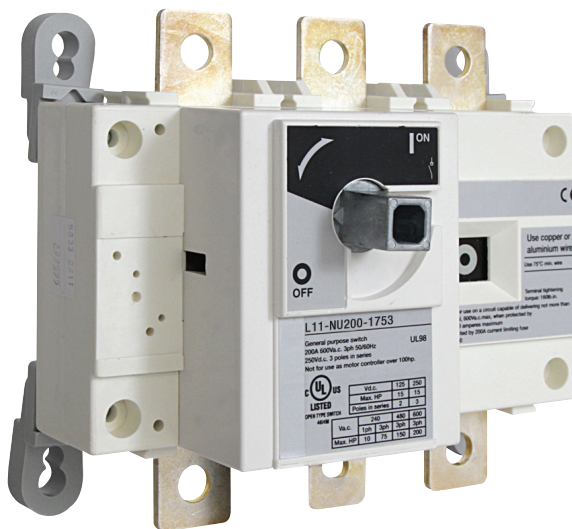


Disconnect Switches

Series L7 - Motor Disconnect Switches up to 100A	L1:2
Handles & Accessories	L1:10
Series L7 Enclosed Disconnect Switches	L1:14
Technical Information.....	L1:18
Dimensions.....	L1:20
Series L11 - Fusible and Non-Fusible Disconnects 30...1200A	L2:1
Handles & Accessories	L2:4
Series L11 Enclosed Disconnect Switches	L2:9
Application Methods	L2:10
Technical Information.....	L2:11
Dimensions.....	L2:19



L1

Disconnect Switches

Series L7 Motor Disconnect Switches up to 100A

UL508 approved device "suitable as motor disconnect"

TIP!



To learn the basic differences between control, load and fusible disconnect switches and how to apply them, see our white paper Tech-LMSD in the online library.

Sprecher + Schuh's L7 line incorporates the latest modular design techniques to provide maximum functionality with the fewest number of parts. These rugged switches are compact, reliable and the ideal choice for all disconnect applications including motor disconnects per UL-508 Part III. A device under this UL listing meets the requirements as a motor controller or "at motor disconnect."



Just the right switch for your application

L7 Disconnect Switches are available in four frame sizes up to 100 amps. The smaller L7s come in six pole models, as well as three pole changeover switches. A full complement of switch handles and accessories including auxiliary contact blocks, ground and neutral terminals make the L7 line broad enough to tackle virtually any disconnect duty.

Meets the toughest safety standards

A generous 9mm gap between open contacts, combined with high short circuit withstand capabilities ensures a minimum probability of welding. All switches are touch safe to IP20, while most switch handles are rated for strong water jets to IP66. Excellent making and breaking characteristics provide a level of safety that, in many cases, exceeds international standards.

Modular, flexible and easy to assemble

The versatile L7 line is fully modular. All accessories snap-on and off without the use of tools, speeding assembly. The L7's modular design minimizes inventory with features such as universal auxiliary contact blocks... virtually every block fits all frame sizes. Both metal and plastic shaft extension systems are available to accommodate most panel depths.

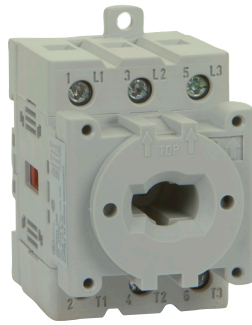
International standards and approvals

L7 Motor Disconnect Switches are UL Listed (UL508, Part III) and CSA approved (C22.2 No. 14). They also carry the CE Mark and meet IEC 947-1, 947-3, as well as IEC 207 requirements. They are approved in virtually every international market.



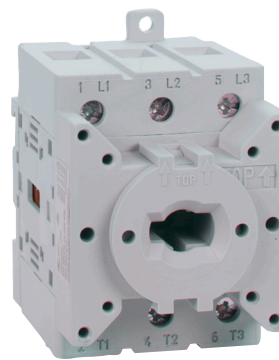
36mm
(≈1 13/32")

16A



45mm
(≈1 3/4")

25A
32A



54mm
(≈2 1/8")

40A
63A



72mm
(≈2 13/16")

80A
100A

Full range of enclosed disconnects for any job

From “do-it-yourself” to fully assembled, we offer a complete selection of three, four and six pole enclosed disconnects for any industrial application.

The most economical choice is to configure your own design (Figure 1) by selecting one of the non-UL/CSA Approved

ABS or Noryl enclosures from page L1:17 and completing it with your choice of L7 switch from pages L1:4 ...L1:6. These enclosed disconnects are suitable for use in NEMA 4 type applications (not UL Listed).

An assembled version of this enclosed disconnect is available with LA7 three or six poles from page L1:6 (Figure 2).

A broad selection of assembled UL Enclosed disconnects are available on pages L1:14 and L1:15. Painted metal, stainless steel, polyester-fiberglass, and ABS (IP66) enclosures with three, four and six pole disconnect switches are available with all accessories (Figure 3).

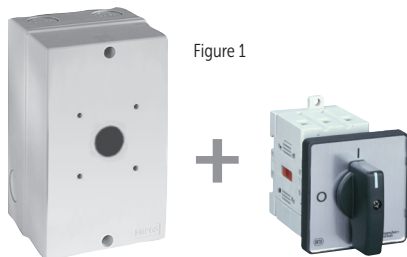


Figure 1



Figure 2

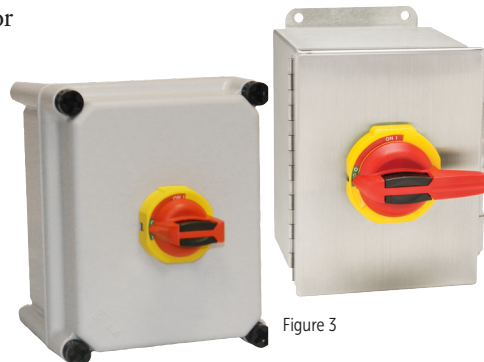


Figure 3

How to order L7 motor disconnect switches

A complete L7 Motor Disconnect Switch is ordered with as little as two catalog numbers. The first number specifies the switch body and the second specifies the switch handle assembly. All L7 switch bodies come standard with

a shaft and mounting screws for the switch handle assembly. Accessories such as shaft extensions and auxiliary contact blocks are ordered separately.

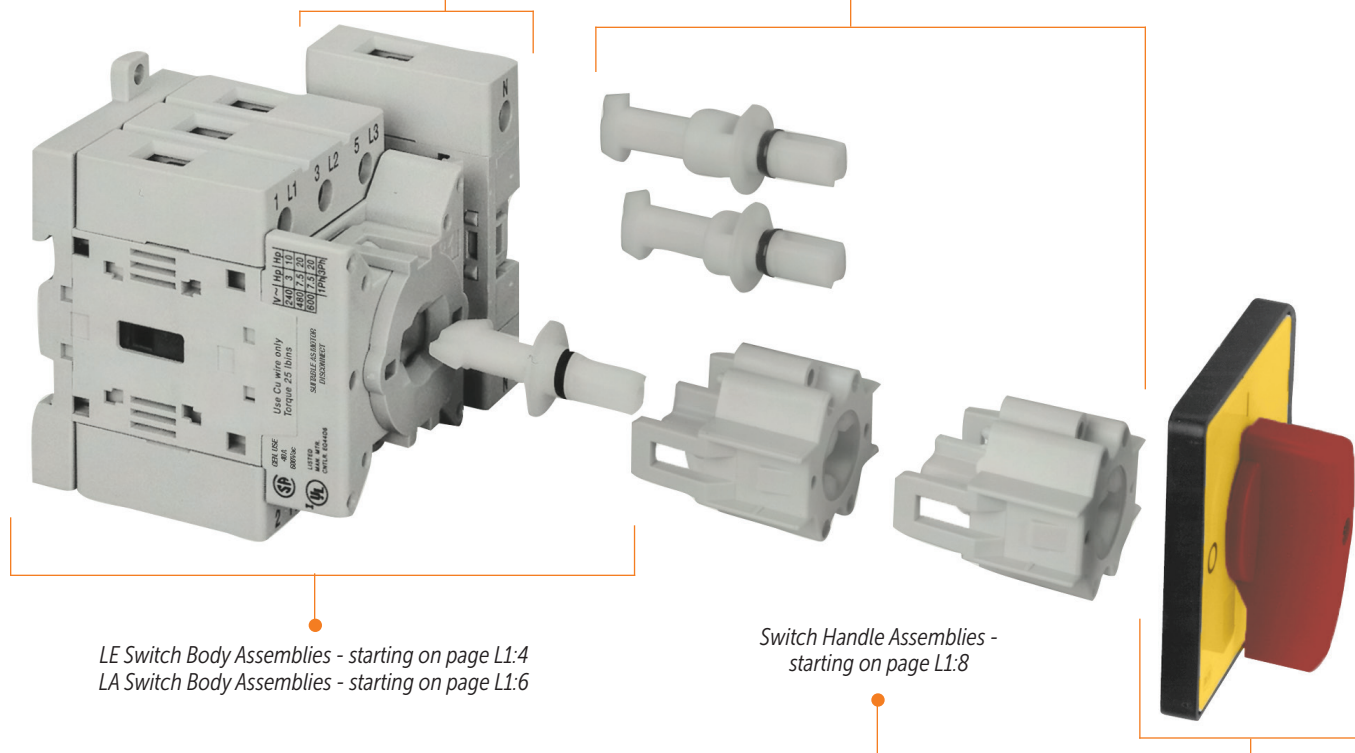
First determine the switch you need from pages L1:4...L1:6. Then turn to page L1:8 and L1:9 to choose a switch handle assembly.

If necessary, see page L1:12 and L1:13 to determine the type and length of shaft extension you require.

Auxiliary contact blocks, fourth poles, ground terminals and neutral terminals are found on page L1:10.

Side Mount Accessories - page L1:10
Miscellaneous Accessories - page L1:11

Modular Shaft Extensions (LA only) - page L1:12
Metal Shaft Extensions (LA only) - page L1:13



LE Switch Body Assemblies - starting on page L1:4
LA Switch Body Assemblies - starting on page L1:6

Switch Handle Assemblies -
starting on page L1:8

L1

L7 Disconnect Switches

L1:3

Front Mounted 3 Pole Switches - 90° Throw ①③

3 Pole 1/L13/L25/L3 2/T14/T26/T3	 Plastic 	 Plastic 	 Metal 		
	Catalog Number	Catalog Number	Catalog Number	Catalog Number	Catalog Number
3 Pole >	LE7-16-1753	LE7-25-1753	LE7-32-1753	LE7-40-1753	LE7-63-1753
Amp Rating (encl.)					
UL/CSA	16	25	32	40	63
IEC/VDE/BS	16	25	32	40	63
3Ø Horsepower					
240V	3	5	7.5	10	15
480V	7.5	10	15	20	25
600V	10	10	15	20	25
1Ø Horsepower					
120V	1	1	1	2	3
240V	2	2	3	3	5
Dimension - mm (inches)	63 (2-31/64) - Height 36 (1-27/64) - Width 51 (2-1/64) - Depth ②	63 (2-31/64) - Height 45 (1-49/64) - Width 60 (2-23/64) - Depth ②		72 (2-55/64) - Height 54 (2-1/8) - Width 74 (2-29/32) - Depth ②	

3 Pole 1/L13/L25/L3 2/T14/T26/T3	 Metal 	
	Catalog Number	Catalog Number
3 Pole >	LE7-80-1753	LE7-100-1753
Amp Rating (encl.)		
UL/CSA	80	100
IEC/VDE/BS	80	100
3Ø Horsepower		
240V	25	30
480V	40	50
600V	50	50
1Ø Horsepower		
120V	5	7.5
240V	10	15
Dimension - mm (inches)	90 (3-35/64) - Height 72 (2-27/32) - Width 90 (3-35/64) - Depth ②	

① Fourth pole side-mounted module available. See page L1:10.

② Dimension without shaft.

③ Switch Handle position

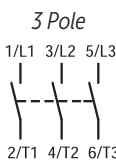
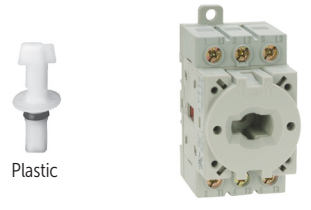
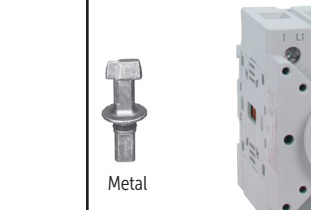
Front Mounted 3 Pole Changeover Switches and 6 Pole Switches - 90° Throw ①

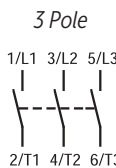
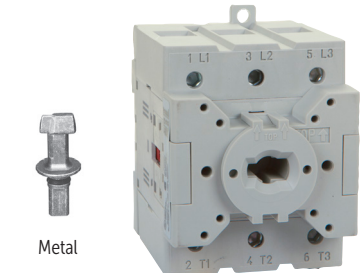
Changeover (Center OFF) 1 7 3 9 5 11 2 8 4 10 6 12 6 Pole 1 3 5 7 9 11 2 4 6 8 10 12	 Metal	 Metal	 Metal		
	Catalog Number LE7-16-3753	Catalog Number LE7-25-3753	Catalog Number LE7-32-3753		
Changeover >	Catalog Number LE7-40-3753	Catalog Number LE7-63-3753			
6 Pole >	Catalog Number LE7-16-1756	Catalog Number LE7-25-1756	Catalog Number LE7-32-1756		
Amp Rating (encl.)	Catalog Number LE7-40-1756	Catalog Number LE7-63-1756			
UL/CSA	16	25	32	40	63
IEC/VDE/BS	16	25	32	40	63
3Ø Horsepower					
240V	3	5	7.5	10	15
480V	7.5	10	15	20	25
600V	10	10	15	20	25
1Ø Horsepower					
120V	1	1	1	2	3
240V	2	2	1	3	5
Dimension - mm (inches)	63 (2-31/64) - Height 90 (3-35/64) - Width 76 (3) - Depth ②	63 (2-31/64) - Height 90 (3-35/64) - Width 85 (3-11/32) - Depth ②	72 (2-55/64) - Height 108 (4-1/4) - Width 99 (3-57/64) - Depth ②		

Changeover (Center OFF) 6 Pole	Metal	
	Catalog Number	Catalog Number
Changeover >	LE7-80-3753	LE7-100-3753
6 Pole >	LE7-80-1756	LE7-100-1756
Amp Rating (encl.)		
UL/CSA	80	100
IEC/VDE/BS	80	100
3Ø Horsepower		
240V	25	30
480V	40	50
600V	50	50
1Ø Horsepower		
120V	5	7.5
240V	10	15
Dimension - mm (inches)	90 (3-35/64) - Height 144 (5-43/64) - Width 115 (4-17/32) - Depth ②	

- ① 3 Pole Changeover Switch has center OFF – 1 — 2
- ② Dimension without shaft.

Base Mounted 3 Pole Switches - 90° Throw ①③

						
	Catalog Number	Catalog Num.	Catalog Num.	Catalog Num.	Catalog Num.	Catalog Num.
3 Pole >	LA7-16-1753	LA7-25-1753	LA7-32-1753	LA7-40-1753	LA7-63-1753	LA7-63-1753
Amp Rating (encl.)	16	25	32	40	63	63
UL/CSA	16	25	32	40	63	63
IEC/VDE/BS	16	25	32	40	63	63
3Ø Horsepower						
240V	3	5	7.5	10	15	15
480V	7.5	10	15	20	25	25
600V	10	10	15	20	25	25
1Ø Horsepower						
120V	1	1	1	2	3	3
240V	2	2	3	3	5	5
Dimension - mm (inches)	63 (2-31/64) - Height 36 (1-27/64) - Width 51 (2-1/64) - Depth ②	63 (2-31/64) - Height 45 (1-49/64) - Width 60 (2-23/64) - Depth ②	63 (2-31/64) - Height 45 (1-49/64) - Width 60 (2-23/64) - Depth ②	72 (2-55/64) - Height 54 (2-1/8) - Width 74 (2-29/32) - Depth ②	72 (2-55/64) - Height 54 (2-1/8) - Width 74 (2-29/32) - Depth ②	72 (2-55/64) - Height 54 (2-1/8) - Width 74 (2-29/32) - Depth ②

		
	Catalog Num.	Catalog Num.
3 Pole >	LA7-80-1753	LA7-100-1753
Amp Rating (encl.)	80	100
UL/CSA	80	100
IEC/VDE/BS	80	100
3Ø Horsepower		
240V	25	30
480V	40	50
600V	50	50
1Ø Horsepower		
120V	5	7.5
240V	10	15
Dimension - mm (inches)	90 (3-35/64) - Height 72 (2-27/32) - Width 90 (3-35/64) - Depth ②	90 (3-35/64) - Height 72 (2-27/32) - Width 90 (3-35/64) - Depth ②

① Fourth pole side-mounted module available. See page L1:10.

② Dimension without shaft.

③ Switch Handle position 

Base Mounted 3 Pole Changeover and 6 Pole Switches - 90° Throw ①③

Changeover (Center OFF) 	 Metal	 Metal	 Metal	 Metal	 Metal
6 Pole 					
Changeover >	Catalog Number	Catalog Number	Catalog Number	Catalog Number	Catalog Number
6 Pole >	Catalog Number	Catalog Number	Catalog Number	Catalog Number	Catalog Number
Amp Rating (encl.)					
UL/CSA	16	25	32	40	63
IEC/VDE/BS	16	25	32	40	63
3Ø Horsepower					
240V	3	5	7.5	10	15
480V	7.5	10	15	20	25
600V	10	10	15	20	25
1Ø Horsepower					
120V	1	1	1	2	3
240V	2	2	3	3	5
Dimension - mm (inches)	63 (2-31/64) - Height 90 (3-35/64) - Width 85 (3-11/32) - Depth ②	63 (2-31/64) - Height 90 (3-35/64) - Width 89 (3-1/2) - Depth ②		72 (2-55/64) - Height 108 (4-1/4) - Width 103 (4-1/16) - Depth ②	

Changeover (Center OFF) 1739511 28410612	1 L1 3 L2 5 L3 7 L4 9 L5 11 L6 2 T1 4 T2 6 T3 8 T4 10 T5 12 T6 Metal	
6 Pole 1357911 24681012		
Changeover >	Catalog Number	Catalog Number
6 Pole >	Catalog Number	Catalog Number
Amp Rating (encl.)		
UL/CSA	80	100
IEC/VDE/BS	80	100
3Ø Horsepower		
240V	25	30
480V	40	50
600V	50	50
1Ø Horsepower		
120V	5	7.5
240V	10	15
Dimension - mm (inches)	90 (3-35/64) - Height 144 (5-43/64) - Width 119 (4-17/32) - Depth ②	

- ① 3 Pole Changeover Switch has center OFF -
- ② Dimension without shaft.
- ③ Insert LA2-G3399 is required for 3-position changeover switches when using LA2-G3399 metal shaft extensions.

Switch Handle Assemblies (LA and LE Switches)

Switch Handle Assembly ❶	Color	Mounting Method	Protection Rating	For use with...	Frame Size	Legend ❷	Catalog Number
 Type A	Silver Legend ❷ Black Knob	Screw Fixing ❶	Type 12, IP66	LA/LE7-16...63A	48 X 48	O-I OFF-ON 1-0-2 ❸	LFS2-A-4-175 LFS2-A-4-175I LFS2-A-4-375
			Type 12, IP66	LA/LE7-25...100A ❹	64 X 64	O-I OFF-ON 1-0-2 ❸	LFS2-A-6-175 LFS2-A-6-175I LFS2-A-6-375
			Type 12, IP66	LA/LE7-40...100A	88 X 88	O-I OFF-ON 1-0-2 ❸	LFS2-A-8-175 ❺ LFS2-A-8-175I ❺ LFS2-A-8-375
		Central Nut	Type 12, IP66	LE7-16...63A	48 X 48	O-I OFF-ON	LFC2-A-4-175 LFC2-A-4-175I
 Type E	Silver Legend ❷ Black Knob ❸	Screw Fixing ❶	Type 12, IP66	LA/LE7-16...63A	48 X 48	O-I OFF-ON 1-0-2 ❸	LFS2-E-4-175 LFS2-E-4-175I LFS2-E-4-375
			Type 12, IP66	LA/LE7-25...100A ❹	64 X 64	O-I OFF-ON 1-0-2 ❸	LFS2-E-6-175 LFS2-E-6-175I LFS2-E-6-375
		Central Nut	Type 12, IP66	LE7-16...63A	48 X 48	O-I OFF-ON	LFC2-E-4-175 LFC2-E-4-175I
 Type I	Yellow Legend ❷ Red Knob	Screw Fixing ❶	Type 12, IP66	LA/LE7-16...63A	48 X 48	O-I OFF-ON 1-0-2 ❸	LFS2-I-4-175 LFS2-I-4-175I LFS2-I-4-375
			Type 12, IP66	LA/LE7-25...100A ❹	64 X 64	O-I OFF-ON 1-0-2 ❸	LFS2-I-6-175 LFS2-I-6-175I LFS2-I-6-375
			Type 12, IP66	LA/LE7-40...100A	88 X 88	O-I OFF-ON 1-0-2 ❸	LFS2-I-8-175 ❺ LFS2-I-8-175I ❺ LFS2-I-8-375
		Central Nut	Type 12, IP66	LE7-16...63A	48 X 48	O-I OFF-ON	LFC2-I-4-175 LFC2-I-4-175I
 Type L	Yellow Legend ❷ Red Knob ❸	Screw Fixing ❶	Type 12, IP66	LA/LE7-16...63A	48 X 48	O-I OFF-ON 1-0-2 ❸	LFS2-L-4-175 LFS2-L-4-175I LFS2-L-4-375
			Type 12, IP66	LA/LE7-25...100A ❹	64 X 64	O-I OFF-ON	LFS2-L-6-175 LFS2-L-6-175I
		Central Nut	Type 12, IP66	LE7-16...63A	48 X 48	O-I OFF-ON	LFC2-L-4-175 LFC2-L-4-175I

❶ Mounting screws included with Switch Body Assembly.

❷ For blank legend plate, substitute "000" for last three digits in catalog number. Example: LFS2-A-4-000.

❸ Lockable in OFF position, ON position or both.

❹ Only for use with 3 Pole Changeover switch.

❺ Only for use with LA/LE7-25...63 three pole Changeover Switches. Use 88 x 88 Switch Handle for 80 and 100A Changeover Switch.

❻ This handle cannot be used on a mechanical coupling accessory L2-G3* when coupling any LE7 switches. Must select smaller 48x48 or 64x64 type handles for LE7 coupling applications.

Switch Handle Assemblies (LA and LE Switches) ②

Switch Handle Assembly	Color	Mounting Method	Protection Rating	For use with...	Frame Size	Legend	Catalog Number
 Type G	Gray Frame Black Handle	Screw Fixing ①	Type 12, IP66	LA/LE7-16	54 x 54	O — I OFF — ON	LFS7-G-4-175
			Type 12, IP66	LA7-16...100A LE7-25...100A	67 x 67	O — I OFF — ON	LFS2-G-6-175
			Type 12, IP66	LA/LE7-40...100A	90 x 90	O — I OFF — ON	LFS2-G-8-175 ⑥
		Central Nut	Type 12, IP66	LE7-16...63A	67 x 67	O — I OFF — ON	LFC2-G-6-175
 Type N	Yellow Frame Red Handle	Screw Fixing ①	Type 12, IP66	LA/LE7-16	54 x 54	O — I OFF — ON	LFS7-N-4-175
			Type 12, IP66	LA7-16...100A LE7-25...100A	67 x 67	O — I OFF — ON	LFS2-N-6-175
			Type 12, IP66	LA/LE7-40...100A	90 x 90	O — I OFF — ON	LFS2-N-8-175 ⑥
		Central Nut	Type 12, IP66	LE7-16...63A	67x67	O — I OFF — ON	LFC2-N-6-175

Switch Handle Assemblies for LA7 Switches - Type 4/4X ①②③④⑤

Switch Handle Assembly	Mounting Method	Protection Rating	For use with...	Frame Size	Legend	Color	Catalog Number
 Type R	Screw Fixing Configurable for defeatable or non- defeatable	Type 3R, 3, 12, 4, 4X IP66	LA7-16...100A	48.7 x 47	O — I OFF — ON	Black Frame Black Handle	LA7-SB
		Type 3R, 3, 12, 4, 4X IP66		48.7 x 47	O — I OFF — ON	Yellow Frame Red Handle	LA7-SY
 Type R	Screw Fixing Configurable for defeatable or non- defeatable	Type 3R, 3, 12, 4, 4X	LA7-16...100A	80 x 114	O — I OFF — ON	Black Frame Black Handle	L11-PB
		Type 3R, 3, 12, 4, 4X		80 x 114	O — I OFF — ON	Yellow Frame Red Handle	L11-PY

① Mounting screws included with Switch Body Assembly.

② Lockable in OFF position with up to 3 padlocks.

③ For LA7 base mount switches only.

④ Switch handle can be field modified to be defeatable or non-defeatable.

⑤ Handles LA7-S_ and L11-P_ require R-type Switch Handle Shaft Extension. See page L1:13.

⑥ This handle cannot be used on a mechanical coupling accessory L2-G3* when coupling any LE7 switches. Must select smaller 48x48 or 64x64 type handles for LE7 coupling applications.

Auxiliary Contact Blocks ②

Aux. Contact Block	Contact Configuration	For use with...	Catalog Number
One NO (Early Break) ①			
		LE7-16 LE7-25...100	LE7-16-P-D10 LE7-P-D10
		LA7-16 LA7-25...100	LA7-16-P-D10 LA7-P-D10
One NO and One NC (Instantaneous)			
		LE7-16...100	LE7-P-11
		LA7-16...100	LA7-P-11
One NOEM and One NCLB (Make Before Break)			
		LE7-16...100	LE7-PL-11
		LA7-16...100	LA7-PL-11
Two NO and Two NC (Instantaneous)			
		LE7-16...100	LE7-P-22
		LA7-16...100	LA7-P-22

Fourth Pole ②

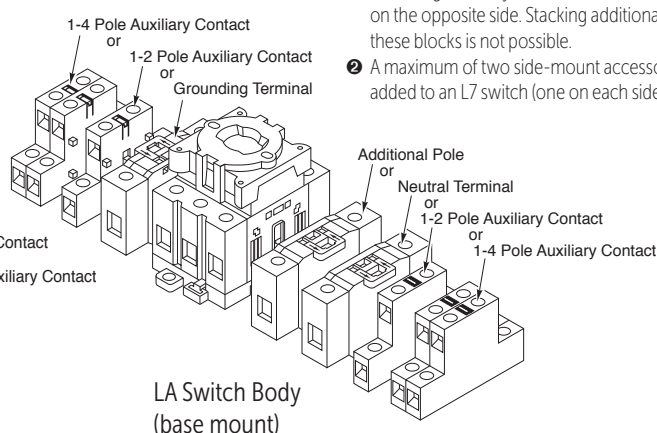
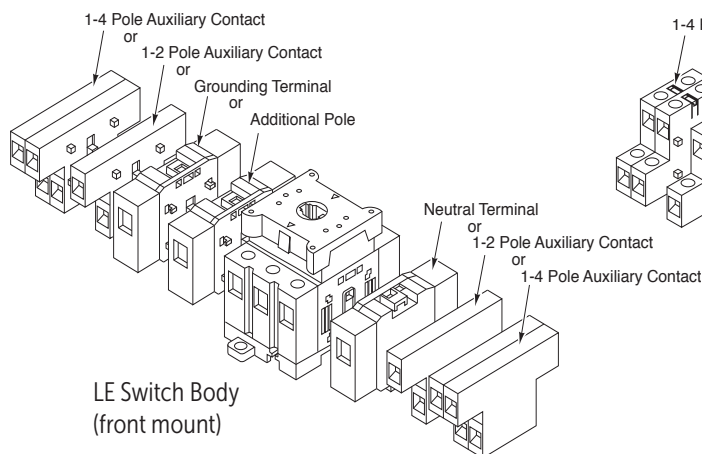
Fourth Pole	Contact Configuration	For use with...	Catalog Number
Early Make-Late Break			
		LE7-16 LE7-25 LE7-32 LE7-40 LE7-63 LE7-80 LE7-100	LE7-16-NP LE7-25-NP LE7-32-NP LE7-40-NP LE7-63-NP LE7-80-NP LE7-100-NP
		LA7-16 LA7-25 LA7-32 LA7-40 LA7-63 LA7-80 LA7-100	LA7-16-NP LA7-25-NP LA7-32-NP LA7-40-NP LA7-63-NP LA7-80-NP LA7-100-NP

Ground & Neutral Terminals ②

Terminal	Contact Configuration	For use with...	Catalog Number
Ground Terminal			
		LA7-16 LA7-25 & 32 LA7-40 & 63 LA7-80 & 100	LA7-16-PE LA7-32-PE LA7-63-PE LA7-100-PE
		LE7-16 LE7-25 & 32 LE7-40 & 63 LE7-80 & 100	LE7-16-PE LE7-32-PE LE7-63-PE LE7-100-PE
Neutral Terminal			
		LA7-16 LA7-25 & 32 LA7-40 & 63 LA7-80 & 100	LA7-16-TN LA7-32-TN LA7-63-TN LA7-100-TN
		LE7-16 LE7-20 & 32 LE7-40 & 63 LE7-80 & 100	LE7-16-TN LE7-32-TN LE7-63-TN LE7-100-TN

Accessory Mounting Guide

Various accessories can be mounted simultaneously on both the LA7 (base mount) and LE7 (front mount) switch bodies. The drawings below illustrate which combinations are possible.



- ① All N.O. Early Break Contact Blocks mount on the left and/or right side by themselves, or with -NP, -PE, -TN aux on the opposite side. Stacking additional aux contacts on these blocks is not possible.
- ② A maximum of two side-mount accessories may be added to an L7 switch (one on each side)

L7 Switch Accessories

Accessory	Description	Catalog Number
 (Reducer included)	End Shaft - for LE switch ② - Replacement 44mm shaft supplied standard with all switches - Sold only in packages of 5. - Order 5 pieces to receive 1 pkg of 5. Plastic L2-G3380 Metal L7-G3688 ①	
	Terminal cover - 3 pole LE/LA7-16 LE/LA7-25/32 LE/LA7-40/63 LE/LA7-80/100 - Sold only in packages of 2. - Order 2 pieces to receive 1 pkg of 2.	L7-16-C3 L7-25-C3 L7-40-C3 L7-80-C3
	Terminal cover - 3 & 4th pole LE/LA7-25/32 LE/LA7-40/63 LE/LA7-80/100 - Sold only in complete packages. - Order 1 to receive 1 pkg of 4 pieces.	L7-25-C4 L7-40-C4 L7-80-C4
	6 Pole Mechanical Coupling - ②③ joins two L7 switches (front or base mount) to form a 6 pole switch (includes 44 mm metal End Shafts for both LE and LA switch) LE7-16 LE/LA7-25 & 32 LE/LA7-40 & 63 LE/LA7-80 & 100	L7-G3821 L7-G3660 L7-G3661 L7-G3662
	Handle Assembly Wrench Used for tightening LA7-S- handles during assembly	LA7-N245

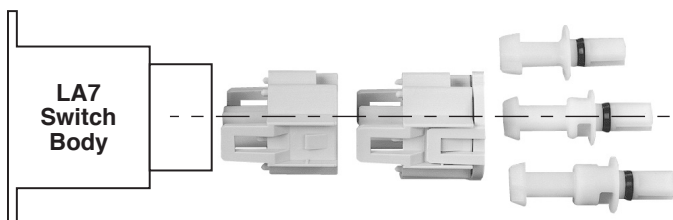
① LE7-40...100 3-pole switches and LE7-16...100 6-pole/Changeover switches come standard with a 44mm **metal** End Shaft. LE7-16...32 3-pole switches come standard with a 44mm **plastic** End Shaft.

② When using mechanical coupler to join two LE7 or LA7 three pole switches, terminal markings will be: 
 To obtain terminal markings  order six pole switch from pages L1:5 and L1:7. Coupling for changeover switch is not available.

③ Mechanical couplings applied to all LE7 front mount switches must use LFS2- 48x48 or 64x64 type handles. 6-Pole Mechanical Couplings are not designed for use with LFS2- 88x88 or 90x90 type handles. Mechanical couplings applied to all LA7 base mount switches may use all types of LFS2 handles where applicable.

Modular shaft extension system

Shaft Extension Modules are ideal for lengthening the shaft of an LA7 switch up to 144mm (≈5.5"). These rugged polycarbonate modules are 24mm (≈15/16") long and snap on "piggyback" to one another without the use of tools. Strong center shafts interlock as each module is snapped together. The standard 44mm End Shaft supplied with every LA7 switch connects the last Extension Module with the Switch Handle Assembly. End Shafts of 52 and 57mm are also available, making this modular system versatile, fast and economical. Shaft Extension Modules are supplied two per package.

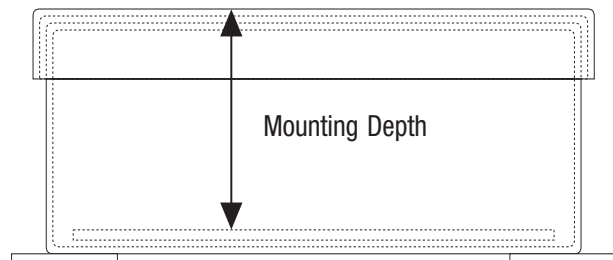


Modular Shaft Extension Components ③

Component	Description	Catalog Number
	44mm End Shaft - one 44mm shaft supplied standard with all switches Plastic shaft Metal shaft	LA2-G2830 L7-G3687 ②
	52mm End Shaft - Plastic shaft Metal shaft	LA2-G3194 L7-G3707 ②
	57mm End Shaft - Plastic shaft	LA2-G3195
	Extension Modules - Two per package (priced per package)	LA2-G2853

Determining modular shaft extension components

- Determine Mounting Depth. This is the distance from the inside mounting surface of the enclosure to the *outside surface* of the enclosure cover. See diagram below for details. ①



- If necessary convert Mounting Depth inches to millimeters (inches x 25.4 = millimeters).

NOTE: Table is based on a standard 3 or 4 pole switch body. For 6 pole switches, deduct 25mm from the overall Mounting Depth before referring to table.

- In the Modular Shaft Extension Table to the right, find the Mounting Depth in the column under the appropriate LA7 Switch Body.
- Order the End Shaft and number of Extension Modules required for that Mounting Depth.

Modular Shaft Extension Table

Number of Extension Modules	Required End Shaft	Mounting Depth (mm) ①			
		Switch Body LA7-16	Switch Body LA7-25/32	Switch Body LA7-40/63	Switch Body LA7-80/100
0	44mm ②	57.5-63.5	66.5-72.5	79.5-84.5	96-102
0	52mm	65-73	74-82	81.5-94	98-111.5
0	57mm	70-78	79-87	86.5-99	103-116.5
1	44mm ②	81.5-87.5	90.5-96.5	103.5-109.5	120-126
1	52mm	83.5-97	92.5-106	105.5-119	122-135.5
1	57mm	88.5-102	97.5-111	110.5-124	127-140.5
2	44mm ②	105.5-111.5	114.5-120.5	127.5-133.5	144-150
2	52mm	107.5-121	116.5-130	129.5-143	146-159.5
2	57mm	112.5-126	121.5-135	134.5-148	151-164.5
3	44mm ②	129.5-135.5	138.5-144.5	151.5-157.5	168-174
3	52mm	131.5-145	140.5-154	153.5-167	170-183.5
3	57mm	136.5-150	145.5-159	158.5-172	175-188.5
4	44mm ②	153.5-159.5	162.5-168.5	175.5-181.5	192-198
4	52mm	155.5-169	164.5-178	177.5-191	194-207.5
4	57mm	160.5-174	169.5-183	182.5-196	199-212.5
5	44mm ②	177.5-183.5	186.5-192.5	199.5-205.5	216-222
5	52mm	179.5-193	188.5-202	201.5-215	218-231.5
5	57mm	184.5-198	193.5-207	206.5-220	223-236.5
6	44mm ②	201.5-207.5	210.5-216.5	223.5-229.5	240-246
6	52mm	203.5-217	212.5-226	225.5-239	242-255.5
6	57mm	208.5-222	217.5-231	230.5-244	247-260.5

① For DIN rail mounted devices, remember to deduct the offset distance provided by the rail. For example, deduct 2.5mm from the Mounting Depth for switch bodies mounted on DIN 46277 rail.

② LA7-40...100 3-pole switches and LA7-16...100 6-pole/Changeover switches come standard with a 44mm metal End Shaft. LA7-16...32 3-pole switches come standard with a 44mm plastic End Shaft.

③ Order replacement End Shafts for LE (front mount switches) from page L1:11.

Metal shaft extension system

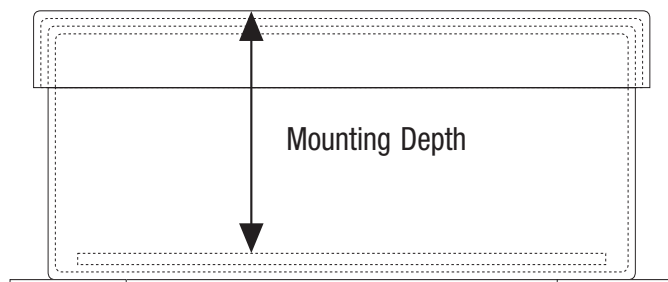
Adjustable metal shaft extensions snap on securely to LA7 switches via the same quick-connect design as shaft extension modules. Metal shafts are equipped with a door interlock and a padlock hasp for locking out the switch after the enclosure is opened (for outside lockout, select a Switch Handle Assembly with lockout capability).



Two standard lengths of these unique adjustable shafts are available. Metal shaft extensions mate with any of the standard Switch Handle Assemblies on pages L1:8 and L1:9. All necessary hardware is supplied with the shaft.

Determining metal shaft extension

- Determine Mounting Depth. This is the distance from the inside mounting surface of the enclosure to the **outside surface** of the enclosure cover. See diagram below for details. ❶



- If necessary convert Mounting Depth inches to millimeters (inches x 25.4 = millimeters).
- NOTE:** Tables are based on a standard 3 or 4 pole switch body. For 6 pole switches, **deduct 25mm** from overall Mounting Depth before referring to table.
- In the Metal Shaft Extension Table to the right, find the Mounting Depth in the column under the appropriate LA7 Switch Body.
- Order the Metal Shaft Extension required for that Mounting Depth.

- ❶ For DIN rail mounted devices, remember to deduct the offset distance provided by the rail. For example, deduct 2.5mm from the Mounting Depth for switch bodies mounted on DIN 46277 rail.
- ❷ This dimension can be reduced another 55mm by cutting the plastic sleeve and further cutting the metal shaft.
- ❸ If using Metal Shaft Extension System with LA7 3 Pole Changeover Switches, insert LA2-G3399 is required for three position switching. Lockout at the switch is not possible. See page L1:8 for Type E or Type L lockable handles for lockout on outside of enclosure.
- ❹ Shaft included in package is designed for LA7-S_ and L11-P_ only. Not for use with previous handles.

Metal Shaft Extension Components (LA7-16...100)

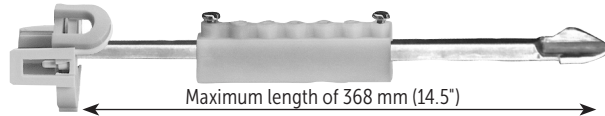
Component	Catalog Number
 Length: 110...235mm For switching positions: 0	LA2-G3393 ❸
 Length: 230...350mm For switching positions: 0	LA2-G3394 ❸
 Insert - For modifying metal shaft for use with 3 Pole Changeover Switches (SEE IMPORTANT NOTE ❸)	LA2-G3399

Metal Shaft Extension Table

Metal Shaft Extension	Mounting Depth (mm) ❶			
	Switch Body LA7-16	Switch Body LA7-25/32	Switch Body LA7-40/63	Switch Body LA7-80/100
LA2-G3393	168❷ - 299	173❷ - 304	186❷ - 317	203❷ - 334
LA2-G3394	288 - 414	293 - 419	306 - 432	323 - 449

R-type Switch Handle Shaft Extensions (LA7-16...100) ❹

Only select shaft extension from this table if ordering the R-type (UL Type 4X) Switch Handle (page L1:9). Select shaft after figuring overall Mounting Depth.

R-type Switch Handle Shaft Extension (typical)				
				
Mounting Depth (mm) ❶				Catalog Number
LA7-16	LA7-25/32	LA7-40/63	LA7-80/100	
84.5-108.5	93.5-117.5	117.5-131.5	123.5-147.5	LA7-S-67
107.5-131.5	116.5-140.5	130.5-154.5	146.5-170.5	LA7-S-90
114.5-138.5	123.5-147.5	137.5-161.5	153.5-177.5	LA7-S-97
132.5-156.5	141.5-165.5	155.5-179.5	171.5-195.5	LA7-S-115
Adjustable R-type Switch Handle Shaft Extension (LA7-S1-P shown)				
 Maximum length of 368 mm (14.5")				
130-385	144-399	157-412	174-429	LA7-S1-P
Includes all parts except L11-S1 shaft, order separately				LA7-NS-P

L7 Enclosed Motor Disconnects (UL and CSA Approved Enclosures) ①⑤

Amp/Horsepower Rating						Painted Steel - UL Type 1/3/12/4 LFS2 Operator - Type 12/IP66 ⑦		Nonmetallic - UL Type 1/3/12/4 LFS2 Operator - Type 12/IP66 ⑦		Nonmetallic - UL Type 4/4X Operator - UL Type 4/4X		Stainless Steel - UL Type 4/4X Operator - UL Type 4/4X			
															
										LA7-S handle shown		L11-P handle shown			
						Dimension ③				Dimension ③				Dimension ③	
						Catalog Number		Catalog Number		Catalog Number		Catalog Number		Catalog Number	
				</											

Modifications (Factory Assembled) ②

Description	Catalog Number Suffix
Ground Terminal	
For LA7-16	-PE
For LA7-25 & 32	-PE
For LA7-40 & 63	-PE
For LA7-80 & 100	-PE
Neutral Terminal	
For LA7-16	-TN ③
For LA7-25 & 32	-TN ③
For LA7-40 & 63	-TN ③
For LA7-80 & 100	-TN ③

NOTE: All -WN and -CN Enclosed Disconnects come standard with a round, yellow and red, screw fixing handle (Type N) with ON/OFF marking. For a round gray and black handle, change "N" to "G". Example: change LA7-25-1753-WN to LA7-25-1753-WG. For a gray and black square handle (LFS2-A), change "N" to "A". For example, change LA7-25-1753-WN to LA7-25-1753-WA.

All -CR and -SR Enclosed Disconnects come standard with a round yellow and red handle set to defeatable door interlocking mode (Type R) and ON/OFF marking. For a black handle change "R" to "B". For example, change LA7-25-1753-CR to LA7-25-1753-CB. Note: L11-S*/P* Handles can be field converted to non-defeatable mode by inserting a plastic tab which ships in a packet with the enclosed assemblies. See pages L1.8...L1.9 for descriptions of all Switch Handle Assemblies.



- ① UL/CSA Approved enclosures do not provide for knockouts. Wire opening must be drilled by user.
- ② Up to two modifications available per Enclosed Disconnect (one modification possible on 4 pole switches).
- ③ Not available on four pole switches.
- ④ One additional factory modification possible.
- ⑤ Non-metallic enclosures are fiberglass reinforced polyester type.

- ⑥ LA7-...-CR and -SR Enclosures with dim codes A and C include LA7-S_ Handles, and dim codes B and D include L11-P_ handles. Transition to LA7-S* handles will be a gradual change.
- ⑦ To substitute L11 4X handle add -PY for yellow/red or -PB for black handle; For example: LA7-25-1753-WN changes to LA7-25-1753-WN-PY. Price adder applies.

L7 Enclosed Motor Disconnects (UL and CSA Approved Enclosures) ①

Amp/Horsepower Rating						Painted Steel - UL Type 1/3/12/4 LFS2 Operator - Type 12/IP66 ⑤		Nonmetallic - UL Type 1/3/12/4 LFS2 Operator - Type 12/IP66 ⑤		Nonmetallic - UL Type 4/4X Operator - UL Type 4/4X		Stainless Steel - UL Type 4/4X Operator - UL Type 4/4X	
										 LA7-S handle shown		 L11-P handle shown	
UL/CSA Amps	Horsepower					Catalog Number	Dimension ⑥	Catalog Number	Dimension ⑥	Catalog Number	Dimension ⑥	Catalog Number	Dimension ⑥
	1Ø		3Ø										
120V	240V	240V	480V	600V									
3 Pole - ON/OFF (with 1 NOEM and 1 NCLB - Make Before Break)													
16	1	2	3	7.5	10	LA7-16-1753-WN-PL11	A	LA7-16-1753-CN-PL11	C	LA7-16-1753-CR-PL11	C	LA7-16-1753-SR-PL11	A
25	1	2	5	10	10	LA7-25-1753-WN-PL11	A	LA7-25-1753-CN-PL11	C	LA7-25-1753-CR-PL11	C	LA7-25-1753-SR-PL11	A
32	1	3	7.5	15	15	LA7-32-1753-WN-PL11	A	LA7-32-1753-CN-PL11	C	LA7-32-1753-CR-PL11	C	LA7-32-1753-SR-PL11	A
40	2	3	10	20	20	LA7-40-1753-WN-PL11	A	LA7-40-1753-CN-PL11	C	LA7-40-1753-CR-PL11	C	LA7-40-1753-SR-PL11	A
63	3	5	15	25	25	LA7-63-1753-WN-PL11	A	LA7-63-1753-CN-PL11	C	LA7-63-1753-CR-PL11	C	LA7-63-1753-SR-PL11	A
80	5	10	25	40	50	LA7-80-1753-WN-PL11	B	LA7-80-1753-CN-PL11	D	LA7-80-1753-CR-PL11	D	LA7-80-1753-SR-PL11	B
100	7.5	15	30	50	50	LA7-100-1753-WN-PL11	B	LA7-100-1753-CN-PL11	D	LA7-100-1753-CR-PL11	D	LA7-100-1753-SR-PL11	B
4 Pole - ON/OFF (with 1 NOEM and 1 NCLB - Make Before Break) ③													
16	1	2	3	7.5	10	LA7-16-1754-WN-PL11	A	LA7-16-1754-CN-PL11	C	LA7-16-1754-CR-PL11	C	LA7-16-1754-SR-PL11	A
25	1	2	5	10	10	LA7-25-1754-WN-PL11	A	LA7-25-1754-CN-PL11	C	LA7-25-1754-CR-PL11	C	LA7-25-1754-SR-PL11	A
32	1	3	7.5	15	15	LA7-32-1754-WN-PL11	A	LA7-32-1754-CN-PL11	C	LA7-32-1754-CR-PL11	C	LA7-32-1754-SR-PL11	A
40	2	3	10	20	20	LA7-40-1754-WN-PL11	A	LA7-40-1754-CN-PL11	C	LA7-40-1754-CR-PL11	C	LA7-40-1754-SR-PL11	A
63	3	5	15	25	25	LA7-63-1754-WN-PL11	A	LA7-63-1754-CN-PL11	C	LA7-63-1754-CR-PL11	C	LA7-63-1754-SR-PL11	A
80	5	10	25	40	50	LA7-80-1754-WN-PL11	B	LA7-80-1754-CN-PL11	D	LA7-80-1754-CR-PL11	D	LA7-80-1754-SR-PL11	B
100	7.5	15	30	50	50	LA7-100-1754-WN-PL11	B	LA7-100-1754-CN-PL11	D	LA7-100-1754-CR-PL11	D	LA7-100-1754-SR-PL11	B
6 Pole - ON/OFF (with 1 NOEM and 1 NCLB - Make Before Break)													
16	1	2	3	7.5	10	LA7-16-1756-WN-PL11	B	LA7-16-1756-CN-PL11	D	LA7-16-1756-CR-PL11	D	LA7-16-1756-SR-PL11	B
25	1	2	5	10	10	LA7-25-1756-WN-PL11	B	LA7-25-1756-CN-PL11	D	LA7-25-1756-CR-PL11	D	LA7-25-1756-SR-PL11	B
32	1	3	7.5	15	15	LA7-32-1756-WN-PL11	B	LA7-32-1756-CN-PL11	D	LA7-32-1756-CR-PL11	D	LA7-32-1756-SR-PL11	B
40	2	3	10	20	20	LA7-40-1756-WN-PL11	B	LA7-40-1756-CN-PL11	D	LA7-40-1756-CR-PL11	D	LA7-40-1756-SR-PL11	B
63	3	5	15	25	25	LA7-63-1756-WN-PL11	B	LA7-63-1756-CN-PL11	D	LA7-63-1756-CR-PL11	D	LA7-63-1756-SR-PL11	B

Modifications (Factory Assembled) ②

Description	Catalog Number Suffix
Ground Terminal	
For LA7-16	-PE
For LA7-25 & 32	-PE
For LA7-40 & 63	-PE
For LA7-80 & 100	-PE
Neutral Terminal	
For LA7-16	-TN
For LA7-25 & 32	-TN
For LA7-40 & 63	-TN
For LA7-80 & 100	-TN



NOTE: All -WN and -CN Enclosed Disconnects come standard with a round, yellow and red, screw fixing handle (Type N) with ON/OFF marking. For a round gray and black handle, change "N" to "G". Example: change LA7-25-1753-WN to LA7-25-1753-WG. For a gray and black square handle (Type A), change "N" to "A". Example: change LA7-25-1753-WN to LA7-25-1753-WA.

All -CR and -SR Enclosed Disconnects come standard with a round yellow and red handle set to defeatable door interlocking mode (Type R) and ON/OFF marking. For a black handle change "R" to "B". For example, change LA7-25-1754-CR-PL11 to LA7-25-1754-CB-PL11. Note: L11-S*/P* Handles can be field converted to non-defeatable mode by inserting a plastic tab which ships in a packet with the enclosed assemblies. See pages L1:8...L1:9 for descriptions of all Switch Handle Assemblies.

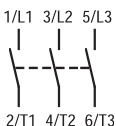
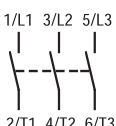
- UL/CSA Approved enclosures do not provide for knockouts. Wire opening must be drilled by user.
- One modification available per Enclosed Disconnect (no modifications available on 4 pole).
- Factory modifications not available.
- Nonmetallic enclosures are fiberglass reinforced polyester type.

- LA7-...-CR and -SR Enclosures with dim codes A & C include LA7-S_ Handles, and dim codes B & D include L11-P_ handles. Transition to LA7-S* handles will be a gradual change.
- To substitute L11 4X handle add -PY for yellow/red or -PB for black handle. For example: LA7-25-1753-WN-PL11 changes to LA7-25-1753-WN-PY-PL11. Price adder applies.

LY7 Enclosed Load Disconnect Switches (IP Rated Enclosures) ❶

Amp/Horsepower Rating						Plastic - IP66 ABS Enclosure Operator - IP66, Red/Yellow (Type N)	Plastic - IP66 ABS Enclosure Operator - IP66, Gray/Black (Type G)	Plastic - IP66 ABS Enclosure Operator - IP66, Silver/Black (Type A)
								
UL/ CSA Amps	Horsepower					Catalog Number	Catalog Number	Catalog Number
	1Ø		3Ø					
	120V	240V	240V	480V	600V			
3 Pole - ON/OFF								
16	1	2	3	7.5	10	LY7-16M-1753-N4	LY7-16M-1753-G4	LY7-16M-1753-A4
25	1	2	5	10	10	LY7-25-1753-N6	LY7-25-1753-G6	LY7-25-1753-A6
32	1	3	7.5	15	15	LY7-32-1753-N6	LY7-32-1753-G6	LY7-32-1753-A6
40	2	3	10	20	20	LY7-40-1753-N6	LY7-40-1753-G6	LY7-40-1753-A6
63	3	5	15	25	25	LY7-63-1753-N6	LY7-63-1753-G6	LY7-63-1753-A6
80	5	10	25	40	50	LY7-80-1753-N6	LY7-80-1753-G6	LY7-80-1753-A6
100	7.5	15	30	50	50	LY7-100-1753-N6	LY7-100-1753-G6	LY7-100-1753-A6
6 Pole - ON/OFF								
16	1	2	3	7.5	10	LY7-16M-1756-N6	LY7-16M-1756-G6	LY7-16M-1756-A6
25	1	2	5	10	10	LY7-25-1756-N6	LY7-25-1756-G6	LY7-25-1756-A6
32	1	3	7.5	15	15	LY7-32-1756-N6	LY7-32-1756-G6	LY7-32-1756-A6
40	2	3	10	20	20	LY7-40-1756-N6	LY7-40-1756-G6	LY7-40-1756-A6
63	3	5	15	25	25	LY7-63-1756-N6	LY7-63-1756-G6	LY7-63-1756-A6

Assembled L7 Disconnect Switches

Switch	Description	Function	Color	Circuit	Poles	UL/CSA Amps	Catalog Number
	Type Q Load Switch - This pre-assembled switch is designed for panels with standard 45mm cutouts. The specially designed switch handle also makes it ideal for mounting <i>within</i> a distribution panel when ready access to the operator is not desired. Finger-proof to IP20.	 ON-OFF 90° Switching	Gray face/ Black Handle	 1/L1 3/L2 5/L3 2/T1 4/T2 6/T3	3	25	LA7-25-1753-Q
						32	LA7-32-1753-Q
	Emergency Off Switch - This yellow and red pre-assembled switch is designed as an Emergency Off for panels with standard 45mm cutouts. The specially designed switch handle also makes it ideal for mounting <i>within</i> a distribution panel when a color coded OFF switch is desired. Finger-proof to IP20 with provision for locking with one padlock.	 ON-OFF 90° Switching	Yellow face/ Red handle	 1/L1 3/L2 5/L3 2/T1 4/T2 6/T3	3	25	LA7-25-1753-R
						32	LA7-32-1753-R

❶ Suitable for use in NEMA 4 type applications (not UL listed).

Thermoplastic Enclosures (IP Rated)

Accessory	Description	Enclosure Size	For use with...	Poles	Shaft Required...	Catalog Number
	ABS Enclosure – For High Impact Applications IP66, UL94 Flame Resistance - HB Includes 1 Grounding/Neutral terminal.	95 (W) x 150 (H) x 86 (D)	LA7-25...32	3 / 4	LA2-G3194	LA2-G3572
		95 (W) x 150 (H) x 111 (D)				LA2-G3573
	With pre-drilled holes for 64 x 64 operator or larger	125 (W) x 180 (H) x 105 (D)	LA7-25...32	6	With switch Supplied with enclosure	L7-G3663
			LA7-40...63	3 / 4		
		175 (W) x 230 (H) x 120 (D)	LA7-40...63	6	With switch Supplied with enclosure	L7-G3665
			LA7-80...100	3 / 4		
	Without holes	95 (W) x 150 (H) x 86 (D) 95 (W) x 150 (H) x 111 (D)				LA2-G3574 LA2-G3575
	Noryl Enclosure – For Corrosion Prone Applications IP66, UL94 Flame Resistance - VO Includes 1 Grounding/Neutral terminal.	95 (W) x 150 (H) x 86 (D)	LA7-25...32	3 / 4	LA2-G3194	LA2-G3576
		95 (W) x 150 (H) x 111 (D)				LA2-G3577
	With pre-drilled holes for 64 x 64 operator or larger	125 (W) x 180 (H) x 105 (D)	LA7-25...32	6	With switch Supplied with enclosure	L7-G3664
			LA7-40...63	3 / 4		
		175 (W) x 230 (H) x 120 (D)	LA7-40...63	6	With switch Supplied with enclosure	L7-G3666
			LA7-80...100	3 / 4		
	Without holes	95 (W) x 150 (H) x 86 (D) 95 (W) x 150 (H) x 111 (D)				LA2-G3578 LA2-G3579

Enclosure Accessories

Accessory	Description	For use with...	Pkg Qty	Catalog Number
 L7-G3653  L7-G3673	Additional Ground & Neutral Terminals - - Provision for two - One included with enclosures above - Sold only in quantities of 5. Order 5 pieces to receive one package of 5.	LA2-G357... L7-G366...	5	L7-G3653 L7-G3673

Technical Information

				16A	25A	32A	40A	63A	80A	100A	Aux. Cont.
Performance Data											
Rated operational voltage U_e		UL/CSA	[V]	600	600	600	600	600	600	600	600
		IEC ❶	[V]	690	690	690	690	690	690	690	690
Rated insulation voltage U_i		UL/CSA	[V]	600	600	600	600	600	600	600	600
		IEC	[V]	690	690	690	690	690	690	690	690
Rated impulse voltage U_{imp}		UL/CSA	[kV]	8	8	8	8	8	8	8	8
Test voltage U_t		1 minute	[kV]	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Lost power, per pole			[W]	0.58	1.0	1.5	1.6	2.4	3.6	5.5	0.4
Rated Frequency			[Hz]	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Conventional free air thermal current I_{th} ❶			[A]	25	40	50	63	75	100	120	12
Conventional enclosed thermal current I_{th} ❶			[A]	20	32	40	50	63	80	100	10
Rated Current I_e ❶											
AC-1	Non-inductive or only slightly inductive loads	690V	[A]	16	25	32	40	63	80	100	10
AC-21A	Switching of resistive loads with slight overload										
Rated Power P_e											
AC-23A	Occasional switching of 3Ø motors and other highly inductive loads (criterion for selecting main switches)	230V	[kW]	5.5	7.5	7.5	15	18.5	22	30	–
		400V	[kW]	7.5	11	15	22	30	37	55	–
		690V	[kW]	7.5	11	15	18.5	22	37	45	–
AC-3	Squirrel cage motors; starting and stopping of running motors	230V	[kW]	4	5.5	7.5	11	15	18.5	22	–
		400V	[kW]	5.5	7.5	11	15	18.5	30	37	–
		690V	[kW]	5.5	7.5	11	15	18.5	30	22	–
Short circuit current (Type 2 coordination)											
Rated conditional short circuit current		400/415V	[kA]	20	20	15	20	15	30	25	–
Maximum fuse rating of circuit (type g, G)			[A]	20	25	35	50	63	80	100	–
Rated short-time current 1cw, 1s			[A]	800	900	900	1300	1300	2500	2500	–
Rated breaking capacity AC23A (cosφ 0.45)		230V	[A]	156	296	296	484	484	780	780	–
		400V	[A]	120	256	256	504	504	800	800	–
		690V	[A]	70	136	136	196	196	376	376	–
DC switching capacity											
Rated current I_e		24/48V	[A]	20	25	32	40	63	80	100	–
DC-21A	1 pole	110V	[A]	5	5	6	8	10	16	20	–
		220V	[A]	1	1	1	1.5	1.5	3	3	–
		440V	[A]	0.5	0.5	0.5	0.6	0.6	0.7	0.7	–
		96V	[A]	20	25	32	40	63	80	100	–
	2 poles	110V	[A]	20	23	25	32	50	70	80	–
		220V	[A]	5	5	6	8	10	16	20	–
		440V	[A]	1	1	1	1.5	1.5	3	3	–
		600V	[A]	0.6	0.6	0.6	0.8	0.8	1	1	–
	3 poles	110V	[A]	20	25	32	40	63	80	100	–
		220V	[A]	13	13	15	20	28	50	63	–
		440V	[A]	2.2	2.2	2.2	3.6	3.6	6.5	6.5	–
		600V	[A]	1.3	1.5	1.5	2	2	3	3	–
Rated power P_e		90V	[kW]	1	1.3	1.5	2.9	4.1	5.1	7.2	–
DC-23A, DC-3, DC-5	3 poles For inductive loads, T< 15 ms	110V	[kW]	1	1.1	1.3	2.2	3.3	5.5	7	–
		220V	[kW]	0.8	0.9	1.1	1.7	2	3.5	4.4	–
		440V	[kW]	0.6	0.6	0.6	0.9	0.9	1.1	1.1	–
		600V	[kW]	0.4	0.4	0.4	0.5	0.5	0.9	0.9	–

① See Conformity to Standards on next page.

Technical Information (continued)

			16A	25A	32A	40A	63A	80A	100A	Aux. Cont.	
UL/CSA Data											
Continuous current			[A]	16	25	32	40	63	80	100	–
Heavy Pilot Duty			[AC]	A600	A600	A600	–	–	–	–	A600
Standard Duty			[DC]	–	–	–	–	–	–	–	Q600
Motor Rating 60Hz	Single phase, 2 poles	120V	[FLA]	16	16	16	24	34	56	80	–
			[HP]	1	1	1	2	3	5	7.5	–
		240V	[FLA]	12	12	17	17	28	50	68	–
			[HP]	2	2	3	3	5	10	15	–
		480V	[FLA]	8.5	8.5	14	21	26	34	68	–
			[HP]	3	3	5	7.5	10	15	30	–
	Three phase	600V	[FLA]	11.2	11.2	11.2	16	20	27	44	–
			[HP]	5	5	5	7.5	10	15	25	–
		120V	[FLA]	13.6	13.6	19.2	30.4	40	56	84	–
			[HP]	2	2	3	5	7.5	10	15	–
		240V	[FLA]	9.6	15.2	22	28	42	68	80	–
			[HP]	3	5	7.5	10	15	25	30	–
		480V	[FLA]	11	14	21	27	34	52	65	–
			[HP]	7.5	10	15	20	25	40	50	–
		600V	[FLA]	11	11	17	22	27	52	52	–
			[HP]	10	10	15	20	25	50	50	–

Short Circuit Ratings

Maximum short circuit prospective fault current, RMS symmetrical, 600 VAC max.

When protected by Class K5 fuses, maximum amperes of rated fuse	[KA]	5	5	5	5	5	5	5	–
	[A]	25	35	35	80	80	125	125	–
When protected by J Class fuses, maximum amperes of rated fuse	[KA]	~	65	65	65	65	65	65	–
	[A]	~	30	30	60	60	100	100	–

Mechanical Data

			16A	25A...32A	40A...63A	80A...100A	Aux. Cont.
Protection class according to IEC 529							
Motor rating 60 Hz							
Actuators							
Switch bodies							
Type 12 / IP66							
IP20							
Mechanical life	[millions of operations]			0.2			
Maximum wire gauges							
Terminal size per IEC 947-1			A4	A6	A7	A9	2xA2
Fine strands	1/2	[AWG]	(1)16...10/(2)16...12	(1)14...8/(2)14...10	(1)12...4/(2)12...8	(1)10...1/(2)10...4	18...14
	conductor	[mm²]	(1)1...10/(2)1...4	(1)1.5...16/(2)1.5...6	(1)2.5...25/(2)2.5...16	(1)4...50/(2)4...25	0.75...2.5
Rigid wire	1/2	[AWG]	(1)16...8/(2)16...12	(1)14...8/(2)14...10	(1)12...4/(2)12...8	(1)10...1/(2)10...6	18...14
	conductor	[mm²]	(1)1.5...6/(2)1.5...4	(1)1.5...10/(2)1...6	(1)2.5...16/(2)2.5...10	(1)4...35/(2)4...16	0.5...2.5
Tightening Torque	max.	[lb-in]	12	12	25	50	8
		[Nm]	1.4	1.4	2.8	5.6	1.0
Ambient Temperature	Operation	[°C]	-25...+60 °C (-13...+140 °F)				
	Storage	[°C]	-40...+80 °C (-40...+176 °F)				

Conformity to Standards: ①

IEC 947-1, IEC 947-3 Low voltage switchgear and control gear part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units.

CE

UL 508: Industrial Control Equipment

CSA: C22.2 No. 14: Industrial Control Equipment

Approvals: ①

UL Listed (File No. E54612 NLRV)

CSA Certified (LR 13002)

CCC Certified

Meets IEC, VDE and BS standard requirements

IEC/CE Marked (Per EN60947-3)

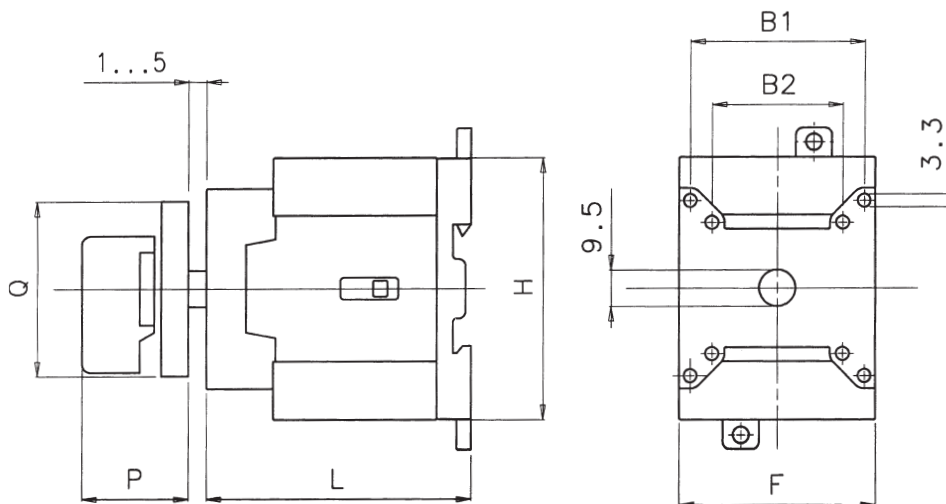
① LA(E)-16 switches are cUL approved.

LE7 Front Mount (3 Pole) with Screw Fixing Handle

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

Switch Handle		
Type	P	Q
LFS2-A-4	28	48 x 48
LFS2-E-4	28	48 x 48
LFS2-I-4	28	48 x 48
LFS2-L-4	28	48 x 48
LFS2-S-4	28	48 x 62
LFS2-A-6	28	64 x 64
LFS2-E-6	28	64 x 64
LFS2-I-6	28	64 x 64
LFS2-L-6	28	64 x 64
LFS2-S-6	28	64 x 78
LFS7-G-4	34	54 x 54
LFS7-N-4	34	54 x 54
LFS2-G-6	34	67 x 67
LFS2-N-6	34	67 x 67
LFS2-A-8	45	88 x 88
LFS2-I-8	45	88 x 88
LFS2-G-8	49	88 x 88
LFS2-N-8	49	88 x 88

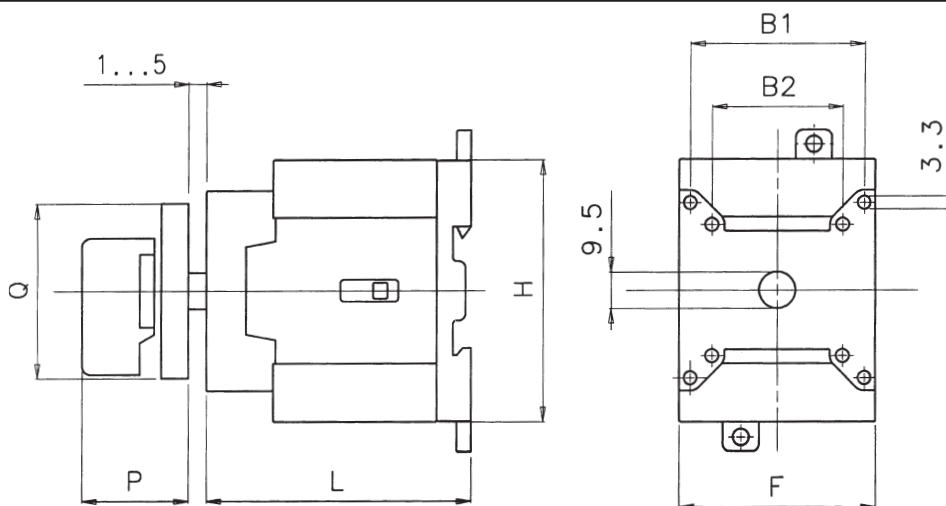
Switch Body					
Type	B1	B2	F	H	L
LE7-16	–	28	36	63	51
LE7-25/32	–	36	45	63	60
LE7-40/63	48	36	54	72	74
LE7-80/100	48	36	72	90	90



LE7 Front Mount (6 Pole) with Screw Fixing Handle

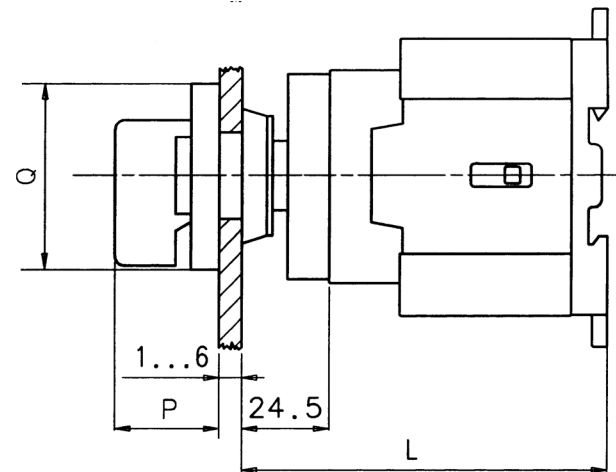
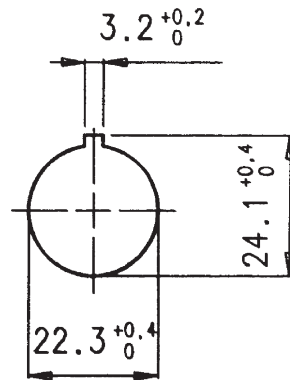
Switch Handle		
Type	P	Q
LFS2-A-4	28	48 x 48
LFS2-E-4	28	48 x 48
LFS2-I-4	28	48 x 48
LFS2-L-4	28	48 x 48
LFS2-S-4	28	48 x 62
LFS2-A-6	28	64 x 64
LFS2-E-6	28	64 x 64
LFS2-I-6	28	64 x 64
LFS2-L-6	28	64 x 64
LFS2-S-6	28	64 x 78
LFS7-G-4	34	54 x 54
LFS7-N-4	34	54 x 54
LFS2-G-6	34	67 x 67
LFS2-N-6	34	67 x 67
LFS2-A-8	45	88 x 88
LFS2-I-8	45	88 x 88
LFS2-G-8	49	88 x 88
LFS2-N-8	49	88 x 88

Switch Body					
Type	B1	B2	F	H	L
LE7-16	–	28	36	63	51
LE7-25/32	–	36	45	63	60
LE7-40/63	48	36	54	72	74
LE7-80/100	48	36	72	90	90



LE7 Front Mount (3 Pole) with Central Nut Fixing Handle

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



Switch Handle

Type	P	Q
LFC2-A-4	29	48 x 48
LFC2-E-4	29	48 x 48
LFC2-I-4	29	48 x 48
LFC2-L-4	29	48 x 48
LFC2-G-6	34	67 x 67
LFC2-N-6	34	67 x 67

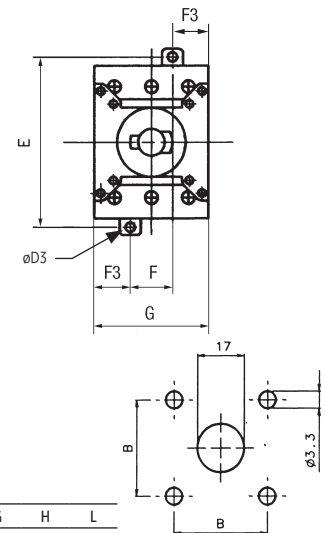
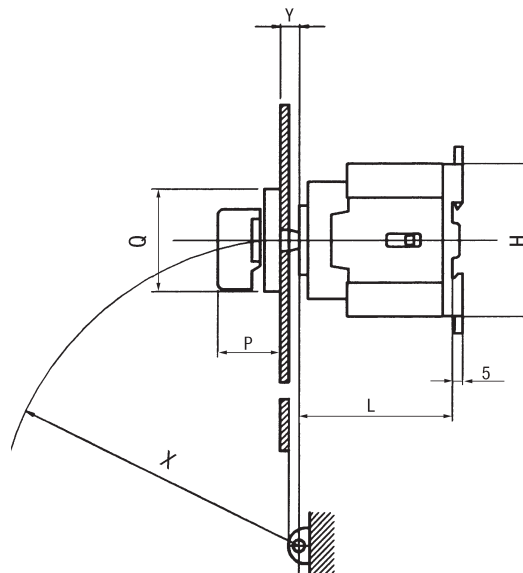
Switch Body

Type	L
LE7-16	75.5
LE7-25/32	84.5
LE7-40/63	98.5

LA7 Base Mount (3 Pole) with Screw Fixing Handle

Switch Handle

Type	P	Q	B
LFS2-A-4	28	48 x 48	36
LFS2-E-4	28	48 x 48	36
LFS2-I-4	28	48 x 48	36
LFS2-L-4	28	48 x 48	36
LFS2-S-4	28	48 x 62	36
LFS2-A-6	28	64 x 64	48 (36)
LFS2-E-6	28	64 x 64	48 (36)
LFS2-I-6	28	64 x 64	48 (36)
LFS2-L-6	28	64 x 64	48 (36)
LFS2-S-6	28	64 x 78	48 (36)
LFS7-G-4	34	54 x 54	36
LFS7-N-4	34	54 x 54	36
LFS2-G-6	34	67 x 67	48 (36)
LFS2-N-6	34	67 x 67	48 (36)
LFS2-A-8	45	88 x 88	48
LFS2-I-8	45	88 x 88	48
LFS2-G-8	49	88 x 88	48
LFS2-N-8	49	88 x 88	48



Proximity to Hinge

Type	Y min.	X ≥	Y max.	X ≥
LE7-16	2.5	150	9.5	90
LE7-25/32	2.5	150	9.5	90
LE7-40/63	2.5	150	9.5	90
LE7-80/100	2.5	150	9.5	90

Switch Body

Type	D3	E	F	F3	G	H	L
LA7-16	4.5	70	11	12.5	36	63	55
LA7-25/32	4.5	70	15	15	45	63	59
LA7-40/63	4.5	80	20	17	54	72	73
LA7-80/100	5.6	95	25	23.5	72	90	89

LA7 Base Mount (6 Pole) with Screw Fixing Handle

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

Switch Handle

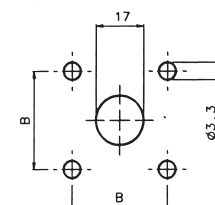
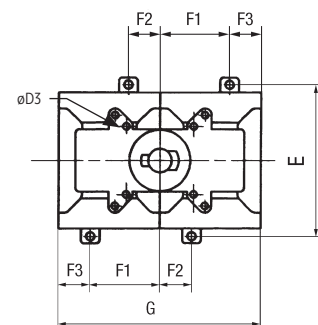
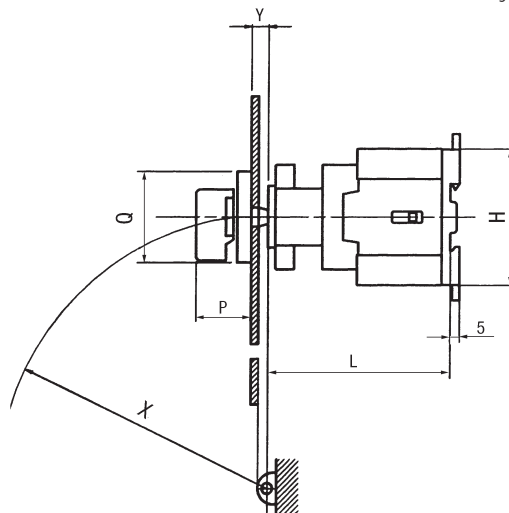
Type	P	Q	B
LFS2-A-4	28	48 x 48	36
LFS2-E-4	28	48 x 48	36
LFS2-I-4	28	48 x 48	36
LFS2-L-4	28	48 x 48	36
LFS2-S-4	28	48 x 62	36
LFS2-A-6	28	64 x 64	48 (36)
LFS2-E-6	28	64 x 64	48 (36)
LFS2-I-6	28	64 x 64	48 (36)
LFS2-L-6	28	64 x 64	48 (36)
LFS2-S-6	28	64 x 78	48 (36)
LFS7-G-4	34	54 x 54	36
LFS7-N-4	34	54 x 54	36
LFS2-G-6	34	67 x 67	48 (36)
LFS2-N-6	34	67 x 67	48 (36)
LFS2-A-8	45	88 x 88	48
LFS2-I-8	45	88 x 88	48
LFS2-G-8	49	88 x 88	48
LFS2-N-8	49	88 x 88	48

Proximity to Hinge

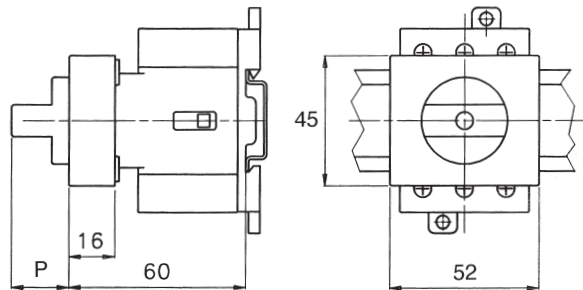
Type	Y min.	X ≥	Y max.	X ≥
LE7-16	2.5	150	9.5	90
LE7-25/32	2.5	150	9.5	90
LE7-40/63	2.5	150	9.5	90
LE7-80/100	2.5	150	9.5	90

Switch Body

Type	D3	E	F1	F2	F3	G	H	L
LA7-16	4.5	70	xx	12.5	12.5	90	63	55
LA7-25/32	4.5	70	30	15	15	90	63	84
LA7-40/63	4.5	80	37	17	17	108	72	98
LA7-80/100	5.6	95	48.5	23.5	23.5	144	90	114

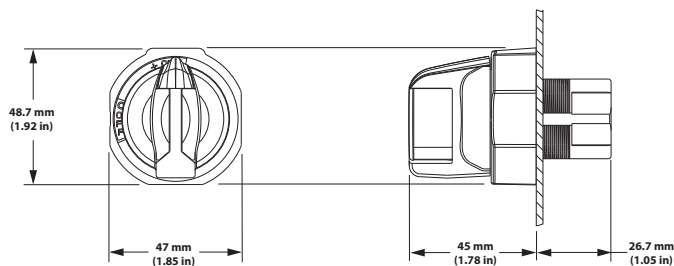


Type Q and Emergency Off Switch

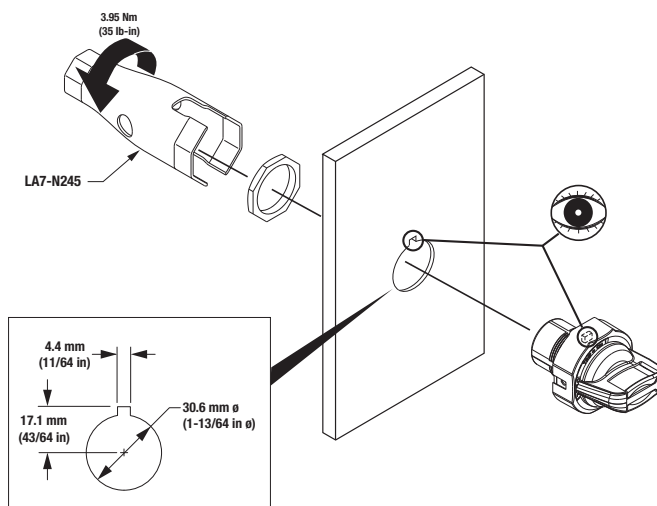


Type	P
LA7-25(32)-1753-Q	20
LA7-25(32)-1753-R	23

LA7-SY/SB (Type R) Switch Handle

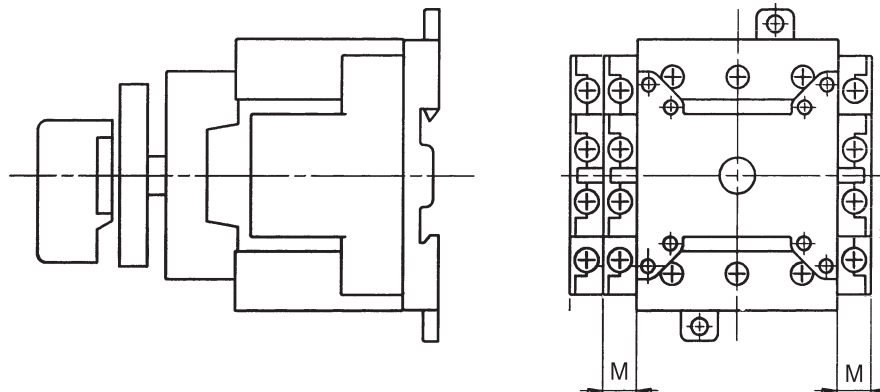


LA7-SY/SB Assembly



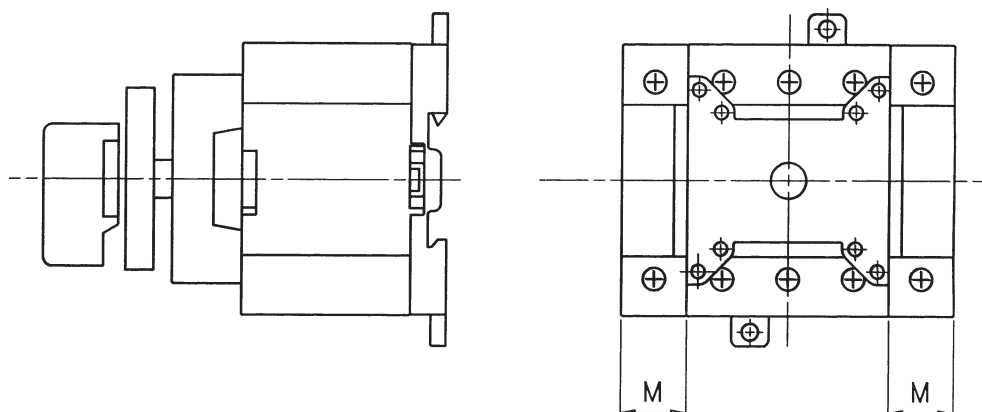
L7 with Auxiliary Contact Blocks

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



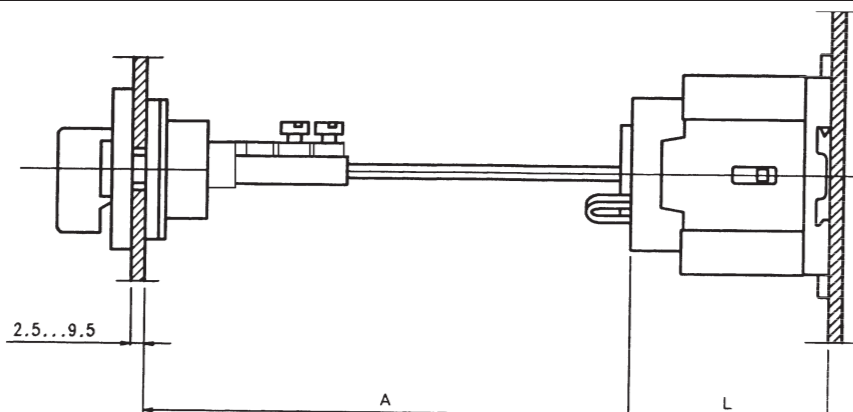
Contacts	M
1 N.O. + 1 N.C.	9
2 N.O. + 2 N.C.	18

L7 with Ground, Neutral and Fourth Pole



Type	M
L7-16	12.5
L7-20/32	14
L7-40/63	17.5
L7-80/100	22

Metal Shaft Extension (LA2-G3393[4])

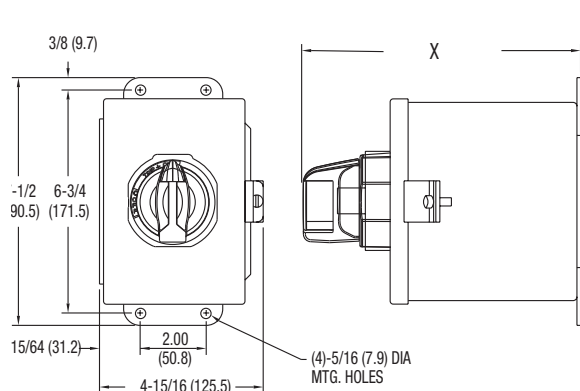


Switch Body	
Type	L
LA7-16	55
LA7-20/32	59
LA7-40/63	73
LA7-80/100	89

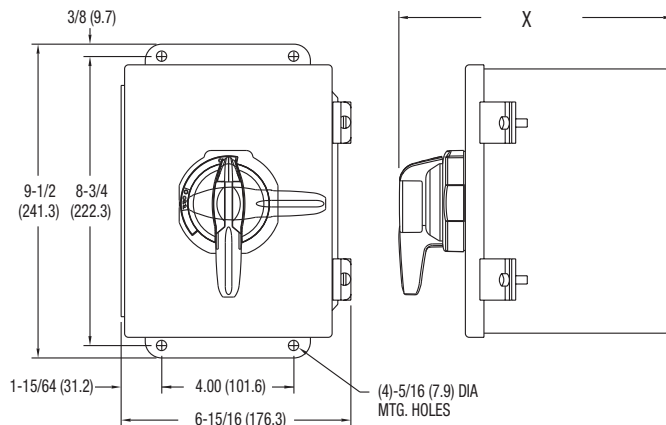
Shaft	
Type	A
LA2-G3393	110...235
LA2-G3394	230...350

L7 Enclosed Motor Disconnect

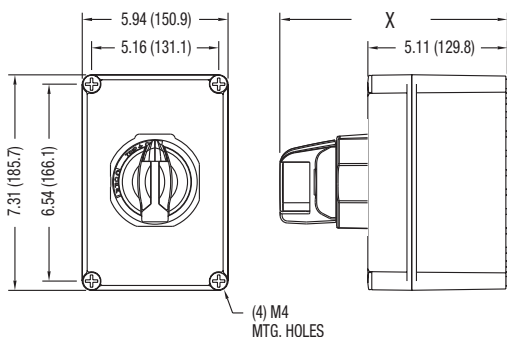
Dimensions are in inches (millimeters). Dimensions not intended for manufacturing purposes.



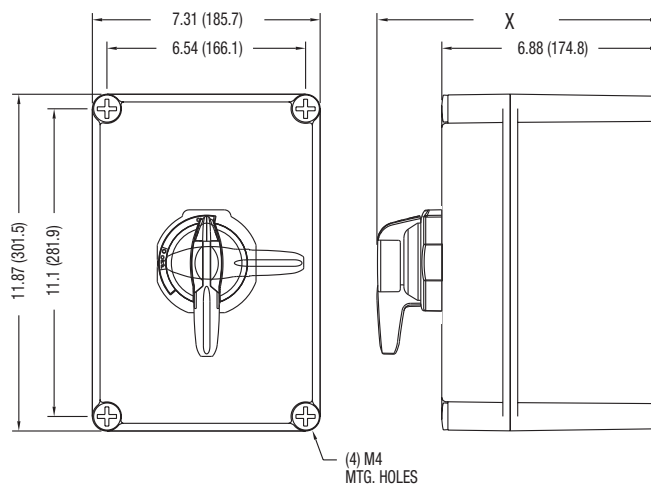
DIMENSION CODE A



DIMENSION CODE B



DIMENSION CODE C



DIMENSION CODE D

Dimension Code	Handle	Dim X	
		inches	mm
A	LA7-SY/SB	6-9/16	166.8
	LFS2-_-6*	6-1/8	155.8
B	L11-PB/PY	7-1/16	180.1
	LFS2-_-6*	6-11/16	169.1
C	LA7-SY/SB	6-1/4	158.7
	LFS2-_-6*	5-13/16	147.7
D	L11-PB/PY	8	203.7
	LFS2-_-6*	7-9/16	192.7

LY7 Enclosed Load Disconnect Switch (and Thermoplastic Enclosures)

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

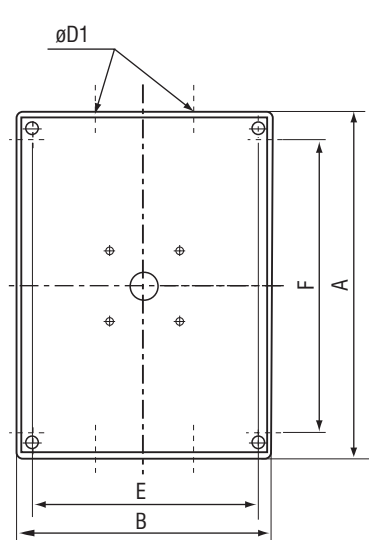


Figure 1

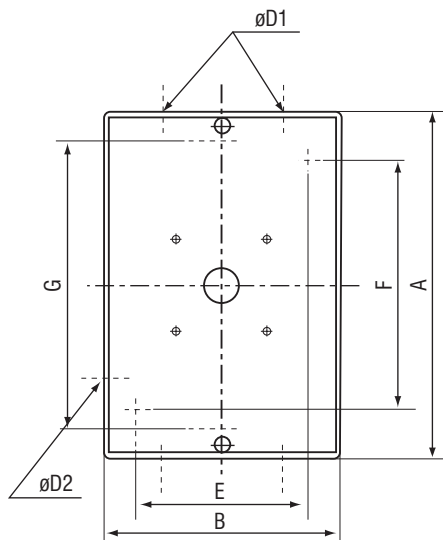
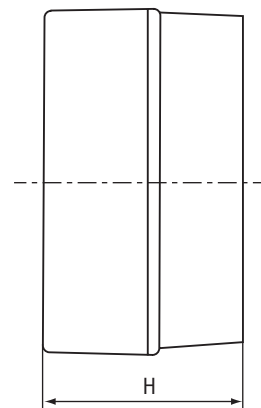


Figure 2



Enclosure Side View

Type	Figure	Poles	Enclosure		Height A	Width B	Knock Outs		Mounting Holes			Depth H
			ABS	Noryl			$\phi D1$ ❶	$\phi D2$	E	F	G	
LY7-16M	2	3	❶	❶	118	70	16/20	~	50	105	~	70
	2	6	L7-G3663	L7-G3664	180	125	25/30	~	~	~	145	105
LY7-25/32	2	3/4	LA2-G3572	LA2-G3576	150	95	22.5/28.5	22.5	60	115	~	86
	2	6	L7-G3663	L7-G3664	180	125	28.5/37.5	~	~	~	145	105
LY7-40/63	2	3/4	L7-G3663	L7-G3664	180	125	28.5/37.5	~	~	~	145	105
	1	6	L7-G3665	L7-G3666	230	175	37.5/47.5	~	155	195	~	120
LY7-80/100	1	3/4	L7-G3665	L7-G3666	230	175	37.5/47.5	~	155	195	~	120

❶ Empty enclosures not available for purchase

❷ LA7-16 units have one knock-out on each end. All others have two knock-outs on each end.

Series L11 Fusible up to 800A & Non-fusible Disconnect Switches up to 1200 Amps

Suitable as a UL98
Service Entrance
Disconnecting Means



TIP!



To learn the basic differences between control, load and fusible disconnect switches and how to apply them, see our white paper Tech-LMSD in the online library.

Sprecher + Schuh's L11 series of fused and nonfused disconnect switches complies with UL98 service entrance requirements and is NFPA 79 compliant. This family of rod operated switches is suitable for applications that require small panel space and superior short circuit protection.

Big performance in a small package

L11 disconnects are rated up to 1200A and can be operated at up to 600V. They protect motors up to 500HP (@480V). The L11 may be installed on circuits capable of delivering up to 200,000A of short circuit fault current levels typically found in modern industrial facilities.

The new expanded offering of the L11 disconnect series ranges from 100A through 1200A. The L11 Fusible switches are available from 100A up to 800A, and are designed to be used with Class J & L fuses. The L11 Non-Fusible switches are available from 100A up to 1200A. Optional auxiliary contacts can also be mounted on the switch for control circuit use. The L11 family performance comes in a compact design, leaving room for additional branch circuit components within the panel.

Maximum protection for downstream equipment

L11 switches are UL98 approved as a branch circuit protection device and are engineered to provide excellent short-circuit protection for downstream equipment up to 200kA. The L11 fusible switches accept the latest small dimension Class CC, J, L and HRCII fuses.

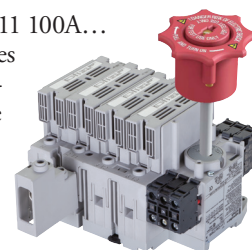
This Type 2 protection limits let-through currents to levels specified for IEC equipment, and ensures that when the short circuit is cleared, the device will be operable.

Meets the toughest safety standards

The L11 offers a modular universal internal handle which provides an interlocked handle for test mode use (30A/60A) and UL508A and NFPA 79 compliance in North America. The L11 30A & 60A are equipped with removable fuse carriers which provide dead-front switch protection during fuse change-out. Fuse carriers with neon blown fuse indicators are also available as an option on 30A & 60A models. Test mode D7 auxiliary contacts may be installed to provide test capability of control circuit without energizing the main contacts for the L11-30A/60A switches. The L11 switches meet IP20 for finger-safe wiring terminals and IP30 for touch-safe fuse carriers.

NFPA 79 Compliant

All L11 30/60A & L11 100A... 800A Fusible switches are NFPA79 compliant, which meets the following guidelines under the NFPA 79 standards 5.3.3.1 and 6.2.3.1.2.



The supply Circuit Disconnecting Device shall:

- Be provided with a permanent means permitting it to be locked in the open position only independent of the door position.
- Be operable, by qualified persons, independent of the door position without the use of accessory tools or devices.

The interlocking means shall:

- Be reactivated automatically when the door is closed.
- Prevent closing of the disconnecting means while the enclosure door is open, unless an interlock is operated by deliberate action.

International standards and approvals

All Sprecher + Schuh L11 disconnect switches are UL Listed under File Number E47426, CSA, CE Marked and are designed to meet IEC 947-3, and applicable NEMA requirements.



L2

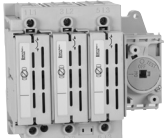
L11 Disconnect Switches

UL/CSA Fused Disconnect Switches ⑤

Switch	Amp Rating (A)	Maximum Horsepower ❶							Catalog Number	Dimension Code
		1 Ø (60Hz)		Three Phase (60Hz)			DC			
		120V	240V	240V	480V	600V	125V	250V		
 30A & 60A Typical  L11-J100A...L800A Typical	UL Class CC and CSA HRCI-Misc Fuses ❷									
	30	2	3	7.5	15	20	3	5	L11-C30-1753	A1
	UL Class J and CSA HRCI-J Fuses ❷									
	30	2	3	7.5	15	20	3	5	L11-J30-1753	A1
	60	3	10	15	30	50	5	10	L11-J60-1753	B1
	100	7.5	15	30	60	75	7.5	20	L11-J100-1753	F5
	200	~	25	60	125	150	15	40	L11-J200-1753	F6
	400	~	50	125	250	350	20	50	L11-J400-1753	F7
	600	~	~	200	400	500	~	~	L11-J600-1753	F8
	UL Class L and CSA HRCII-L Fuses									
	800	~	~	200	500	500	~	~	L11-L800-1753	F9
	CSA HRCII-C Fuses									
	30	2	3	7.5	15	20	3	5	L11-H30-1753	B1
	60	3	10	15	30	50	5	10	L11-H60-1753	B1

Items in Gray available by Special Order only.

UL/CSA Non-Fused Disconnect Switches ③

Switch	④ Amp Rating (A)	Maximum Horsepower							No. of Poles	Catalog Number	Dimension Code
		1 Ø (60Hz)		Three Phase (60Hz)			DC				
		120V	240V	240V	480V	600V	125V	250V			
 30A & 60A Typical  NU100A....1200A Typical	30	2	3	7.5	15	20	3	5	3	L11-N30-1753	A2
	60	3	10	15	30	40	5	10	3	L11-N60-1753	B2
	100	7.5	15	30	75	100	10	15	3	L11-NU100-1753	F1
	200	~	50	75	150	200	15	15	3	L11-NU200-1753	F1
	400	~	~	125	250	350	20	50	3	L11-NU400-1753	F2
	600	~	~	200	400	350	20	50	3	L11-NU600-1753	F3
	800	~	~	200	500	500	~	~	3	L11-NU800-1753	F4
	1200	~	~	200	500	500	~	~	3	L11-NU1200-1753	F4

Ordering Instructions

- Specify Disconnect Switch catalog number (this page)
- Specify desired switch handle catalog number (page L2:4)
- Specify desired operating shaft catalog number (page L2:5)
- Specify desired accessories (starting on page L2:6)

- ① Time delay fuses may be required to utilize the disconnect switch at its maximum horsepower rating.
- ② Only UL listed Class CC, J and CSA Certified HRCI-J fuses are suitable for use with these disconnect switches.
- ③ Non-fused disconnect switches must use separately installed fuses for upstream short circuit protection.
- ④ 30A UL-rated device has lthe of 40 A per IEC. 60A UL-rated device has lthe of 80A per IEC.
- ⑤ To order a fusible switch with fuse status indicator on 30A and 60A switches, add an "S" to the end of the catalog number. For example, L11-J30-1753 changes to L11-J30-1753S. Not available on J100...J600, or L800 devices. Price adder applies.

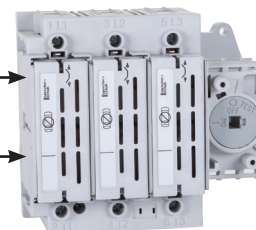
4th-Pole Modules (for 30A & 60A only) ④

Switch (typical)	Amp Rating (A)	Maximum Horsepower ❶							Fuses	Catalog Number	Dimension Code
		1 Ø (60Hz)		Three Phase (60Hz)			DC				
		120V	240V	240V	480V	600V	125V	250V			
 L11-30-NJ  L11-30-NN	UL Class CC and CSA HRCI-MISC Fuses										
	30	2	3	7.5	15	20	3	5	30A CC, HRCI-Misc	L11-30-NC	A1
	UL Class J and CSA HRCI-J Fuses										
	30	2	3	7.5	15	20	3	5	30A J, HRCI-J	L11-30-NJ	A1
	60	3	10	15	30	50	5	10	60A J, HRCI-J	L11-60-NJ	B1
	CSA HRCII-C Fuses										
	30	2	3	7.5	15	20	~	~	30A HRCII-C	L11-30-NH	B1
	60	3	10	15	30	50	~	~	60A HRCII-C	L11-60-NH	B1
	Non-Fused										
	30 ❷	2	3	7.5	15	20	3	5	~	L11-30-NN	A2
	60 ❸	3	10	15	30	40	5	10	~	L11-60-NN	B2

Items in Gray available by Special Order only.

4th-Pole Modules
must be ordered
separately and field
installed to existing
L11 Disconnect
Switch.

L11-30-NN



L11-N30-1753

Replacement Mounting Hardware

Accessory	Description	Switch Dimension Code	Pkg Qty	Catalog Number
	(1) set screw, (1) shaft clip, and (2) #8 M4 screws	A1, A2	2	L11-30-HDWR
	(1) set screw, (1) shaft clip, and (4) #8 M4 screws	B1, B2	4	L11-60-HDWR
	(8) HM10 25mm bolts, (8) HM10 nuts, (16) M10 washers	F1	1	L11-HF-200-4U
	(8) HM12 30mm bolts, (8) HM12 nuts, (16) M12 washers	F2	1	L11-HF-400-4U
	(8) HM10 16mm bolts, (8) HM10 washers	F6	1	L11-HF-250-3BDU
	(8) HM8 16mm bolts, (8) HM8 washers, (6) HM10 35mm bolts, (6) M10 nuts, (12) M10 washers	F7	1	L11-HF-400-3BU
	(8) HM12 30mm bolts, (8) HM12 washers	F8, F9	1	L11-HF-800-3U

① Time delay fuses may be required to utilize the disconnect switch at its maximum horsepower rating.

② 30A UL-rated device has lthe of 40 A per IEC.

③ 60A UL-rated device has lthe of 80A per IEC.

④ To order a 4th pole module for 30A or 60A switches with fuse status indicator, add an "S" to the end of the catalog number. For example, L11-30-NC changes to L11-30-NCS. Not available on J100...J600, or L800 devices. Price adder applies.

Switch Handle Assemblies (accepts 3 Padlocks)

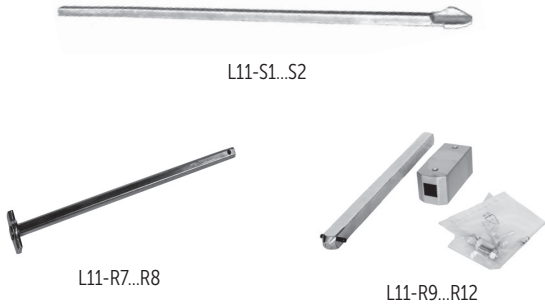
Switch Handle Assembly ①②	Description	For use with	Color	Degree of Protection	Catalog Number
 L11-PY	Padlockable Handle - Standard 80 x 114 mm - Configurable for defeatable or non-defeatable ③	L11- 30...60A	Black	Type 3R, 3, 12, 4, 4X, IP66	L11-PB
			Red/Yellow	Type 3R, 3, 12, 4, 4X, IP66	L11-PY
 L11-PBT	Padlockable Handle - Test Mode 80 x 114 mm - Configurable for defeatable or non-defeatable ③	L11- 30...60A	Black	Type 3R, 3, 12, 4, 4X, IP66	L11-PBT
			Red/Yellow	Type 3R, 3, 12, 4, 4X, IP66	L11-PYT
 L10-HM4	Padlockable Operating Handle Standard orientation with defeater	L11- 100...400A	Black	Type 1, 3R, 12, 4, 4X – IP66	L10-HM4
			Red/Yellow	Type 1, 3R, 12, 4, 4X, IP66	L10-HM4E
 L10-HM4E-N2	Padlockable Operating handle Standard orientation without defeater	L11- 100...400A	Black with light grey	Type 1, 3R, 12, 4, 4X – IP66	L10-HM4-N2
			Red/Yellow	Type 1, 3R, 12, 4, 4X – IP66	L10-HM4E-N2
 L11-HM4-L	Padlockable Operating Handle Standard orientation with defeater	L11- 600...1200A	Black with light grey	Type 1, 3R, 12, 4, 4X, IP65	L11-HM4-L
			Red/Yellow	Type 1, 3R, 12, 4, 4X, IP65	L11-HM4E-L
 L11-HM4-N2-L	Padlockable Operating Handle Standard orientation without defeater	L11- 600...1200A	Black with light grey	Type 1, 3R, 12, 4, 4X, IP65	L11-HM4-N2-L
			Red/Yellow	Type 1, 3R, 12, 4, 4X, IP65	L11-HM4E-N2-L

OSHA Lock Out/Tag Out Compliance (LOTO)

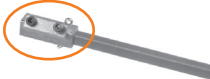
OSHA CFR36 Section 1910 mandates that disconnects be able to be locked out while in the OFF position during servicing. All L11 handles comply with this important safety requirement. *Please see NFPA Article 430 for disconnect requirements of motor applications.*

- ① Mounting screws included with Switch Handle Assembly.
- ② Lockable in OFF position (and ON position with special modification).
- ③ Switch handle can be field modified to be defeatable or non-defeatable.

Metal Operating Shafts ❶

Shaft (typical)	For use with handle type...	Operating Shaft Length mm (in)	Catalog Number
	L11-P/L11-P_T for L11-30...60A	305 (12)	L11-S1
		533 (21)	L11-S2
	L10-HM for L11 100...400A	320 (12.6)	L11-R7
		560 (22)	L11-R8
	L11-HM for fused L11 600...800A	320 (12.6)	L11-R11
		560 (22)	L11-R12
	L11-HM for Non-fused L11 600...1200A	320 (12.6)	L11-R9
		560 (22)	L11-R10
NFPA 79 Handle Kit - Internal handle that permits operation of the disconnect when the panel door is open, in compliance with NFPA79. • Includes NFPA 79 internal operating handle with shaft	L11-P/L11-P_T	305 (12)	L11-N1
		533 (21)	L11-N2
	L10-HM4 (L11 fused 100...400A)	320 (12.6)	L11-HM4-NFPA1
		560 (22)	L11-HM4-NFPA3
	L11-HM4_-L (L11 fused 600...800A)	320 (12.6)	L11-HM4-NFPA2
		560 (22)	L11-HM4-NFPA4

Operating Shaft Accessories

Accessory	Description	Switch Dimension Code	Pkg Qty	Catalog Number
	Operating Shaft Coupler - Used with L11-S1 and L11-S2 shafts to extend shaft length an additional 120 mm (4.75 in).	A1, A2, B1, B2	1	L10-SC1

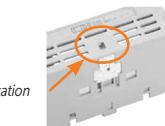
❶ See page L2:24 for Shaft dimensions.

❷ The L11-NU100...NU1200 Non-Fused switches do not have a means to be locked in the OFF position, therefore are not in compliance with NFPA79 and should not be used with L11-HM4-NFPA* handle kits.

Disconnect Switch Padlock Accessory (for 30A & 60A only) ①⑤

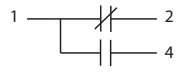
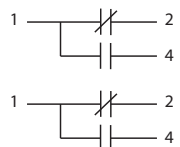
Accessory	Description	Switch Dimension Code	Pkg Qty	Catalog Number
	Disconnect Switch Padlock Accessory	A1, A2, B1, B2	1	L11-PLA1

Replacement Fuse Carriers (for 30A & 60A only)

Accessory	Description	Pkg Qty	Without Fuse Status Indication	With Fuse Status Indication
			Catalog Number	Catalog Number
 L11-J30-FC  L11-J30-FCS	30A CC Fuse Carrier	1	L11-C30-FC	L11-C30-FCS
	30A J Fuse Carrier	1	L11-J30-FC	L11-J30-FCS
	60A J Fuse Carrier	1	L11-J60-FC	L11-J60-FCS
	30A CSA HRCII-C Fuse Carrier	1	L11-H30-FC	L11-H30-FCS
	60A CSA HRCII-C Fuse Carrier	1	L11-H60-FC	L11-H60-FCS
	30A Non-Fuse Carrier	1	L11-N30-FC	
	60A Non-Fuse Carrier	1	L11-N60-FC	

Items in Gray are Special Order.

Auxiliary Contact Blocks

Accessory	Description	For use with ...	Contact Material	Pkg Qty	Catalog Number
	Contact Block ②③ Note: Sold only in multiples of 10. Order (quantity of) 10 to receive one package of 10 pieces.	All L11-30...60A All Fusible switches L11-100...800A	N.O.	10	D7-X10
			N.C.		D7-X01
			N.O.E.M.		D7-X10E
			N.C.L.B.		D7-X01L
			N.O. w/ spring-clamp		D7-Q10
			N.CO. w/ spring-clamp		D7-Q01
	Auxiliary Contact Block ④ N.O.E.B./N.C.	All L11 Non-Fused 100...1200A		1	L11-1STNONC
				1	L11-2NDNONC

① For Padlock with ø3...6mm.

② Also used for test mode function on 30A...60A switches.

③ Maximum auxiliary contact blocks allowed to be mounted on switches:

- Max 6 for 30A...60A switches
- Max 4 for L11-J100...200A switches
- Max 8 for L11-J400...J600, & L800 switches

④ Only one auxiliary type can be mounted on switch. Auxiliaries cannot be combined.

⑤ Fusible L11-100...800A has built in lockable feature on switch.

Terminal Protective Covers ①②③

Accessory	Description	No. of poles Protected per pkg.	Mounting Position	Switch Dim. Code	Qty per Pkg	Pkg qty req. for Line & Load protection	Catalog Number
 order 2 for 1 pkg of 2 shrouds	30A Terminal Shroud	6	line or load side	A1, A2	2	1	L11-30-C3
	60A Terminal Shroud	6	line or load side	B1, B2	2	1	L11-60-C3
 order 2 for 1 pkg of 2 shrouds	30A Terminal Shroud	2	line or load side	A1, A2	2	1	L11-30-C1
	60A Terminal Shroud	2	line or load side	B1, B2	2	1	L11-60-C1
 order 1 for 1 package of 3 shrouds	UL Terminal Shroud for L11- UL Fused 600A...800A	3	line or load side	F17	3	2 ③	L11-LNC29
	UL Terminal Shroud for L11- UL Fused 200A	3	line or load side	F6	3	2	L11-LNC31
	UL Terminal Shroud for L11 - UL Fused 400A	3	line or load side	F7	3	2	L11-LNC32
 1 shield covers all 3 poles	UL Terminal Shield for L11- UL Non-fused 100A...200A	3	line side	F1	1	1	L11-LNC17
		3	load side	F1	1	1	L11-LNC18
	UL Non-fused 400A	3	line side	F2	1	1	L11-LNC20
		3	load side	F2	1	1	L11-LNC21
	UL Non-fused 600A	3	line or load	F3	1	1 ③	L11-LNC23
	UL Non-fused 800A...1200A	3	line or load	F4	1	1 ③	L11-LNC25

Multi-Tap Terminal Lugs ①

Accessory	Description	Switch Dimension Code	Pkg Qty	Catalog Number
	For 30A L11 Switches - Wire: (3) 8-14 AWG/1.5-10 mm² - Torque: 14 lb-in/1.6 Nm	A1, A2	1	L11-30-MTL3
	For 60A L11 Switches - Wire: (3) 4-14 AWG/2-25 mm² - Torque: 24 lb-in/2.8 Nm	B1, B2	1	L11-60-MTL3

③ L11 Switches include various protection covers as standard. See table to order optional shrouds/shields separately.

Switch Type	Terminal Shrouds	Terminal Shields	Terminal Lugs	Notes
L11-J30/60 A	N/A ②	N/A	Built-in	IP20 Touch-Safe by design
L11-J100 A	N/A	N/A	Built-in	IP20 Touch-Safe by design
L11-J200/400 A	Optional	N/A	Optional	Purchase optional items separately
L11-J600/L800 A	Includes 1 pkg L11-LNC29 for line side	N/A	Optional	Purchase optional items separately
L11-N30/60 A	N/A	N/A	Built-In	IP20 Touch-Safe by design
L11-NU100/400 A	N/A	Optional	Optional	Purchase optional items separately
L11-NU600 A	N/A	Includes 1 pkg L11-LNC23 for line side	Optional	Purchase optional items separately
L11-NU800/1200 A	N/A	Includes 1 pkg L11-LNC25 for line side	Optional	Purchase optional items separately

① Includes integral plastic cover (not shown), for IP10 ingress rating only.

② L11-XX-CX shrouds are typically used to re-label power terminals when rotating the switch 180°.

Terminal Lug Kits ❶

Accessory	For use with...	Wire Size	Pkg Qty	Catalog Number
 order 1 for 1 package of 3 lugs	L11-J200 Fused L11-NU100, L11-NU200 Non-Fused	(1) #6 - 300 MCM	3	L11-TL1
 order 1 for 1 package of 3 lugs	L11-J400 Fused L11-NU400 Non-Fused	(1) #4 - 600 MCM	3	L11-TL3
 order 1 for 1 package of 3 lugs	L11-J400 Fused L11-NU400 Non-Fused	(2) #6 - 350 MCM	3	L11-TL5
	L11-J600...L800 Fused L11-NU600 Non-Fused	(2) #2 - 600 MCM	3	L11-TL7
 order 1 for 1 package of 6 lugs	L11-NU800...NU1200 Non-Fused	(2) #2 - 600 MCM	6	L11-TL9

❶ L11-30/60 Fused and Non-fused, and L11-J100 Fused disconnect switches are equipped with built-in terminal lugs.

L11 Enclosed Motor Disconnects (UL and CSA Approved Enclosures)

Amp/Horsepower Rating						Type 3/4/12 Watertight, Dusttight Sheetmetal Enclosure		Type 4/4X Watertight, Corrosion-Resistant Stainless Steel Enclosure		Type 4/4X Watertight, Corrosion-Resistant Non-metallic Enclosure	
											
UL/ CSA Amps	Horsepower					Catalog Number	Dimension Code	Catalog Number	Dimension Code	Catalog Number	Dimension Code
	1Ø (60 Hz)		3Ø (60 Hz)								
	120V	240V	240V	480V	600V						
Class CC Fused											
30	2	3	7.5	15	20	L11-FC030P3	A1	L11-CC030P3	A1	L11-KC030P3	A1
Class J Fused											
30	2	3	7.5	15	20	L11-FJ030P3	A1	L11-CJ030P3	A1	L11-KJ030P3	A1
60	3	10	15	30	50	L11-FJ060P3	B1	L11-CJ060P3	B1	L11-KJ060P3	B1
100	7.5	15	30	60	75	L11-FJ100P3	C1	L11-CJ100P3	C1	L11-KJ100P3	C1
200	~	25	60	125	150	L11-FJ200P3	D1	L11-CJ200P3	D1	L11-KJ200P3	D1
400	~	50	125	250	350	L11-FJ400P3	F1	L11-CJ400P3	F1	L11-KJ400P3	F1
Non-Fused											
30	2	3	7.5	15	20	L11-FN030P3	A2	L11-CN030P3	A2	L11-KN030P3	A2
60	3	10	15	30	50	L11-FN060P3	B2	L11-CN060P3	B2	L11-KN060P3	B2
100	7.5	15	30	75	100	L11-FN100P3	C1	L11-CN100P3	C1	L11-KN100P3	C1
200	~	50	75	150	200	L11-FN200P3	D1	L11-CN200P3	D1	L11-KN200P3	D1
400	~	~	125	250	350	L11-FN400P3	F1	L11-CN400P3	F1	L11-KN400P3	F1

Larger sizes available. Contact your Sprecher + Schuh representative.

Enclosed Disconnect Assemblies Include:

- Disconnect Switch
- Black handle/shaft with ON/OFF marking. For a yellow and red handle add suffix "E" to the end of the catalog number. Example: change L11-FN030P3 to L11-FN030P3E.
- Line & Load Terminal Lugs for Fused 200/400A & Non-Fused 100A...400A (Lugs are built-in on Fused 30/60/100A & Non-fused 30/60A switches).
- Two Ground Lugs mounted on back-panel

NOTE: Fusible accessory Shrouds, Non-Fusible accessory Shields must be purchased separately and installed by user. To add any accessory items into these standard assemblies, please contact your Sprecher+Schuh representative for a custom enclosed L11 request.



L11-KJ060P3

L2

L11 Disconnect Switches

Applications Within the United States and Canada

General

The requirements for disconnect switches used in motor branch circuits rated 600V and less are defined in Article 430, Part J of the U.S. National Electrical Code (NEC), NFPA70. Canadian Electrical Code (CEC) requirements are very similar in the area of motor branch circuit disconnect requirements. For simplicity, we will treat the NEC and CEC requirements as being the same – and reference specific sections of the US National Electrical Code.

The requirements for properly sizing a disconnect switch are dependent on the type of application. The NEC refers to two types of applications: single motor and combination loads. A combination load consists of an application where two or more motors are used together or where one or more motors are used in combination with other loads, such as resistance heaters.

Single Motor Applications

Section 430-110 Paragraph (a) states that the disconnect switch must have an ampere rating of at least 115% of the full load current rating of the motor.

Example 1: for a motor with a full-load current of 22A, the disconnect switch must be rated at least 25.3A (22×1.15).

If the disconnecting means under evaluation is rated in horsepower, the selection of the disconnect switch is even more straightforward; a disconnect switch must have a horsepower rating equal to, or greater than the horsepower rating of the motor at the applicable voltage.

Example 2: For a motor with a 10HP rating at 460V AC, the disconnect switch must be rated at least 10HP at 460V AC.

If the disconnect switch is rated in horsepower, and UL Listed, UL Component Recognized, or CSA Certified, it will meet the requirements for the 115% full-load current rating stipulated by the NEC.

Combination Load Applications

Section 430-110 Paragraph (c) addresses the rating of the disconnecting means for combination loads. This paragraph essentially requires that the loads that “may be simultaneously on a single disconnecting means” be combined to provide equivalent full-load and locked-rotor currents for what is then to be considered as a single motor for the purpose of selecting the appropriate disconnecting means. This means that it is necessary to identify the particular combination of connected loads which can be operating simultaneously and will result in the maximum full-load and locked-rotor current sums.

The individual full-load current values are to be selected from Tables 430-148, 430-149, or 430-150 and the locked-rotor values are to be from Table 430-151.

The equivalent single motor full-load current is the sum of the simultaneously operating motor full-load currents and the rating in amperes of the other loads operating at the same time. The equivalent locked-rotor current is the sum of the simultaneously started motors’ locked-rotor currents and the full-load currents of the remaining operating motor and non-motor loads.

The disconnecting means shall have a current rating equal to or greater than 115% of the equivalent single motor full-load current and have a horsepower rating equal to or greater than the horsepower rating determined from the equivalent locked-rotor summation.

Consider the following 460V application:

Load	HP	Full-Load Current A
Motor 1	5	7.6 (simultaneous)
Motor 2	10	14.0 (not included) ❶
Motor 3	15	21.0 (simultaneous)
Motor 4	20	27.0 (simultaneous)
Other		7.0 (simultaneous)
Total Equivalent		62.6 (simultaneous)

❶ Motor 2 is not included in the total since it cannot operate simultaneously with the other motor, therefore, the disconnect switch must be rated at least 72A (1.15×62.6).

Consider now the locked-rotor current analysis for the same application:

Load	HP	Locked Rotor Current A
Motor 1	5	(7.6 FLA) 45.6 (simultaneous)
Motor 2	10	84.0 (not included) ❶
Motor 3	15	126.0 (simultaneous) ❷
Motor 4	20	162.0 (simultaneous) ❷
Other		7.0 (simultaneous)
Total Equivalent		302.6 (simultaneous)

❶ Note again that Motor 2 cannot operate simultaneously with the other loads.

❷ The largest equivalent locked-rotor current occurs when motors 3 and 4 start together while the other loads marked “simultaneous” are already operating. Since Motor 1 is not starting with Motors 3 and 4, its full-load current will be added to the total instead of its locked-rotor current.

Table 430-151, which provides the correlation between locked-rotor currents and HP ratings, shows that a 40 HP rating is the equivalent for 302.6 locked-rotor amperes.

Therefore, the disconnect selected for this application must have a current rating of at least 72A and a HP rating of at least 40 HP. In this case, an L11 disconnect switch rated for 100A and 60 HP at 460V would be an appropriate choice. What can be seen from this analysis is that, depending upon the number of motors that can start simultaneously, the actual size of the required disconnect is sometimes determined by the equivalent full load current (72A) and other times by the equivalent horsepower determined from the locked-rotor analysis (40 HP).

Fused Disconnect Switches for UL Class Fuses and CSA HRCI-J

Electrical Ratings			L11-C30-1753		L11-J30-1753		L11-J60-1753	
UL Fuse Type / CSA Fuse Type			Class CC/HRCI-MISC ❶		Class J/HRCI-J		Class J/HRCI-J	
Maximum Fuse Cartridge Size			(A) 30		30		60	
Maximum Voltage	AC	(V)	600		600		600	
	DC	(V)	250		250		250	
Ampere Rating			(A) 30		30		60	
Maximum Short Circuit Prospective Fault Current			(kA) 200		200		200	
Fuse Operating Characteristics			Time Delay	Non-Time Delay	Time Delay	Non-Time Delay	Time Delay	Non-Time Delay
Maximum Hp, 3Ø AC	200V 60 Hz	(Hp)	5	3	7.5	3	15	7.5
	240V 60 Hz	(Hp)	5	3	7.5	3	15	7.5
	480V 60 Hz	(Hp)	10	5	15	5	30	15
	600V 60 Hz	(Hp)	10	7.5	20	7.5	50	15
Maximum Hp, 1Ø AC	120V, 60 Hz	(Hp)	0.75	0.5	2	0.5	3	1.5
	240V, 60 Hz	(Hp)	2	1.5	3	1.5	10	3
Maximum Hp, DC	125V, DC	(Hp)	2	3	3	2	5	5
	250V, DC	(Hp)	3	5	5	5	10	10

Mechanical Data		L11-C30-1753	L11-J30-1753	L11-J60-1753
Degree of Protection (per IEC 60947-3)				
Switch Only		IP20	IP20	IP20
Switch with Terminal Shield & Fuse Carriers		IP20	IP20	IP20
Mechanical Endurance ②	Operations	10,000	10,000	10,000
Handle Mechanism Operating Torque	N•m	3.5	3.5	3.5
	lb•in	35	35	35
Terminal Capacity				
Power Terminals	mm²	2.5...10	2.5...10	2.5...25
	AWG	#14...#8	#14...#8	#14...#4
Auxiliary Contact Terminals	mm²	2.5...4	2.5...4	2.5...4
	AWG	#14...#12	#14...#12	#14...#12
Maximum Number of Auxiliary Contacts		6	6	6
Approximate Weight	kg	0.92	0.92	1.32
	lbs	2.03	2.03	2.9
Minimum Enclosure Size	Height	248 (9-3/4)	248 (9-3/4)	248 (9-3/4)
Approximate dimensions in millimeters (inches)	Width	171 (6-3/4)	171 (6-3/4)	197 (7-3/4)
	Depth	148 (5-13/16)	148 (5-13/16)	148 (5-13/16)
Switch Dimensions Reference (See dimension drawings)		A1	A1	B1

❶ CSA HRCI-MISC fuses must also be UL Listed as Class CC fuses.

❷ Based on Sprecher + Schuh tests in accordance with the requirements as defined in CSA C22.2 No. 4, IEC 60947-3, and UL 98.

Fused Disconnect Switches for UL Class Fuses and CSA HRCI-J

Electrical Ratings			L11-J100-1753	L11-J200-1753	L11-J400-1753	L11-J600-1753	L11-L800-1753
UL Fuse Type / CSA Fuse Type			Class J/HRCI-J				Class L
Maximum Fuse Cartridge Size	(A)		100	200	400	600	800
Maximum Voltage	AC (V) DC (V)		600 250 ②	600 250 ②	600 250 ②	600 250 ②	600 250 ②
Ampere Rating	(A)		100	200	400	600	800
Maximum Short Circuit Prospective Fault Current	(kA)		200	200	200	200	200
Fuse Operating Characteristics							
Maximum Hp, 3Ø AC	200V 60 Hz (Hp)		~	~	~	~	~
	240V 60 Hz (Hp)		30	60	125	200	200
	480V 60 Hz (Hp)		60	125	250	400	500
	600V 60 Hz (Hp)		75	150	350	500	500
Maximum Hp, 1Ø AC	120V, 60 Hz (Hp)		7.5	~	~	~	~
	240V, 60 Hz (Hp)		15	25	50	~	~
Maximum Hp, DC	125V, DC (Hp)		7.5	15	20	~	~
	250V, DC (Hp)		20	40	50	~	~

Mechanical Data			L11-J100-1753	L11-J200-1753	L11-J400-1753	L11-J600-1753	L11-L800-1753
Degree of Protection (per IEC 60947-3)							
Switch Only			IP20	IP20	IP20	IP20	IP20
Switch with Terminal Shield & Fuse Carriers			IP20	IP20	IP20	IP20	IP20
Mechanical Endurance ①	Operations		10,000	8,000	6,000	5,000	5,000
Handle Mechanism Operating Torque	N•m lb•in		10 88.5	15 132.8	20 177	70 620	70 620
Terminal Capacity							
Power Terminals	mm ²			300 MCM	600 MCM; 2 x 300 MCM	2 x 600 MCM	2 x 600 MCM
	AWG		#1	#6	#2 or 2 x #6	2 x #2	2 x #2
Auxiliary Contact Terminals	mm ²		2.5...4	2.5...4	2.5...4	2.5...4	2.5...4
	AWG		#14...#12	#14...#12	#14...#12	#14...#12	#14...#12
Maximum Number of Auxiliary Contacts			4	8	8	8	8
Approximate Weight	kg		2.4	3.6	4.85	20	20
	lbs		5.3	7.9	10.7	44	44
Minimum Enclosure Size							
Approximate dimensions in millimeters (inches)	Height		~	~	~	~	~
	Width						
	Depth						
Switch Dimensions Reference (See dimension drawings)			F5	F6	F7	F8	F9

① Based on Sprecher + Schuh tests in accordance with the requirements as defined in CSA C22.2 No. 4, IEC 60947-3.

② 3-Poles in series.

Non-Fused Disconnect Switches for CSA and UL Class Applications ❶

Electrical Ratings			L11-N30-1753		L11-N60-1753		L11-NU100-1753	L11-NU200-1753
Maximum Voltage	AC (V)		600		600		600	600
	DC (V)		250		250		250	250
Fuse Type			~		~		J	J
Ampere Rating		(A)	30 ❷		60 ❷		100	200
Maximum Short Circuit Prospective Fault Current		(kA)	200		200		200	200
Fuse Operating Characteristics ❸			Time Delay	Non-Time Delay	Time Delay	Non-Time Delay	~	~
Maximum Hp, 3Ø AC	200V 60 Hz	(Hp)	7.5	3	15	7.5	~	~
	240V 60 Hz	(Hp)	7.5	3	15	7.5	30	75
	480V 60 Hz	(Hp)	15	5	30	15	75	150
	600V 60 Hz	(Hp)	20	7.5	50	15	100	200
Maximum Hp, 1Ø AC	120V, 60 Hz	(Hp)	2	0.5	3	1.5	7.5	~
	240V, 60 Hz	(Hp)	3	1.5	10	3	15	50
Maximum Hp, DC	125V, DC	(Hp)	3	2	5	5	10	15
	250V, DC	(Hp)	5	5	10	10	15	15
Power Lost			2		6		~	~

Mechanical Data			L11-N30-1753		L11-N60-1753		L11-NU100-1753	L11-NU200-1753
Degree of Protection (per IEC 60947-3)								
Switch Only			IP20		IP20		IP20	IP20
Switch with Terminal Shield & Fuse Carriers			IP20		IP20		IP20	IP20
Mechanical Endurance ❸		Operations	10,000		10,000		10,000	10,000
Handle Mechanism Operating Torque	N•m		3.5		3.5		10	10
	lb•in		35		35		88.5	88.5
Terminal Capacity								
Power Terminals	mm²		2.5...10		2.5...25		300 MCM	300 MCM
	AWG		#14...#8		#14...#4		#6	#6
Auxiliary Contact Terminals	mm²		2.5...10		2.5...25		~	~
	AWG		#14...#8		#14...#4			
Maximum Number of Auxiliary Contacts			6		6		2	2
Approximate Weight	kg		0.81		1.14		1.67/2.1	1.67/2.1
	lbs		1.78		2.52		3.7/4.3	3.7/4.3
Minimum Enclosure Size			248 (9-3/4)		248 (9-3/4)			
Approximate dimensions in millimeters (inches)	Width		171 (6-3/4)		197 (7-3/4)		~	~
	Depth		111 (4-3/8)		111 (4-3/8)			
Switch Dimensions Reference (See dimension drawings)			A2		B2		F1	F1

❶ Non-fused disconnect switches must be used with separately installed fuses.

❷ When using CSA HRCI-J, HRCI-MISC (also UL Listed as Class CC) or HRCI-T fuses, and UL Class J, CC or T fuses.

❸ Based on Sprecher + Schuh tests in accordance with the requirements as defined in CSA C22.2 No. 4, IEC 60947-3, UL 1087 and UL 98.

Non-Fused Disconnect Switches for CSA and UL Class Applications ❶

Electrical Ratings			L11-NU400-1753	L11-NU600-1753	L11-NU800-1753	L11-NU1200-1753
Maximum Voltage	AC (V)		600	600	600	600
	DC (V)		250	250	250	250
Fuse Type			J	J	L	L
Ampere Rating (A)			400	600	800	1200
Maximum Short Circuit Prospective Fault Current (kA)			200	200	100	100
Fuse Operating Characteristics ❸			~	~	~	~
Maximum Hp, 3Ø AC	200V 60 Hz (Hp)		~	~	~	~
	240V 60 Hz (Hp)		125	200	200	200
	480V 60 Hz (Hp)		250	400	500	500
	600V 60 Hz (Hp)		350	350	500	500
Maximum Hp, 1Ø AC	120V, 60 Hz (Hp)		~	~	~	~
	240V, 60 Hz (Hp)		~	~	~	~
Maximum Hp, DC	125V, DC (Hp)		20	20	~	~
	250V, DC (Hp)		50	50	~	~
Power Lost (W)			~	~	~	~

Mechanical Data			L11-NU400-1753	L11-NU600-1753	L11-NU800-1753	L11-NU1200-1753
Degree of Protection (per IEC 60947-3)						
Switch Only			IP20	IP20	IP20	IP20
Switch with Terminal Shield & Fuse Carriers			IP20	IP20	IP20	IP20
Mechanical Endurance ❹ Operations			6,000	6,000	3,500	3,500
Handle Mechanism Operating Torque	N•m		14.5	37	50	50
	lb•in		128.3	327.5	442	442
Terminal Capacity						
Power Terminals	mm ²		600 MCM	2 x 600 MCM	4 x 600 MCM	4 x 600 MCM
	AWG		#2	2 x #2	4 x #2	4 x #2
Auxiliary Contact Terminals			~	~	~	~
Maximum Number of Auxiliary Contacts			2	2	2	2
Approximate Weight	kg		3/3.8	8.2/10.3	11.6/14.5	11.6/14.5
	lbs		6.6/8.4	18.1/22.7	25.6/32	25.6/32
Minimum Enclosure Size						
Approximate dimensions in millimeters (inches)	Height		~	~	~	~
	Width					
	Depth					
Switch Dimensions Reference (See dimension drawings)			F2	F3	F4	F4

❶ Non-fused disconnect switches must be used with separately installed fuses.

❷ When using CSA HRCI-J, HRCI-MISC (also UL Listed as Class CC) or HRCI-T fuses, and UL Class J, CC or T fuses.

❸ Based on Sprecher + Schuh tests in accordance with the requirements as defined in CSA C22.2 No. 4, IEC 60947-3, UL 1087 and UL 98.

Fused Disconnect Switches for CSA HRCII-C Fuses

Electrical Ratings			L11-H30-1753	L11-H60-1753
CSA Fuse Type/UL Fuse Type			HRCII-C	HRCII-C
Maximum Fuse Cartridge Size	(A)		30	60
Maximum Voltage	AC (V)		600	600
Ampere Rating	(A)		30	60
Maximum Short Circuit Prospective Fault Current	(kA)		200	200
Fuse Operating Characteristics				
Maximum Hp, 3Ø AC	200V 60 Hz	(Hp)	7.5	15
	240V 60 Hz	(Hp)	7.5	15
	480V 60 Hz	(Hp)	15	30
	600V 60 Hz	(Hp)	20	50
Maximum Hp, 1Ø AC	120V, 60 Hz	(Hp)	2	3
	240V, 60 Hz	(Hp)	3	10
Mechanical Data			L11-H30-1753	L11-H60-1753
Degree of Protection (per IEC 60947-3)				
Switch Only			IP20	IP20
Switch with Terminal Shield & Fuse Carriers			IP20	IP20
Mechanical Endurance ❶	Operations		10,000	10,000
Handle Mechanism Operating Torque	N•m		3.5	3.5
	lb•in		35	35
Terminal Capacity				
Power Terminals	mm ²		2.5...10	2.5...25
	AWG		#14...#8	#14...#4
Auxiliary Contact Terminals	mm ²		2.5...4	2.5...4
	AWG		#14...#12	#14...#12
Maximum Number of Auxiliary Contacts			6	6
Approximate Weight	kg		1.18	1.18
	lbs		2.60	2.60
Minimum Enclosure Size Approximate dimensions in millimeters (inches)	Height		248 (9-3/4)	248 (9-3/4)
	Width		171 (6-3/4)	197 (7-3/4)
	Depth		148 (5-13/16)	148 (5-13/16)
Switch Dimensions Reference (See dimension drawings)			B1	B1

❶ Based on Sprecher + Schuh tests in accordance with the requirements as defined in CSA C22.2 No. 4, IEC 60947-3, UL 1087 and UL 98.

Environmental Data For All L11 Fused and Non-Fused Disconnect Switches

Environmental Ratings		L11-_30A...60A	L11-_100A...1200A ①
Ambient Temperature			
Open	[°C (F)]	-20...+55 (-4...+131)	-20...+70 (-4...+158)
Enclosed	[°C (F)]	-20...+40 (-4...+104)	-20...+70 (-4...+158)
Storage	[°C (F)]	-40...+65 (-40...+149)	-25...+70 (-13...+158)
Altitude (per IEC 60947-1)	[m]	2,000	2,000
Relative Humidity (per IEC 60947-1)		90% at +20°C (+68°F)	90% at +20°C (+68°F)
		50% at +40°C (+104°F)	50% at +40°C (+104°F)
Auxiliary Contact Ratings:			
D7 Contact Ratings		See Section H	
L11-1STNONC and L11-2NDNONC			
AC Rating (100mA min. load)		10.1A at 250V AC 1/2 HP at 250V AC 1/4 HP at 125V AC	
DC Rating (100mA min. load)		0.5A at 125V DC	
DC-13 General use (no HP ratings)		0.25A at 250V DC	

Standards Compliance

IEC 60947-4-1/EN60947-3
BS EN60947-3
VDE 0660
CSA 22.2 No. 4
NEMA KS-1
UL 98

with L11-SDK2 Handle Kit

UL 98
CSA 22.2 No. 4

Certifications

UL Listed (File No. E 47426, Guide WHTY)
CSA Certified (File No. LR1234)
CE
ASTA Certified
LOVAG Certified

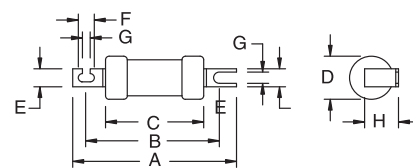
with L11-SDK2 Handle Kit

UL Listed (File No. E47426, Guide WHTY)
CSA Certified (File No. LR1234)

CSA HRCII Fuses (sold by others)

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

- CSA fuse type: HRCII-C
- Voltage rating: 600V AC
- Interrupting rating: 200 000 A
- Standard cartridge sizes: 30, & 60 A
- Typical ampere ratings: 1...60 A
- Construction: Blade type for bolted connection
- Can be installed on Bulletin 194R disconnect switch
- Cat. Nos: L11-H30-1753, L11-H60-1753
- Where used: Canada



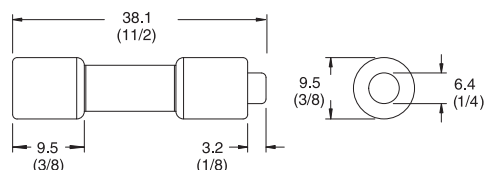
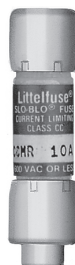
Current Range [A]	A	B	C	D	E	F	G	H	J
0...30	84.14 (3-5/16)	71.04 (2-51/64)	50.8 (2)	20.64 (13/16)	8.73 (11/32)	7.54 (19/64)	5.56 (7/32)	23.81 (15/16)	1.59 (1/16)
31...60	88.9 (3-1/2)	71.04 (2-51/64)	50.8 (2)	20.64 (13/16)	12.7 (1/2)	7.54 (19/64)	5.56 (7/32)	26.99 (1-1/16)	1.59 (1/16)

① Derate switch 1% for every 1°C over 40°C

CSA HRCI Class CC Fuses (sold by others)

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

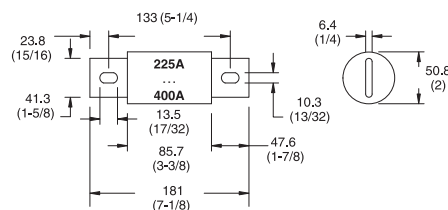
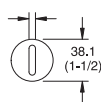
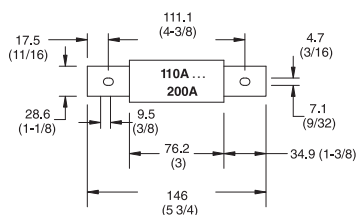
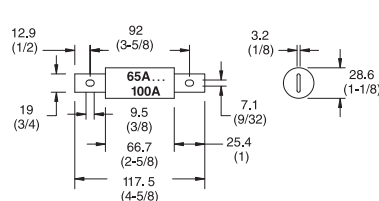
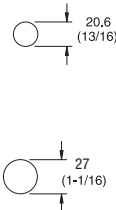
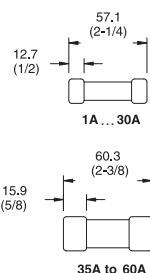
- UL fuse type: Class CC
- CSA fuse type: HRCI-MISC
- Voltage rating: 600V AC
- Interrupting rating: 200 000 A
- Standard cartridge sizes: 30 A
- Typical ampere ratings: 1...30 A
- Construction: Ferrule type
- Can be installed on L11-C30-1753 disconnect switch
- Where used: North America



CSA HRCI Class J Fuses (sold by others)

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

- CSA fuse type: HRCI-J
- UL fuse type: Class J
- Voltage rating: 600V AC
- Interrupting rating: 200 000 A
- Standard cartridge sizes: 30, 60, 100, 200, and 400 A
- Typical ampere ratings: 1...600 A; Blade type for bolted connection
- Can be installed on L11 disconnect switch
- Cat. Nos: L11-J30...J400-1753
- Where used: North America

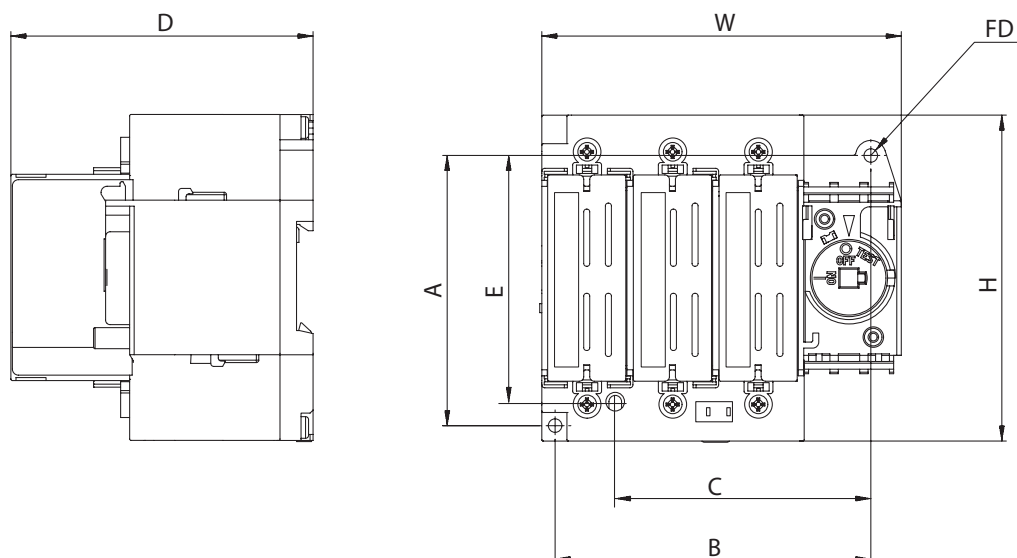

L2
L11 Disconnect Switches

Wiring Diagrams

UL Listed, CSA Certified	Dimension Reference	Circuit
L11-C30-1753 L11-J30-1753 L11-J60-1753 L11-H30-1753 L11-H60-1753	A1 A1 B1 B1 B1	
L11-N30-1753 L11-N60-1753	A2 B2	
L11-* -1753 + L11-* -NC/NJ/NH	3-Pole Switch + 4-Pole Module	

L11 Fused and Non-Fused Disconnect Switches (30 & 60A)

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

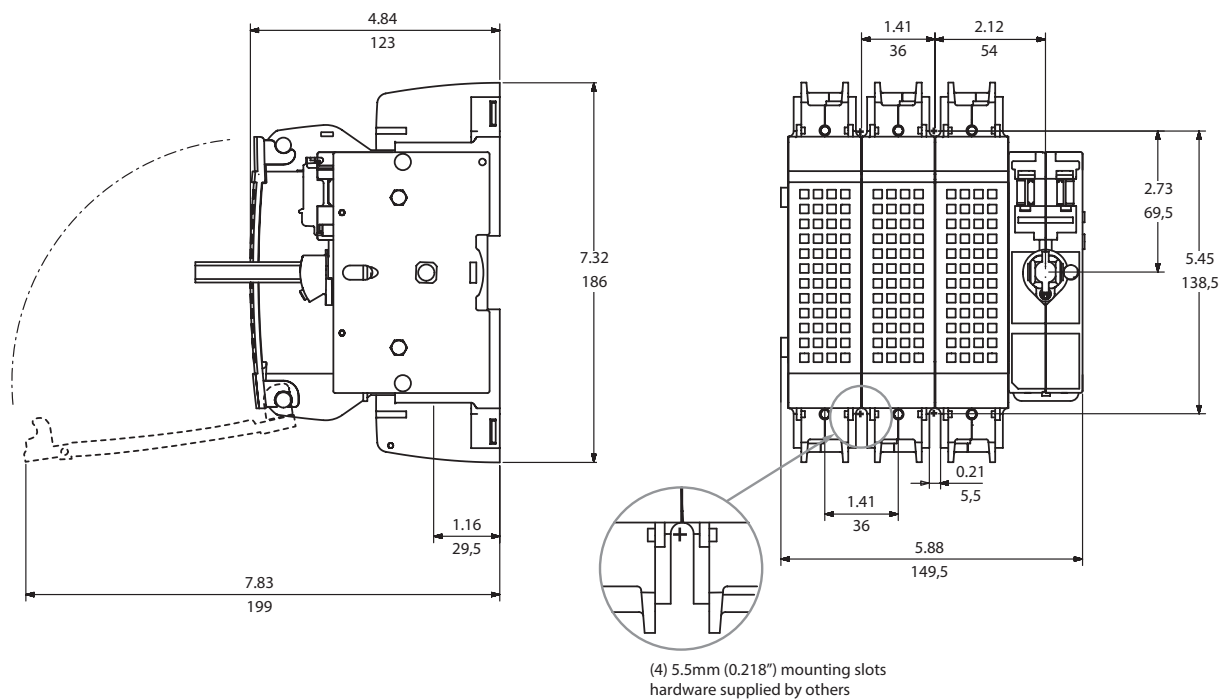


Dimension Reference	Approximate Dimensions in mm (in)							
	H	W	D	A	B	C ❶	E ❶	FD
A1	108 (4-1/4)	120 (4-3/4)	101 (4)	90 (3-9/16)	105 (4-1/8)	85 (3-11/32)	82 (3-15/64)	2-M4, 2-#8
A2	108 (4-1/4)	120 (4-3/4)	80 (3-1/8)	90 (3-9/16)	105 (4-1/8)	85 (3-11/32)	82 (3-15/64)	2-M4, 2-#8
B1	113 (4-29/64)	142 (5-19/32)	114 (4-31/64)	100 (3-15/16)	120 (4-23/32)	N/A	N/A	4-M4, 4-#8
B2	113 (4-29/64)	142 (5-19/32)	93 (3-43/64)	100 (3-15/16)	120 (4-23/32)	N/A	N/A	4-M4, 4-#8

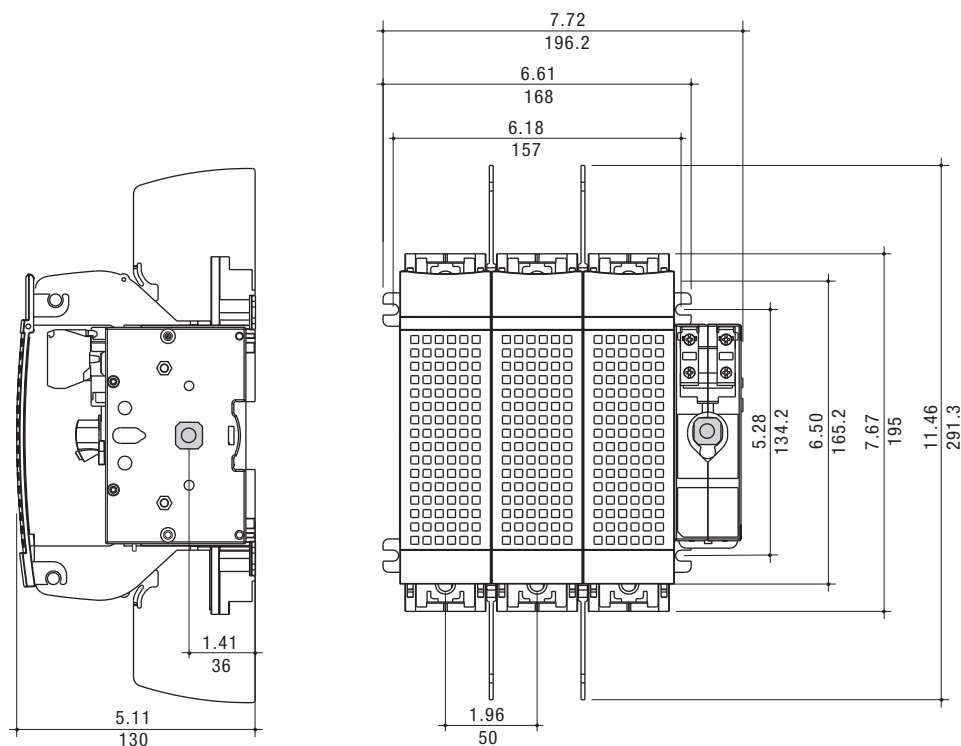
❶ Mounting holes are backward compatible with L10 Disconnect Switches

L11 Fused Disconnect Switches (100A)

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



L11 Fused Disconnect Switches (200A)

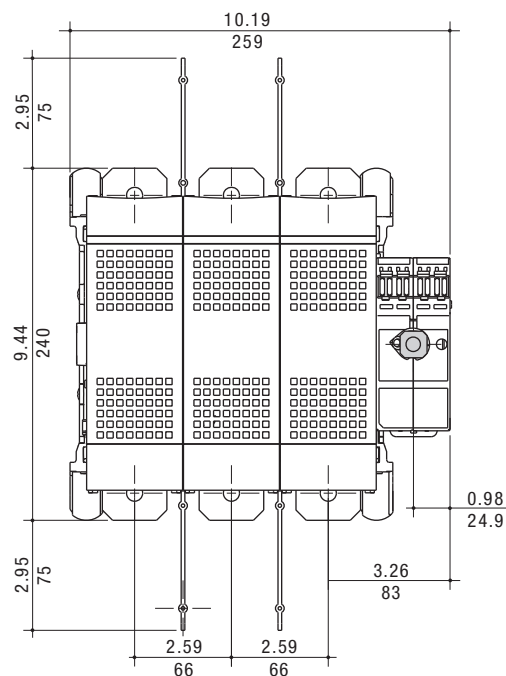
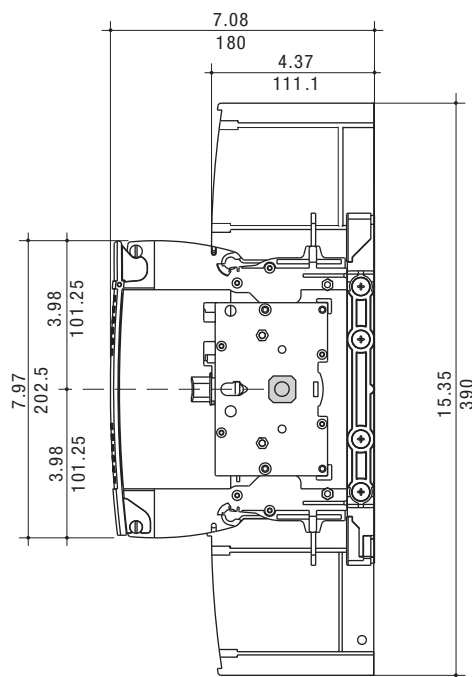


L2

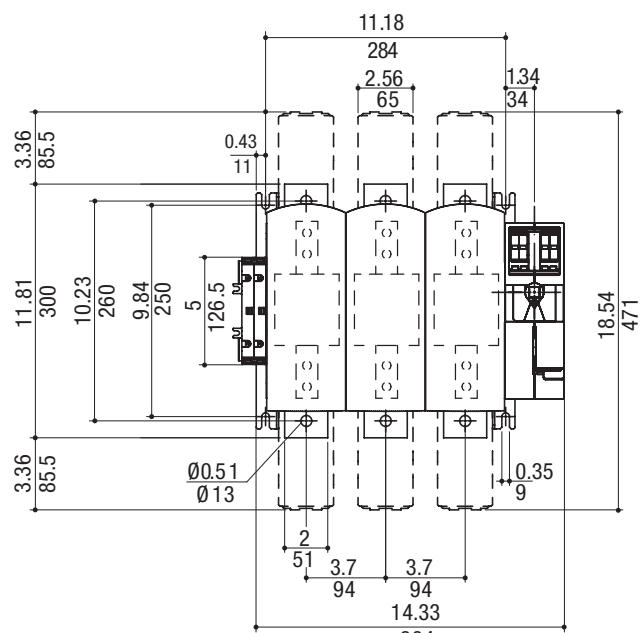
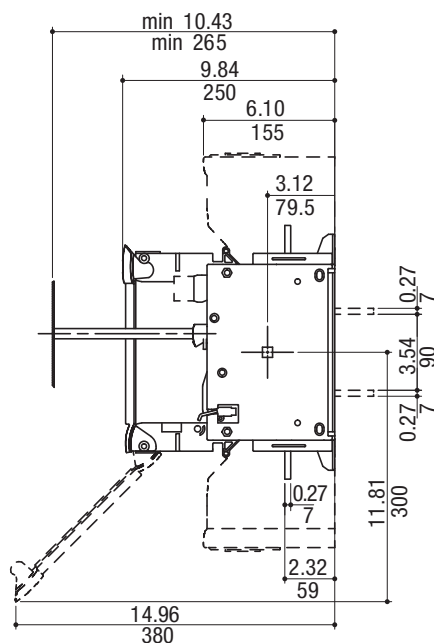
L11 Disconnect Switches

L11 Fused Disconnect Switches (400A)

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

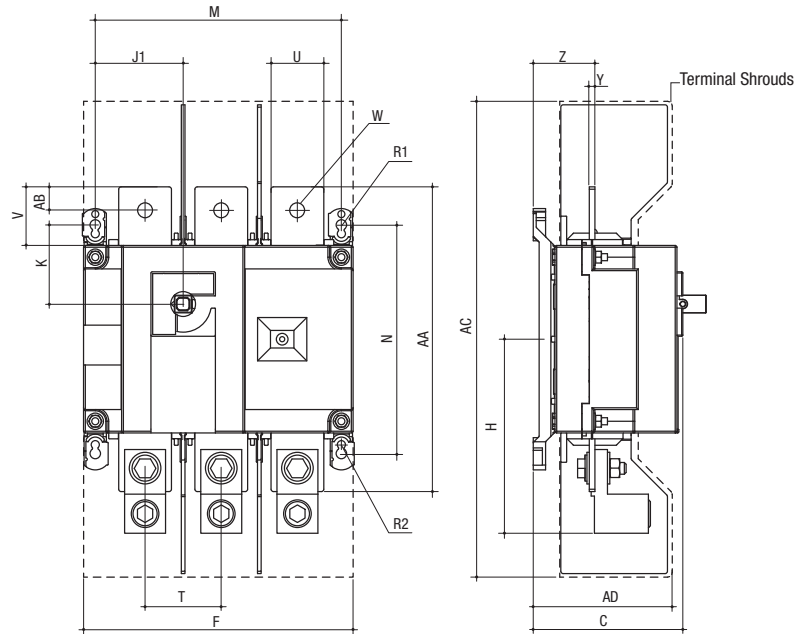


L11 Fused Disconnect Switches (600...800A)



L11 Non-Fused Disconnect Switches (100...400A)

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

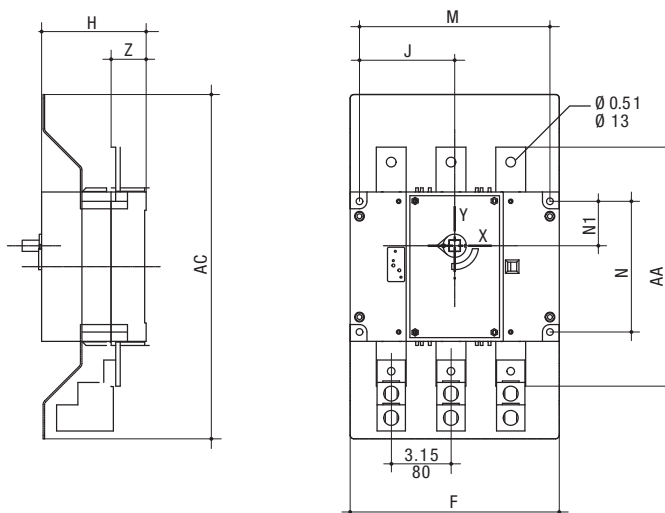


L11-N...	Dim. Ref.	Approximate Dimensions in mm (in)													
		Overall	Terminal Shrouds			Switch Body					Switch Mounting				
		C	AC	AD	F (3-pole)	F (4-pole)	H	J1 (3-pole)	J1 (4-pole)	K	M (3-pole)	M (4-pole)	N	R1	R2
100	F1	94.6 (3.72)	256 (10.1)	77.5 (3.05)	180 (7.09)	230 (9.06)	107 (4.22)	55 (2.17)	105 (4.13)	45.6 (1.8)	160 (6.3)	210 (8.7)	135 (5.31)	9 (0.35)	7 (0.27)
200		94.6 (3.72)	256 (10.1)	77.5 (3.05)	180 (7.09)	230 (9.06)	107 (4.22)	55 (2.17)	105 (4.13)	45.6 (1.8)	160 (6.3)	210 (8.7)	135 (5.31)	9 (0.35)	7 (0.27)
400	F2	128 (4.92)	406 (16)	115 (4.15)	230 (9.05)	290 (11.4)	166 (6.53)	75 (2.95)	135 (5.31)	67.5 (2.65)	210 (8.26)	270 (10.6)	195 (7.67)	9 (0.35)	7 (0.27)

L11-N...	Dim. Ref.	Approximate Dimensions in mm (in)							
		Connection							
		T	U	V	W	Y	Z	AA	AB
100	F1	50 (1.97)	25 (0.98)	30 (1.18)	11 (0.43)	3.5 (0.14)	34.4 (0.14)	160 (6.3)	15 (0.6)
200		50 (1.97)	25 (0.98)	30 (1.18)	11 (0.43)	3.5 (0.14)	34.4 (0.14)	160 (6.3)	15 (0.6)
400	F2	65 (2.56)	45 (1.77)	50 (1.97)	13 (0.51)	5 (0.2)	53 (2.08)	260 (10.2)	20 (0.8)

L11 Non-Fused Disconnect Switches (600A)

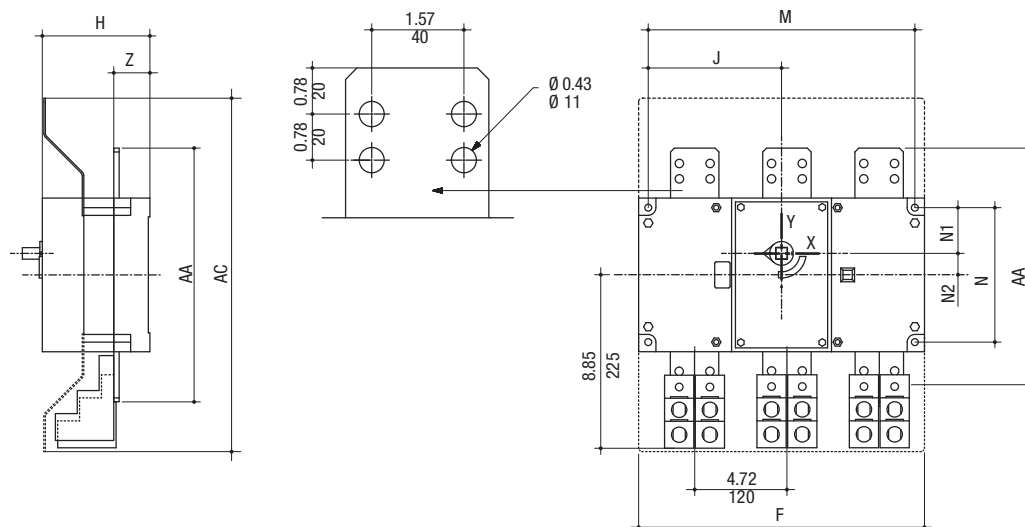
Dimensions are in millimeters (inches). Dimensions not intended for manufacturing purposes.



Approximate Dimensions in mm (in)													
L11-N...	Dim. Ref.	Terminal Shrouds	Switch Body					Switch Mounting				Connection	
		AC	F (3-pole)	F (4-pole)	H	J (3-pole)	J (4-pole)	M (3-pole)	M (4-pole)	N	N1	AA	Z
600	F3	460 (18.12)	280 (11)	360 (14.17)	140 (5.5)	127.5 (5)	167.5 (6.59)	255 (10.03)	335 (13.19)	175 (6.88)	59.5 (2.34)	320 (12.6)	47 (1.85)

L11 Non-Fused Disconnect Switches (800...1200A)

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



Approximate Dimensions in mm (in)													
L11-N...	Dim. Ref.	Terminal Shrouds	Switch Body					Switch Mounting				Connection	
		AC	F (3-pole)	F (4-pole)	H	J (3-pole)	J (4-pole)	M (3-pole)	M (4-pole)	N	N1	AA	Z
800	F4	460 (18.12)	372 (14.64)	492 (19.37)	140 (5.5)	173.5 (6.83)	233.5 (9.19)	347 (13.66)	467 (18.38)	175 (6.88)	59.5 (2.34)	330 (13)	47 (1.85)
1200		460 (18.12)	372 (14.64)	492 (19.37)	140 (5.5)	173.5 (6.83)	233.5 (9.19)	347 (13.66)	467 (18.38)	175 (6.88)	59.5 (2.34)	330 (13)	47 (1.85)

L2

L11 Disconnect Switches

L11 Metal Operating Shaft Dimensions



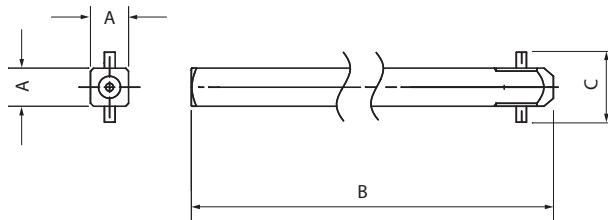
L11-S1..S2



L11-R7..R8



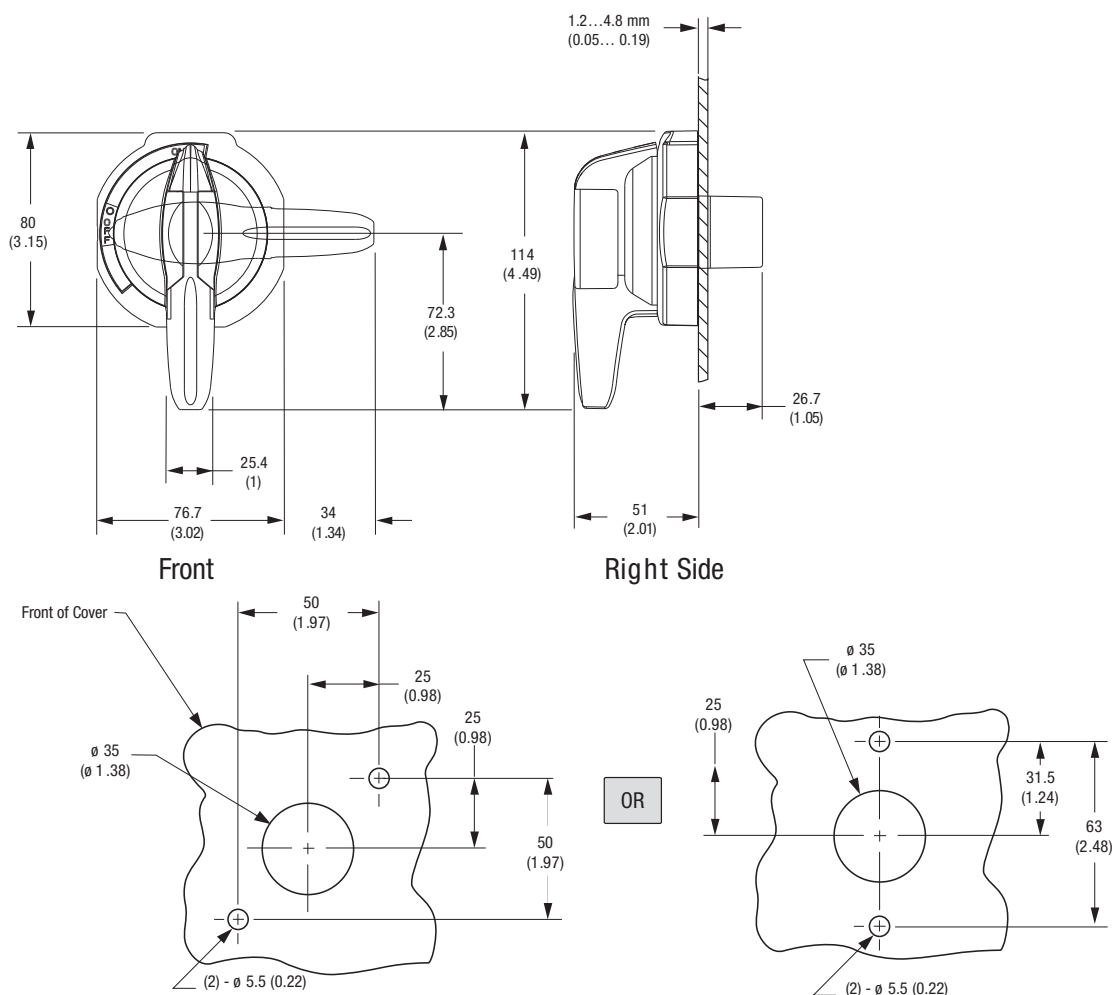
L11-R9..R12



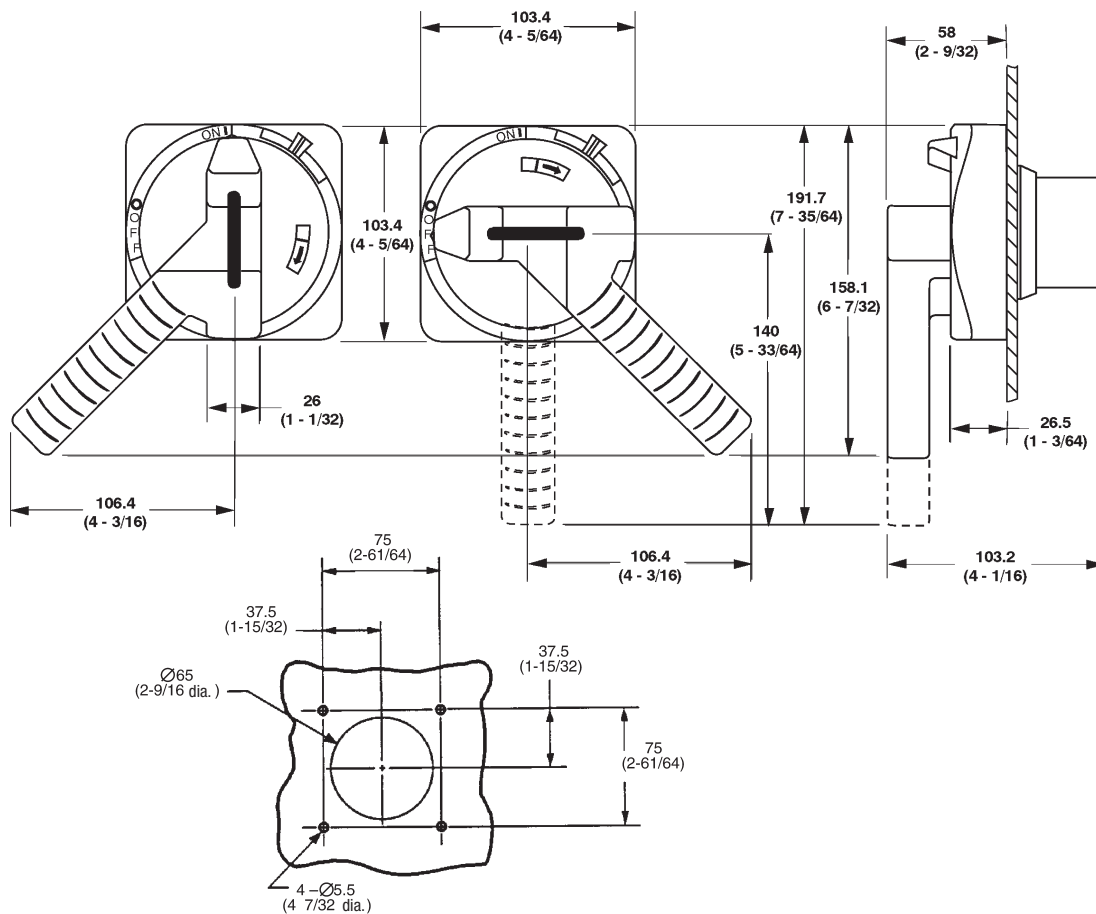
Catalog Number	A ² mm (in)	B mm (in)	C mm (in)
L11-S1	6.35 (0.238)	305 (12)	
L11-S2	6.35 (0.238)	533 (21)	
L11-R7	10 (0.39)	320 (12.6)	~
L11-R8	10 (0.39)	580 (22.8)	~
L11-R9	12 (0.47)	320 (12.6)	22 (0.87)
L11-R10	12 (0.47)	560 (22)	22 (0.87)
L11-R11	12 (0.47)	320 (12.6)	22 (0.87)
L11-R12	12 (0.47)	560 (22)	22 (0.87)

L11-P*/L11-P*T Operating Handles

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

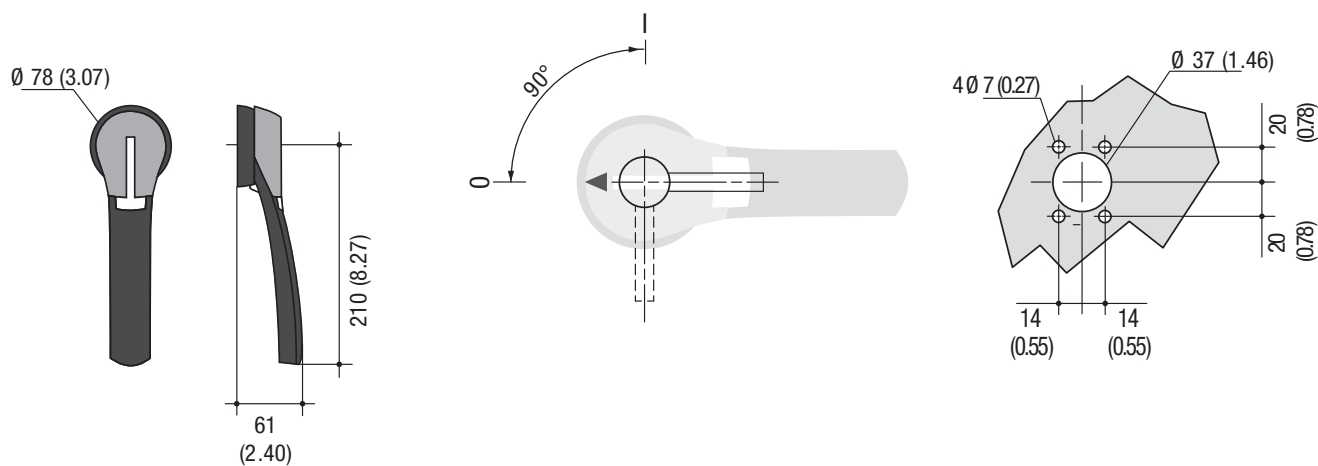


L10-HM4/HM4E Operating Handles



Operating Handles — Cat. No. L10-HM4, -HM4E

L11-HM4*-L/-N2-L Operating Handles

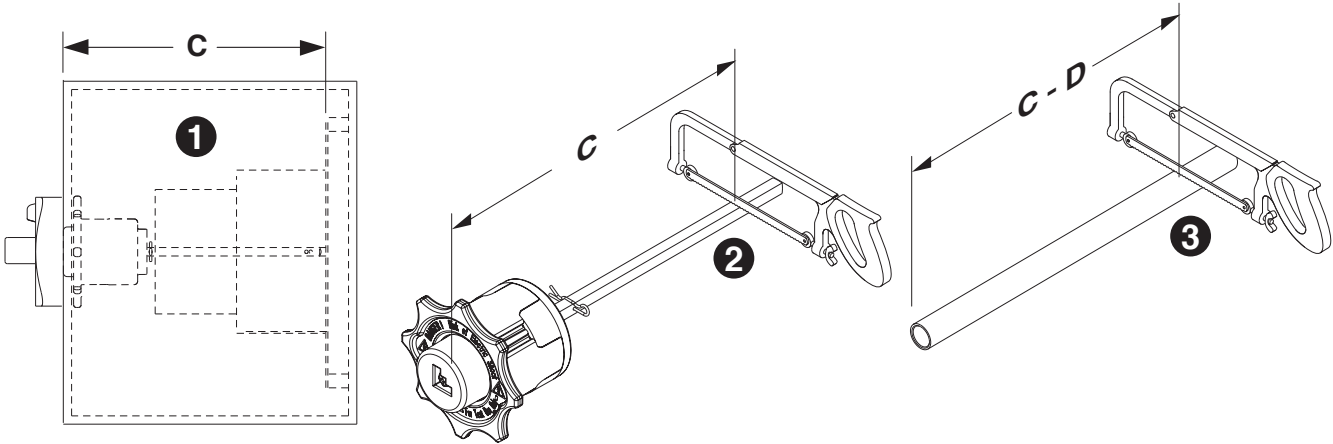


L2

L11 Disconnect Switches

L11-N1 & L11-N2 Operating Handle (30 & 60A)

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



Next Generation L11			
Disconnect	C	D	
L11-N30-__	≥ 165 mm 6.5 in	155 mm 6.0 in	
L11-B20-__ L11-B32-__ L11-C30-__ L11-F25-__ L11-F32-__ L11-J30-__	≥ 190 mm 7.5 in		
L11-N60-__	≥ 180 mm 7.0 in		170 mm 6.75 in
L11-B63-__ L11-D32-__ L11-D63-__ L11-F63-__ L11-H30-__ L11-H60-__ L11-J60-__	≥ 205 mm 8.0 in		

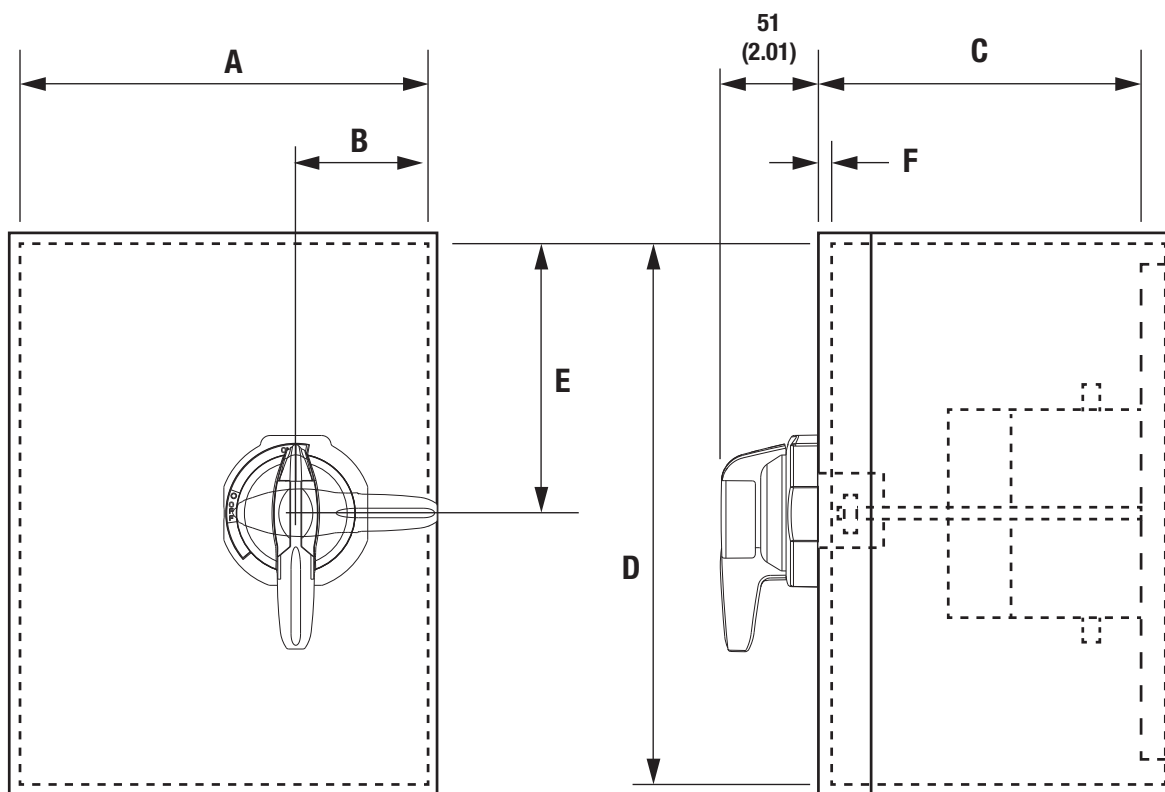
Legacy L10			
Disconnect	C	D	
L10-NN030__	≥ 170 mm 6.75 in	140 mm 5.5 in	
L10-NC030__ L10-NJ030__ L10-NA100__ L10-NA200__	≥ 210 mm 8.25 in		
L10-NN060__	≥ 170 mm 6.75 in		115 mm 4.5 in
L10-NJ060__ L10-NA300__	≥ 210 mm 8.25 in		

L2

L11 Disconnect Switches

L11 Enclosure and Operating Handle Dimensions

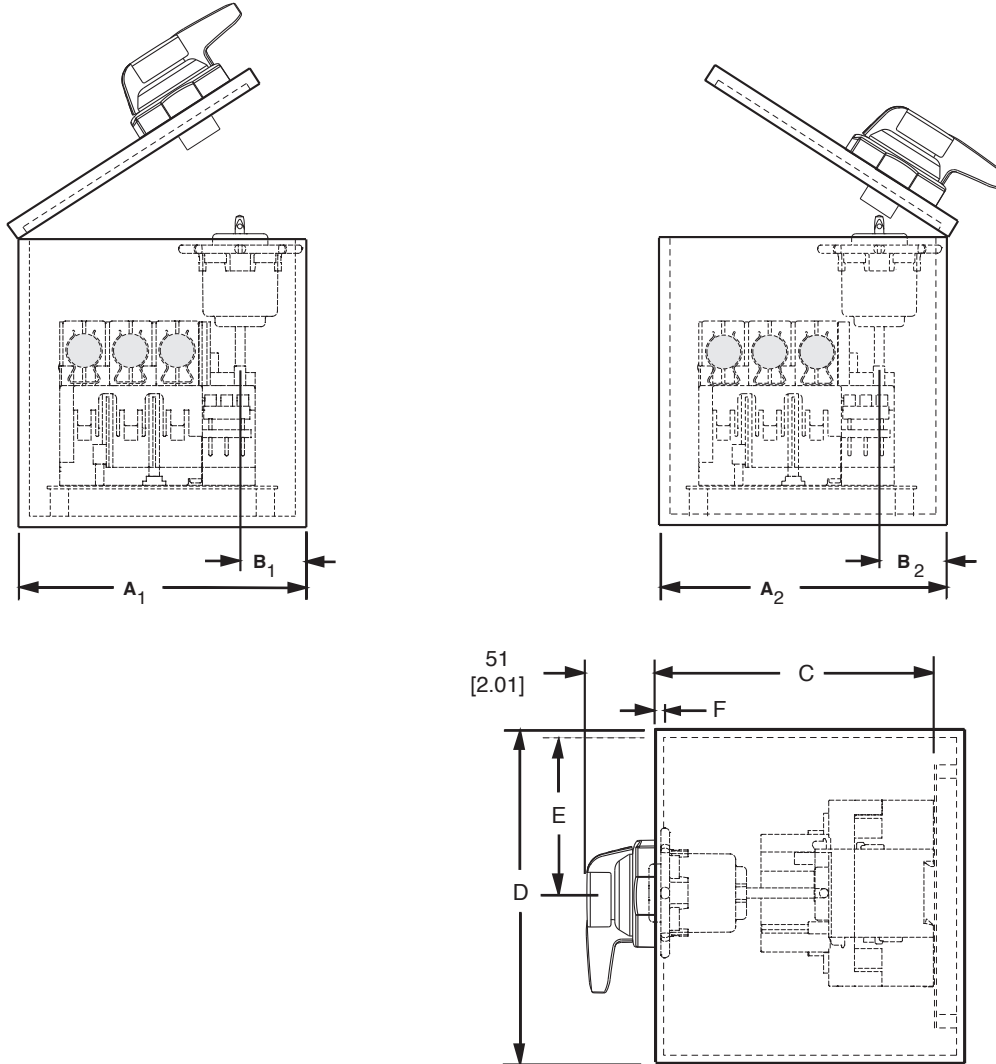
Dimensions are in millimeters (inches). Dimensions not intended for manufacturing purposes.



Catalog Number	Dimension Reference	A	B	C		D	E	F	
		Maximum	Minimum	Minimum	Maximum	Minimum	Minimum	Minimum	Maximum
L11-C30-1753 L11-J30-1753	A1	171 (6-3/4)	45 (1-49/64)	147.6 (5-13/16)	454 (17-7/8)	248 (9-3/4)	89 (3-1/2)	1.4 (1/16)	4/78 (3/16)
L11-N30-1753	A2	171 (6-3/4)	45 (1-49/64)	111 (4-3/8)	454 (17-7/8)	248 (9-3/4)	89 (3-1/2)	1.4 (1/16)	4/78 (3/16)
L11-J60-1753 L11-H30-1753 L11-H60-1753	B1	197 (7-3/4)	45 (1-49/64)	147.6 (5-13/16)	454 (17-7/8)	248 (9-3/4)	105 (4-9/64)	1.4 (1/16)	4/78 (3/16)
L11-N60-1753	B2	197 (7-3/4)	45 (1-49/64)	111 (4-3/8)	454 (17-7/8)	248 (9-3/4)	105 (4-9/64)	1.4 (1/16)	4/78 (3/16)

L11 Enclosure Installation Dimensions

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



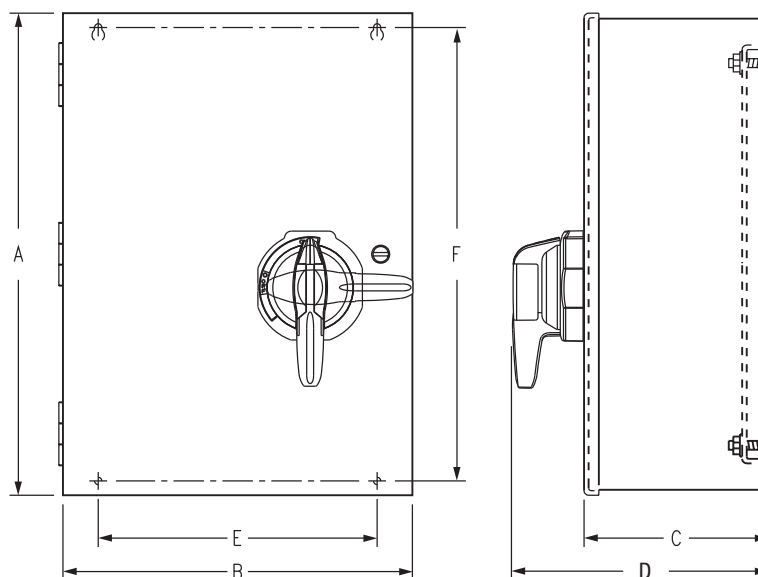
Catalog Number	Dimension Reference	A1 Min.	A2 Min.	B Min.	B Min.	Min.	C Max.	D Min.	E Min.	Min.	F Max.
L11-C30-1753 L11-J30-1753	A1	171 (6-3/4)	203 (7-63/64)	45 (1-49/64)	76 (3)	178 (7)	454 (17-7/8)	248 (9-3/4)	89 (3-1/2)	1.4 (1/16)	4.78 (3/16)
L11-N30-1753	A2	171 (6-3/4)	203 (7-63/64)	45 (1-49/64)	76 (3)	178 (7)	454 (17-7/8)	248 (9-3/4)	89 (3-1/2)	1.4 (1/16)	4.78 (3/16)
L11-J60-1753 L11-H30-1753 L11-H60-1753	B1	197 (7-3/4)	228 (8-63/64)	45 (1-49/64)	76 (3)	178 (7)	454 (17-7/8)	248 (9-3/4)	105 (4-9/64)	1.4 (1/16)	4.78 (3/16)
L11-N60-1753	B2	197 (7-3/4)	228 (8-63/64)	45 (1-49/64)	76 (3)	178 (7)	454 (17-7/8)	248 (9-3/4)	105 (4-9/64)	1.4 (1/16)	4.78 (3/16)

L2

L11 Disconnect Switches

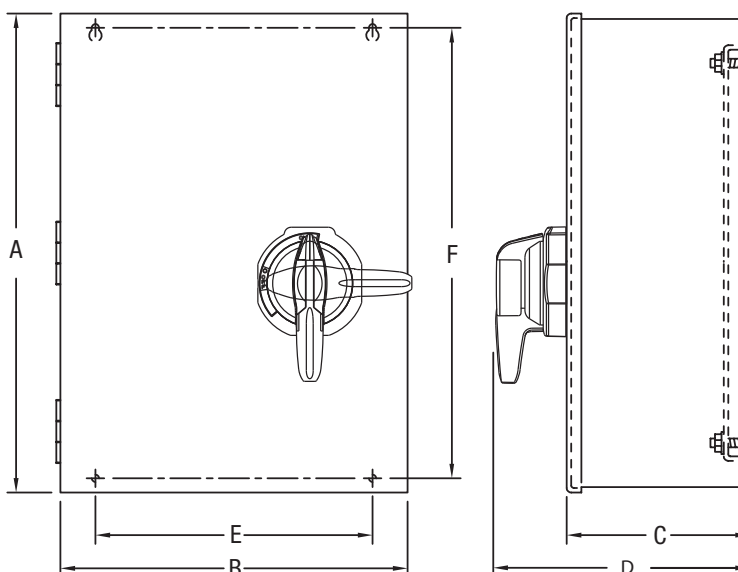
Type 3/4/12 - Watertight, Dusttight Sheet Metal Enclosure (30 & 60A)

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



Amps	Type	Dim. Ref.	A	B	C	D	E	F
30	Fused & Non-fused	A1, A2	305 (12.00)	305 (12.00)	173 (6.80)	224 (8.81)	267 (10.5)	267 (10.5)
60	Fused & Non-fused	B1, B2	305 (12.00)	305 (12.00)	173 (6.80)	224 (8.81)	267 (10.5)	267 (10.5)

Type 4/4X Watertight, Corrosion-Resistant Stainless Steel Enclosure (30 & 60A)



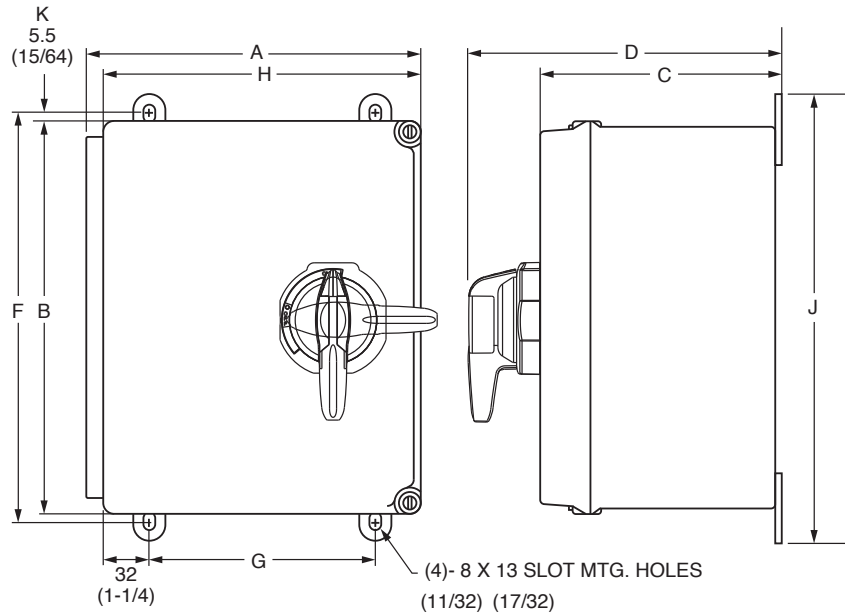
Amps	Type	Dim. Ref.	A	B	C	D	E	F
30	Fused & Non-fused	A1, A2	305 (12.00)	305 (12.00)	173 (6.80)	224 (8.81)	267 (10.5)	267 (10.5)
60	Fused & Non-fused	B1, B2	305 (12.00)	305 (12.00)	173 (6.80)	224 (8.81)	267 (10.5)	267 (10.5)

L2

L11 Disconnect Switches

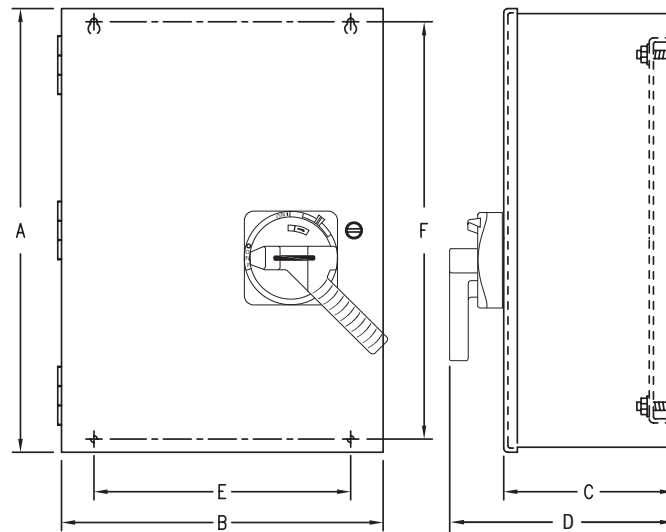
Type 4/4X - Corrosion Resistant Non-Metallic Enclosure (30 & 60A)

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



Amps	Type	Dim. Ref.	A	B	C	D	F	G	H	J	K
30 &	Fused &	A1 & A2	226	267	163	214	278	152	216	305	6
60	Non-Fused	B1 & B2	(8.92)	(10.52)	(6.42)	(8.43)	(10.95)	(8.0)	(8.50)	(12.0)	(0.23)

Type 4/12 Metallic and Type 4/4X Stainless Steel Enclosure (100A)



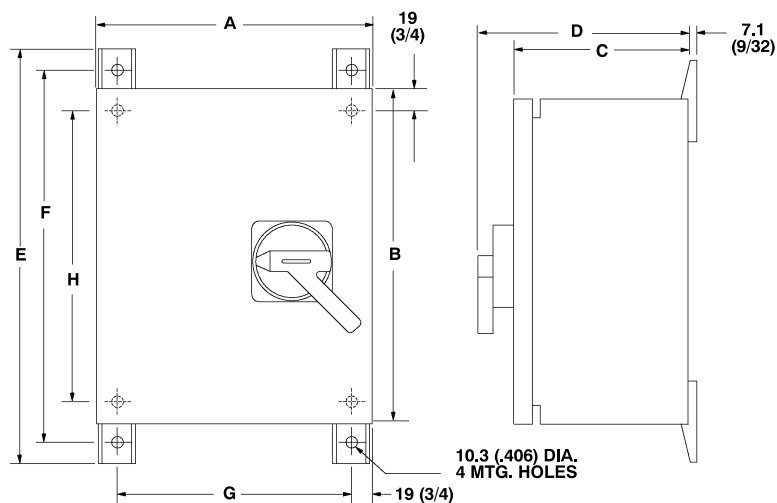
Amps	Type	Dim. Ref.	A	B	C	D	E	F
100	Fused & Non-fused	C1	406 (16.00)	406 (16.00)	224 (8.80)	282 (11.10)	368 (14.5)	368 (14.5)

L2

L11 Disconnect Switches

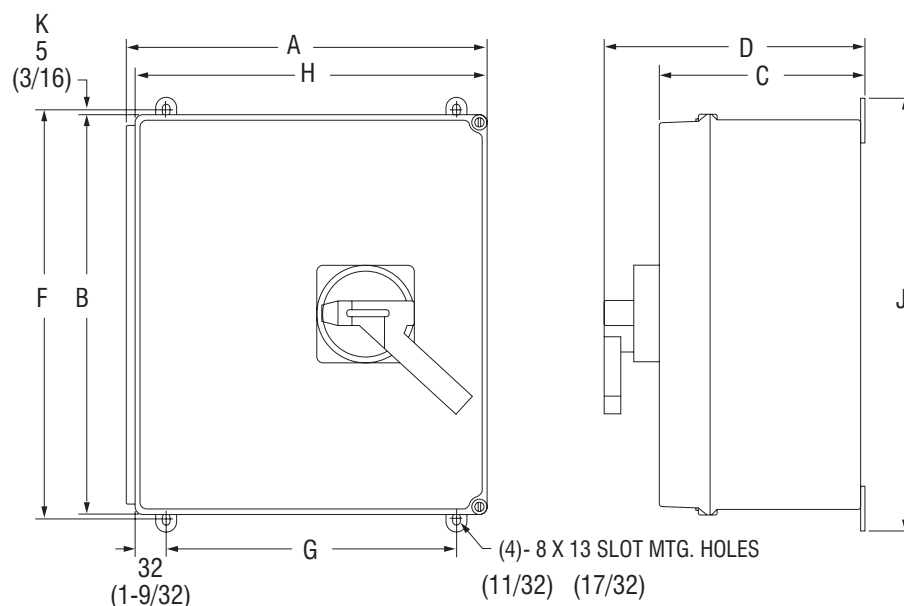
Type 4/12 Metallic and Type 4/4X Stainless Steel Enclosure (200 & 400A)

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



Amps	Type	Dim. Ref.	A	B	C	D	E	F	G	H
200	Fused & Non-Fused	D1	406 (16)	610 (24)	224 (8-51/64)	282 (11-5/64)	688 (27-5/64)	650 (25-19/32)	368 (14-1/2)	572 (22-1/2)
400	Fused & Non-Fused	F1	610 (24)	762 (30)	326 (12-51/64)	384 (15-5/64)	840 (33-5/64)	802 (31-15/32)	572 (22-1/2)	724 (28-1/2)

Type 4/4X Corrosion Resistant Non-Metallic Enclosure (100A)



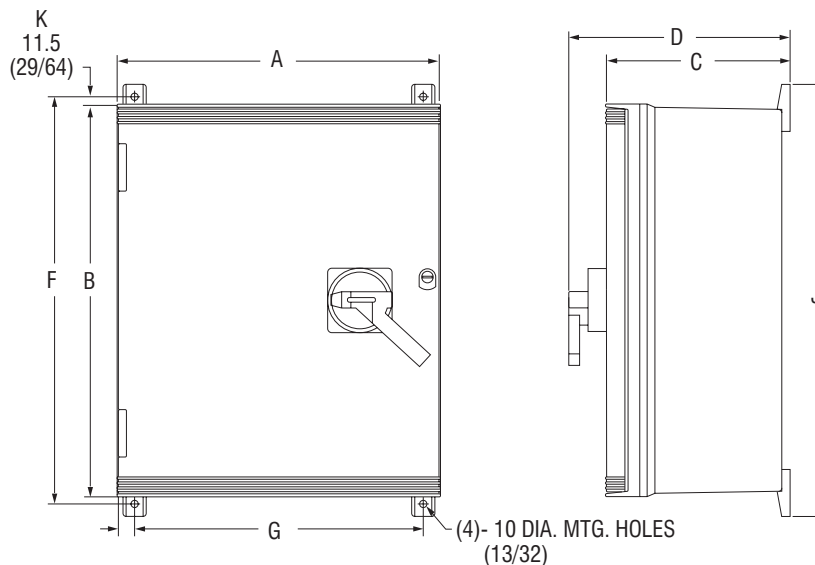
Amps	Type	Dim. Ref.	A	B	C	D	F	G	H	J	K
100	Fused & Non-Fused	C1	380 (14-31/32)	420 (16-1/4)	215 (8-31/64)	273 (10-49/64)	430 (16-61/64)	305 (12)	370 (14-9/16)	457 (18)	5 (13/64)

L2

L11 Disconnect Switches

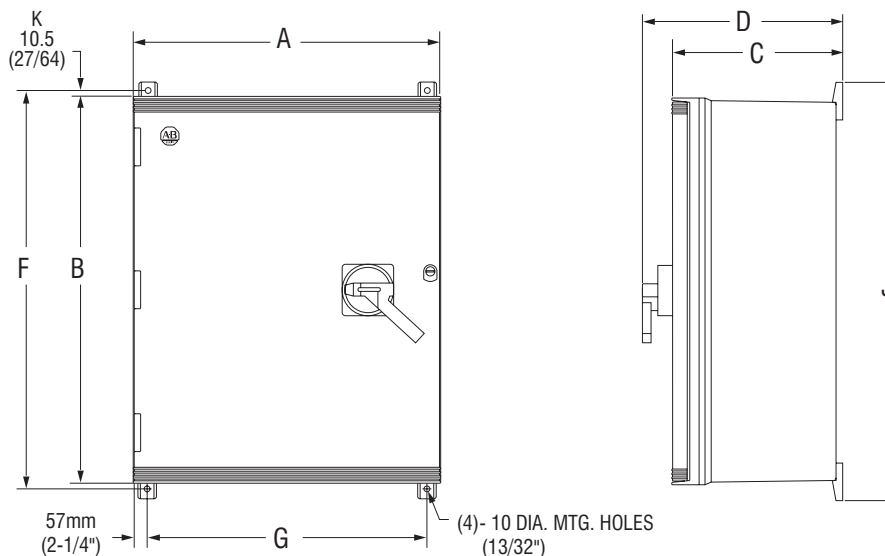
Type 4/4X Corrosion Resistant Non-Metallic Enclosure (200A)

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



Amps	Type	Dim. Ref.	A	B	C	D	F	G	J	K
200	Fused & Non-Fused	D1	513 (20-13/64)	625 (24-5/8)	292 (11-31/64)	350 (13-25/32)	648 (25-1/2)	457 (18)	686 (27)	11.5 (29/64)

Type 4/4X Corrosion Resistant Non-Metallic Enclosure (400A)



Amps	Type	Dim. Ref.	A	B	C	D	F	G	J	K
400	Fused & Non-Fused	F1	612 (24 1/8)	775 (30 33/64)	343 (13 31/64)	401 (15 23/32)	796 (31 31/32)	555 (21 7/8)	834 (32 27/32)	10.5 (13/32)

L2

L11 Disconnect Switches