30	40	30	14.5	4.25	**ST3040L1200**	36
200	**SB4040L1200G**	Main Lug	40	40	36	14.5	4.25	**ST4040L1200**	30

① Suitable for use as service equipment.
② May be installed on higher rated systems when protected by a circuit breaker with a higher AIR rating.
③ ES Series single phase skus with a "G" suffix have ground bar included (factory installed).
④ Available (made to order) in white by adding "W" to the end of the part number.

ES Series 1-Phase Special Load Centers

1-phase, 3-wire SN, 120/240 Volts AC

First Surge ES Load Centers — Aluminum Bus

54-60 Circuits — 60/75° Rated, 22,000A IR

Amp Rating	No. of Spaces	No. of Circuits	Catalog Number	Surge Protection	Enclosure Height (inches)②
200	30	54	**S3054B1200S060**	**60kA**	36
200	40	60	**S4060B1200S060**	**60kA**	42

Outdoor Trailer Panels — Aluminum Bus

16 Circuits / 200 Amperes — 60/75° Rated 100,000A IR

Amp Rating	No. of Spaces	No. of Circuits	Catalog Number	Main Breaker		Enclosure Height (inches)④
200	8	16	**SW0816L1200T**	N/A	N/A	23
200	8	16	**SW0816B1200T**⑤	MBK200A	Factory Installed	23

Value Pack Load Centers③ — Aluminum Bus

Catalog Number	Load Center	Breakers Included	Amp	N0. of Spaces	No. of Circuits
S2020B1100P	S2020B1100	(3) Q120, (1) Q230	100	20	20
S3040B1200P	S3040B1200	(3) Q120, (1) Q230	200	30	40
S3040L1200P	S3040L1200	(3) Q120, (1) Q230	200	30	40
S4040B1200P	S4040B1200	(3) Q120, (1) Q230	200	30	40
S3054B1200P	N/A	(3) Q120, (1) Q230	200	30	54

Split Ground Series Load Centers⑥

30-40 Circuits / 125-200 Amperes

16 Circuits / 200 Amperes — Aluminum Bus

Branch Circuits			Indoor Enclosure – NEMA Type 1	
Amp Rating	No. of Spaces	No. of Circuits	Catalog Number	Enclosure Height (inches)②
125	20	30	**S2030L1125SG**	21
150	30	30	**S3030B1150SG**	30
200	40	40	**S4040B1200SG**	36

Selectable Main Load Centers⑦

24-40 Circuits / 125-200 Amperes — Aluminum Bus

Branch Circuits			Indoor Enclosure – NEMA Type 1		Outdoor Enclosure – NEMA Type 3R		Available Kits	
Amp Rating	No. of Spaces	No. of Circuits	Catalog Number	Enclosure Height (inches)②	Catalog Number	Enclosure Height (inches)④	Main Lug	Main Breaker
125	24	24	**S2424C1125**	24	**SW2424C1125**	27	ECMLK125	MBK100A, MBK125A
200	20	40	**S2040C1200**	35	**SW2040C1200**	35	ECMLK225	MBK200A
200	30	40	**S3040C1200**	36	**SW3040C1200**	35	ECMLK225	MBK150A, MBK200A
200	40	40	**S4040C1200**	36	**SW4040C1200**	38	ECMLK225	MBK150A, MBK200A

① Load centers with white trim have increased lead time of 3-4 weeks. Sold in pallet quantities only. Additional charge will apply. Contact sales office for details.
② Indoor enclosures are 14 1/4" wide by 3 7/8" deep.
③ Breakers are shipped inside a sleeve located inside the load center.
④ Outdoor enclosures are 14 1/2" wide by 4 1/4" deep.
⑤ Main breaker rated 22,000A IR.
⑥ Split Ground load centers have factory installed 100% neutral with factory bonded 75% ground.
⑦ Selectable main load centers do not come with main lugs or main breakers. Those kits are sold separately.

ES Series 3-Phase Main Lug & Main Breaker Load Centers

3-phase, 3-wire, 240 Volt AC or 3-phase, 4-wire, 120/240 or 120/208 Volts AC

Main Breaker — Aluminum Bus

30-60 Circuits / 100-225 Amperes — 60/75°C Rated 10,000A IR①

Branch Circuits			Indoor Enclosure – NEMA Type 1		Outdoor Enclosure – NEMA Type 3R	
Amp Rating	No. of Spaces	No. of Circuits	Catalog Number	Enclosure Height (inches)③	Catalog Number	Enclosure Height (inches)④
100	12	24	**S1224B3100②**	24	**SW1224B3100**	23
100	30	30	**S3030B3100②**	30	—	—
100	30	42	**S3042B3100②**	30	—	—
125	30	42	**S3042B3125**	35	—	—
150	24	42	**S2442B3150**	36	**SW2442B3150**	35
150	42	42	**S4242B3150**	42	—	—
150	30	54	**S3054B3150**	35	—	—
200	30	54	**S3054B3200**	39	**SW3054B3200**	38
200	42	60	**S4260B3200**	42	**SW4260B3200**	42
225	42	42	**S4242B3225**	42	**SW4242B3225**	42

Main Lug⑤ — Aluminum Bus

12-70 Circuits / 125-225 Amperes — 60/75° Rated 100,000A IR⑥

Branch Circuits			Indoor Enclosure – NEMA Type 1		Outdoor Enclosure – NEMA Type 3R	
Amp Rating	No. of Spaces	No. of Circuits	Catalog Number	Enclosure Height (inches)③	Catalog Number	Enclosure Height (inches)④
125	12	24	**S1224L3125**	21	**SW1224L3125**	21
150	18	36	**S1836L3150**	24	**SW1836L3150**	23
150	24	42	**S2442L3150**	30	**SW2442L3150**	27
200	12	24	**S1224L3200**	21	**SW1224L3200**	21
200	24	42	**S2442L3200**	30	**SW2442L3200**	27
200	30	54	**S3054L3200⑦**	30	**SW3054L3200**	35
225	42	60	**S4260L3225⑦**	36	**SW4260L3225**	38
225	54	70	**S5470L3225⑦**	42	—	—

① May be installed on higher rated systems when protected by a circuit breaker with a higher AIR rating.
② Back fed main breaker.
③ Indoor enclosures are 14 1/4" wide by 3 7/8" deep.
④ Outdoor enclosures are 14 1/2" wide by 4 1/4" deep.
⑤ Suitable for use as service entrance equipment when not more than six main disconnecting means are provided. See article 230.71 of the NEC®.
⑥ Rated 100,000A IR in series with breakers listed on wiring diagram.
⑦ Available (made to order) in white by adding "W" to the end of the part number.

EQ® Load Centers—300-400 Amp

1-Phase, 3-Wire/3-Phase, 3-Wire, 4-Wire

Features

- UL listed for 60/75°C conductors. See equipment markings for applications.
- Copper bus standard.
- Factory installed lock on indoor enclosures.
- Outdoor enclosures use HV type hubs. See page 1-23.
- Main breaker units have a factory installed JXD2 type breaker.

E3030MB1400SCU

Main Breaker 300-400 Ampere③ — 120/240 Volts AC
1Ø, 3-Wire — 65,000A IR

Branch Circuits			Indoor Enclosure – NEMA Type 1				Outdoor Enclosure – NEMA Type 3R		
Amp Rating	No. of Spaces	No. of Circuits	Siemens Catalog Number	Murray Catalog Number	Enclosure Height①	Trim Style	Siemens Catalog Number	Murray Catalog Number	Enclosure Height①
300	42	42	**E4242MB1300FCU**	—	58	Flush	—	—	—
	42	42	**E4242MB1300SCU**	—	58	Surface	—	—	—
400	30	30	—	**LC330SS②⑥**	47	Surface	—	—	—
	30	30	**E3030MB1400SCU**	—	52	Surface	**W3030MB1400CU**	—	52
	42	42	**E4242MB1400FCU**	—	58	Flush	—	—	—
	42	42	**E4242MB1400SCU**	**LC442SS⑦**	58	Surface	**W4242MB1400CU**	**LW442SR⑦**	58

3Ø, 3-Wire, 4-Wire — 240 Volts AC
65,000A IR

Branch Circuits			Indoor Enclosure – NEMA Type 1				Outdoor Enclosure – NEMA Type 3R		
Amp Rating	No. of Spaces	No. of Circuits	Siemens Catalog Number	Murray Catalog Number	Enclosure Height①	Trim Style	Siemens Catalog Number	Murray Catalog Number	Enclosure Height①
300	42	42	**E4242MB3300SCU**	—	58	Surface	—	—	—
400	30	30	**E3030MB3400SCU**	—	52	Surface	—	—	—
	42	42	**E4242MB3400FCU**	—	58	Flush	—	—	—
	42	42	**E4242MB3400SCU**	**LP442SS⑧**	58	Surface	**W4242MB3400CU**	**LZ442SR⑧**	58

Main Lug 400 Ampere — 120/240 Volts AC
1Ø, 3-Wire — 65,000A IR

Branch Circuits			Indoor Enclosure – NEMA Type 1				Outdoor Enclosure – NEMA Type 3R		
Amp Rating	No. of Spaces	No. of Circuits	Siemens Catalog Number	Murray Catalog Number	Enclosure Height①	Trim Style	Siemens Catalog Number	Murray Catalog Number	Enclosure Height①
400	12	6	—	—	—	—	**W0606ML1400CU④⑤⑦**	—	43
	30	30	**E3030ML1400SCU**	—	41	Surface	**W3030ML1400CU**	—	43
	42	42	**E4242ML1400FCU**	—	47	Flush	—	—	—
	42	42	**E4242ML1400SCU**	**LC042SS⑥**	47	Surface	**W4242ML1400CU**	**LW042SR⑥**	47

3Ø, 3-Wire, 4-Wire — 240 Volts AC
22,000A IR

Branch Circuits			Indoor Enclosure - NEMA Type 1				Outdoor Enclosure - NEMA Type 3R		
Amp Rating	No. of Spaces	No. of Circuits	Siemens Catalog Number	Murray Catalog Number	Enclosure Height①	Trim Style	Siemens Catalog Number	Murray Catalog Number	Enclosure Height①
400	30	30	**E3030ML3400SCU**	—	41	Surface	—	—	—
	42	42	**E4242ML3400FCU**	—	47	Flush	—	—	—
	42	42	**E4242ML3400SCU**	**LP042SS**	47	Surface	**W4242ML3400CU**	**LW942SR⑧**	47

① Indoor and outdoor enclosures are 20" wide by 6" deep.
② Dual Main provisions. Has factory installed 200 amp MD-TR main breaker with provision for second MD-TR main breaker up to 200 amps to feed sub-panl or other large loads.
③ UL listed as suitable for use as service equipment.
④ Accepts up to six QN style breakers
⑤ Suitable for use as service entrance equipment when not more than six main disconnecting means are provided.
⑥ 50,000A IR
⑦ 22,000A IR
⑧ 10,000A IR

Generator Ready Load Centers

The Siemens generator ready load center can save thousands of dollars in future generator installation expenses while keeping initial expenses to a minimum. Works with an automatic standby generator or a portable generator.

Load Center Features

- UL Listed
- Indoor Type 1 and outdoor Type 3R
- 225A max rated
- Flush or surface mounting
- Fits between standard stud centers
- Tin plated copper bus bars
- 22 kAIC rated
- 120/240V ~
- Main lug – convertible to main breaker with addition of MBK150A, MBK200A, or MBK225A
- Installation of transfer mechanism can be performed at time of generator installation

Automatic transfer switch features:

- UL Listed
- Operates automatically when connected to generator
- Transfers load from utility to generator and back to utility
- Transfer switch (sold separately) catalog number: GENTFRSWTCH①③

Indoor Enclosure – NEMA Type 1

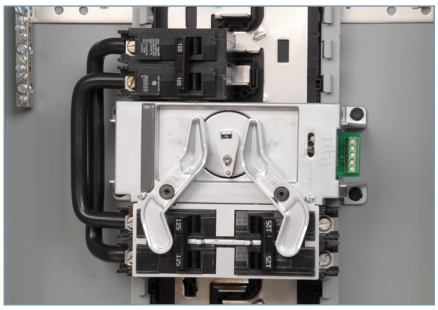
Amp Rating	No. of Spaces②	No. of Circuits②	Siemens Catalog Number	Murray Catalog Number	Main	Enclosure Height④
200	30	42	**G3042B1200GEN**	**LC3042B1200GEN**	Main Breaker	42
225	30	42	**G3042L1225GEN**	**LC3042L1225GEN**	Main Lug	42
200	42	54	**G4254B1200GEN**	—	Main Breaker	44
225	42	54	**G4254L1225GEN**	-	Main Lug	44

Outdoor Enclosure – NEMA Type 3R

Amp Rating	No. of Spaces②	No. of Circuits②	Siemens Catalog Number	Murray Catalog Number	Main	Enclosure Height⑤
200	30	42	**W3042B1200GEN**	-	Main Breaker	42
225	30	42	**W3042L1225GEN**	-	Main Lug	42

① Q2125S provided with GENTFRSWTCH for use with automatic transfer mechanism.
② 2 spaces and 2 circuits are reserved for standby generator installation.
③ Field install breaker for voltage sensing required.
④ Indoor enclosures are 14 1/4" wide by 3 7/8" deep.
⑤ Outdoor enclosures are 14 1/2" wide by 4 1/4" deep.

NEMA 1



GENTFRSWTCH

NEMA 3R

Riser Panel Load Centers

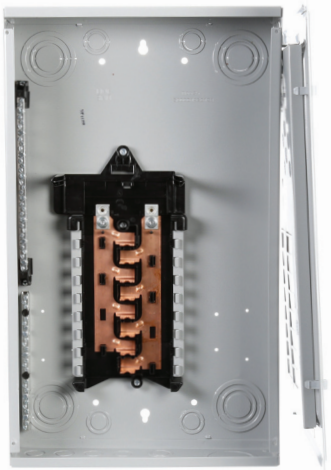
1-Phase, 3-Wlre SN, 120/240Volts AC

Riser Panel Load Centers①

Riser panel load centers are ideal for high rise applications. The shifted interior provides room for conductors to pass through the load center. The tap kits allow the installer to tap off from those conductors to power the panel.

Features

- UL Listed for use in 1Ø and 3Ø riser gutter applications.
- Copper bus standard.
- Main lug factory standard - convertible to main breaker.
- Neutrals aligned on left side- keeps way clear for riser cables.
- Available in 125 and 200 amp models.
- Invertible for left and right hand applications.



R1632L1125CU

ECRLK250

Riser Gutter Tap Kit②

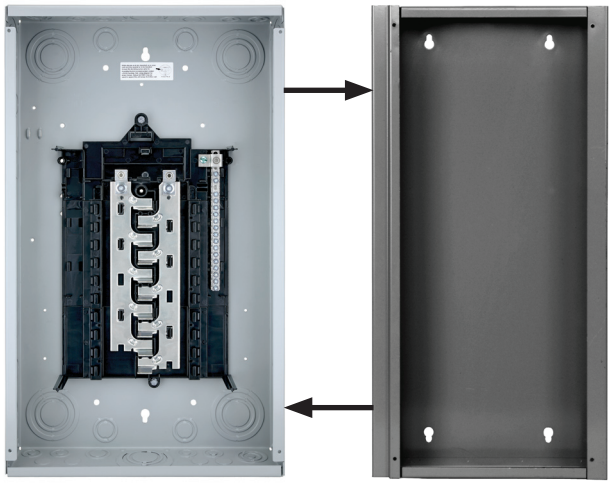
The riser gutter tap kit (ECRLK250) allows the installer to tap off the main conductors, eliminating the need to cut completely through the conductor. The tap kit accepts 250 -1/0 on the main conductor side and 250-#6 on the tap side.

Riser Gutter

The riser gutter (RAG24) is used to convert any load center 24" or larger into a riser panel.

Features

- Single and 3-phase applications
- Compatible with any single or 3-phase Siemens load center 24" or higher
- Flush trim included
- Load center mounting hardware and pass through brush included (Catalog no. RAG24)



Any Load Center 24" or larger

RAG24

1-phase, 3-wire SN, 120/240 Volts AC

Amp Rating	No. of Spaces	No. of Circuits	Catalog Number				Dimensions (inches)			Acceptable Main Breaker Kits
			Aluminum Bus	Aluminum Bus White Coating	Copper Bus	Copper Bus White Coating	Height	Width	Depth	
125	16	32	**R1632L1125**	**R1632L1125W**	**R1632L1125CU**	—	24	14.25	3.88	MBK100A,MBK125A
125	24	24	**R2424L1125**	**R2424L1125W**	**R2424L1125CU**	—	30	14.25	3.88	MBK100A, MBK125A
125	24	42	**R2442L1125**	**R2442L1125W**	**R2442L1125CU**	**R2442L1125CUW**	30	14.25	3.88	MBK100A, MBK125A
200	30	42	**R3042L1200**	**R3042L1200W**	**R3042L1200CU**	**R3042L1200CUW**	36	14.25	3.88	MBK150A, MBK200A

① The riser panels are single phase only, but can be fed from 1-phase or 3-phase systems running through the gutter trough area.

② ECRLK250 is sold separately

EQ® Load Centers—Small Circuit Load Centers

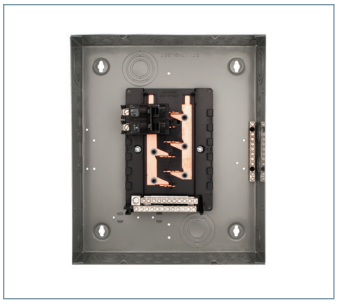
1-Phase, 3-Wire SN, 120/240Volts AC

Features/Applications

- Indoor and Outdoor Applications
- UL Listed
- 2 to 12 Space Options
- SPA panels offer a 50A or 60A factory installed GFCI breaker
- Service Entrance or Subfeed Applications

Small Circuit Load Centers

Ideal for subfeed applications



Renovation Panel

Ideal for older home renovation projects where the distance between the studs is narrower than current construction practices. The narrower panel eliminates the need to 'notch' out the existing studs.

Spa Panels

Spa Panels are ideal for outdoor applications requiring the use of ground fault protection, such as hot tubs. A factory installed 2-Pole GFCI breaker is provided, along with 2 extra circuits.

Amp Rating	No. of Spaces	No. of Circuits	Indoor Enclosure - NEMA Type 1									
			Siemens Catalog Number	Murray Catalog Number	Max Short Circuit Rating	Bus Material	Mounting	Phase Lug Wire Size	Ground Bar	Dimensions (inches) H	W	D
100	10	20	E1020MB1100FCGP①②③	LC110DFCGP①②③	22,000	Copper	Flush	CU or AL #4 - 2/0 AWG	ECGB10 Installed	14.6	12.3	3.7
	12	24	E1224ML1100FG④⑤	—	100,000	Aluminum	Flush			14.6	12.3	3.7
			E1224ML1100FCU④⑤	—	100,000	Copper	Flush		Use ECGB kits	14.6	12.3	3.7
125	4	8	E0408ML1125F⑥⑦⑧⑨	LC004NF⑥⑦⑧	100,000	Aluminum	Flush⑩	AL #12 - 2/0 AWG or CU #14 - 2/0 AWG	Use ECGB or ECLX kits	12.8	6.5	3.3
			E0408ML1125S⑥⑦⑧⑨	LC004NS⑥⑦⑧	100,000	Aluminum	Surface⑩			12.8	6.5	3.3
	8	16	E0816ML1125F⑦⑨	LC008DF⑦	100,000	Aluminum	Flush	CU or AL #4 - 2/0 AWG		14.6	12.3	3.7
			E0816ML1125S⑦⑨	LC008DS⑦	100,000	Aluminum	Surface			14.6	12.3	3.7
			E0816ML1125FGB⑦	LC008DFG⑦	100,000	Aluminum	Flush		ECGB10 or ECLX071M Installed	14.6	12.3	3.7
			—	LC008DSG⑦	100,000	Aluminum	Surface		ECLX071M Installed	14.6	12.3	3.7
			E0816ML1125FCU⑦	—	100,000	Copper	Flush		Use ECGB kits	14.6	12.3	3.7
			E0816ML1125SCU⑦	—	100,000	Copper	Surface			14.6	12.3	3.7

Amp Rating	No. of Spaces	No. of Circuits	Outdoor Enclosure - NEMA Type 3R									
			Siemens Catalog Number	Murray Catalog Number	Max Short Circuit Rating	Bus Material	Hub Provision	Phase Lug Wire Size	Ground Bar	Dimensions (inches) H	W	D
100	2	4	W0204MB1100③⑦	LW102NL⑦⑧⑪	100,000	Aluminum	1.25" HS Hub	AL #12 - 2/0 AWG or CU #14 - 2/0 AWG	Use ECGB or ECLX kits	12.1	6.2	4.4
125	4	8	W0408ML1125⑥⑧⑨⑫	LW004NR⑥⑧⑫	100,000	Aluminum	HS Cover Plate			12.1	6.2	4.4
			W0408L1125SPA50⑫⑬	LW004NRSPA50⑫⑬	100,000	Aluminum			ECGB5 Installed	12.1	6.2	4.4
			W0408L1125SPA60⑫⑬	LW004NRSPA60⑫⑬	100,000	Aluminum				12.1	6.2	4.4
	8	16	W0816ML1125CU⑦⑨	LW008NR⑦	100,000	Copper		CU or AL #4 - 2/0 AWG	Use ECGB or ECLX kits	14.7	12.1	4.1
150	4	4	W0404MB1150CTS③⑭	—	22,000	Copper			ECLX384M Installed	20.0	11.1	4.7
200	4	8	—	LW004TR⑭⑮	100,000	Aluminum				20.0	11.1	4.7
			—	LW204TL⑪⑭	100,000	Aluminum	2" HS Hub			20.0	11.1	4.7
		4	W0404MB1200CT⑪⑭	—	22,000	Copper				20.0	11.1	4.7
			W0404MB1200CTS⑪⑭	—	22,000	Copper	HS Cover Plate			20.0	11.1	4.7

① Suitable for use as service equipment when a main breaker (100A maximum) is used with retainer clip (Cat. No. ECMBR1).
② Two Q115 or MP115 and one Q130 or MP130 included
③ 22KAIC Main Breaker factory installed
④ 70 amp maximum breaker.
⑤ Suitable for use as service entrace equipment when a main breaker (70A maximum) is used with reatiner clip (Cat. No. ECMBR1).
⑥ Will not accommodate a 2-pole circuit breaker with shunt trip.
⑦ Suitable for use as service equipment when not more than six main disconnecting means are provided. Check local codes and restrictions.
⑧ Packaged in quantities of 5.
⑨ CSA Listed
⑩ No Door
⑪ 10KAIC Main Breaker factory installed
⑫ I2-pole 60A GFCI, a restriction of #6 wire applies due to wire bend space of the enclosure.
⑬ Suffix SPA50 indicates a factory installed 50A 2-pole GFCI and suffix SPA60 indicates a factory installed 60A 2-pole GFCI.
⑭ Suitable only for use as service equipment.
⑮ Requires field installed main and retainer clip (Cat. No. ECLX378M).

EQ® Load Centers—Circuit Breaker Enclosures

1-Phase and 3-Phase, 240V AC Max.

Features

- Circuit breaker enclosures range from 60A to 250A, indoor and outdoor models
- UL listed
- Suitable for use as service entrance equipment
- UL listed for 60/75°C Conductors (See equipment markings for applications)
- Outdoor type 3R devices use HS type hubs (pg. 1-22) except for the W0204ML1060 which uses HA type hubs

W0202MB1200CU

E0303ML3100CU

Amp Rating	No. of Poles	Indoor Enclosure - NEMA Type 1							Outdoor Enclosure - NEMA Type 3R						
		Catalog Number	Breaker Used①	Max Short Circuit Rating	Std. Pkg.	Dimensions (inches) H	W	D	Catalog Number	Breaker Used①	Max Short Circuit Rating	Std. Pkg.	Dimensions (inches) H	W	D
1-Phase, 3-Wire SN - 120/240 Volts AC - Breaker Factory Installed															
100	2	**E0202MB1100**	Q2100	22,000	1	17.3	7.3	4.3	**W0202MB1100CU**	Q2100	22,000	1	17.2	7.3	4.3
		LC100CS	MP2100						**LW100CR**	MP2100					
150	2	—	—	—	—	—	—	—	**W0202MB1150CU**	QN2150H	65,000	1	19.8	8.7	5
200	2	**E0202MB1200**	QN2200	22,000	1	20	8.7	4	**W0202MB1200CU**	QN2200H					
		LC200VS	MPD2200	22,000	1	20	8.7	4	**LW200VR**	MPD2200					
150	2	—	—	—	—	—	—	—	**WB2150BQR**	QR22B150L	10,000	1	26.9	7.1	4.4
200	2	—	—	—	—	—	—	—	**WB2200BQR**	QR22B200L					
225	2	—	—	—	—	—	—	—	**WB2225BQR**	QR22B225L					
1-Phase, 3-Wire SN - 120/240 Volts AC - Enclosure Only															
60	2	**E0204ML1060S**②④	QP, QPH, or HQP	100,000⑥	5	9.9	5.2	2.7	**W0204ML1060**②④	QP, QPH, or HQP	100,000⑥	5	8.1	5.5	3.5
		E0204ML1060F②④							—	—					
		LC002GS②	MP-T, MP-HT, or MP-MT						**LW002GR**②	MP-T, MP-HT, or MP-MT					
125	2	**E0204ML1125SCU**③	QP or QPH	22,000	1	17.3	7.3	4.3	**W0204ML1125CU**③	QP or QPH	22,000	1	17.2	7.3	4.3
		E0204ML1125FCU③							—	—					
		LC002HS	MP-T or MP-HT						**LW002HR**	MP-T or MP-HT					
200	2	—	—	—	—	—	—	—	**W0202ML1200CU**	QN, QNH, or HQN	65,000	1	19.8	8.7	5
		LC004VS	MD-T, MD-HT, or MD-MT	65,000	1	17.3	7.3	4.3	**LW004VR**	MD-T, MD-HT, or MD-MT					
225	1-4	—	—	—	—	—	—	—	**W0406ML1225CU**	QPP or QP	10,000	1	23.2	10.4	4.5
	2	—	—	—	—	—	—	—	**QR2N3R2**	QR2, QRH2, or HQR2	65,000	1	26.9	7.1	4.4
250	2	**QR2N1S**	QR2, QRH2, HQR2, or HQR2H	100,000	1	31.4	9.6	5.6	—	—	—	—	—	—	—
		QR2N1F							—	—	—	—	—	—	—
3-Phase, 3-Wire 240 Volts AC or 3-Phase, 4-Wire SN — 120/208 Volts AC, 120/240, 240 Volts AC - Enclosure Only															
100	2-3	**E0303ML3100S**⑤	QP or QPH	22,000	1	17.3	7.3	4.3	**W0303ML3100**⑤	QP or QPH	22,000	1	17.2	7.3	4.3
		LP003CS⑤	MP-T or MP-HT						**LW903CR**⑤	MP-T or MP-HT					
		EB3100S⑤	BQ or BQH						**WB3100**⑤	BQ or BQH					
250	2-3	**QR2N1S**	QR2, QRH2, HQR2, or HQR2H	100,000	1	31.4	9.6	5.6	**QR2N3R3**	QR2, QRH2, HQR2, or HQR2H	100,000	1	31.4	9.6	5.6
		QR2N1F							—	—	—	—	—	—	—

① Additional breaker types may be listed on the wiring diagram.

② Will not accommodate 2-pole GFCI or Circuit breaker with shunt trip.

③ Can accommodate 2-pole GFCI breaker up to 60A.

④ CSA Listed

⑤ Will not accommodate circuit breaker with shunt trip.

⑥ Series rating

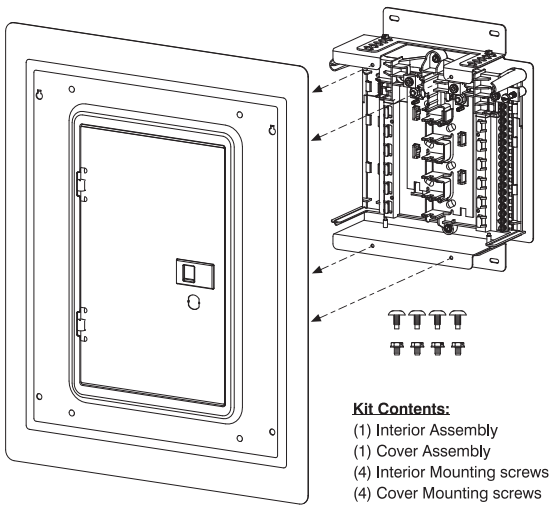
Renovation Interiors

1 Phase, 3 WIRE, 120/240V

Features

- For use in home renovations with existing load centers①
- Suitable for use in indoor Type 1 Enclosure
- Interior, Flush Cover, and Hardware included
- Adjustable depth
- Incoming lugs: 2/0 - #4 AWG
- UL listed

Amp Rating	No. of Spaces	No. of Circuits	Catalog Numbers	Min. Enclosure Size (inches)			Max. Enclosure Size (inches)			Cover Dimensions (inches)	
				L	W	D②	L	W	D②	L	W
100	8	16	**RE0816ML1100J**	13.00	10.50	3.75	19.00	14.25	6.00	22.00	18.00
100	8	16	**RE0816ML1100K**	20.00	10.50	3.75	26.00	14.25	6.00	29.00	18.00
125	12	24	**RE1224ML1125J**	17.00	12.25	3.75	21.00	14.25	6.00	23.00	18.00
125	12	24	**RE1224ML1125K**	22.00	12.25	3.75	26.00	14.25	6.00	29.00	18.00



Kit Contents:
(1) Interior Assembly
(1) Cover Assembly
(4) Interior Mounting screws
(4) Cover Mounting screws

① Existing enclosure must mearsure within listed dimensions for the use of the kit.

② Depth of enclosure is measured from finished wall surface.

Load Center OEM Interiors①

1Ø: Small Circuit Main Lug Interiors

Amps	Catalog Number②	Spaces	Circuits	Dimensions	
				Height	Width
60	I0204ML1125CU	2	2	4.40	1.85
60	I0303ML3100CU	3	3	5.77	3.42
125	I0408ML1125	4	8	4.51	6.61
125	I0816ML1125CU	8	16	6.19	6.81
125	I0816ML1125CUSP	8	16	6.19	6.81
200	I0202L1200	4	4	3.88	7.13
200	I1220L1200CT	12	20	9.00	7.00

1Ø: High Circuit Main Lug Interiors with Neutral Bars④

Amps	Catalog Number②	Spaces	Circuits	Dimensions	
				Height	Width
125	I1224L1125CU	12	24	10.80	9.80
125	I1624L1125CU	16	24	12.80	9.80
125	I3040L1125CU	30	40	20.80	9.80
200	I0816L1200CT④	8	16	10.80	9.80
200	I1224L1200CU	12	24	10.80	9.80
200	I1632L1200CU	16	32	12.80	9.80
200	I2040L1200CU	20	40	14.80	9.80
200	I3040L1200CU	30	40	14.80	9.80
200	I4040L1200CU	40	40	24.80	9.80
225	I4242L1225CU	42	42	26.80	9.80

3Ø: Main Lug Interiors②

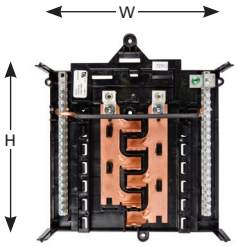
Amps	Catalog Number	Spaces	Circuits	Dimensions	
				Height	Width
125	SI1224L3125B	12	24	10.04	9.95
200	SI1224L3200B	12	24	10.04	9.95
200	SI2442L3200B	24	42	16.04	9.95
200	SI3054L3200B	30	54	19.04	9.95
225	SI4242L3225B	42	42	25.04	9.95
125	PI1224L3125CUB	12	24	10.04	9.95
200	PI1224L3200CUB	12	24	10.04	9.95
200	PI1836L3200CUB	18	36	13.04	9.95
125	PI1836L3125CUB	18	36	13.04	9.95
200	PI2442L3200CUB	24	42	10.04	9.95
200	PI3054L3200CUB	30	54	19.04	9.95
225	PI4242L3225CUB	42	42	25.04	9.95

1Ø: Parallel Lug Interiors with Neutral Bars

Amps	Catalog Number②	Spaces	Circuits	Dimensions	
				Height	Width
200	CTI2040L1200CU	20	40	14.80	9.80
200	CTI2440L1200CU	24	40	16.80	9.80
200	CTI3040L1200CU	30	40	20.80	9.80

Lug Data

Interior	Amperage	Wire range	Torque
I0204ML1060	60	2/0 - 4 AWG	45 lb. - ins.
I0303ML3100	100	2/0 - 4 AWG	45 lb. - ins.
I1224ML1100	100	2/0 - 4 AWG	45 lb. - ins.
I0408ML1125	125	2/0 - 4 AWG	45 lb. - ins.
I0816ML1125CU/CUSP	60	2/0 - 4 AWG	45 lb. - ins.
Single Phase	125	2/0 - 4 AWG	110 lb. - ins.
Single Phase	200/225	300 kcmil - 4 AWG	250 lb. - ins.
Three Phase	125	300 kcmil - 6 AWG	340 lb. - ins.
Three Phase	200/225	300 kcmil - 6 AWG	340 lb. - ins.



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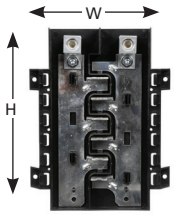
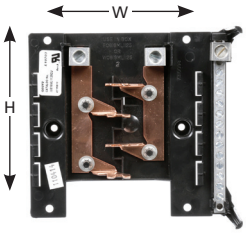


I1220L1200CT



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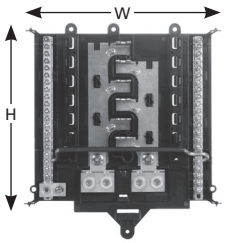
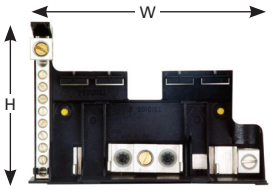


Parallel Lug



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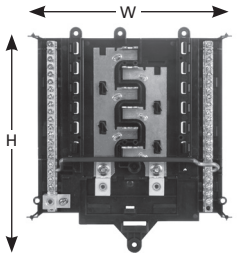
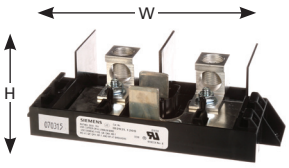
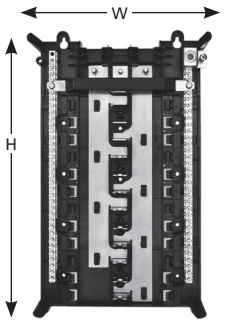


1 Phase



I0202L1200



3 Phase

① UL Recognized Components.
② The letters "CU" in any catalog number represent copper bus bars.
③ Feed thru lugs provided.
④ Convertible to main breaker using the MBK main breaker kits.

Ground Bar Kits (For ES and PL Load Centers)

Catalog Number	Description	Pack Qty
EC1GB8	GROUND BAR KIT-8 POS	1
EC1GB82	GROUND BAR KIT-8 POS, 2/0 LUG	1
EC2GB12	GROUND BAR KIT-12 POS	1
EC2GB122	GROUND BAR KIT-12 POS, 2/0 LUG	1
EC2GB15	GROUND BAR KIT-15 POS	1
EC2GB152	GROUND BAR KIT-15 POS, 2/0 LUG	1
EC3GB21	GROUND BAR KIT-21 POS	1
EC3GB212	GROUND BAR KIT-21 POS, 2/0 LUG	1
EC3GB27	GROUND BAR KIT-27 POS	1
EC3GB272	GROUND BAR KIT-27 POS, 2/0 LUG	1
EC3GB30	GROUND BAR KIT-30 POS	1
EC3GB302	GROUND BAR KIT-30 POS, 2/0 LUG	1
EC3GB352	GROUND BAR KIT-35 POS, 2/0 LUG	1
EC3GB352G	GROUND BAR KIT-35 POS, 2/0 LUG②	1

Ground Bar Kits (For Legacy Load Centers)

ECGB5	GROUND BAR KIT-5 POS	1
ECGB10	GROUND BAR KIT-10 POS	1
ECGB101	GROUND BAR KIT-10 POS, 1/0 LUG	1
ECGB14	GROUND BAR KIT-14 POS	1
ECGB141	GROUND BAR KIT-14 POS, 1/0 LUG	1
ECGB142	GROUND BAR KIT-14 POS, 2/0 LUG	1
ECGB20	GROUND BAR KIT-20 POS	1
ECGB201	GROUND BAR KIT-20 POS, 1/0 LUG	1
ECGB202	GROUND BAR KIT-20 POS, 2/0 LUG	1
ECINSGB5	INSULATED GROUND BAR KIT-5 POS	1
ECINSGB14	INSULATED GROUND BAR KIT-14 POS	1
ECINSGB20	INSULATED GROUND BAR KIT-20 POS	1

Hubs

ECHA000	HA Type W0204ML1060	CLOSURE PLATE	1
ECHA075		HUB - 3/4″	1
ECHA100		HUB - 1″	1
ECHA125		HUB - 1 1/4″	1
ECHA150		HUB - 1 1/2″	1
ECHS000	HS Type PL & ES and Small Circuit Loadcenters	CLOSURE PLATE	1
ECHS075		HUB - 3/4″	1
ECHS100		HUB - 1″	1
ECHS125		HUB - 1 1/4″	1
ECHS150		HUB - 1 1/2″	1
ECHS200		HUB - 2″	1
ECHS250		HUB - 2 1/2″	1
ECHV000	HV Type 300-400A Loadcenters	CLOSURE PLATE	1
ECHV200		HUB - 2″	1
ECHV250		HUB - 2.5″	1
ECHV300		HUB 3″	1
ECHV350		HUB - 3.5″	1
ECHV400		HUB - 4″	1

Lock Kits

ECQFL2	FLUSH LOCK KIT FOR ULT., PL, ES, 3PH 100A-225A	1
ECQFL1	FLUSH LOCK KIT-REPLACEMENT FOR EQ LC	1
ECQFL3	ADD-A-LOCK (FLUSH LOCK) FOR 300-400A LC	1

① The pack quantity is the number that is sold in a pack. Items listed on this page must be ordered in multiples of pack quantities but items are priced per each. For example, ECRLK250 come 3 to a pack so must be ordered in multiples of 3 but pricing would be individual unit price times 3.

Load Center Conversion Kits③④

Catalog Number	Description	Pack Qty
MBK100A	MAIN BREAKER KIT 100A 1PH 22K	1
MBK125A	MAIN BREAKER KIT 125A 1PH 22K	1
MBK150A	MAIN BREAKER KIT 150A 1PH 22K	1
MBK200A	MAIN BREAKER KIT 200A 1PH 22K	1
MBK225A	MAIN BREAKER KIT 225A 1PH 22K	1
MBK3100	MAIN BREAKER KIT 100A 3PH QP 240V 10K	1
MBK3125R	MAIN BREAKER KIT 125A 3PH 240V 10K, QR	1
MBK3150R	MAIN BREAKER KIT 150A 3PH 240V 10K, QR	1
MBK3175R	MAIN BREAKER KIT 175A 3PH 240V 10K, QR	1
MBK3200R	MAIN BREAKER KIT 200A 3PH 240V 10K, QR	1
MBK3225R	MAIN BREAKER KIT 225A 3PH 240V 10K, QR	1
MBK3125HR	MAIN BREAKER KIT 125A 3PH 240V 22K, QR	1
MBK3150HR	MAIN BREAKER KIT 150A 3PH 240V 22K, QR	1
MBK3175HR	MAIN BREAKER KIT 175A 3PH 240V 22K, QR	1
MBK3200HR	MAIN BREAKER KIT 200A 3PH 240V 22K, QR	1
MBK3225HR	MAIN BREAKER KIT 225A 3PH 240V 22K, QR	1
MBK3125HHR	MAIN BREAKER KIT 125A 3PH 240V 65K, QR	1
MBK3150HHR	MAIN BREAKER KIT 150A 3PH 240V 65K, QR	1
MBK3175HHR	MAIN BREAKER KIT 175A 3PH 240V 65K, QR	1
MBK3200HHR	MAIN BREAKER KIT 200A 3PH 240V 65K, QR	1
MBK3225HHR	MAIN BREAKER KIT 225A 3PH 240V 65K, QR	1
HMBK3125HR	MAIN BREAKER KIT 125A 3PH 240V 100K, QR	1
HMBK3150HR	MAIN BREAKER KIT 150A 3PH 240V 100K, QR	1
HMBK3175HR	MAIN BREAKER KIT 175A 3PH 240V 100K, QR	1
HMBK3200HR	MAIN BREAKER KIT 200A 3PH 240V 100K, QR	1
HMBK3225HR	MAIN BREAKER KIT 225A 3PH 240V 100K, QR	1
ECMLK125	1 PH MAIN LUG CONVERSION KIT 100-125A	1
ECMLK225	1 PH MAIN LUG CONVERSION KIT 150-225A	1
ECMLK3125	3 PH MAIN LUG CONVERSION KIT 100-125A	1
ECMLK3225	3 PH MAIN LUG CONVERSION KIT 150-225A	1

Lug Kits

ECCS1	COLLAR STRAP FOR GRD BARS #14-1/0	1
ECCS2	COLLAR STRAP FOR GRD BARS #6-250	1
ECLKB1	NEUTRAL LUG KIT WITH BOND TAB	1
ECLK3	NEUTRAL LUG KIT #1-300 FOR EQIII LC	1
ECLK1-2	NEURTAL LUG KIT #2 TO 1/0 FOR EQIII LC	1
ECLK2	NEUTRAL LUG KIT #4-2/0 FOR EQIII LC, PL, ES	1
ECLK2SC	2/0 LUG FOR 125AMP NEUTRAL FEEDER	1
ECLK2125	125A SUB FEED LUGS-USES 2 SPACES	1
ECLK2225	150A-225A SUB FEED LUGS-USES 4 SPACES	1
ECLK3225	3P SUB FEED LUGS-USES 6 SPACES	1
ECRLK250	RISER LUG KIT 250 KCMIL	3

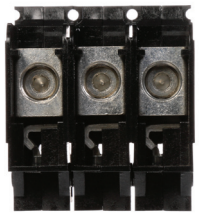
Miscellaneous Load Center Accessories

ECCP1	PKG OF 100 CIRCUIT DIRECTORY	100
ECQF3	QP/BQ/ED2 FILLER PLATE	5
ECMBF125	1 PH 100&125A MAIN BREAKER FILLER PLATE	1
EC3PMFP1	3 POLE MAIN FILLER PLATE, QJ	1
EC3PMFPR	3 POLE MAIN FILLER PLATE, QR	1
ECSMK1	SURFACE MOUNT 1/4" SPACE KIT FOR LC'S	4
ECTS2	LC TRIM SCREWS	6
ECTS2W	LC TRIM SCREWS WHITE	6
ECLCHINGE	GREY LC HINGES	100
ECADHLCDIRLBL	ADHESIVE LC DIRECTORY LABELS	100
ECSIELATCH	SIEMENS LC LATCHES	25
ECBONDSCRW	LC BOND SCREW	10
ECSN1	SCREWS & NUTS FOR HC HUB-BOTTOM USE	4
RAG24	RISER AUX GUTTER 24"	1
ECAFL	ARC FLASH LABEL	10

Neutral Bar Kits

ECLNB14	MLO NEUTRAL BAR KIT-14 POS	1
ECCNB16	CONVERTIBLE LC NEUTRAL BAR KIT-16 POS	1
ECMLK125	1 PH MAIN LUG CONVERSION KIT 100-125A	1

② Bar has green-colored screws.
③ QR Main Breaker Kits include a QR filler plate.
④ Main Breaker Kits include line terminal barriers.



Lug Kit, 3-Pole, Subfeed or Feed thru Applications
ECLK3225

2 PH Main Lug Conversion Kit
150A-225A
ECMLK225

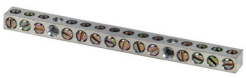
Main Breaker Kit
200A - 225A, 1PH 22K
MBK200A

3-Pole Main Breaker Kit
MBK3200

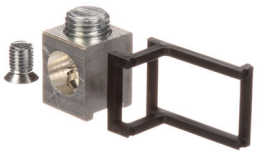
Main Breaker Retainer Kit for EQ Load Centers
ECMBR1

Main Breaker Retainer kit for PL, ES, & Ultimate Load Centers
ECMBR2

Ground Bar Kit
20 POS. 2/0 Lug
ECGB202



Ground Bar Kit, **ECGB14**

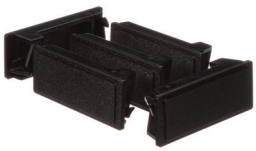


Neutral Lug Kit**, ECLK1-2**
wire range — #2-1 AWG
Cu or Al

Neutral Lug Kit, **ECLK3**
wire range — #1-300 MCM
Neutral Lug Kit, **ECLK2**
wire range — #4-#2/0 AWG
Cu or Al

For use on Ground Bar only
Collar Strap, Wire Range;
ECCS1; ECCS2

Add-A-Lock
(Flush Lock) **ECQFL1**
For EQ load centers



Filler Plate, **ECQF3**

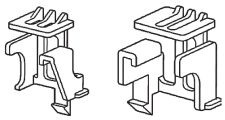
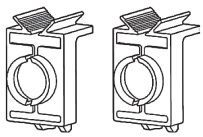
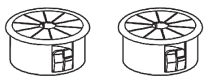
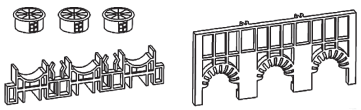
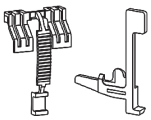
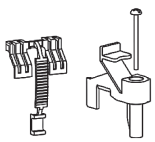
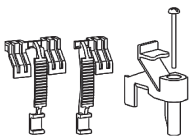
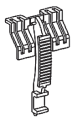
Add-A-Lock
(Flush Lock), **ECQFL2**
PL, ES, Ultimate Load Centers
and EQ III up to 225A

Add-A-Lock
(Flush Lock), **ECQFL3**
300-400A Load Centers

Load centers and meter combos

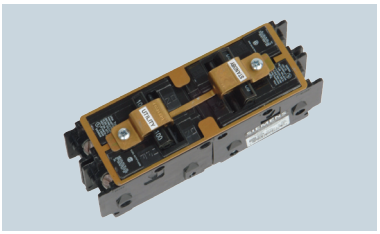
Touchsafe barriers are required for any single main service entrance application for a panel covered under UL 67. Line Terminal Barriers will be included in Main Breaker Load Centers and Single Main Meter Combos manufactured after January 1, 2017.

Single phase and 3-phase main breaker kits will include a barrier. Field installable kits are being created for replacements if needed and line terminal barriers are being added to hold down kits that can be used in back-fed applications. The barriers are designed to have minimal interference during load center installation, and can be removed and reattached as necessary.

	Catalog number	Description
	**ECLTB1**	For EQ Main Breakers/MBK kits 100A-125A
	**ECLTB2**	For EQ Main Breakers/MBK kits 150A-225A
	**ECLTB3**	For QN / QNR type breakers
	**ECLTB4**	For QR 3 phase breakers
	**ECMBR1**①	For 2 Pole QP / MP-T type breakers for EQIII (extruded basepan) and Line 5 Load Centers
	**ECMBR2**①	For 2 Pole QP / MP-T type breakers to be used with Ultimate LCs (now ES / PL), Murray or Rock Solid
	**ECMBR3**	For 3 Pole QP / MP-T type breakers to be used with PL, ES 3 phase load centers
	**ECLX387HD**	For 2 Pole MP-T type breakers in legacy Murray load centers

① Barrier fits with 2-pole QP 70A and above and all amperages of QPH and HQP.

Convert load centers or meter combinations into standby power panels



Standard features

- UL listed for use in most Siemens load centers and meter combinations
- Suitable for use with optional standby systems in accordance with article 702 of the National Electric Code
- Corrosion resistant finish
- Easy assembly requiring no modifications to the load center or meter combination
- Remains attached to the main breakers when load center cover

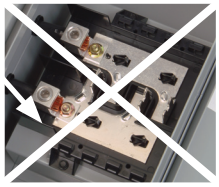
Panels in which the bussing or wire forms from the meter socket land on main lugs are not acceptable for use in standby systems because turning the main breaker to "OFF" does not prevent feedback to the utility power lines. Examples of such panels include catalog numbers that start with the following letters.

MC0606L1200*

MM0406L1*

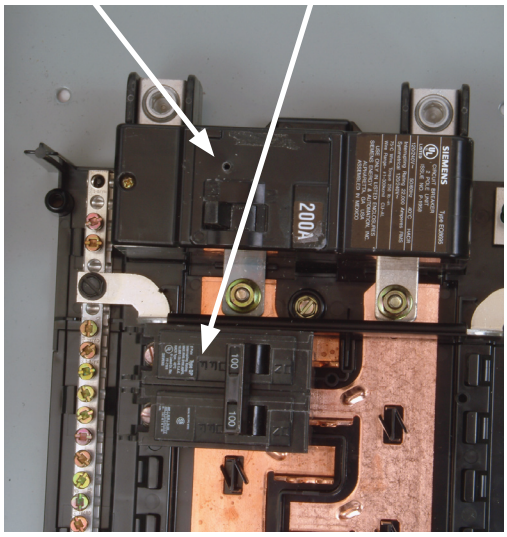
MC1212L1200*

Wire forms or bussing



Utility main breaker

Standby power main breaker



To activate standby power the utility main breaker must be in the "OFF" position to prevent dangerous feedback between the power sources.

Acceptable usage of Interlock Kits by load center/meter combination catalog numbers

ES Series Load Centers can utilize interlock kits: 1, 2, 5, 6, 7. Kits 3 and 4 can also be used on main breaker panels.

PL Series Load Centers can utilize interlock kits: 1, 2, 3, 4, 5, 6, 7.

Siemens Meter Combinations			
MC0408B1200RGA	8	MC1020B1100S	1 2
MC0408B1200RT	8	MC1224B1100EFC	2
MC0408B1200T	8	MC1224B1100ESC	2
MC0816B1150JLT	9	MC1224B1125EFC	2
MC0816B1150RCT	8	MC1224B1125ESC	2
MC0816B1150TH	5 7	MC2040B1150JLC	8
MC0816B1200CT	8	MC2040B1200JLC	8
MC0816B1200EFN	2	MC2040B1200R	5 7
MC0816B1200ESN	2	MC2040B1200RC	9
MC0816B1200EST	2	MC2040B1200RJBC	9
MC0816B1200JLT	9	MC2442S1200FC	2
MC0816B1200RCT	8	MC2442S1200SC	2
MC0816B1200RGA	8	MC3042B1200FED	3
MC0816B1200RTH	5 7	MC3042B1200JLC	8
MC0816B1200T	7	MC3042B1400FD	5 7
MC0816B1200TH	5 7	MC3042B1400SC	5 7
MC0816B1350RLTM	5	MC3042B1400SCS	5 7
MC0816B1400RLTM	5	MC3042B1400SD	5 7
MC0816B1400SCS	5 7	MC3042B1400SDS	5 7
MC1020B1100F	1 2	MC4040S1200SC	5

Numbers 1 through 9 in these tables represent the last digit in each interlock kit catalog number. Example: 1 = ECSBPK01

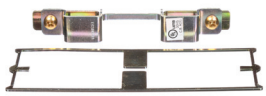
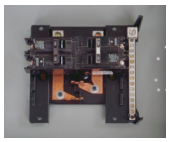
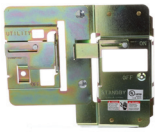
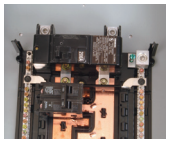
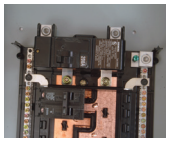
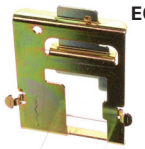
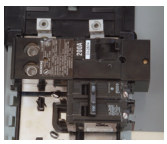
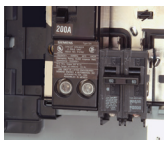
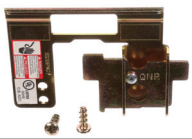
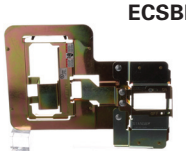
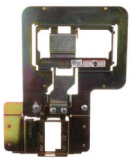
When used in horizontal positions as typical in most load centers, ECSBPK07 is recommended for use only with QNR type circuit breakers.

Standby power interlock kits are not intended for use with AFCI, GFCI, 3-pole or 1/2" frame circuit breakers and 4 space, 125 amp load centers.

Siemens type EQ load centers using a "4-pole" main breaker do not have a kit available to interlock this main to branch circuits. Branch circuit positions can be interlocked.

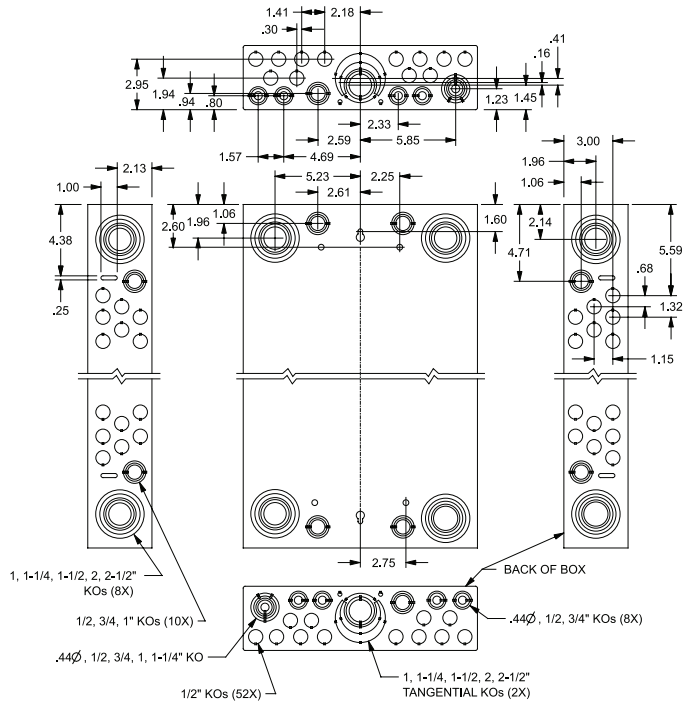
Prevents dangerous feedback between two sources of power

Manual Transfer Interlock Kits①

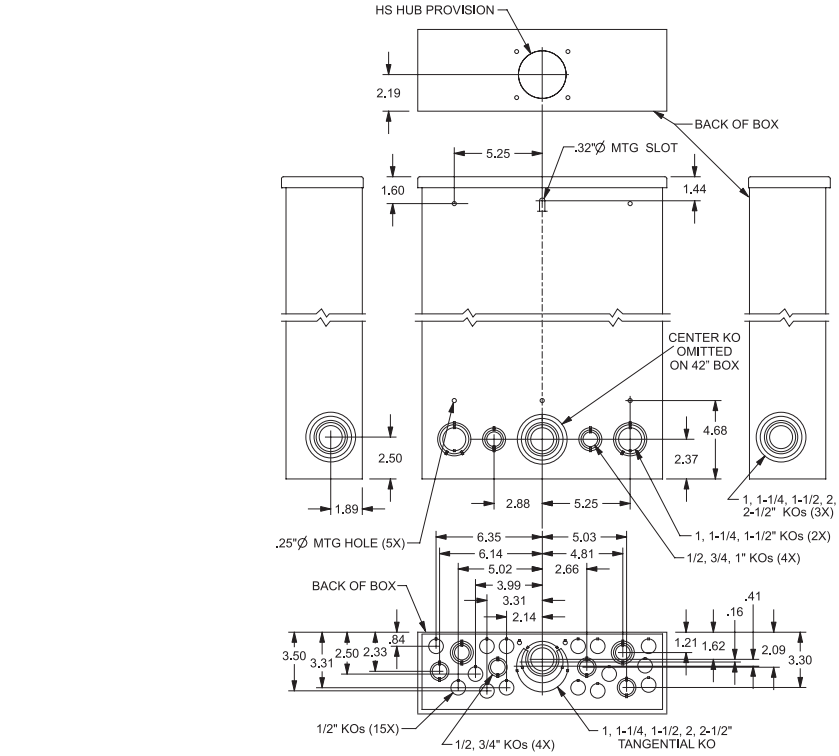
Catalog number	Usage Information	Utility main breaker types	Standby main breaker types	Interlock Number
ECSBPK01 	For use on load centers or meter combinations that will accept 2-pole circuit breakers opposite one another as shown.	QP, QPH, HQPH	QP, QPH, HQPH	1 
ECSBPK02 	For use on load centers or meter combinations that will accept 2- or 4-pole next to a 2-pole circuit breaker side by side as shown.	QP, QPH, HQPH	QP, QPH, HQPH	2 
ECSBPK03② 	For use on UltimateTM and Rock Solid load centers, 150 amp and higher, to connect the main breaker to a 2-pole circuit breaker.	MBK150A, MBK200A, OR MBK225A	QP, QPH, HQPH	3 
ECSBPK04② 	For use on Ultimate and Rock Solid load centers, 125 amp and lower, to connect the main breaker to a 2-pole circuit breaker.	MBK100A or MBK125A	QP, QPH, HQPH	4 
ECSBPK05 	For use on load centers or meter meter combinations that will accept a QNR (MD-TR) frame circuit breaker next to a 2-pole circuit breaker as shown.	QNR, QNRH, HQNR	QP, QPH, HQPH	5 
CSBPK06② 	For use on load centers or meter combinations that will accept a QN (MD-T) frame circuit breaker next to a 2-pole circuit breaker as shown.	QN, QNH, HQN	QP, QPH, HQPH	6 
ECSBPK07 	For use on load centers or meter combinations that will accept two QNR (MD--TR) circuit breakers side by side as shown OR will accept two QN (MD--T) circuit breakers side by side as shown.	QNR, QNRH, HQNR, QN, QNH, HQN	QNR, QNRH, HQNR QN, QNH, HQN	7 
ECSBPK08② 	For use on 8 space, over/under, OH/UG feed meter combinations as shown. Limited application to specific catalog numbers.	QPP, QPPH	QP, QPH, HQPH	8 
ECSBPK09② 	For use on 20 space, over/under, OH/UG feed meter combinations as shown. Limited application to specific catalog numbers.	QPP, QPPH	QP, QPH, HQPH	9 

① Manual breaker interlock kits are attached to the breakers not the trim of the load center.

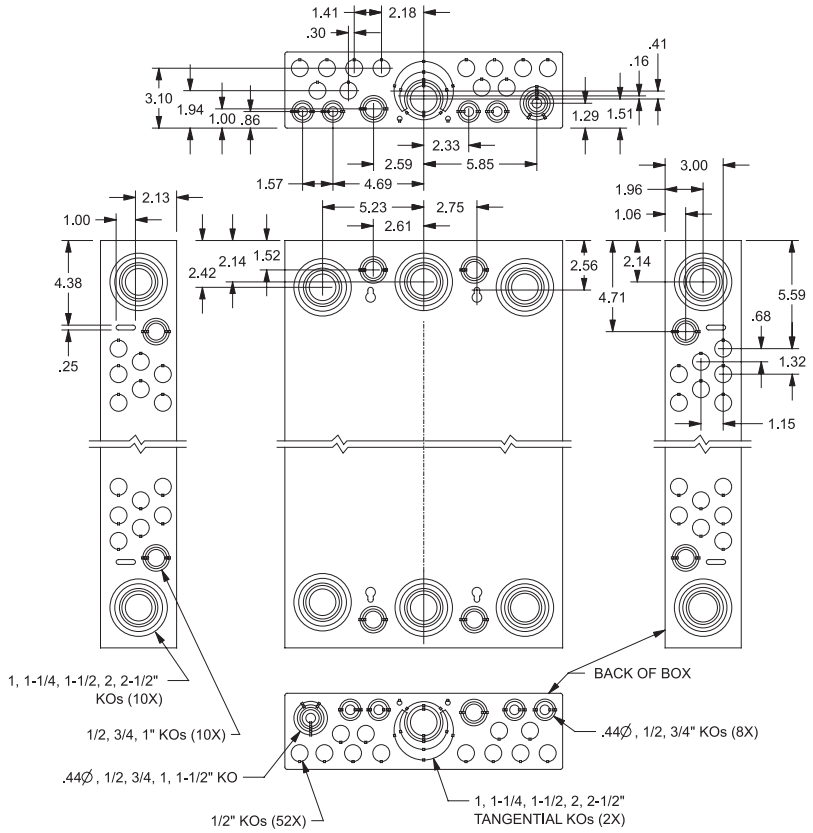
② These kits take up 2 spaces adjacent to the 2 pole breaker being interlocked. Those spaces cannot accommodate filler plates.



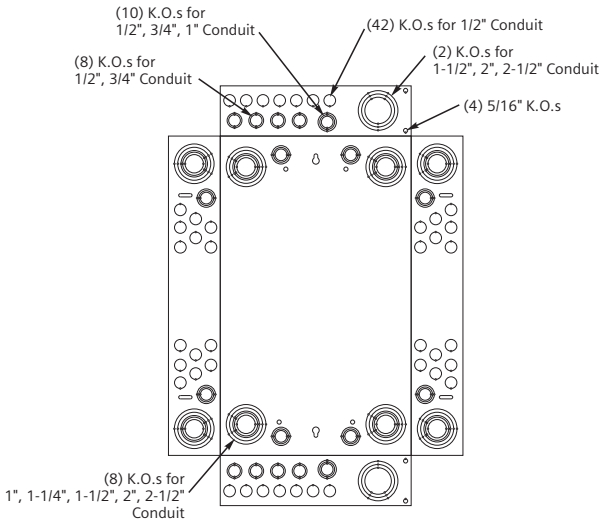
ES, PL, and Generator Ready
1 Phase Load Centers
Indoor



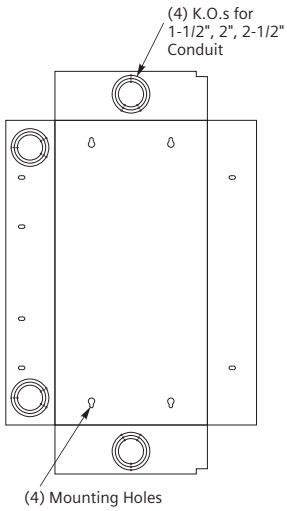
ES, PL, and Generator Ready
1 and 3 Phase Load Centers
Outdoor



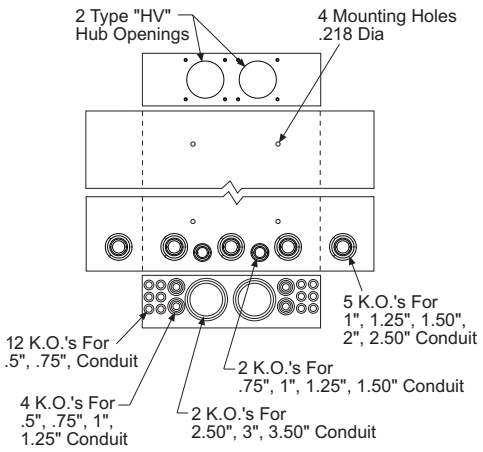
ES and PL
3 Phase Load Centers



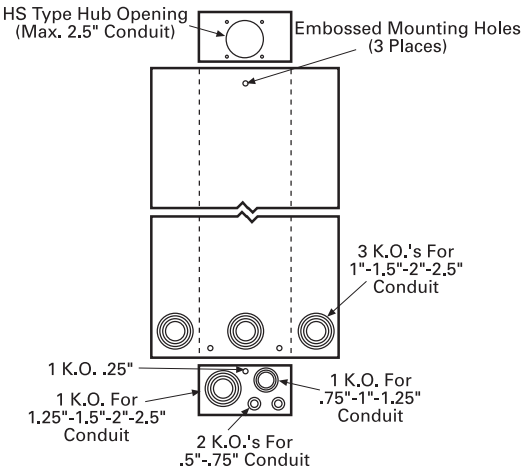
All Riser Panels



RAG24



Outdoor 400A Load Center



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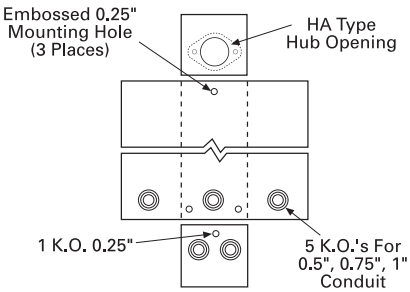

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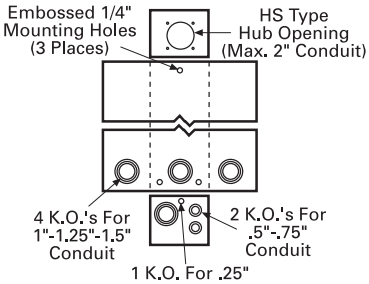

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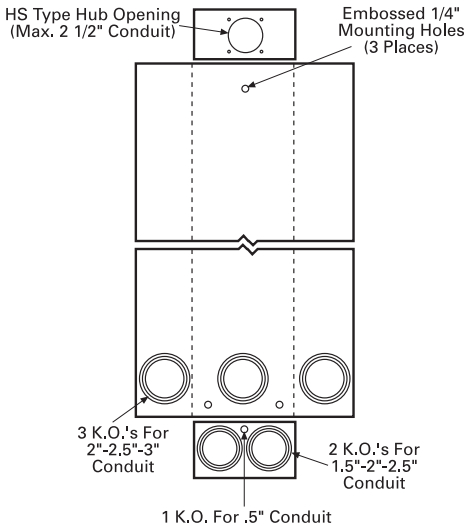
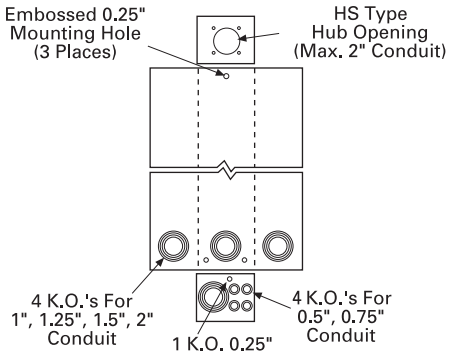


WB2225 and WB32225



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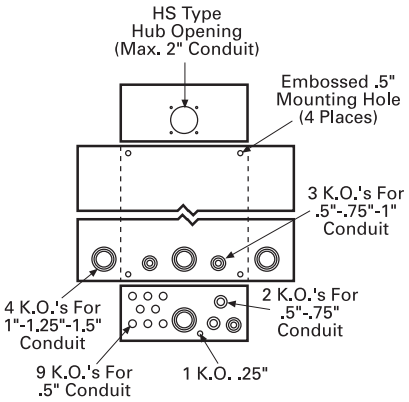
W0303ML3100

WB3100



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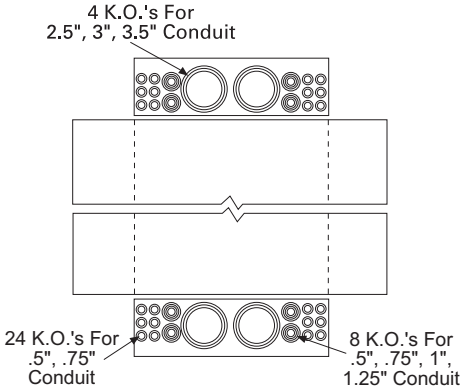
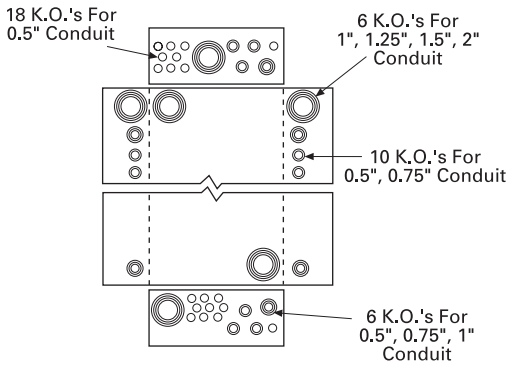
W0816ML1125



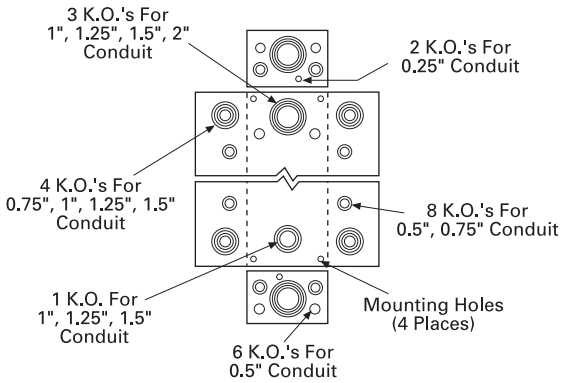
Indoor 300-400A Load Center



E0612ML1125

E0816ML1125

E1224ML1100F



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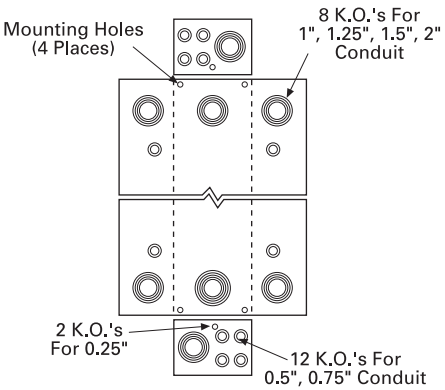
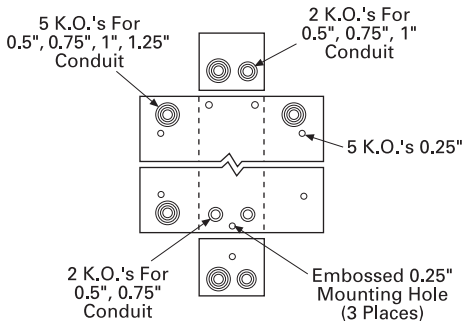


E0303ML3100SCU

EB3100



E0204ML1060

Ultimate Load Center Cross Reference to ES Series and PL Series

Phase	Type	Current Sku	ES Series	PL Series
1 Phase	Indoor	New	—	P3040L1200SG
		New	—	P4040L1200SG
		New - Higher Circuits	—	P4260L1225CUSG
		New - Higher Circuits	S3054L1200	P3054L1200CU
		New - Higher Circuits	S5470B1225	P5470B1225CU
		New - Higher Circuits	S5470L1225	P5470L1225CU
		New - Higher Circuits	SW3054L1200	PW3054L1200CU
		G1212L1125	S1212L1125	-
		G1212L1125CU	—	P1212L1125CU
		G1224B1100	S1224B1100	-
		G1224B1100CU	—	P1224B1100CU
		G1224L1125	S1224L1125	-
		G1224L1125CU	—	P1224L1125CU
		G1224L1125CUSG	—	P1224L1125CUSG
		G1224L1200CU	S1224L1200	P1224L1200CU
		G1624B1100	S1624B1100	-
		G1624B1100CU	—	P1624B1100CU
		G1624B1100W	S1624B1100W	-
		G1624L1125	S1624L1125	-
		G1624L1125CU	—	P1624L1125CU
		G1624L1125CUSG	—	P1624L1125CUSG
		G1630B1150	S1630B1150	-
		G2020B1100	S2020B1100	-
		G2020B1100CP	S2020B1100P	-
		G2020B1100CU	—	P2020B1100CU
		G2020L1125	S2020L1125	-
		G2020L1125CU	—	P2020L1125CU
		G2020L1125CUW	S2020L1125W	—
		G2030B1150	S2030B1150	—
		G2030B1150CU	—	P2030B1150CU
		G2030L1125CUSG	—	P2030L1125CUSG
		G2030L1150	S2030L1150	—
		G2030L1150CU	—	P2030L1150CU
		G2030L1150CUSG	—	P2030L1150CUSG
		G2040B1200	S2040B1200	—
		G2040B1200CU	—	P2040B1200CU
		G2040L1200	S2040L1200	—
		G2040L1200CU	—	P2040L1200CU
		G2424B1100CU	—	P2424B1100CU
		G2424B1125	S2424B1125	—
		G2424L1125	S2424L1125	—
		G2424L1125W	S2424L1125W	—
		G2430B1150	S2430B1150	—
		G2430L1125CUSG	—	P2430L1125CUSG
		G2440B1200	S2440B1200	—
		G2440L1125CU	S2440L1125	P2440L1125CU
		G2440L1200	S2440L1200	—
		G2440L1200CU	—	P2440L1200CU
		G3030B1100CU	S3030B1100	P3030B1100CU
		G3030B1150	S3030B1150	—
		G3030B1150CU	—	P3030B1150CU
		G3030L1200	S3030L1200	—
		G3030L1200CU	—	P3030L1200CU
		G3030L1200W	S3030L1200W	—
		G3040B1200	S3040B1200	P3040B1200
		G3040B1200CP	S3040B1200P	—
		G3040B1200CU	—	P3040B1200CU
		G3040L1125CU	—	P3040L1125CU
		G3040L1125CUW	S3040L1125W	—
		G3040L1200	S3040L1200	P3040L1200
		G3040L1200CP	S3040L1200P	—
		G3040L1200CU	—	P3040L1200CU
		G3040L1200CUSG	—	P3040L1200CUSG
		G4040B1200	S4040B1200	P4040B1200
		G4040B1200CP	S4040B1200P	—
		G4040B1200CU	—	P4040B1200CU
		G4040B1200W	S4040B1200W	P4040B1200W
		G4040L1125CU	S4040L1125	P4040L1125CU
		G4040L1200	S4040L1200	P4040L1200
		G4040L1200CU	—	P4040L1200CU
		G4040L1200CUSG	—	P4040L1200CUSG
		G4242B1225CU	S4260B1225	P4260B1225CU
		G4242L1225CU	S4260L1225	P4260L1225CU
		G2020B1100SP	S2024B1100	P2024B1100CU
		G2020L1125SP	S2020L1125G	—
		G2024L1125SP	S2024L1125/S2024L1125G	P2024L1125CU
		G2424L1125SP	S2424L1125G	—
		G3030B1125CU	S3030B1125	P3030B1125CU
		G3040L1125	S3040L1125/S3040L1125G	—
		G4040B1200CUSG	—	P4040B1200CUSG

Ultimate Load Center Cross Reference to ES Series and PL Series

Phase	Type	Current Sku	ES Series	PL Series
1 Phase	Outdoor	W0816B1200CT	SW0816B1200T	PW0816B1200TC
		W0816L1200CT	SW0816L1200T	PW0816L1200TC
		W1212L1125CU	SW1212L1125	PW1212L1125CU
		W1224B1100CU	SW1224B1100	PW1224B1100CU
		W1224L1125CU	SW1224L1125	PW1224L1125CU
		W1224L1200CU	SW1224L1200	PW1224L1200CU
		W1224L1225CU	SW1224L1225	PW1224L1225CU
		W1624B1100CU	SW1624B1100	PW1624B1100CU
		W1624L1125CU	SW1624L1125	PW1624L1125CU
		W2020B1100CU	SW2020B1100	PW2020B1100CU
		W2030L1150CU	SW2030L1150	PW2030L1150CU
		W2040B1200CU	SW2040B1200	PW2040B1200CU
		W2040L1200CU	SW2040L1200	PW2040L1200CU
		W2424L1125CU	SW2424L1125	—
		W3040B1200CU	SW3040B1200	PW3040B1200CU
		W3040L1125CU	SW3040L1125	PW3040L1125CU
		W3040L1200CU	SW3040L1200	PW3040L1200CU
		W4040B1200CU	SW4040B1200	PW4040B1200CU
		W4040L1200CU	SW4040L1200	PW4040L1200CU
		W4242B1225CU	SW4260B1225	PW4260B1225CU
		W4242L1225CU	SW4260L1225	PW4260L1225CU
3 Phase	Indoor	New	S4242B3150	—
		New – Higher Circuits	—	P5470B3225CU
		New – Higher Circuits	S5470L3225	P5470L3225CU
		G1224L3125CU	S1224L3125	P1224L3125CU
		G1224L3200CU	S1224L3200	—
		G1836L3150CU	S1836L3150	—
		G2442B3150CU	S2442B3150	P2442B3150CU
		G2442B3150CU22	—	P2442B3150CU
		G2442L3150CU	S2442L3150	—
		G2442L3200CU	S2442L3200	P2442L3200CU
		G3030B3100CU	S3030B3100	P3042B3100CU
		G3030B3100CU22	—	P3042B3100CU
		G3042B3200CU	S3054B3200	P3054B3200CU
		G3042L3200CU	S3054L3200	P3054L3200CU
		G4242B3200CU	S4260B3200	P4260B3200CU
		G4242B3225CU	S4242B3225	P4260B3225TCU/ P4260B3225CU
		G4242L3225CU	S4260L3225	P4260L3225CU
	Outdoor	W1224L3125CU	SW1224L3125	PW1224L3125CU
		W1224L3200CU	SW1224L3200	—
		W1836L3150CU	SW1836L3150	—
		W2442B3150CU	SW2442B3150	—
		W2442L3150CU	SW2442L3150	—
		W2442L3200CU	SW2442L3200	PW2442L3200CU
		W3042B3200CU	SW3054B3200	PW3054B3200CU
		W3042B3200CU22	—	PW3054B3200CU
		W3042L3200CU	SW3054L3200	PW3054L3200CU
		W4242B3200CU	SW4260B3200	PW4260B3200CU
		W4242B3200CU22	—	PW4260B3200CU
		W4242B3225CU	SW4242B3225	PW4260L3225CU
		W4242L3225CU	SW4260L3225	—

Arc-Fault Circuit Interrupters (AFCI)

AFCI's detect arcing faults (an unintentional arcing condition in a circuit) that standard circuit breakers are not designed to detect. The device is intended to mitigate the effects of arcing faults by functioning to de-energize the circuit when an arc-fault is detected.

Combination Type AFCI

Detects all three possible types of arc faults: line-to-ground, line-to-neutral, and series.

Breaker Type	Amp Rating	10,000 A IR Catalog No.	22,000 A IR Catalog No.	65,000 A IR Catalog No.
QAF2/QAFH2/HQAF2 **1-Pole 120V AC**	15 20	QA115AFC① QA120AFC①	QA115AFCH ① QA120AFCH ①	QA115AFCHH■ ① QA120AFCHH■ ①
QAF/QAFH **2-Pole 120/240V AC**	15 20	Q215AFC① Q220AFC①	Q215AFCH■ ① Q220AFCH■ ①	— —
QAF2N **Plug-on Neutral/1-Pole 120V AC**	15 20	QA115AFCN QA120AFCN	— —	— —
QAF/QAFH **Plug-on Neutral/2-Pole 120/240V AC**	15 20	Q215AFCN Q220AFCN	— —	— —

Dual Function AFCI/GFCI

The Dual Function Circuit Breaker combines Combination Type AFCI and 5mA GFCI protection in one device. The device includes the Self Test feature, making it the first in class in electrical safety for homeowners.

QFGA2/QFGAH2/HQFGA2 **1-Pole 120V AC**	15 20	Q115DF① Q120DF①	Q115DFH■ ① Q120DFH ①	Q115DFHH■ ① Q120DFHH■ ①
QFGA2N **Plug-on Neutral/1-Pole 120V AC**	15 20	Q115DFN Q120DFN	— —	— —

Ground-Fault Circuit Interrupters (GFCI)

Provides Class A (5mA) ground fault protection. Intended for personnel protection. Includes Self Test as an added safety feature.

Breaker Type	Amp Rating	10,000 A IR Catalog No.	22,000 A IR Catalog No.	65,000 A IR Catalog No.
QPF2/QPHF2/HQPF2 **1-Pole 120V AC**	15 20 30	QF115A① QF120A① QF130A①	QF115AH■① QF120AH■① QF130AH■①	QF115AHH■① QF120AHH■① QF130AHH■①
QPF/QPHF **2-Pole 120/240V AC**	15 20 30 40 50 60	QF215A QF220A QF230A QF240A QF250A QF260A	QF215AH■ QF220AH■ QF230AH■ QF240AH■ QF250AH■ QF260AH■	— — — — — —
QPF2N **Plug-on Neutral/1-Pole 120V AC**	15 20 30	QF115AN QF120AN QF130AN	— — —	— — —

Ground Fault Equipment Protection (30mA)

Provides protection of equipment from damaging line-to-ground faults currents.

QE/QEH **1-Pole 120V AC**	15 20 30	QE115 QE120 QE130	QE115H■ QE120H■ QE130H■	— — —
QE/QEH **2-Pole 120/240V AC**	15 20 30 40 50 60	QE215 QE220 QE230 QE240 QE250 QE260	QE215H■ QE220H■ QE230H■ QE240H■ QE250H■ QE260H■	— — — — — —

QAF2/QPF/QE/QPF2 Accessories

Description	Catalog Number①
Padlocking Device 1-Pole	**ECPLD1**
Padlocking Device 2-Pole	**ECPLD2**
Handle Block	**ECBX231M**

■ Built to order. Allow 8 -10 weeks for delivery.
① UL Listed as SWD (Switching Duty) Rated, suitable for 120V AC Fluorescent Lighting.


1-Pole Combination Type AFCI


2-Pole Combination Type AFCI

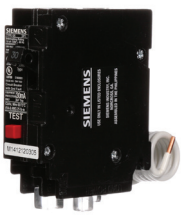

1-Pole Dual Function AFCI/GFC


1-Pole AFCI Plug-on Neutral


1-Pole Dual Function Plug-on Neutral


1-Pole GFCI


2-Pole GFCI


1-Pole Equipment Protection


2-Pole Equipment Protection

Circuit Breakers

Type QP with INSTA-WIRE

Continuous Current Rating @ 40° C	Type QP① 10,000A IR Catalog Number	Type QPH 22,000A IR Catalog Number	Type HQP 65,000A IR Catalog Number
1-Pole Plug-In (120/240V AC)⑤			
10	Q110⑨	—	—
15	Q115③	Q115H③	Q115HH■③
20	Q120③	Q120H③	Q120HH■③
25	Q125	Q125H■	Q125HH■
30	Q130	Q130H	Q130HH■
35	Q135■	Q135H■	Q135HH■
40	Q140	Q140H	Q140HH■
45	Q145■	Q145H■	Q145HH■
50	Q150	Q150H	Q150HH■
60	Q160	Q160H■	Q160HH■
70	Q170	Q170H■	Q170HH■
2-Pole Plug-In (Common-Trip 120/240V AC)⑥			
10	Q210⑨	—	—
15	Q215	Q215H	Q215HH
20	Q220	Q220H	Q220HH
25	Q225	Q225H■	Q225HH■
30	Q230	Q230H	Q230HH
35	Q235	Q235H■	Q235HH■
40	Q240	Q240H	Q240HH■
45	Q245	Q245H■	Q245HH■
50	Q250	Q250H	Q250HH
60	Q260	Q260H	Q260HH
70	Q270	Q270H	Q270HH
80	Q280	Q280H■	Q280HH■
90	Q290	Q290H	Q290HH■
100	Q2100	Q2100H	Q2100HH
110	Q2110	Q2110H	Q2110HH■
125	Q2125	Q2125H	Q2125HH
2-Pole Plug-In (Common-Trip 240V AC)④⑥			
15	Q215R	—	—
20	Q220R	—	—
30	Q230R	—	—
40	Q240R	—	—
50	Q250R	—	—
3-Pole Plug-In (Common-Trip 240V AC)⑦			
15	Q315	Q315H	Q315HH■
20	Q320	Q320H	Q320HH
25	Q325	Q325H■	Q325HH■
30	Q330	Q330H	Q330HH
35	Q335	Q335H■	Q335HH■
40	Q340	Q340H	Q340HH
45	Q345	Q345H■	Q345HH■
50	Q350	Q350H	Q350HH
60	Q360	Q360H	Q360HH
70	Q370	Q370H	Q370HH■
80	Q380	Q380H	Q380HH■
90	Q390	Q390H	Q390HH■
100	Q3100	Q3100H	Q3100HH

Q120

Q220

Q320

QP / QPH / HQP Internal Accessories

Control Voltage AC	Catalog Number	Field/Factory Installed
120V Shunt Trip	add suffix …00S01■	Factory
24V Shunt Trip	add suffix …00S07■	Factory
120V Auxiliary Switch	add suffix …01■②	Factory

Modifications

Description	Catalog Number
400 Hz Calibration	add suffix …Y⑧
Marine 50°C Ambient Calibration	add suffix …M
Fungus Proofing	add suffix …F

For external accessories please refer to page 1-43.

■ Built to order. Allow 2-3 weeks for delivery.

① UL Listed for use with 60/75° wire through 40 amps, UL listed for use with 75° wire only for 50 amps and above, HACR rated.
② 1A and 1B contacts.
③ UL Listed for frequent switching applications (SWD). 120V AC Fluorescent Lighting.
④ UL Listed for use on 3-phase grounded "B" systems — 10,000 for this application.
⑤ Shipped 12 per sleeve.
⑥ Shipped 6 per sleeve.
⑦ Shipped 4 per sleeve.
⑧ UL Listed 5 KA IR.
⑨ Type QP1, UL listed for 16 AWG conductors and multiple wires.

Duplex Circuit Breakers

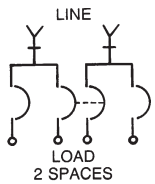
Breaker Type	Ampere Rating	Catalog Number	Catalog Number
QT **1-Pole** **10K AIC** **120V AC**	15–15	**Q1515**	**Q1515NC**①
	15–20	**Q1520**	**Q1520NC**①
	20–20	**Q2020**	**Q2020NC**①
	20–30	**Q2030**	—
	30–15■	**Q3015**	—
	30–20	**Q3020**	—
	30–30	**Q3030**	**Q3030NC**①
	SHIPPING: 12 per carton, (Wt. 4.8 lbs.)		

QT Duplex

These space saver duplex breakers combine two independent 1/2" breaker poles in a common unit. This unit plugs into one load center stab and requires one panel space. HACR rated.

Triplex Circuit Breakers

Breaker Type	Ampere Rating: Single Pole	Ampere Rating: Common-Trip 2-Pole	Catalog Number
QT **2-Pole** **10K AIC** **120/240V AC** **Inner Poles** **Common Trip**	15	15	**Q21515CT**
	15	20	**Q21520CT**
	15	25	**Q21525CT**■
	15	30	**Q21530CT**
	15	35	**Q21535CT**■
	15	40	**Q21540CT**
	15	45	**Q21545CT**■
	15	50	**Q21550CT**
	20	20	**Q22020CT**
	20	25	**Q22025CT**■
	20	30	**Q22030CT**
	20	35	**Q22035CT**■
	20	40	**Q22040CT**
	20	45	**Q22045CT**■
	20	50	**Q22050CT**
	30	30	**Q23030CT**
	SHIPPING: 6 per carton, (Wt. 4.9 lbs.)		

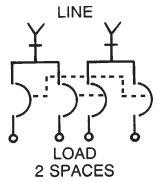


QT Triplex

These space saver triplex breakers provide a 2-pole common trip breaker for 120/240V AC circuits and two single poles for 120V AC circuits. Triplex require two panel spaces. HACR rated.

Quadplex Circuit Breakers

Breaker Type	Ampere Rating: Common-Trip 2-Pole Outside	Ampere Rating: Common-Trip 2-Pole Inside	Catalog Number
QT **2-Pole** **10K AIC** **120/240V AC** **Inner and** **Outter 2 Poles** **Common Trip**	15	15	**Q21515CT2**
	15	30	**Q21530CT2**
	20	20	**Q22020CT2**
	20	50	**Q22050CT2**
	30	20	**Q23020CT2**
	30	25	**Q23025CT2**
	30	30	**Q23030CT2**
	30	50	**Q23050CT2**
	40	20	**Q24020CT2**
	40	30	**Q24030CT2**
	40	40	**Q24040CT2**
	SHIPPING: 6 per carton, (Wt. 4.8 lbs.)		



QT Quadplex

These space saver quadplex breakers provide two sets of common trip, two-pole breakers for 120/240V AC circuits, and require two panel spaces. HACR rated.

For external accessories, please refer to page 1-43.

For inches / millimeters conversion, see Application Data section.

■ Built to order. Allow 2–3 weeks for delivery.

① Non-CTL. For replacement use only in panels manufactured before 1968

HID Lighting

For high-intensity discharge lamp loads having in-rush currents above the instantaneous trip setting of a standard breaker.

Breaker Type	Wiring Diagram	Complete Breaker UL Unenclosed	
		Ampere Rating	Catalog Number
QP 1-Pole 120V AC	Figure 1	15	Q115HID①■
		20	Q120HID①
		30	Q130HID
QP 2-Pole 120/240V AC	Figure 2	15	Q215HID
		20	Q220HID■
		30	Q230HID■

Molded Case Switch

For applications that do not require overcurrent protection.

QP 1-Pole 120V AC	Figure 1	100	Q1100S
QP 2-Pole 120/240V AC	Figure 2	30 50 60 125	Q230S Q250S Q260S Q2125S

No-Noise

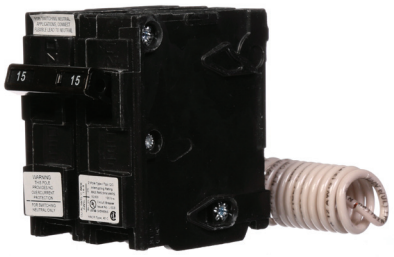
For applications that require a reduction in the 60-cycle hum of a standard breaker.

QP 2-Pole 120/240V AC	Figure 2	50 60	Q250NN■ Q260NN

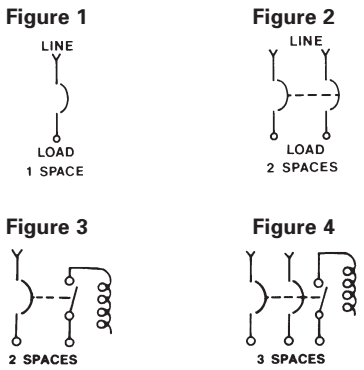
Switching Neutrals

Used where all conductors are required to be disconnected. Neutral pole of the circuit breaker does not connect to load center bus. One side is wired to neutral and the other side to the device.

QG 2-Wire Common Trip 120V AC	Figure 3	15 20	QG215 QG220
QG 3-Wire Common Trip 120/240V AC	Figure 4	20	QG320



Switching Neutral



Wiring Diagrams

■ Built to order. Allow 2–3 weeks for delivery.
Note: All circuit breakers on this page are 10K AIC

①UL Listed as SWD (Switching Duty) Rated, suitable for 120V AC Fluorescent Lighting.

Features

- 3/4" format
- HACR Rated
- UL Classified for use in certain Square D load centers

Type QD Circuit Breakers

The Type QD circuit breaker line is available in 1-pole and 2-pole common trip versions listed on this page.

The circuit breakers are UL Classified and UL Listed.

All QD breakers are supplied with load side connectors suitable for 60/75°C wire and are calibrated for 40°C maximum ambient applications.

UL Classified

Siemens Type QD circuit breakers are UL Classified for use in specific Square D load centers in place of Square D Type QO® circuit breakers. A Panelboard Compatibility List packaged with each QD breaker shows which type QD circuit breakers are acceptable for use in Square D load centers.

The interrupting rating on these circuit breakers is 10,000A IR maximum and they are ***not*** series rated with Square D circuit breakers or equipment. This UL Classification allows a Siemens Type QD circuit breaker to be used in place of a Square D Type QO circuit breaker in those load centers that are specifically shown on the Panelboard Compatibility list. For additional information, contact your local Siemens sales engineer.

D120

D220

Continuous Current Rating @ 40°C	1-Pole	2-Pole
	120V	120/240V Common Trip
	Catalog Number	Catalog Number
15	D115①	D215
20	D120①	D220
30	D130	D230
40	D140	D240
50	D150	D250
60	D160	D260

Shipping Weights

Number of Poles	Number Per Carton	Shipping Weight (lbs.)
1	16	3.8
2	8	4.2

Panelboard Compatibility List

Listed Panelboards—Square D—Catalog Numbers

QO2L30F/S	QO12M100/RB	QO120-30M150/RB	QO130-40M200
QO2-4L70F/S	QO16-20M100/RB	QO124L150G	QO130M200/RB
QO2-4L70TS	QO16M100/RB	QO124M150	QO130-40L200G/RB
QO2-4L70RB	QO20M100/RB	QO130L150G/RB	QO140M200/RB
QO6-12L100F/S	QO112L125G/RB	QO130M150/RB	QO16L200/RB
QO6-12L100DF/S	QO112-24L125G/RB	QO16L150/RB	QO16M200/RB
QO6-12L100TF/S	QO112-24L125GWGC	QO16M150/RB	QO18-16M200FTRB
QO6-12L100DTF/S	QO116L125G	QO16-30L150/RB	QO20-40L200/RB
QO6-12L100RB	QO116-24L125G/RB	QO18-16M150FTRB	QO20-40M200TF/S
QO8-16L100F/S	QO12-24L125/RB	QO20-30M150/RB	QO20-40M200/RB
QO8-16L100DF/S	QO120-24L125G	QO20-30M150TF/S	QO24L200/RB
QO8-16L100TF/S	QO120-24L125GWGC	QO20-30L150	QO24M200/RB
QO8-16L100DTF/S	QO120L125G	QO24L150/RB	QO30L200/RB
QO8-16L100RB	QO124L125G/RB	QO24M150/RB	QO30M200/RB
QO112M100/RB	QO124M125/RB	QO30L150/RB	QO30-40L200/RB
QO116M100/RB	QO16L125/RB	QO30M150/RB	QO30-40M200/RB
QO120M100/RB	QO16-12M125FTRB	QO8-16M200FT/RB	QO40M200/RB
QO124M100	QO16-24L125/RB	QO112L200G/RB	QO140M225
QO12L100DF/S	QO20L125/RB	QO120-40M200/RB	QO142L225G/RB
QO12L100RB	QO20-24L125/RB	QO120-40M200TC	
QO12-20M100/RB	QO24L125/RB	QO124M200	
QO12-20M100TF/S	QO120-30L150G	QO130L200G/RB	

For inches / millimeters conversion, see Application Data section.

① UL Listed for frequent switching applications (SWD). 120V AC Fluorescent Lighting. One or two load conductors.

Circuit Breakers

Main and Branch Circuit Breakers①

Breaker Type	Ampere Rating	Catalog Number	Catalog Number	UL Interrupting Ratings (kA)
QN 2-Pole 120/240V AC	150	QN2150	QN2150R②	10
	175	QN2175■	QN2175R②■	10
	200	QN2200	QN2200R②	10
QNH 2-Pole 120/240V AC	150	QN2150H	QN2150RH②	22
	175	QN2175H■	QN2175RH②■	22
	200	QN2200H	QN2200RH②	22
HQN 2-Pole 120/240V AC	150	HQN2150	HQN2150R②	65
	175	HQN2175■	—	65
	200	HQN2200	HQN2200R②	65

Requires 4 panel spaces, 2 adjacent and 2 opposite. **SHIPPING:** 1 per carton (Wt. 3 lbs.)

QNR⑤ **QN⑤**

Main Breaker Kits

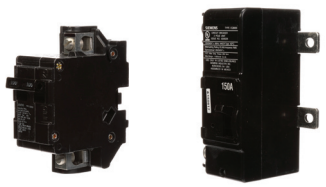
For use in PL, ES, and UIt Load Centers④			For use in EQIII Load Centers			
UL Type	Ampere Rating	Catalog Number	UL Type	Ampere Rating	Catalog Number	UL Interrupting Ratings (kA)
EQ8681	100	MBK100A	EQ9675	100	MBK100	22
EQ8682	125	MBK125A	EQ9677	125	MBK125	22
EQ8693	150	MBK150A	EQ9683	150	MBK150	22
—	—	—	EQ9684	175	MBK175■	22
EQ8695	200	MBK200A	EQ9685	200	MBK200	22
EQ8696	225	MBK225A	EQ9686	225	MBK225	22

EQ9675

Breaker Type	Ampere Rating	Catalog Number	UL Interrupting Ratings (kA)
QPJ③ 3-Pole 240V AC	125	QPJ3125	10
	150	QPJ3150	10
	200	QPJ3200	10

Requires 6 spaces due to cross over design. Fits only EQIII 125-400A 3-phase load centers

SHIPPING: 5 per carton (Wt. 17 lbs.)



MBK (100,125)A **MBK** (150,200,225)A

Breaker Type	Ampere Rating	Catalog Number	UL Interrupting Breaker Ratings (kA) Volts AC 120/240
QPP 2-Pole 120/240V AC	125	Q2125B	10
	150	Q2150B	10
	175	Q2175B■	10
	200	Q2200B	10
	225	Q2225B	10
QPPH 2-Pole 120/240V AC	125	Q2125BH	22
	150	Q2150BH	22
	175	Q2175BH■	22
	200	Q2200BH	22
	225	Q2225BH■	22
HQPH 2-Pole, 120/240V AC	100	HQ2100H	100
	125	HQ2125H	100
HQPP 2-Pole 120/240V AC	125 150 175 200 225	Obsolete	
HQPPH 2-Pole 120/240V AC	100 125 150 175 200 225	Obsolete	

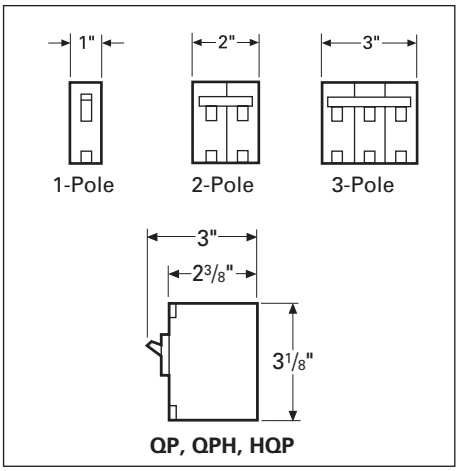
QPJ

2-Pole **QPP**

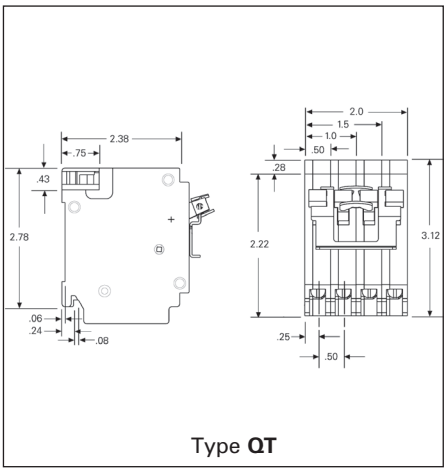
For inches / millimeters conversion, see Application Data section.
■ Built to order. Allow 2–3 weeks for delivery.

① All circuit breakers on this page are common trip.
② Reverse handle.
③ CSA Listed.
④ MBK100A for use in 100 and 125A load centers.
MBK125A for use in 125A load centers.
MBK150A for use in 150, 200 and 225A load centers.
MBK200A for use in 200 and 225A load centers.
MBK225A for use in 225A load centers.
MBK175A for use in 200 and 225A load centers.

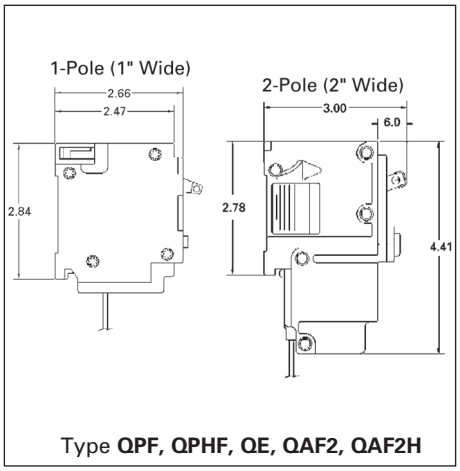
⑤ QNR required for horizontal applications or vertical applications where the lugs are facing up. The QN breaker is required for vertical applications where the lugs are facing down as shown.



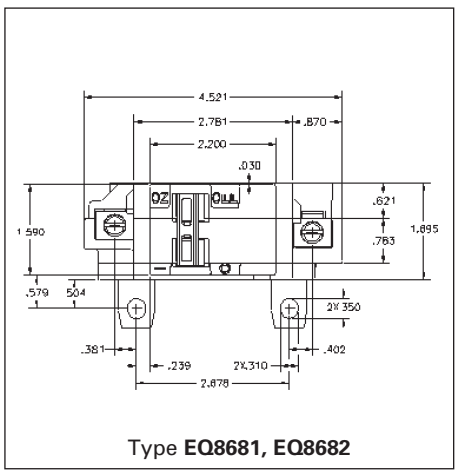
QP, QPH, HQP



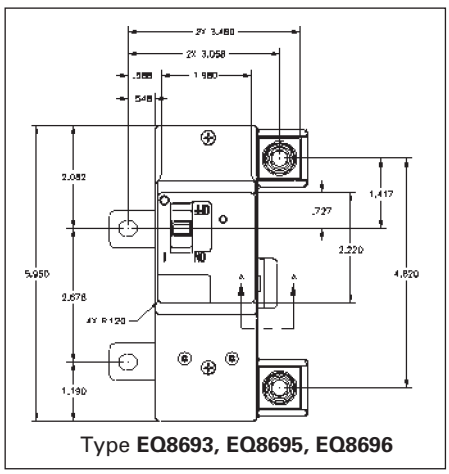
Type **QT**



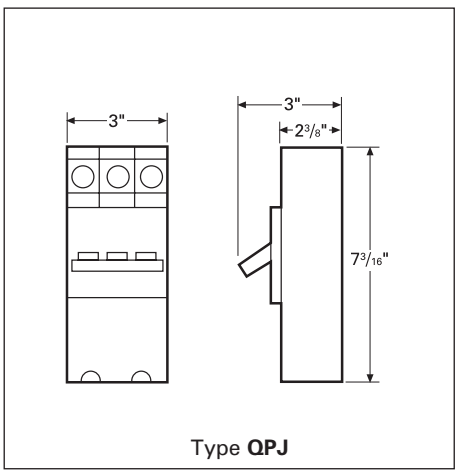
Type **QPF, QPHF, QE, QAF2, QAF2H**



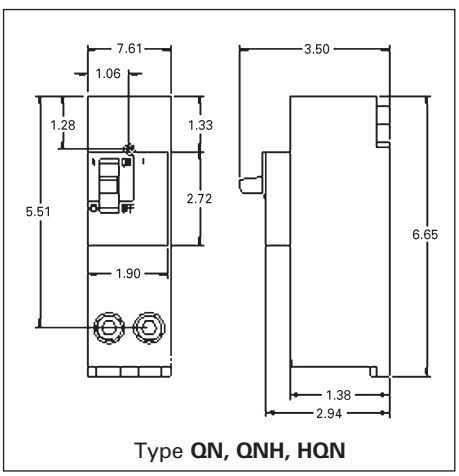
Type **EQ8681, EQ8682**



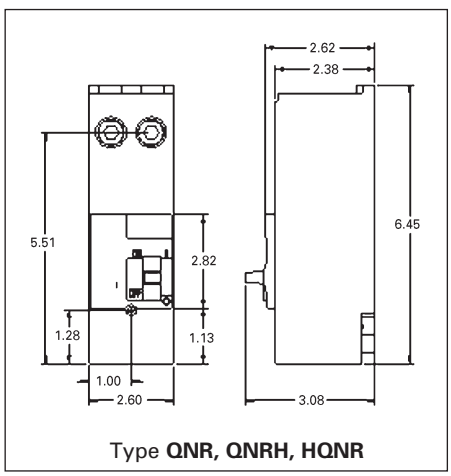
Type **EQ8693, EQ8695, EQ8696**



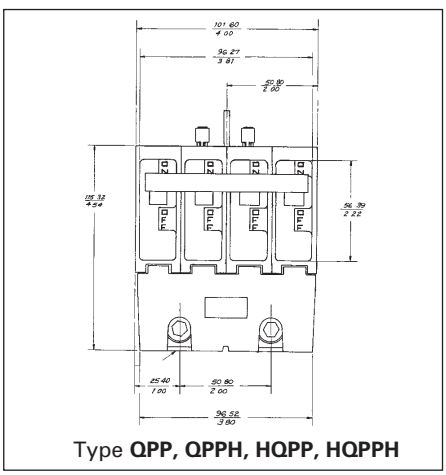
Type **QPJ**



Type **QN, QNH, HQN**



Type **QNR, QNRH, HQNR**



Type **QPP, QPPH, HQPP, HQPPH**

① All standard circuit breakers are calibrated to 40°C maximum ambient application.

Circuit Breaker Type	Circuit Breaker Ampere Rating	Cables Per Connector	Connector Wire Range
	LOAD SIDE		
QP, QPH, HQP, Plug-in	10	1 or 2	#14-#16 AWG Cu
	15–35	1 1	#14–#6 AWG Cu #14–#6 AWG Al
	40–50	1 1	#8–#6 AWG Cu #8–#4 AWG Al
	55-125	1 1	#8-#2/0 AWG Cu #8-#2/0 AWG Al
QP 1 & 2-Pole Only	55-60	1	#6-#4 AWG Cu-Al (#3 AWG compatible with QPH & HQP)
QT	15–35	1 1	#14–#6 AWG Cu #14–#6 AWG Al
	40	1	#8 AWG CU-Al
	40–50 Exception: 1 & 2-pole QP at 55-60	1 1	#8–#6 AWG Cu #8–#4 AWG Al
QPF, QPHF	15–30	1 1	#14–#10 AWG Cu #12–#8 AWG Al
	40–60	1 1	#8–#6 AWG Cu #8–#4 AWG Al
QAF2, QAFH2, QFGA2, QFGAH2	15–20	1 1	#14–#12 AWG Cu #12–#10 AWG Al
QD	15–20	2	#14–#10 AWG Cu Only
	15–20	1 1	#14–#12 AWG Cu #12–#10 AWG Al
	25–35	1 1	#10–#8 AWG Cu #10–#6 AWG Al
	40–60	1 1	#8–#6 AWG Cu #8–#4 AWG Al
QN, QNH, HQN	150–200	1	#1–300kcmil Cu-Al
QS, QSH, QSHH, HQS, HQSH	100–225	1	#3–300kcmil Cu-Al
EQ8681-Ultimate, PL, ES	100	1	#4–3/0 AWG Cu-Al
EQ8682-Ultimate, PL, ES	125	1	#4–3/0 AWG Cu-Al
EQ8693-Ultimate, PL, ES	150	1	#1–300kcmil Cu-Al
EQ8695-Ultimate, PL, ES	200	1	#1–300kcmil Cu-Al
EQ8696-Ultimate, PL, ES	225	1	#1–300kcmil Cu-Al
QPP, QPPH, HQPP, HQPPH	125	1 1	#1 AWG Cu #2/0 AWG Al
	150	1 1	#1/0 AWG Cu #3/0 AWG Al
	175	1 1	#2/0 AWG Cu #4/0 AWG Al
	200	1 1	#3/0 AWG Cu 250kcmil AWG Al
	225	1 1	#4/0 AWG Cu 300kcmil AWG Al
EQ9675-EQIII	100	1 1	#8-#2/0 AWG Cu #8-#2/0 AWG Al
EQ9677-EQIII	125	1 1	#8-#2/0 AWG Cu #8-#2/0 AWG Al
EQ9683-EQIII	150	1 1	#1/0 AWG Cu #3/0 AWG Al
EQ9684	175	1 1	#3/0 AWG Cu 250kcmil AWG Al
EQ9685-EQIII	200	1 1	#2/0 AWG Cu #4/0 AWG Al
EQ9686-EQIII	225	1 1	#4/0 AWG Cu 300kcmil AWG Al
QPJ	125–200	1	#2–300kcmil Cu-Al

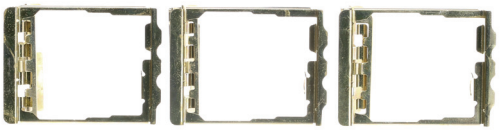
Circuit Breaker Accessories ④⑤⑥⑦⑧⑨

Catalog Number	For Use With Breaker Type	Number of Poles	Standard Package
Padlocking Device For locking breaker in "OFF" position. Note "ON" position does not affect breaker fuctionally			
ECPLD1	Type QP, BL, QAF2, QPF2, QE, QT-Duplex, BQ, BQXD	1P	3 Pieces
ECPLD1R	Type QP, BL, QAF2, QPF, QE, QT-Duplex, BQ, BQXD (Red Color)	1P	3 Pieces
ECPLD2	Type QP, BL, QAF2, QPF, QE, QT-Triplex & Quadplex, BQ, BQXD	2P	3 Pieces
ECPLD2R	Type QP, BL, QAF2, QPF, QE, QT-Triplex & Quadplex, BQ, BQXD (Red Color)	2P	3 Pieces
ECPLD3	Type QP, BL, QAF2, QPF, QE, BQ	3P	1 Piece
US2:ECPLD3R	Type QP, BL, QAF2, QPF, QE, BQ (Red Color)	3P	1 Piece
ECQLD3	Type QP, BL, BQ, BQXD	1P	10 Pieces
ECQLD4	Type QT-Duplex	QT-Duplex Breakers	10 Pieces
ECQLN3②	150-225 MBKA, QN, QNR	n/a	1 Piece
ECQTH4	Type QP, BL, BQH	Designed for (3) 1P Breakers	1 Piece
Handle Tie Provide simultaneous swiching of 2 adjacent handles.			
ECQTH2	Type QT Duplex	Designed for (2) QT Duplex Breakers	25 Pieces
ECQTH3	Type QP, BL	2P	50 Pieces
Mechanical Interlock①			
ECQML12	Type QP, BL, BQ Interlock Bracket	Designed for 1" Breaker	10 Pieces
Handle Blocking Device For holding breaker in "ON" or "OFF" position. Not a lockout/tagout device			
ECQL1	Type QP, BL, BQ, BQXD	1P	10 Pieces
ECBX231M	Type QT-Duplex	1/2" Breakers	10 Pieces
Main Breaker Retainer			
ECMBR1③	EQ Load Centers		1 Piece
ECMBR2	PL, ES, and Ultimate Load Centers: 2-pole QP		1 Piece
ECMBR3	PL, ES, and Ultimate Load Centers: 3-pole QP		1 Piece
Mounting Accessories			
MB120	Type BQ, BQH Mounting Clips	1P	20 Pieces
FP9508	Type BQ, BQH FACE MOUNT PLATE	1P	10 Pieces
FP9555	Type BQ, BQH FACE MOUNT PLATE	2P	10 Pieces
FP9556	Type BQ, BQH FACE MOUNT PLATE	3P	10 Pieces
SMB6R	Type BQ MOUNTING BRACKET	1P, 2P, 3P	6 Pieces
TCH65K	Type BQ MOUNTING ADAPTER		500 Pieces
BR2	Type BQ, BQH, BQXD Back Mounting Plates	2P	10 Pieces
BR3	Type BQ, BQH, BQXD Back Mounting Plates	3P	10 Pieces
BR4	Type BQ, BQH, BQXD Back Mounting Plates	4P	10 Pieces
I0204ML1125CU	Type QP Back Mounting Plates	1P, 2P	10 Pieces
I0303ML3100CU	Type QP Back Mounting Plates	3P	10 Pieces
Replacement Lugs			
TA1Q1	Type BQ, NGG 100A Al Cu LGS	n/a	6 Pieces
TC1Q1	Type BQ, NGG 40A Al Cu LUGS	n/a	6 Pieces
Finger Shield			
BQFS1K	Type BQXD Finger Shield (Bulk Pack)	n/a	1000 Pieces
BQFS2	Type BQXD Finger Shield	n/a	2 Pieces
Filler Plate			
ECQF3	1" Filler Plate	n/a	5 Pieces

① For a complete list of standby power mechanical interlock kits, see page 1-25
② For use with Ultimate Load Center Main Breakers
③ Not suitable for use on 15-50A, 10 AIC Type QP Circuit Breakers
④ QP Type includes QPH, HQP
⑤ BL Type includes BLH, HBL
⑥ BQ Type includes BQH, HBQ
⑦ QAF2 Type includes QAFH2, BAF2, BAFH2, QFGA2, QFGAH2, BFGA2, BFGAH2
⑧ QPF Type includes QPHF, BLF, BLHF
⑨ QE Type includes QEH, BLE, BLEH

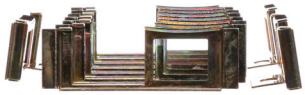
Padlocking Device

ECPLD1

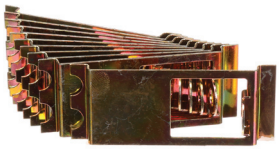


ECPLD2

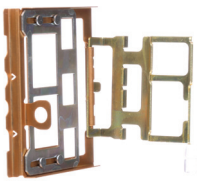
ECPLD1R/2R/3R (Single pole pictured. 2-/3-pole available)



ECQLD3



ECQLD4



ECQTH4

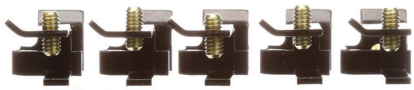
Handle Tie

ECQTH2

ECQTH3

Handle Blocking Device

ECQL1



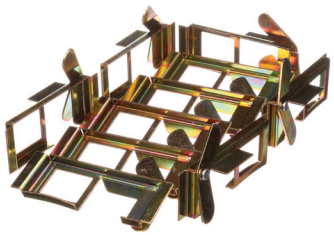
ECBX231M

Main Breaker Retainer

ECMBR1

ECMBR2

Mechanical Interlock



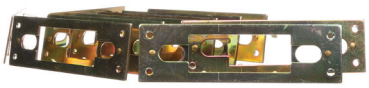
ECQML12

Mounting Accessories

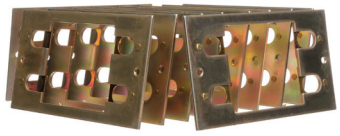
MB120

SMB6R

I0204ML1125



FP9508



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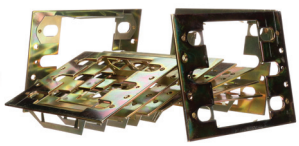


FP9556

Features

- 2 inch wide plug-on design
  - — Includes (2) 1 Pole circuits breakers
  - — No loss of load center spaces
- Easy to install and perfect for retrofit
- LEDs provide protection status

Benefits

By installing a Siemens Circuit Breaker and Surge Protective Device (SPD) in the load center of the residence, surge protection is provided for all branch circuits①.

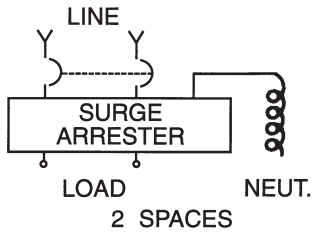
Two green LED indicator lights are provided to show that surge protection is provided for all circuits connected to the load center. These breakers should be used for circuit protection of frequently used household or facility circuits because the lights and devices connected to these circuits provide an effective indication that surge protection is being provided.

The circuit breaker and SPD utilize Siemens-built 150V AC, 40mm, metal oxide varistors (MOVs). The maximum impulse rating for the SPD module is 40kA. The standard interrupting rating for the circuit breakers is 10k AIC. All Type QP circuit breakers and SPD are plug-on style, with load terminals provided. The devices are rated for 120/240V AC and are calibrated for 40 degrees C maximum ambient applications.

Breaker Type	Ampere Rating	Catalog Number	Surge Type
QP 1- Pole 120/240V AC 10K AIC	(2) 15	**QSA1515SPD**	SPD
	(2) 20	**QSA2020SPD**	SPD

Catalog Number	**QSA1515SPD QSA2020SPD**
Amperage	15 or 20 Amp
Number of Poles	(2) 1-Pole Circuit Breakers
Initial Clamping Level	240 Volts
Transient Energy Rating	360 Joules line-to-neutral 720 Joules line-to-line
Transient Suppression	500 volts peak, line-to-neutral
Voltage Rating	1000 volts peak, line-to-line
Peak Current Rating (impulse)	40,000 amperes
Discharge Voltage Characteristic	@ 1,500A, 600 volts @ 5,000A, 800 volts (both line-to-neutral)
Discharge Current Withstand Rating	10,000 amperes line-to-neutral
Circuit Breaker Interrupting Rating	10,000A, 120/240V AC
Listings/Certifications	UL, CSA Meets UL 1449 4th Edition

Circuit Breaker and Surge Protective Device (SPD)



① For warranty information please refer to the surge website www.usa.siemens.com/surge

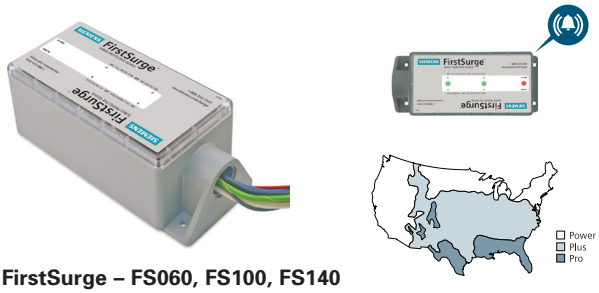
FirstSurge™ - Power, Plus, or Pro

- 4th Listed, Type 2, Surge Protective Device (SPD
- Surge Current Capacities:
  - 60,000 A,FirstSurge Power (FS060)
  - 100,000 A,FirstSurge Plus (FS100)
  - 140,000 A, FirstSurge Pro (FS140)
- 3 Stage Commercial Grade Notification:
  - Protection Status LEDs
  - Audible Alarm
  - Flashing Red Service LED
- Ground Reference Monitoring (GRM)
- 10 year product & connected equipment warranty*

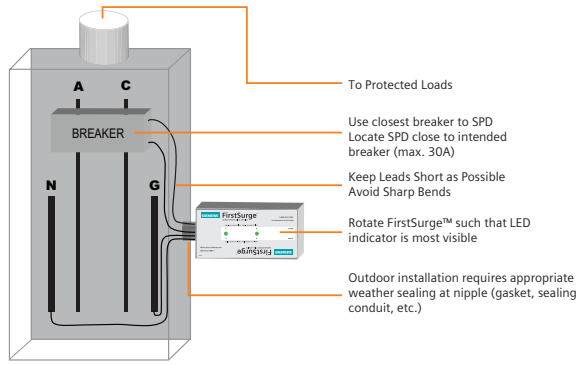
* See www.usa.siemens.com/surge for warranty terms and conditions.

Surge Type	Catalog Number
FirstSurge Power	**FS060**
FirstSurge Plus	**FS100**
FirstSurge Pro	**FS140**

AC Surge Protection	
UL and CSA Listings	1449 4th Edition & CSA 22.2 No. 269.2
Surge Spike Capacity	60kA, 100kA, or 140kA
Line Voltage	120/240 1 Phase 50/60 Hz
UL 1449 4th Edition VPR	L-N, L-G, N-G: 600 V; L-L: 900V
Rated Voltage (MCOV)	L-N, L-G, and N-G: 150V; L-L: 300V
Short Circuit Current Rating (SCCR)	100kA
Inominal (I_n) Rating	20kA
Response Time	<1 nanosecond
Enclosure	NEMA 4X Indoor and Outdoor Rated
Product Warranty	10 years



FirstSurge – FS060, FS100, FS140



Type 1 SPD / Surge Arrestor Replacement

TPS3 03

TPS3 03 is a UL 1449 4th Edition 50 kA Type 1 compact surge protective device that can be used as a replacement secondary surge or lighting arrestors. Having a Type 1 designation allows for flexible electrical system connection location (line or load side) as well as UL 96A compliance (@ 20 kA I_n).

TPS3 03 Key Features

- UL 1449 4th Edition Listed Type 1
- Type 1 Rated SPD
- 50 kA Per Phase Surge Current
- 20 kA I_n (Most models)
- 200 kA SCCR (Most models
- UL 96A Lightning Protection Master Labeling compliant (@ 20 kA))
- Every MOV is monitored
- Mounts external to electrical distribution equipment
  - Recommend for Line Side or Load Side Applications
- Standard compact NEMA 4X polycarbonate enclosure
- Modes of Protection: L-N or L-G and L-L
- Standard Monitoring: LED Indicator
- Dimensions: 3.25" x 3.25" x 3.3"
  (82.6 mm x 82.6 mm x 83.8 mm)
- Weight: 2 lb. (0.9 kg)
- 2 Year Product Warranty

Available Options:

- Dry contacts & Audible Alarm (option "D")

TPS3 03

TPS3 01 DIN RAIL Mounting

Ordering Information

Catalog # TPS3 ☐ 03 ☐☐☐☐

Voltage Code
A = 120/240 V, 1Ø, 3W
B = 120/240 V, 3Ø, 4W
C = 120/208 V, 3Ø, 4W
D = 240 V, 3Ø, 3W
E = 277/480 V, 3Ø, 4W
F = 480 V, 3Ø, 3W
G = 600 V, 3Ø, 3W
K = 380/220 V, 3Ø, 4W
L = 600/347 V, 3Ø, 4W

Surge Current (kA)
05 = 50 kA per phase

Options
D = Dry contact & audible alarm
N = Adds N-G Protection

Example: **TPS3C0305D0** = Type 1 SPD for a 208/120V application with a surge current capacity of 50 kA per phase, in a standard NEMA 4X enclosure with dry contacts and audible alarm option.

When an option is not selected, include a **zero** (**0**) in the field.

Available Accessories: Ordered Separately

RMSIE = Remote monitor

FSPHONE & FSPHONE4X

- UL/cUL listed
- Hardwired Telephone/Modem/Fax/DSL protection
- Exceptionally fast response time
- Low insertion loss
- Available with or without enclosure
- 5 Year product warranty*

* See www.usa.siemens.com/surge for warranty terms and conditions.

The Siemens FSPHONE & FSPHONE4X is a 2 pair, hardwired surge protector designed to stop surges from entering through the main telephone incoming service connection. It is equipped with a failshort device to permanently ground the telephone line in the event of a power cross. The FSPHONE is designed for indoor applications where the FSPHONE4X is useed for outdoor mounting is required.

The FSPHONE4X includes the FSPHONE plus a weatherproof enclosure to facilitate indoor or outdoor applications. The enclosure is molded of temperature and humidity resistant thermoplas-tic to resist cracking and discoloration. The cover can be secured with a tie wrap or similar locking device.

FSPHONE

FSPHONE4X

AC Surge Protection	
Catastrophic Surge Circuit	Yes
Spike Capacity	200 Amps
Let Through Voltage	<270V
Overcurrent Protection	Yes
Response Time	<1 nanosecond
Environmentally Sealed	Yes
UL/cUL Listings	497A
Meets Telcordia (formallly Bellcore) GR-974-CORE Requirements for Telecommunications Line Protectors	Yes
Product Warranty	5 years

Surge Type	Catalog Number
Telco	**FSPHONE**
Telco	**FSPHONE4X**

Coaxial Service Entrance Surge Protection

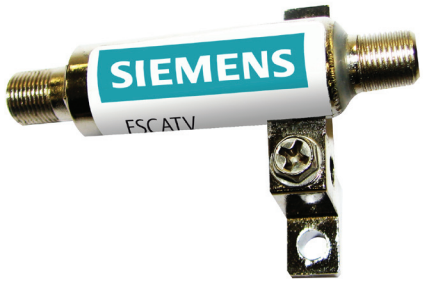
FSCATV

- UL/cUL listed surge protection
- Rated for CATV, DSS, TV, VCR, and Cable Modem
- Easy to install
- Standard Female to Female F connector
- Low insertion loss
- Automatic recovery
- 5 Year product warranty*

* See www.usa.siemens.com/surge for warranty terms and conditions.

Siemens FSCATV shields coaxial connected electronics in residential and light commercial applications against electrical transient damage, including lightning, from entering through the main cable connection.

FSCATV includes a section of coaxial cable with female to female splice for line side application. The Siemens warranty covers product defects for 5 years. To have complete protection for your equipment, home, or business, it is important to protect AC power lines and all data lines the equipment is connected through.



FSCATV

AC Surge Protection	
Frequency Range	DC thru 1.5 GHz
Catastrophic Surge Circuit	Yes
Spike Capacity	5000 Amps, 8/20 µSec
Impedance	75 Ohms
Overcurrent Protection	Yes
Return Loss	30dB @ 1 GHz
Insertion Loss	<0.1dB
UL/cUL Listings	497B
Meets IEEE C62.41.1 Requirements	Yes
Product Warranty	5 Years

Surge Type	Catalog Number
Coaxial	**FSCATV**

AC Disconnects

1-Phase, NEMA 3R Rated

WN2060

WN2060GFCI

WF2060PL

WNAS2060GFCI

Steel AC Disconnects①

Ampere Rating	Disconnect Type	Catalog Number	Horse Power Rating	Dimensions			Pallet Qty.
				Height	Width	Depth	
30	Fused Pullout	**WF2030**	3	7¼	5	2⅛	360
60	Fused Pullout	**WF2060**	10	9	5	2⅛	360
60	Non-fused Pullout	**WN2060**	10	7¼	5	2⅛	360
60	Non-automatic Switch	**WNAS2060**	10	7¼	5	2⅛	360

Plastic AC Disconnects①

Ampere Rating	Disconnect Type	Catalog Number	Horse Power Rating	Dimensions			Pallet Qty.
				Height	Width	Depth	
30	Fused Pullout	**WF2030PL**	3	7¼	5	2½	216
60	Fused Pullout	**WF2060PL**	10	7¼	5	2½	216
60	Non-fused Pullout	**WN2060PL**	10	7¼	5	2½	360
60	Non-Fused Pullout	**WN2060PLX**	10	8	5¾	3½	288
60	Non-automatic switch	**WNAS2060PL**	10	7¼	5	2½	360

Steel AC Disconnects with 15 Amp GFCI Receptacle①

Ampere Rating	Disconnect Type	Catalog Number	Horse Power Rating	Dimensions			Pallet Qty.
				Height	Width	Depth	
30	Fused Pullout	**WF2030GFCI**	3	9	6⅛	5 3/16	112
60	Fused Pullout	**WF2060GFCI**	10	9	6⅛	5 3/16	112
60	Non-fused Pullout	**WN2060GFCI**	10	7⅛	5¾	5 3/16	144
60	Non-automatic Switch	**WNAS2060GFCI**	10	7⅛	5¾	5 3/16	144

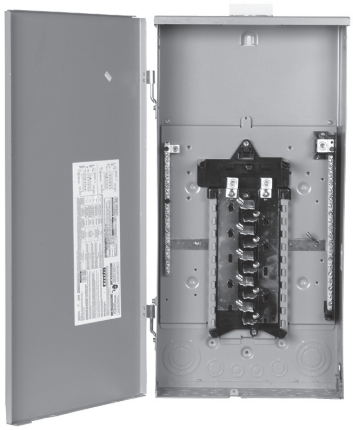
Wire Range Table

Connector	Copper		Aluminum	
	Solid	Stranded	Solid	Stranded
Line	#14-8	#14-3	#12-8	#12-3
Load	#14-8	#14-3	#12-8	#12-3
Neutral	#12-8	#12-2	#12-8	#12-2
Equip. Grnd	#12-8	#12-2	#12-8	#12-2

① Accepts Class H Fuse

Rock Solid Load Centers⑥

Main Lug Only, 1Ø, 65,000 AIC①, Main Lug Panels 3-Wire 120/240V AC or 208Y/120V AC, Insulated and Bonded Split Neutrals



LW2040L1200

Load centers on this page through 225 amp feature a split neutral insulated bars. For service entrance applications, install bonding strap, and use both bars for neutral and ground conductors. For non service entrance applications, do not install bonding strap and use insulated bars for neutral conductors and bonded bar for ground conductors.

12-42 Circuit, 125–225 Amperes

Amps Max.	No. of Spaces	Max. Circuit	Indoor Type 1②	Dimensions③			Outdoor Type 3R②④	Dimensions③		
			Catalog Number	Height⑦	Width	Depth	Catalog Number	Height	Width	Depth
125	12	24	**LC1224L1125**	18	14⅜	4	**LW1224L1125**	20	14¼	4½
125	16	32	**LC1632L1125**	21	14⅜	4	**LW1632L1125**	29	14¼	4½
125	20	40	**LC2040L1125**	21	14⅜	4	**LW2040L1125**	29	14¼	4½
125	30	40	**LC3040L1125**	30	14⅜	4	—	—	—	—
150	16	32	**LC1632L1150**	24	14⅜	4	—	—	—	—
150	24	40	**LC2440L1150**	30	14⅜	4	—	—	—	—
200	12	24	—	—	—	—	**LW1224L1200**	29	14¼	4½
200	20	40	**LC2040L1200**	24	14⅜	4	**LW2040L1200**	29	14¼	4½
200	24	40	**LC2440L1200**	30	14⅜	4	—	—	—	—
200	30	40	**LC3040L1200**	30	14⅜	4	**LW3040L1200**	38	14¼	4½
200	40	40	**LC4040L1200**	36	14⅜	4	—	—	—	—
225	40	60	**LC4060L1225**	36	14⅜	4	—	—	—	—

Copper Bus⑤

Amps Max.	No. of Spaces	Max. Circuit	Indoor Type 1②	Dimensions③			Outdoor Type 3R②	Dimensions③		
			Catalog Number	Height⑦	Width	Depth	Catalog Number	Height	Width	Depth
125	20	40	**LC2040L1125CU**	21	14⅜	4	—	—	—	—
200	20	40	**LC2040L1200CU**	24	14⅜	4	—	—	—	—
200	30	40	**LC3040L1200CU**	30	14⅜	4	—	—	—	—
200	40	40	**LC4040L1200CU**	36	14⅜	4	—	—	—	—
225	12	24	—	—	—	—	**LW1224L1225CU**	29	14¼	4½
225	42	42	**LC4242L1225CU**	39	14⅜	4	**LW4242L1225CU**	42	14¼	4½

①100-225A only.

②Standard package quantity equal to 1.

③Dimensions shown are representative of outside box length, width & depth (± ⅛″) and do not include allowance for mounting bumps, endwalls, hubs or hardware protrusions. Allow approximately 1¼″ additional in length and width dimensions for surface or combination overhang. Consult factory for specific details if required.

④Hub provision only. Closure plate included. Panels through 225A require HS type hub; panels over 225A require HV type hub. See accessories page 1-43 for hub selection.

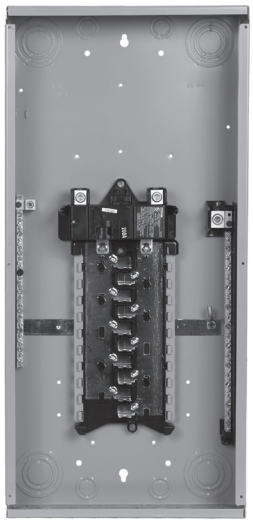
⑤Copper bus load centers are recommended for those applications where the environment may be severe (ie farm and coastal areas).

⑥Units manufactured after April 10, 2014 are UL listed for Siemens and Murray Breakers

⑦Heights shown are for Series A. Original series heights are listed on page 1-19.

Rock Solid Load Centers⑨

Main Breaker, 1Ø, 22,000 AIC①



LC2040B1200

Load centers on this page through 200 amp feature a new split neutral with one bonded and one insulated bar. For service entrance applications, install bonding strap, and use both bars for neutral and ground conductors. For non service entrance applications, do not install bonding strap and use insulated bar for neutral conductors and bonded bar for ground conductors.

Load Center Short Circuit Current Rating

Murray load centers have UL recognized short circuit current ratings up to 100,000 Amps, when used with appropriate main or feeder (remote or internal) overcurrent devices. Load center ratings are shown below. For load center applications with residential or commercial metering equipment, refer to the appropriate catalog section.

1Ø, main breaker load centers are Underwriter's Laboratories Listed for use with 60/75°C conductors and accept Murray branch circuit breakers which are also UL Listed for use with 60/75°C conductors. Type 3R load centers are furnished with a hub opening closure plate.

Load Center Short Circuit Current Rating

Load Center Short Circuit Current Rating②	Load Center Main Rating	Internal or Remote Main or Feeder Circuit Breaker Type
10,000 AIC	Any	Any
22,000 AIC	100/125A	MP-HT, MQH③④
	150/200/225A	MD-H, MQH②④, MPP-HT③
42,000 AIC	100/125A	MQL③④
	150/200/225A	MQL②④
65,000 AIC	100/125A	MP-MT, MPP-MT③
	150/200/225A	MPP-MT③
100,000 AIC	100/125A	100A, 300V AC, Class "T" Fuse③
100,000 AIC	150/200/225A	200A, 300V AC, Class "T" Fuse③

12-42 Circuit, 100-200 Amperes

Amps Max.	No. of Spaces	Max. Circuit	Catalog Number	Dimensions⑤			Outdoor Type 3R⑥⑦	Dimensions⑤		
			Indoor Type 1⑦	Height⑩	Width	Depth	Catalog Number	Height	Width	Depth
100	12	24	**LC1224B1100**	18	14⅜	4	**LW1224B1100**	23	14¼	4½
100	16	32	—	—	—	—	**LW1632B1100**	23	14¼	4½
100	20	40	**LC2040B1100**	21	14⅜	4	—	—	—	—
100	24	40	**LC2440B1100**	24	14⅜	4	—	—	—	—
100	30	40	**LC3040B1100**	30	14⅜	4	—	—	—	—
150	16	32	**LC1632B1150**	24	14⅜	4	—	—	—	—
150	20	40	**LC2040B1150**	30	14⅜	4	**LW2040B1150**	29	14¼	4½
150	24	40	**LC2440B1150**	30	14⅜	4	—	—	—	—
150	30	40	**LC3040B1150**	36	14⅜	4	—	—	—	—
200	12	24	—	—	—	—	**LW1224B1200**	29	14¼	4½
200	16	32	**LC1632B1200**	24	14⅜	4	—	—	—	—
200	20	40	**LC2040B1200**	30	14⅜	4	**LW2040B1200**	29	14¼	4½
200	24	40	**LC2440B1200**	30	14⅜	4	—	—	—	—
200	30	40	**LC3040B1200**	36	14⅜	4	**LW3040B1200**	38	14¼	4½
200	40	40	**LC4040B1200**	36	14⅜	4	**LW4040B1200**	38	14¼	4½
200	30	54	**LC3054B1200**	36	14⅜	4	—	—	—	—
200	40	40	**LC4040B1200**	36	14⅜	4	—	—	—	—
200	40	60	**LC4060B1200**	36	14⅜	4	—	—	—	—

Copper Bus⑧

Amps Max.	No. of Spaces	Max. Circuit	Indoor Type 1⑦ Catalog Number	Dimensions⑤		
				Height⑩	Width	Depth
100	20	40	**LC2040B1100CU**	21	14⅜	4
200	20	40	**LC2040B1200CU**	30	14⅜	4
200	30	40	**LC3040B1200CU**	36	14⅜	4
200	40	40	**LC4040B1200CU**	36	14⅜	4

① 100-225A only.

②This information is based on use of 10,000 AIC rated branch circuit breakers in load center (MP-T, MH-T, MP-GT, MG). Most series ratings exclude MH-T above 40 Amp. Consult device wiring diagram for specific data.

③ Remote Only

④Types MQH & MQL may be mounted internal in 150-225 amp 3Ø main breaker load centers.

⑤ Dimensions shown are representative of outside box length, width & depth (±⅛") and do not include allowance for mounting bumps, endwalls, hubs or hardware protrusions. Allow approximately 1¼" additional in length and width dimensions for surface or combination overhang. Consult factory for specific details if required.

⑥Hub provision only. Closure plate included. Panels through 225A require HS type hub; panels over 225A require HV type hub.

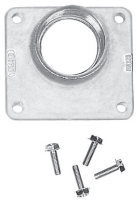
⑦ Standard package quantity equal to 1.

⑧ Copper bus load centers are recommended for those applications where the environment may be severe (ie farm and coastal areas).

⑨ Units manufactured after April 10, 2014 are UL listed for Siemens and Murray Breakers

⑩ Heights shown are for Series A. Original series heights are listed on page 1-19.

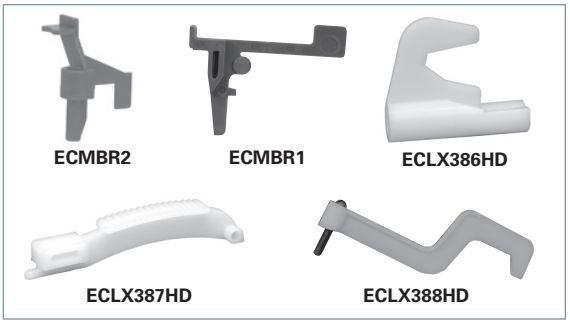
Hubs



ECHS125

Catalog Number	Description	Pack Quanity
ECHS075	3/4" Hub	10
ECHS100	1" Hub	10
ECHS125	1 1/4" Hub	10
ECHS150	1 1/2" Hub	10
ECHS200	2" Hub	10
ECHS250	2 1/2" Hub	10

Backfed Main Breaker Hold Down Kits



ECMBR2 ECMBR1 ECLX386HD ECLX387HD ECLX388HD

Catalog Number	Description	Pack Quanity
ECMBR2	For use on MP-T, MP-HT, & MP-MT breakers in Rock Solid Load Centers	25
ECMBR1	For use on MP-T, MP-HT, & MP-MT breakers in 2–8 circuit Load Centers	25
ECLX378M	For use on MD-T, MD-HT, & MD-MT breakers on old style (pre 2003) load centers (12–42 circuit)	25
ECLX386HD	For use on MP-T, MP-HT, & MP-MT breakers (15–60A) on old style (pre 2003) load centers (12–42 circuit)	25
ECLX387HD	For use on MP-T, MP-HT, & MP-MT breakers (70–125A) on old style (pre 2003) load centers (12–42 circuit)	25
ECLX388HD	For use on MP-T, MP-HT, & MP-MT breakers (100–125A) on old style (pre 2003) load centers (12–42 circuit)	25

Miscellaneous

ECQFL2

QF3/ECQF3

Catalog Number	Description	Pack Quanity
ECQFL2	Door lock for Rock Solid Load Centers	10
ECQF3	Filler plate (1")	10
ECMBF125	Filler plate for main breaker opening on 100–125A Rock Solid Load Centers. Use two QF3 filler plates for 150–225A load centers	25
LX077SF	Flush installation cover for 400A panels	1
ECTS2	6 Cover screws, combination cover	50 Bags
ECSMK1	Surface mount spacer kit provides 1/4" space between load center and wall	25

Main Breaker Kits

MBK100M

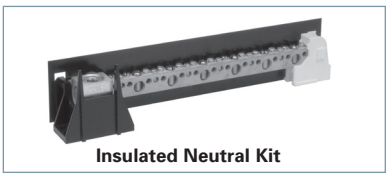
MBK200M

Catalog Number	Description	Pack Quanity
MBK100M	100A—For use on 100 & 125A Rock Solid Load Centers only	1
MBK125M	125A—For use on 125A Rock Solid Load Centers only	1
MBK150M	150A—For use on 150, 200, & 225A Rock Solid Load Centers only	1
MBK200M	200A—For use on 200 & 225A Rock Solid Load Centers only	1
MBK225M	225A—For use on 225A Rock Solid Load Centers only	1
ECMLK125	1 PH Main Lug Conversion Kit 100-125A	1
ECMLK225	1 PH Main Lug Conversion Kit 150-225A	1

Lug Kits

Catalog Number	Description	Pack Quanity
ECLK2SC	#2/0 max. lug for 125 amp neutral feeder for 12–42 circuit devices	50
ECLX384M	CB enclosure ground lug	20

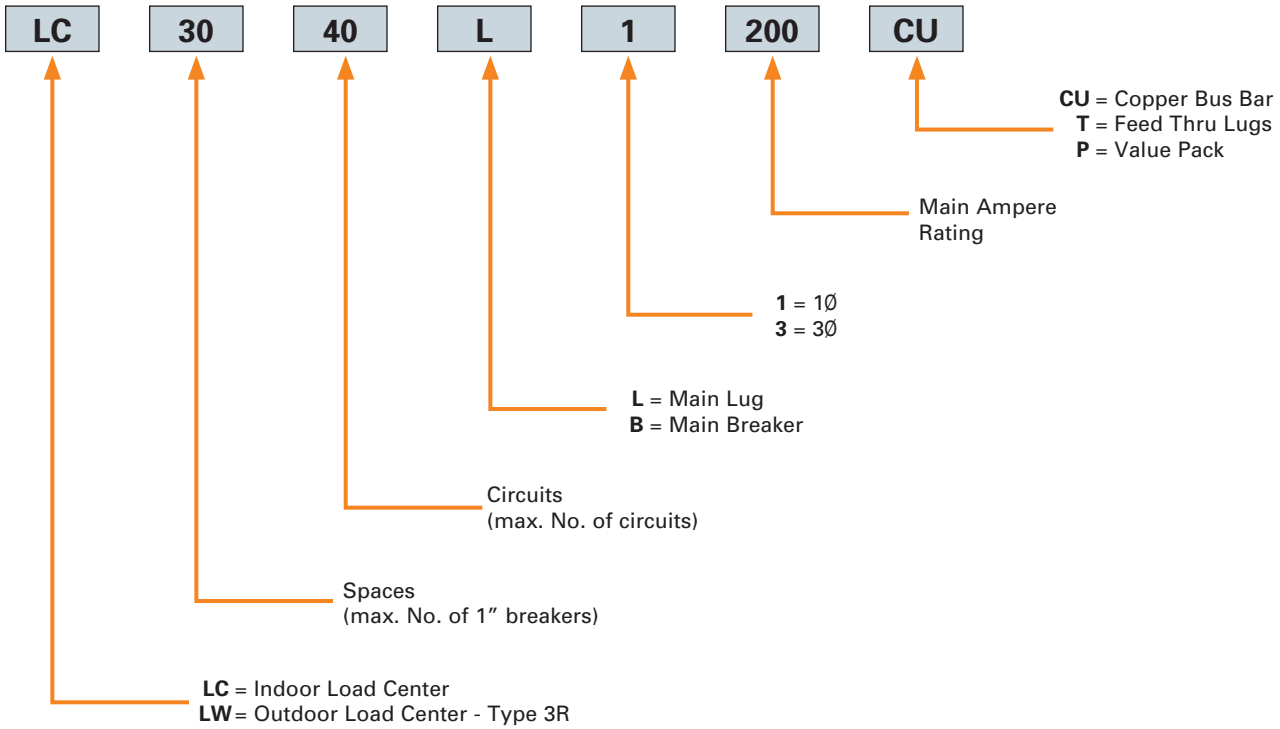
Ground Bars and Insulated Neutral Kits



Insulated Neutral Kit

Catalog Number	Description	Pack Quanity
ECLX068M	4 small terminals—1 5/8" long	10
ECLX069M	5 small and 2 large terminals—3" long	10
ECLX071M	8 small and 3 large terminals—3 1/2" long	10
ECLX072M	11 small and 4 large terminals—4 5/8" long	10
ECLX073M	14 small amd 5 large terminals—5 3/4" long	10
ECLX074M	17 small amd 6 large terminals—7" long	10
ECLX075M	21 small amd 7 large terminals—8" long	10
ECINSNB27	Insulated neutral bar with 27 positions	10
ECINSNB32	Insulated neutral bar with 32 positions	10
ECINSNB33	Insulated neutral bar with 33 positions and a 300 MCM lug	10
ECINSNB41	Insulated neutral bar with 41 positions and a 300 MCM lug	10
ECINSNB43	Insulated neutral bar with 43 positions	10

Rock Solid Load Centers



Lug Data

Amps	Phase	Wire Range① Main Lug Load Centers	Main Breaker Load Centers
60	1Ø	14-4	
100	1Ø	—	3-1/0
125 (4 CKT)	1Ø	14-2/0	—
(6 CKT & Above)	1Ø	4-2/0	4-2/0
150	1Ø	1/0-4/0	4-250 kcmil

Amps	Phase	Wire Range① Main Lug Load Centers	Main Breaker Load Centers
200	1Ø	4-250 kcmil	4-250 kcmil
225	1Ø	4-300 kcmil	4-300 kcmil
400 (24 and 42 CKT)	1Ø	(1)3/0-500 kcmil② (2)3/0-250 kcmil	(1or2)3/0-250 kcmil
400 (30 CKT Only)	1Ø	—	(1)3/0-500 kcmil (2)3/0-250 kcmil
400 (24 and 42 CKT)	3Ø	(1)3/0-500 kcmil② (2)3/0-250 kcmil	

① All lugs are rated for Cu or Al wire. Wire rang shown is maximum allowable for bending space provided. Lug may accommodate larger wire. Refer to National Electric Code for specific wire size requirements.

② 500 kcmil must be top side entry.

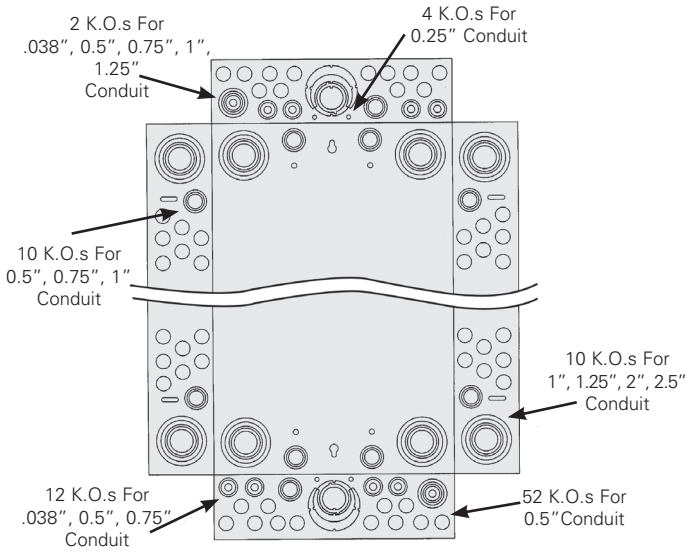
Murray 3-Phase Cross Reference to New SKUs

(See Section 1 for full offering)		
Legacy Murray SKU	**ES™ Series Part No.**	**PL™ Series Part No.**
LC1224B3100CU	S1224B3100	P1224B3100CU
LC1224L3125CU	S1224L3125	P1224L3125CU
LC1224L3200CU	S1224L3200	No equivalent
LC1836B3100CU	No equivalent	No equivalent
LC1836L3150CU	S1836L3150	No equivalent
LC1836L3200CU	S2442L3200	No equivalent
LC2442L3150CU	S2442L3150	P2442L3200CU
LC3042B3150CU	S4242B3150	P4242B3150CU
LC3042B3200CU	S3054B3200	P3054B3200CU
LC3042L3200CU	S3054L3200	P3054L3200CU
LC4242B3200CU	S4260B3200	P4260B3200CU
LC4242B3225CU	S4242B3225	P4260B3225TCU/P4260B3225CU
LC4242L3225CU	S4260L3225	P4260L3225CU
LW1224L3125CU	SW1224L3125	PW1224L3125CU
LW1836L3150CU	SW1836L3150	No equivalent
LW3042B3200CU	SW3054B3200	PW3054B3200CU
LW3042L3200CU	SW3054L3200	PW3054L3200CU
New	S3042B3100	—
New	S5470L3225	—
New	SW1224L3200	—
New	SW2442L3150	—
New	SW2442L3200	—
New	SW4260L3225	—
New	S3030B3100	—
New	SW2442B3150	—
New	SW4260B3200	—
New	SW4242B3225	—
New	—	P3042B3100CU

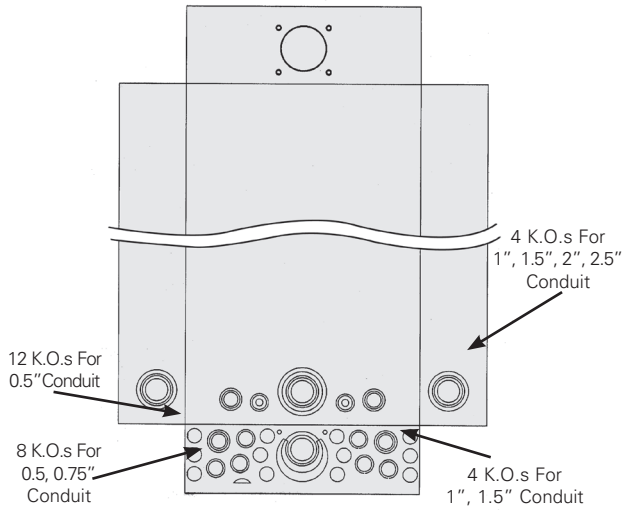
New Murray Heights

	Height	
Load Center	**Original**	**Series A**
LC1224B1100	18	18
LC1224L1125	21	18
LC1224L1125P	21	18
LC1632B1150	24	24
LC1632B1200	30	24
LC1632L1125	21	21
LC1632L1150	24	24
LC2040B1100	24	21
LC2040B1100CU	24	21
LC2040B1100P	24	21
LC2040B1150	30	30
LC2040B1200	30	30
LC2040B1200CU	30	30
LC2040B1200P	30	30
LC2040L1125	24	21
LC2040L1125CU	24	21
LC2040L1200	30	24
LC2040L1200CU	30	24
LC2440B1100	24	24
LC2440B1150	30	30
LC2440B1200	30	30
LC2440L1150	30	30
LC2440L1200	30	30
LC2448B1100	24	24
LC2448B1100P	24	24
LC3040B1100	30	30
LC3040B1150	36	36
LC3040B1200	36	36
LC3040B1200CU	36	36
LC3040B1200P	36	36
LC3040L1125	30	30
LC3040L1200	36	30
LC3040L1200CU	36	30
LC3054B1200	36	36
LC3060B1200P	36	36
LC4040B1200	39	36
LC4040B1200CU	39	36
LC4040B1200P	39	36
LC4040L1200	39	36
LC4040L1200CU	39	36
LC4060B1200	39	36
LC4060L1225	39	36
LC4242L1225CU	42	39
LC4260B1200	42	39
LC4260B1200P	42	39

Indoor Main Breaker and Main Lug Enclosures

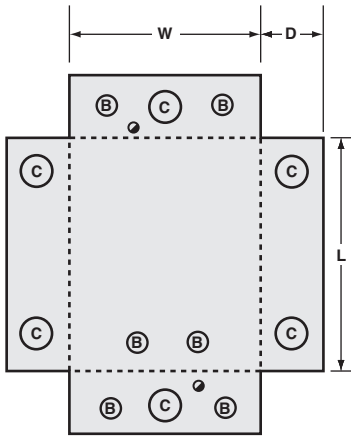


Outdoor Main Breaker and Main Lug Enclosures

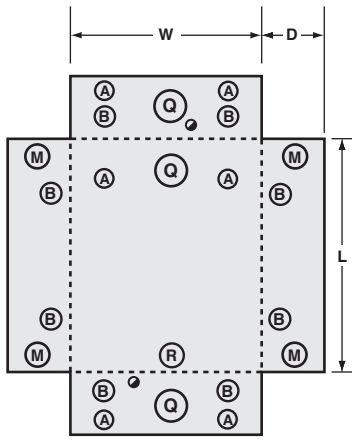


K.O. dimensions refer to conduit trade size, not actual diameter.

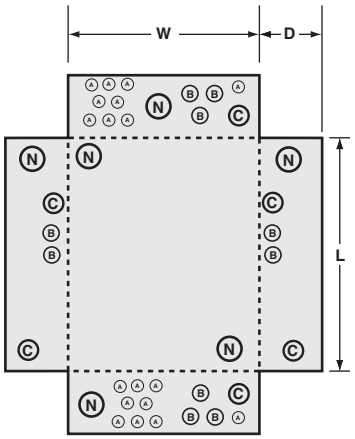
4 Circuit Indoor



8 Circuit Indoor



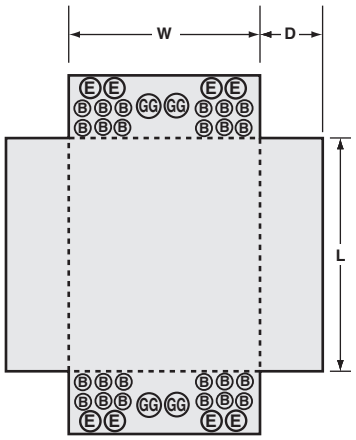
16 Circuit Indoor



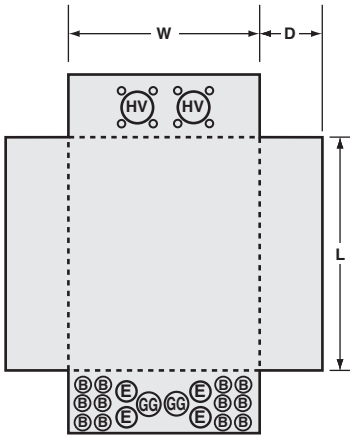
Knockout Code—Conduit Sizes

◑ = ¼
A = ½
B = ½, ¾
C = ½, ¾, 1
D = ½, 1
E = ½, ¾, 1, 1¼
F = ½, 1¼, 1½
G = ¾
H = ¾, 1
J = ¾, 1, 1¼
K = ¾, 1¼
L = ½, ¾, 1, 1¼, 1½
M = ¾, 1, 1¼, 1½
N = ¾, 1, 1¼, 1½, 2
P = 1, 1¼
Q = 1, 1¼,1½
R = 1, 1¼, 1½, 2
S = 1, 1¼, 1½, 2, 2½
T = 1¼
U = 1¼, 1½
V = 1¼, 1½, 2
W = 1¼, 2
X = 1¼, 1½, 2, 2½
Y = 1½, 2
Z = 1½, 2, 2½
AA = 1½, 2, 2½, 3
BB = 1½, 2, 2½, 3, 3½
CC = 2, 2½, 3, 3½
EE = 2, 2½, 3
FF = 2½, 3
GG = 2½, 3, 3½
HH = 2½, 3, 3½, 4
JJ = 3½, 4
LL = 3
VV = 2

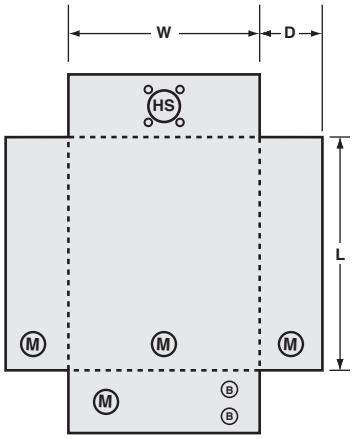
400A Indoor



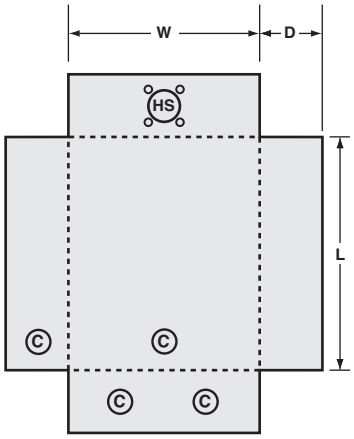
400A Outdoor



8 Circuit Outdoor



4 Circuit Outdoor



Knockout Code—Conduit Sizes

◑ = ¼
A = ½
B = ½, ¾
C = ½, ¾, 1
D = ½, 1
E = ½, ¾, 1, 1¼
F = ½, 1¼, 1½
G = ¾
H = ¾, 1
J = ¾, 1, 1¼
K = ¾, 1¼
L = ½, ¾, 1, 1¼, 1½
M = ¾, 1, 1¼, 1½
N = ¾, 1, 1¼, 1½, 2
P = 1, 1¼
Q = 1, 1¼,1½
R = 1, 1¼, 1½, 2
S = 1, 1¼, 1½, 2, 2½
T = 1¼
U = 1¼, 1½
V = 1¼, 1½, 2
W = 1¼, 2
X = 1¼, 1½, 2, 2½
Y = 1½, 2
Z = 1½, 2, 2½
AA = 1½, 2, 2½, 3
BB = 1½, 2, 2½, 3, 3½
CC = 2, 2½, 3, 3½
EE = 2, 2½, 3
FF = 2½, 3
GG = 2½, 3, 3½
HH = 2½, 3, 3½, 4
JJ = 3½, 4
LL = 3
VV = 2

Arc-Fault Circuit Interrupters (AFCI)

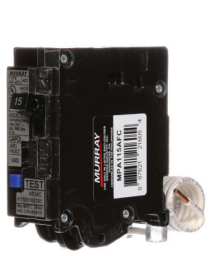
AFCI's detect arcing faults (an unintentional arcing condition in a circuit) that standard circuit breakers are unable to detect. The device is intended to mitigate the effects of arcing faults by functioning to de-energize the circuit when an arc fault is detected

- UL Listed
- HACR Rated (Except where noted)
- Standard 1 inch per pole format with plug-in design

Combination Type AFCI②

Detects all three possible types of arc faults: line-to-ground, line-to-neutral, and series.

Breaker Type	Ampere Rating	10,000 A IR Catalog Number	22,000 A IR Catalog Number	65,000 A IR Catalog Number
MP-AT2/MP-HAT2/ MP-MAT2 1-Pole 120V AC	15 20	MPA115AFC① MPA120AFC①	MPA115AFCH■① MPA120AFCH■①	MPA115AFCHH MPA120AFCHH
MP-AT2/MP-HAT2 2-Pole 120/240V AC	15 20	MP215AFC① MP220AFC①	MP215AFCH■① MP220AFCH■①	— —



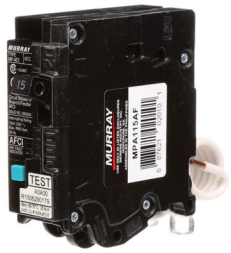
1-Pole Combination Type AFCI

2-Pole Combination Type AFCI

Branch-Feeder AFCI

Detects line-to-ground and line-to-neutral arcs.

MP-AT2/MP-HAT2/ MP-MAT2 1-Pole 120V AC	15 20	MPA115AF① MPA120AF①	MPA115AFH■① MPA120AFH■①	MPA115AFHH MPA120AFHH



1-Pole Branch Feeder AFCI

Dual Function AFCI/GFCI

The Dual Function Circuit Breaker combines Combination Type AFCI and GFCI, protecting against both Arc Faults and (5mA) Ground Faults. The device includes the Self Test feature, making it the first in class in electrical safety for homeowners.

MP-GAT2/MP-HGAT2/ MP-MGAT2 1-Pole 120V AC	15 20	MP115DF MP120DF	MP115DFH MP120DFH	MP115DFM MP120DFM

Ground Fault Interrupters and Protection

Ground-Fault Circuit Interrupters (Class A - 5mA)②

Ground-fault circuit interrupters (GFCI) provide Class A ground fault protection. A GFCI is a device intended for personnel protection and will de-energize the circuit when a fault current to ground is 6 milliamperes or more.

Breaker Type	Amp Rating	10,000 A IR Catalog No.	22,000 A IR Catalog No.
MP-GT/ MP-HGT 1-Pole 120V AC	15 20 25 30	MP115GFA MP120GFA MP125GFA MP130GFA	MP115GFAH■ MP120GFAH■ MP125GFAH■ MP130GFAH■
MP-GT/ MP-HGT 2-Pole① 120/240V AC	15 20 30 40 50 60	MP215GFA MP220GFA MP230GFA MP240GFA MP250GFA MP260GFA	MP215GFAP■ MP220GFAP■ MP230GFAP■ MP240GFAP■ MP250GFAP■ MP260GFAP■

Ground Fault Equipment Protection (30mA)②

Type EQF circuit breakers provide protection of equipment from damaging line-to-ground fault currents by de-energizing the circuit for all ungrounded conductors of the faulted circuit.

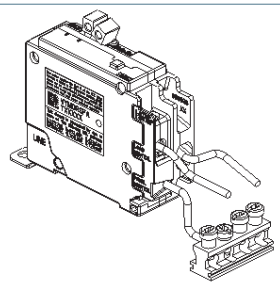
Breaker Type	Amp Rating	10,000 A IR Catalog No.	22,000 A IR Catalog No.
MP-ET/ MP-HET 1-Pole 120V AC	15 20 30	MP115EG① MP120EG① MP130EG	MP115EGH■① MP120EGH■① MP130EGH■
MP-ET/ MP-HET 2-Pole① 120/240V AC	15 20 30 40 50 60	MP215EG MP220EG MP230EG MP240EG MP250EG MP260EG■	MP215EGH■ MP220EGH■ MP230EGH■ MP240EGH■ MP250EGH■ MP260EGH■

1-Pole GFCI

2-Pole GFCI

AFCI and GFCI Accessories

Description	Catalog Number
Padlocking Device for 1" & Twin Breakers	ECPLD1
Padlocking Device for 2" & Quad Breakers	ECPLD2
Handle Blocking Device for 1/2" Circuit Breakers	ECBX231M



■ Built to order. Allow 8 -10 weeks for delivery.
① Not UL Listed as SWD Rated.

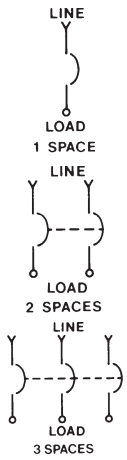
② White line neutral (pigtail) must be connected to the panel neutral for the device to function.

Continuous Current Rating @ 40° C	Type MP-T① 10,000A IR Catalog Number	Type MP-HT 22,000A IR Catalog Number	Type MP-MT 65,000A IR Catalog Number
1-Pole Plug-In (120/240V AC)⑤			
10	MP110	—	—
15	MP115④	MP115KH④	MP115KM■④
20	MP120④	MP120KH④	MP120KM■④
25	MP125	MP125KH■	MP125KM■
30	MP130	MP130KH	MP130KM■
35	MP135■	MP135KH■	MP135KM■
40	MP140	MP140KH	MP140KM■
45	MP145■	MP145KH■	MP145KM■
50	MP150	MP150KH	MP15KKM■
60	MP160■	MP160KH■	MP160KM■
70	MP170■	MP170KH■	MP170KM■
2-Pole Plug-In (Common-Trip 120/240V AC)⑥			
15	MP215	MP215KH	MP215KM■
20	MP220	MP220KH	MP220KM■
25	MP225	MP225KH■	MP225KM■
30	MP230	MP230KH	MP230KM■
35	MP235	MP235KH■	MP235KM■
40	MP240	MP240KH	MP240KM■
45	MP245	MP245KH■	MP245KM■
50	MP250	MP250KH	MP250KM■
60	MP260	MP260KH	MP260KM■
70	MP270	MP270KH■	MP270KM■
80	MP280	MP280KH■	—
90	MP290	MP290KH■	MP290KM■
100	MP2100	MP2100KH	MP2100KM
110	MP2110	MP2110KH	MP2110KM■
125	MP2125	MP2125KH	MP2125KM
2-Pole Plug-In (Common-Trip 240V AC)③⑥			
15	MPH215	—	—
20	MPH220	—	—
30	MPH230	—	—
40	MPH240■	—	—
50	MPH250	—	—
60	MPH260	—	—
70	MPH270■	—	—
100	MPH2100■	—	—
3-Pole Plug-In (Common-Trip 240V AC)⑦			
15	MP315	MP315KH	MP315KM■
20	MP320	MP320KH	MP320KM■
25	MP325■	MP325KH■	—
30	MP330	MP330KH	MP330KM
35	MP335■	—	—
40	MP340	MP340KH	MP340KM
45	MP345■	—	—
50	MP350	MP350KH	MP350KM
60	MP360	MP360KH	MP360KM
70	MP370	MP370KH	MP370KM■
80	MP380	MP380KH■	MP380KM■
90	MP390	MP390KH■	MP390KM■
100	MP3100	MP3100KH	MP3100KM

1-Pole

2-Pole

3-Pole



Wiring Diagrams

MP-T / MP-HT / MP-MT Internal Accessories

Description	Catalog Number	Field/Factory Installed
120V Shunt Trip	add suffix...ST■	Factory
24V Shunt Trip	add suffix...ST24V■	Factory
120V Auxiliary Switch	add suffix...AS■②	Factory

Modifications

Description	Catalog Number
400Hz Calibration	add suffix...Y ⑧
Marine 50° C Ambient Calibration	add suffix...M
Fungus Proofing	add suffix...F

For external accessories please refer to page 1-46.

■ Built to order. Allow 2-3 weeks for delivery

① UL Listed for use with 60/75° wire through 40 amps, UL listed for use with 75° wire only for 50 amps and above, HACR rated. 120V AC Fluorescent Lighting.

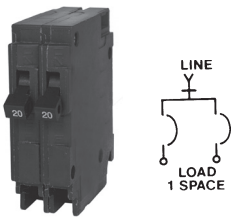
② 1A and 1B contacts.
③ UL Listed for use on 3 phase grounded "B" systems — 10,000 for this application.
④ UL Listed for frequent switching applications (SWD).
⑤ Shipped 12 per sleeve.

⑥ Shipped 6 per sleeve.
⑦ Shipped 4 per sleeve.
⑧ UL Listed 5KA IR.
⑨ Not UL Listed.
⑩ 1 & 2 Poles only.

Duplex Circuit Breakers

Breaker Type	Ampere Rating	Catalog Number	Catalog Number
MH-T 1-Pole 10K AIC 120V AC	15–15	MP1515	MP1515N①
	15–20	MP1520	MP1520N■①
	20–20	MP2020	MP2020N①
	20–30	MP2030	MP2030N■①
	15–30	MP3015■	MP3015N■①
	30–30	MP3030	MP3030N■①
	SHIPPING: 12 per carton, (Wt. 4.8 lbs.)		

MH-T Duplex

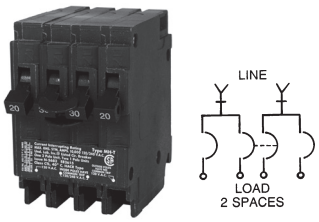


These space saver duplex breakers combine two independent 1/2" breaker poles in a common unit. This unit plugs into one load center stab and requires one panel space. HACR rated.

Triplex Circuit Breakers

Breaker Type	Ampere Rating: Single Pole	Ampere Rating: Common-Trip 2-Pole	Catalog Number
MH-T 2-Pole 10K AIC 120/240V AC Inner Poles Common Trip. Outter Poles 1 Pole Units	15	15	MP21515
	15	20	MP22015
	15	25	MP22515■
	15	30	MP23015
	15	35	MP23515■
	15	40	MP24015
	15	45	MP24515■
	15	50	MP25015
	20	20	MP22020
	20	25	MP22520■
	20	30	MP23020
	20	35	MP23520■
	20	40	MP24020
	20	45	MP24520■
	20	50	MP25020
	SHIPPING: 6 per carton, (Wt. 4.9 lbs.)		

MH-T Triplex

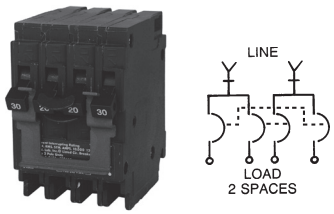


These space saver triplex breakers provide a 2-pole common trip breaker for 120/240V AC circuits and two single poles for 120V AC circuits. Triplex require two panel spaces. HACR rated.

Quadplex Circuit Breakers

Breaker Type	Ampere Rating: Common-Trip 2-Pole Outside	Ampere Rating: Common-Trip 2-Pole Inside	Catalog Number
MH-T 2-Pole 10K AIC 120/240V AC Outter and Inner 2 Poles Common Trip	15	15	MP21515CT2
	15	30	MP21530CT2
	20	15	MP22015CT2
	20	50	MP22050CT2
	30	20	MP23020CT2
	30	25	MP23025CT2
	30	30	MP23030CT2
	30	50	MP23050CT2
	40	20	MP24020CT2
	40	30	MP24030CT2
	40	40	MP240240CT2
	SHIPPING: 6 per carton, (Wt. 4.8 lbs.)		

MH-T Quadplex



These space saver quadplex breakers provide two sets of common trip, two-pole breakers for 120/240V AC circuits, and require two panel spaces. HACR rated.

For external accessories please refer to page 1-46.

■ Built to order. Allow 2–3 weeks for delivery.

①Non-CTL.. For replacement use only in panels manufactured before 1968.

Features

- 2 inch wide plug-on design
  - — Includes (2) 1 Pole circuits breakers
  - — No loss of load center spaces
- Easy to install and perfect for retrofit
- LEDs provide protection status

Benefits

By installing a Siemens Circuit Breaker and Surge Protective Device (SPD) in the load center of the residence, surge protection is provided for all branch circuits①.

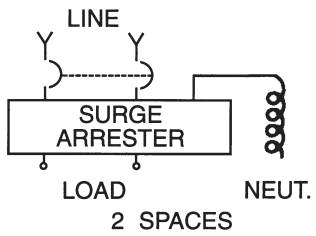
Two green LED indicator lights are provided to show that surge protection is provided for all circuits connected to the load center. These breakers should be used for circuit protection of frequently used household or facility circuits because the lights and devices connected to these circuits provide an effective indication that surge protection is being provided.

The circuit breaker and SPD utilize Siemens-built 150V AC, 40mm, metal oxide varistors (MOVs). The maximum impulse rating for the SPD module is 40kA. The standard interrupting rating for the circuit breakers is 10k AIC. All Type QP circuit breakers and SPD are plug-on style, with load terminals provided. The devices are rated for 120/240V AC and are calibrated for 40 degrees C maximum ambient applications.

Breaker Type	Ampere Rating	Catalog Number	Surge Type
QP 1- Pole	(2) 15	MSA1515SPD	SPD
120/240V AC 10K AIC	(2) 20	MSA2020SPD	SPD

Catalog Number	MSA1515SPD MSA2020SPD
Amperage	15 or 20 Amp
Number of Poles	(2) 1-Pole Circuit Breakers
Initial Clamping Level	240 Volts
Transient Energy Rating	360 Joules line-to-neutral 720 Joules line-to-line
Transient Suppression	500 volts peak, line-to-neutral
Voltage Rating	1000 volts peak, line-to-line
Peak Current Rating (impulse)	40,000 amperes
Discharge Voltage Characteristic	@ 1,500A, 600 volts @ 5,000A, 800 volts (both line-to-neutral)
Discharge Current Withstand Rating	10,000 amperes line-to-neutral
Circuit Breaker Interrupting Rating	10,000A, 120/240V AC
Listings/Certifications	UL, CSA Meets UL 1449 4th Edition

Circuit Breaker and Surge Protective Device (SPD)



① For warranty information please refer to the surge website www.usa.siemens.com/surge

HID Lighting

For high-intensity discharge lamp loads having in-rush currents above the instantaneous trip setting of a standard breaker.

Breaker Type	Wiring Diagram	Complete Breaker UL Unenclosed	
		Ampere Rating	Catalog Number
MP-T 1-Pole 120V AC	Figure 1	15 20 30	MP115HID■① MP120HID■① MP130HID■
QP 2-Pole 120/240V AC	Figure 1	15 20 30	MP215HID■ MP220HID■ MP230HID■

Molded Case Switch

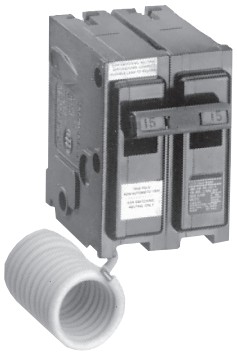
Molded case non-automatic switch does not provide overload protection.

MP-T 2-Pole 240V AC Plug-In	Figure 2	30 60	MP260NA MP230NA

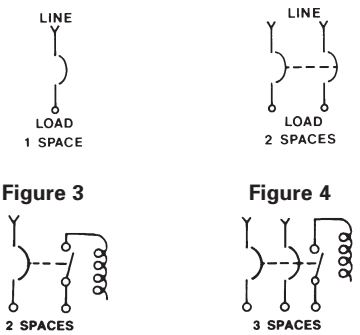
Switched Neutrals

For use where all conductors are required to be disconnected. Neutral pole of breaker does not connect to loadcenter bus. One side is wired to neutral and the other to the device.

MG 2-Wire Common Trip 120V AC	Figure 3	15 20	MP215SN MP220SN
MG 3-Wire Common Trip 120/240V AC	Figure 4	20	MP320SN



Switched Neutrals



Wiring Diagrams

■ Built to order. Allow 2–3 weeks for delivery.
Note: All circuit breakers on this page are 10K AIC

① UL Listed as SWD (Switching Duty) Rated, suitable for 120V AC Fluorescent Lighting.

Features

- 3/4" format.
- HACR Rated.
- UL Classified for use in certain Square D② load centers.

Type MSQ Circuit Breakers

The Type MSQ circuit breaker line is available in 1-pole and 2-pole common trip versions listed on this page.

The circuit breakers are UL Classified and UL Listed.

All MSQ breakers are supplied with load side connectors suitable for 60/75°C wire and are calibrated for 40°C maximum ambient applications.

UL Classified

Murray Type MSQ circuit breakers are UL Classified for use in specific Square D② load-centers in place of Square D② Type QO® circuit breakers. A Panelboard Compatibility List packaged with each QD breaker shows which type MSQ circuit breakers are acceptable for use in Square D② load centers.

The interrupting rating on these circuit breakers is 10,000A IR maximum and they are ***not*** series rated with Square D② circuit breakers or equipment. This UL Classification allows a Murray Type MSQ circuit breaker to be used in place of a Square D② Type QO circuit breaker in those load centers that are specifically shown on the Panelboard Compatibility list. For additional information, contact your local Murray sales engineer.

1-Pole 2-Pole
Wiring Diagrams

Continuous Current Rating @ 40°C	1-Pole 120V Catalog Number	2-Pole 120/240V Common Trip Catalog Number
15	MQ115①	MQ215
20	MQ120①	MQ220
30	MQ130	MQ230
40	MQ140	MQ240
50	MQ150	MQ250
60	MQ160	MQ260

Shipping Weights

Number of Poles	Number Per Carton	Shipping Weight (lbs.)
1	16	3.8
2	8	4.2

Panelboard Compatibility List

Listed Panelboards—Square D②—Catalog Numbers

QO2L30F/S	QO12M100/RB	QO120-30M150/RB	QO130-40M200
QO2-4L70F/S	QO16-20M100/RB	QO124L150G	QO130M200/RB
QO2-4L70TS	QO16M100/RB	QO124M150	QO130-40L200G/RB
QO2-4L70RB	QO20M100/RB	QO130L150G/RB	QO140M200/RB
QO6-12L100F/S	QO112L125G/RB	QO130M150/RB	QO16L200/RB
QO6-12L100DF/S	QO112-24L125G/RB	QO16L150/RB	QO16M200/RB
QO6-12L100TF/S	QO112-24L125GWGC	QO16M150/RB	QO18-16M200FTRB
QO6-12L100DTF/S	QO116L125G	QO16-30L150/RB	QO20-40L200/RB
QO6-12L100RB	QO116-24L125G/RB	QO18-16M150FTRB	QO20-40M200TF/S
QO8-16L100F/S	QO12-24L125/RB	QO20-30M150/RB	QO20-40M200/RB
QO8-16L100DF/S	QO120-24L125G	QO20-30M150TF/S	QO24L200/RB
QO8-16L100TF/S	QO120-24L125GWGC	QO20-30L150	QO24M200/RB
QO8-16L100DTF/S	QO120L125G	QO24L150/RB	QO30L200/RB
QO8-16L100RB	QO124L125G/RB	QO24M150/RB	QO30M200/RB
QO112M100/RB	QO124M125/RB	QO30L150/RB	QO30-40L200/RB
QO116M100/RB	QO16L125/RB	QO30M150/RB	QO30-40M200/RB
QO120M100/RB	QO16-12M125FTRB	QO8-16M200FT/RB	QO40M200/RB
QO124M100	QO16-24L125/RB	QO112L200G/RB	QO140M225
QO12L100DF/S	QO20L125/RB	QO120-40M200/RB	QO142L225G/RB
QO12L100RB	QO20-24L125/RB	QO120-40M200TC	
QO12-20M100/RB	QO24L125/RB	QO124M200	
QO12-20M100TF/S	QO120-30L150G	QO130L200G/RB	

①UL Listed for frequent switching applications (SWD). 120V AC Fluorescent Lighting. One or two load conductors.
②Square D is a registered trademark of Schneider Electric.

Main and Branch Circuit Breakers①

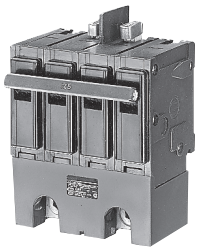
Breaker Type	Ampere Rating	Catalog Number	Catalog Number②④	UL Interrupting Ratings (kA)
MD-T③ 2-Pole 120/240V AC	150	MPD2150	MPD2150R	10
	175	MPD2175■	MPD2175R■	10
	200	MPD2200	MPD2200R	10
MD-HT③ 2-Pole 120/240V AC	150	MPD2150KH	MPD2150RH	22
	175	MPD2175KH■	MPD2175RH■	22
	200	MPD2200KH	MPD2200RH	22
MD-MT③ 2-Pole 120/240V AC	150	MPD2150KM	MPD2150RM	65
	175	MPD2175KM■	MPD2175RM■	65
	200	MPD2200KM	MPD2200RM	65

MD-T, MD-HT, MD-MT⑨ | MD-TR, MD-HTR, MD-MTR⑨

Breaker Type	Ampere Rating	Catalog Number	UL Interrupting Ratings (kA)
M1⑤ 2-Pole 120/240V AC	100	MBK100M⑩	22
	125	MBK125M⑩	22
M2⑤ 2-Pole 120/240V AC	150	MBK150M⑪	22
	175	MBK175M⑪	22
	200	MBK200M⑪	22
	225	MBK225M⑪	22

M1 | M2

Breaker Type	Ampere Rating	Catalog Number	UL Interrupting Ratings (kA)
ED-A⑥ 3-Pole 240V AC	125	EP3125	10
	150	EP3150	10
	200	EP3200	10
	175	EP3175	10
	225	EP3225	10



Type MPP-T, MPP-HT, MPP-MT, MPP-PT

Breaker Type	Ampere Rating	Catalog Number	UL Interrupting Ratings (kA)
MPP⑦ 2-Pole 120/240V AC	125	MPP2125	10
	150	MPP2150	10
	175	MPP2175■	10
	200	MPP2200	10
	225	MPP2225	10
MPP-HT⑦ 2-Pole 120/240V AC	125	MPP2125KH	22
	150	MPP2150KH	22
	175	MPP2175KH■	22
	200	MPP2200KH	22
	225	MPP2225KH■	22
MPP-MT⑦ 2-Pole 120/240V AC	125 150 175 200 225	Obsolete	
MPP-PT⑦ 2-Pole 120/240V AC	100 125 150 175 200 225	Obsolete	

Type ED-A, ED-HA

■ Built to order. Allow 2–3 weeks for delivery.
① All circuit breakers on this page are common trip.
② Reverse handle, ON toward lugs. See page 2-23.
③ Requires 4 panel spaces, 2 adjacent, and 2 opposite.
④ For use as load center branch and/or replacement main for old-style load center.
⑤ Main breaker kit for Rock Solid load center
⑥ Requires 6 spaces due to cross over design.
⑦ 4-poles wide for use with 200A modular and Uni-Pak metering
⑧ For use with breaker types MD-T(R), MD-HT(R), MD-MT(R)
⑨ MD-TR required for horizontal mounting applications as shown, or for vertical applications when the lugs are on top. MD-T required for vertical mounting applications with the lugs on the bottom as shown.
⑩ MBK100M for use with 100A and 125A Rock Solid load centers only. MBK125M for use with 125A Rock Solid load centers only.
⑪ MBK150M for use with 150A, 200A, and 225A Rock Solid load centers only. MBK200M for use with 200A and 225A Rock Solid load centers only. MBK225M for use with 225A Rock Solid load centers only.

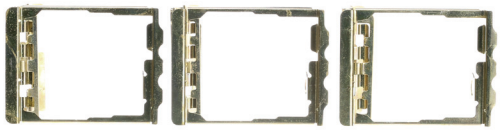
Circuit Breaker Accessories ④⑤⑥⑦

Catalog Number	For Use With Breaker Type	Number of Poles	Standard Package
Padlocking Device For locking breaker in "OFF" position. Note "ON" position does not affect breaker fuctionally			
ECPLD1	Type MP-T, MP-AT2, MP-GT, MP-ET, MH-T-Duplex	1P	3 Pieces
ECPLD1R	Type MP-T, MP-AT2, MP-GT, MP-ET, MH-T-Duplex (Red Color)	1P	3 Pieces
ECPLD2	Type MP-T, MP-AT2, MP-GT, MP-ET, MH-T-Triplex & Quadplex	2P	3 Pieces
ECPLD2R	Type MP-T, MP-AT2, MP-GT, MP-ET, MH-T-Triplex & Quadplex, (Red Color)	2P	3 Pieces
ECPLD3	Type MP-T, MP-AT2, MP-GT, MP-ET	3P	1 Piece
US2:ECPLD3R	Type MP-T, MP-AT2, MP-GT, MP-ET (Red Color)	3P	1 Piece
ECQLD3	Type MP-T	1P	10 Pieces
ECQLD4	Type MH-T-Duplex	QT-Duplex Breakers	10 Pieces
ECQLN3②	150-225 M2, MD-T	n/a	1 Piece
ECQTH4	Type MP-T, BL, BQH	Designed for (3) 1P Breakers	1 Piece
Handle Tie Provide simultaneous swiching of 2 adjacent handles.			
ECQTH2	Type MH-T Duplex	Designed for (2) QT Duplex Breakers	25 Pieces
ECQTH3	Type MP-T, BL	2P	50 Pieces
Mechanical Interlock①			
ECQML12	Type MP-T, Interlock Bracket	Designed for 1" Breaker	10 Pieces
Handle Blocking Device For holding breaker in "ON" or "OFF" position. Not a lockout/tagout device			
ECQL1	Type MP-T	1P	10 Pieces
ECBX231M	Type MH-T-Duplex	1/2" Breakers	10 Pieces
Main Breaker Retainer			
ECMBR2	Rock Solid Load Centers		1 Piece
Mounting Accessories			
I0204ML1125CU	Type MP-T, Back Mounting Plates	1P, 2P	10 Pieces
I0303ML3100CU	Type MP-T, Back Mounting Plates	3P	10 Pieces
Filler Plate			
ECQF3	1" Filler Plate	n/a	5 Pieces

■ Built to order. Allow 2-3 weeks for delivery
① For a complete list of standby power mechanical interlock kits, see the Standby Generator Section XXXX
② For use with Murray Rock Solid Center Main Breakers
③ Not suitable for use on 15-50A, 10 AIC Type MP-T Circuit Breakers
④ MP-T Type includes MP-HT, MP-MT
⑤ MP-AT2 Type includes MP-HAT2
⑥ MP-GT Type includes MP-HGT
⑦ MP-ET Type includes MP-HET

Padlocking Device

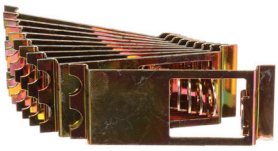
ECPLD1



ECPLD2

ECPLD1R/2R/3R (Single pole pictured. 2-/3-pole available)

ECQLD3



ECQLD4

ECQTH4

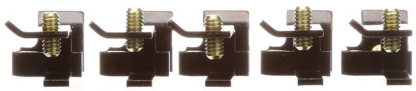
Handle Tie

ECQTH2

ECQTH3

Handle Blocking Device

ECQL1

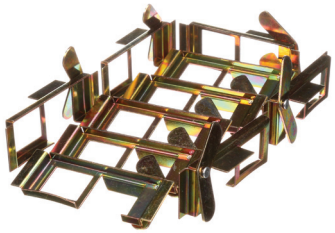


ECBX231M

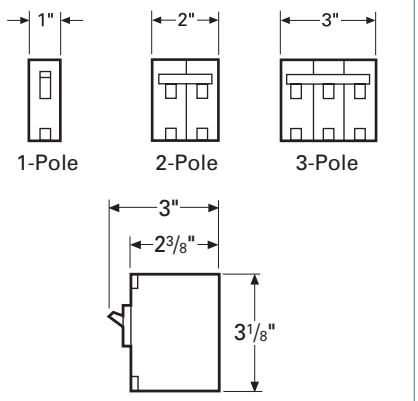
Main Breaker Retainer

ECMBR2

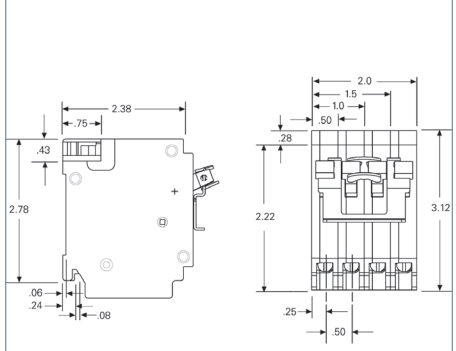
Mechanical Interlock



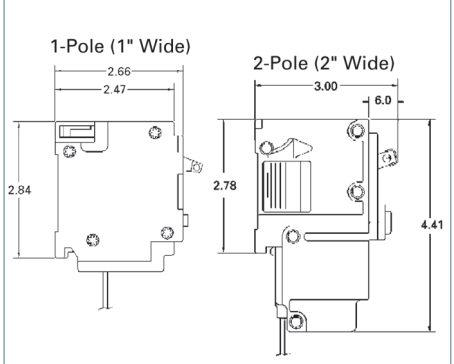
ECQML12



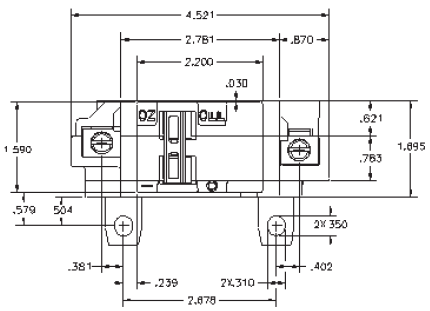
Type MP-T, MP-HT, MP-MT



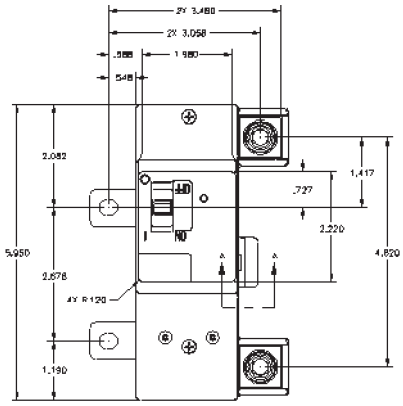
Type MH-T



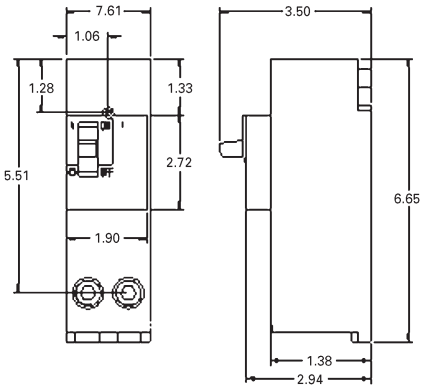
Type MP-GT, MP-HGT, MP-ET, MP-HET



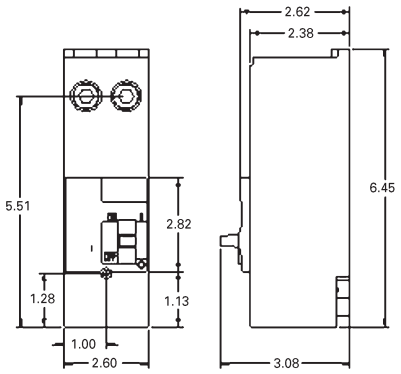
Type M1



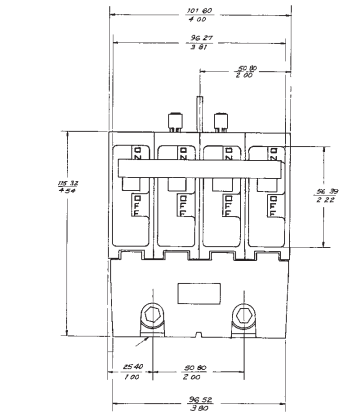
Type M2



Type MD-T, MD-HT, MD-MT



Type MD-TR, MD-HTR, MD-MTR



Type MPP-T, MPP-HT, MPP-MT, MPP-PT

①All standard circuit breakers are calibrated to 40°C maximum ambient application.

Circuit Breaker Type	Circuit Breaker Ampere Rating	Cables Per Connector	Connector Wire Range
	LOAD SIDE		
MP-T, MP-HT, MP-MT	10	1 or 2	#16–#14 CU
	15–35	1 1	#14-#6 AWG Cu #14-#6 AWG Al
	40–50	1 1	#8–#6 AWG Cu #8–#4 AWG Al
	55–125 (exception: 1 & 2-pole MP-T at 55-60)	1 1	#8-#2/0 Cu #8-#2/0 Al
MP-T 1 & 2-Pole ONLY	55–60	1	#6-#4 AWG Cu-Al (#3 AWG requires MP-HT or MP-MT)
MH-T	15–35	1 1	#14-#6 AWG Cu #14-#6 AWG Al
	40	1	#8 AWG CU-Al
	40–50	1 1	#8–#6 AWG Cu #8–#4 AWG Al
MP-GT, MP-HGT, MP-ET, MP-HET BLF, BLHF, BLE, BLEH	15–30	1 1	#14–#10 AWG Cu #12–#8 AWG Al
	40–60	1 1	#8–#6 AWG Cu #8–#4 AWG Al
MP-AT2, MP-HAT, BAF, BAFH	15–20	1 1	#14–#12 AWG Cu #12–#10 AWG Al
MSQ	15–20	2	#14-#10 AWG Cu only
	15–20	1 1	#14–#12 AWG Cu #12–#10 AWG Al
	25–35	1 1	#10–#8 AWG Cu #10–#6 AWG Al
	40–60	1 1	#8–#6 AWG Cu #8–#4 AWG Al
MD-T, MD-HT, MD-MT, MD-PT, MD-TR, MD-HTR, MD-MTR, MD-PTR	150–200	1	#1–300kcmil Cu-Al
M1	100	1	#4-3/0 AWG Cu #4-3/0 AWG Al
		1	#4-3/0 AWG Cu #4-3/0 AWG Al
	125	1	#4–3/0 AWG Cu-Al
M2	150	1	#1–300kcmil Cu-Al
	200	1	#1–300kcmil Cu-Al
	225	1	#1–300kcmil Cu-Al
MPP-T, MPP-HT, MPP-MT, MPP-PT	125	1 1	#1 AWG Cu #2/0 AWG Al
	150	1 1	#1/0 AWG Cu #3/0 AWG Al
	175	1 1	#2/0 AWG Cu #4/0 AWG Al
	200	1 1	#3/0 AWG Cu 250kcmil AWG Al
	225	1 1	#4/0 AWG Cu 300kcmil AWG Al
MQ, MQH, MQL	60–225	1	#6–300kcmil Cu #4–300kcmil Al