
CANADIAN CATALOG | JANUARY 2018

SENTRICITY™ Loadcentres and Circuit Breakers

Raising the standard in residential.



Your home has a power like no other.

The power to comfort us, keep us safe and give us peace of mind. A power only true if the loadcentre solution can do the same.

That's why ABB, the inventor of the resettable circuit breaker, has brought its world-class brand of electrical innovation to the residential marketing with **SENTRICITY™ Loadcentres and Circuit Breakers.**



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Residential solution

Your home has a power like no other.

The power to comfort us, keep us safe and give us peace of mind. A power only true if the loadcentre solution can do the same. That's why ABB, the inventor of the resettable circuit breaker, has brought its global brand of electrical innovation to the residential market with our new SENCITY™ Loadcentres and Circuit Breakers.

For SENCITY™, ABB has combined our components with premium features to create a residential product that's anything but standard. SENCITY™ delivers greater value to contractors, distributors, homebuilders, and homeowners alike.

For superior safety and quality you can depend on, turn to SENCITY™ Loadcentres and Circuit Breakers and ABB.

We know the power of home.



SENTRICITY™

Faster. Easier. Safer. Better.



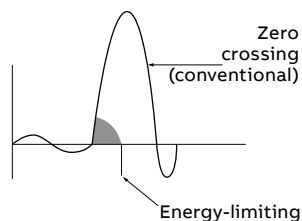
Superior safety you can see.

Like a 24-hour sentry, SENTRICITY™ Loadcentres and Circuit Breakers protect electrical circuits with energy-limiting technology. The SENTRICITY™ residential solution includes the loadcentre, Miniature Circuit Breakers (MCBs), Ground Fault Circuit Interrupters (GFCIs), Combination Arc Fault Circuit Interrupters (AFCIs), and Surge Protective Devices (SPDs). The SENTRICITY™ residential solution also includes LED lights on its AFCIs and GFCIs to indicate proper function. Also included is a visual trip indicator on its MCBs, usually only found on

Why energy-limiting technology?

premium units.

Energy-limiting technology interrupts the circuit up to three times faster than conventional circuit breaker technology. This limits the intensity of the short circuit and reduces the likelihood of collateral damage.



Faster, easier installation.

ABB, along with electrical contractors, designed the SENTRICITY™ Loadcentres and Circuit Breakers for faster and easier installation. Smart features—including keyhole mounting slots and simplified plug-on neutral AFCIs, GFCIs, and SPDs that eliminate pigtails—help streamline every job. Even more remarkable, SENTRICITY™ includes self-testing AFCIs and GFCIs. AFCI trip diagnostics makes it easy to determine the cause of the AFCI interruption.

Why ABB?

ABB has long been known as a pioneering technology leader. ABB's Hugo Stotz invented the resettable circuit breaker in 1923. We continue to be a leader of circuit protection innovation. Today, we offer electrical innovations that drive efficiency, safety, and productivity for utility, industry, transportation and infrastructure customers around the world.

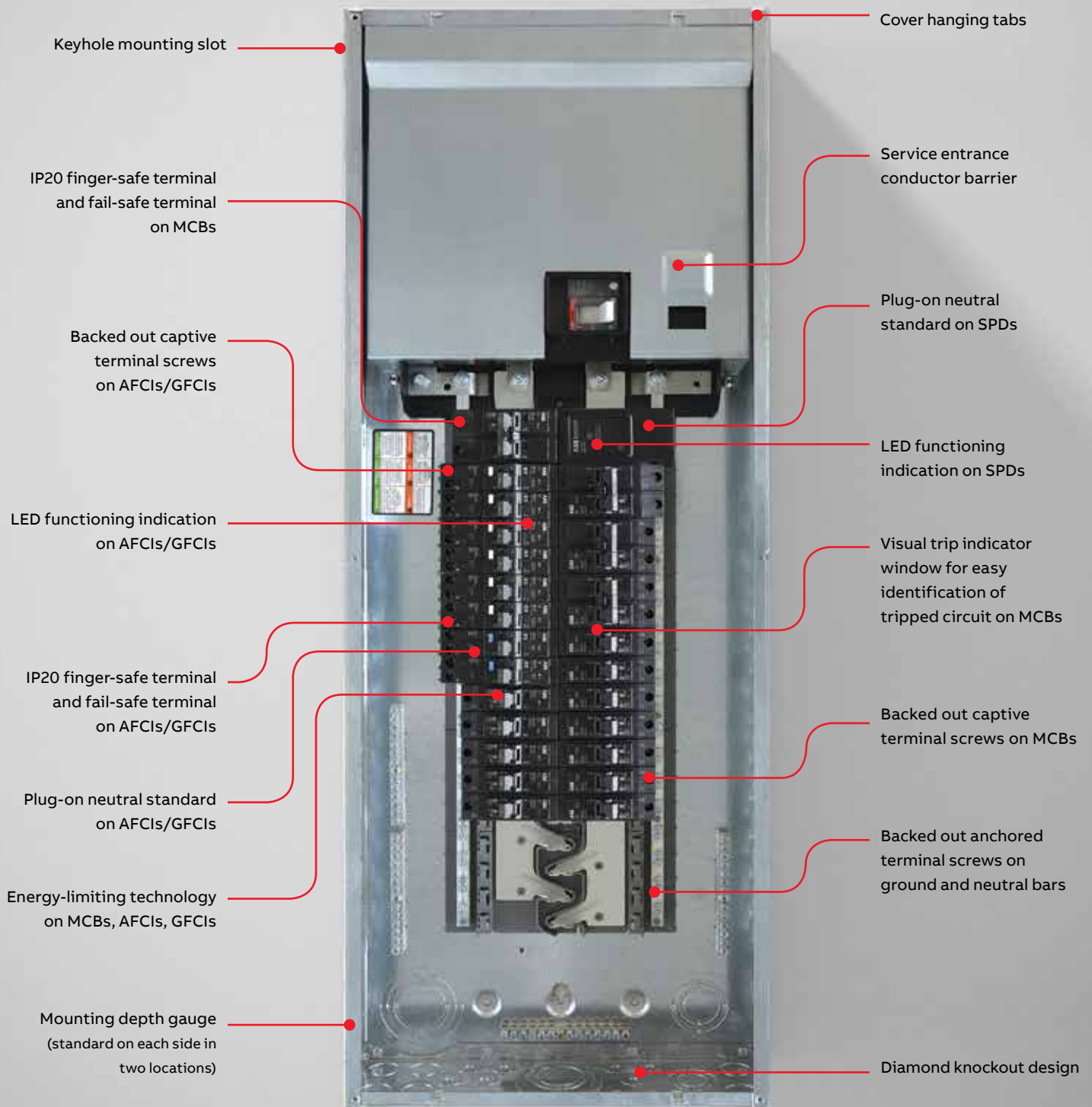
SENTRICITY™

Loadcentres and Circuit Breakers advantages

Features	Benefits
Energy-limiting technology for MCBs, AFCIs, GFCIs	Fastest short circuit interruptions in the industry
LED functioning indication on AFCIs, GFCIs, SPDs	Ensures operational functionality
Fail-safe terminals on MCBs, AFCIs, GFCIs	Helps ensure wire is fed properly into the terminal
Multi-trip indication on AFCIs	Easier troubleshooting cause of trip
Plug-on neutral standard on AFCIs, GFCIs, SPDs	Quicker installation and maximizes wire gutter space
Captive terminal screws on MCBs, AFCIs, GFCIs	Prevents terminal screws from backing/falling out
Keyhole mounting slots	Helps ensure proper flush installation
Diamond knockout design	Easy removal of knockout in flush application for addition of more circuits
IP20 finger-safe terminals on MCBs, AFCIs, GFCIs	Reduce opportunity for inadvertent shock
Backed out terminal screws on MCBs, AFCIs, GFCIs, neutral and ground bars	Eliminates up to 50% of work required for terminating wires
Visual trip indicator window on 1 inch MCBs.	Easy identification of tripped circuit
Cover hanging tabs	Allows hands-free cover screw installation

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Loadcentres and Circuit Breakers advantages



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Main lug type 1 indoor loadcentres


ABB, along with electrical contractors, designed the SENTRYCITY™ Loadcentres for faster and easier installation.

SENTRICITY™ Loadcentres deliver the best features available on the market into one standard offering.

Features:

- Service entrance rated
- Factory installed ground bar
- Keyhole mounting slots
- Diamond knockout design
- Backed out anchored terminal screws on ground and neutral bars
- Cover hanging tabs
- Galvanized enclosure, painted cover
- Main incoming lug
- CSA certified

Main lug fixed type 1 enclosure (indoor) - 22 kAIC SCCR; 120/240 Vac - 1Ø3W - CSA certified

	Mains rating	Max. nbr of circuits	Complete loadcentre (Enclosure, interior and cover) ¹ part number	Max. permissible main incoming wire size (Cu or Al)	Equipment ground bar kit (included)	Enclosure Width (in / mm)	Enclosure Height (in/mm)	Enclosure depth (in / mm)
	70 A	2	CSLC2L70TS ^{2,3}	1/0	Installed	5.00 / 127	10.25 / 261	3.25 / 83
	100 A	6	CSLC6L100PTS ^{2,3}	2/0	Installed	10.00 / 254	15.00 / 381	4.00 / 102
	125 A	6	CSLC6L125PTS ²	2/0	Installed	10.00 / 254	18.25 / 464	4.00 / 102
		8	CSLC8L125PTC (W)	2/0	Installed	14.25 / 362	16.06 / 408	3.94 / 100
		12	CSLC12L125PTC (W)	2/0	Installed	14.25 / 362	19.50 / 495	3.94 / 100
		20	CSLC20L125PTC (W)	2/0	Installed	14.25 / 362	23.50 / 597	3.94 / 100
		24	CSLC24L125PTC (W)	2/0	Installed	14.25 / 362	30.50 / 775	3.94 / 100
		32	CSLC32L125PTC (W)	2/0	Installed	14.25 / 362	30.50 / 775	3.94 / 100
	200 A	16	CSLC16L200PTC (W)	300 kcmil	Installed	14.25 / 362	30.50 / 775	3.94 / 100
		20	CSLC20L225PTC (W)	300 kcmil	Installed	14.25 / 362	30.50 / 775	3.94 / 100
	225 A	32	CSLC32L225PTC (W)	300 kcmil	Installed	14.25 / 362	35.50 / 902	3.94 / 100
		40	CSLC40L225PTC (W)	300 kcmil	Installed	14.25 / 362	39.50 / 1003	3.94 / 100

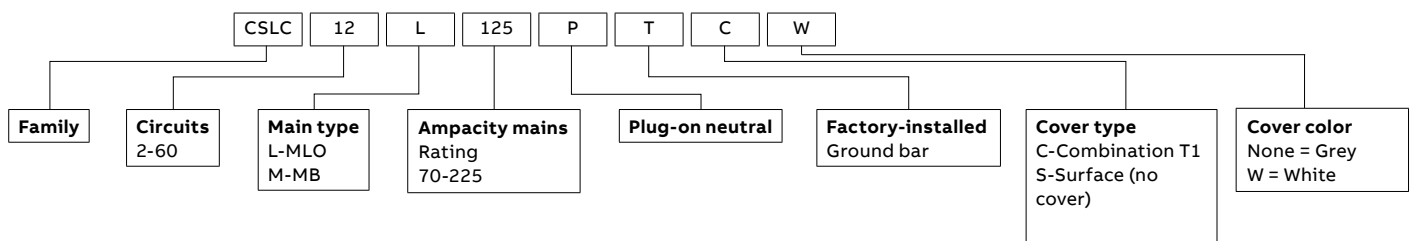
NOTE: The appropriate wire size must be chosen according to the current rating of the main or feeding breaker.

¹ C = Combination surface/flush, CW = Combination surface/flush white

² S = Surface, no door

³ Nominal current cannot exceed panel rating

Catalog number explanation



SENTRICITY™

Main circuit breaker type 1 indoor loadcentres

ABB, along with electrical contractors, designed the SENTRICITY™ Loadcentres for faster and easier installation.

SENTRICITY™ Loadcentres deliver the best features available on the market into one standard offering.

Features:

- Service entrance rated
- Factory installed ground bar
- Keyhole mounting slots
- Diamond knockout design
- Backed out anchored terminal screws on ground and neutral bars
- Cover hanging tabs
- Galvanized enclosure, painted cover
- Main circuit breaker (factory installed)
- CSA certified

Main circuit breaker (factory installed) type 1 enclosure (indoor) - 22 kAIC SCCR; 120/240 Vac - 1Ø3W - CSA certified

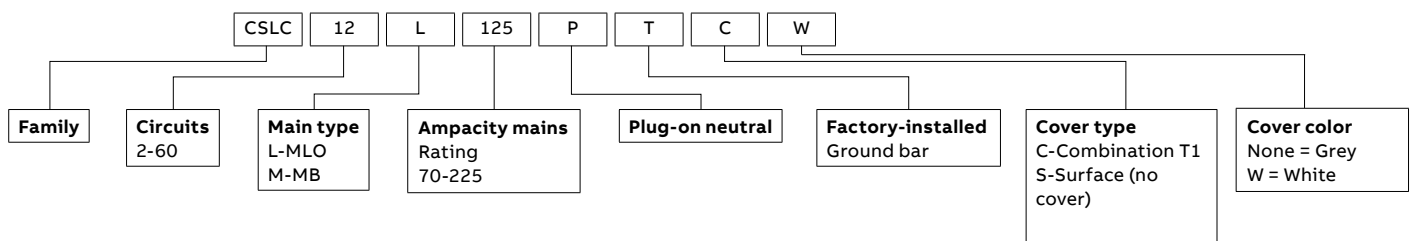


Mains rating	Max. nbr of circuits	Complete loadcentre (Enclosure, interior and cover) ¹ part number	Max. permissible main incoming wire size (Cu or Al)	Equipment ground bar kit (included)	Enclosure Width (in / mm)	Enclosure Height (in/mm)	Enclosure depth (in / mm)
100 A	8	CSLC8M100PTC (W)	2/0	Installed	14.25 / 362	19.50 / 495	3.94 / 100
	12	CSLC12M100PTC (W)	2/0	Installed	14.25 / 362	19.50 / 495	3.94 / 100
	20	CSLC20M100PTC (W)	2/0	Installed	14.25 / 362	23.50 / 597	3.94 / 100
	24	CSLC24M100PTC (W)	2/0	Installed	14.25 / 362	30.50 / 775	3.94 / 100
	32	CSLC32M100PTC (W)	2/0	Installed	14.25 / 362	30.50 / 775	3.94 / 100
125 A	16	CSLC16M125PTC (W)	2/0	Installed	14.25 / 362	23.50 / 597	3.94 / 100
	24	CSLC24M125PTC (W)	2/0	Installed	14.25 / 362	30.50 / 775	3.94 / 100
	32	CSLC32M125PTC (W)	2/0	Installed	14.25 / 362	35.50 / 902	3.94 / 100
150 A	32	CSLC32M150PTC (W)	300 kcmil	Installed	14.25 / 362	35.50 / 902	3.94 / 100
	40	CSLC40M150PTC (W)	300 kcmil	Installed	14.25 / 362	39.50 / 1003	3.94 / 100
200 A	20	CSLC20M200PTC (W)	300 kcmil	Installed	14.25 / 362	30.50 / 775	3.94 / 100
	32	CSLC32M200PTC (W)	300 kcmil	Installed	14.25 / 362	35.50 / 902	3.94 / 100
	40	CSLC40M200PTC (W)	300 kcmil	Installed	14.25 / 362	39.50 / 1003	3.94 / 100
	60	CSLC60M200PTC (W)	300 kcmil	Installed	14.25 / 362	51.50 / 1308	3.94 / 100
225 A	44	CSLC44M225PTC (W)	300 kcmil	Installed	14.25 / 362	43.50 / 1105	3.94 / 100

NOTE: The appropriate wire size must be chosen according to the current rating of the main or feeding breaker.

¹ C = Combination surface/flush, CW = Combination surface/flush white

Catalog number explanation



SENTRICITY™

Main lug type 3R outdoor loadcentres


ABB, along with electrical contractors, designed the SENTRICITY™ Loadcentres for faster and easier installation.

SENTRICITY™ Loadcentres deliver the best features available on the market into one standard offering.

Features:

- Service entrance rated
- Factory installed ground bar
- Keyhole mounting slots
- Diamond knockout design
- Backed out anchored terminal screws on ground and neutral bars
- Cover hanging tabs
- Galvanized enclosure, painted cover
- Main incoming lug
- CSA certified

Main lug fixed type 3R enclosure (outdoor) - 22 kAIC SCCR; 120/240 Vac - 1Ø3W - CSA certified

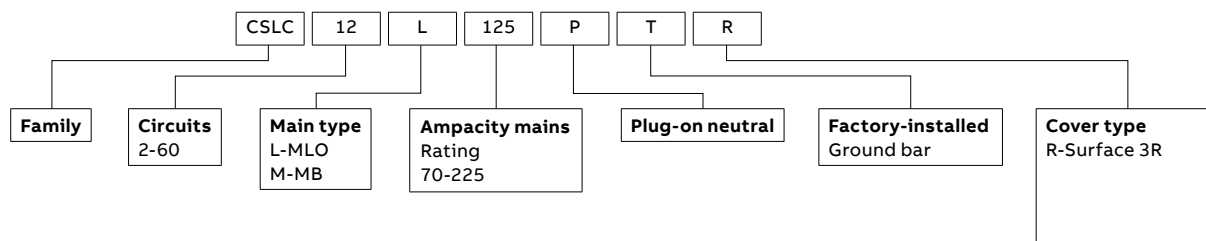
	Mains rating	Max. nbr of circuits	Complete loadcentre (Enclosure, interior and cover) ¹ part number	Max. permissible main incoming wire size (Cu or Al)	Equipment ground bar kit (included)	Enclosure Width (in / mm)	Enclosure Height (in/mm)	Enclosure depth (in / mm)
	70 A	2	CSLC2L70TR ²	1/0	Installed	5.00 / 127	10.31 / 262	4.06 / 103
		12	CSLC12L125PTR	2/0	Installed	14.25 / 362	20.00 / 508	4.50 / 114
	125 A	20	CSLC20L125PTR	2/0	Installed	14.25 / 362	26.50 / 673	4.50 / 114
		24	CSLC24L125PTR	2/0	Installed	14.25 / 362	26.50 / 673	4.50 / 114
	225 A	20	CSLC20L225PTR	300 kcmil	Installed	14.25 / 362	30.50 / 775	4.50 / 114
		32	CSLC32L225PTR	300 kcmil	Installed	14.25 / 362	35.50 / 902	4.50 / 114
		40	CSLC40L225PTR	300 kcmil	Installed	14.25 / 362	39.50 / 1003	4.50 / 114

NOTE: The appropriate wire size must be chosen according to the current rating of the main or feeding breaker.

¹ R = Type 3R surface mount

² Nominal current cannot exceed panel rating

Catalog number explanation



SENTRICITY™

Main circuit breaker type 3R outdoor loadcentres


ABB, along with electrical contractors, designed the SENTRICITY™ Loadcentres for faster and easier installation.

SENTRICITY™ Loadcentres deliver the best features available on the market into one standard offering.

Features:

- Service entrance rated
- Factory installed ground bar
- Keyhole mounting slots
- Diamond knockout design
- Backed out anchored terminal screws on ground and neutral bars
- Cover hanging tabs
- Galvanized enclosure, painted cover
- Main circuit breaker (factory installed)
- CSA certified

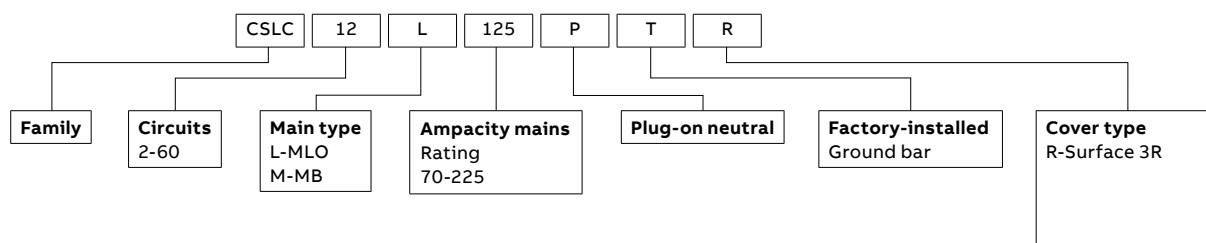
Main circuit breaker (factory installed) type 3R enclosure (outdoor) - 22 kAIC SCCR; 120/240 Vac - 1Ø3W - CSA certified

	Mains rating	Max. nbr of circuits	Complete loadcentre (Enclosure, interior and cover) ¹	Max. permissible main incoming wire size (Cu or Al)	Equipment ground bar kit (included)	Enclosure Width (in / mm)	Enclosure Height (in/mm)	Enclosure depth (in / mm)
150 A		32	CSLC32M150PTR	300 kcmil	Installed	14.25 / 362	35.50 / 902	4.50 / 114
		20	CSLC20M200PTR	300 kcmil	Installed	14.25 / 362	30.50 / 775	4.50 / 114
200 A		32	CSLC32M200PTR	300 kcmil	Installed	14.25 / 362	35.50 / 902	4.50 / 114
		40	CSLC40M200PTR	300 kcmil	Installed	14.25 / 362	39.50 / 1003	4.50 / 114

NOTE: The appropriate wire size must be chosen according to the current rating of the main or feeding breaker.

¹ R = Type 3R surface mount

Catalog number explanation



SENTRICITY™



Miniature circuit breakers devices

SENTRICITY™ Miniature Circuit Breakers use state-of-the-art energy-limiting technology to interrupt short circuits faster and safer. Energy-limiting technology interrupts the shorted circuit up to three times faster than conventional zero crossing circuit-breaker technology for more safety in your installation. The let-through energy is limited to less than 30% of other circuit breakers reducing the likelihood of collateral damage. Due to the fact that the breaker trips up to three times faster, the branch MCB trips before the main breaker. This selectivity will disconnect only the affected branch circuit not the entire installation.

Features:

- Energy-limiting technology
- Trip to mid-handle position
- Visual trip indicator window for easy tripped-state indication
- IP20 finger-safe terminal
- Fail-safe terminal
- Slot/Robertson combination terminal screws
- Backed out captive terminal screws
- Durable laser printing for easy product identification
- One lock out/tag out device
- 1 inch format
- UL and CSA listed

Miniature circuit breaker - 10 kAIC SCCR

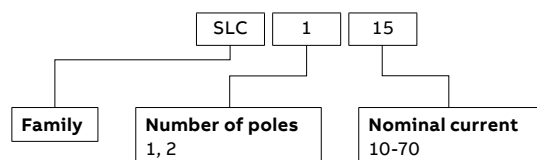
	No. of pole	Voltage rating	Device Width (in / mm)	Amp. rating	Part number
	1P	120 Vac	0.98 / 25.0	10 A	SLC110 ^{2,3}
				15 A	SLC115 ^{1,2,3}
				20 A	SLC120 ^{1,2,3}
				25 A	SLC125 ^{2,3}
				30 A	SLC130 ^{2,3}
				35 A	SLC135 ²
				40 A	SLC140 ²
				45 A	SLC145 ²
				50 A	SLC150 ²
				60 A	SLC160 ²
	2P Common Trip	120 / 240 Vac	1.97 / 50.0	10 A	SLC210 ²
				15 A	SLC215 ²
				20 A	SLC220 ²
				25 A	SLC225 ²
				30 A	SLC230 ²
				35 A	SLC235 ²
				40 A	SLC240 ²
				45 A	SLC245 ²
				50 A	SLC250 ²
				60 A	SLC260 ²
				70 A	SLC270 ²

¹ UL Listed as SWD (switching duty) rated. Suitable for switching 120 Vac fluorescent lighting loads.

² UL Listed as HACR type for use with air conditioning, heating and refrigeration equipment having motor group combinations and marked for use with HACR type circuit breakers.

³ Rated for up to two #10 CU wires.

Catalog number explanation



SENTRICITY™



Arc fault and ground fault devices (AFCI / GFCI)

SENTRICITY™ AFCI breakers will detect series and parallel arcs as well as overvoltage conditions. The GFCI breakers detect ground fault currents. These AFCI and GFCI breakers utilize the same energy-limiting technology as the MCB's. Plug-on neutral is standard for all AFCI and GFCI breakers which reduces the number of connections by up to 33% because there is no pigtail connection to be made to the neutral bar. The neutral connection is made by simply plugging the device on to the neutral bar.

Features:

- Energy-limiting technology
- Trip to mid-handle position
- LED functioning indication
- IP20 finger-safe terminal
- Fail-safe terminal
- LED indicator for troubleshooting three trip types (AFCI)
 - Series arc
 - Parallel arc
 - Overvoltage
- Fail-safe terminal
- Slot/Robertson combination terminal screws
- Backed out captive terminal screws
- One lock out/tag out device
- Self-test feature
- Plug-on neutral standard
- Durable laser printing for easy product identification
- UL and CSA listed

Arc fault and ground fault circuit breaker - 10 kAIC SCCR

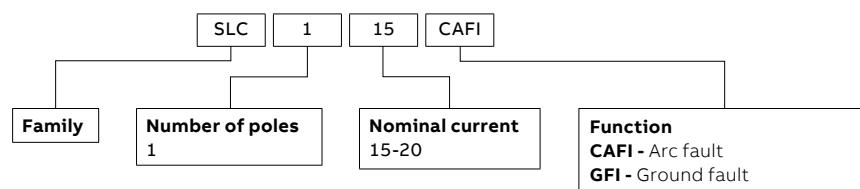
	Device	Voltage rating	Device Width (in / mm)	Amp. rating	Part number
	AFCI	120 Vac	0.98 / 25.0	15 A	SLC115CAFI ^{1,2,3}
				20 A	SLC120CAFI ^{1,2,3}
	GFCI	120 Vac	0.98 / 25.0	15 A	SLC115GFI ^{1,2,3}
				20 A	SLC120GFI ^{1,2,3}

¹ UL Listed as SWD (switching duty) rated. Suitable for switching 120 Vac fluorescent lighting loads.

² UL Listed as HACR type for use with air conditioning, heating and refrigeration equipment having motor group combinations and marked for use with HACR type circuit breakers.

³ Rated for up to two #10 CU wires.

Catalog number explanation




SENTRICITY™

Surge protective devices (SPD)

SENTRICITY™ SPDs also feature the plug-on neutral connection as standard on the CSLCPOSURGE, which eliminates the pigtail connection on the neutral bar and allows a faster installation.

- Features:**
- Plug-on neutral standard (CSLCPOSURGE)
 - Thermally protected metal oxide varistor technology
 - Up to 80 kA total surge current rating (SLCEXSURGE)
 - LED functioning indication
 - Excellent protection ratings (VPR) values of 500 V L-N and 900 V L-L
 - UL and cULus listed

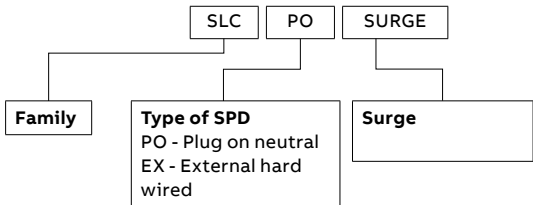
Surge protective devices



Device	Voltage rating	Installation	Surge rating / phase	Part number
SPD	120 / 240 Vac	Plug-on neutral 1ph/3W 2 spaces	50 kA	SLCPOSURGE
		External hard wired 1ph/3W +G 2 spaces ¹	80 kA	SLCEXSURGE

¹ To be wired with a 2p circuit breaker.


Catalog number explanation




SENTRICITY™

Accessories

Hubs

	Description	Conduit size (in)	Part number
	Bolt-on hubs for Type 3R enclosures	1	MH10X
		1 1/4	MH12X
		1 1/2	MH15
		2	MH20
		2 1/2	MH25

Ground bar

	Description	Nbr of circuits	Part number
	Ground bar kit	12 ccts	SLC12GBK

Neutral lug

	Description	Amp. rating	Part number
	Neutral lug kit	125 A	SLC125NLK
		200 A	SLC200NLK

Back fed kit

	Description	Nbr of circuits	Part number
	Back fed main retaining kit	6 ccts	SLC6BFMRK
		8 ccts +	SLC8BFMRK

Extra parts

	Description	Part number
	Door filler plate	SLCFP
	Breaker handle padlock attachment	SA1

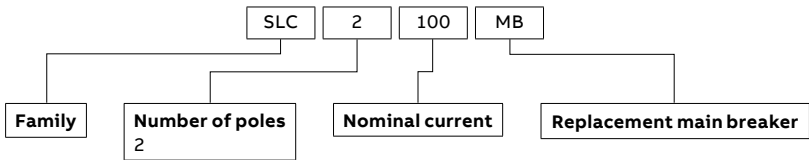


SENTRICITY™

Main breaker replacement kits

Main breaker replacement kits				
No. of pole	Voltage rating	Amp. rating	Part number	
2P	120 / 240 Vac	100 A	SLC2100MB	
		125 A	SLC2125MB	
		150 A	SLC2150MB	
		200 A	SLC2200MB	
		225 A	SLC2225MB	

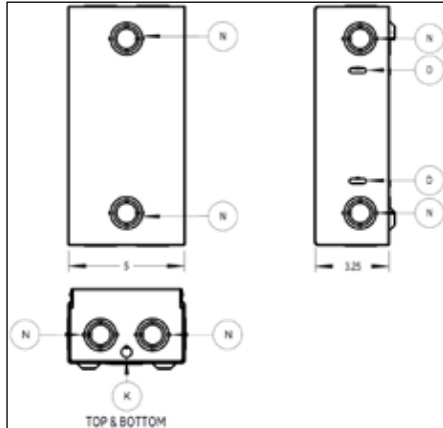
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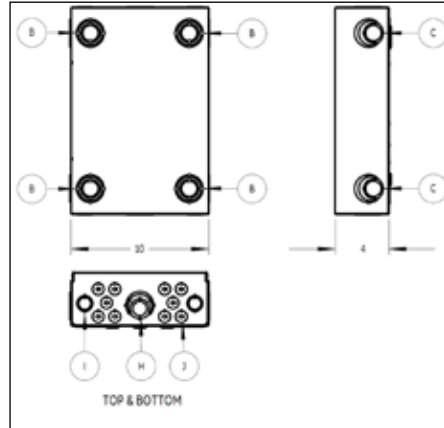
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Dimensions and knock-outs Type 1 enclosures

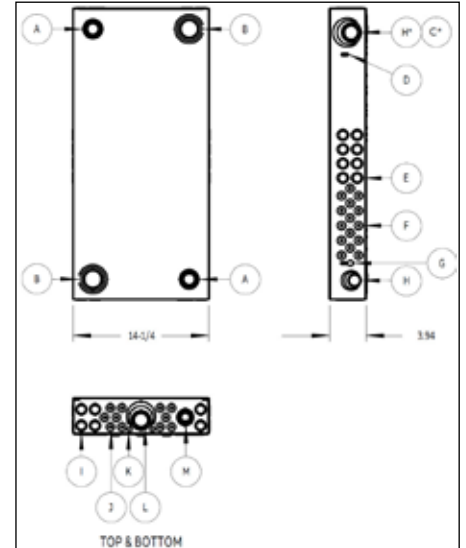
Drawing type 1



Drawing type 2 & 3



Drawing type 4 to 11



Drawing types

Enclosure part number	Drawing type
CSLC2L70TS	1
CSLC6L100PTS	2
CSLC6L125PTS	3
CSLC8L125PTC	4
CSLC12L125PTC	5
CSLC8M100PTC	
CSLC12M100PTC	6
CSLC20L125PTC	
CSLC20M100PTC	7
CSLC16M125PTC	
CSLC24L125PTC	
CSLC16L200PTC	
CSLC20L225PTC	
CSLC24M100PTC	8
CSLC32M100PTC	
CSLC24M125PTC	
CSLC20M200PTC	
CSLC32L125PTC	
CSLC32L225PTC	9
CSLC32M125PTC	
CSLC32M150PTC	
CSLC32M200PTC	
CSLC40L225PTC	10
CSLC40M150PTC	
CSLC40M200PTC	11
CSLC60M200PTC	
CSLC44M225PTC	

Type E and F knock-outs

Drawing type	Number of knock-outs E type	Number of knock-outs F type
4	-	15
5	2	9
6	4	9
7	4	15
8	4	15
9	6	18
10	9	27
11	6	21

Knock-out trade diameter

Knock-out type	Diameter (in)
A	Concentric: 3/4, 1, 1 1/4, 1 1/2
B	Concentric: 3/4, 1, 1 1/4, 1 1/2
C ¹	Tangential: 3/4, 1, 1 1/4, 1 1/2
D	Mounting slot
E	Concentric: 1/2, 3/4
F	Concentric (diamond): 1/2
G	Keyhole mounting slot
H ¹	Tangential: 3/4, 1, 1 1/4, 1 1/2
I	Concentric: 1/2, 3/4
J	Concentric (diamond): 1/2
K	0.450
L	Tangential: 1, 1 1/4, 1 1/2, 2, 2 1/2
M	Concentric: 1/2, 3/4, 1, 1 1/4
N	Concentric: 1/2, 3/4, 1

¹ "C" type knock-outs used on drawing type 4, 5 and 6.

"H" type knock-outs used on drawing type 7 to 11



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Dimensions and knock-outs Type 3R enclosures



Notes

Notes section with horizontal dotted lines for writing.

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