

Illuminated Selector Switches (Assembled)



Assembled Illuminated Selector Switches

A SL D 2 (2) 99 11 D N - 111 - R - 24

Function

SL: Illuminated Selector Switch

Series Designation

D: TWTD series

Number of Positions

2: 2-Position
3: 3-Position

Spring Return Action

Blank: Maintained
1: Spring return from Right
2: Spring return from Left
3: Two-Way spring return from Left and Right

Rated Operational Voltage (Primary)

Transformer Type	Full Voltage Type
126: 120V AC	99: Full Voltage
246: 240V AC	
486: 480V AC	

Contact Arrangement Code

20: 2NO	02: 2NC
40: 4NO	04: 4NC
11: 1NO-1NC	22: 2NO-2NC

Lamp Voltage

(Full Voltage Units Only)

6V: 6V AC/DC
12V: 12V AC/DC
24V: 24V AC/DC
120V: 120V AC
240V: 240V AC (LED only)

Lens Color Code

A: Amber
G: Green
R: Red
S: Blue
W: White
Y: Yellow

Circuit Code Number

See Circuit # column of Selector Switch Contact Arrangement Charts on page 629.

Lamp Type

Blank: Incandescent Lamp
D: LED Lamp



Use only when interpreting part numbers. Do not use for developing part numbers.

Illuminated Selector Switches(Assembled)

Illuminated 2-Position Selector Switches

Style					Part Number		
Contact	Mounting	Operator Position		Lamp Circuit Type	Maintained	Spring Return from Right	Spring Return from Left
		L	R				
1NO 1NC	1	0	X	Transformer	ASLD2 ④11⑤N-②	ASLD21 ④11⑤N-②	ASLD22 ④11⑤N-②
	2	X	0	Full Voltage	ASLD29911⑤N-②-③	ASLD219911⑤N-②-③	ASLD229911⑤N-②-③
2NO	1	0	X	Transformer	ASLD2 ④20⑤N-②	ASLD21 ④20⑤N-②	ASLD22 ④20⑤N-②
	2	0	X	Full Voltage	ASLD29920⑤N-②-③	ASLD219920⑤N-②-③	ASLD229920⑤N-②-③
2NC	1	X	0	Transformer	ASLD2 ④02⑤N-104-②	ASLD21 ④02⑤N-104-②	ASLD22 ④02⑤N-104-②
	2	X	0	Full Voltage	ASLD29902⑤N-104-②-③	ASLD219902⑤N-104-②-③	ASLD229902⑤N-104-②-③
2NO 2NC	1	0	X	Transformer Full Voltage	ASLD2 ④22⑤N-② ASLD29922⑤N-②-③	ASLD21 ④22⑤N-② ASLD219922⑤N-②-③	ASLD22 ④22⑤N-② ASLD229922⑤N-②-③
	2	X	0				
2NO 2NC	3	0	X	Transformer Full Voltage	ASLD2 ④22⑤N-111-② ASLD29922⑤N-111-②-③	ASLD21 ④22⑤N-111-② ASLD219922⑤N-111-②-③	ASLD22 ④22⑤N-111-② ASLD229922⑤N-111-②-③
	4	X	0				

② LED/Lens Color Codes

Color	Code
Amber	A
Green	G
Red	R
Blue	S
White	W
Yellow	Y

③ Full Voltage Codes

Voltage	Code
6V AC/DC	6V
12V AC/DC	12V
24V AC/DC	24V
120V AC	120V
240V AC	240V (LED only)

Illuminated 3-Position Selector Switches, Maintained and Spring Return

Style					Part Number				
Contact	Mounting	Operator Position			Lamp Circuit Type	Maintained	Spring Return From Right	Spring Return from Left	Spring Return Two-Way
		L	C	R					
2NO	1	X	0	0	Transformer	ASLD3 ④ 20⑤N-②	ASLD31 ④ 20⑤N-②	ASLD32 ④ 20⑤N-②	ASLD33 ④ 20⑤N-②
	2	0	0	X	Full Voltage	ASLD39920⑤N-②-③	ASLD319920⑤N-②-③	ASLD329920⑤N-②-③	ASLD339920⑤N-②-③
2NC	1	0	X	X	Transformer	ASLD3 ④ 02⑤N-②	ASLD31 ④ 02⑤N-②	ASLD32 ④ 02⑤N-②	ASLD33 ④ 02⑤N-②
	2	X	X	0	Full Voltage	ASLD39902⑤N-②-③	ASLD319902⑤N-②-③	ASLD329902⑤N-②-③	ASLD339902⑤N-②-③
2NO 2NC	1	X	0	0	Transformer Full Voltage	ASLD3 ④ 22⑤N-② ASLD39922⑤N-②-③	ASLD31 ④ 22⑤N-② ASLD319922⑤N-②-③	ASLD32 ④ 22⑤N-② ASLD329922⑤N-②-③	ASLD33 ④ 22⑤N-② ASLD339922⑤N-②-③
	2	0	0	X					
2NO 2NC	3	0	X	X	Transformer Full Voltage	ASLD3 ④ 22⑤N-309-② ASLD39922⑤N-309-②-③	ASLD31 ④ 22⑤N-309-② ASLD319922⑤N-309-②-③	ASLD32 ④ 22⑤N-309-② ASLD329922⑤N-309-②-③	ASLD33 ④ 22⑤N-309-② ASLD339922⑤N-309-②-③
	4	X	X	0					
2NO 2NC	1	X	0	X	Transformer Full Voltage	ASLD3 ④ 22⑤N-310-② ASLD39922⑤N-310-②-③	ASLD31 ④ 22⑤N-310-② ASLD319922⑤N-310-②-③	ASLD32 ④ 22⑤N-310-② ASLD329922⑤N-310-②-③	ASLD33 ④ 22⑤N-310-② ASLD339922⑤N-310-②-③
	2	X	X	0					
2NO 2NC	3	0	X	0	Transformer Full Voltage	ASLD3 ④ 22⑤N-310-② ASLD39922⑤N-310-②-③	ASLD31 ④ 22⑤N-310-② ASLD319922⑤N-310-②-③	ASLD32 ④ 22⑤N-310-② ASLD329922⑤N-310-②-③	ASLD33 ④ 22⑤N-310-② ASLD339922⑤N-310-②-③
	4	0	0	X					
4NO	1	X	0	0	Transformer Full Voltage	ASLD3 ④ 40⑤N-② ASLD39940⑤N-②-③	ASLD31 ④ 40⑤N-② ASLD319940⑤N-②-③	ASLD32 ④ 40⑤N-② ASLD329940⑤N-②-③	ASLD33 ④ 40⑤N-② ASLD339940⑤N-②-③
	2	0	0	X					
4NC	3	X	0	0	Transformer Full Voltage	ASLD3 ④ 04⑤N-② ASLD39904⑤N-②-③	ASLD31 ④ 04⑤N-② ASLD319904⑤N-②-③	ASLD32 ④ 04⑤N-② ASLD329904⑤N-②-③	ASLD33 ④ 04⑤N-② ASLD339904⑤N-②-③
	4	0	X	X					



- In place of ②, specify the Lens/LED Color Code, in place of ③, specify the Full Voltage (lamp voltage) Code, in place of ④, specify the Transformer Voltage Code and in place of ⑤ specify the Lamp Type Code.
- The truth table indicates the operating position of contact block when the operator is switched to that position.
 X = On (Closed Contacts) 0 = Off (Open Contacts)
 X-X = Overlapping Contacts: Remain on (closed contacts) when switch is moved between these positions
- Yellow selector switch comes with white LED.

④ Transformer Voltage Codes

Voltage	Code
120VAC	126
240VAC	246
480VAC	486

⑤ Lamp Type Codes

Lamp	Code
Incandescent	Blank
LED	D



Transformers step down to 6V (use 6V lamp).

Light is independent of switch position.

Illuminated Selector Switches (Sub-Assembled)



*Not required for full voltage units (use APD-F full voltage clips instead).

Operators

Style	Position	Description	Part Number
Operator	2	Maintained	ASLD200
	3	Maintained, Cam 1	ASLD300-1
		Maintained, Cam 2	ASLD300-2
	2	Spring return from right	ASLD2100
		Spring return from left	ASLD2200
	3	Spring return from right, Cam 1	ASLD3100-1
		Spring return from right, Cam 2	ASLD3100-2
		Spring return from left, Cam 1	ASLD3200-1
Spring return from left, Cam 2		ASLD3200-2	
3	Spring return from left/right, Cam 1	ASLD3300-1	
	Spring return from left/right, Cam 2	ASLD3300-2	

Contact Blocks

Style	Part Number	
	1NO	1NC
	BST-010	BST-001
	BST-010S (early make)	BST-001S (late break)
Dummy Block	BST-D	



- Dummy blocks (no contacts) are used with an odd number of contact blocks.
- Combining BST-010S and BST-001S results in overlapping contacts (remain on, or closed, when switch is moved between two positions).

Lenses

Description	Part Number
	ASLNHU-①

Full Voltage Clips

Style	Part Number
	APD-F



Required for all full voltage models.

Lamps

Style	Voltage	Part Number
LED	6V AC/DC	LSTD-6②
	12V AC/DC	LSTD-1②
	24V AC/DC	LSTD-2②
	120V AC	LSTD-H2②
	240V AC	LSTD-M4②
Incandescent	6V AC/DC	IS-6
	12V AC/DC	IS-12
	24V AC/DC	IS-24
	120V AC	L-120L



- In place of ②, specify the LED color code.
- The LED contains a current-limiting resistor and a protection diode.

Transformers

Description	Primary Voltage (50/60Hz)	Part Number
	120V AC	TWD-0126
	240V AC	TWD-0246
	480V AC	TWD-0486



6V secondary voltage.

② LED/Lens Color Codes

Color	Code	Color	Code
Amber	A	Blue	S
Green	G	White	W
Red	R	Yellow	Y



Yellow lens only. Yellow LED not available, use white LED.

Switches & Pilot Lights

Display Lights

Relays & Sockets

Timers

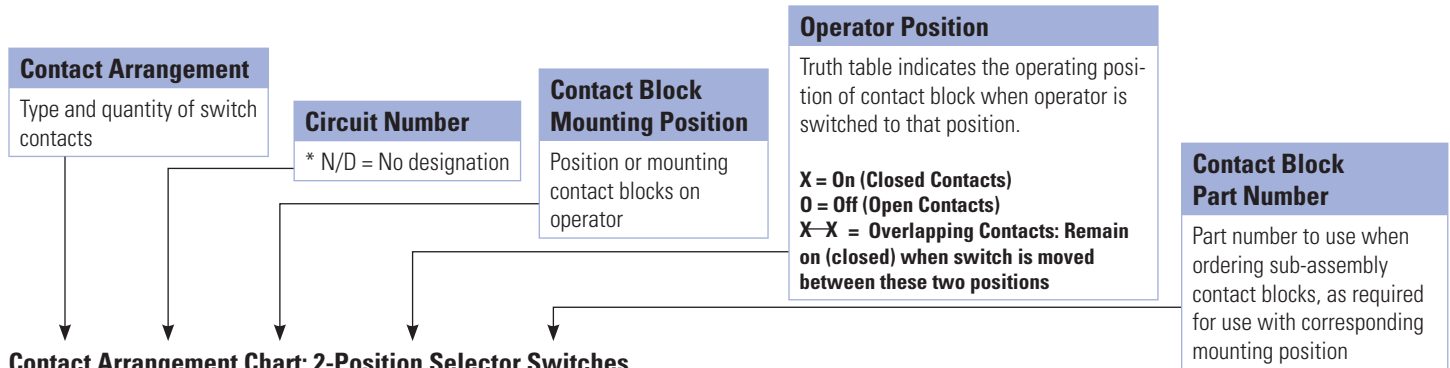
Terminal Blocks

Circuit Breakers

Contact Arrangement Charts

How to Read Contact Arrangement Charts

To determine contact block mounting position, first make sure the selector switch is oriented as shown on the right



Contact Arrangement Chart: 2-Position Selector Switches

Style		Mounting Position	Operator Position		Contact Block Part Number	Description	Operator Part Number		
Contact	Circuit Number		L	R			Maintained	Spring Return from Right	Spring Return from Left
1NO	N/D	1	O	X	BST-010	Knob/Lever Key	ASD200 ASD2K00 ASLD200	ASD2100 ASD21K00 ASLD2100	ASD2200 ASD22K00 ASLD2200
		2	O	O	BST-D	Illuminated Knob			
1NC	116	1	X	O	BST-001	Knob/Lever Key	ASD200 ASD2K00 ASLD200	ASD2100 ASD21K00 ASLD2100	ASD2200 ASD22K00 ASLD2200
		2	O	O	BST-D	Illuminated Knob			
1NO 1NC	N/D	1	O	X	BST-010	Knob/Lever Key	ASD200 ASD2K00 ASLD200	ASD2100 ASD21K00 ASLD2100	ASD2200 ASD22K00 ASLD2200
		2	X	O	BST-001	Illuminated Knob			
	103	1	X	O	BST-001	Knob/Lever Key	ASD200 ASD2K00 ASLD200	ASD2100 ASD21K00 ASLD2100	ASD2200 ASD22K00 ASLD2200
		2	O	X	BST-010	Illuminated Knob			
1NO-EM 1NC-LB	600	1	O	X	BST-010S	Knob/Lever Key	ASD200 ASD2K00 ASLD200	ASD2100 ASD21K00 ASLD2100	ASD2200 ASD22K00 ASLD2200
		2	X	O	BST-001S	Illuminated Knob			
	601	1	X	O	BST-001S	Knob/Lever Key	ASD200 ASD2K00 ASLD200	ASD2100 ASD21K00 ASLD2100	ASD2200 ASD22K00 ASLD2200
		2	O	X	BST-010S	Illuminated Knob			
2NO	N/D	1	O	X	BST-010	Knob/Lever Key	ASD200 ASD2K00 ASLD200	ASD2100 ASD21K00 ASLD2100	ASD2200 ASD22K00 ASLD2200
		2	O	X	BST-010	Illuminated Knob			
2NC	104	1	X	O	BST-001	Knob/Lever Key	ASD200 ASD2K00 ASLD200	ASD2100 ASD21K00 ASLD2100	ASD2200 ASD22K00 ASLD2200
		2	X	O	BST-001	Illuminated Knob			
2NO 2NC	N/D	1	O	X	BST-010	Knob/Lever Key Illuminated Knob	ASD200 ASD2K00 ASLD200	ASD2100 ASD21K00 ASLD2100	ASD2200 ASD22K00 ASLD2200
		2	X	O	BST-001				
		3	O	X	BST-010				
		4	X	O	BST-001				
	110	1	X	O	BST-001	Knob/Lever Key Illuminated Knob	ASD200 ASD2K00 ASLD200	ASD2100 ASD21K00 ASLD2100	ASD2200 ASD22K00 ASLD2200
		2	O	X	BST-010				
		3	X	O	BST-001				
		4	O	X	BST-010				
	111	1	O	X	BST-010	Knob/Lever Key Illuminated Knob	ASD200 ASD2K00 ASLD200	ASD2100 ASD21K00 ASLD2100	ASD2200 ASD22K00 ASLD2200
		2	O	X	BST-010				
		3	X	O	BST-001				
		4	X	O	BST-001				
4NO	N/D	1	O	X	BST-010	Knob/Lever Key Illuminated Knob	ASD200 ASD2K00 ASLD200	ASD2100 ASD21K00 ASLD2100	ASD2200 ASD22K00 ASLD2200
		2	O	X	BST-010				
		3	O	X	BST-010				
		4	O	X	BST-010				

Switches & Pilot Lights

Display Lights

Relays & Sockets

Timers

Terminal Blocks

Circuit Breakers

Contact Arrangement Chart: 3-Position Selector Switches

Contact	Circuit Number	Mounting Position	Operator Position			Contact Block Part Number	Description	Operator Part Number				
			L	C	R			Maintained	Spring Return from Right	Spring Return from Left	Two-Way	
1NO 1NC	202	1	X	0	0	BST-010	Knob/Lever Key	ASD300-1 ASD3K00-1 ASLD300-1	ASD3100-1 ASD31K00-1 ASLD3100-1	ASD3200-1 ASD32K00-1 ASLD3200-1	ASD3300-1 ASD33K00-1 ASLD3300-1	
		2	X—X	0	0	BST-001	Illuminated Knob					
	203	1	0	X—X	0	BST-001	Knob/Lever Key	ASD300-1 ASD3K00-1 ASLD300-1	ASD3100-1 ASD31K00-1 ASLD3100-1	ASD3200-1 ASD32K00-1 ASLD3200-1	ASD3300-1 ASD33K00-1 ASLD3300-1	
		2	0	0	X	BST-010	Illuminated Knob					
	302	1	X	0	X	BST-010	Knob/Lever Key	ASD300-2 ASD3K00-2 ASLD300-2	ASD3100-2 ASD31K00-2 ASLD3100-2	ASD3200-2 ASD32K00-2 ASLD3200-2	ASD3300-2 ASD33K00-2 ASLD3300-2	
		2	X—X	0	0	BST-001	Illuminated Knob					
	303	1	0	X	0	BST-001	Knob/Lever Key	ASD300-2 ASD3K00-2 ASLD300-2	ASD3100-2 ASD31K00-2 ASLD3100-2	ASD3200-2 ASD32K00-2 ASLD3200-2	ASD3300-2 ASD33K00-2 ASLD3300-2	
		2	0	0	X	BST-010	Illuminated Knob					
	2NO	N/D	1	X	0	0	BST-010	Knob/Lever Key	ASD300-1 ASD3K00-1 ASLD300-1	ASD3100-1 ASD31K00-1 ASLD3100-1	ASD3200-1 ASD32K00-1 ASLD3200-1	ASD3300-1 ASD33K00-1 ASLD3300-1
			2	0	0	X	BST-010	Illuminated Knob				
		301	1	X	0	X	BST-010	Knob/Lever Key	ASD300-2 ASD3K00-2 ASLD300-2	ASD3100-2 ASD31K00-2 ASLD3100-2	ASD3200-2 ASD32K00-2 ASLD3200-2	ASD3300-2 ASD33K00-2 ASLD3300-2
			2	0	0	X	BST-010	Illuminated Knob				
2NC	304	1	0	X	0	BST-001	Knob/Lever Key	ASD300-2 ASD3K00-2 ASLD300-2	ASD3100-2 ASD31K00-2 ASLD3100-2	ASD3200-2 ASD32K00-2 ASLD3200-2	ASD3300-2 ASD33K00-2 ASLD3300-2	
		2	X—X	0	0	BST-001	Illuminated Knob					
	N/D	1	0	X—X	0	BST-001	Knob/Lever Key	ASD300-1 ASD3K00-1 ASLD300-1	ASD3100-1 ASD31K00-1 ASLD3100-1	ASD3200-1 ASD32K00-1 ASLD3200-1	ASD3300-1 ASD33K00-1 ASLD3300-1	
		2	X—X	0	0	BST-001	Illuminated Knob					
2NO 2NC	N/D	1	X	0	0	BST-010	Knob/Lever Key Illuminated Knob	ASD300-1 ASD3K00-1 ASLD300-1	ASD3100-1 ASD31K00-1 ASLD3100-1	ASD3200-1 ASD32K00-1 ASLD3200-1	ASD3300-1 ASD33K00-1 ASLD3300-1	
		2	0	0	X	BST-010						
		3	0	X—X	0	BST-001						
		4	X—X	0	0	BST-001						
	210	1	0	X—X	0	BST-001	Knob/Lever Key Illuminated Knob	ASD300-1 ASD3K00-1 ASLD300-1	ASD3100-1 ASD31K00-1 ASLD3100-1	ASD3200-1 ASD32K00-1 ASLD3200-1	ASD3300-1 ASD33K00-1 ASLD3300-1	
		2	0	0	X	BST-010						
		3	0	X—X	0	BST-001						
		4	0	0	X	BST-010						
	308	1	X	0	X	BST-010	Knob/Lever Key Illuminated Knob	ASD300-2 ASD3K00-2 ASLD300-2	ASD3100-2 ASD31K00-2 ASLD3100-2	ASD3200-2 ASD32K00-2 ASLD3200-2	ASD3300-2 ASD33K00-2 ASLD3300-2	
		2	X—X	0	0	BST-001						
		3	X	0	X	BST-010						
		4	X—X	0	0	BST-001						
309	1	X	0	X	BST-010	Knob/Lever Key Illuminated Knob	ASD300-2 ASD3K00-2 ASLD300-2	ASD3100-2 ASD31K00-2 ASLD3100-2	ASD3200-2 ASD32K00-2 ASLD3200-2	ASD3300-2 ASD33K00-2 ASLD3300-2		
	2	X—X	0	0	BST-001							
	3	0	X	0	BST-001							
	4	0	0	X	BST-010							
310	1	0	X	0	BST-001	Knob/Lever Key Illuminated Knob	ASD300-2 ASD3K00-2 ASLD300-2	ASD3100-2 ASD31K00-2 ASLD3100-2	ASD3200-2 ASD32K00-2 ASLD3200-2	ASD3300-2 ASD33K00-2 ASLD3300-2		
	2	0	0	X	BST-010							
	3	0	X	0	BST-001							
	4	0	0	X	BST-010							

- Each operator sub-assembly is available as a "-1" and a "-2" for 3-position selector switches. The internal cam of a "-1" is different from that of a "-2". This results in designated combinations of open and closed contacts in the various operator positions.
- N/D = No circuit number designation required in assembled part number.
- X = On (closed contacts) 0 = Off (open contacts). X—X Overlapping contacts remain on (closed) when switch is moved between these two positions.

Switches & Pilot Lights

Display Lights

Relays & Sockets

Timers

Terminal Blocks

Circuit Breakers

Contact Arrangement Chart: 3-Position Selector Switches

Style		Mounting Position	Operator Position			Contact Block Part Number	Description	Operator Part Number			
Contact	Circuit Number		L	C	R			Maintained	Spring Return from Right	Spring Return from Left	Two-Way
4NO	N/D	1	X	0	0	BST-010	Knob/Lever Key Illuminated Knob	ASD300-1 ASD3K00-1 ASLD300-1	ASD3100-1 ASD31K00-1 ASLD3100-1	ASD3200-1 ASD32K00-1 ASLD3200-1	ASD3300-1 ASD33K00-1 ASLD3300-1
		2	0	0	X	BST-010					
		3	X	0	0	BST-010					
		4	0	0	X	BST-010					
	305	1	X	0	X	BST-010	Knob/Lever Key Illuminated Knob	ASD300-2 ASD3K00-2 ASLD300-2	ASD3100-2 ASD31K00-2 ASLD3100-2	ASD3200-2 ASD32K00-2 ASLD3200-2	ASD3300-2 ASD33K00-2 ASLD3300-2
		2	0	0	X	BST-010					
		3	X	0	X	BST-010					
		4	0	0	X	BST-010					
4NC	N/D	1	0	X	X	BST-001	Knob/Lever Key Illuminated Knob	ASD300-1 ASD3K00-1 ASLD300-1	ASD3100-1 ASD31K00-1 ASLD3100-1	ASD3200-1 ASD32K00-1 ASLD3200-1	ASD3300-1 ASD33K00-1 ASLD3300-1
		2	X	X	0	BST-001					
		3	0	X	X	BST-001					
		4	X	X	0	BST-001					
	314	1	0	X	0	BST-001	Knob/Lever Key Illuminated Knob	ASD300-2 ASD3K00-2 ASLD300-2	ASD3100-2 ASD31K00-2 ASLD3100-2	ASD3200-2 ASD32K00-2 ASLD3200-2	ASD3300-2 ASD33K00-2 ASLD3300-2
		2	X	X	0	BST-001					
		3	0	X	0	BST-001					
		4	X	X	0	BST-001					

- Each operator sub-assembly is available as a "-1" and a "-2" for 3-position selector switches. The internal cam of a "-1" is different from that of a "-2". This results in designated combinations of open and closed contacts in the various operator positions.
- N/D = No circuit number designation required in assembled part number.
- X = On (closed contacts) 0 = Off (open contacts). X-X Overlapping contacts remain on (closed) when switch is moved between these two positions.

Operator Truth Tables

Use the following tables to build custom selector switches.

2 Position Selector Switches

	Contact	Mounting Position	Operator Position	
			Left	Right
ASD200	BST-010 (NO)	L	0	X
		R	0	X
	BST-001 (NC)	L	X	0
		R	X	0
	BST-010S (NO-EM)	L	0	X-X
		R	0	X-X
	BST-001S (NC-LB)	L	X-X	0
		R	X-X	0

3 Position Selector Switches

	Contact	Mounting Position	Operator Position		
			Left	Center	Right
ASD300-1 ASLD300-1 ASD3K00-1	BST-010 (NO)	L	X	0	0
		R	0	0	X
	BST-001 (NC)	L	0	X-X	X
		R	X-X	X	0
	BST-010S (NO-EM)	L	X-X	0	0
		R	0	0	X
	BST-001S (NC-LB)	L	0	X-X	X
		R	X-X	X	0

3 Position Push/Pull Switches

	Contact	Operator Position		
		Pull	Normal	Push
AYLD22	BST-010 (NO)	0	0	X
	BST-001 (NC)	X	0	0
	BST-010S (NO-EM)	0	X	X
	BST-001S (NC-LB)	X	X	0

	Contact	Mounting Position	Operator Position		
			Left	Center	Right
ASD300-2 ASLD300-2 ASD3K00-2	BST-010 (NO)	L	X	0	X
		R	0	0	X
	BST-001 (NC)	L	0	X	0
		R	X-X	X	0
	BST-010S (NO-EM)	L	X-X	0	X-X
		R	0	0	X
	BST-001S (NC-LB)	L	0	X-X	0
		R	X-X	X	0

Switches & Pilot Lights

Display Lights

Relays & Sockets

Timers

Terminal Blocks

Circuit Breakers