

SMH

Test Switches



- High barriers
- Recognized by UL and cUL
- Self-extinguishing materials
- Nonferrous material
- Corrosion-resistant nickel finish
- Safety-grip handle

STATES®

A complete line of switches is available for meter, relay, instrument, transducer and control system calibration, disconnection, troubleshooting, checkout and testing.

All the features you need for any application: potential elements, current elements, make-before-break short-circuiting elements for current transformer circuits.

Test jacks are included.



DESCRIPTION

STATES Type SMH Test Switches combine many decades of experience in the design and manufacture of test switches with the latest improvements in material composition and construction techniques.

Each switch blade can be operated independently or, where requirements dictate, adjacent handles can be ganged for simultaneous operation.

Features are incorporated for safety, durability, ruggedness and reliability. Where applicable, dimensions are in accordance with EEI-AEIC Meter and Service Committee Standards.

All configurations are available in front-connected, back-connected or flush-mounted styles.

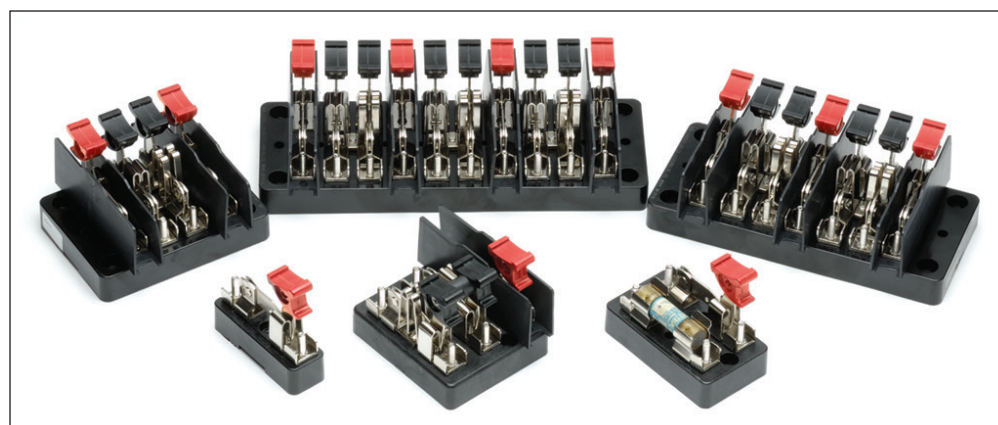
RECOGNIZED BY UL AND cUL

Underwriters Laboratories recognizes STATES Type SMH Test Switches under its component program, File No. E75355, with a rating of 600 volts, 30 amperes.

FEATURES AND BENEFITS

- **Self-extinguishing materials:** All non-metallic components are made of self-extinguishing, flame-retardant materials with Underwriters Laboratories' best rating for self-extinguishing materials (V-O).

- **Nonferrous material:** All current-carrying metallic components, including hardware, are made of highest quality nonferrous materials such as copper, bronze, brass or phosphor bronze. This ensures excellent conductivity and minimizes galvanic action between dissimilar metals.
- **Nickel plating:** All current-carrying metallic components, including hardware, have a corrosion-resistant nickel finish that ensures good electrical contact and smooth operation of moving parts even after years of inactivity.
- **One-piece jaw and hinge:** One-piece construction of hinge and jaw eliminates unnecessary, multiple connection points.
- **Special blade shape:** All blades are shaped so that the edge of the blade enters at a right angle to the jaw; thus, the blade enters and exits the full width of the jaw simultaneously.
- **Test lug:** The large corrugated test lug provided for each terminal stud is a secure surface for attaching test clips.
- **Switch jaws:** All STATES Test Switches have uniform contact pressure over the full width of the blade. The "ping" heard when opening the blade is due to the special, spring-grade phosphor bronze used in the jaw. This design ensures an excellent low-resistance contact that will not overheat.



Type SMH Test Switches are available in 1-, 2-, 3-, 4-, 7- and 10-pole base sizes. The bases are made of rugged, 1/8 inch, nontracking material with excellent insulating properties and are impervious to moisture. Mounting dimensions of the 4-, 7-, and 10-pole bases conform to applicable EEI-AEIC Meter and Service Committee Standards.

- **Short-circuit jaw:** A rugged, make-before-break element is used to short the secondary of a current transformer.
- **Fixed terminal studs:** The screw terminals on which wiring connections are made are part of a rigid, immovable assembly and cannot be turned or backed out.
- **Test jack:** The test jack eliminates the possibility of opening current transformer secondaries and permits safe, easy measurements to be made in current circuits without disturbing permanent wiring. A dual-circuit test plug, such as the STATES Part No. 15000, inserted into the test jack puts the measuring instrument in series with the current circuit. The test jack does not carry current except when making a test because it is shunted by a standard switch blade that is opened only when the test jack is used.
- **Color-coded handles:** Unless otherwise specified, **potential** elements have **red handles** and **current** elements have **black handles**; however, the following other colors are available at additional cost: blue, orange, white, yellow, brown and green.
- **Identification card holder:** Each safety grip handle is slotted for insertion of an identification card for marking or coding. Cards are available under Part No. SB678.



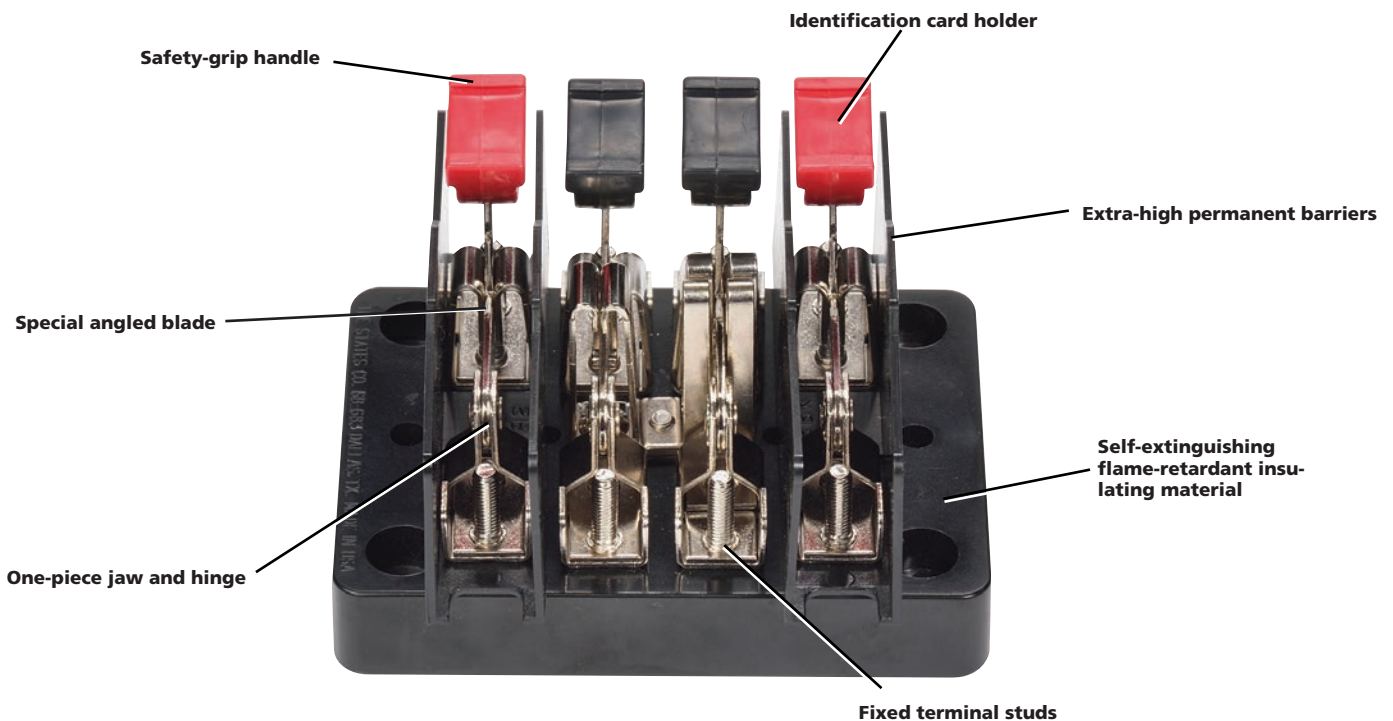
Safety-grip handle

A molded handle covers the terminal and includes a lower lip that projects over the metal parts of the switch, thus protecting the operator from contact with live components.



High barriers

Maximum circuit isolation is obtained by extra-high barriers that provide uncompromised protection. Barriers are permanently mounted and cannot fall out or be knocked out, as in some "snap-in" designs.



FRONT-CONNECTED SWITCHES

The front-connected test switch usually is used where wiring entering and leaving the test switch is located on the same side of the panel that the test switch is mounted.

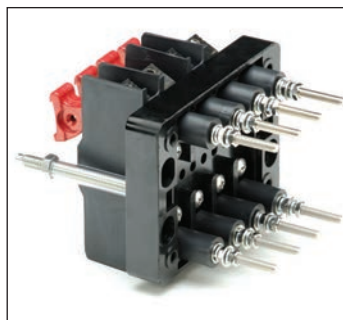
To order front-connected test switches, refer to **Ordering Information**.



BACK-CONNECTED SWITCHES

All switches can be provided in a back-connected version so that the switch is mounted on one side of a panel and the wiring connections are made on the opposite side. Back-connected switches have factory-installed insulated studs that project from the rear of the switch.

To order back-connected switches, refer to **Ordering Information**.



Back-connected switch view

FLUSH-MOUNTED SWITCHES

Flush-mounted switches consist of a standard back-connected test switch mounted in an insulated metal cabinet with cover. Flush-mounted switches match flush-mounted or semi-flush-mounted relays, instruments, meters, etc., furnished on steel panelboards.

The switch cabinet has a black finish to match the panelboard and/or devices mounted in the panelboard. The cabinet cover, which has a protective clear insert, can be sealed. Self-extinguishing, flame-retardant insulating material lines the cabinet. The cabinet is mounted by inserting it into a panel cutout and fastening it with screws that are hidden when the cover is attached.

To order flush-mounted switches, refer to **Ordering Information**.



Front view of
flush-mounted
G unit option



Side view of
flush-mounted
G unit option

NOTE: Flush-mounted switches are special order and require longer lead times.

COVERS

Rugged, virtually unbreakable covers for STATES Test Switches are available in clear or opaque styles. The covers are manufactured from tough, self-extinguishing, flame-retardant polycarbonate and are available for front- or back-connected versions. Covers are available on 4-, 7- and 10-pole base sizes. The covers are constructed so that all switch blades must be closed when the cover is properly sealed. Switches provided with covers include two insulated, cadmium-plated steel cover studs that have holes for wire seals.

Covers for front-connected switches are open or slotted at the bottom of each side to permit wiring to enter and exit between the cover and the panel.

Covers for back-connected switches fit flush with the panel because all wiring exits at the rear of the test switch.

To add a cover, refer to **Ordering Information**.



Front-connected opaque (C1) cover



Front-connected clear (C3) cover



Back-connected opaque (C2) cover



Back-connected clear (C4) cover

SMH
Test Switches

Cover style must be specified at order placement

SPECIFICATIONS

SMH TECHNICAL SPECIFICATIONS		
Class	Front Connected	Back Connected / Flush Mounted
Brief Description	Metering Test Switch with Stud Terminals	Metering Test Switch with Stud Terminals
Typical Applications	Metering Sub-Station Monitoring Relay Panels	Metering Sub-Station Monitoring Relay Panels
Number of Poles Available	1 - 10	1 - 10
Certifications	UL, cUL UL File E75355	UL, cUL UL File E75355
Voltage Rating	600VAC	600VAC
Current Rating	30A	30A
Wire Size Range	Min 14awg / Max 10awg	Min 14awg / Max 10awg
Recommended Wire Lug Size	#10	#10
Stud Thread	10-32	10-32
Recommended Torque for Stud Wiring Connections	Max 25in/lbs	Max 25in/lbs
#73 - Fuse Clip Dimensions - 600 VAC 30 AMP *Fuse not included	1/2" Diameter 2" Length	1/2" Diameter 2" Length
Ambient Temperature	104° F (40° C)	104° F (40° C)

Understanding SMH Part Numbers				
1	2	3	4	5
Covers (Optional)	Front-Connected Part Number	Number of Poles	Arrangement Designator	Back-Connected
<u>FRONT-CONNECTED</u> C1 - Slotted, Opaque C3 - Slotted, Clear <u>BACK-CONNECTED</u> C2 - Solid, Opaque C4 - Solid, Clear G - Flush-Mounted w/Cover & Case Enclosure	4	01 - 10	This is the letter and/or number designation that has been assigned for a particular arrangement See catalog page 117, or visit our website at www.statesproducts.com for arrangement options	Add a -B for back-connection
*Although you can order 1, 2, & 3 pole switches either front-connected or back-connected, covers are not available for those size switch bases. Covers are only available for 4, 7, & 10 pole base sizes.				

EXAMPLES

$\frac{4}{2} \frac{02}{3} - \frac{A}{4}$

Part No. 402-A
SMH 2 Pole Switch - Front-connected, no cover.

$\frac{C3}{1} - \frac{4}{2} \frac{04}{3} - \frac{E}{4}$

Part No. C3-404-E
SMH 4 Pole Switch - Front-connected with a clear front-connected cover.




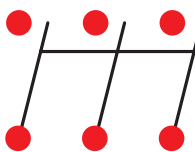

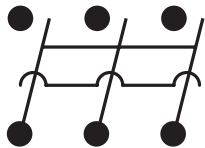

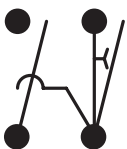
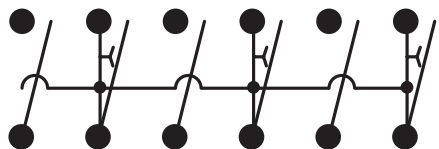

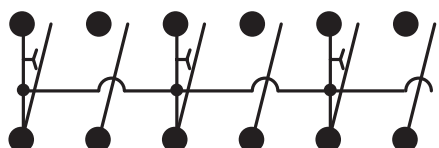






$\frac{C4}{1} - \frac{4}{2} \frac{07}{3} - \frac{A}{4} - \frac{B}{5}$

Part No. C4-407-A-B
SMH 7 Pole Switch - Back-connected with a clear back-connected cover.

$\frac{G}{1} - \frac{4}{2} \frac{10}{3} - \frac{E}{4}$

Part No. G-410-E
SMH 10 Pole Switch - Mounted in a case enclosure with back connections.

SMH SWITCH ELEMENTS

<div>35</div> <div></div> <div>Blank Space</div>	<div>42</div> <div></div> <div>Single-Pole Potential</div>	<div>62</div> <div></div> <div>Ganged Double-Pole Potential</div>	<div>78</div> <div></div> <div>Ganged Three-Pole Potential</div>	
<div>44</div> <div></div> <div>Ganged Two-Pole Short-Circuiting Current Assembly</div>	<div>79</div> <div></div> <div>Ganged Three-Pole Short-Circuiting Current Assembly</div>	<div>61</div> <div></div> <div>Through Bar</div>		
<div>46</div> <div></div> <div>Right-Hand Current Assembly Consists of Test Jack and Short-Circuiting Current Assemblies</div>	<div>84</div> <div></div> <div>Three Interconnected Right-Hand Current Assemblies</div>			
<div>45</div> <div></div> <div>Left-Hand Current Assembly Consists of Test Jack and Short-Circuiting Current Assemblies</div>	<div>85</div> <div></div> <div>Three Interconnected Left-Hand Current Assemblies</div>			
<div>72</div> <div></div> <div>Current Test Jack</div>	<div>68</div> <div></div> <div>Current Test Jack With Left-Hand Common Bar</div>	<div>69</div> <div></div> <div>Current Test Jack With Right-Hand Common Bar</div>	<div>71</div> <div></div> <div>Short-Circuiting Assembly With Right-Hand Common Bar</div>	
<div>70</div> <div></div> <div>Short-Circuiting Assembly With Left-Hand Common Bar</div>	<div>73</div> <div></div> <div>30-Amp Fuse Mounting Clips</div>			<div>NOTES:</div> <div>1. Barriers are provided between poles of opposite polarity.</div> <div>2. Potential handles are red and current handles are black unless otherwise specified.</div> <div>3. Arrange elements left to right, front view.</div> <div>4. Covers are only available on 4, 7 and 10 pole bases.</div> <div>5. Element No. 73 accepts standard cartridge fuses rated 600 VAC 30 AMP. Fuse dimensions must be 1/2" diameter and 2" in length. (Fuses Not Included)</div>

ORDERING INFORMATION

The part numbers under the arrangements beginning on page 117 are for front-connected switches without covers. These same numbers are also used as the basis for ordering back-connected and flush-mounted switches.

The part numbers are three digits followed by a letter or letter and number combination. **Example: 402-A**

42/42/



402-A

The slashes (/) in the arrangements represent barriers that are installed standard between any adjoining elements of opposite polarity.

SPECIAL ORDERS

Special Arrangements: These can be made of any combination of potential or current elements, with a maximum of 10 poles. For more information, refer to the following example and illustrations on Page 109.

Example: To order a unique switch in a back-connected version and with a clear back-connected cover, specify:

Switch Type: STATES Type SMH
No. of poles: 10-pole test switch
Arrangement*: /42/44/42/46/61/45/73/
Style: Back-connected
Cover: Clear, back-connected

***Arrangements should be given as frontview of switch, left to right, using the elements listed on page 110.**

Handle Colors: The standard colors for handles are **red** for **potential** and **black** for **current** handles are also available in other colors.

To specify non-standard colors, add to the element number the appropriate color code:

Color	Color Code
Black	k
Blue	b
Green	g
Orange	e
Red	r
White	w
Yellow	y
Brown	n

To order a switch with handles in non-standard colors, you must specify the arrangement with colors indicated. For example, to order a 4-pole switch with special handle colors, specify: **Arrangement: 71g/42/42b/68w**

STATES Type SMH Test Switches are available in literally thousands of configurations.

Ganged handles: You may specify a yoking bar to gang adjacent handles.

For example, to order a switch with the adjacent potentials ganged, you must specify: **Gang all potentials**

Ganged handles are represented with the number (#) sign.

Example: #42/42/42/42#/ (all handles in between the “#” are ganged together)

Hinge position: The “U” (next to an element) in an arrangement indicates the hinge is positioned upside down from the typical arrangement.

Bases: An 8- or 9-pole test switch is built on a 10-pole base. A 5-, 6-, or 7-pole test switch usually is built on a 7-pole base but can be provided on a 10-pole base if desired.

OPTIONAL ACCESSORIES



Socket Wrench and Insert

To speed installation of the terminal nuts on Type SMH Test Switches, the socket wrench (Part No. 16028) and 3/8 inch insert (Part No. 16027) are available. Pictures are available in the Testing Accessories section.

The screwdriver attachment (Part No. 16022) makes this wrench your complete meter installation tool.

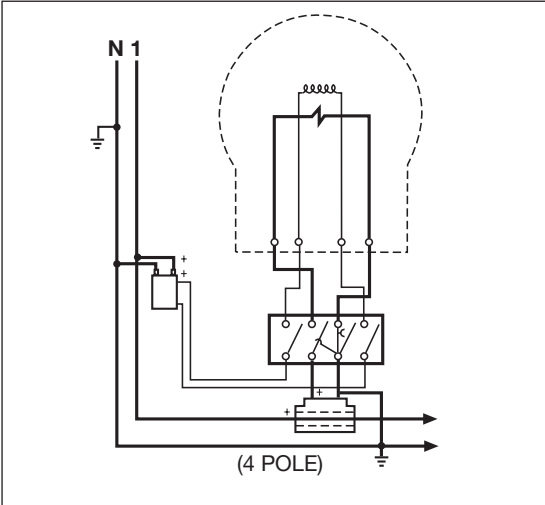
Dual Circuit Plug

By inserting the STATES Dual Circuit Plug (Part No. 15000) into the test jack, safe measurement can be made of current transformer secondary current.

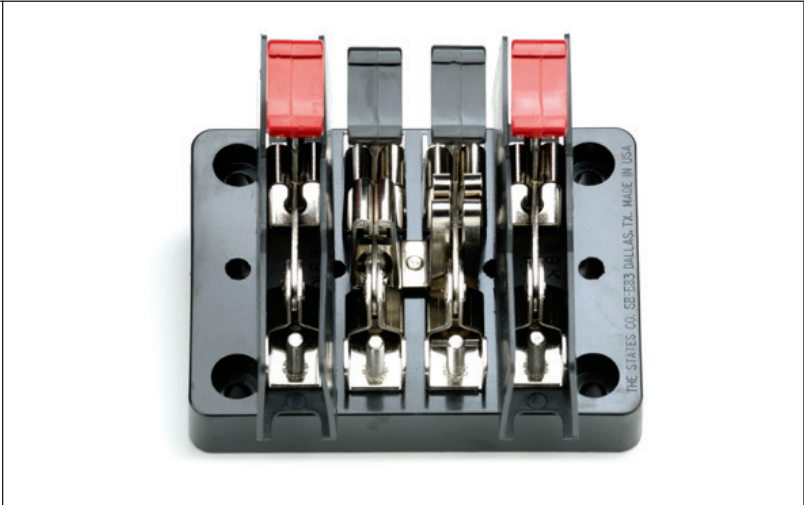
See Testing Accessories on page 128.



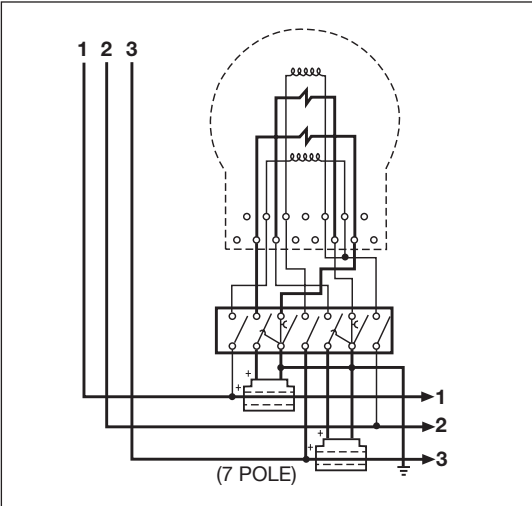
TYPICAL WIRING DIAGRAM



1 ϕ 2-Wire with CT and PT



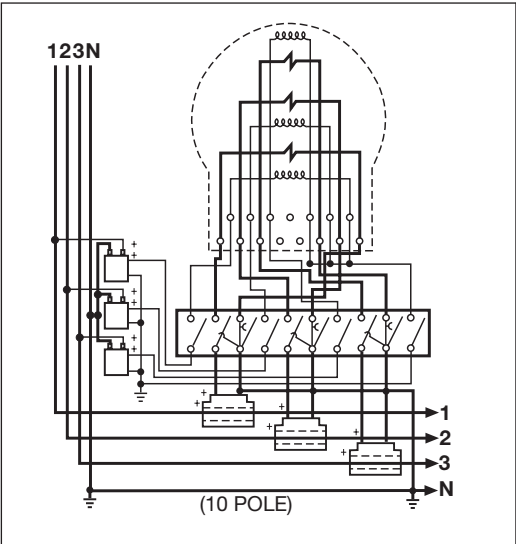
4-Pole Test Switch - Part No. 404-N (ARR:/42/46/42/)



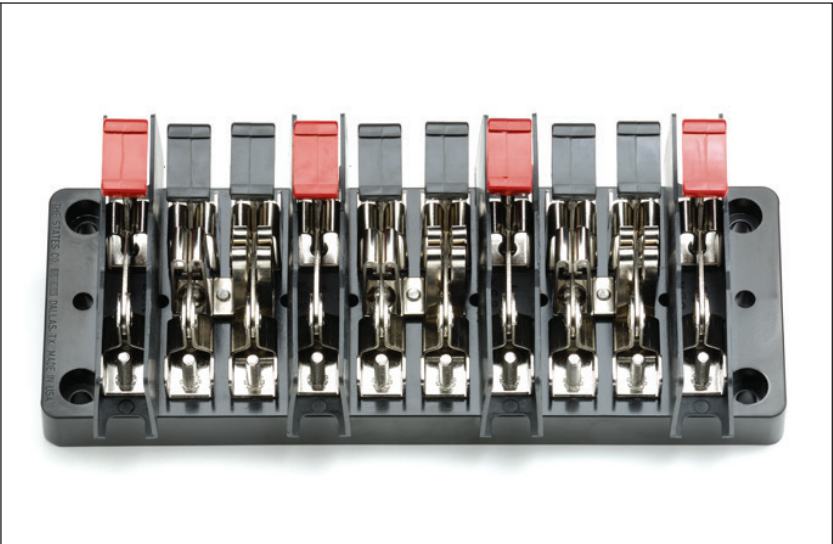
3 ϕ 3-Wire 2-Element



7-Pole Test Switch - Part No. 407-K (ARR: /42/46/42/46/42/)

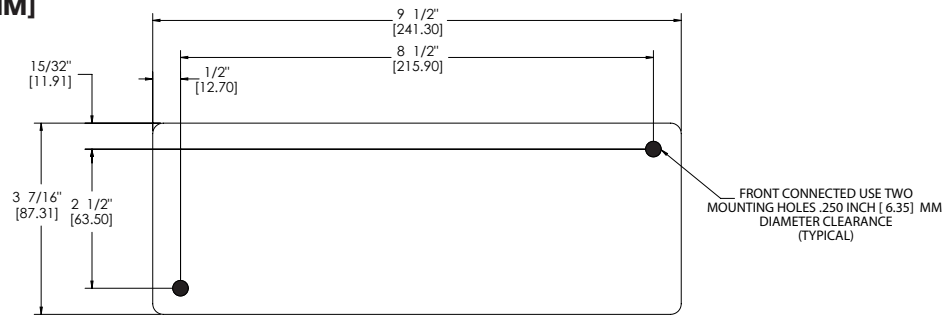


3 ϕ 4-Wire Y 3-Element

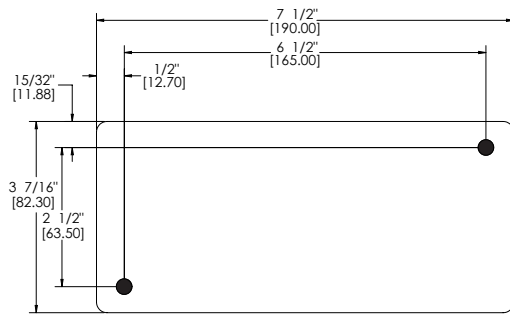


10-Pole Test Switch - Part No. 410-E (ARR: /42/46/42/46/42/46/42/)

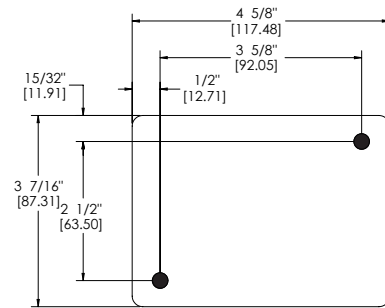
FRONT-CONNECTED SWITCHES **DIMENSIONS IN INCHES [MM]**



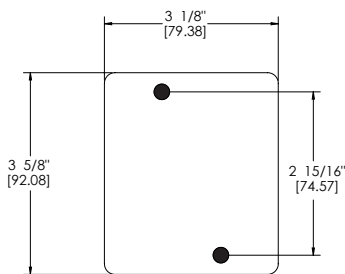
10 POLE BASE



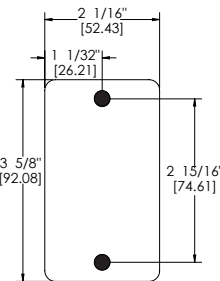
7 POLE BASE



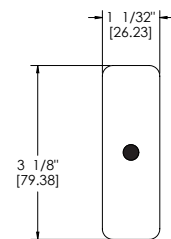
4 POLE BASE



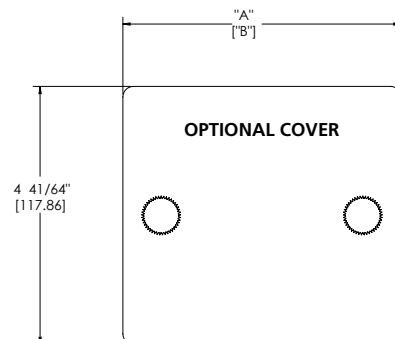
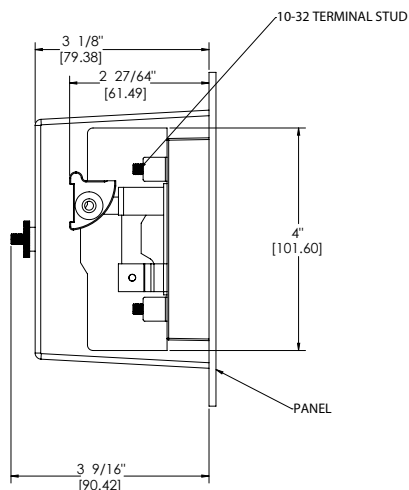
3 POLE BASE



2 POLE BASE

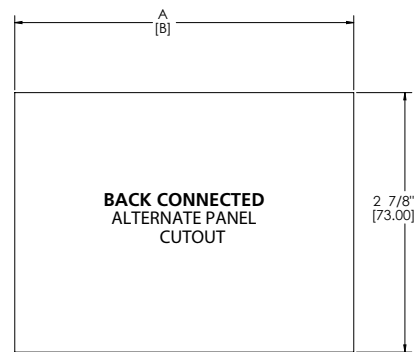
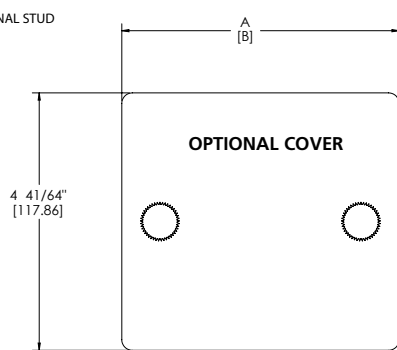
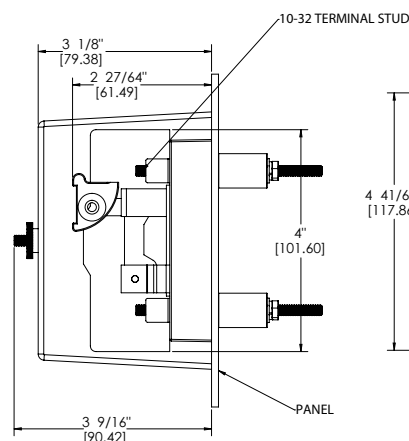
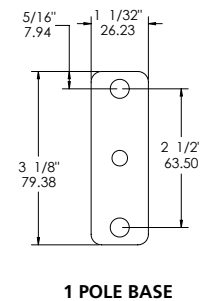
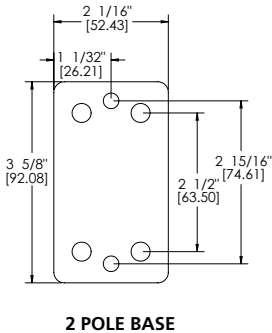
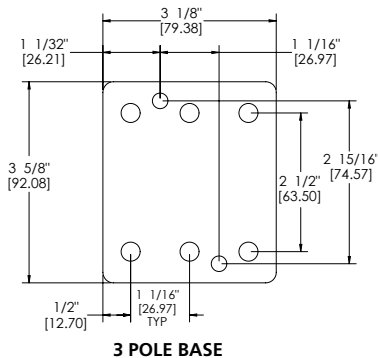
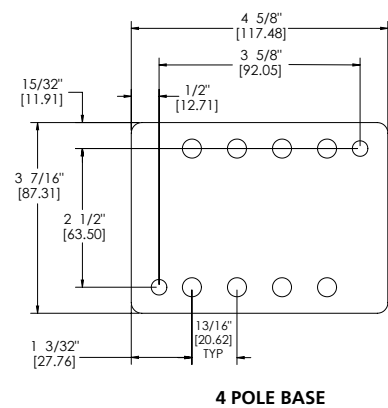
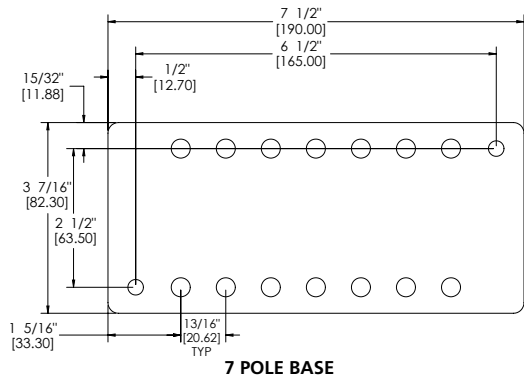
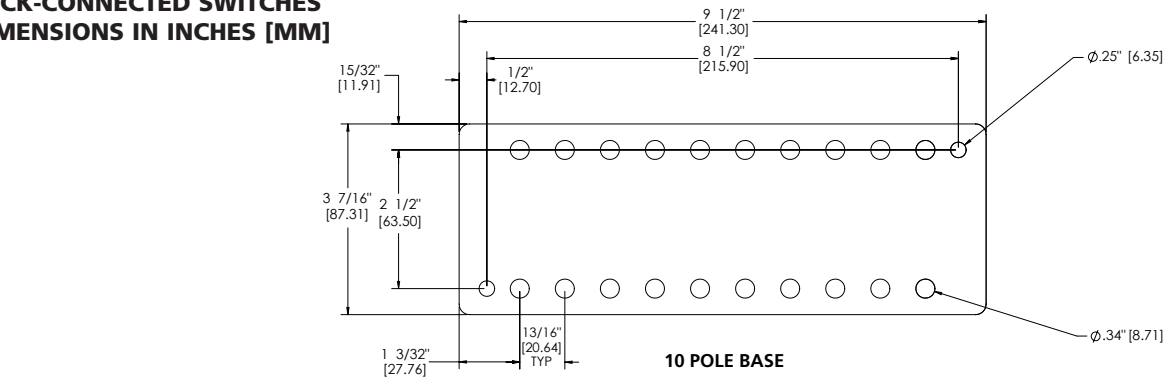


1 POLE BASE



POLE	"A" DIMENSION	"B" DIMENSION
4	5 1/16"	[128.5]
7	7 15/16"	[201.6]
10	10 1/8"	[257.2]

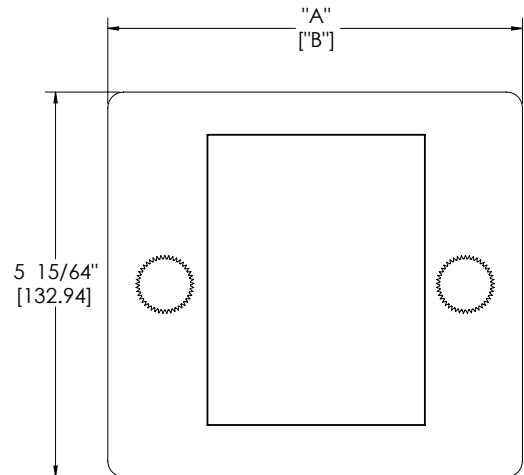
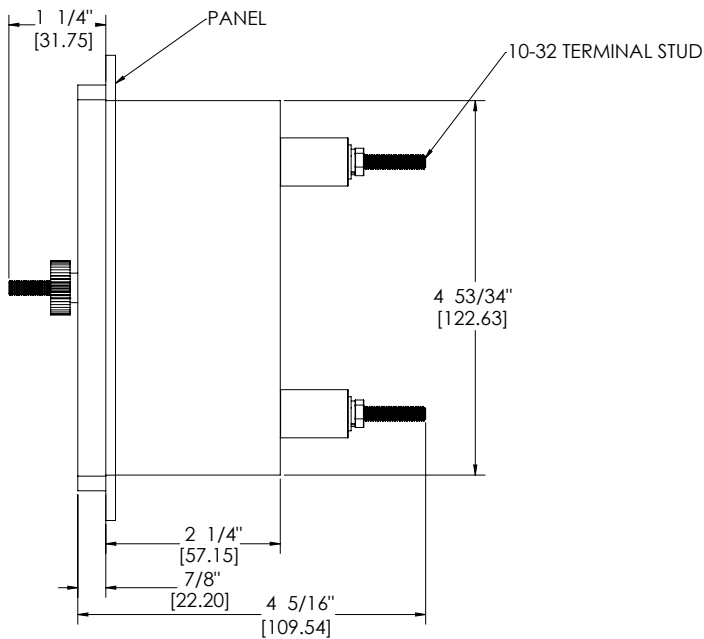
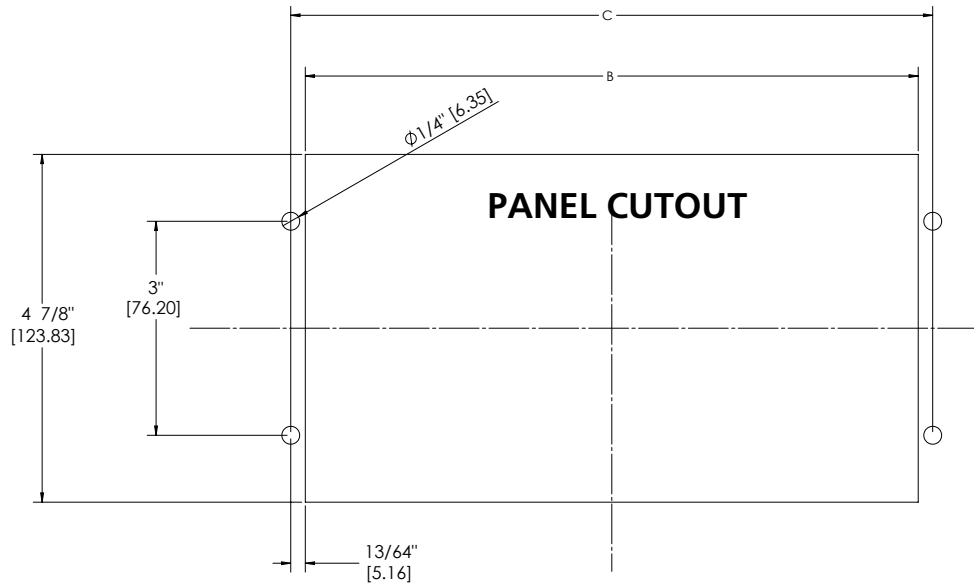
BACK-CONNECTED SWITCHES
DIMENSIONS IN INCHES [MM]



POLE	"A" DIMENSION	"B" DIMENSION
4	5 1/16"	[128.6]
7	7 15/16"	[201.6]
10	10 1/8"	[257.2]

BACK CONNECTED ALTERNATE PANEL CUTOUT TABLE		
POLE	"A" DIMENSION	"B" DIMENSION
4	2 13/16"	[71.4]
7	5 1/4"	[133.35]
10	7 11/16"	[195.26]

FLUSH-MOUNTED SWITCHES
DIMENSIONS IN INCHES [MM]



DIMENSIONS IN [] ARE IN MM , NO [] DIMENSIONS IN INCHES			
BASE SIZE (POLES)	"A" DIMENSION	"B" DIMENSION	"C" DIMENSION
4	6 7/16" [163.5]	5 7/32" [132.5]	5 5/8" [142.9]
7	9 39/64" [244]	8 13/32" [213.5]	8 26/32" [223.8]
10	12 13/16" [325.4]	11 19/32" [294.5]	12 [304.8]

SMH ACCESSORIES

PART NUMBER	DESCRIPTION
SBM25-xx	Handle Ganging Kit - Replace the "xx" with the required number of adjacent poles to be ganged together (example: SBM-2 - 2 Pole Kit)
SB678-100	White Marker Handle Tags (100pcs per bag)
17191	2 Pole Hardware Kit
10547	4 Pole Hardware Kit
10548	7 Pole Hardware Kit
10549	10 Pole Hardware Kit
SMC1-4	4 Pole Front Connected Opaque Cover - includes cover, cover knobs and cover stud hardware
SMC2-4	4 Pole Back Connected Opaque Cover - includes cover, cover knobs and cover stud hardware
SMC3-4	4 Pole Front Connected Clear Cover - includes cover, cover knobs and cover stud hardware
SMC4-4	4 Pole Back Connected Clear Cover - includes cover, cover knobs and cover stud hardware
SMC1-7	7 Pole Front Connected Opaque Cover - includes cover, cover knobs and cover stud hardware
SMC2-7	7 Pole Back Connected Opaque Cover - includes cover, cover knobs and cover stud hardware
SMC3-7	7 Pole Front Connected Clear Cover - includes cover, cover knobs and cover stud hardware
SMC4-7	7 Pole Back Connected Clear Cover - includes cover, cover knobs and cover stud hardware
SMC1-10	10 Pole Front Connected Opaque Cover - includes cover, cover knobs and cover stud hardware
SMC2-10	10 Pole Back Connected Opaque Cover - includes cover, cover knobs and cover stud hardware
SMC3-10	10 Pole Front Connected Clear Cover - includes cover, cover knobs and cover stud hardware
SMC4-10	10 Pole Back Connected Clear Cover - includes cover, cover knobs and cover stud hardware

Please refer to our website for accessory pictures

FRONT VIEW 1-POLE

42



401-A (1-Pole Base)

Color Option:

42Y
401-D
(1-Pole Base)

72



401-B (1-Pole Base)

73



401-C (1-Pole Base)

Other 1-Pole
Standard Arrangements:

/42/

401-G (1-Pole Base)

72-35

401-F (2-Pole Base)

2-POLE

42/42/



402-A (2-Pole Base)

72-72



402-B (2-Pole Base)

73/73/



402-C (2-Pole Base)

62



402-D (2-Pole Base)

2-POLE (CONT.)

44



402-E (2-Pole Base)

45



402-F (2-Pole Base)

46



402-G (2-Pole Base)

Other 2-Pole
Standard Arrangements:

35-44-35

402-N (4-Pole Base)

35-45-35

402-S (4-Pole Base)

35-46-35

402-J (4-Pole Base)

35-62/35

402-Y (4-Pole Base)

42-35-42

402-T (3-Pole Base)

42-35-42

402-U (3-Pole Base)

42-35-42-35

402-M (4-Pole Base)

42-35-42-35

402-P (4-Pole Base)

42-42

402-Q (2-Pole Base)

42-42

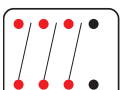
402-R (2-Pole Base)

/62/

402-W (2-Pole Base)

3-POLE

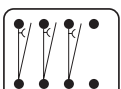
42/42/42-35



403-A (4-Pole Base)

Color Option:
42Y/42Y/42Y-35
403-M (4-Pole Base)

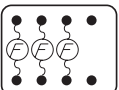
72-72-72-35



403-B (4-Pole Base)

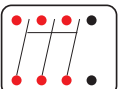
3-POLE (CONT.)

73/73/73-35



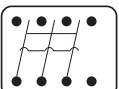
403-C (4-Pole Base)

78-35



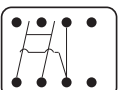
403-D (4-Pole Base)

79-35



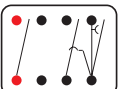
403-E (4-Pole Base)

77-61-35



403-F (4-Pole Base)

42-35-46



403-G (4-Pole Base)

44/42/35



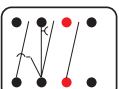
403-H (4-Pole Base)

/42/44-35



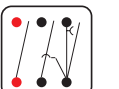
403-J (4-Pole Base)

46/42/35



403-K (4-Pole Base)

/42/46



403-S (3-Pole Base)

Other 3-Pole
Standard Arrangements:

#42-42-42#

403-N (3-Pole Base)

42Y/42Y/42Y

403-P (3-Pole Base)

42/42/42

403-T (3-Pole Base)

42-42-42

403-V (3-Pole Base)

42-46

403-R (3-Pole Base)

78

403-U (3-Pole Base)

79

403-Q (3-Pole Base)

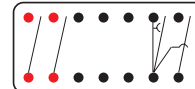
4-POLE

42/42/42/42/



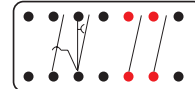
404-A

42/42K/35-35-35-45RWRK



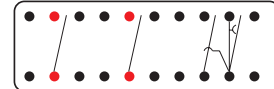
404-AA (7-Pole Base)

35-46RW-35/42R/42W/35



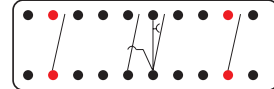
404-AB (7-Pole Base)

35-42-35-35-42-35-35-46-35



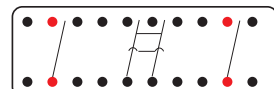
404-AC (10-Pole Base)

35-42-35-35-46-35-35-42-35



404-AD (10-Pole Base)

35/42/35-35-44-35-35/42/35

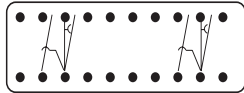


404-AE (10-Pole Base)

FRONT VIEW

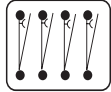
4-POLE (CONT.)

35-46-35-35-35-35-46-35



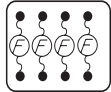
404-AF (10-Pole Base)

72-72-72-72



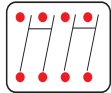
404-B

73/73/73/73/



404-C

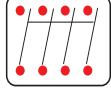
/62/62/



404-D

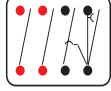
Color Option: **/62RK/62RK/**
404-AR

#42/42/42/42/#



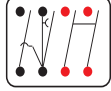
404-E

42/42/46



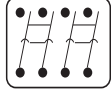
404-F

46/62



404-G

44-44



404-H

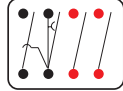
42/42/45



404-J

4-POLE (CONT.)

46/42/42



404-K

/42/44/42



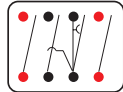
404-L

44/42/42



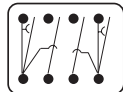
404-M

/42/46/42/



404-N

45-46



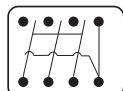
404-P

42/42/44



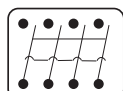
404-Q

81-61



404-R

71-71-71-70



404-S

Other 4-Pole
Standard Arrangements:
35-35/42/46/42/35
404-AP

35-35-69/42/42/70-35
404-AH

42-35-42-35-35-45
404-AK

42-35-42-35-35-46
404-AL (7-Pole Base)

4-POLE (CONT.)

42-35-46-35-42-35
404-AG (7-Pole Base)

42-42-42-42
404-AZ

46-45

404-AY

69/42/42/70

404-Y

71G/42/42B/68W

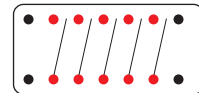
404-X

72-35-72-35-72-35-72

404-AJ (7-Pole Base)

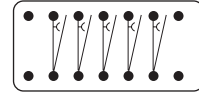
5-POLE

35-42/42/42/42/42-35



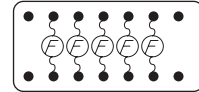
405-A

35-72-72-72-72-72-35



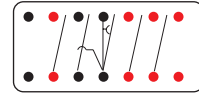
405-B

35-73/73/73/73/73-35



405-C

35/42/46/42/42-35



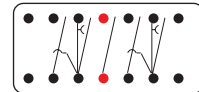
405-D

35/42/42/42/44-35



405-E

35-46/42/46-35

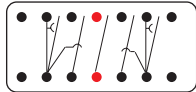


405-F

FRONT VIEW

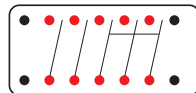
5-POLE (CONT.)

35-45/42/46-35



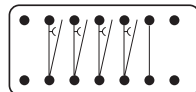
405-G

35-42/42/78-35



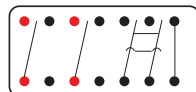
405-H

35-72/72/72/72/61-35



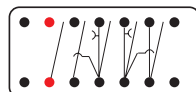
405-J

42-35-42-35-44-61



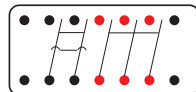
405-K

35/42/46-45-35



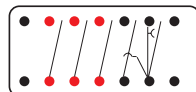
405-L

35-44/78/35



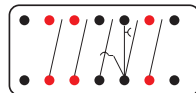
405-M

35/42/42/42/46-35



405-N

35-42/42/46/42/35



405-P

Other 5-Pole

Standard Arrangements:

35-72/72/72/72/72-35

405-U (7-Pole Base)

35-71-71-71-71-61-35

405-Y (7-Pole Base)

42-35-35-46-45

405-S (7-Pole Base)

5-POLE (CONT.)

42-35-42/42/42-35-42

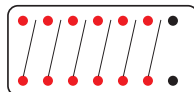
405-V (7-Pole Base)

44-35-35-35-42-35-42-35-42

405-T (10-Pole Base)

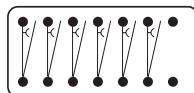
6-POLE

42/42/42/42/42/35



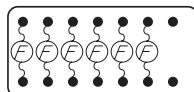
406-A

72-72-72-72-72-72-35



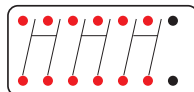
406-B

73/73/73/73/73/35



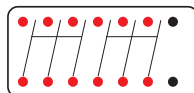
406-C

62/62/62/35



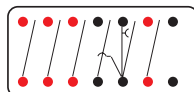
406-D

78/78/35



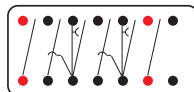
406-E

/42/42/42/46/42/35



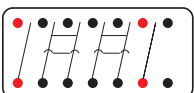
406-F

/42/46-46/42/35



406-G

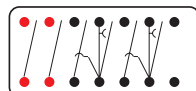
/42/44-44/42/35



406-H

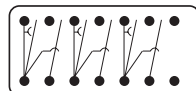
6-POLE (CONT.)

42/42/46-46-35



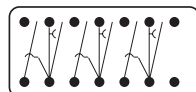
406-J

45-45-45-35



406-K

46-46-46-35



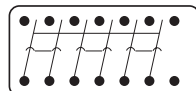
406-L

42/42/44-44-35



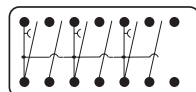
406-M

44-44-44-35



406-N

69-71-69-71-69-70-35



406-P

Other 6-Pole

Standard Arrangements:

/42/35-46-35-35-45-35/42/

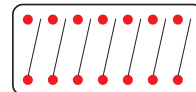
406-T (10-Pole Base)

/42/46-35-46/42/

406-AB (7-Pole Base)

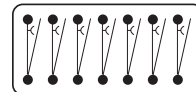
7-POLE

42/42/42/42/42/42/42



407-A

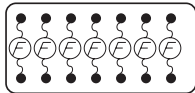
72-72-72-72-72-72-72



407-B

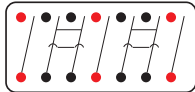
FRONT VIEW 7-POLE (CONT.)

73/73/73/73/73/73/73



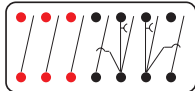
407-C

/42/44/42/44/42/



407-D

/42/42/42/46-45



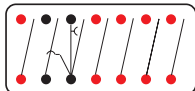
407-E

42/42/46/42/42/42/



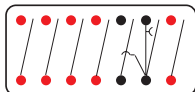
407-F

/42/46/42/42/42/42



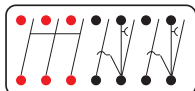
407-G

42/42/42/42/46/42



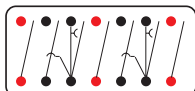
407-H

78/46-46



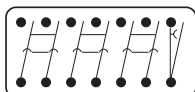
407-J

/42/46/42/46/42/



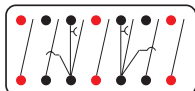
407-K

44-44-44-72



407-L

/42/46/42/45/42/



407-M

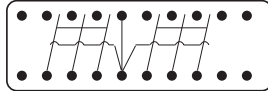
7-POLE (CONT.)

/42/42/42/46-46



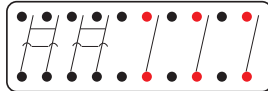
407-N

35-81-61-80-35-35



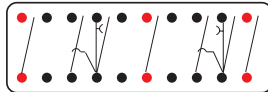
407-Q (10-Pole Base)

44-44-35/42/35/42/35/42/



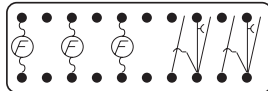
407-AA (10-Pole Base)

/42/35-46-35/42/35-46/42/



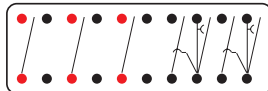
407-P (10-Pole Base)

73-35-73-35-73-35-46-46



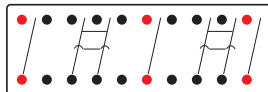
407-AC (10-Pole Base)

/42/35/42/35/42/35-46-46



407-T (10-Pole Base)

42-35-44-35-42-35-44/42/



407-U (10-Pole Base)

Other 7-Pole

Standard Arrangements:

42-35-42-35-42-35-46-45

407-AF (10-Pole Base)

/42/35-44-35/42/35-44/42/

407-AS (10-Pole Base)

42-35-46-35-42-35-45/42/

407-AD (10-Pole Base)

/42/42W/42K/46EG-46BG

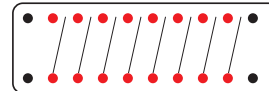
407-AE

79-61/78

407-AB

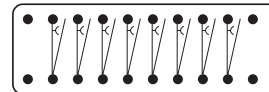
8-POLE

35-42/42/42/42/42/42/42/35



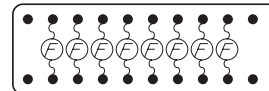
408-A

35-72-72-72-72-72-72-72-35



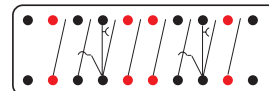
408-B

35-73/73/73/73/73/73/73/35



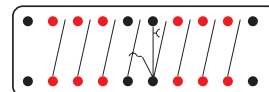
408-C

35/42/46/42/42/46/42/35



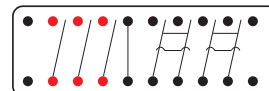
408-D

35/42/42/42/46/42/42/35



408-E

35-42/42/42/61/44-44-35



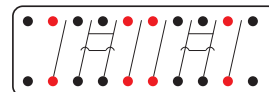
408-F

35-42/42/42/42/46-46-35



408-G

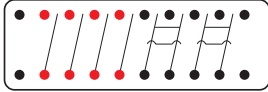
35/42/44/42/42/44/42/35



408-H

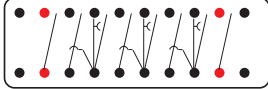
FRONT VIEW - 8-POLE (CONT.)

35-42/42/42/42/44-44-35



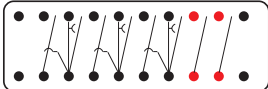
408-J

35/42/46-46-46/42/35



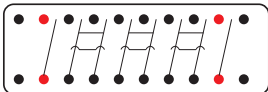
408-K

35-46-46-46/42/42-35



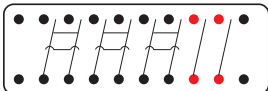
408-L

35/42/44-44-44/42/35



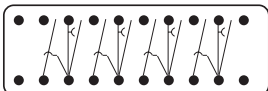
408-M

35-44-44-44/42/42-35



408-N

35-46-46-46-35



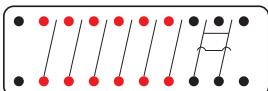
408-P

35/42/42/42/44/42/42/42/35



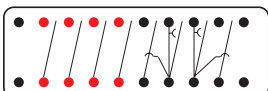
408-Q

35-42/42/42/42/42/42/44-35



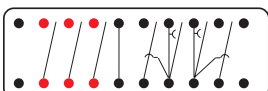
408-R

35-42/42/42/42/46-45-35



408-S

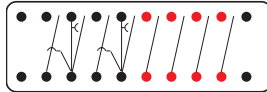
35-42/42/42/61/46-45-35



408-T

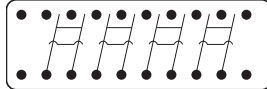
8-POLE (CONT.)

35-46-46/42/42/42/42-35



408-U

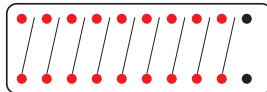
35-44-44-44-35



408-W

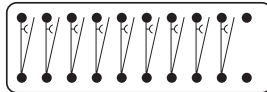
9-POLE

42/42/42/42/42/42/42/42/42-35



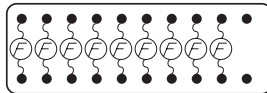
409-A

72-72-72-72-72-72-72-72-35



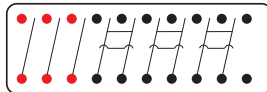
409-B

73/73/73/73/73/73/73/73-35



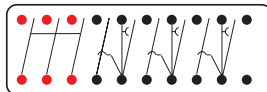
409-C

/42/42/42/44-44-44-35



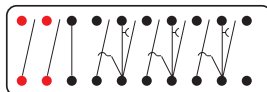
409-D

/78/46-46-46-35



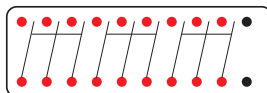
409-E

/42/42/61/46-46-46-35



409-F

78/78/78-35



409-G

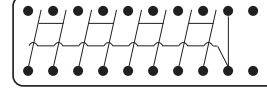
9-POLE (CONT.)

/42/44/42/44/42/44-35



409-H

77-77-77-77-61-35



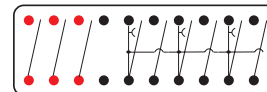
409-J

/42/46/42/46/42/46-35



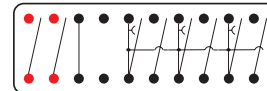
409-K

42/42/42-35-69-71-69-71-69-70



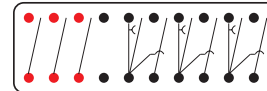
409-L

/42/42/61-35-69-71-69-71-69-70



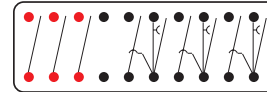
409-M

/42/42/42/35-45-45-45



409-N

/42/42/42/35-46-46-46



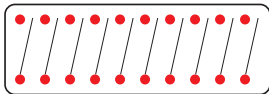
409-P

Other 9-Pole
Standard Arrangement:
/42/42/61/35-45-45-45
409-S

SMH Test Switches

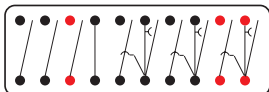
FRONT VIEW - 10-POLE

42/42/42/42/42/42/42/42/42/42/



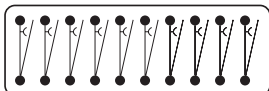
410-A

/42K/42G/42/61-46-46G-46R



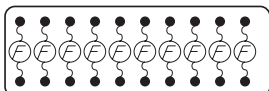
410-A1

72-72-72-72-72-72-72-72-72-72-



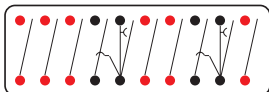
410-B

73/73/73/73/73/73/73/73/73/73/



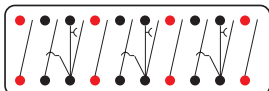
410-C

/42/42/42/46/42/42/46/42/



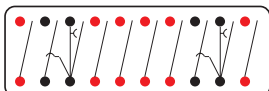
410-D

/42/46/42/46/42/46/42/



410-E

/42/46/42/42/42/42/46/42/



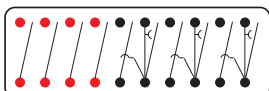
410-F

/42/44/42/44/42/44/42/



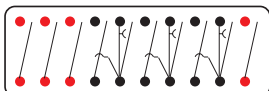
410-G

42/42/42/42/46-46-46



410-H

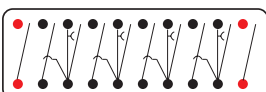
/42/42/42/46-46-46/42/



410-J

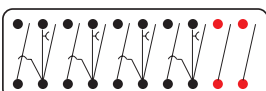
10-POLE (CONT.)

/42/46-46-46-46-/42/



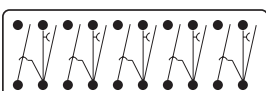
410-K

46-46-46-46/42/42



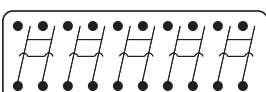
410-L

46-46-46-46-46



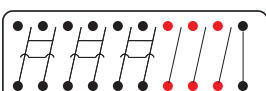
410-M

44-44-44-44-44



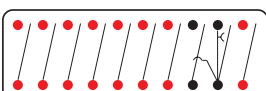
410-N

44-44-44/42/42/42/61/



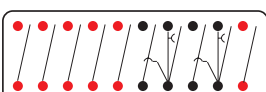
410-P

/42/42/42/42/42/42/42/46/42/



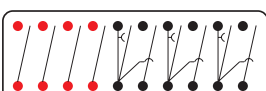
410-Q

/42/42/42/42/42/46-46/42/



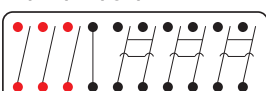
410-R

42/42/42/42/45-45-45



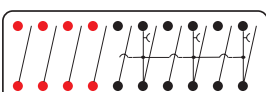
410-S

42/42/42/61/44-44-44



410-T

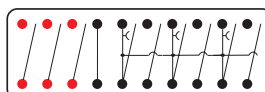
42/42/42/42/71-69-71-69-71-72



410-U

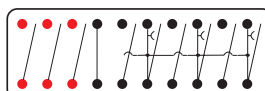
10-POLE (CONT.)

42/42/42/61/69-71-69-71-69-70



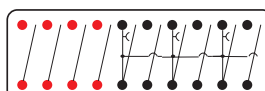
410-V

42/42/42/61/71-69-71-69-71-72



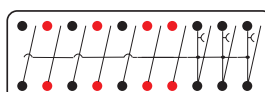
410-W

42/42/42/42/69-71-69-71-69-70



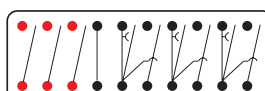
410-X

71/42/71/42/71/42/42/69-69-72



410-Y

42/42/42/61/45-45-45



410-Z

Other 10-Pole
Standard Arrangements:

42/42/42/61/46-46-46
410-T1

/42/46/42/46/42/71-69-42
410-Z1

50/50/50/50/50
410-B5

73/73/73/61/46-46-46
410-D7

Please refer to the STATES website
for more part numbers and up to date
information.