

Non-Illuminated Selector Switches (Assembled)



**Assembled Selector Switches**

**A S D 2 ( ) ( ) 11 N - ( )**

**Function** \_\_\_\_\_

S: 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: 2-Way spring return from Left and Right

**Circuit Number** \_\_\_\_\_

(See Circuit # column of Selector Switch Contact Arrangement Chart on beginning on page 629.)

**Contact Arrangement Code**

10: 1NO    01: 1NC  
20: 2NO    02: 2NC  
40: 4NO    04: 4NC  
11: 1NO-1NC    22: 2NO-2NC

**Operator Style Code**

Blank: Knob Operator  
L: Lever Operator  
K: Key Operator

1. Use only when interpreting part numbers. Do not use for developing part numbers.  
2. Custom key removal codes available. Please contact IDEC for details.

**Non-Illuminated Selector Switches (Assembled)**

**Non-Illuminated 2-Position Selector Switches**

Style				Part Number			
Contact	Mounting	Operator Position			Maintained	Spring Return from Right	Spring Return from Left
		L	R				
<b>1NO</b>	1	0	X	<b>Knob</b>	ASD210N	ASD2110N	ASD2210N
	2	0	0		<b>Lever Key</b>	ASD2L10N ASD2K10N	ASD21L10N ASD21K10N
<b>1NC</b>	1	X	0	<b>Knob</b>	ASD201N-116	ASD2101N-116	ASD2201N-116
	2	0	0		<b>Lever Key</b>	ASD2L01N-116 ASD2K01N-116	ASD21L01N-116 ASD21K01N-116
<b>1NO</b> <b>1NC</b>	1	X	0	<b>Knob</b>	ASD211N	ASD2111N	ASD2211N
	2	0	X		<b>Lever Key</b>	ASD2L11N ASD2K11N	ASD21L11N ASD21K11N
<b>2NO</b>	1	0	X	<b>Knob</b>	ASD220N	ASD2120N	ASD2220N
	2	0	X		<b>Lever Key</b>	ASD2L20N ASD2K20N	ASD21L20N ASD21K20N
<b>2NC</b>	1	X	0	<b>Knob</b>	ASD202N-104	ASD2102N-104	ASD2202N-104
	2	X	0		<b>Lever Key</b>	ASD2L02N-104 ASD2K02N-104	ASD21L02N-104 ASD21K02N-104
<b>2NO</b> <b>2NC</b>	1	0	X	<b>Knob</b>	ASD222N	ASD2122N	ASD2222N
	2	X	0		<b>Lever Key</b>	ASD2L22N ASD2K22N	ASD21L22N ASD21K22N
<b>2NO</b> <b>2NC</b>	1	0	X	<b>Knob</b>	ASD222N-111	ASD2122N-111	ASD2222N-111
	2	0	X		<b>Lever Key</b>	ASD2L22N-111 ASD2K22N-111	ASD21L22N-111 ASD21K22N-111



- 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 two positions.
- All knob and lever selector switches come in black. Other colors are available by ordering the knob or lever separately.
- Custom contact arrangements available, see page 629 or call IDEC for details.

**Non-Illuminated 3-Position Selector Switches**

Style					Part Number				
Contact	Mounting	Operator Position				Maintained	Spring Return from Right	Spring Return from Left	Spring Return Two-Way
		L	C	R					
<b>2NO</b>	1	X	0	0	<b>Knob</b>	ASD320N	ASD3120N	ASD3220N	ASD3320N
	2	0	0	X		<b>Lever Key</b>	ASD3L20N ASD3K20N	ASD31L20N ASD31K20N	ASD32L20N ASD32K20N
<b>2NC</b>	1	0	X	X	<b>Knob</b>	ASD302N	ASD3102N	ASD3202N	ASD3302N
	2	X	X	0		<b>Lever Key</b>	ASD3L02N ASD3K02N	ASD31L02N ASD31K02N	ASD32L02N ASD32K02N
<b>2NO</b> <b>2NC</b>	1	X	0	0	<b>Knob</b>	ASD322N	ASD3122N	ASD3222N	ASD3322N
	2	0	0	X		<b>Lever Key</b>	ASD3L22N ASD3K22N	ASD31L22N ASD31K22N	ASD32L22N ASD32K22N
<b>2NO</b> <b>2NC</b>	1	X	0	X	<b>Knob</b>	ASD322N-309	ASD3122N-309	ASD3222N-309	ASD3322N-309
	2	X	X	0		<b>Lever Key</b>	ASD3L22N-309 ASD3K22N-309	ASD31L22N-309 ASD31K22N-309	ASD32L22N-309 ASD32K22N-309
<b>2NO</b> <b>2NC</b>	1	0	X	0	<b>Knob</b>	ASD322N-310	ASD3122N-310	ASD3222N-310	ASD3322N-310
	2	0	0	X		<b>Lever Key</b>	ASD3L22N-310 ASD3K22N-310	ASD31L22N-310 ASD31K22N-310	ASD32L22N-310 ASD32K22N-310
<b>4NO</b>	1	X	0	0	<b>Knob</b>	ASD340N	ASD3140N	ASD3240N	ASD3340N
	2	0	0	X		<b>Lever Key</b>	ASD3L40N ASD3K40N	ASD31L40N ASD31K40N	ASD32L40N ASD32K40N
<b>4NC</b>	1	0	X	X	<b>Knob</b>	ASD304N	ASD3104N	ASD3204N	ASD3304N
	2	X	X	0		<b>Lever Key</b>	ASD3L04N ASD3K04N	ASD31L04N ASD31K04N	ASD32L04N ASD32K04N

Switches & Pilot Lights

Display Lights

Relays & Sockets

Timers

Terminal Blocks

Circuit Breakers



Non-Illuminated Selector Switches (Sub-Assembled)

Contact Blocks + Operator + Knob or Lever\* + Color Insert\* = Complete Part†



- 1. \*Not needed with key type switches.
- 2. †Knob type shown.

Operators

Appearance	Position	Description	Part Number	
 Knob/Lever	2	Maintained	ASD200	
		Spring return from right	ASD2100	
		Spring return from left	ASD2200	
	3	Maintained, Cam 1 Maintained, Cam 2		ASD300-1 ASD300-2
			Spring return from right, Cam 1 Spring return from right, Cam 2	ASD3100-1 ASD3100-2
		Spring return from left, Cam 1 Spring return from left, Cam 2		ASD3200-1 ASD3200-2
Spring return from left/right, Cam 1 Spring return from left/right, Cam 2			ASD3300-1 ASD3300-2	
 Key		2	Maintained	ASD2K00-RA
			Spring return from right	ASD21K00-RL
	Spring return from left		ASD22K00	
	3	Maintained, Cam 1 Maintained, Cam 2		ASD3K00-1 ASD3K00-2
			Spring return from right, Cam 1 Spring return from right, Cam 2	ASD31K00-1-RLC ASD31K00-2-RLC
		Spring return from left, Cam 1 Spring return from left, Cam 2	ASD32K00-1-RRC ASD32K00-2-RRC	
Spring return from left/right, Cam 1 Spring return from left/right, Cam 2	ASD33K00-1-RC ASD33K00-2-RC			

- 1. Order knobs, levers, color inserts separately (see below).
- 2. For key switches, keys are removable in all maintained positions. Other options available, contact IDEC for details.
- 3. See page 631 "Operator Truth Tables" for details of difference between cams.

① Color Codes

Knob/Lever Color	Code
Black	B
Blue	S
Green	G
Red	R
Yellow	Y
White	W


- 1. Knob/Lever not available in white.
- 2. Color inserts not available in Black.
- 3. Lever not available in yellow.

Handles and Inserts

Style	Part Number
 Knob	ASDHHY-⊙
 Lever	ASDHHL-⊙*
 Color Insert	TW-HC1-⊙

- 1. In place of ⊙, specify the Color Code.  
\*Not available in yellow.

Contact Blocks

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

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

Switches & Pilot Lights

Display Lights

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Timers

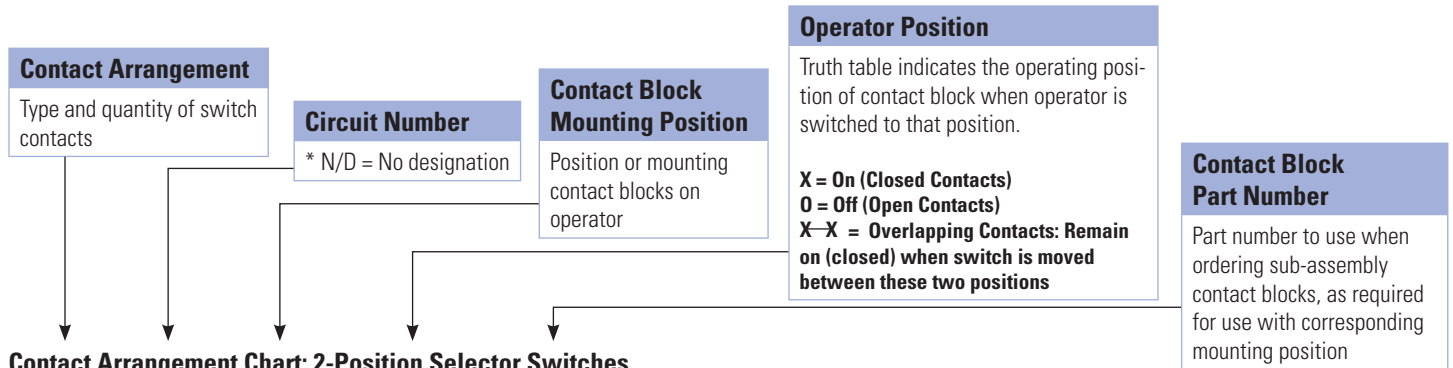
Terminal Blocks

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	BST-001	Illuminated Knob					
	203	1	0	X	X	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	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	BST-001	Illuminated Knob					
	N/D	1	0	X	X	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	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	BST-001						
		4	X	X	0	BST-001						
	210	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	0	0	X	BST-010						
		3	0	X	X	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	BST-001						
		3	X	0	X	BST-010						
		4	X	X	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	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

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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
		R	0	0	X
	BST-001S (NC-LB)	L	0	X-X	0
		R	X-X	X	0

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