

Type SJK Test Switches



DESCRIPTION

STATES Type SJK Test Switches have long been used for providing a reliable, simple means to test meters, relays and instrument transducers and for control system calibration, disconnection, troubleshooting, checkout and testing. Make-before-break short-circuiting elements for current transformer circuits and test jacks are available. Each switch blade can be operated independently or, where necessary, adjacent handles can be ganged for simultaneous operation. All configurations are available in front-connected, back-connected or flush-mounted styles.

Front-connected switches usually are mounted on the same side of the panel as the wiring. Back-connected switches are mounted on one side of the panel, and the wiring is on the other side. As an option, clear or opaque plastic covers are available for both front-connected or back-connected switches.

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

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.
- **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.
- **No-barrier design**
- **Self-extinguishing materials**
- **Front-connected, back-connected and flush-mounted styles**
- **Blades operate independently or can be ganged together**
- **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-resistant contact that will not overheat.
- **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 a 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 Cat. 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; however, the following other colors are available at additional cost: blue, orange, white, yellow, brown, green, black and white.
- **Identification card holder:** Each safety grip handle is slotted for insertion of an identification card for marking or coding. Cards are available under Cat. No. SB 678.
- **Bases:** Type SJK Test Switches are available in 1-, 2-, 3-, 4-, 7- and 10-pole base sizes. The bases are made of rugged, $\frac{3}{8}$ inch, non-tracking material with excellent insulating properties.
- **Extra-wide element separation:** Elements are $\frac{1}{16}$ inches center-to-center to allow for easy installation of test leads.

ORDERING INFORMATION

The catalog numbers under the arrangements on the following pages are for front-connected switches without covers, which are designated by the first three characters in the catalog numbers, 20K. **Example:** 20K10-E

COVERS

Any front- or back-connected switch, up to 10 poles, can be ordered with a cover. Covers are available on 4-, 7- and 10-pole bases. Although you may choose a larger base, usually a 1- to 4-pole switch is built on a 4-pole base; a 5- to 7-pole switch is built on a 7-pole base; and an 8- to 10-pole switch is built on a 10-pole base.

To order front-connected switches

To order front-connected switches without covers, specify the catalog numbers shown under the arrangements on the following pages.

Example: 20K10-E

For covers, change the 20K prefix to one of the following prefixes:

Cover	Prefix
Front-connected, slotted, clear	60K
Front-connected, slotted, opaque	80K

Example: 60K10-E

To order back-connected switches

To order back-connected switches without covers, specify the desired arrangement and add the suffix -B.

Example: 20K10-E-B

Covers are available for 4-, 7- and 10- pole switches.

For covers, add the appropriate prefix:

Cover	Prefix
Back-connected, solid, opaque	90K
Back-connected, solid, clear	70K

Example: 90K10-E-B

To order flush-mounted switches

Add the prefix G- to the number of the desired arrangement.

Example: G-20K10-E

Flush-mounted switches are provided with a cover.

(The prefix G- mentioned above designates a flush-mounted switch and its' standard cover.)

SPECIAL ORDERS

Special Arrangements: In addition to the typical arrangements shown on the following pages, special arrangements are available. 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 45.

Example: To order a customized, 10-pole, back-connected switch with a clear, back-connected cover, specify:

Switch Type: STATES Type SJK
 No. of poles: 10-pole test switch
 Arrangement: 1-10-1-10-1-10-1
 Style: Back-connected
 Cover: Clear, back-connected

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

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

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

To order a switch with handles in non-standard colors, you must specify the arrangement with colors indicated. For example, to order a 10-pole switch with special handle colors, specify:

Arrangement: 1k/10g/1y/10b/1e/10r/1w

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

Hinge position: The "U" 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

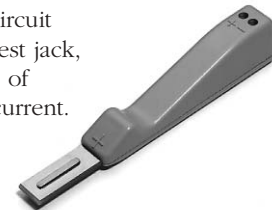
To speed installation of the terminal nuts on STATES Test Switches, the socket wrench (Cat. No. 16028) and $\frac{3}{8}$ inch insert (Cat. No. 16027) are available.

The screwdriver attachment

(Cat. No. 16022) makes this wrench your complete meter installation tool.

Dual Circuit Plug

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



STATES

FRONT VIEW

1-POLE

(On 1-pole base unless otherwise noted)

1



20K01-B

Color Options: 1y
20K01-F

1k
20K01-K

9



20K01-E

Other 1-Pole
Standard Arrangements:

1-26 (2-pole base)
20K01-P

9-26 (2-pole base)
20K01-E2

2-POLE

(On 2-pole base unless otherwise noted)

1-1



20K02-D2

2



20K02-B

Color Option: 2y
20K02-N2

11



20K02-D

10



20K02-G

2-POLE (CONT.)

13



20K02-E

Other 2-Pole
Standard Arrangements:

1/1g
20K02-J4

26-1-1-26 (4-pole base)
20K02-K2

26-2-26 (4-pole base)
20K02-A

26-13-26 (4-pole base)
20K02-V2

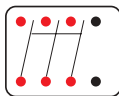
3-POLE

(On 4-pole base unless otherwise noted)

1-1-1-26
20K03-B2

Color Option: 1y-1y-1y-26
20K03-N3

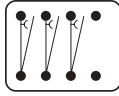
16-26



20K03-T

Color Option: 16K-26
20K03-D4

9-9-9-26



20K03-V2

17 (3-pole base)



20K03-E2

Other 3-Pole
Standard Arrangements:

1-10-26
20K03-E3

3-POLE (CONT.)

1-11 (3-pole base)
20K03-C6

1-25-25-26
20K03-A7

15-24-26
20K03-A2

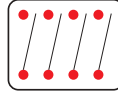
16 (3-pole base)
20K03-D

17-26
20K03-A3

4-POLE

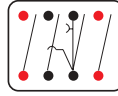
(On 4-pole base unless otherwise noted)

1-1-1-1



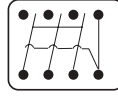
20K04-P

1-10-1



20K04-M

20-24



20K04-S3

1-13-1



20K04-D

Other 4-Pole
Standard Arrangements:

1-1-1-1
20K04-SA

1/1/10
20K04-X

1-1-11
20K04-C

1-1-25-25
20K04-A3

1-26-1-26-26-11
(7-pole base)
20K04-T6

1-26-10-26-1-26
(7-pole base)
20K04-AK

4-POLE (CONT.)

4-1-1-5
20K04-E2

6-6-6-7
20K04-G5

9-24-14
20K04-GA

9-9-9-9
20K04-W

9-26-9-26-9-26-9
(7-pole base)
20K04-Z8

10-1-1
20K04-K

10-2
20K04-C7

10-10
20K04-B

13-13
20K04-H

22
20K04-Q2

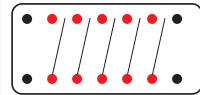
25-25-1-1
20K04-YA

26-26-26-4-1-1-5
(7-pole base)
20K04-RA

5-POLE

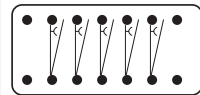
(On 7-pole base)

26-1-1-1-1-1-26



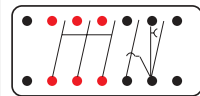
20K05-P

26-9-9-9-9-9-26



20K05-G5

26-16-10-26



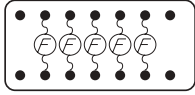
20K05-S3

STATES

FRONT VIEW

5-POLE (CONT.)

26-25-25-25-25-26



20K05-N5

Other 5-Pole
Standard Arrangements:

1-26-1-26-13-24
20K05-C8

1-26-26-10-11
20K05-B6

13-26-26-16
20K05-J4

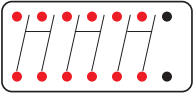
26-10-1-10-26
20K05-K

26-1-1-1-1-1-26
20K05-L5

26-2/1/1-1-26
20K05-B8

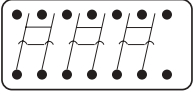
6-POLE (ON 7-POLE BASE)

2-2-2-26



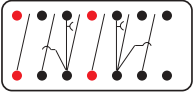
20K06-N4

13-13-13-26



20K06-F

1-10-1-11-26



20K06-T

Other 6-Pole
Standard Arrangements:

1-1-1-1-1-1-26
20K06-B

1-1-1-1-1-1-26
20K06-V8

1y-1y-1y-1y-1y-1y-26
20K06-B8

1-1-1-26-25-25-25
20K06-LC

2-2/26-13
20K06-S5

4-6-4-6-4-5-26

6-POLE (CONT.)

20K06-S2

9-9-9-9-9-26
20K06-P5

11-11-11-26
20K06-Q3

10-10-10-26
20K06-R7

13-13-26/1/1
20K06-A

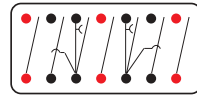
13-13-26/2
20K06-C5

13-13-13-26
20K06-DC

13r-13r-13r-26
20K06-FR

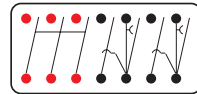
7-POLE (ON 7-POLE BASE, UNLESS OTHERWISE NOTED)

1-10-1-11-1



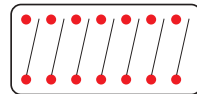
20K07-A

16-10-10



20K07-B2

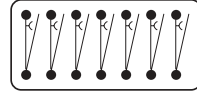
1-1-1-1-1-1-1



20K07-S

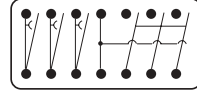
Color Option: 1y-1y-1y-1y-1y-1y-1y
20K07-B8

9-9-9-9-9-9-9



20K07-R8

9-9-9-24-19



20K07-T8

Other 7-Pole
Standard Arrangements:

/1/1/1/10-10
20K07-BP

1e-1b-1g-10eg-10bg
20K07-BQ

1-1-1-10-11
20K07-E

1-1-1-1-11-1
20K07-RA

1/1/1-26-26-26-10-10
(10-pole base)
20K07-CE

1/1g/1w-26-26-26 10eb-10kwk
(10-pole base)
20K07-CJ

1-10-1-10-1
20K07-K

/1/10/1/11/1/
20K07-M

/1k/10wg/1b/10gy/1/
20K07-CC

1-11-1-11-1
20K07-Z

1-13-1-13-1
20K07-D

1-13-1-13-1
20K07-AZ

/1/13/1y/13/1
20K07-DY3

1-26-1-26-1-26-10-11
(10-pole base)
20K07-CF

/1/26-10-26/1/26-10/1/
(10-pole base)
20K07-CG

1-26-10-26-1-26-11/1/
(10-pole base)
20K07-C2

1-26-13-26-1-26-13/1/
(10-pole base)
20K07-CD

9-11-9-11-9
20K07-NA

10-11-1-1-1
20K07-G

13-13-13-1
20K07-AX

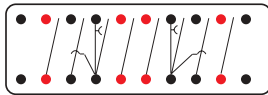
Color Key: k: Black b: Blue g: Green e: Orange r: Red w: White n: Brown y: Yellow kw: Black and White

STATES

FRONT VIEW

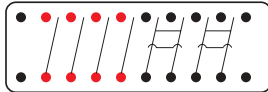
8-POLE (ON 10-POLE BASE)

26-1-10-1-1-11-1-26



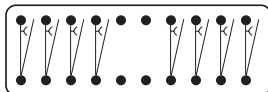
20K08-B

26-1-1-1-1-13-13-26



20K08-CD

9-9-9-9-26-26-9-9-9-9



20K08-U9

Color Option:

9r-9r-9r-9r-26-26-9r-9r-9r-9r
20K08-XA

Other 8-Pole

Standard Arrangements:

1b/1g/1/24/-26-10-26-11rr

20K08-CF

26-1-1-1-1-1-1-1-1-26

20K08-N

26-1-1-1-1-1-1-1-1-26

20K08-AB

26-1-1-1-1-10-10-26

20K08-PE

26-1-1-1-1-10-11-26

20K08-E2

26-1/1/1/1/13-13-26

20K08-B6

26/1/6/1/6-4/1/3/1/26

20K08-CG

26-1r-6r-9k/1k/1w-9w-5g-1g-26

20K08-P6

26-1-10ek-1y-1w-10gk-1k-26

20K08-ME

26-1-10-10-10-1-26

20K08-F7

26-1-13-1-1-13-1-26

20K08-J

26-9-9-9-9-9-9-9-26

20K08-T9

26-9-9-9-24-19-5-26

20K08-TE

26-10-10-10-1-1-26

20K08-V

26-10-10-10-10-26

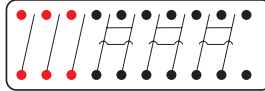
20K08-K6

26-16-24-13-13-26

20K08-JE

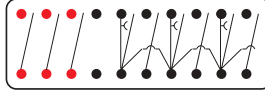
9-POLE (ON 10-POLE BASE)

1-1-1-13-13-13-26



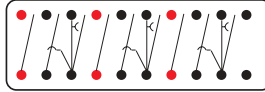
20K09-C

1-1-1-26-4-6-4-6-4-5



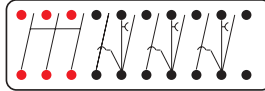
20K09-D8

1-10-1-10-1-10-26



20K09-K

16-10-10-10-26



20K09-XU

Other 9-Pole

Standard Arrangements:

1-1-1-1-1-1-1-1-1-26

20K09-W

1-1-1-1-1-13-13-26

20K09-C7

1-1-1-10-10-10-26

20K09-U

1-1-1-11-11-11-26

20K09-P

1-1-24-26-4-6-4-6-4-5

20K09-F8

1-10-10-1-10-1-26

20K09-G

1-11-1-11-1-11-26

20K09-N

1-13-1-13-1-13-26

20K09-H

9-9-9-9-9-9-9-9-26

20K09-Q4

9-10-10-10-10-26

20K09-U7

10-10-10-1-1-1-26

20K09-D

10-10-10-10-9-26

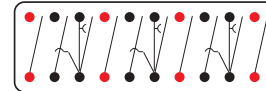
20K09-AB

11-9-11-9-11-9-26

20K09-XB

10-POLE (ON 10-POLE BASE)

1-10-1-10-1-10-1



20K10-E

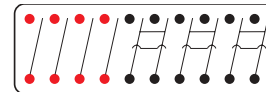
Color Options:

1-10bw-1y-10gw-1e-10nw-1w
20K10-BZ

1e-10rw-1g-10yw-1b-10kw-1w
20K10-AB

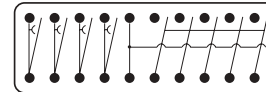
1-10rk-1w-10wb-1g-10ge-1k
20K10-Z5

1-1-1-1-13-13-13



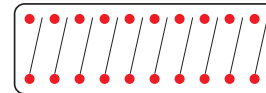
20K10-C

9-9-9-9-24-14-19



20K10-MA

1-1-1-1-1-1-1-1-1-1



20K10-Y

Color Options:

1y-1y-1y-1y-1y-1y-1y-1y-1y-1y
20K10-H8

1k-1k-1k-1k-1k-1k-1k-1k-1k-1k
20K10-K8

1-1-1-1-10-10-10
20K10-BT

1e-1b-1-24-10eg-10bg-10rg
20K10-BV

/1/1/1/24-11-11-11
20K10-D7

1-1-10-10-1-1-1-1
20K10-BB

1-6-1-6-1-6-4-4-4-24
20K10-X

/1/10/1/10/1/10/1/
20K10-EM

1-13-1-13-1-13-1
20K10-G

/1/13/1/13/1/13/1y/
20K10-W5

1-13-1-13-1-13-24
20K10-F

/1/13/1/13/1/13/24/
20K10-M

Color Key: k: Black b: Blue g: Green e: Orange r: Red w: White n: Brown y: Yellow kw: Black and White

STATES

FRONT VIEW

10-POLE (CONT.)

2-2-2-2-2
20K10-AA

2-2-2-2-13
20K10-CK

9-9-9-9-9-24-19
20K10-M9

9-9-9-9-24-5-5-5-5-5
20K10-B5

9-9-9-9-24-19-19
20K10-G9

9-9-9-24-19-19
20K10-V9

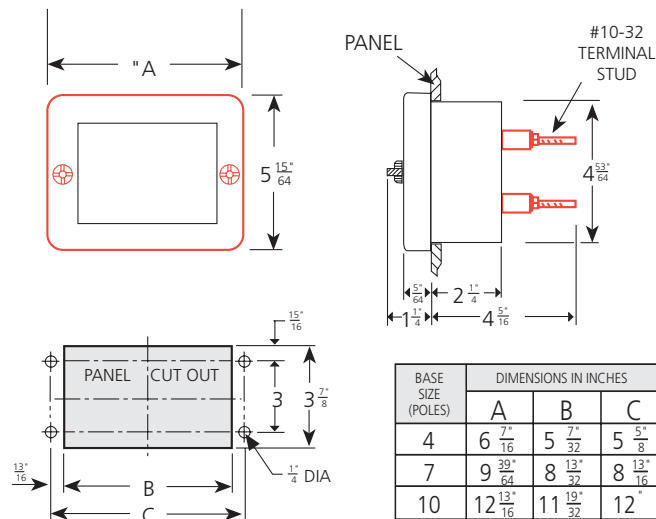
10-10-10-10-10
20K10-M4

13-13-13-1-1-1-24
20K10-BU

ELEMENTS FOR CUSTOMIZED SWITCHES NOT LISTED UNDER TYPICAL ARRANGEMENTS

1 Single-Pole Potential	2 Ganged Double-Pole Potential	16 Ganged Three-Pole Potential	13 Ganged Two-Pole Short-Circuiting Current Assembly	17 Ganged Three-Pole Short-Circuiting Current Assembly
9 Current Test Jack	6 Short-Circuiting Assembly With Right-Hand Common Bar	10 Right-Hand Current Assembly Consists of Test Jack and Short-Circuiting Current Assemblies	20 Ganged Three-Pole Short-Circuiting Current Assembly, Right Extension	5 Short-Circuiting Assembly With Left-Hand Common Bar
11 Left-Hand Current Assembly Consists of Test Jack and Short-Circuiting Current Assemblies	19 Ganged Three-Pole Short-Circuiting Current Assembly, Left Extension	22 Left-Hand Through Bar and Three-Pole Short-Circuiting Current Assembly	23 Right-Hand Through Bar and Three-Pole Short-Circuiting Current Assembly	24 Through Bar
26 Blank Space	25 30-Amp Fuse Mounting Clip	3 Current Test Jack With Left-Hand Common Bar	4 Current Test Jack With Right-Hand Common Bar	<p>NOTES:</p> <ol style="list-style-type: none"> Barriers are provided between poles of opposite polarity. Potential handles are red and current handles are black unless otherwise specified. Arrange elements left to right, front view.

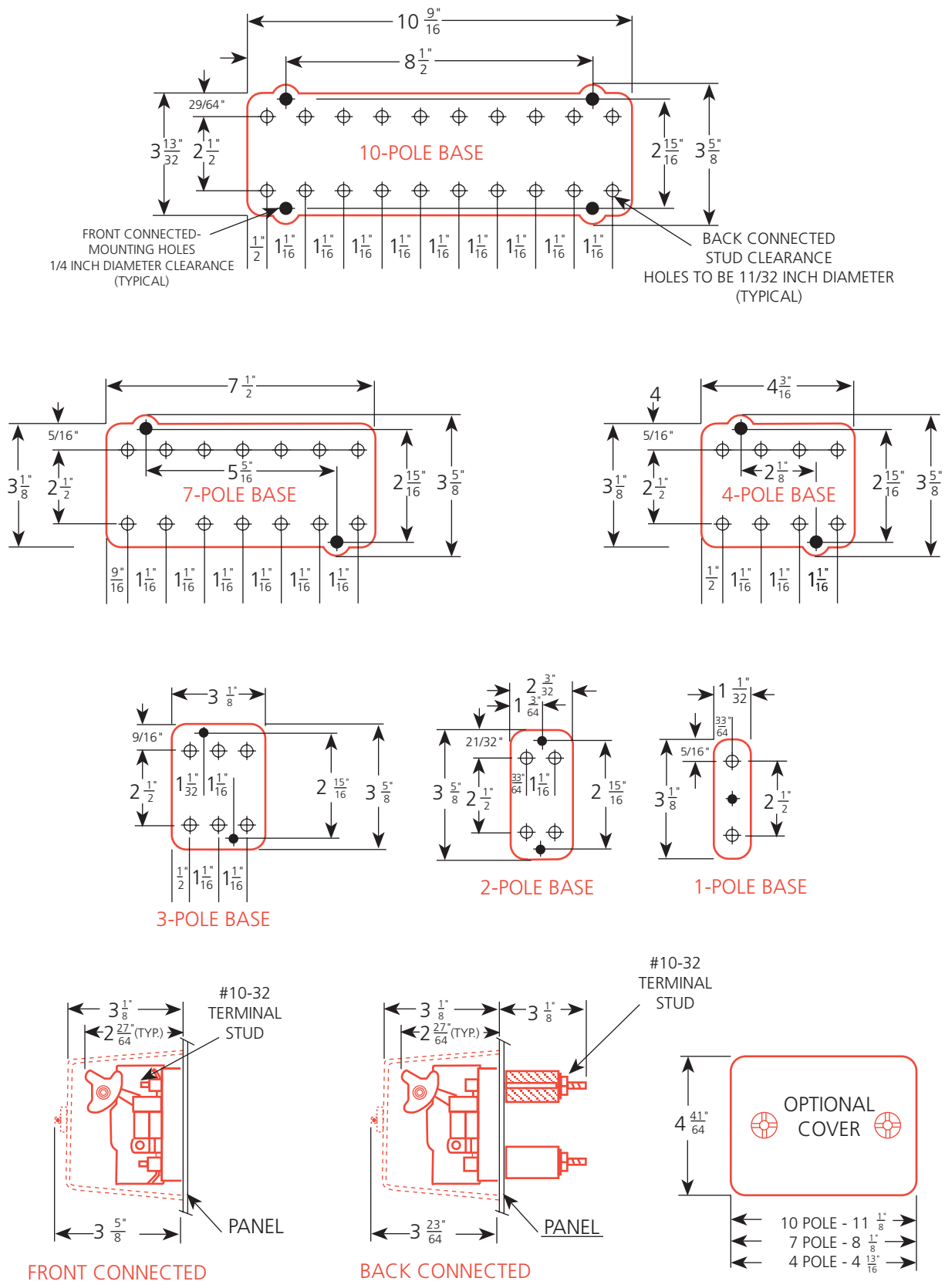
DIMENSIONS (IN INCHES) FLUSH MOUNT SWITCH



Color Key: k: Black b: Blue g: Green e: Orange r: Red w: White n: Brown y: Yellow kw: Black and White

STATES

DIMENSIONS (IN INCHES)



Color Key: k: Black b: Blue g: Green e: Orange r: Red w: White n: Brown y: Yellow kw: Black and White

STATES

4271 BRONZE WAY

DALLAS TX 75237-1019 USA

Ph: 1 800 325 4574

Toll Free: 1 214 331 7316

Fax: 1 214 331 7368

Email: states@megger.com

Web: www.statesproducts.com