CANADIAN CATALOGUE

SENTRICITY®

Loadcentres and Circuit Breakers

- CSA certified loadcentres and devices
- Circuit breakers, GFCI, AFCI, DFCI, SPD
- Accessories and kits
- Easy codification of devices

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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SENTRICITY®
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 SENTRICITY® Loadcentres and Circuit Breakers.

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

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

We know the power of home.

SENTRICITY®

Faster. Easier. Safer. Better.

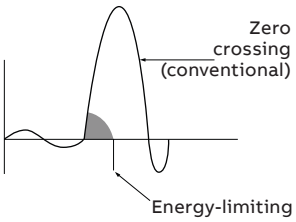
Superior safety you can see.

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 industrial MCBs.

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 GF-CIs. AFCI trip diagnostics makes it easy to determine the cause of the AFCI interruption.

Why ABB?

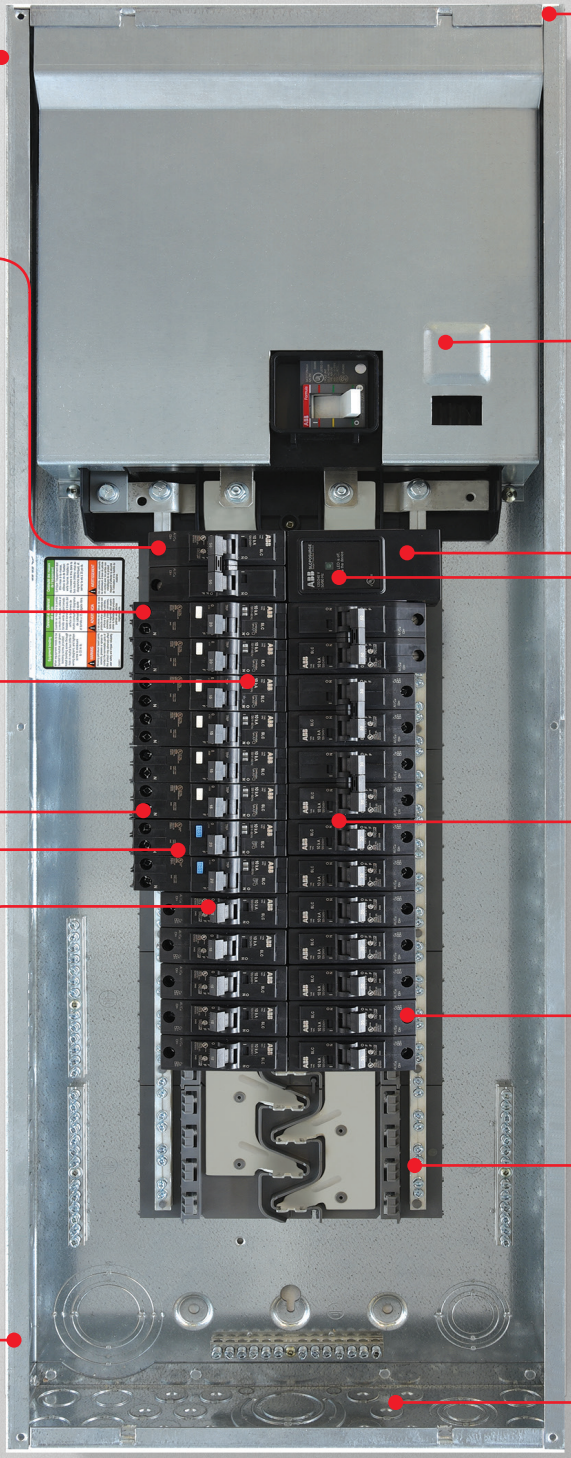
ABB has long been known as a pioneering technology leader. ABB's Hugo Stotz invented the resettable circuit breaker in 1923. We continue to be a leader of circuit protection innovation. Today, we offer electrical innovations that drive efficiency, safety, and productivity for utility, industry, transportation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

SENTRICITY®

Loadcentres and Circuit Breakers advantages



Keyhole mounting slot

IP20 finger-safe terminal and fail-safe terminal on MCBs

Backed out captive terminal screws on AFCIs/GFCIs

LED functioning indication on AFCIs/GFCIs

IP20 finger-safe terminal and fail-safe terminal on AFCIs/GFCIs

Plug-on neutral standard on AFCIs/GFCIs

Energy-limiting technology on MCBs, AFCIs, GFCIs

Mounting depth gauge (standard on each side in two locations)

Cover hanging tabs

Service entrance conductor barrier

Plug-on neutral standard on SPDs

LED functioning indication on SPDs

Visual trip indicator window for easy identification of tripped circuit on MCBs

Backed out captive terminal screws on MCBs

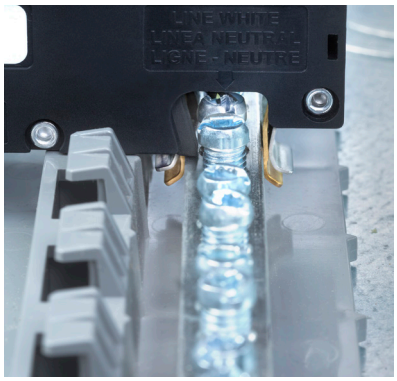
Backed out anchored terminal screws on ground and neutral bars

Diamond knockout design

Load Centre Selection

SENTRICITY®
Indoor type 1 load centres and features

ABB, along with electrical contractors, designed the perfect load centre for a faster and easier installation. The SENTRICITY® Load Centres deliver the best features available on the market into one standard offering



Neutral bar with backed-out and anchored screws

Eliminates up to 50% of work required for terminating wires. The anchored screws ensures that they will not fall during transportation of the enclosure.

Door cover hanging tabs

Allows hands-free cover screw installation.

Diamond knock-outs

Easy removal of knockout in flush application for addition of more circuits

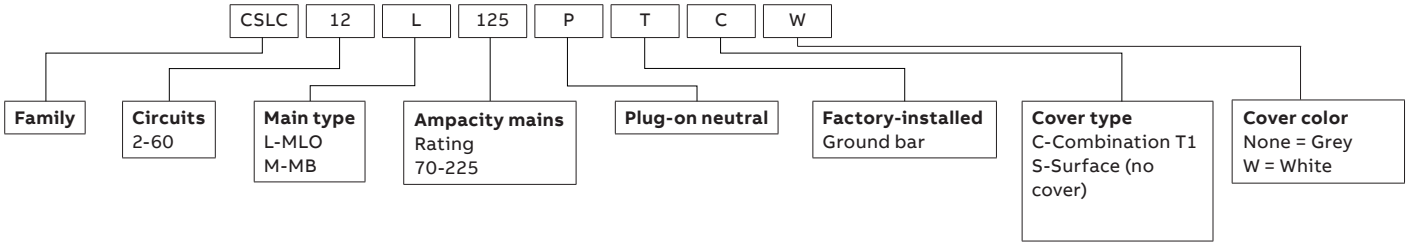
Other important features:

- Service entrance rated
- Factory installed ground bar with backed-out and anchored screws
- Keyhole mounting slots
- Galvanized enclosure, painted cover
- Main incoming lug
- CSA certified

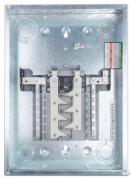
SENTRICITY®

Indoor type 1 load centres and features

Part number configuration



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
225 A	20	CSLC20L225PTC (W)	300 kcmil	Installed	14.25 / 362	30.50 / 775	3.94 / 100
	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

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

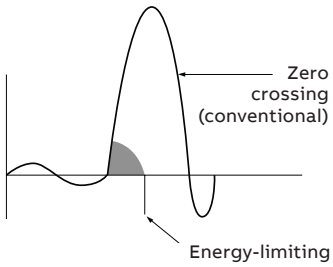
[2] S = Surface, no door

[3] Nominal current cannot exceed panel rating

Circuit Breakers

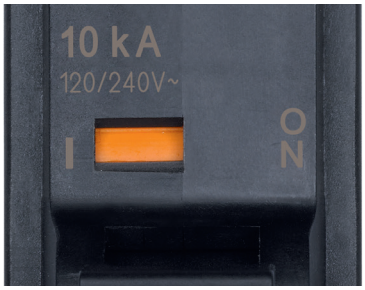
SENTRICITY®
Standard miniature circuit breakers and features

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



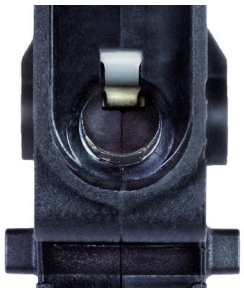
Energy-limiting technology

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 only disconnect the affected branch circuit, not the entire installation.



Visual trip indication

The visual trip indication will change colour when the circuit breaker has tripped. This ensures a quick inspection and reset of tripped circuit breakers



Failsafe terminals

Helps ensure wire is fed properly into the terminal

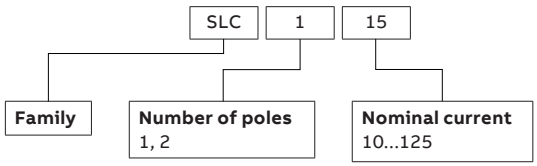
Other important features:

- Trip to mid-handle position
- IP20 finger-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

SENTRICITY®

Standard miniature circuit breakers and features

Catalog number explanation



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]
				70 A	SLC170 [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]
				80 A	SLC280 [2,4]
				90 A	SLC290 [2,4]
				100 A	SLC2100 [2,4]
				110 A	SLC2110 [2,4]
				125 A	SLC2125 [2,4]

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

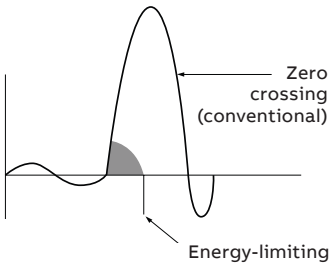
[2] UL Listed as HACR type for use with air conditioning, heating and refrigeration equipment having motor group combinations and marked for use with HACR type circuit breakers.

[3] Rated for up to two #10 CU wires.

[4] Available in Q2 2019.

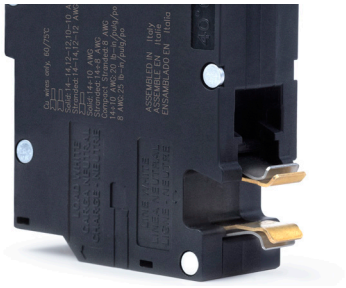
SENTRICITY®
Arc fault and ground fault circuit breakers and features

The SENTRICITY® AFCI breakers detect series and parallel arcs as well as overvoltage conditions. The GFCI breakers detect ground fault currents and trip when a fault current to ground is 6 milliamperes or more. These AFCI and GFCI breakers use the same energy-limiting technology as the MCBs.



Energy-limiting technology

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 only disconnect the affected branch circuit, not the entire installation.



Plug-on neutral
(available on SLC types only)

Quicker installation and maximizes wire gutter space by removing the installation of a pigtail neutral cable

LED indication

Ensures operational functionality and easier troubleshooting cause of trip. The LED indicator on the AFCI, will blink at a different speed to indicate 1 of the 3 possible trip cause (series arc, parallel arc or overvoltage)

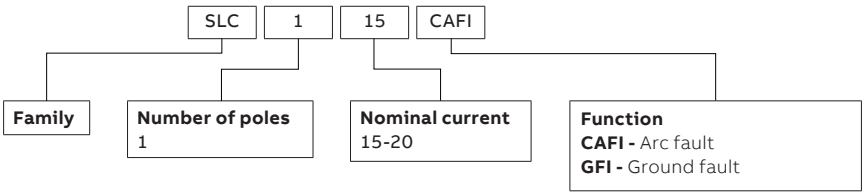
Other important features:

- Trip to mid-handle position
- IP20 finger-safe terminal
- Fail-safe terminal
- Slot/Robertson combination terminal screws
- Backed out captive terminal screws
- One lock out/tag out device
- Self-test feature
- Durable laser printing for easy product identification
- UL and CSA listed

SENTRICITY®

Arc fault and ground fault circuit breakers and features

Catalog number explanation



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]
	Dual AFCI/GFCI (from GE)	120 Vac	0.98 / 25.0	15 A	THQL1115DF [1, 2]
				20 A	THQL1120DF [1, 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.

Surge Protective Devices

SENTRICITY®
Surge protective devices

The SENTRICITY® SPDs are there specifically to eliminate high surge current events and will protect your house from external and internal disturbances that could dammage your sensitive and expensive equipment.

Plug-on neutral

Quicker installation and maximizes wire gutter space by removing the installation of a pigtail neutral cable. No need to wire through a circuit breaker

LED indication

LED indicator will go off when SPD needs to be changed.

Higher level of protection

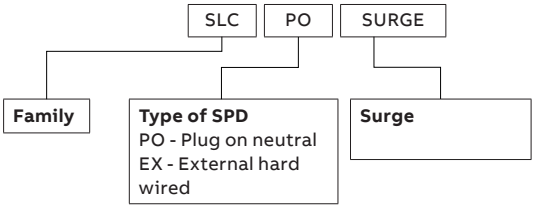
Wired version available for increased kA protection level. Nipple mounted version that needs an internal circuit breaker to connect to the pannel (2p-30 A). Also a great retrofit solution for existing panels.

Other important features:

- Thermally protected metal oxide varistor technology
- Up to 80 kA total surge current rating (CSLCEXSURGE)
- Excellent protection ratings (VPR) values of 500 V L-N and 900 V L-L
- UL and cULus listed

SENTRICITY®
Surge protective devices

Catalog number explanation



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 - 30 A circuit breaker.

Accessories and spare parts

SENTRICITY®
Accessories

SLC12GBK

SA1

SLC8BFMRK

SLC6BFMRK

Kits and miscellaneous

Description	Part number
Ground bar kit (12 circuit) (14–6 AWG, Cu/Al; 3 x 10–14 AWG, Cu)	SLC12GBK
Neutral lug kit (125 A) (14–2/0 AWG, Cu/Al)	SLC125NLK
Neutral lug kit (200 A) (6 AWG–300 kcmil, Cu/Al)	SLC200NLK
Filler plate, single space	SLCFP
Back-fed main retaining kit (6 circuits or less)	SLC6BFMRK
Back-fed main retaining kit (8 circuits or more)	SLC8BFMRK
MCB-handle padlock attachment	SA1

SNM12-6R
SNM34-6R

Carlon® nonmetallic snap-in fittings

Description	Trade size (in.)	Clamping range (in.)		Suggested application (nonmetallic sheathed cable)	Part number
		min.	max.		
Nonmetallic fitting gray	½	0.21	0.42	14/2 - 12/2 - 10/2 14/3 - 12/3 - 10/3 2 cables: 2 x 14/2 - 2 x 12/2 1 x 14/2 - 1 x 12/2	SNM12-6R
Nonmetallic fitting blue	¾	0.22	0.65	12/2 - 10/2 - 8/2 6/2 - 14/3 - 12/3 10/3 - 8/3 - 6/3 2 cables: 2 x 12/2 - 2 x 10/2 1 x 12/2 - 1 x 10/2	SNM34-6R

SENTRICITY®
Main breaker replacement kits

Replacement main breaker kit

Ampere rating	Part number
100	SLC2100MB
125	SLC2125MB
150	SLC2150MB
200	SLC2200MB
225	SLC2225MB

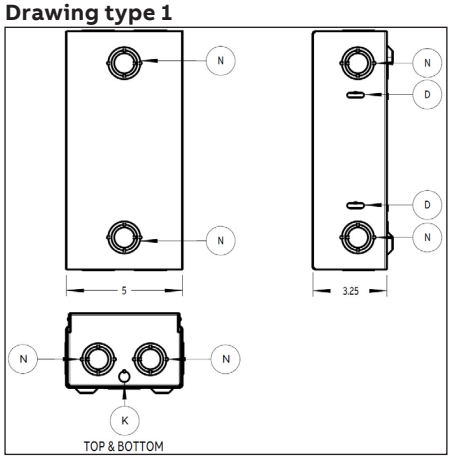
Drawings and knock-outs

002 Indoor type 1 load centres

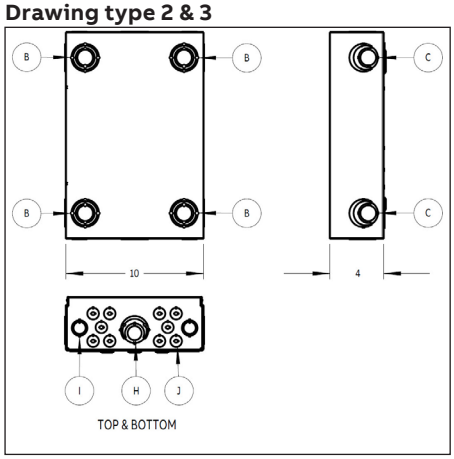
SENTRICITY®

Dimensions and knock-outs Type 1 enclosures

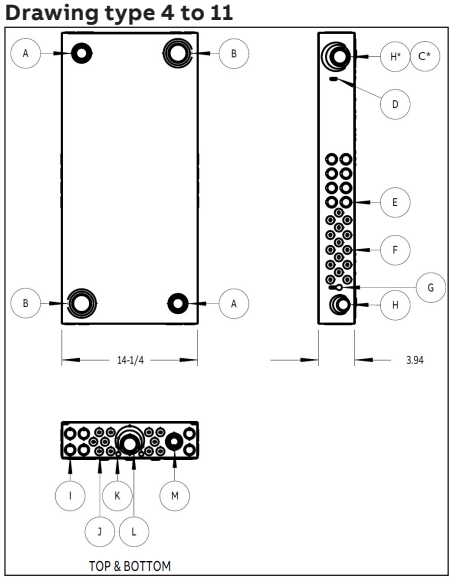
Drawing type 1



Drawing type 2 & 3



Drawing type 4 to 11



Drawing types

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

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

Notes

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