

## The Standard Mounting Arrangements for S&C Alduti-Rupter Switches

Three-pole S&C Alduti-Rupter Switches for indoor distribution are offered in a variety of standard mounting arrangements for mounting on structural steel or in metal enclosures. This selection of mounting arrangements cuts the user's engineering costs and reduces lead time.

The selector chart on page 3 illustrates 20 standard mounting arrangements, classified by:

- **Style of switch:** Main contact at top, handle on right or handle on left; main contact at bottom, handle on right or handle on left
- **Type of operating mechanism:** Direct-coupled, chain-coupled, pipe-coupled

Many advantages accrue from using one of the standard mounting arrangements:

### No Design Delay; No Ordering Delay

Switches can be ordered immediately, and the user can complete the layout and design of the vault, substation, or metal-enclosed switchgear from readily available erection drawings. No other drawings are required from S&C to adapt the switches to the majority of applications.

### Reduced Delivery Time

Delivery time is greatly reduced because there is no delay for customized engineering, customer approval, or time-consuming fabrication of non-standard parts.

### Stocking Switches for Immediate Use

Standard mounting arrangements make it possible for the user to buy and warehouse a quantity of Alduti-Rupter Switches with operating mechanisms for the user's preferred arrangements for use in future installations. Thus, at any time, a switch may be taken from stock and installed without delay.

### No Problem with Last-Minute Changes

In the event of a last-minute change, the user can choose a new arrangement from the selector chart and find in utility engineering files the erection drawing for the desired arrangement. Then, a comparison of the bills of materials on the erection drawings will indicate whether additional or different parts will be required and will permit immediate ordering of these parts.

## Erection Drawings Immediately Available

Each standard mounting arrangement in the selector chart is identified with an "ED" number. This number indicates the erection drawing corresponding to the mounting arrangement. Erection drawings are available on S&C's website at [sandc.com/drawings](http://sandc.com/drawings). Printed copies may also be requested through your S&C sales representative.

Each erection drawing is complete with detailed installation data, including an outline drawing of the mounting arrangement, base details, operating-mechanism component details, a bill of materials, installation notes and illustrations, and recommended clearances.

## What a Standard Mounting Arrangement Includes

When a standard mounting arrangement is specified, the shipment will include:

- A three-pole switch with integral quick-make, quick-break mechanism; interphase barriers;● side barriers;● an operating-shaft extension (when specified); a direct-coupled, chain-coupled, or pipe-coupled operating handle; and other operating-mechanism components, including rod guides and any number of 10-foot-4-inch (315-cm) lengths of vertical pipe required by the specifications for any pipe-coupled handle type standard mounting arrangement
- The appropriate detailed erection drawing
- Complete installation and maintenance instructions

## What About Specials?

Departures from standard mounting arrangements are easily handled. They fall into two categories:

1. Standard Minor Modifications of Standard Mounting Arrangements
2. Special Mounting Arrangements

- Interphase barriers and side barriers are neither required nor furnished with 25-kV three-pole switches.



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**Information Bulletin 783-80**

Typical ED, Reduced from Full 11-inch x 17-inch (279-mm x 432-mm) Size

**SHAFT EXTENSION DETAIL**

**NOTES:**

1. TO FIND X (SHAFT EXTENSION LENGTH) SUBTRACT "F" FROM "U" DIMENSION.
2. LENGTH OF SHAFT EXTENSION FURNISHED WILL BE DETERMINED FROM "U" DIM. SUPPLIED WITH ORDER.
3. USER'S ENCLOSURE TO BE SO DESIGNED THAT "U" DIM. IS AN EXACT MULTIPLE OF 2" A TOLERANCE OF ± 1/16" IS PRECISED MINIMUM (U > 32).
4. SHAFT EXTENSION IS PREDRILLED AND SHIPPED SEPARATE TO FACILITATE ASSEMBLY INTO ENCLOSURES.
5. PIN LOCKING DISC WITH ITEM 4, USING HOLE PROVIDED PREDRILLED AT FACTORY.

**ALDUTI-RUPTER SWITCH AND HANDLE ASSEMBLY**

**SECTION E-E**  
METHOD OF MOUNTING OPERATING HANDLE

**ELECTRICAL CLEARANCE FROM LIVE PARTS TO METAL ENCLOSURE**

RATING	MIN. CLEARANCE FROM LIVE PARTS TO METAL ENCLOSURE	MIN. CLEARANCE FROM LIVE PARTS TO METAL ENCLOSURE	MIN. CLEARANCE FROM LIVE PARTS TO METAL ENCLOSURE	MIN. CLEARANCE FROM LIVE PARTS TO METAL ENCLOSURE	MIN. CLEARANCE FROM LIVE PARTS TO METAL ENCLOSURE	MIN. CLEARANCE FROM LIVE PARTS TO METAL ENCLOSURE	MIN. CLEARANCE FROM LIVE PARTS TO METAL ENCLOSURE	MIN. CLEARANCE FROM LIVE PARTS TO METAL ENCLOSURE	MIN. CLEARANCE FROM LIVE PARTS TO METAL ENCLOSURE	MIN. CLEARANCE FROM LIVE PARTS TO METAL ENCLOSURE
KV	U	X	P	Z <sub>1</sub>	Z <sub>2</sub>	Z <sub>3</sub>	S <sub>1</sub>	S <sub>2</sub>	S <sub>3</sub>	S <sub>4</sub>
4.8	3 1/2	2 1/8	3/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8
12.5	6	4 1/2	3/4	2 1/8	2 1/8	2 1/8	2 1/8	2 1/8	2 1/8	2 1/8
18	8	6	1	3 1/8	3 1/8	3 1/8	3 1/8	3 1/8	3 1/8	3 1/8
24	10	8	1 1/8	4 1/8	4 1/8	4 1/8	4 1/8	4 1/8	4 1/8	4 1/8
30	12	10	1 1/2	5 1/8	5 1/8	5 1/8	5 1/8	5 1/8	5 1/8	5 1/8
36	14	12	1 3/4	6 1/8	6 1/8	6 1/8	6 1/8	6 1/8	6 1/8	6 1/8
48	18	16	2	8 1/8	8 1/8	8 1/8	8 1/8	8 1/8	8 1/8	8 1/8
60	22	20	2 1/2	10 1/8	10 1/8	10 1/8	10 1/8	10 1/8	10 1/8	10 1/8
72	26	24	3	12 1/8	12 1/8	12 1/8	12 1/8	12 1/8	12 1/8	12 1/8
84	30	28	3 1/2	14 1/8	14 1/8	14 1/8	14 1/8	14 1/8	14 1/8	14 1/8
96	34	32	4	16 1/8	16 1/8	16 1/8	16 1/8	16 1/8	16 1/8	16 1/8
108	38	36	4 1/2	18 1/8	18 1/8	18 1/8	18 1/8	18 1/8	18 1/8	18 1/8
120	42	40	5	20 1/8	20 1/8	20 1/8	20 1/8	20 1/8	20 1/8	20 1/8
132	46	44	5 1/2	22 1/8	22 1/8	22 1/8	22 1/8	22 1/8	22 1/8	22 1/8
144	50	48	6	24 1/8	24 1/8	24 1/8	24 1/8	24 1/8	24 1/8	24 1/8
156	54	52	6 1/2	26 1/8	26 1/8	26 1/8	26 1/8	26 1/8	26 1/8	26 1/8
168	58	56	7	28 1/8	28 1/8	28 1/8	28 1/8	28 1/8	28 1/8	28 1/8
180	62	60	7 1/2	30 1/8	30 1/8	30 1/8	30 1/8	30 1/8	30 1/8	30 1/8
192	66	64	8	32 1/8	32 1/8	32 1/8	32 1/8	32 1/8	32 1/8	32 1/8

Standard Minor Modifications

The Standard Minor Modifications of Standard Mounting Arrangements category represents such departures as additional base drillings or special mounting brackets for operating mechanism components. For this category of "special," S&C will prepare an erection drawing based on the standard mounting arrangement erection drawing.

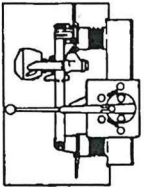
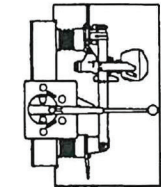
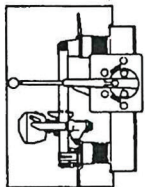
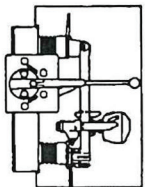
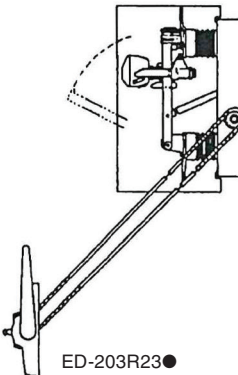
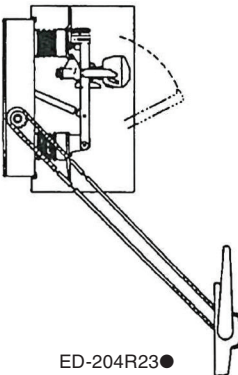
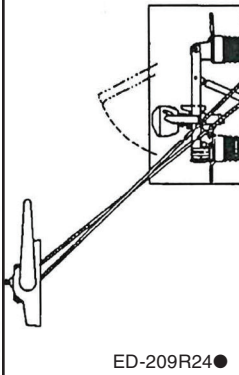
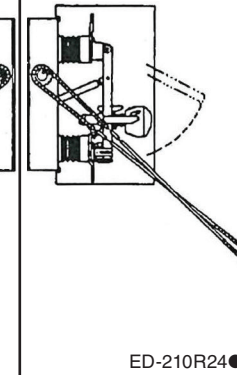
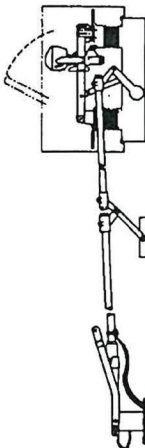
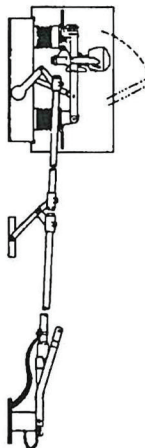
Special Mounting Arrangements

The Special Mounting Arrangements category represents a complete departure from the standard mounting arrangements and it is usually brought about by S&C being asked to customize an Alduti-Rupter Switch to fit the user's application. Custom erection drawings will be prepared as required.

Guide to Using the Selector Chart

Each style of Alduti-Rupter Switch—main contact at top, handle on right or handle on left; main contact at bottom, handle on right or handle on left—is described in S&C Specification Bulletin 783-31. The specification bulletin should be reviewed before using the selector chart on page 3.

For each switch style, mountings are shown for direct-coupled, chain-coupled, and pipe-coupled operating handles. Each drawing in the chart represents schematically a corresponding standard mounting arrangement erection drawing, which is available as [sandc.com/drawings](http://sandc.com/drawings). The ED number given with each arrangement should be used in ordering the required erection drawing. The ED number of the drawing supplied may be supplemented with the letter R followed by a digit. This indicates the most recent modification of construction details for that particular standard mounting arrangement.

Operating Handle	Main Contact at Top		Main Contact at Bottom	
	Handle on Right	Handle on Left	Handle on Right	Handle on Left
Direct-coupled	 <p>ED-201R23● ED-220R4■</p>	 <p>ED-202R23● ED-221R4■</p>	 <p>ED-207R24● ED-226R4■</p>	 <p>ED-208R24● ED-227R4■</p>
Chain-coupled	 <p>ED-203R23● ED-222R4■</p>	 <p>ED-204R23● ED-223R4■</p>	 <p>ED-209R24● ED-228R4■</p>	 <p>ED-210R24● ED-229R4■</p>
Pipe-coupled	 <p>ED-205R25● ED-224R5■</p>	 <p>ED_206R25● ED-225R5■</p>		

- For switches rated 4,8, 7.2, and 13.8 kV.
- For switches rated 25 and 34.5 kV.