Load Centers & Circuit Breakers

SPEEDFAX[™] 2017 Section





Generator Ready **Load Center**



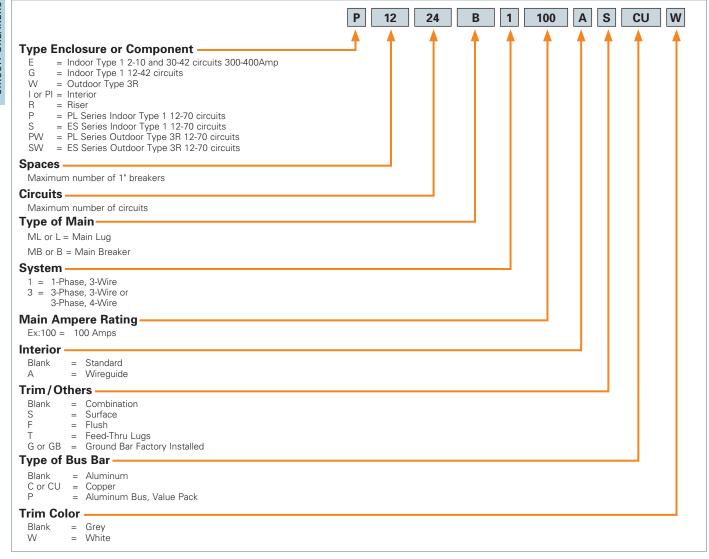
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Contents

Load Centers	
Catalog Numbering System	1-2
Siemens PL and ES Series Load Centers™ Introduction	1-3
NireGuide™ Load Centers and Breakers	1-3
PL Series Load Centers Features and Product Offering	1-4 – 1-5
PL Series Single Phase Main Lug & Main Breaker Load Centers	1-6
PL Series Single Phase Special Load Centers	1-7
PL Series Three Phase Main Lug & Main Breaker Load Centers	1-8
PL Series Three Phase Unassembled Load Centers	1-9
ES Series Load Centers Features and Product Offering	1-10 – 1-11
ES Series Single Phase Main Lug & Main Breaker Load Centers	1-12
ES Series Single Phase Special Load Centers	1-14
ES Series Three Phase Main Lug & Main Breaker Load Centers	1-15
EQ® Load Centers, 300-400 Amp	1-16
Generator Ready Load Centers	1-17
Riser Panel Load Centers	1-18
EQ® Load Centers, Small Circuit and Circuit Breaker Enclosures	1-19 – 1-20
Renovation Interiors	1-21
Load Centers OEM Interiors and Accessories	1-22 – 1-25
Standby Power Systems	1-26 – 1-27
Knockout Diagrams	1-28 – 1-32
Load Center Cross Reference	1-33 – 1-34
Circuit Breakers	
Arc-Fault and Ground-Fault Breakers	1-35
Dual Arc-Fault and Ground-Fault Breakers	1-36
Type QP, 1" Breakers	1-37
Duplex, Triplex and Quadplex Plug-In Breakers	1-38
Special Application Breakers	1-39
Type QD, 3/4" Breakers	1-40
Main and Branch Circuit Breakers	1-41
Circuit Breaker Dimension Drawings and Lug Data	1-42 – 1-43
Circuit Breaker Accessories	1-44 – 1-45
Surge Protection Products	1-46 – 1-48
AC Disconnects, 1-Phase, NEMA 3R Rated	1-49
Murray Load Centers	1-50 – 1-56
Main Lug Only and Main Breaker	1-50 – 1-51
Accessories	1-52
Catalog Logic	1-53
Cross References and Knockout Drawings	1-54 – 1-56
Murray Circuit Breakers	1-57 – 1-67
Arc-Fault Interrupters (AFCI)	1-57 - 1-67
1" Plug-in	1-58 – 1-59
Circuit Breaker and Surge Protective Device (SPD)	1-60
Special Application Breakers	1-60
Type MSQ, 3/4 Inch Plug-In Breakers	1-62
Main and Branch Circuit Breakers	1-62
Accessories	1-64 – 1-65
Line Diagrams and Lug Data	1-64 – 1-65 1-66 – 1-67
Line Diagrams and Lug Data	1-00 - 1-07

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
- Invertible[®]
- Flush or Surface Mount Combination Cover®
- Insta-wire neutrals & grounds
- Ground bars included
- Copper busbars
- Dual neutrals on all configurations
- Carton-in-carton packaging
- Lifetime warranty







PL Series 3-phase

ES Series:

- Invertible[®]
- Flush or Surface Mount Combination Cover®
- Insta-wire neutrals & grounds
- Aluminum busbars
- Single sided neutral on 24 circuits and below
- Single piece carton packaging
- 10 year warranty



ES Series 1-phase



ES Series 3-phase

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 white^①
- 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

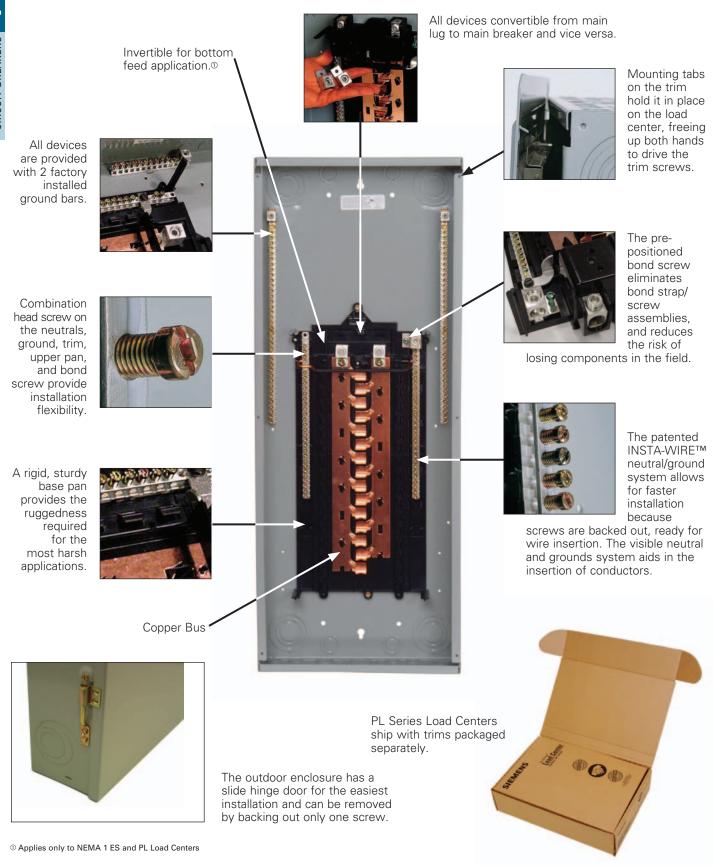


Combination Type AFCI WireGuide Breaker

① Applies only to NEMA 1 ES and PL Load Centers

PL Series Load Centers

Features



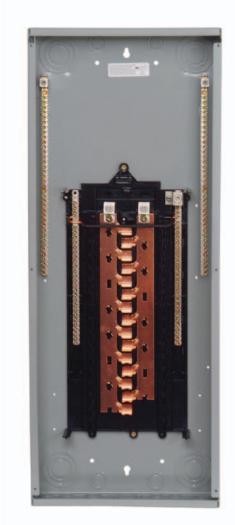
PL Series Load Centers

Product Offering

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

12-70 Circuits / 100-225 Amperes

Copper Bus⁽⁷⁾

60/75°C Rated 22,000A IR²

		Indoor E	nclosure - NEMA Typ	e 1			Outdoor	Enclosure – NEMA Ty	rpe 3R
Amp Rating	No. of Spaces	No. of Circuits	PL Catalog Number	No. of Circuits	PL with WireGuide Interior Catalog Number [®]	NEMA 1 - Enclosure Height (inches) ³	No. of Circuits	Catalog Number	NEMA 3R - Enclosure Height (inches) ⁽⁴⁾
	12	24	P1224B1100CU	_	_	18	24	PW1224B1100CU	21
	16	24	P1624B1100CU®	_	_	21	24	PW1624B1100CU	23
	20	20	P2020B1100CU	40	D0040D4400A0U	24	20	PW2020B1100CU	27
100	20	24	P2024B1100CU	40	P2040B1100ACU	24	_	_	_
	24	24	P2424B1100CU	48	P2448B1100ACU	24	_	_	_
	30	30	P3030B1100CU	60	P3060B1100ACU	30	_	_	_
	30	40	_	_	_	_	40	PW3040B1100CU	35
125	30	30	P3030B1125CU®	60	P3060B1125ACU	30	40	PW3040B1125CU	35
	20	30	P2030B1150CU	40	P2040B1150ACU	24	_	_	_
150	20	30	_	_	_	_	30	PW2030B1150CU	27
150	30	30	P3030B1150CU	60	P3060B1150ACU	30	_	_	_
	30	40	_	_	_	_	40	PW3040B1150CU	35
	20	40	P2040B1200CU	40	P2040B1200ACU	30	40	PW2040B1200CU	27
	20	40	P3040B1200CU	60	P3060B1200ACU	36	40	PW3040B1200CU	35
200	30	40	P3040B1200®®	60	P3060B1200A®	36	_	_	_
200	40	40	P4040B1200CU®	80	P4080B1200ACU	36	40	PW4040B1200CU	38
	40	40	P4040B1200®®	80	P4080B1200A®	36	_	_	-
	54	70	P5470B1200CU	80	P5480B1200ACU	44	_	_	_
225	42	60	P4260B1225CU®	80	P4280B1225ACU	39	60	PW4260B1225CU	42
225	54	70	P5470B1225CU®	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 Centers[®]

12-70 Circuits / 125-225 Amperes

Copper Bus⁽⁷⁾ 60/75° Rated 100.000A IR

12-70	oncarts	/ 120 2	220 Amperes					00/75 Hate	d 100,000A in
		Indoor E	nclosure - NEMA Typ	e 1			Outdoor	Enclosure - NEMA Ty	pe 3R
Amp Rating	No. of Spaces	No. of Circuits	PL Catalog Number	No. of Circuits	PL with WireGuide Interior Catalog Number [®]	NEMA 1 - Enclosure Height (inches) ³	No. of Circuits	Catalog Number	NEMA 3R - Enclosure Height (inches)®
	10	12	P1212L1125CU®	_	_	18	12	PW1212L1125CU [®]	21
	12	24	P1224L1125CU [©]	<u> </u>	_	18	24	PW1224L1125CU [©]	21
	16	24	P1624L1125CU	I-	_	21	24	PW1624L1125CU	23
125	20	20	P2020L1125CU®	40	P2040L1125ACU	24	-	_	_
125	20	24	P2024L1125CU	024L1125CU 40 P2040L1125ACO		24	-	_	_
	24	40	P2440L1125CU®	48	P2448L1125ACU	24	_	_	_
	30	40	P3040L1125CU®	60	P3060L1125ACU	30	40	PW3040L1125CU	35
	40	40	P4040L1125CU®	80	P4080L1125ACU	36	_	_	_
150	20	30	P2030L1150CU	40	P2040L1150ACU	24	30	PW2030L1150CU	27
	12	24	P1224L1200CU	_	_	24	24	PW1224L1200CU ^⑤	23
	20	40	P2040L1200CU	40	P2040L1200ACU	30	40	PW2040L1200CU	27
	24	40	P2440L1200CU	48	P2448L1200ACU	30	-	_	_
		30	P3030L1200CU				_	_	_
200	30	40	P3040L1200CU®	60	P3060L1200ACU	36	40	PW3040L1200CU	35
	30	54	P3054L1200CU				54	PW3054L1200CU	35
		40	P3040L1200 ^{®®}	60	P3060L1200A®	36	_	_	_
	40	40	P4040L1200CU®	80	P4080L1200ACU	36	40	PW4040L1200CU	38
	40	40	P4040L1200®	80	P4080L1200A®	36	_	_	_
	12	24	_	_		_	24	PW1224L1225CU	23
225	42	60	P4260L1225CU®	80	P4280L1225ACU	39	60	PW4260L1225CU	42
	54	70	P5470L1225CU	80	P5480L1225ACU	44			_

¹⁾ Suitable for use as service equipment.

May be installed on higher rated systems when protected by a circuit breaker with a higher AIR rating.

Indoor enclosures are 14 1/4" wide by 3 7/8" deep.

Outdoor enclosures are 14 1/2" wide by 4 1/4" deep.

[§] Suitable for use as service entrance equipment when

not more than six main disconnecting means are provided. See article 230.71 of the NEC®.

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.

② Copper bus load centers are recommended for those applications where the environment may be severe (i.e. far and coastal areas).

[®] Includes all PL Series features with aluminum bussing. 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 Circ	uits		Indoor Enclosure – NEM	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 40 Circuits / 200 Amperes

Copper Bus 60/75° Rated, 22,000A IR³

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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



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

Outdoor Trailer Panels

16 Circuits / 200 Amperes

Copper Bus

60/75° Rated, 22,000A IR^⑤

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

¹ Includes all PL Series features with aluminum

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.

② Outdoor enclosures are 14 1/2" wide by 4 1/4" deep.

③ Main lug panel rated 100,000A IR.

[®] Load centers with white trim have increased lead time

of 3-4 weeks. Sold in pallet quantities only.

Doad 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

4

OAD CENTERS & RCUIT BREAKERS

Main Breaker/Convertible Load Centers

Copper Bus^{®®}

30-70 Circuits / 100-225 Amperes

60/75°C Rated 22,000A IR^①

Branch Cir	cuits		Indoor Enclosure - NEN	/IA 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	l —	_	
100	30	42	P3042B3100CU ²	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	P4260B3200CU®	42	PW4260B3200CU	42	
225	42	60	P4260B3225CU	42	_	_	
225	42	60	P4260B3225TCU®	49	_	_	
225	54	70	P5470B3225CU	49	_	_	

Main Lug/Convertible Load Centers^⑤

Copper Bus^{®®}

12-70 Circuits / 125-225 Amperes

60/75° Rated 100,000A IR®

Branch Circuits			Indoor Enclosure – NE	MA Type 1	Outdoor Enclosure – NEMA Type 3R		
Amp Rating	No. of Spaces	No. of Circuits	Catalog Number	Catalog Number Enclosure Height (inches) ^③ Ca		Enclosure Height (inches) ⁴	
125	12	24	P1224L3125CU®	21	PW1224L3125CU®	21	
200	24	42	P2442L3200CU	36	PW2442L3200CU	35	
200	30	54	P3054L3200CU	39	PW3054L3200CU	38	
225	42	60	P4260L3225CU	42	PW4260L3225CU [®]	42	
225	5.4	70	DE 4701 2225CLI	40			

May be installed on higher rated systems when protected by a circuit breaker with a higher AIR rating.
 Back fed main breaker.

³ Indoor enclosures are 14 1/4" wide by 3 7/8" deep.

Outdoor enclosures are 14 1/2" wide by 4 1/4" deep.

Suitable for use as service entrance equipment when not more than six main disconnecting means are provided. See article 230.71 of the NEC®.

Includes factory installed feed through lugs and is also non-convertible.

② Non-convertible to main breaker.

[®] All load centers are provided with tin plated copper bus bars.

Rated 100,000A IR in series with breakers listed on wiring diagram.
 All load centers are provided with tin-plated copper

All load centers are provided with tin-plated coppe bus bars.

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 24-70 Circuits / 100-225 Amperes

Copper Bus^⑤ 60/75°C Rated 22,000A IR^①

Interiors				Enclosure		Trim Kit	Trim Kit	
Amp Rating	No. of Spaces	No. of Circuits	Interior Catalog Number	Enclosure Height (inches) [®]	Enclosure Catalog Number	No. Breaker Spaces	Trim Catalog Number ^⑤	
100	30	42	PI3042B3100CU ²	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

12-70 Circuits / 125-225 Amperes

60/75° Rated 100,000A IR®

Copper Bus^⑤

Interiors				Enclosure		Trim Kit					
Amp Rating	No. of Spaces	No. of Circuits	Interior Catalog Number	Enclosure Height (inches) [®]	Enclosure Catalog Number	No. Breaker Spaces	Trim Catalog Number [®]				
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				

May be installed on higher rated systems when protected by a circuit breaker with a higher AIR rating.
 Back fed main breaker.

Indoor enclosures are 14 1/4" wide by 3 7/8" deep.

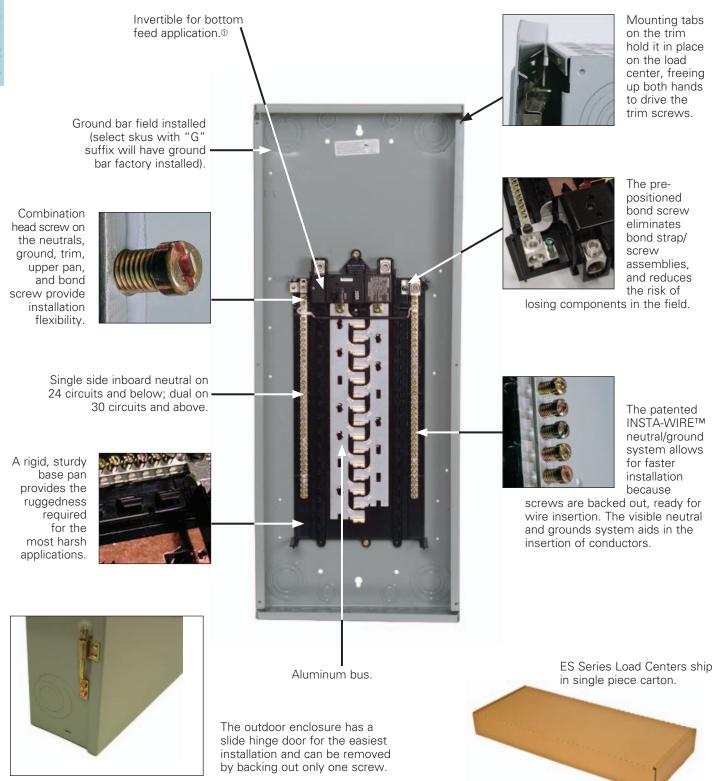
Trim catalog numbers with a "B" indicate for use with main breaker and is not convertible. "L" indicates for use with main lug and is not convertible. "X" indicates can be used with convertible interior.

All load center interiors are provided with tin plated copper bus bars.

[®] Rated 100,000A IR in series with breakers listed on wiring diagram.

ES Series Load Centers

Features



① Applies only to NEMA 1 ES and PL Load Centers

ES Series Load Centers

Product Offering

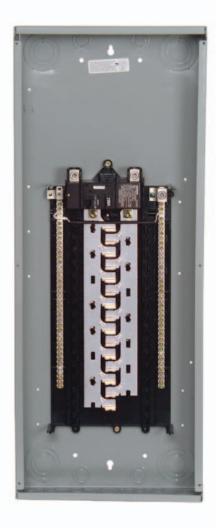
The ES Series Load Center product line provides a wide array of variation to meet any application need.

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

Main Breaker^①

Aluminum Bus 60/75°C Rated 22,000A IR²

12-70 Circuits / 100-225 Amperes

		Indoor En	closure - NEMA Typ	e 1	Outdoor I	Enclosure – NEMA Ty	pe 3R		
Amp Rating	No. of Spaces	No. of Circuits	ES Catalog Number	No. of Circuits	ES with WireGuide Interior Catalog Number®	NEMA 1 - Enclosure Height (inches) [®]	No. of Circuits	Catalog Number	NEMA 3R - Enclosure Height (inches) ⁽⁴⁾
	10	20	S1020B1100	_	_	18		_	_
	12	24	S1224B1100	_	_	18	24	SW1224B1100	21
100	16	24	S1624B1100®	_	_	21	24	SW1624B1100	23
100	20	20	S2020B1100	40	S2040B1100A	24	20	SW2020B1100	27
	20	24	S2024B1100	40	32040D1100A	24	_	_	_
	30	30	S3030B1100 [®]	60	S3060B1100A	30	_	_	_
	12	24	_	_	_	_	24	SW1224B1125	21
	16	24	S1624B1125	_	_	21		_	_
125	10	32	_	_	_	_	24	SW2024B1125	27
123	24	24	S2424B1125®	48	S2448B1125A	24	24	SW2424B1125	27
	30	30	S3030B1125®	60	S3060B1125A	30	_	_	_
	30	40	S3040B1125	00		30	40	SW3040B1125	35
	16	30	S1630B1150	<u> </u>	_	24	_	_	
	20	30	S2030B1150	40	S2040B1200A	24	_	_	_
150	24	30	S2430B1150	48	S2448B1200A	30	_	_	_
150	30	30	S3030B1150®	60	S3060B1150A	30	_	_	_
	30	40	S3040B1150	00	33000B1130A	30	40	SW3040B1150	35
	40	40	_	_	_	_	40	SW4040B1150	38
	16	32	S1632B1200	_	_	24	_	_	_
	20	40	S2040B1200	40	S2040B1200A	30	40	SW2040B1200	27
	24	40	S2440B1200	48	S2448B1200A	30	_	_	
200	30	40	S3040B1200®	60	S3060B1200A	36	40	SW3040B1200	35
	40	40	S4040B1200®	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
223	54	70	S5470B1225	80	S5480B1225A	44	_	-	_

Main Lug 12-70 Circuits / 125-225 Amperes

Aluminum Bus 60/75° Rated 100 0004 IR

12-70	Circuits	5 / 125-2	25 Amperes					60//5° Rate	ed 100,000A IK
		Indoor En	closure - NEMA Type	1			Outdoor	Enclosure - NEMA Typ	oe 3R
Amp Rating	No. of Spaces	No. of Circuits	ES Catalog Number(6)	No. of Circuits	ES with WireGuide Interior Catalog Number ^{©®}	NEMA 1 - Enclosure Height (inches) ³	No. of Circuits	Catalog Number	NEMA 3R - Enclosure Height (inches) ⁽⁴⁾
	40	12	S1212L1125 ^⑤	1_	_	18	12	SW1212L1125 ^⑤	21
	12	24	S1224L1125 ^⑤	—	_	18	24	SW1224L1125 [©]	21
	16	24	S1624L1125	_	_	21	24	SW1624L1125	21
		20	S2020L1125®				_	_	_
	00	20	S2020L1125G®	140	C00401440EAC	0.1		_	_
	20	24	S2024L1125	40	S2040L1125AG	21	_	_	_
125		24	S2024L1125G	7			_	_	_
125		24	S2424L1125®				24	SW2424L1125	27
	24	24	S2424L1125G [®]	48	S2448L1125AG	24	_	_	_
	24	40	S2440L1125®	48		24	_	_	_
		40	S2440L1125G				_	_	_
	30	40	S3040L1125®	_	C20C0L 112E A.C	30	40	SW3040L1125	29
	30	40	S3040L1125G®	_	S3060L1125AG	30	_	_	_
	40	40	S4040L1125	80	S4080L1125AG	36	_	_	_
150	20	30	S2030L1150®	40	S2040L1150AG	24	30	SW2030L1150	27
	12	24	S1224L1200 ³		_	21	24	SW1224L1200 [©]	21
	20	40	S2040L1200	40	S2040L1200AG	24	40	SW2040L1200	27
	24	40	S2440L1200 [®]	48	S2448L1200AG	30	_	_	_
200		30	S3030L1200®				_	_	_
200	30	40	S3040L1200 [®]	60	S3060L1200AG	30	40	SW3040L1200	35
	30	54	S3054L1200				54	SW3054L1200	35
		40	S3040L1200L50 ^⑦		_	36	_	_	_
	40	40	S4040L1200 [®]	80	S4080L1200AG	36	40	SW4040L1200	35
	12	24	-	_	-	_	24	SW1224L1225	23
225	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 pro-

tected by a circuit breaker with a higher AIR rating. 3 Indoor enclosures are 14 1/4" wide by 3 7/8" deep.

[@] Outdoor enclosures are 14 1/2" wide by 4 1/4" deep.

Suitable for use as service entrance equipment when not more than six main disconnecting means are provided. See article 230.71 of the NEC®.

Series single phase skus with a "G" suffix have ground bar included (factory installed).
 Line and Neutral Lug Wire Range: 500 kcmil - #2 AL/CU

[®] 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 Centers^① 24-40 Circuits / 125-200 Amperes

Aluminum Bus 60/75° Rated 22,000A IR²

Amp		No. of		of No. of Di		s		Trim Catalog	Pallet
Rating	Box Catalog Number	Main	Spaces	Circuits	Height	Width	Depth	Number	Quantity
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	ST4040B1200 ⁴	30

Selectable Main ES Unassembled Load Centers[®] 30-40 Circuits / 200 Amperes

Aluminum Bus

	Amp Rating Box Catalog Number			No. of No. of		Dimension	s		Trim Catalog	Pallet
			Main	Spaces	Circuits	Height	Width	Depth	Number	Quantity
	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 24-40 Circuits / 125-200 Amperes

Aluminum Bus 60/75° Rated 100,000A IR

Amp			No. of	No. of	Dimensions			Trim Catalog	Pallet
Rating	Box Catalog Number			Circuits	Height	Width	Depth	Number	Quantity
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.

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).

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

~

DAD CENTERS & CUIT BREAKERS

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		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®	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 Centers[®] 30-40 Circuits / 125-200 Amperes

16 Circuits / 200 Amperes

Aluminum Bus

Branch Circ	uits		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 Centers®

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

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.
 Indoor enclosures are 14 1/4" wide by 3 7/8" deep.

[®] Breakers are shipped inside a sleeve located inside the load center.

Outdoor enclosures are 14 1/2" wide by 4 1/4" deep.

Main breaker rated 22,000A IR.

Split Ground load centers have factory installed 100% neutral with factory bonded 75% ground.

② 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 IR^①

Branch Circu	uits		Indoor Enclosure - NE	MA Type 1	Outdoor Enclosure –	NEMA Type 3R
Amp Rating	No. of Spaces	No. of Circuits	Catalog Number	Enclosure Height (inches) [®]	Catalog Number	Enclosure Height (inches) ⁽⁴⁾
100	12	24	S1224B3100 ²	24	SW1224B3100	23
100	30	30	S3030B3100 ²	30	_	_
100	30	42	S3042B3100 ²	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 Lug^⑤

Aluminum Bus

12-70 Circuits / 125-225 Amperes

60/75° Rated 100,000A IR[®]

Branch Circ	uits		Indoor Enclosure - N	IEMA 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	S3054L3200 ^⑦	30	SW3054L3200	35	
225	42	60	S4260L3225 ^⑦	36	SW4260L3225	38	
225	54	70	S5470L3225®	42	_	_	

① May be installed on higher rated systems when protected by a circuit breaker with a higher AIR rating. Back fed main breaker.

³ Indoor enclosures are 14 1/4" wide by 3 7/8" deep.

[@] Outdoor enclosures are 14 1/2" wide by 4 1/4" deep.

Suitable for use as service entrance equipment when not more than six main disconnecting means are provided. See article 230.71 of the NEC®.

[®] Rated 100,000A IR in series with breakers listed on

wiring diagram.
② 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.



Main Breaker 300-400 Ampere³ 1Ø. 3-Wire

120/240 Volts AC 65,000A IR

Branch C	Circuits		Indoor Enclosure - NEI	VIA Type 1		Outdoor Enclosure – NEMA Type 3R			
Amp Rating	No. of Spaces	No. of Circuits	Siemens Catalog Number	Murray Catalog Number	Enclosure Height ^①	Trim Style	Siemens Catalog Number	Murray Catalog Number	Enclosure Height ^①
000	42	42	E4242MB1300FCU	_	58	Flush	_	_	_
300	42	42	E4242MB1300SCU	_	58	Surface	_	_	_
	30	30	_	LC330SS ² 6	47	Surface	_	_	_
400	30	30	E3030MB1400SCU	_	52	Surface	W3030MB1400CU	_	52
400	42	42	E4242MB1400FCU	_	58	Flush	_	_	_
	42	42	E4242MB1400SCU	LC442SS®	58	Surface	W4242MB1400CU	LW442SR ^⑦	58

240 Volts AC 65,000A IR

3Ø, 3-Wire, 4-Wire

Branch C	Circuits		Indoor Enclosure - NEI	VIA Type 1			Outdoor Enclosure – NEMA Type 3R				
Amp Rating	No. of Spaces	No. of Circuits	Siemens Murray Catalog Number Catalog Number		Enclosure Height ^①	Trim Style	Siemens Catalog Number	Murray Catalog Number	Enclosure Height ^①		
300	42	42	E4242MB3300SCU	_	58	Surface	_	_	_		
	30	30	E3030MB3400SCU	_	52	Surface	_	_	_		
400	42	42	E4242MB3400FCU	_	58	Flush	_	_	_		
	42	42	E4242MB3400SCU	LP442SS®	58	Surface	W4242MB3400CU	LZ442SR®	58		

Main Lug 400 Ampere 1Ø, 3-Wire

120/240 Volts AC 65,000A IR

Branch C	Circuits		Indoor Enclosure – NEI	MA Type 1			Outdoor Enclosure – NEMA Type 3R				
Amp Rating	No. of Spaces	No. of Circuits	Siemens Catalog Number	Murray Catalog Number	Enclosure Height ^①	Trim Style	Siemens Catalog Number	Murray Catalog Number	Enclosure Height ^①		
	12	6	_	_	_	_	W0606ML1400CU457	_	43		
400	30	30	E3030ML1400SCU	_	41	Surface	W3030ML1400CU	_	43		
400	42	42	E4242ML1400FCU	_	47	Flush	_	_	_		
	42	42	E4242ML1400SCU	LC042SS [®]	47	Surface	W4242ML1400CU	LW042SR [®]	47		

3Ø, 3-Wire, 4-Wire

240 Volts AC 22,000A IR

Branch C	Circuits		Indoor Enclosure - NEM	/IA Type 1			Outdoor Enclosure - NEMA Type 3R				
Amp Rating	No. of Spaces	No. of Circuits	Siemens Catalog Number	Murray Catalog Number	Enclosure Height ^①	Trim Style	Siemens Catalog Number	Murray Catalog Number	Enclosure Height ^①		
	30	30	E3030ML3400SCU	_	41	Surface	_	_	_		
400	42	42	E4242ML3400FCU	_	47	Flush	_	_	_		
	42	42	E4242ML3400SCU	LP042SS	47	Surface	W4242ML3400CU	LW942SR®	47		

① Indoor and outdoor enclosures are 20" wide by 6" deep.

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

[®] Suitable for use as service entrance equipment when not more than six main disconnecting means are provided.

^{6 50.000}A IR ② 22,000A IR

^{® 10,000}A IR

Generator Ready Load Centers

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

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: GENTFRSWTCH^{①③}

Indoor Enclosure - NEMA Type 1

	ndoor Endoodio Tienni Typo T											
Amp Rating	No. of Spaces ^②	No. of Circuits ²	Siemens Catalog Number	Murray Catalog Number	Main	Enclosure Height ⁴						
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 Spaces ^②	No. of Circuits ²	Siemens Catalog Number	Murray Catalog Number	Main	Enclosure Height ^⑤
200	30	42	W3042B1200GEN	-	Main Breaker	42
225	30	42	W3042L1225GEN	-	Main Lug	42







GENTFRSWTCH



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.

Indoor enclosures are 14 1/4" wide by 3 7/8" deep.
 Outdoor enclosures are 14 1/2" wide by 4 1/4" deep.

Riser Panel Load Centers

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

TERS &

Riser Panel Load Centers[®]

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.



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.



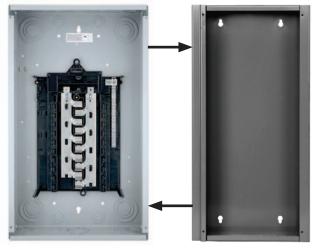
The riser gutter (RAG24) is used to convert any load center 24" or larger into a riser panel.

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

			Catalog Number				Dimens	ions (inc	ches)	
Amp Rating	No. of Spaces	No. of Circuits	Aluminum Bus	Aluminum Bus White Coating		Copper Bus White Coating	Height	Width	Depth	Acceptable Main Breaker Kits
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.

[@] 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.

			Indoor Enclosure - NEM	A Type 1								
Amp	No. of	No. of	Siemens	Murray	Max Short Circuit	Bus		Phase Lug		Dimer (inche		
			Catalog Number	Catalog Number	Rating	Material	Mounting	Wire Size	Ground Bar	Н	w	D
	10	20	E1020MB1100FCGP ¹⁾²⁾³	LC110DFCGP ^{①②③}	22,000	Copper	Flush		CCCD10 In atallad	14.6	12.3	3.7
100	12	24	E1224ML1100FG ^{4/5}	_	100,000	Aluminum	Flush	CU or AL #4 - 2/0 AWG	ECGB10 Installed	14.6	12.3	3.7
	12		E1224ML1100FCU ^{4/5}	_	100,000	Copper	Flush	#4 - 2/0 AVV	Use ECGB kits	14.6	12.3	3.7
			E0408ML1125F ^{6/7/8/9}	LC004NF [©] ?®	100,000	Aluminum	Flush [®]	AL #12 - 2/0 AWG		12.8	6.5	3.3
	4	8	E0408ML1125S ^{©⑦®®}	LC004NS ^{©⑦®}	100,000	Aluminum	Surface [®]	or CU #14 - 2/0 AWG	Use ECGB or	12.8	6.5	3.3
			E0816ML1125F ²	LC008DF ^⑦	100,000	Aluminum	Flush		ECLX kits	14.6	12.3	3.7
405			E0816ML1125S ^{⑦⑨}	LC008DS®	100,000	Aluminum	Surface			14.6	12.3	3.7
125	8	16	E0816ML1125FGB®	LC008DFG®	100,000	Aluminum	Flush	CU or AL	ECGB10 or ECLX071M Installed	14.6	12.3	3.7
		_	LC008DSG®	100,000	Aluminum	Surface	#4 - 2/0 AWG	ECLX071M Installed	14.6	12.3	3.7	
		E0816ML1125FCU ^⑦	_	100,000	Copper	Flush		Lloo ECCP kito	14.6	12.3	3.7	
		E0816ML1125SCU ²	_	100,000	Copper	Surface		Use ECGB kits		12.3	3.7	

			Outdoor Enclosure - NE	loor Enclosure - NEMA Type 3R									
					Max Short					Dimensions (inches)			
			Siemens Catalog Number	Murray Catalog Number	Circuit Rating	Bus Material	Hub Provision	Phase Lug Wire Size	Ground Bar	Н	w	D	
100	2	4	W0204MB1100 ³	LW102NL ^{⑦®®}	100,000	Aluminum	1.25" HS Hub	AL #12 - 2/0 AWG	Use ECGB or ECLX kits	12.1	6.2	4.4	
			W0408ML1125 ⁶³⁹	LW004NR ^{©®®}	100,000	Aluminum		or	ECLA KIIS	12.1	6.2	4.4	
	4	8	W0408L1125SPA50 ²³	LW004NRSPA50 ^{@®}	100,000	Aluminum		CU #14 - 2/0 AWG	ECGB5 Installed	12.1	6.2	4.4	
125			W0408L1125SPA60 ²³	LW004NRSPA60 ^{@®}	100,000	Aluminum	HS Cover		LCGD5 installed	12.1	6.2	4.4	
	8	16	W0816ML1125CU ^⑦	LW008NR®	100,000	Copper	Plate		Use ECGB or ECLX kits	14.7	12.1	4.1	
150	4	4	W0404MB1150CTS ^{3/4}	_	22,000	Copper				20.0	11.1	4.7	
		8		LW004TR ^{@®}	100,000	Aluminum		CU or AL		20.0	11.1	4.7	
		0	_	LW204TL [®]	100,000	Aluminum	2" HS	#4 - 2/0 AWG	ECLX384M Installed	20.0	11.1	4.7	
200	4	1	W0404MB1200CT [®]	_	22,000	Copper	Hub		LOLAGOTIVI IIIStalleu	20.0	11.1	4.7	
			W0404MB1200CTS [®]	_	22,000	Copper	HS Cover Plate			20.0	11.1	4.7	

Suitable for use as service equipment when a main breaker (100A maximum) is used with retainer clip (Cat. No. ECMBR1).

[©] Two Q115 or MP115 and one Q130 or MP130 included

^{3 22}KAIC Main Breaker factory installed

^{@ 70} amp maximum breaker.

Suitable for use as service entrace equipment when a main breaker (70A maximum) is used with reatiner clip (Cat. No. ECMBR1).

Will not accommodate a 2-pole circuit breaker with shunt trip.

② Suitable for use as service equipment when not more than six main disconnecting means are provided. Check local codes and restrictions.

[®] Packaged in quantities of 5.

[®] No Door

^{10 10} KAIC Main Breaker factory installed

② I2-pole 60A GFCI, a restriction of #6 wire applies due to wire bend space of the enclosure.

Suffix SPA50 indicates a factory installed 50A 2-pole GFCI and suffix SPA60 indicates a factory installed 60A 2-pole GFCI.

Suitable only for use as service equipment.

[®] 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
- 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





		Indoor Enclosure - N	EMA Type 1						Outdoor Enclosure - NEMA Type 3R						
				Max Short		Dime (inch	nsion es)	ıs			Max Short		Dime (inch	nsion es)	ıs
Amp Rating	No. of Poles	Catalog Number	Breaker Used ^①	Circuit Rating	Std. Pkg.	н	w	D	Catalog Number	Breaker Used ^①	Circuit Rating	Std. Pkg.	н	w	D
1-Pha	se, 3-	Wire SN - 120/	240 Volts A	C - Brea	ıker	Fact	tory	Inst	alled						
100	2	E0202MB1100	Q2100	22,000	1	17.3	7.3	4.3	W0202MB1100CU	Q2100	22,000	1	17.2	7.3	4.3
100	2	LC100CS	MP2100	22,000	'	17.3	7.3	4.3	LW100CR	MP2100	22,000	'	17.2	7.3	4.3
150	2	_	_	_	_	_	_	_	W0202MB1150CU	QN2150H					
200	2	E0202MB1200	QN2200	22,000	1	20	8.7	4	W0202MB1200CU	QN2200H	65,000	1	19.8	8.7	5
200	2	LC200VS	MPD2200	22,000	1	20	8.7	4	LW200VR	MPD2200					
150	2	_	_	_	_	_			WB2150BQR	QR22B150L					
200	2	_	_	_	_	_	_	_	WB2200BQR	QR22B200L	10,000	1	26.9	7.1	4.4
225	2	_	_	_	_	_	_		WB2225BQR	QR22B225L					
1-Pha	se, 3-	Wire SN - 120/	240 Volts A	C - Encl	osu	re O	nly								
		E0204ML1060S ² 4	QP, QPH, or						W0204ML1060 ² ⁴	QP, QPH, or HQP					
60	2	E0204ML1060F24	HQP	100,000®	5	9.9	5.2	2.7	_	_	100,000	5	8.1	5.5	3.5
		LC002GS ²	MP-T, MP-HT, or MP-MT						LW002GR ²	MP-T, MP-HT, or MP-MT					
		E0204ML1125SCU ³	OD OD!!						W0204ML1125CU ³	QP or QPH					
125	2	E0204ML1125FCU ³	QP or QPH	22,000	1	17.3	7.3	4.3	_	_	22,000	1	17.2	7.3	4.3
		LC002HS	MP-T or MP-HT						LW002HR	MP-T or MP-HT				İ	
200		_	_	_	_	_	_	_	W0202ML1200CU	QN, QNH, or HQN	CE 000	4	10.0	0.7	_
200	2	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	65,000	ı	19.8	8.7	5
	1-4	_	_	_	_		_		W0406ML1225CU	QPP or QP	10,000	1	23.2	10.4	4.5
225	2	_	_	_	_	_	_	_	QR2N3R2	QR2, QRH2, or HQR2	65,000	1	26.9	7.1	4.4
250	2	QR2N1S	QR2, QRH2,	100,000	1	31.4	9.6	5.6		_	_				_
230	-	QR2N1F	HQR2, or HQR2H	100,000	'	31.4	0.0	3.0	_	_	_	_	_	-	-
3-Pha	se, 3-	Wire 240 Volts	AC or 3-Phas	e, 4-Wir	re SI	N —	120	/208	Volts AC, 120	/240, 240 Vo	lts AC -	Enc	losu	re O	nly
		E0303ML3100S [©]	QP or QPH						W0303ML3100 ^⑤	QP or QPH					
100	2-3	LP003CS [©]	MP-T or MP-HT	22,000	1	17.3	7.3	4.3	LW903CR®	MP-T or MP-HT	22,000	1	17.2	7.3	4.3
		EB3100S ^⑤	BQ or BQH						WB3100 ^⑤	BQ or BQH	1				
250	2-3	QR2N1S	QR2, QRH2, HQR2, or	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	HQR2H						_	_	_	_	_	_	_
		CHENT!	1					L		_					

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

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

[©] Can accommodate 2-pole GFCI breaker up to 60A.

[@] CSA Listed

Will not accommodate circuit breaker with shunt trip.

Series rating

Renovation Interiors

1 Phase, 3 WIRE, 120/240V

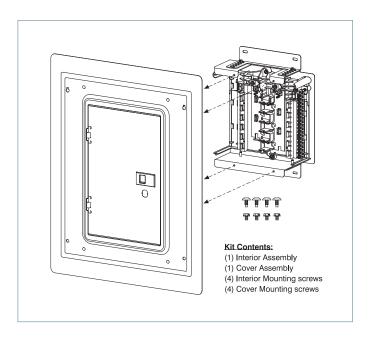
Features

- For use in home renovations with existing load centers^①
- 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	Amp No. of			Min. Enclosure Size (inches)			Max. Enclosure Size (inches)			Cover Dimensions (inches)		
Rating	Spaces	Circuits	Catalog Numbers	L	W	D ②	L	W	D ²	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	



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

② Depth of enclosure is measured from finished wall surface.

1Ø: Small Circuit Main Lug Interiors

				Dimensions		
Amps	Catalog Number ^②	Spaces	Circuits	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	

10: High Circuit Main Lug Interiors with Neutral Bars[®]

				Dimensions		
Amps	Catalog Number ^②	Spaces	Circuits	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	I0816L1200CT [®]	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

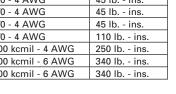
				Dimensions	
Amps	Catalog Number	Spaces	Circuits	Height	Width
125	SI1224L3125B	12	24	10.04	9.95
200	SI1224L3200B	12	24	10.04	9.95
200	SI2442L3200B	24	42	16.04	9.95
200	SI3054L3200B	30	54	19.04	9.95
225	SI4242L3225B	42	42	25.04	9.95
125	PI1224L3125CUB	12	24	10.04	9.95
200	PI1224L3200CUB	12	24	10.04	9.95
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

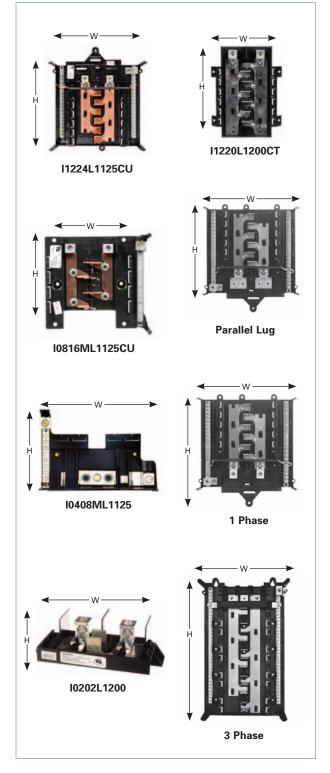
10: Parallel Lug Interiors with Neutral Bars

				Dimensions	
Amps	Catalog Number ^②	Spaces	Circuits	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.	





① UL Recognized Components. ② The letters "CU" in any catalog number represent copper bus bars.

Feed thru lugs provided. Convertible to main breaker using the MBK main breaker

Load Centers

Load Center Accessories^①

Catalog Number	Description	Pack Oty		
Ground Bar Kits (For ES and PL Load Centers)				
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 LUG ²	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

Tiubs			
ECHA000		CLOSURE PLATE	1
ECHA075		HUB - 3/4"	1
ECHA100	HA Type W0204ML1060	HUB - 1"	1
ECHA125	VV0204IVIL 1000	HUB - 1 1/4"	1
ECHA150		HUB - 1 1/2"	1
ECHS000		CLOSURE PLATE	1
ECHS075	1	HUB - 3/4"	1
ECHS100	HS Type	HUB - 1"	1
ECHS125	PL & ES and Small Circuit Loadcenters	HUB - 1 1/4"	1
ECHS150		HUB - 1 1/2"	1
ECHS200		HUB - 2"	1
ECHS250		HUB - 2 1/2"	1
ECHV000		CLOSURE PLATE	1
ECHV200		HUB - 2"	1
ECHV250	HV Type 300-400A Loadcenters	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.

Catalog Number	Description	Pack Qty
Load Center	Conversion Kits ³⁴	
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 **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

3 PH MAIN LUG CONVERSION KIT 150-225A

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.
- © Dar Has green-Colored screws.
 © QR Main Breaker Kits include a QR filler plate.
 © 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

Load Center Accessories

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®	For 2 Pole QP / MP-T type breakers for EQIII (extruded basepan) and Line 5 Load Centers
ECMBR2®	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*

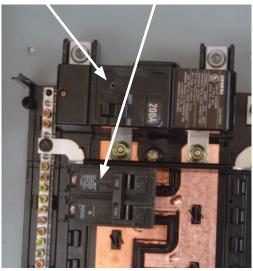


Wire forms or bussing



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.

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.

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	

Load Centers

Manual Transfer Interlock Kits for Load Centers and Meter Combinations

Prevents dangerous feedback between two sources of power

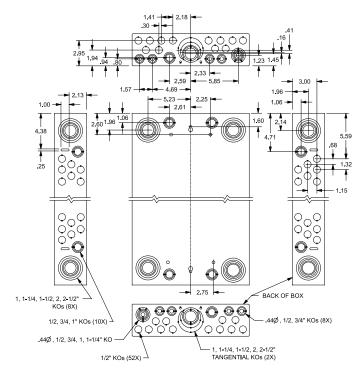
Manual Transfer Interlock Kits^①

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, НQPH	QР, QРН, НQРН	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, НQPH	QР, QРН, НQРН	2
ECSBPK03®	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	QР, QРН, НQРН	3
ECSBPK04®	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	QР, QРН, НQРН	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	QР, QРН, НQРН	5
CSBPK06®	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	QР, QРН, НQРН	6
ECSBPK07	For use on load centers or meter combinations that will accept two QNR (MDTR) circuit breakers side by side as shown OR will accept two QN (MDT) circuit breakers side by side as shown.	QNR, QNRH, HQNR, QN, QNH, HQN	QNR, QNRH, HQNR QN, QNH, HQN	
ECSBPK08®	For use on 8 space, over/under, OH/UG feed meter combinations as shown. Limited application to specific catalog numbers.	ОРР, ОРРН	QР, QРН, НQРН	8
ECSBPK09®	For use on 20 space, over/under, OH/UG feed meter combinations as shown. Limited application to specific catalog numbers.	ОРР, ОРРН	ОР, ОРН, НОРН	9

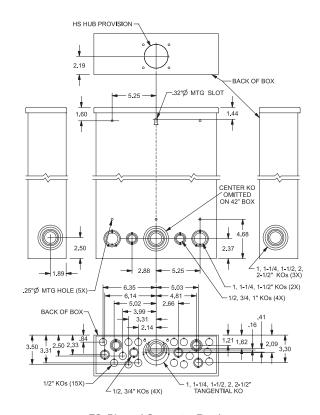
 $[\]ensuremath{\mathbb{O}}$ Manual breaker interlock kits are attached to the breakers not the trim of the load center.

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

1-Phase Indoor and 1-Phase & 3-Phase Outdoor Enclosures—Knockout Diagrams



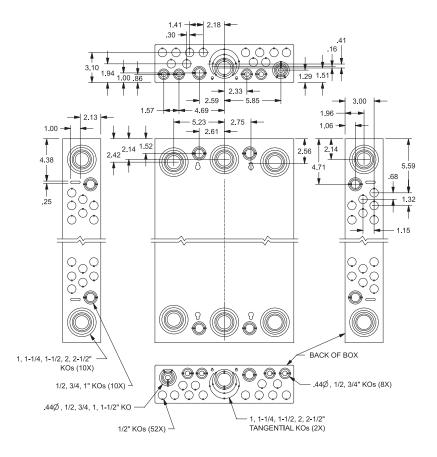
ES, PL, and Generator Ready 1 Phase Load Centers Indoor



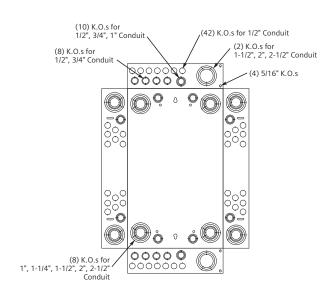
ES, PL, and Generator Ready 1 and 3 Phase Load Centers Outdoor

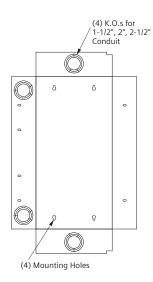
Load Centers

3-Phase Indoor and Riser Enclosures—Knockout Diagrams



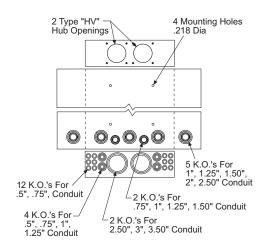
ES and PL 3 Phase Load Centers



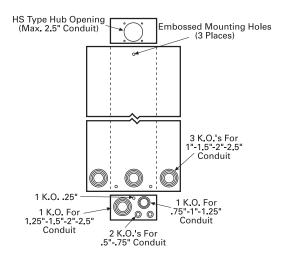


All Riser Panels RAG24

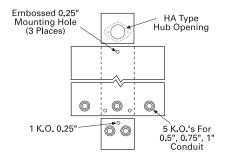
Outdoor Enclosures—Knockout Diagrams



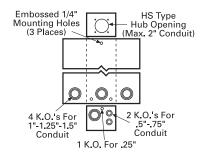
Outdoor 400A Load Center



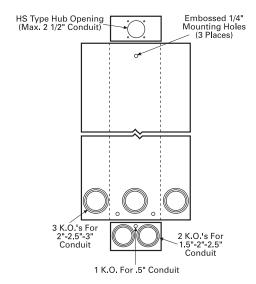
W0406ML1125CU



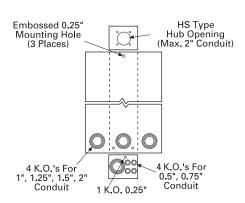
W0204ML1060



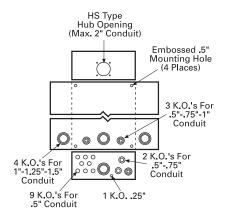
W0408ML1125



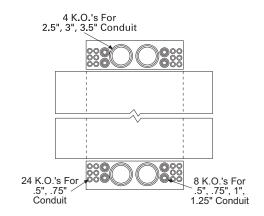
WB2225 and WB32225



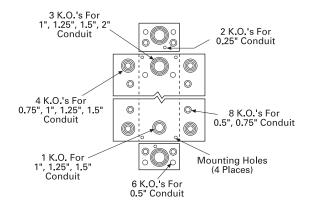
W0204ML1125 W0303ML3100 WB3100



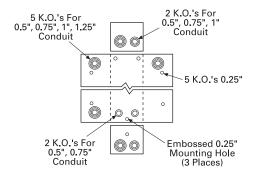
W0612ML1125 W0816ML1125



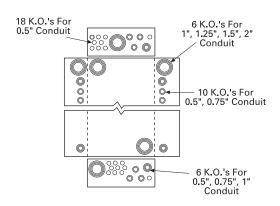
Indoor 300-400A Load Center



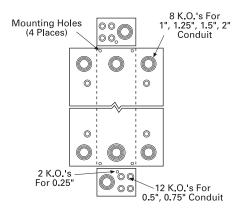
E0408ML1125



E0204ML1060



E0612ML1125 E0816ML1125 E1224ML1100F



E0303ML3100SCU EB3100

Load Centers

Cross Reference

Ultimate Load Center Cross Reference to ES Series and PL Series

Jitiiiiat	e Luau	Center Cross Referen	ice to ES Series and PL	Series
Phase	Type	Current Sku	ES Series	PL Series
	1	New	_	P3040L1200SG
		New		P4040L1200SG
			 -	
		New - Higher Circuits		P4260L1225CUSG
		New - Higher Circuits	S3054L1200	P3054L1200CU
		New - Higher Circuits	S5470B1225	P5470B1225CU
		New - Higher Circuits	S5470L1225	P5470L1225CU
	İ	New - Higher Circuits	SW3054L1200	PW3054L1200CU
		G1212L1125	S1212L1125	-
			3121211123	D4040L440ECLL
		G1212L1125CU		P1212L1125CU
		G1224B1100	S1224B1100	-
		G1224B1100CU	_	P1224B1100CU
		G1224L1125	S1224L1125	-
		G1224L1125CU		P1224L1125CU
		G1224L1125CUSG		P1224L1125CUSG
		G1224L1200CU	S1224L1200	P1224L1200CU
		G1624B1100	S1624B1100	-
		G1624B1100CU		P1624B1100CU
		G1624B1100W	S1624B1100W	-
		G1624L1125	S1624L1125	_
		G1624L1125CU	0102421120	P1624L1125CU
		G1624L1125CUSG	-	P1624L1125CUSG
		G1630B1150	S1630B1150	-
		G2020B1100	S2020B1100	-
		G2020B1100CP	S2020B1100P	-
		G2020B1100CU		P2020B1100CU
		G2020B1100CC	S2020L1125	. 20200110000
			32U2UL1123	- D202014425011
		G2020L1125CU	-	P2020L1125CU
		G2020L1125CUW	S2020L1125W	<u> </u>
		G2030B1150	S2030B1150	_
		G2030B1150CU	_	P2030B1150CU
		G2030L1125CUSG		P2030L1125CUSG
		G2030L1150	S2030L1150	12030211230000
			32030L1190	— P20201 44F0CH
		G2030L1150CU		P2030L1150CU
		G2030L1150CUSG		P2030L1150CUSG
		G2040B1200	S2040B1200	_
		G2040B1200CU	_	P2040B1200CU
		G2040L1200	S2040L1200	
		G2040L1200CU	0204021200	P2040L1200CU
		G2424B1100CU		P2424B1100CU
Phase	Indoor	G2424B1125	S2424B1125	_
1 11400	maoor	G2424L1125	S2424L1125	_
		G2424L1125W	S2424L1125W	_
		G2430B1150	S2430B1150	
		G2430L1125CUSG	0240081100	P2430L1125CUSG
			C0440D4000	1 2430L 1 125CO3G
		G2440B1200	S2440B1200	— —
		G2440L1125CU	S2440L1125	P2440L1125CU
		G2440L1200	S2440L1200	_
		G2440L1200CU	_	P2440L1200CU
		G3030B1100CU	S3030B1100	P3030B1100CU
		G3030B1150	S3030B1150	_
			3303001130	D2020D11E0CLI
		G3030B1150CU	— C20201 1200	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	1 _	P3040L1200CUSG
			S4040P1200	
		G4040B1200	S4040B1200	P4040B1200
		G4040B1200CP	S4040B1200P	 _
		G4040B1200CU	<u> </u>	P4040B1200CU
		G4040B1200W	S4040B1200W	P4040B1200W
		G4040L1125CU	S4040L1125	P4040L1125CU
		G4040L1200	S4040L1200	P4040L1200
	1	G4040L1200CU	—	P4040L1200CU
			 -	
		G4040L1200CUSG		P4040L1200CUSG
		G4242B1225CU	S4260B1225	P4260B1225CU
		G4242L1225CU	S4260L1225	P4260L1225CU
		G2020B1100SP	S2024B1100	P2024B1100CU
		G2020L1125SP	S2020L1125G	
				D2024L112ECL1
		G2024L1125SP	S2024L1125/S2024L1125G	P2024L1125CU
			. COAOALTTOE/2	T. Control of the Con
		G2424L1125SP	S2424L1125G	
		G3030B1125CU	S3030B1125	P3030B1125CU
				P3030B1125CU — P4040B1200CUSG

Ultimate Load Center Cross Reference to ES Series and PL Series

Phase	Туре	Current Sku	ES Series	PL Series
	- 7/	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
1 Phase	Outdoor	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
		New	S4242B3150	_
		New – Higher Circuits	_	P5470B3225CU
		New – Higher Circuits	S5470L3225	P5470L3225CU
		G1224L3125CU	S1224L3125	P1224L3125CU
		G1224L3200CU	S1224L3200	_
		G1836L3150CU	S1836L3150	_
		G2442B3150CU	S2442B3150	P2442B3150CU
		G2442B3150CU22	_	P2442B3150CU
	l	G2442L3150CU	S2442L3150	_
	Indoor	G2442L3200CU	S2442L3200	P2442L3200CU
		G3030B3100CU	S3030B3100	P3042B3100CU
		G3030B3100CU22	_	P3042B3100CU
		G3042B3200CU	S3054B3200	P3054B3200CU
		G3042L3200CU	S3054L3200	P3054L3200CU
		G4242B3200CU	S4260B3200	P4260B3200CU
3 Phase		G4242B3225CU	S4242B3225	P4260B3225TCU/ P4260B3225CU
		G4242L3225CU	S4260L3225	P4260L3225CU
		W1224L3125CU	SW1224L3125	PW1224L3125CU
		W1224L3200CU	SW1224L3200	_
		W1836L3150CU	SW1836L3150	<u> </u>
		W2442B3150CU	SW2442B3150	_
		W2442L3150CU	SW2442L3150	<u> </u>
		W2442L3200CU	SW2442L3200	PW2442L3200CU
	Outdoor	W3042B3200CU	SW3054B3200	PW3054B3200CU
		W3042B3200CU22	_	PW3054B3200CU
		W3042L3200CU	SW3054L3200	PW3054L3200CU
		W4242B3200CU	SW4260B3200	PW4260B3200CU
		W4242B3200CU22	_	PW4260B3200CU
		W4242B3225CU	SW4242B3225	PW4260L3225CU
		W4242L3225CU	SW4260L3225	_
		VV4242L3225CU	SVV4260L3225	<u> </u>

Circuit Breakers

Arc-Fault and Ground-Fault Breakers

Selection/Wiring Diagrams

• HACR Rated

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.

Combination Type AFCI

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 No.	22,000 A IR Catalog No.	65,000 A IR Catalog No.
QAF2/QAFH2/HQAF2	15	QA115AFC 1) 2)	QA115AFCH ①	QA115AFCHH■ ①
1-Pole 120V AC	20	QA120AFC 1) 2	QA120AFCH ①	QA120AFCHH■ ①
QAF/QAFH	15	Q215AFC ① ②	Q215AFCH■ ①	_
2-Pole 120/240V AC	20	Q220AFC 10 20	Q220AFCH■ ①	_

Branch-Feeder AFCI

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

QAF2/QAFH2/HQAF2	15	QA115AF ^①	QA115AFH■ ①	QA115AFHH■ ^①
1-Pole 120V AC	20	QA120AF ①	QA120AFH■ ①	QA120AFHH■ ①

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.

QFGA2/QFGAH2/	15	Q115DF ① ②	Q115DFH■ ①	Q115DFHH■ ①
HQFGA2 1-Pole 120V AC	20	Q120DF ① ②	Q120DFH ①	Q120DFHH■ ①

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.
ODE2/ODUE2/HODE2	15	QF115A [©] 2	QF115AH■ ^①	QF115AHH■ ^①
QPF2/QPHF2/HQPF2	20	QF120A [©] 2	QF120AH■ ^①	QF120AHH■ ^①
1-Pole 120V AC Plug-in	30	QF130A ^①	QF130AH■ ^①	QF130AHH■ ^①
	15	QF215A	QF215AH■	_
	20	QF220A	QF220AH■	_
QPF/QPHF	30	QF230A	QF230AH■	_
2-Pole 120/240V AC Plug-in	40	QF240A	QF240AH■	_
	50	QF250A	QF250AH■	_
	60	QF260A	QF260AH■	_

Ground Fault Equipment Protection (30mA)

Provides protection of equipment from damaging line-to-ground faults currents. De-energizes the circuit for all ungrounded conductors of the circuit.

05/0511	15	QE115	QE115H■	_
QE/QEH	20	QE120	QE120H■	
1-Pole 120V AC Plug-in	30	QE130	QE130H■	
QE/QEH 2-Pole 120/240V AC Plug-in	15	QE215	QE215H■	_
	20	QE220	QE220H■	_
	30	QE230	QE230H■	_
	40	QE240	QE240H■	_
	50	QE250	QE250H■	 -
	60	QE260	OE260H■	-

QAF2/QPF/QE/QPF2 Accessories

Description	Catalog Number ^①
Padlocking Device 1-Pole	ECPLD1
Padlocking Device 2-Pole	ECPLD2
Handle Block	ECBX231M

■ Built to order. Allow 8 -10 weeks for delivery.

UL Listed as SWD (Switching Duty) Rated, suitable for 120V AC Fluorescent Lighting.
 Add WG to the part number for the WireGuide version.

• UL Listed

1-Pole Combination Type AFCI



Type AFCI





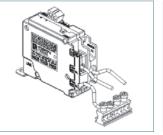


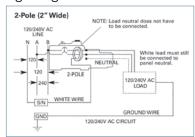






Wiring Diagrams





Circuit Breakers

Dual Function Arc-Fault and Ground-Fault breaker

Two state-of-the-art technologies combined in one device! Dual Function Circuit Breakers: **QFGA2/QFGAH2/HQFGA2**

Introducing the Dual Function Circuit Breaker that provides Arc Fault and Ground Fault protection in one device. The 2014 National Electric Code requires Arc Fault protection on Kitchen and Laundry circuits where Ground fault protection is currently a requirement. One solution to meet this code is to pair an AFCI circuit breaker with a GFCI receptacle. The Dual function breaker will replace the Arc fault breaker and the Ground Fault receptacle. Additionally, the breaker will help eliminate the use of two separate devices and improve cost savings.

Features

- Plug-in or bolt-on branch circuit breakers for Siemens single phase load centers
- Self Test feature as required by UL 1699 effective June 2015
- Saving time ease of installation only One product to install vs. Two
- Saving money Two safety devices combined into One.
- LED trip indicator a Siemens exclusive!
- Available with interrupting rating of 10kA, 22kA or 65kA
- UL Listed
- Torque rating: 25 lb. in.
- Padlocking device available, use catalog number FCPLD1
- Both lugs at the same angle for easier wiring



Type QP with INSTA-WIRE

	Type QP ^①	Type QPH	Type HQP
Continuous Current	10,000A IR	22,000A IR	65,000A IR
Rating @ 40° C	Catalog Number	Catalog Number	Catalog Number

1-Pole Plug-In (120/240V AC)^⑤

10	Q110 [®]	-	_
15	Q1153	Q115H ³	Q115HH ■ ③
20	Q1203	Q120H ³	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)[©]

	_ · · · · · · · · · · · · · · · · · · ·				
10	Q210®	_	_		
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		



15	Q215R	_	_
20	Q220R	-	
30	Q230R	-	
40	Q240R	-	_
50	Q250R	_	_

3-Pole Plug-In (Common-Trip 240V AC)

Q315	Q315H	Q315HH ■
Q320	Q320H	Q320HH
Q325	Q325H ■	Q325HH ■
O330	Q330H	Q330HH
Q335	Q335H ■	Q335HH ■
Q340	Q340H	Q340HH
Q345	Q345H ■	Q345HH ■
Q350	Q350H	Q350HH
Q360	Q360H	Q360HH
Q370	Q370H	Q370HH ■
O380	Q380H	Q380HH ■
Q390	Q390H	Q390HH ■
Q3100	Q3100H	Q3100HH
	O320 O325 O330 O335 O340 O345 O350 O360 O370 O380 O390	Q320 Q320H Q325 Q325H■ Q330 Q330H Q335 Q335H■ Q340 Q340H Q345 Q345H■ Q350 Q350H Q360 Q360H Q370 Q370H Q380 Q380H Q390 Q390H

Modifications

1 vio am cation c			
Description	Catalog Number		
400 Hz Calibration	add suffixY®		
Marine 50°C Ambient Calibration	add suffixM		
Fungus Proofing	add suffixF		

For external accessories please refer to page 1-44.





QP / QPH / HQP Internal Accessories

Control Voltage AC	Catalog Number	Field/Factory Installed
120V Shunt Trip	add suffix00S01■	Factory
24V Shunt Trip	add suffix00S07■	Factory
120V Auxiliary Switch	add suffix01■②	Factory

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

Product Category RESI

Q320

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.

[®] UL Listed for frequent switching applications (SWD). 120V AC Fluorescent Lighting.

UL Listed for use on 3-phase grounded "B" systems — 10,000 for this application.
 Shipped 12 per sleeve.

[©] Shipped 6 per sleeve. © Shipped 4 per sleeve. © UL Listed 5 KA IR. © Type QP1, UL listed for 16 AWG conductors and multiple wires.

Duplex, Triplex and Quadplex Plug-In Breakers

Duplex Circuit Breakers

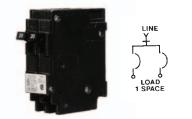
Breaker Type	Ampere Rating	Catalog Number	Catalog Number
QT	15–15	Q1515	Q1515NC ^①
1-Pole	15–20	Q1520	Q1520NC ^①
10K AIC	20–20	Q2020	Q2020NC ^①
120V AC	20–30	Q2030	_
	30–15■	Q3015	_
	30–20	Q3020	_
	30–30	Q3030	Q3030NC ^①
	SHIPPING: 12 per carton, (Wt. 4.8 lbs.)		

Triplex Circuit Breakers

	Ampere Rating		
Breaker Type	Single Pole	Common-Trip 2-Pole	Catalog Number
QT	15	15	Q21515CT
2-Pole	15	20	Q21520CT
10K AIC	15	25	Q21525CT■
120/240V AC	15	30	Q21530CT
Inner Poles	15	35	Q21535CT■
Common Trip	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 carto	n, (Wt. 4.9 lbs.)	

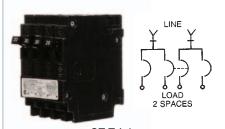
Quadplex Circuit Breakers

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



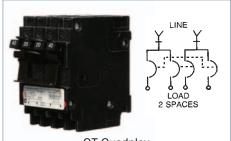
QT Duplex

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.



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.



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 1-44.

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

Special Application Breakers

HID Lighting

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

Breaker	Wiring	Complete Breaker UL Unenclosed	
Туре	Diagram	Ampere Rating	Catalog Number
QP		15	Q115HID ^① ■
1-Pole	Figure 1	20	Q120HID ^①
120V AC		30	Q130HID
QΡ		15	Q215HID
2-Pole	Figure 2	20	Q220HID■
120/240V AC		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

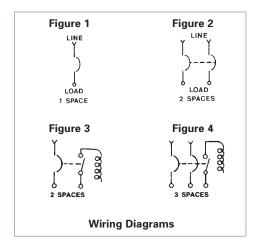
No-Noise

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



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

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

3/4 Inch Plug-In Breakers

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.





Continuous	1-Pole	2-Pole
Current Rating	120V	120/240V Common Trip
@ 40°C	Catalog Number	Catalog Number
15	D115 ^①	D215
20	D120 ^①	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 QO2-4L70F/S QO2-4L70TS	QO12M100/RB QO16-20M100/RB QO16M100/RB	QO120-30M150/RB QO124L150G QO124M150	QO130-40M200 QO130M200/RB QO130-40L200G/RB
QO2-4L7013	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
QO6-12L100DF/S	QQ112-24L125G/KB	QO16M150/RB	QQ18-16M200FTRB
QO6-12L100DTF/S	QQ116L125G	QO16-30L150/RB	QO20-40L200/RB
QO6-12L100BH /3	QO116-24L125G/RB	QO18-16M150FTRB	QO20-40L200/NB 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	QQ120-24L125GWGC	QQ20-30L150	QO24M200/RB
QO8-16L100DTF/S	QO120-24E125GWGC	QO24L150/RB	QO30L200/RB
QO8-16L100RB	QO124L125G/RB	QO24M150/RB	QO30M200/RB
QO112M100/RB	QO124E125G/RB	QO30L150/RB	QO30-40L200/RB
QO112M100/RB	QO16L125/RB	QO30M150/RB	QO30-40M200/RB
QO120M100/RB	QO16-12M125FTRB	QO8-16M200FT/RB	QO40M200/RB
QO124M100	QO16-24L125/RB	QO112L200G/RB	QQ140M225
QO124W100	QO20L125/RB	QO120-40M200/RB	QO140M223 QO142L225G/RB
QQ12L100BI76	QO20-24L125/RB	QQ120-40M200TC	QO 1421223 G/NB
QO12-20M100/RB	QO24L125/RB	QO124M200	
QO12-20M100/NB	QO120-30L150G	QO130L200G/RB	
QO 12 2014110011/0	Q0 120 30E 130Q	QO 130L2000/11D	

For inches / millimeters conversion, see Application Data section.

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

Main and Branch Circuit Breakers^①

Breaker Type	Ampere Rating	Catalog Number	Catalog Number	UL Interrupting Ratings (kA)
QN	150	QN2150	QN2150R ²	10
2-Pole	175	QN2175■	QN2175R ^② ■	10
120/240V AC	200	QN2200	QN2200R ²	10
QNH	150	QN2150H	QN2150RH ²	22
2-Pole	175	QN2175H■	QN2175RH ² ■	22
120/240V AC	200	QN2200H	QN2200RH ²	22
HQN	150	HQN2150	HQN2150R ²	65
2-Pole	175	HQN2175■	_	65
120/240V AC	200	HQN2200	HQN2200R ^②	65

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

Main Breaker Kits

For use in PL, ES, and Ult Load Centers [®]		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

Breaker Type	Ampere Rating	Catalog Number	UL Interrupting Ratings (kA)
QPJ [®]	125	QPJ3125	10
3-Pole	150	QPJ3150	10
240V AC	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.)

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

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

- O All circuit breakers on this page are common trip.
 Reverse handle.
 CSA Listed.
 MBK100A for use in 100 and 125A load centers.
 MBK125A for use in 125A load centers.
 MBK150A for use in 125A load centers.
 MBK150A for use in 250, 200 and 225A load centers.
 MBK225A for use in 200 and 225A load centers.
 MBK225A for use in 200 and 225A load centers.
 MBK175A for use in 200 and 225A load centers.





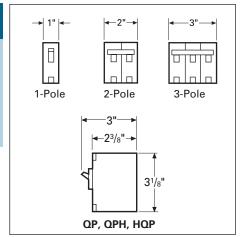


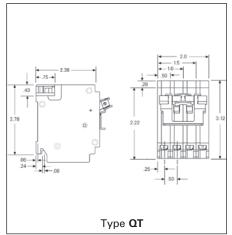


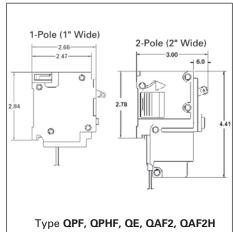


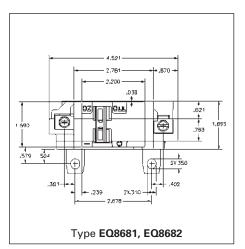
® QNR required for horizontal applications or vertical applications where the lugs are facing up. The QN breaker is required for vertical applications where the lugs are facing down as shown.

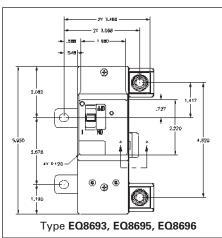
Line Diagrams/Dimension Drawings

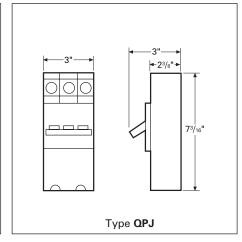


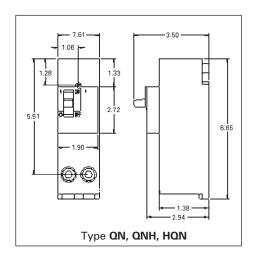


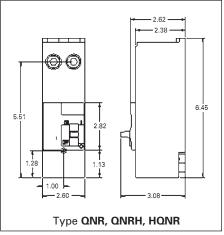


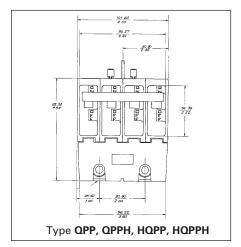












 $^{^{\}scriptsize \textcircled{\tiny 1}}$ All standard circuit breakers are calibrated to 40°C maximum ambient application.

Lug Data

Circuit Breaker Type	Circuit Breaker Ampere Rating	Cables Per Connector	Connector Wire Range
	LOAD SIDE	. 5. 65666	
QP, QPH, HQP, Plug-in	10	1 or 2	#14-#16 AWG Cu
	15–35	1	#14-#6 AWG Cu #14-#6 AWG AI
	40–50	1	#8–#6 AWG Cu #8–#4 AWG AI
	55-125	1	#8-#2/0 AWG Cu #8-#2/0 AWG AI
QP 1 & 2-Pole Only	55-60	1	#6-#4 AWG Cu-Al (#3 AWG compatible with QPH & HQP)
QT	15–35	1	#14–#6 AWG Cu #14–#6 AWG AI
	40	1	#8 AWG CU-AI
	40–50 Exception: 1 & 2-pole QP at 55-60	1	#8-#6 AWG Cu #8-#4 AWG AI
QPF, QPHF	15–30	1	#14-#10 AWG Cu #12-#8 AWG AI
	40–60	1 1	#8-#6 AWG Cu #8-#4 AWG AI
QAF2, QAFH2, QFGA2,	15–20	1	#14-#12 AWG Cu
QFGAH2	15-20	1	#12-#10 AWG AI
QD	15–20	2	#14–#10 AWG Cu Only #14–#12 AWG Cu
	15–20	1	#12–#10 AWG AI
	25–35	1	#10-#8 AWG Cu #10-#6 AWG AI
	40–60	1	#8-#6 AWG Cu #8-#4 AWG AI
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-AI
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
ОРР, ОРРН, НОРР, НОРРН	125	1	#1 AWG Cu #2/0 AWG AI
	150	1	#1/0 AWG Cu #3/0 AWG AI
	175	1	#2/0 AWG Cu #4/0 AWG AI
	200	1	#3/0 AWG Cu 250kcmil AWG Al
	225	1 1 1	#4/0 AWG Cu 300kcmil AWG Al
EQ9675-EQIII	100	1	#8-#2/0 AWG Cu #8-#2/0 AWG AI
EQ9677-EQIII	125	1	#8-#2/0 AWG Cu
EQ9683-EQIII	150	1	#8-#2/0 AWG AI #1/0 AWG Cu
EQ9684	175	1	#3/0 AWG Cu
EQ9685-EQIII		1	250kcmil AWG AI #2/0 AWG Cu
EQ9686-EQIII	200	1	#4/0 AWG AI #4/0 AWG Cu
	225	1	300kcmil AWG AI
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 "G	OFF" position. Note "ON" position does not affect breaker fuctiona	ılly	
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	1P	3 Pieces
	(Red Color)		
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
CPLD3	Type QP, BL, QAF2, QPF, QE, BQ	3P	1 Piece
JS2:ECPLD3R	Type QP, BL, QAF2, QPF, QE, BQ (Red Color)	3P	1 Piece
ECOLD3	Type QP, BL, BQ, BQXD	1P	10 Pieces
CQLD4	Type QT-Duplex	QT-Duplex Breakers	10 Pieces
CQLN3 [©]	150-225 MBKA, QN, QNR	n/a	1 Piece
CQTH4	Type QP, BL, BQH	Designed for (3) 1P Breakers	1 Piece
Handle Tie Provide simultaneous sy	viching of 2 adjacent handles.		
COTH2	Type QT Duplex	Designed for (2) QT Duplex Breakers	25 Pieces
ECQTH3	Type QP, BL	2P	50 Pieces
.041110	17po ca , DE	1	00110003
Vlechanical Interlock®			
CQML12	Type QP, BL, BQ Interlock Bracket	Designed for 1" Breaker	10 Pieces
	1 // /		
Handle Blocking Device For holding breaker in "	ON" or "OFF" position. Not a lockout/tagout device		
CQL1	Type QP, BL, BQ, BQXD	1P	10 Pieces
CBX231M	Type QT-Duplex	1/2" Breakers	10 Pieces
Main Breaker Retainer			
ECMBR1 [®]	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 PO POH Mounting Cline	1P	20 Pieces
P9508	Type BQ, BQH Mounting Clips Type BQ, BQH FACE MOUNT PLATE	1P	10 Pieces
-P9555	Type BQ, BQH FACE MOUNT PLATE	2P	10 Pieces
P9556	Type BQ, BQH FACE MOUNT PLATE	3P	10 Pieces
SMB6R	Type BQ, BQTTTACE MOONT TEATE Type BQ MOUNTING BRACKET	1P, 2P, 3P	6 Pieces
CH65K	Type BQ MOUNTING ADAPTER	11,21,31	500 Pieces
BR2	Type BQ MOONTHING ADAI TEN Type BQ, BQH, BQXD Back Mounting Plates	2P	10 Pieces
BR3	Type BQ, BQH, BQXD Back Mounting Plates	3P	10 Pieces
3R4	Type BQ, BQH, BQXD Back Mounting Plates	4P	10 Pieces
0204ML1125CU	Type QP Back Mounting Plates	1P, 2P	10 Pieces
0303ML3100CU	Type QP Back Mounting Plates	3P	10 Pieces
	Typo at Dank mounting traces	16.	10110000
Replacement Lugs			
ΓA1Q1	Type BQ, NGG 100A AI Cu LGS	n/a	6 Pieces
TC1Q1	Type BQ, NGG 40A AI 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
THE DIE			
Filler Plate ECQF3	1" Filler Plate	n/a	5 Pieces

Tor a complete list of standby power mechanical interlock kits, see page 1-25
 For use with Ultimate Load Center Main Breakers

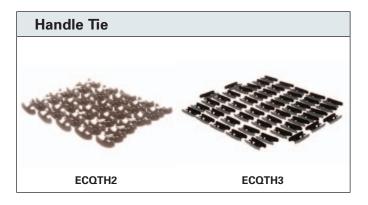
Not suitable for use on 15-50A, 10 AIC Type QP Circuit Breakers

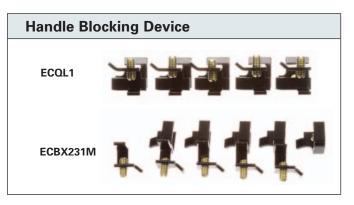
[@] QP Type includes QPH, HQP
BL Type includes BLH, HBL
BQ Type includes BQH, HBQ

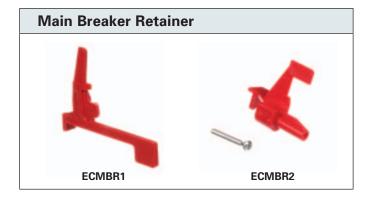
O AF2 Type includes OAFH2, BAF2, BAFH2, QFGA2, QFGAH2, BFGA2, BFGAH2
 QPF Type includes QPHF, BLF, BLHF
 QE Type includes QEH, BLE, BLEH

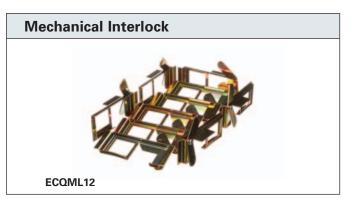
Circuit Breaker Accessories













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 circuits[®].

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	QSA1515SPD	SPD
120/240V AC 10K AIC	(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



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

Surge Protection

Power Service Entrance Surge Protection

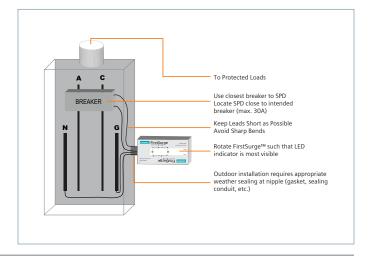
FirstSurge™ - Power, Plus, or Pro

- 4th Listed, Type 2, Surge Protective Device (SPD
- Surge Current Capacities:
 - 60,000 A, FirstSurge Power (FS060)
 - 100,000 A, First Surge 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





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 In).

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

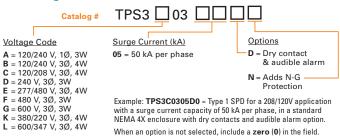
Product Category RESI

Available Options:

Dry contacts & Audible Alarm (option "D")



Ordering Information



1-47

Available Accessories: Ordered Separately

RMSIE = Remote monitor

Telephone Service Entrance Surge Protection

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.





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.



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









Steel AC Disconnects[®]

Ampere	Disconnect		Horse Power	Dimensions			Pallet
Rating	Туре	Catalog Number		Height	Width	Depth	Qty.
30	Fused Pullout	WF2030	3	71/4	5	21/8	360
60	Fused Pullout	WF2060	10	9	5	21/8	360
60	Non-fused Pullout	WN2060	10	71/4	5	21/8	360
60	Non-automatic Switch	WNAS2060	10	71/4	5	21//8	360

Plastic AC Disconnects^①

Ampere	Disconnect		Horse Power	Dimensions			Pallet
Rating	Туре	Catalog Number	Rating	Height	Width	Depth	Qty.
30	Fused Pullout	WF2030PL	3	71/4	5	2½	216
60	Fused Pullout	WF2060PL	10	71/4	5	2½	216
60	Non-fused Pullout	WN2060PL	10	71/4	5	21/2	360
60	Non-Fused Pullout	WN2060PLX	10	8	5¾	3½	288
60	Non-automatic switch	WNAS2060PL	10	71/4	5	2½	360

Steel AC Disconnects with 15 Amp GFCI Receptacle[®]

Ampere	Disconnect		Horse Power	1	Dimensions			
Rating	Туре	Catalog Number	Rating	Height	Width	Depth	Qty.	
30	Fused Pullout	WF2030GFCI	3	9	61/8	5 ³ / ₁₆	112	
60	Fused Pullout	WF2060GFCI	10	9	61//8	53/16	112	
60	Non-fused Pullout	WN2060GFCI	10	71/8	53/4	53/16	144	
60	Non-automatic Switch	WNAS2060GFCI	10	71/8	53/4	53/16	144	

Wire Range Table

	Сор	per	Aluminum		
Connector	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

Main Lug Only, 1Ø, 65,000 AIC⁰, Main Lug Panels 3-Wire 120/240V AC or 208Y/120V AC, Insulated and Bonded Split Neutrals



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	No. of	Max.	Indoor Type 1 [®]	Dimension	Dimensions [®]		Outdoor Type 3R ²⁴	Dimensio	ns ^③	
Max.	Spaces	Circuit	Catalog Number	Height [®]	Width	Depth	Catalog Number	Height	Width	Depth
125	12	24	LC1224L1125	18	14%	4	LW1224L1125	20	141/4	41/2
125	16	32	LC1632L1125	21	14%	4	LW1632L1125	29	141/4	41/2
125	20	40	LC2040L1125	21	14%	4	LW2040L1125	29	141/4	41/2
125	30	40	LC3040L1125	30	14%	4	_	_	_	_
150	16	32	LC1632L1150	24	14%	4	_	_	_	I —
150	24	40	LC2440L1150	30	14%	4	_	-	I —	I —
200	12	24	_	I —	_	 -	LW1224L1200	29	141/4	41/2
200	20	40	LC2040L1200	24	14%	4	LW2040L1200	29	141/4	41/2
200	24	40	LC2440L1200	30	14%	4	_	_	_	-
200	30	40	LC3040L1200	30	14%	4	LW3040L1200	38	141/4	41/2
200	40	40	LC4040L1200	36	14%	4	_	_	_	-
225	40	60	LC4060L1225	36	14%	4	_	_	I —	_

Copper Bus[®]

Amps	No. of Max. Indoor Type 1 ² Dimensions ³		าร [®]	Outdoor Type 3R ²		Dimensions [®]				
Max.	Spaces	Circuit	Catalog Number	Height [®]	Width	Depth	Catalog Number	Height	Width	Depth
125	20	40	LC2040L1125CU	21	14%	4	_	_	_	_
200	20	40	LC2040L1200CU	24	14%	4	_	_	_	_
200	30	40	LC3040L1200CU	30	14%	4	_	_	_	_
200	40	40	LC4040L1200CU	36	14%	4	_	_	_	
225	12	24	_	I <i>—</i>	_	_	LW1224L1225CU	29	141/4	41/2
225	42	42	LC4242L1225CU	39	14%	4	LW4242L1225CU	42	141/4	41/2

①100-225A only.

² Standard package quantity equal to 1.

[®] Dimensions shown are representative of outside box length, width & depth $(\pm \ \%'')$ 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.

Hub provision only. Closure plate included. Panels through 225A require HS type hub; panels over 225A require HV type hub. See accessories page 1-44 for hub selection.

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

[®] Units manufactured after April 10, 2014 are UL listed for Siemens and Murray Breakers

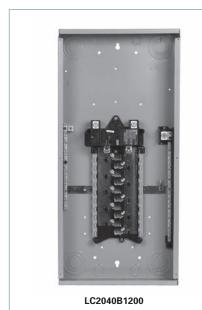
Heights shown are for Series A. Original series heights are listed on page 1-19.

LOAD CENTERS & CIRCUIT BREAKERS

Revised on 11/01/17

Rock Solid Load Centers®

Main Breaker, 1Ø, 22,000 AIC^①



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.

10, 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		Internal or Remote
Short Circuit	Load Center	Main or Feeder
Current Rating®	Main Rating	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	MQL ³⁴
	150/200/225A	MQL@4
65,000 AIC	100/125A	MP-MT, MPP-MT ³
	150/200/225A	MPP-MT [®]
100,000 AIC	100/125A	100A, 300V AC, Class "T" Fuse [®]
100,000 AIC	150/200/225A	200A, 300V AC, Class "T" Fuse [®]

12-42 Circuit, 100-200 Amperes

Amps	No. of	Max.	Catalog Number	Dimensio	ns ^⑤		Outdoor Type 3R®®	Dimens	Dimensions ^⑤	
Max.	Spaces	Circuit	Indoor Type 1 ^⑦	Height [®]	Width	Depth	Catalog Number	Height	Width	Depth
100	12	24	LC1224B1100	18	14%	4	LW1224B1100	23	141/4	41/2
100	16	32	_	l—	_	l —	LW1632B1100	23	141/4	41/2
100	20	40	LC2040B1100	21	14%	4	-	l —	_	_
100	24	40	LC2440B1100	24	14%	4	-	l —	_	_
100	30	40	LC3040B1100	30	14%	4	-	l —	_	_
150	16	32	LC1632B1150	24	14%	4	<u> </u>	_	_	_
150	20	40	LC2040B1150	30	14%	4	LW2040B1150	29	141/4	41/2
150	24	40	LC2440B1150	30	14%	4	-	l —	_	_
150	30	40	LC3040B1150	36	14%	4	-	l —	_	_
200	12	24	_	—	_	I—	LW1224B1200	29	141/4	41/2
200	16	32	LC1632B1200	24	14%	4	-	l —	_	_
200	20	40	LC2040B1200	30	14%	4	LW2040B1200	29	141/4	41/2
200	24	40	LC2440B1200	30	14%	4	-	l —	_	_
200	30	40	LC3040B1200	36	14%	4	LW3040B1200	38	141/4	41/2
200	40	40	LC4040B1200	36	14%	4	LW4040B1200	38	141/4	41/2
200	30	54	LC3054B1200	36	14%	4	-	_	_	_
200	40	40	LC4040B1200	36	14%	4	-	_	_	_
200	40	60	LC4060B1200	36	14%	4	-	_		-

Copper Bus®

Amps	No. of	Max.	Indoor Type 1®	Di	mensions	(5)
Max.	Spaces	Circuit	Catalog Number	Height [®]	Width	Depth
100	20	40	LC2040B1100CU	21	14%	4
200	20	40	LC2040B1200CU	30	14%	4
200	30	40	LC3040B1200CU	36	14%	4
200	40	40	LC4040B1200CU	36	14%	4

① 100-225A only.

This 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

[©]Types 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 (±%") and do not include allowance for mounting bumps, endwalls, hubs or hardware protrusions. Allow approximately 1%" additional in length and width dimensions for surface or combination overhang. Consult factory for specific details if required.

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

Standard package quantity equal to 1.

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

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

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

Electricenter Accessories

_

LOAD CENTERS & IRCUIT BREAKERS

Hubs



Backfed Main Breaker Hold Down Kits



Miscellaneous





Main Breaker Kits





Lug Kits

Ground Bars and Insulated Neutral Kits



Catalog Number	Description	Pack Quanity
ECHS075	3/4" Hub	10
ECHS100	1" Hub	10
ECHS125	11/4" Hub	10
ECHS150	11/2" Hub	10
ECHS200	2" Hub	10
ECHS250	21/2" Hub	10

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

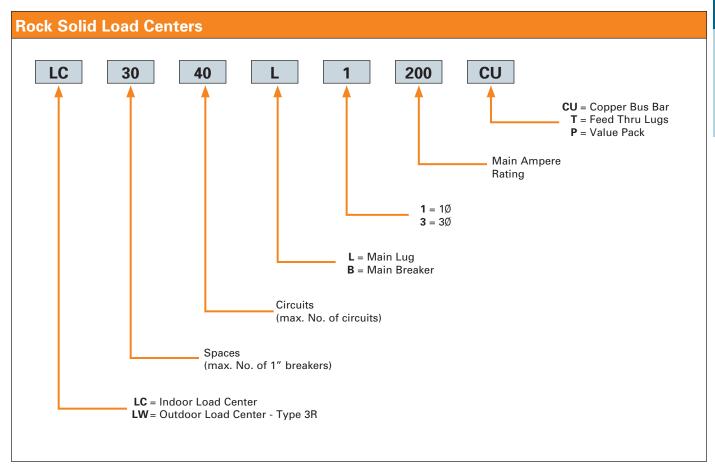
Catalog Number	Description	Pack Quanity
ECQFL2	Door lock for Rock Solid Load Centers	10
ECQF3	Filler plate (1")	10
ECMBF125	Filler plate for main breaker opening on 100– 125A Rock Solid Load Centers. Use two QF3 filler plates for 150–225A load centers	25
LX077SF	Flush installation cover for 400A panels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

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

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

Catalog Number	Description	Pack Quanity
ECLX068M	4 small terminals—15/8" long	10
ECLX069M	5 small and 2 large terminals—3" long	10
ECLX071M	8 small and 3 large terminals—31/2" long	10
ECLX072M	11 small and 4 large terminals—45/8" long	10
ECLX073M	14 small amd 5 large terminals—53/4" long	10
ECLX074M	17 small amd 6 large terminals—7" long	10
ECLX075M	ECLX075M 21 small amd 7 large terminals—8" long	
ECINSNB27	ECINSNB27 Insulated neutral bar with 27 positions	
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

Catalog Number Logic



Lug Data

Amps	Phase	Wire Range ^① 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 Range ^① 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 kcmil ²	(1or2)3/0-250 kcmil
		(2)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 kcmil ²	
		(2)3/0-250 kcmil	

2 500 kcmil must be top side entry.

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.

Murray Load Centers



Cross References

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

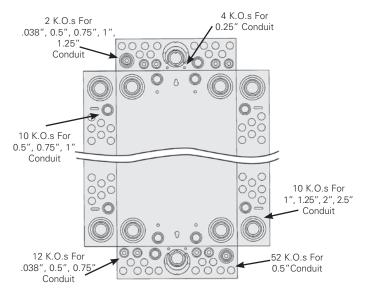
	Height	
Load Center	Original	Series A
LC1224B1100	18	18
LC1224L1125	21	18
LC1224L1125P	21	18
LC1632B1150	24	24
LC1632B1200	30	24
LC1632L1125	21	21
LC1632L1150	24	24
LC2040B1100	24	21
LC2040B1100CU	24	21
LC2040B1100P	24	21
LC2040B1150	30	30
LC2040B1200	30	30
LC2040B1200CU	30	30
LC2040B1200P	30	30
LC2040L1125	24	21
LC2040L1125CU	24	21
LC2040L1200	30	24
LC2040L1200CU	30	24
LC2440B1100	24	24
LC2440B1150	30	30
LC2440B1200	30	30
LC2440L1150 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

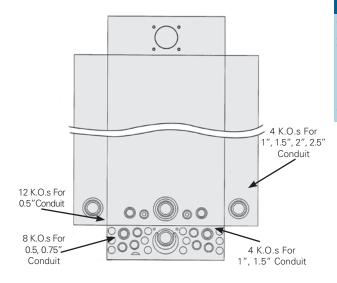


Rock Solid Load Centers (including Generator Ready)

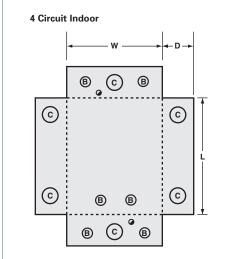
Indoor Main Breaker and Main Lug Enclosures

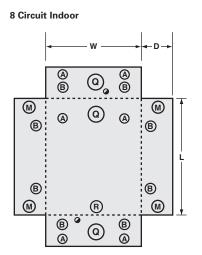
Outdoor Main Breaker and Main Lug Enclosures

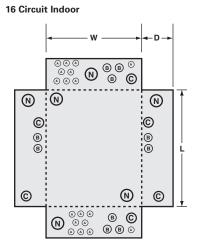




K.O. dimensions refer to conduit trade size, not actual diameter.



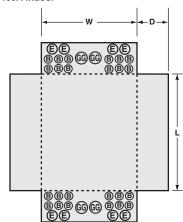




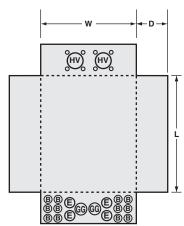
Knockout Code—Conduit Sizes

● = ¼ A = ½ B = ½, ¾ C = ½, ¾, 1 D = ½, 1 E = ½, ¾, 1, 1½ 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 P = 1, 1¼, 1½, 2 R = 1, 1¼, 1½, 2	FF = 2½, 3

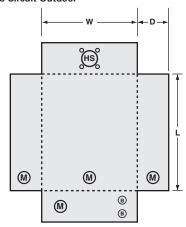




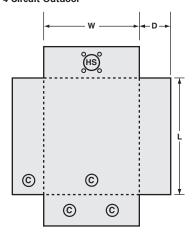
400A Outdoor



8 Circuit Outdoor



4 Circuit Outdoor



Knockout Code—Conduit Sizes

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

Arc-Fault Circuit Interrupters (AFCI)

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

Combination Type AFCI®

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		MPA115AFCH■ ^① MPA120AFCH■ ^①	MPA115AFCHH MPA120AFCHH
MP-AT2/MP-HAT2 2-Pole 120/240V AC	15 20	MP215AFC ^① MP220AFC ^①	MP215AFCH■① MP220AFCH■①	_

Branch-Feeder AFCI

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

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	15	MP115DF	MP115DFH	MP115DFM
1-Pole 120V AC	20	MP120DF	MP120DFH	MP120DFM
1-FOIE 120V AC				

Ground Fault Interrupters and Protection

Ground-Fault Circuit Interrupters (Class A - 5mA)[®]

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/	15	MP115GFA	MP115GFAH■
MP-HGT	20	MP120GFA	MP120GFAH■
1-Pole	25	MP125GFA	MP125GFAH■
120V AC	30	MP130GFA	MP130GFAH■
	15	MP215GFA	MP215GFAP■
MP-GT/	20	MP220GFA	MP220GFAP■
MP-HGT	30	MP230GFA	MP230GFAP■
2-Pole ^①	40	MP240GFA	MP240GFAP■
120/240V	50	MP250GFA	MP250GFAP■
AC	60	MP260GFA	MP260GFAP■

Ground Fault Equipment Protection (30mA)[®]

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	MP115EG ^① MP120EG ^① MP130EG	MP115EGH ■① MP120EGH ■① MP130EGH ■
MP-ET/ MP-HET 2-Pole ^① 120/240V AC	15 20 30 40 50	MP215EG MP220EG MP230EG MP240EG MP250EG MP260EG	MP215EGH ■ MP220EGH ■ MP230EGH ■ MP240EGH ■ MP250EGH ■ MP260EGH ■

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. ①Not UL Listed as SWD Rated. 

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

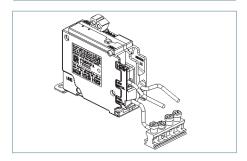


1-Pole Combination Type AFCI

2-Pole Combination Type AFCI







Full Size (1" per Pole) with INSTA-WIRE

	Type MP-T ^①	Type MP-HT	Type MP-MT	
Continuous Current	10,000A IR	22,000A IR	65,000A IR	
Rating @ 40° C	Catalog Number	Catalog Number	Catalog Number	
1-Pole Plug-In (120	0/240V AC) ^⑤			
10	MP110	_	<u> </u>	
15	MP115 ⁴	MP115KH ⁴	MP115KM■ ^④	
20	MP120 ⁴	MP120KH ⁴	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) [©]				
15	MP215	MP215KH	MP215KM■	
20	MP220	MP220KH	MP220KM■	
25	MP225	MP225KH■	MP225KM■	

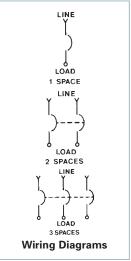
2-Pole Plug-I	n (Common-Trip 12	20/240V AC) [©]		
15	MP215	MP215KH	MP215KM■	Т
20	MP220	MP220KH	MP220KM■	
25	MP225	MP225KH■	MP225KM■	
30	MP230	MP230KH	MP230KM■	
35	MP235	MP235KH■	MP235KM■	
40	MP240	MP240KH	MP240KM■	
45	MP245	MP245KH■	MP245KM■	
50	MP250	MP250KH	MP250KM■	
60	MP260	MP260KH	MP260KM■	
70	MP270	MP270KH■	MP270KM■	
80	MP280	MP280KH■	<u> </u>	
90	MP290	MP290KH■	MP290KM■	
100	MP2100	MP2100KH	MP2100KM	
110	MP2110	MP2110KH	MP2110KM■	
125	MP2125	MP2125KH	MP2125KM	
2-Pole Plug-l	n (Common-Trip 24	10V AC)36		

2-Pole Plug-In (Common-Trip 240V AC) ³⁶					
15	MPH215	_	<u> </u>		
20	MPH220	-	-		
30	MPH230	-	-		
40	MPH240■	-	-		
50	MPH250	-	<u> </u>		
60	MPH260	-	<u> </u>		
70	MPH270■	-	<u> </u>		
100	MPH2100■	-	-		

3-Pole Plua-In (C	ommon-Trip 240	OV ACI®

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■	<u> </u>		
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



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

Description	Catalog Number	Field/Factory Installed
120V Shunt Trip	add suffixST■	Factory
24V Shunt Trip	add suffixST24V■	Factory
120V Auxiliary Switch	add suffixAS■ ^②	Factory

Modifications

Description	Catalog Number
400Hz Calibration	add suffixY ®
Marine 50° C Ambient Calibration	add suffixM
Fungus Proofing	add suffixF

For external accessories please refer to page 1-47.

[■] 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.

^{© 1}A and 1B contacts.

© UL Listed for use on 3 phase grounded "B" systems — 10,000 for this application.

© UL Listed for frequent switching applications (SWD).

© Shipped 12 per sleeve.

[©] Shipped 6 per sleeve. © Shipped 4 per sleeve. © UL Listed 5KA IR. © Not UL Listed. © 1 & 2 Poles only.

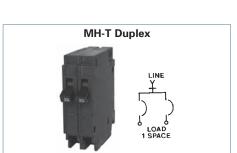
Duplex, Triplex and Quadplex Plug-in Breakers

Duplex Circuit Breakers

Breaker Type	Ampere Rating	Catalog Number	Catalog Number
MH-T	15–15	MP1515	MP1515N _①
1-Pole	15-20	MP1520	MP1520N■①
10K AIC	20-20	MP2020	MP2020N _①
120V AC	20-30	MP2030	MP2030N■ _①
	15-30	MP3015■	MP3015N■ _①
	30-30	MP3030	MP3030N■ _①
	SHIPPING: 12 p	er carton, (Wt. 4.8 lbs.)	

Triplex Circuit Breakers

	Ampere Rating		
Breaker Type	Single Pole	Common-Trip 2-Pole	Catalog Number
MH-T	15	15	MP21515
2-Pole	15	20	MP22015
10K AIC	15	25	MP22515■
120/240V AC	15	30	MP23015
Inner Poles	15	35	MP23515■
Common Trip. Outter Poles	15	40	MP24015
1 Pole Units	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 carto	on, (Wt. 4.9 lbs.)	-



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.



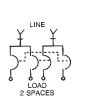
These space saver triplex breakers provide a 2-pole common trip breaker for 120/240V AC circuits and two single poles for 120V AC circuits. Triplex require two panel spaces. HACR rated.

MH-T Quadplex

Quadplex Circuit Breakers

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

For external accessories please refer to page 1-47.



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.

[■] 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 circuits[®].

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	(2) 15	MSA1515SPD	SPD
1- Pole			
120/240V AC	(0) 00	MSA2020SPD	SPD
10K AIC	(2) 20	IVISAZUZUSPD	350

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



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



Special Application Breakers

HID Lighting

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

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

Molded Case Switch

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

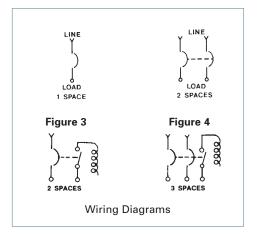
MP-T 2-Pole 240V AC Plug-In	Figure 2	30 60	MP260NA MP230NA
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Switched Neutrals

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





■ 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.

1-61

MURRAY

Type MSQ, 3/4 Inch Plug-In Breakers

Features

- 3/4" format.
- · HACR Rated.
- UL Classified for use in certain Square D[®] 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.

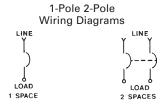
The circuit breakers are UL Classified and UL Listed.

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 D[®] loadcenters in place of Square D[®] 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 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 Murray Type MSQ 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 Murray sales engineer.







Continuous	1-Pole	2-Pole	
Current Rating	120V	120/240V Common Trip	
@ 40°C	Catalog Number	Catalog Number	
15	MQ115 ^①	MQ215	
20	MQ120 ^①	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 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	

①UL Listed for frequent switching applications (SWD). 120V

AC Fluorescent Lighting. One or two load conductors.

Square D is a registered trademark of Schneider Electric.



Main and Branch Circuit Breakers^①

Breaker Type	Ampere Rating	Catalog Number	Catalog Number ^{②④}	UL Interrupting Ratings (kA)
MD-T [®]	150	MPD2150	MPD2150R	10
2-Pole	175	MPD2175■	MPD2175R■	10
120/240V AC	200	MPD2200	MPD2200R	10
MD-HT ³	150	MPD2150KH	MPD2150RH	22
2-Pole	175	MPD2175KH■	MPD2175RH■	22
120/240V AC	200	MPD2200KH	MPD2200RH	22
MD-MT [®]	150	MPD2150KM	MPD2150RM	65
2-Pole	175	MPD2175KM■	MPD2175RM■	65
120/240V AC	200	MPD2200KM	MPD2200RM	65

Breaker Type	Ampere Rating	Catalog Number	UL Interrupting Ratings (kA)
M1 ^⑤ 2-Pole	100	MBK100M [®]	22
120/240V AC	125	MBK125M [®]	22
	150	MBK150M [®]	22
M2 [®]	175	MBK175M [®]	22
2-Pole 120/240V AC	200	MBK200M [®]	22
,	225	MBK225M [®]	22

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

Daniel Toma	Ampere	O-4-I Novebar	UL Interrupting
Breaker Type	Rating	Catalog Number	Ratings (kA)
	125	MPP2125	10
MPP [®]	150	MPP2150	10
2-Pole	175	MPP2175■	10
120/240V AC	200	MPP2200	10
	225	MPP2225	10
	125	MPP2125KH	22
MPP-HT®	150	MPP2150KH	22
2-Pole	175	MPP2175KH■	22
120/240V AC	200	MPP2200KH	22
	225	MPP2225KH■	22
	125		
MPP-MT®	150		
2-Pole	175	Obsolete	
120/240V AC	200		
	225		
	100		
MPP-PT®	125		
2-Pole	150	Obsolete	
120/240V AC	175	Onsolete	
	200		
	225		



MD-T, MD-HT, MD-TR, MD-HTR, MD-MT® MD-MTR®







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

 All circuit breakers on this page are common trip.

 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.
- Requires 6 spaces due to cross over design.
- @ 4-poles wide for use with 200A modular and Uni-Pak
- whetering

 For use with breaker types MD-T(R), MD-HT(R), MD-MT(R)

 MD-MT(R)

 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.
- MBK100M for use with 100A and 125A Rock Solid load centers only. MBK125M for use with 125A Rock Solid load centers only.
 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
De die elde e Deede e			
Padlocking Device For locking breaker in "OF	F" position. Note "ON" position does not affect breaker fuction	onally	
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
ECQLN3 ²	150-225 M2, MD-T	n/a	1 Piece
ECQTH4	Type MP-T, BL, BQH	Designed for (3) 1P Breakers	1 Piece
ECQTH2 ECQTH3	Type MH-T Duplex Type MP-T, BL	Designed for (2) QT Duplex Breakers 2P	25 Pieces 50 Pieces
ECQTH3	Type MP-T, BL	2P	50 Pieces
Mechanical Interlock ^①			
ECQML12	Type MP-T, Interlock Bracket	Designed for 1" Breaker	10 Pieces
Handle Blocking Device For holding breaker in "ON	N" 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			1
I0204ML1125CU	Type MP-T, Back Mounting Plates	1P, 2P	10 Pieces
10303ML3100CU	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 inter-

lock kits, see the Standby Generator Section XXXX

② For use with Murray Rock Solid Center Main Breakers

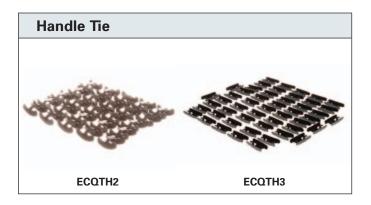
³ Not suitable for use on 15-50A, 10 AIC Type MP-T Circuit Breakers

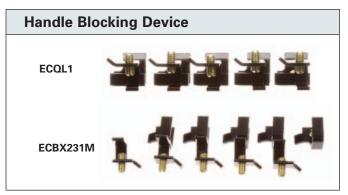
MP-T Type includes MP-HT, MP-MT
 MP-AT2 Type includes MP-HAT2

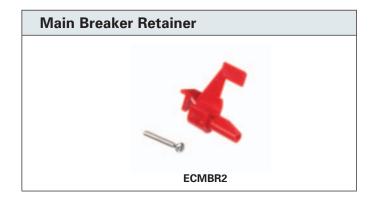
MP-GT Type includes MP-HGTMP-ET Type includes MP-HET

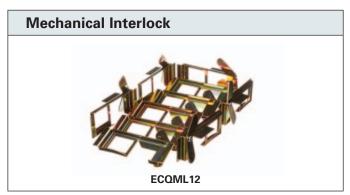
Circuit Breaker Accessories



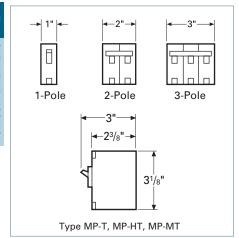


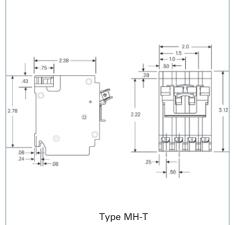


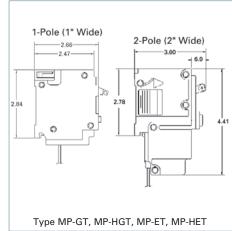


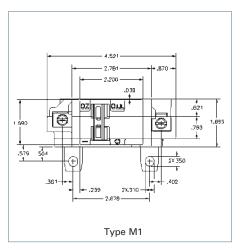


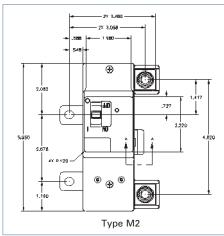
Line Diagrams

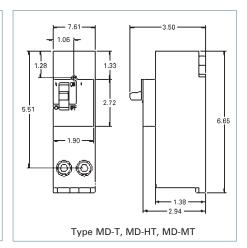


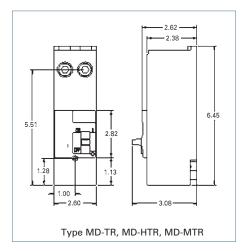


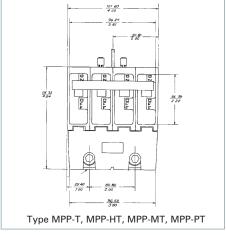














Lug Data

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	#14-#6 AWG Cu #14-#6 AWG Al
	40–50	1 1	#8–#6 AWG Cu #8–#4 AWG AI
	55–125 (exception: 1 & 2-pole MP-T at 55-60)	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)
МН-Т	15–35	1 1	#14-#6 AWG Cu #14-#6 AWG Al
	40	1	#8 AWG CU-AI
	40–50	1 1	#8-#6 AWG Cu #8-#4 AWG AI
MP-GT, MP-HGT, MP-ET, MP-HET BLF, BLHF, BLE, BLEH	15–30	1 1	#14–#10 AWG Cu #12–#8 AWG AI
5L1 , 5L111 , 5LL , 5LL 11	40–60	1 1	#8-#6 AWG Cu #8-#4 AWG AI
MP-AT2, MP-HAT, BAF, BAFH	15–20	1 1	#14–#12 AWG Cu #12–#10 AWG AI
MSQ	15–20	2	#14-#10 AWG Cu only
	15–20	1 1	#14-#12 AWG Cu #12-#10 AWG AI
	25–35	1 1	#10-#8 AWG Cu #10-#6 AWG AI
	40–60	1 1	#8-#6 AWG Cu #8-#4 AWG AI
MD-T, MD-HT, MD-MT, MD-PT, MD-TR, MD-HTR, MD-MTR, MD-PTR	150–200	1	#1–300kcmil Cu-Al
M1		1	#4-3/0 AWG Cu #4-3/0 AWG AI
	100	1	#4-3/0 AWG Cu #4-3/0 AWG AI
	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 AI
	150	1 1	#1/0 AWG Cu #3/0 AWG AI
	175	1	#2/0 AWG Cu #4/0 AWG AI
	200	1	#3/0 AWG Cu 250kcmil AWG Al
	225	1	#4/0 AWG Cu 300kcmil AWG AI
MQ, MQH, MQL	60–225	1	#6–300kcmil Cu #4–300kcmil Al