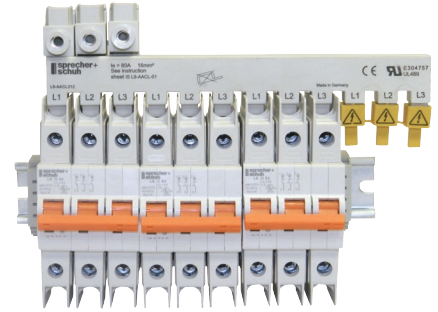


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Circuit Protection

Circuit Protection

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Series L8 UL1077 Supplementary Protectors

Supplemental short circuit protection for a variety of applications up to 63 Amps



Sprecher+Schuh Series L8 Supplementary Protectors provide supplemental overcurrent protection for control circuits, solenoids, actuators, appliances, business equipment and a range of other applications where a high performance current limiting device is required. Advanced features and global approvals make them ideal for use in equipment installed throughout the world.

Broad product range

Series L8 Supplementary Protectors are available in up to 20 different current ratings from 0.5A to 63A, in one, two and three pole configurations. Over 180 base models are available with a full compliment of accessories.

Devices can be used in applications up to 480V AC and 48V DC with interrupting capacities up to 10kA.

Safety features provide enhanced protection

The terminals of Series L8 Supplementary Protectors provide IP20 protection to guard against accidental contact with live parts.

To aid troubleshooting, a color-coded indicator provides positive visual indication of the device status (green for OFF, red for ON) and isolation function.

Sprecher+Schuh Supplementary Protectors also incorporate a trip-free mechanism - ensuring that the device operation cannot be defeated by holding the operator in the ON position.

Easy installation

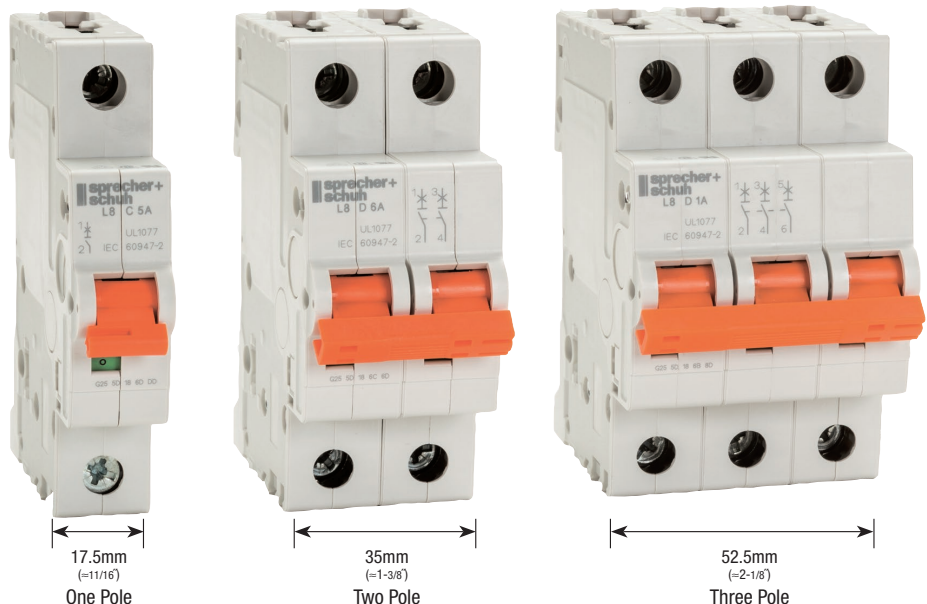
Sprecher+Schuh Supplementary Protectors mount on a standard 35mm DIN-rail. Wire terminals accept multiple conductors, and UL 508 approved bus bars can be used to quickly distribute power to many Supplementary Protectors simultaneously. In addition, power to the circuit breakers can be fed from the line or load side.

Global approvals for worldwide acceptance

Series L8 Supplementary Protectors are UL Recognized for use in the United States in accordance with NFPA 79 (NEC, National Electrical Code). The devices comply with UL 1077 and CSA 22.2 No.235, meeting the requirements for supplementary protectors intended for use as overcurrent protection where branch circuit protection is not required, or is provided by another device such as a fuse or molded case circuit breaker. These Supplementary Protectors also comply with IEC 60947-2 for use in commercial and residential applications and are CE marked.

L8 Series B Protection Devices

Series B L8 UL1077 supplementary protectors offer new features, expanded amp ranges and bus bar accessories. This catalog section reflects the new Series B L8 supplementary protectors. It is important to note that the Series B L8 devices and the previous version are not dimensionally the same or interchangeable with respect to accessories and bus bar accessories.



Three trip characteristics

All Sprecher+Schuh L8 Supplementary Protectors are available with three different tripping characteristics, Type “B”, “C”, and “D”. The tripping characteristic defines the device’s speed of response (trip-time) to various levels of overcurrent. Figure 1 shows trip-time versus overcurrent for Type B, C, and D devices. The time-current characteristics enable the device to be optimally matched to the application. For example, PLC outputs that can only tolerate minimal overcurrents are best protected by Supplementary Protectors with Type B trip characteristics.

Sprecher+Schuh L8 Supplementary Protectors are also current limiting - interrupting fault currents within one half cycle. Current limiting devices protect circuit components from damage by reducing the peak let-through

current which causes damaging magnetic forces and let-through energy which generates heat.

Type “B” Characteristic

Developed primarily to protect conductors and low level signal devices such as PLCs. Instantaneous trip is three to five times the rated current of the Supplementary Protector ($3-5 \times I_n$). The fast trip time of these devices minimizes damage to control circuit conductors from low-level faults.

Type “C” Characteristic

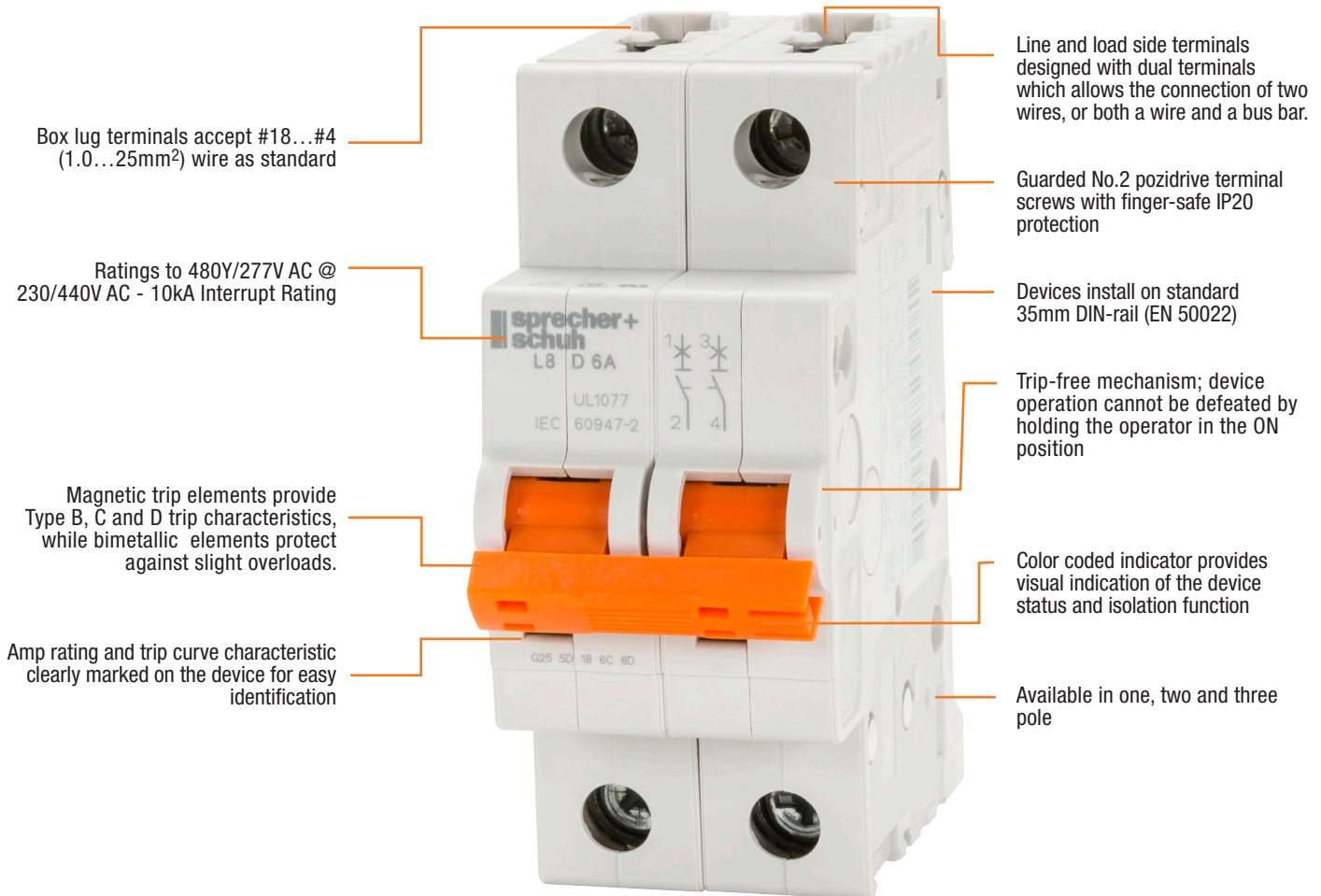
Developed primarily for applications with moderate inrush currents such as lighting, control circuits and coils, computers and appliances. Instantaneous trip is five to ten times the rated current of the Supplementary Protector ($5-10 \times I_n$). The higher instantaneous trip level prevents nuisance tripping, and components being protected can typically withstand higher fault currents without being damaged.



Type “D” Characteristic

Developed primarily for applications with high inrush currents, i.e., transformers, power supplies and heaters. Instantaneous trip is ten to twenty times the rated current of the Supplementary Protector ($10-20 \times I_n$). The high instantaneous trip level prevents nuisance tripping, and components being protected can typically withstand higher fault currents without being damaged.

Compare these advanced features



M

L8 Supplementary Protectors

Trip Characteristic B (3~5 x I_N) – Resistive or slightly inductive loads ③④

Rated Current (A)	1 Pole ①			2 Pole ②			3 Pole ②		
	Catalog Number	Price	Std. Pkg.	Catalog Number	Price	Std. Pkg.	Catalog Number	Price	Std. Pkg.
0.5	L8-0.5/1/B	38	2	L8-0.5/2/B	82	1	L8-0.5/3/B	124	1
1	L8-1/1/B	38	2	L8-1/2/B	82	1	L8-1/3/B	124	1
2	L8-2/1/B	38	2	L8-2/2/B	82	1	L8-2/3/B	124	1
3	L8-3/1/B	38	2	L8-3/2/B	82	1	L8-3/3/B	124	1
4	L8-4/1/B	38	2	L8-4/2/B	82	1	L8-4/3/B	124	1
5	L8-5/1/B	38	2	L8-5/2/B	82	1	L8-5/3/B	124	1
6	L8-6/1/B	38	2	L8-6/2/B	82	1	L8-6/3/B	124	1
7	L8-7/1/B	38	2	L8-7/2/B	82	1	L8-7/3/B	124	1
8	L8-8/1/B	38	2	L8-8/2/B	82	1	L8-8/3/B	124	1
10	L8-10/1/B	38	2	L8-10/2/B	82	1	L8-10/3/B	124	1
13	L8-13/1/B	38	2	L8-13/2/B	82	1	L8-13/3/B	124	1
15	L8-15/1/B	38	2	L8-15/2/B	82	1	L8-15/3/B	124	1
16	L8-16/1/B	38	2	L8-16/2/B	82	1	L8-16/3/B	124	1
20	L8-20/1/B	40	2	L8-20/2/B	90	1	L8-20/3/B	137	1
25	L8-25/1/B	40	2	L8-25/2/B	90	1	L8-25/3/B	137	1
30	L8-30/1/B	40	2	L8-30/2/B	90	1	L8-30/3/B	137	1
32	L8-32/1/B	42	2	L8-32/2/B	99	1	L8-32/3/B	149	1
40	L8-40/1/B	44	2	L8-40/2/B	103	1	L8-40/3/B	155	1
50	L8-50/1/B	50	2	L8-50/2/B	118	1	L8-50/3/B	179	1
63	L8-63/1/B	59	2	L8-63/2/B	134	1	L8-63/3/B	204	1

NEW

L8 Supplementary Protector Features:

- UL-1077 Approved, CSA 22.2 No. 235 and IEC/EN 60947-2
- Thermal Magnetic Overcurrent Protection
- Trip characteristics based on 40°C ambient for UL/CSA
- Up to 10kA interruption ratings
- Finger safe design
- DIN-rail mounting

① 1-Pole ratings: UL/CSA 277VAC 48VDC, IEC 240/440VAC
 ② Multi-pole ratings: UL/CSA 480Y/277VAC 96VDC, IEC 440VAC
 ③ See UL Short Circuit ratings U1/U2 in the technical data sections.
 ④ This table represents L8 Series B offering.

Trip Characteristic C ($5 \sim 10 \times I_N$) – Inductive loads ③④

Rated Current (A)	1 Pole ①			2 Pole ②			3 Pole ②		
	Catalog Number	Price	Std. Pkg.	Catalog Number	Price	Std. Pkg.	Catalog Number	Price	Std. Pkg.
0.5	L8-0.5/1/C	44	2	L8-0.5/2/C	101	1	L8-0.5/3/C	145	1
1	L8-1/1/C	44	2	L8-1/2/C	101	1	L8-1/3/C	145	1
2	L8-2/1/C	44	2	L8-2/2/C	101	1	L8-2/3/C	145	1
3	L8-3/1/C	44	2	L8-3/2/C	101	1	L8-3/3/C	145	1
4	L8-4/1/C	44	2	L8-4/2/C	101	1	L8-4/3/C	145	1
5	L8-5/1/C	44	2	L8-5/2/C	101	1	L8-5/3/C	145	1
6	L8-6/1/C	44	2	L8-6/2/C	101	1	L8-6/3/C	145	1
7	L8-7/1/C	44	2	L8-7/2/C	101	1	L8-7/3/C	145	1
8	L8-8/1/C	44	2	L8-8/2/C	101	1	L8-8/3/C	145	1
10	L8-10/1/C	44	2	L8-10/2/C	101	1	L8-10/3/C	145	1
13	L8-13/1/C	44	2	L8-13/2/C	101	1	L8-13/3/C	145	1
15	L8-15/1/C	44	2	L8-15/2/C	101	1	L8-15/3/C	145	1
16	L8-16/1/C	44	2	L8-16/2/C	101	1	L8-16/3/C	145	1
20	L8-20/1/C	44	2	L8-20/2/C	101	1	L8-20/3/C	145	1
25	L8-25/1/C	48	2	L8-25/2/C	111	1	L8-25/3/C	164	1
30	L8-30/1/C	48	2	L8-30/2/C	111	1	L8-30/3/C	164	1
32	L8-32/1/C	50	2	L8-32/2/C	111	1	L8-32/3/C	166	1
40	L8-40/1/C	55	2	L8-40/2/C	122	1	L8-40/3/C	183	1
50	L8-50/1/C	63	2	L8-50/2/C	143	1	L8-50/3/C	210	1
63	L8-63/1/C	71	2	L8-63/2/C	160	1	L8-63/3/C	239	1

L8 Supplementary Protector Features:

- UL-1077 Approved, CSA 22.2 No. 235 and IEC/EN 60947-2
- Thermal Magnetic Overcurrent Protection
- Trip characteristics based on 40°C ambient for UL/CSA
- Up to 10kA interruption ratings
- Finger safe design
- DIN-rail mounting

① 1-Pole ratings: UL/CSA 277VAC 48VDC, IEC 240/440VAC

② Multi-pole ratings: UL/CSA 480Y/277VAC 96VDC, IEC 440VAC

③ See UL Short Circuit ratings U1/U2 in the technical data sections.

④ This table represents L8 Series B offering.

Trip Characteristic D (10~20 x I_N) – Highly inductive loads ③④

Rated Current (A)	1 Pole ①			2 Pole ②			3 Pole ②		
	Catalog Number	Price	Std. Pkg.	Catalog Number	Price	Std. Pkg.	Catalog Number	Price	Std. Pkg.
0.5	L8-0.5/1/D	44	2	L8-0.5/2/D	101	1	L8-0.5/3/D	145	1
1	L8-1/1/D	44	2	L8-1/2/D	101	1	L8-1/3/D	145	1
2	L8-2/1/D	44	2	L8-2/2/D	101	1	L8-2/3/D	145	1
3	L8-3/1/D	44	2	L8-3/2/D	101	1	L8-3/3/D	145	1
4	L8-4/1/D	44	2	L8-4/2/D	101	1	L8-4/3/D	145	1
5	L8-5/1/D	44	2	L8-5/2/D	101	1	L8-5/3/D	145	1
6	L8-6/1/D	44	2	L8-6/2/D	101	1	L8-6/3/D	145	1
7	L8-7/1/D	44	2	L8-7/2/D	101	1	L8-7/3/D	145	1
8	L8-8/1/D	44	2	L8-8/2/D	101	1	L8-8/3/D	145	1
10	L8-10/1/D	44	2	L8-10/2/D	101	1	L8-10/3/D	145	1
13	L8-13/1/D	44	2	L8-13/2/D	101	1	L8-13/3/D	145	1
15	L8-15/1/D	44	2	L8-15/2/D	101	1	L8-15/3/D	145	1
16	L8-16/1/D	44	2	L8-16/2/D	101	1	L8-16/3/D	145	1
20	L8-20/1/D	44	2	L8-20/2/D	101	1	L8-20/3/D	145	1
25	L8-25/1/D	48	2	L8-25/2/D	111	1	L8-25/3/D	164	1
30	L8-30/1/D	48	2	L8-30/2/D	111	1	L8-30/3/D	164	1
32	L8-32/1/D	50	2	L8-32/2/D	111	1	L8-32/3/D	166	1
40	L8-40/1/D	55	2	L8-40/2/D	122	1	L8-40/3/D	183	1
50	L8-50/1/D	90	2	L8-50/2/D	197	1	L8-50/3/D	308	1
63	L8-63/1/D	119	2	L8-63/2/D	260	1	L8-63/3/D	407	1

NEW

NEW

L8 Supplementary Protector Features:

- UL-1077 Approved, CSA 22.2 No. 235 and IEC/EN 60947-2
- Thermal Magnetic Overcurrent Protection
- Trip characteristics based on 40°C ambient for UL/CSA
- Up to 10kA interruption ratings
- Finger safe design
- DIN-rail mounting





① 1-Pole ratings: UL/CSA 277VAC 48VDC, IEC 240/440VAC

② Multi-pole ratings: UL/CSA 480Y/277VAC 96VDC, IEC 440VAC

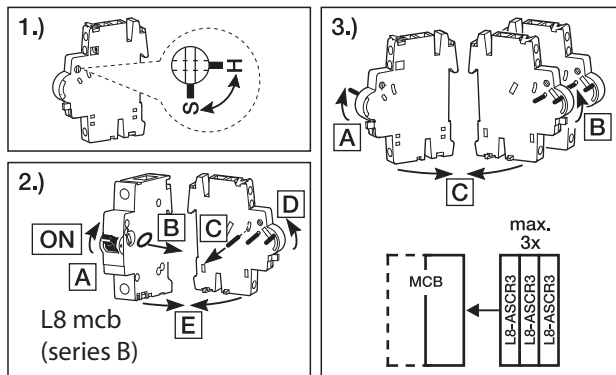
③ See UL Short Circuit ratings U1/U2 in the technical data sections.

④ This table represents L8 Series B offering.

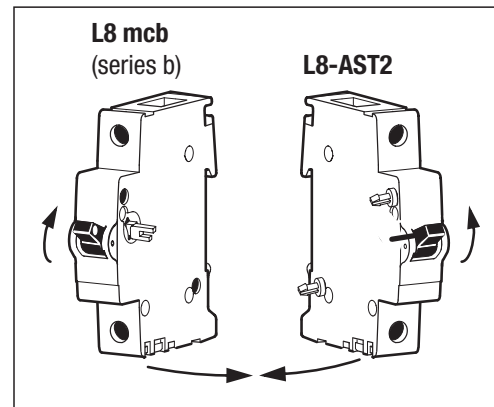
Accessories ❶

Module	Description	For use with...	UL/CSA Max. Current/Voltage	IEC Ratings Current/Voltage	Connection Diagrams	Catalog Number	Price
	Auxiliary/Signal Contact • Mounts on right side of L8 (series B only) ❷	All L8 Series B & Shunt Trips	1A @ 480 VAC 2A @ 277 VAC 1.5A @ 125 VDC 2A @ 60 VDC 4A @ 24 VDC	2A @ 230 V (AC-14) 1A @ 400 V (AC-14) 1.5A @ 110 V (DC-12) 1A @ 220 V (DC-12) 4A @ 24 V (DC-13) 2A @ 60 V (DC-13)	1 NO/NC (1 C.O.) 	L8-ASCR3	71
	Shunt Trip – • Remotely trips the device • Installs on right side of L8 (Series B only) ❸	All L8 Series B	110...415V AC 110...250V DC 12...60V AC/DC	110...415V AC 110...250V DC 12...60V AC/DC		L8-AST1 L8-AST2	166 166

L8-ASCR3 Assembly

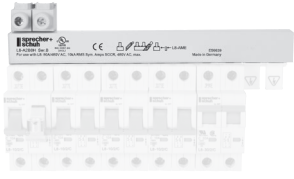
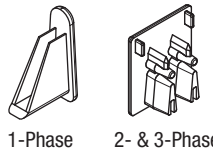
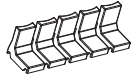
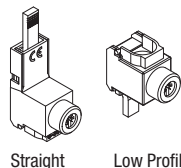
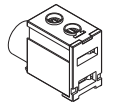



L8-AST1/2 Assembly



- ❶ This table represents L8 Series B offering.
- ❷ A maximum of 3 L8-ASCR3 auxiliary contacts may be installed with or without shunt trip per L8 Series B.
- ❸ A maximum of 3 ASCR3 plus one (1) L8-AST1/2 shunt trip allowed per L8. The shunt must be mounted closest to the L8, then the signal contacts.

Accessories ④

Accessory	Description	Devices per Meter	For use with...	Catalog Number	Price Each
	Bus Bar, Pin Style 1-Phase ②③ Qty 1 bar at 1 meter	57	L8 1-pole, 80A max	L8-A1B8	74
			L8 1-pole, 100A max	L8-A1B1	83
		36	L8 1-pole w/ Aux, 80A max	L8-A1B8H	76
			L8 1-pole w/ Aux, 100A max	L8-A1B1H	87
	Bus Bar, Pin Style 2-Phase ②③ Qty 1 bar at 1 meter	29	L8 2-pole, 80A max	L8-A2B8	167
			L8 2-pole, 100A max	L8-A2B1	185
		22	L8 2-pole w/ Aux, 80A max	L8-A2B8H	163
			L8 2-pole w/ Aux, 100A max	L8-A2B1H	188
	Bus Bar, Pin Style 3-Phase ②③ Qty 1 bar at 1 meter	19	L8 3-pole, 80A max	L8-A3B8	192
			L8 3-pole, 100A max	L8-A3B1	227
16		L8 3-pole w/ Aux, 80A max	L8-A3B8H	193	
	L8 3-pole w/ Aux, 100A max	L8-A3B1H	234		
 1-Phase 2- & 3-Phase	End Caps , sold only in pkgs of 10 ①		L8 1-Phase Bus Bar L8 2-/3-Phase Bus Bar	L8-A1E L8-AME	2 3
	Protective Shroud , sold only in pkgs of 10 ①		All L8 bus bars	L8-AAP	7
 Straight Low Profile	Terminal Power Feed • Sold only in pkgs of 10 ①		L8 2-/3-Phase Bus Bar Straight Lug 10...1/0 AWG 6...50mm ²	L8-AAT1S	18
			L8 1-Phase Bus Bar Offset Lug 10...1/0 AWG low profile 6...50mm ²	L8-AAT1LP	19
	Dedicated Power Feed • Sold only in pkgs of 10 ①		All L8 bus bars Offset Lug 14...1 AWG 2.5...50mm ²	L8-AAT2	18
 1-pole multi-pole	Lock Out Toggle Mount – • Fits securely over switch toggle. Prevents unauthorized activation of L8 or L9 (series B) during maintenance		L8 or L9 1-pole L8 or L9 Multi-pole (Series B Only)	L8-ALOA1 L8-ALOA2	33 33

① Sold in packages of 10. Price indicated is price per piece. Minimum order quantity 10. Example, one package of 10 pcs of L8-A1E is \$20 (10 x \$2).

② Cutable, copper bus bar provided in 1 m length. UL 508 Listed, E56639, Category NMTR, cULus. CE to IEC 664 10 kA SCCR for use with L8 Supplementary protectors. See page M15 for dimensions.

③ Bus Bars L8-_H are designed to accommodate the L8-ASCR3 Auxiliary Contact module, excluding Shunt Trip.

④ This table represents L8 Series B offering.

Technical Information

Electrical Ratings

Number of Poles	1, 2, or 3	
Tripping Characteristics	B, C, or D	
Rated Current I_n	0.5...63A	
Rated Frequency f	50/60 Hz	
Rated Insulation voltage	Phase-to-ground	250V AC
	Phase-to-phase	440V AC
U _i acc. to IEC/EN 60664-1		
Overvoltage Category	III	
Pollution Degree	3	

Data acc. to UL/CSA ⑤

Rated voltage	1-pole	AC	277V AC
		DC	48V DC
	2-pole	AC	480Y/277V AC
		DC	96V DC
	3-pole	AC	480Y/277V AC
	≤ 32 A: 10 kA (AC); > 32 A: 5kA (AC); 0.5...63 A: 10 kA (DC)		
Rated interrupting capacity per UL 1077	Supplementary protector for general use; application codes: TC1: [1P] OLO 277V AC, [2P, 3P] OLO 480Y/277V AC; SC: 10 kA (0.5...32 A), 5 kA (35...63 A), U2 480Y/277V AC; FW3		
Application ①			
Reference temperature for tripping characteristics	40°C		
Electrical Endurance	6,000 ops (AC), 6,000 ops. (DC) 1 cycle (1s - ON, 9s - OFF)		

Data acc. to IEC/EN 60947-2

Rated operational voltage U _e	1-pole	230V AC		
	2-, 3-pole	400V AC		
Highes supply or utilization voltage U _{max}	AC	1-pole	253V AC	
		2-, 3-pole	440V AC	
	DC ②	1-pole	48V DC	
		2-pole	96V DC	
		Min. operating voltage	12V AC/DC	
		Rated ultimate short-circuit breaking capacity I _{cu}	15 kA	
Rated service short-circuit breaking capacity I _{cs}	≤40 A: 11.25 kA			
	>40 A: 7.5 kA			
Rated impulse withstand voltage U _{imp} . (1.2/50 μs)	4 kV			
	(test voltage 6.2kV at sea level, 5kV at 2,000m)			
Dielectric test voltage	2 kV (50/60Hz, 1 min.)			
Reference temperature for tripping characteristics	30 °C			
Electrical endurance				
1 cycle (2s - ON, 13s - OFF, I _n ≤ 32A)	I _n < 30A:	20,000 operations (AC)		
1 cycle (2s - ON, 28s - OFF, I _n > 32A)	I _n ≥ 30A:	10,000 ops. (AC); 1,000 ops. (DC)		

Mechanical Data

Housing	Insulation group II, RAL 7035
Indicator window	red ON/green OFF
Protection degree per EN 60529	IP20, IP40 in enclosure with cover
Mechanical endurance	20,000 operations
Shock resistance per IEC/EN 60068-2-27	25 g - 2 shocks - 13 ms
Vibration resistance per IEC/EN 60068-2-6	5g - 20 cycles at 5...150...5 Hz with load 0.8 I _n

Environmental

Environmental conditions (damp heat) per IEC/EN 60068-2-30	28 cycles with 55°C/90-96% and 25°C/95-100%
Ambient temperature ③	-25...+55°C
Storage temperature	-40...+70°C

Installation

Terminal	Dual terminal	
Cross-section of wire – solid, stranded (front/back terminal slot) ④	35/35 mm ²	
	18...4/18...10 AWG	
Flexible	25/10 mm ²	
Multi-wire rating per UL, CSA	1 wire, 18...4 AWG	
	2-4 wires ⑥, 18...10 AWG	
Cross-section of bus bars (top / bottom)	10/10 mm ²	
	IEC	2.8 N•m
Tightening torque	UL/CSA	AWG 18...16: 8.85 in•lb AWG 14...10: 17.7 in•lb AWG 8...4: 39.8 in•lb
Screwdriver	No. 2 Pozidrive	
Mounting	DIN Rail (EN 60715, 35 mm) with fast clip	
Mounting position	Any	
Supply	Optional	

Approximate Dimensions/Weight

Pole dimensions	H x D x W	88 x 69 x 17.5 mm (3.46" x 2.72" x 0.69")
Pole weight		115 g (4.1 oz)

Combination with Auxiliary Elements

Auxiliary contact	Yes
Signal contact	Yes
Shunt trip	Yes

① 2-pole/3-pole single pole load: TC2

② IEC DC Ratings Self-declared

③ 35mm² self-declared. Not included in IEC/EN approval.

④ Refer to Ambient Temperature Derating tables.

⑤ UL File E65138

⑥ Wires must be of like size and stranding. Up to two wires per terminal slot.

Power Loss Due to Current

Rated Current [A]	Power Loss Per Pole [W]	Rated Current [A]	Power Loss Per Pole [W]
0.5	1.4	13	2.3
1	1.4	15	2.4
2	1.8	16	2.5
3	1.6	20	2.5
4	1.8	25	3.2
5	1.9	30	3.5
6	2.0	32	3.7
7	1.1	40	4.5
8	1.5	50	4.5
10	2.1	63	5.4

Zero-stack Derating

The installation of several miniature circuit breaker side by side with rated current on all poles requires a correction factor to the rated current (not required if spacers are used).

Number of Adjacent Devices	Factor
1	1
2,3	0.9
4,5	0.8
≥ 6	0.75

L8 Supplementary Protection Devices Ambient Temperature Derating

Note: Application below 0° C is for non-condensing atmosphere. Care should be taken for applications below 0 °C. These devices are not certified to operate correctly in the presence of ice.

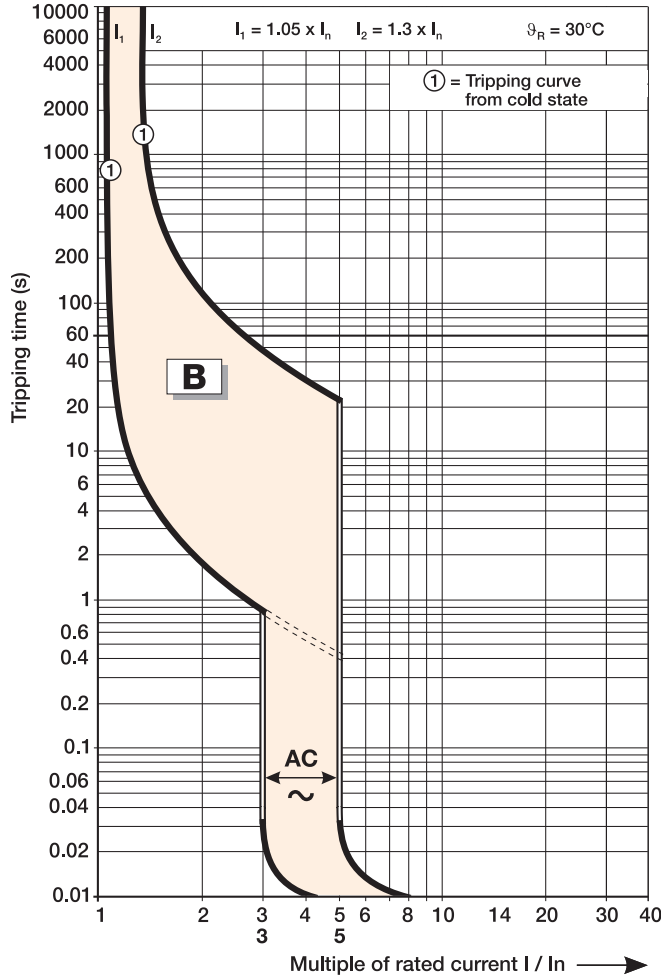
Temperature Derating, UL Reference temperature = 40 °C

Current Rating [A]	Ambient temperature (°C)									
	-25	-20	-10	0	10	20	30	40	50	55
0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5
1	1.2	1.2	1.2	1.1	1.1	1.1	1.0	1	1.0	0.9
2	2.5	2.4	2.4	2.3	2.2	2.1	2.1	2	1.9	1.9
3	3.7	3.7	3.6	3.4	3.3	3.2	3.1	3	2.9	2.8
4	5.0	4.9	4.7	4.6	4.4	4.3	4.1	4	3.9	3.8
5	6.2	6.1	5.9	5.7	5.6	5.4	5.2	5	4.8	4.7
6	7.4	7.3	7.1	6.9	6.7	6.4	6.2	6	5.8	5.7
7	8.7	8.6	8.3	8.0	7.8	7.5	7.3	7	6.7	6.6
8	9.9	9.8	9.5	9.2	8.9	8.6	8.3	8	7.7	7.6
10	12.4	12.2	11.9	11.5	11.1	10.7	10.4	10	9.6	9.4
13	16.1	15.9	15.4	14.9	14.4	14.0	13.5	13	12.5	12.3
15	18.6	18.3	17.8	17.2	16.7	16.1	15.6	15	14.4	14.2
16	19.8	19.6	19.0	18.4	17.8	17.2	16.6	16	15.4	15.1
20	24.8	24.4	23.7	23.0	22.2	21.5	20.7	20	19.3	18.9
25	31.0	30.6	29.6	28.7	27.8	26.9	25.9	25	24.1	23.6
30	37.2	36.7	35.6	34.4	33.3	32.2	31.1	30	28.9	28.3
32	39.7	39.1	37.9	36.7	35.6	34.4	33.2	32	30.8	30.2
40	49.6	48.9	47.4	45.9	44.4	43.0	41.5	40	38.5	37.8
50	62.0	61.1	59.3	57.4	55.6	53.7	51.9	50	48.2	47.2
63	78.2	77.0	74.7	72.3	70.0	67.7	65.3	63	60.7	59.5

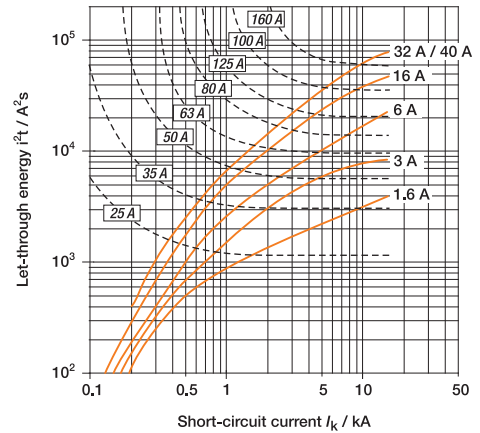
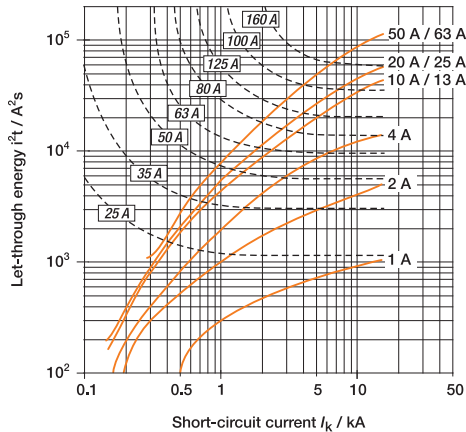
Temperature Derating, IEC Reference temperature = 30 °C

Current Rating [A]	Ambient temperature (°C)									
	-25	-20	-10	0	10	20	30	40	50	55
0.5	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5
1	1.2	1.2	1.1	1.1	1.1	1.0	1	1.0	0.9	0.9
2	2.3	2.3	2.2	2.2	2.1	2.1	2	1.9	1.9	1.9
3	3.5	3.5	3.4	3.3	3.2	3.1	3	2.9	2.8	2.8
4	4.7	4.6	4.5	4.4	4.2	4.1	4	3.9	3.8	3.7
5	5.8	5.8	5.6	5.5	5.3	5.2	5	4.9	4.7	4.6
6	7.0	6.9	6.7	6.5	6.4	6.2	6	5.8	5.6	5.6
7	8.2	8.1	7.8	7.6	7.4	7.2	7	6.8	6.6	6.5
8	9.3	9.2	9.0	8.7	8.5	8.2	8	7.8	7.5	7.4
10	11.7	11.5	11.2	10.9	10.6	10.3	10	9.7	9.4	9.3
13	15.1	15.0	14.6	14.2	13.8	13.4	13	12.6	12.2	12.0
15	17.5	17.3	16.8	16.4	15.9	15.5	15	14.6	14.1	13.9
16	18.6	18.4	17.9	17.4	17.0	16.5	16	15.5	15.0	14.8
20	23.3	23.0	22.4	21.8	21.2	20.6	20	19.4	18.8	18.5
25	29.1	28.8	28.0	27.3	26.5	25.8	25	24.3	23.5	23.1
30	35.0	34.5	33.6	32.7	31.8	30.9	30	29.1	28.2	27.8
32	37.3	36.8	35.8	34.9	33.9	33.0	32	31.0	30.1	29.6
40	46.6	46.0	44.8	43.6	42.4	41.2	40	38.8	37.6	37.0
50	58.3	57.5	56.0	54.5	53.0	51.5	50	48.5	47.0	46.3
63	73.4	72.5	70.6	68.7	66.8	64.9	63	61.1	59.2	58.3

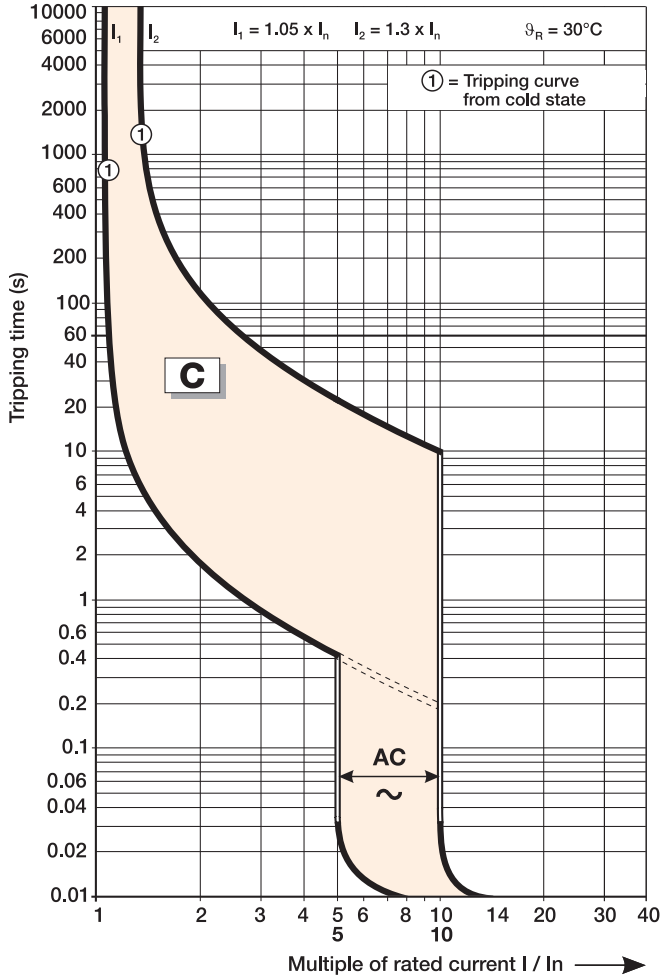
Tripping Characteristics - B Curve



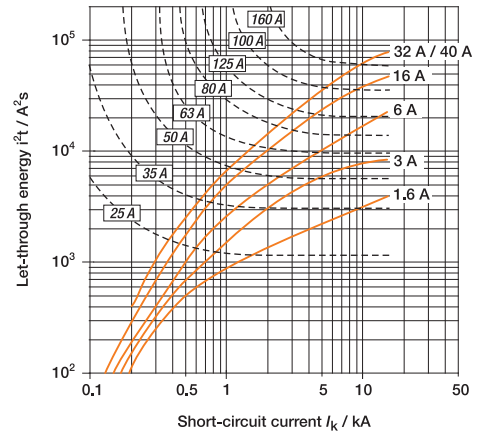
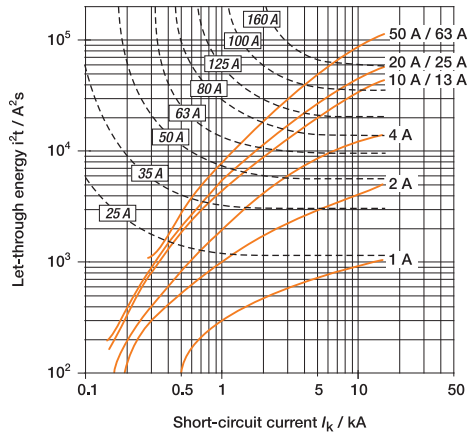
B and C Curve - 230/400V AC Let-through Energy



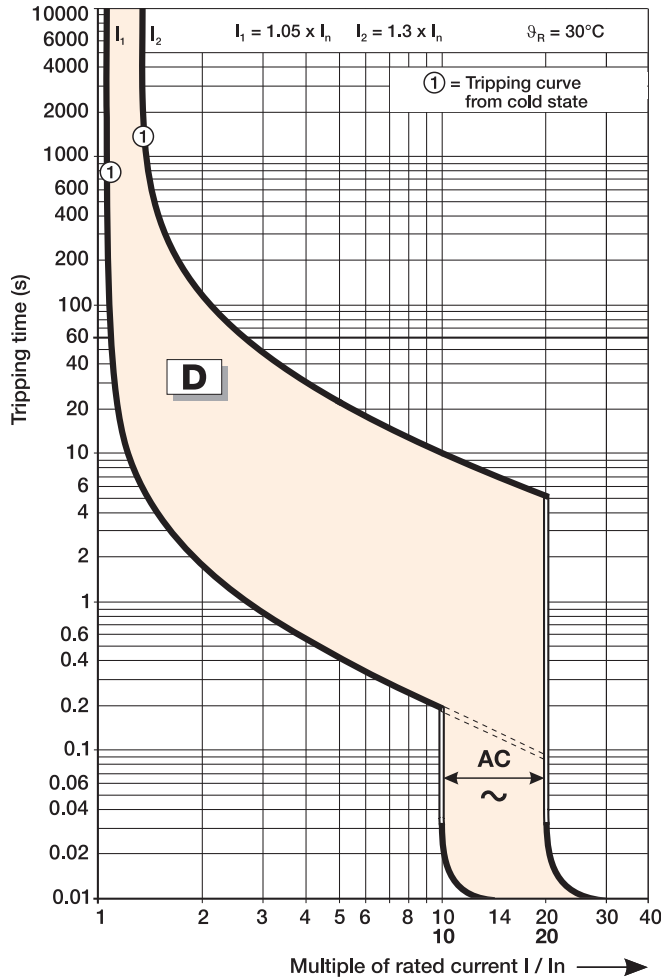
Tripping Characteristics - C Curve



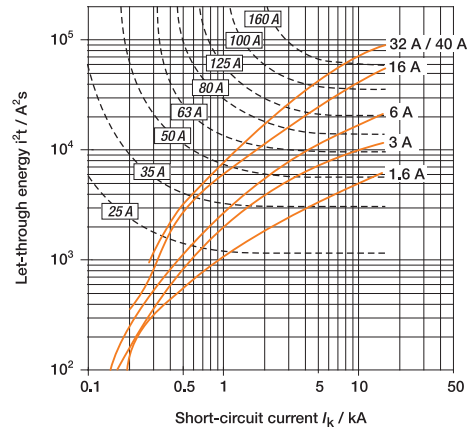
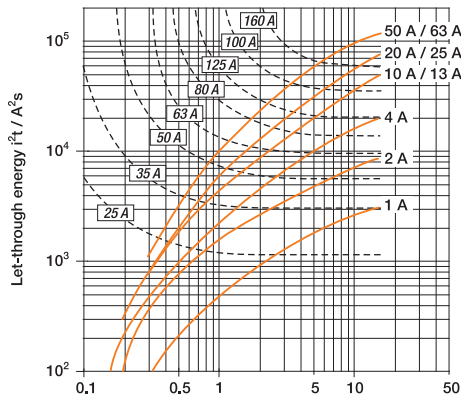
B and C Curve - 230/400V AC Let-through Energy



Tripping Characteristics - D Curve

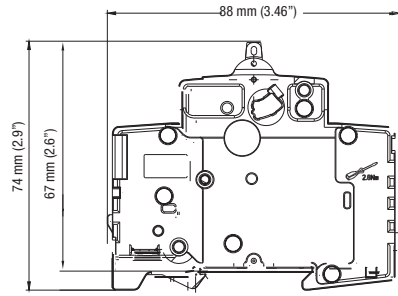


D Curve - 230/400V AC Let-through Energy

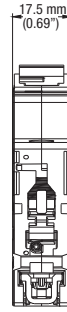


L8 Supplementary Protectors (Series B...B, C & D)

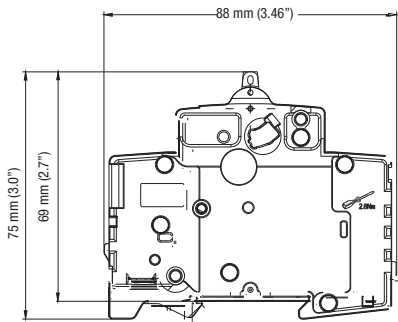
Dimensions are in millimeters (inches). Dimensions not intended for manufacturing purposes.



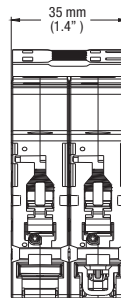
1-Pole



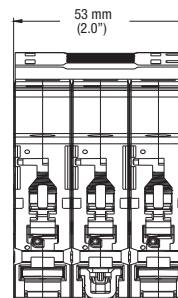
1-Pole



2- & 3-Pole

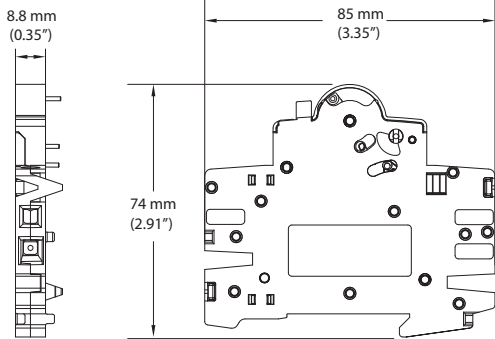


2-Pole

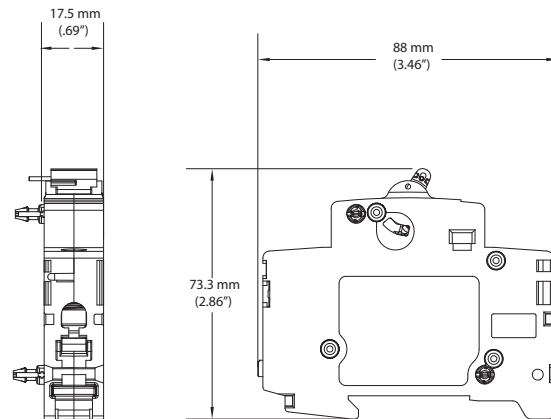


3-Pole

Auxiliary Contact/Signal Alarm (L8-ASCR3)

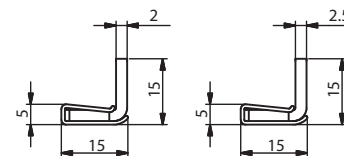
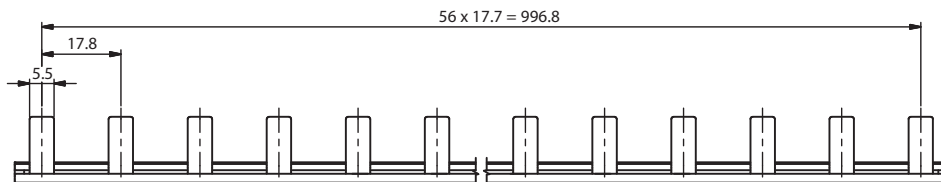
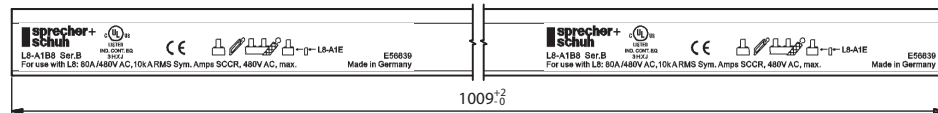


Shunt Trip Modules (L8-AST1/2)



L8 - 1-Pole Bus Bars (L8-A1B...)

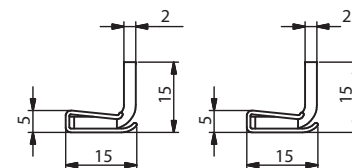
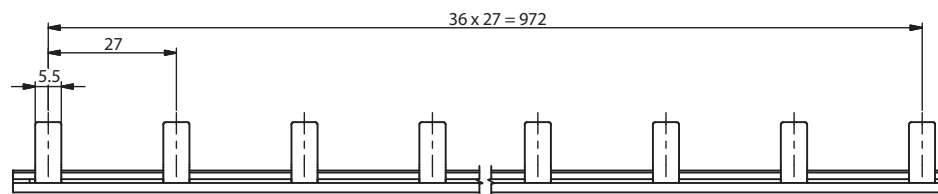
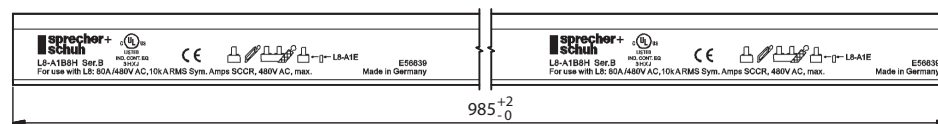
Dimensions are in millimeters (inches). Dimensions not intended for manufacturing purposes.



L8-A1B8

L8-A1B1

L8 - 1-Pole Bus Bars with Auxiliary (L8-A1B...H)



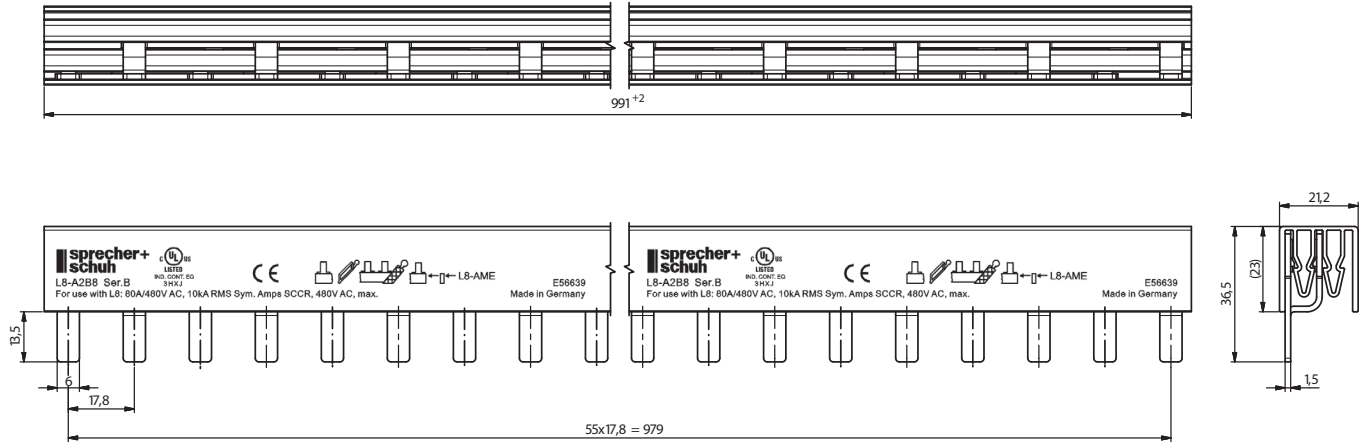
L8-A1B8H

L8-A1B1H

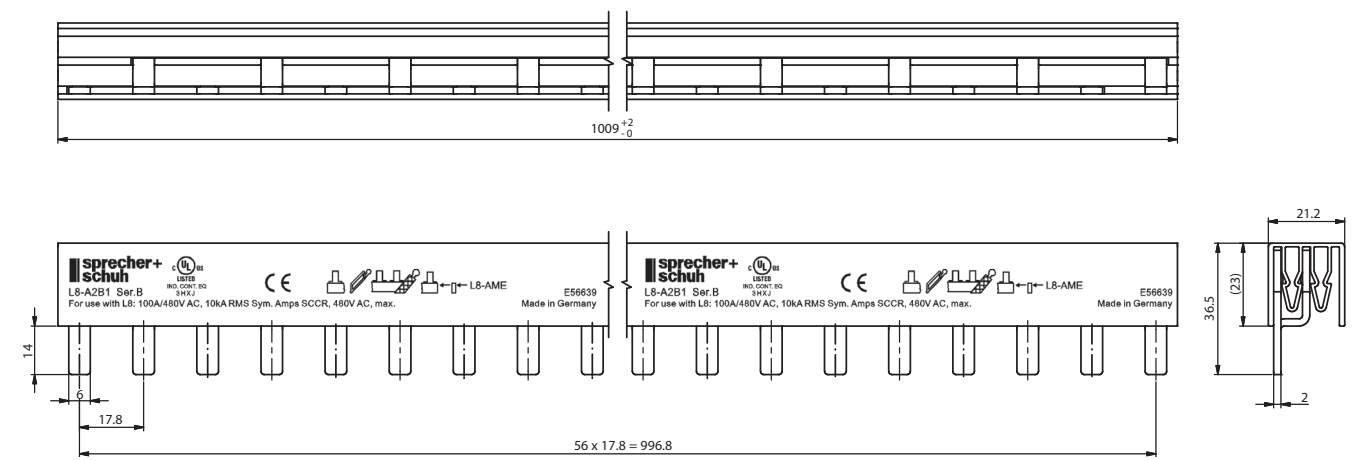


L8-A2B8 - 2 Pole Bus Bars

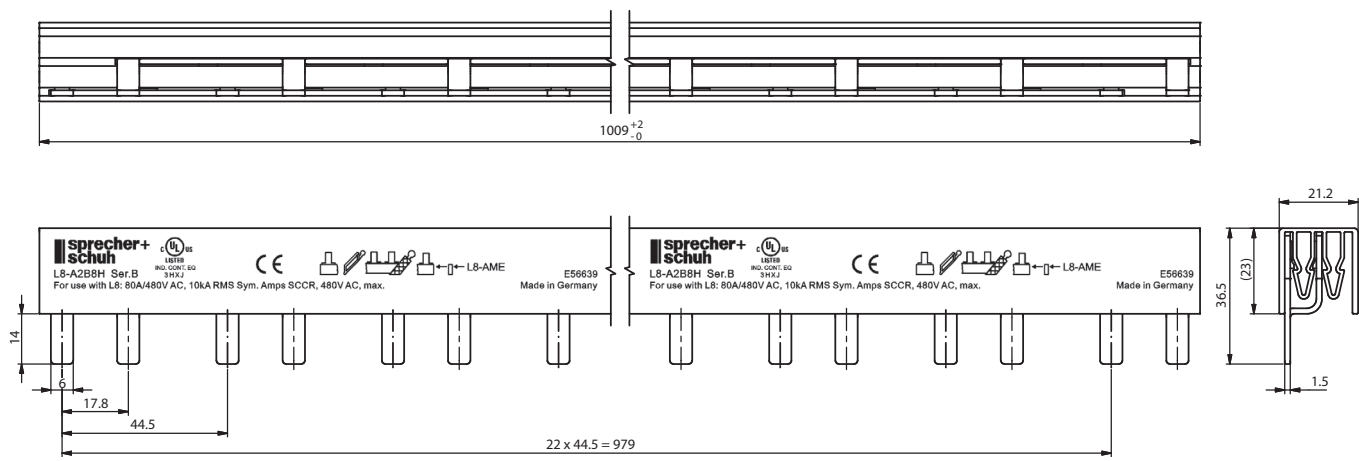
Dimensions are in millimeters (inches). Dimensions not intended for manufacturing purposes.



L8-A2B1 - 2 Pole Bus Bars



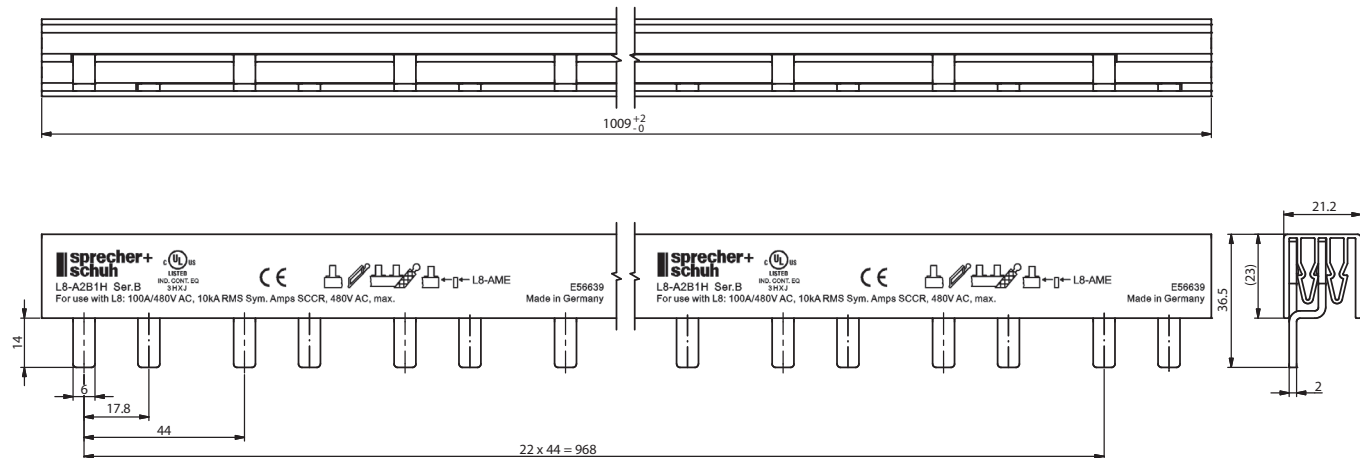
L8-A2B8H - 2 Pole Bus Bars w/ Auxiliary



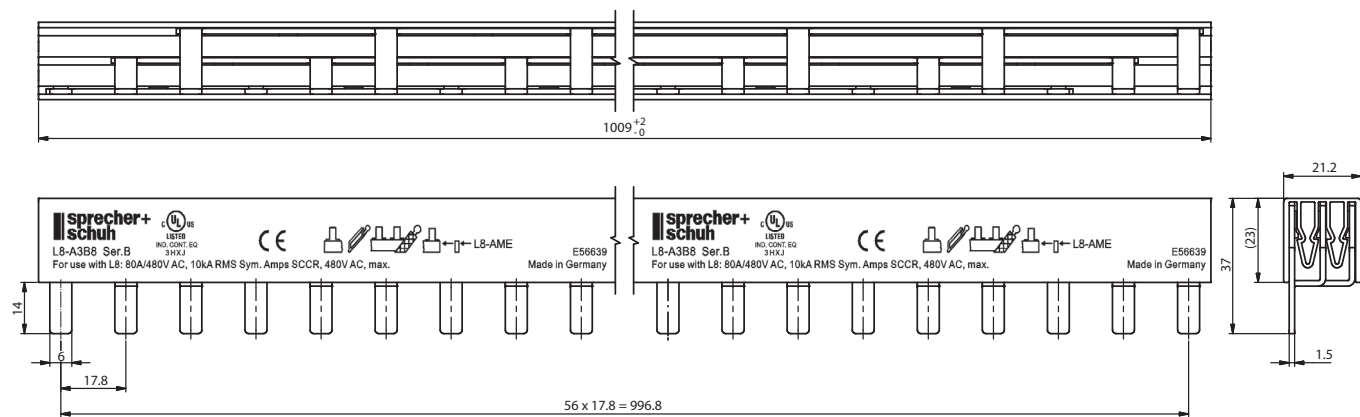
L8 Supplementary Protectors

L8-A2B1H - 2 Pole Bus Bars w/ Auxiliary

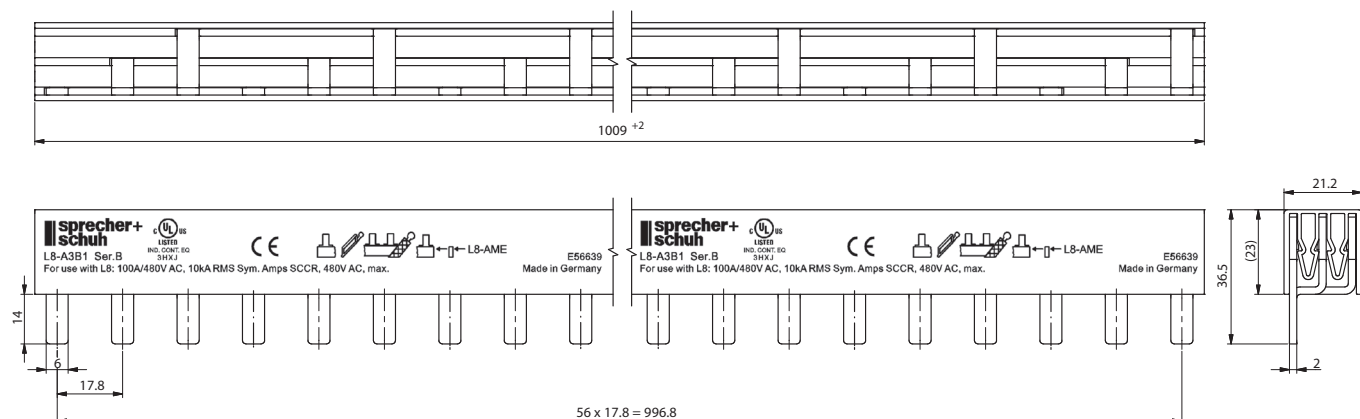
Dimensions are in millimeters (inches). Dimensions not intended for manufacturing purposes.



L8-A3B8 - 3 Pole Bus Bars



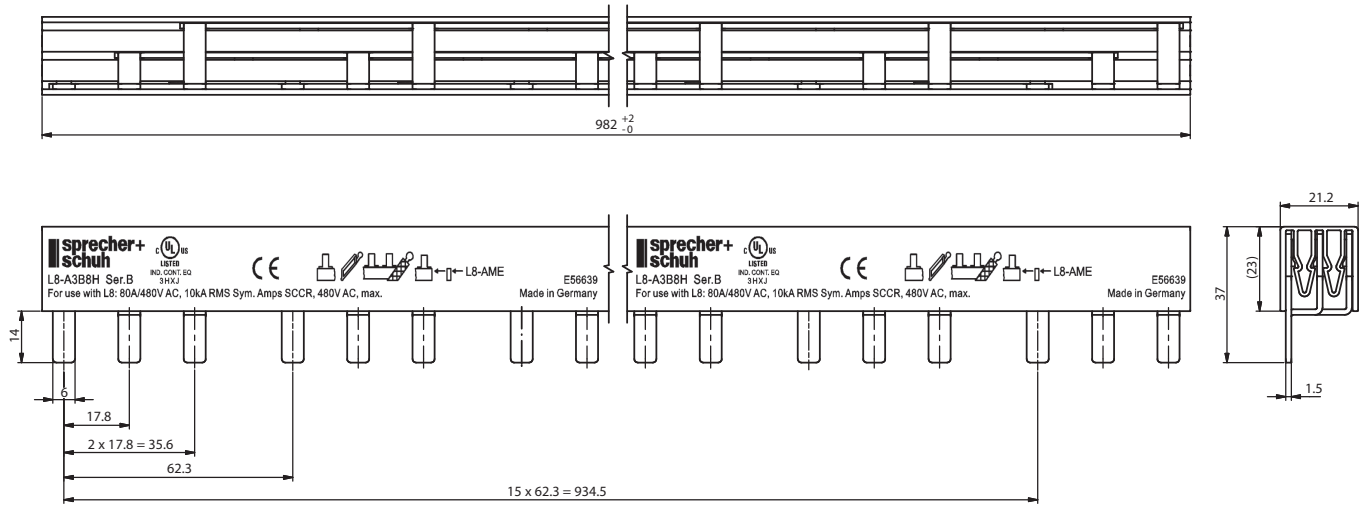
L8-A3B1 - 3 Pole Bus Bars



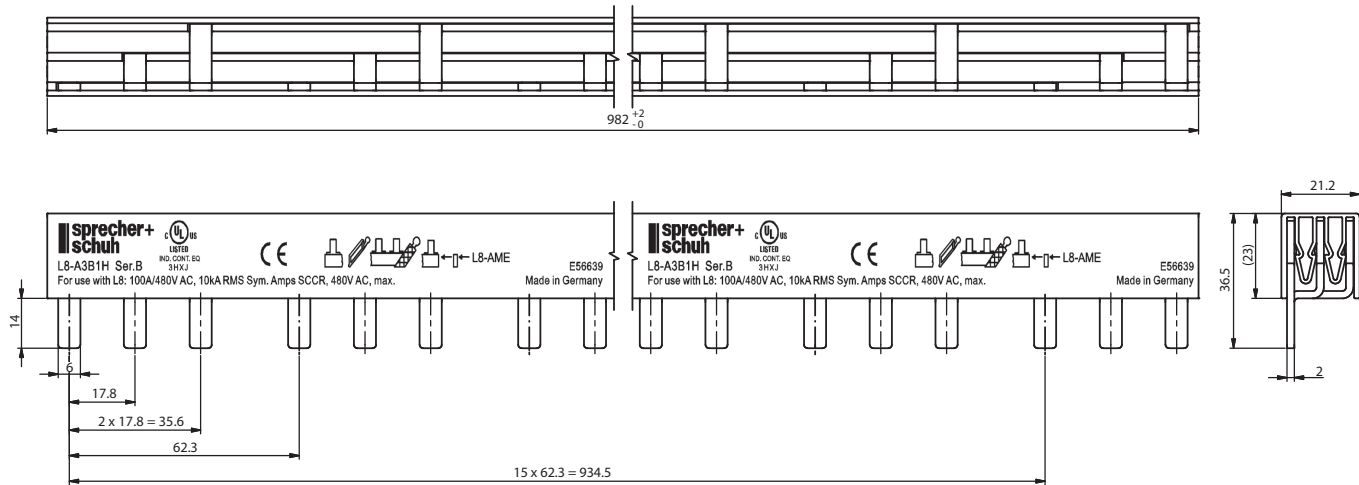
L8 Supplementary Protectors

L8-A3B8H - 3 Pole Bus Bars w/ Auxiliary

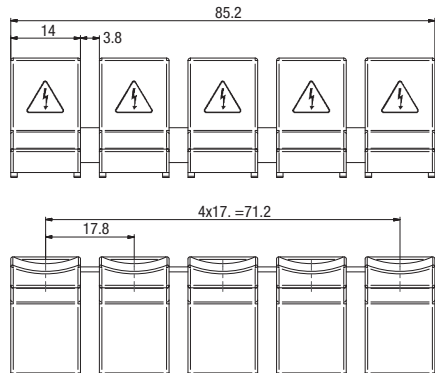
Dimensions are in millimeters (inches). Dimensions not intended for manufacturing purposes.



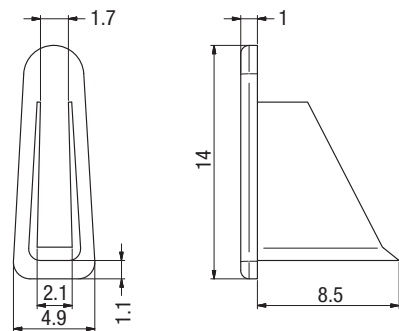
L8-A3B1H - 3 Pole Bus Bars w/ Auxiliary

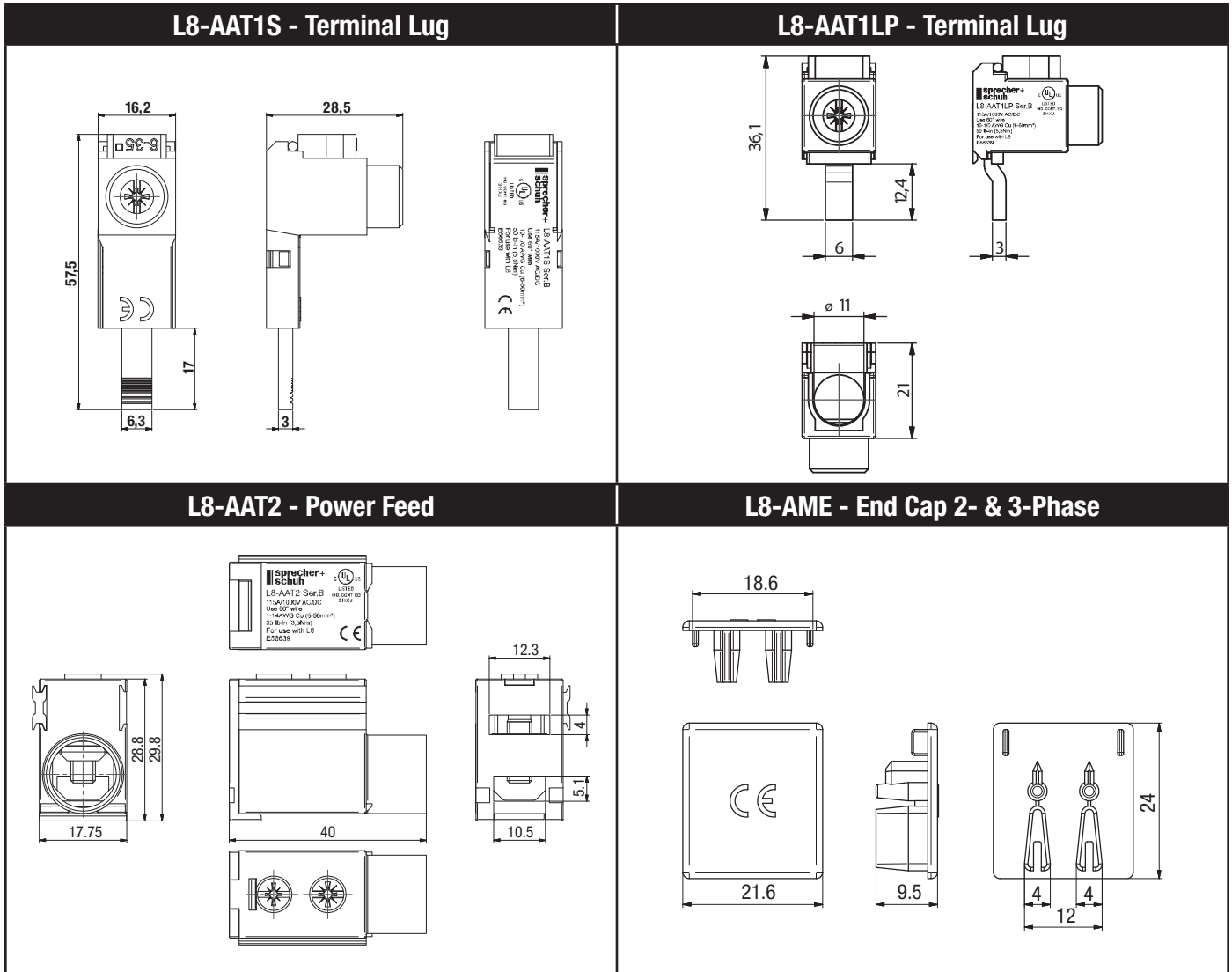


L8-AAP - Protective Shroud

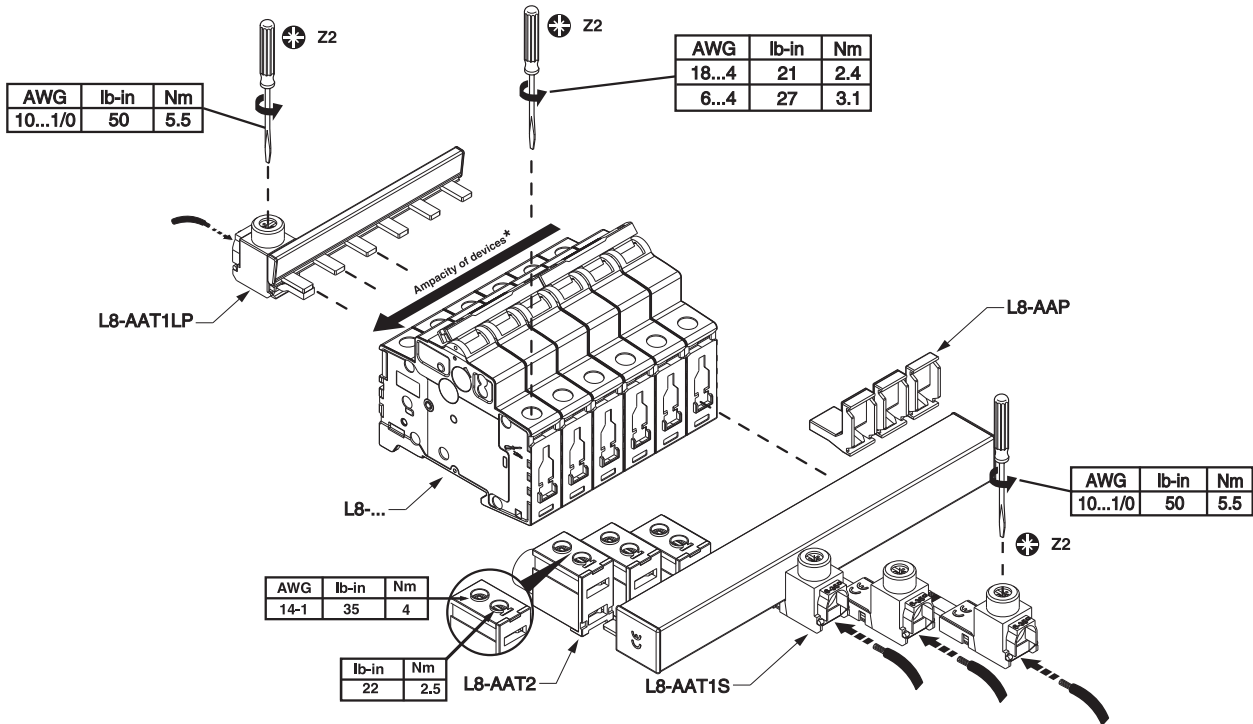


L8-A1E - End Cap 1-Phase

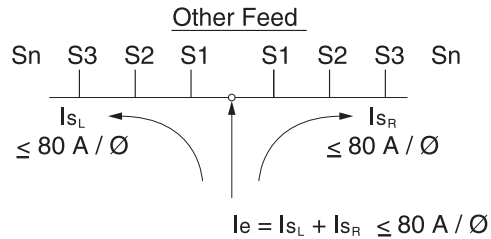
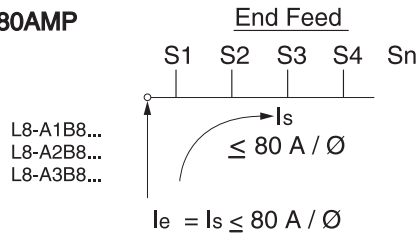




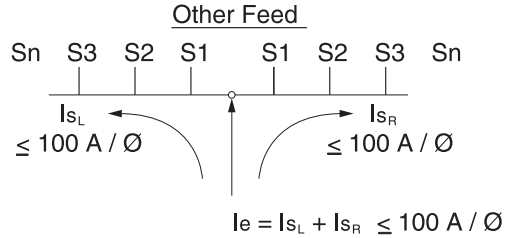
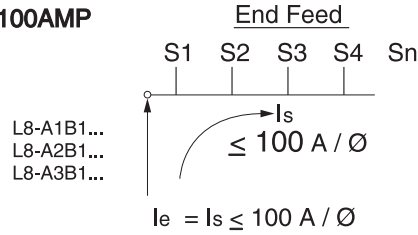
Applying L8 Bus Bars & Accessories



80AMP



100AMP



M

L8 Supplementary Protectors

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