

The Standard Mounting Arrangement for Mini-Rupter Switches

Manually operated Mini-Rupter Switches—Indoor Distribution are available in the top-supported frame style and in the back-supported frame style typical for pad-mounted gear and metal-enclosed switchgear installations respectively. The two styles are offered in a variety of standard mounting arrangements. This selection of pre-engineered mounting arrangements cuts the purchaser's engineering costs and cuts down on lead time.

The standard mounting arrangements are illustrated schematically in the tables on the following pages. Top-supported frame styles are listed in Table 1 on page 3; back-supported frame styles are listed in Tables 2 through 9 on pages 4 through 11, grouped by location of main contact (at top or bottom) and by type of handle—all for either right-hand or left-hand operation. For each of the mounting arrangements, the appropriate standard mounting arrangement erection drawing (ED) numbers are listed, along with the applicable Mini-Rupter Switch catalog numbers.

Erection drawings are available at no charge in as many copies as may be required; just ask the nearest S&C Sales Office for the ED numbers needed.

The drawings are printed in legible, double-page, 11-inch × 17-inch (279-mm × 432-mm) format folded to 8½-inches × 11 inches (216 mm × 279 mm) for convenient filing. Each drawing is complete with detailed installation data, including minimum enclosure dimensions, barrier requirements, switch and handle mounting details, and recommended clearances.



Guide to Using the Selector Charts

Find the table for the switch style and configuration required. For example, back-supported frame-style Mini-Rupter Switches with the main contact at the top and a non-removable side handle are illustrated in Table 3 on page 5. The tables illustrate both handle-on-right and handle-on-left arrangements.

Tabulated under each illustration are the ED numbers for that arrangement, along with the catalog numbers and BIL ratings for the appropriate Mini-Rupter Switches. The ED number of the drawing supplied and the catalog number of the switch 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 or Mini-Rupter Switch.

Select the specific Mini-Rupter Switch for the duty required on the basis of the complete voltage and current ratings listed in Specification Bulletin 785-31. For example, for a back-supported frame-style Mini-Rupter Switch with the main contact at the top and a non-removable side handle on the right for application on a system rated 13.8 kV, with a switch rating of 14.4 kV nominal, 17.0 kV max, 95 kV BIL, 600 amperes continuous and interrupting, 65,000 amperes peak and 65,000 amperes two-time duty-

cycle peak fault closing, the catalog number is 255232 and the erection drawing number is ED-248. Alternately, Mini-Rupter Switch catalog number 255222 with erection drawing number ED-245 may be used. However, in this instance, to attain the 95-kV BIL rating, interphase and full end-barriers are required (this switch, without these barriers, is rated 75 kV BIL for application on systems rated 4.16 kV through 7.2 kV).

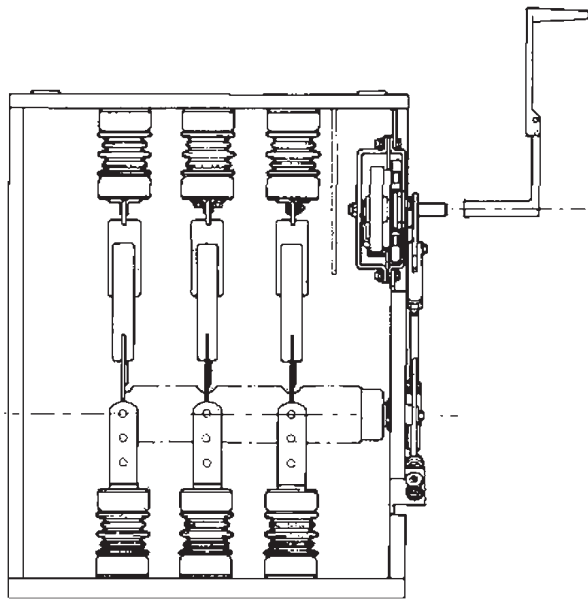
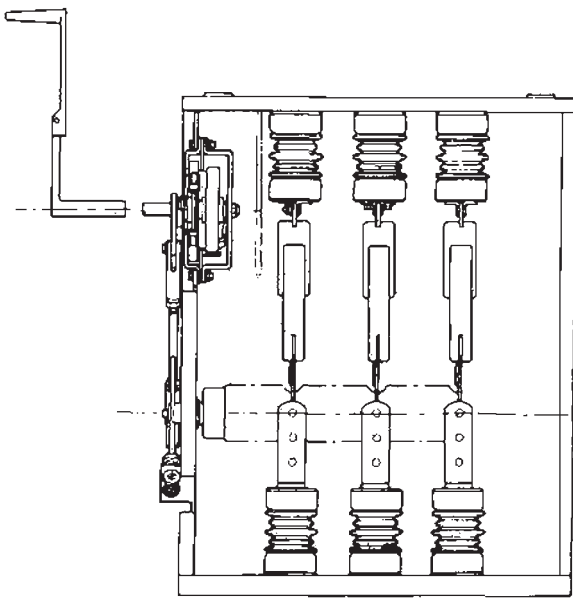
Then, if desired, specify a switch operating handle and/or insulating barriers (which are options) by adding one of the following suffixes to the ED number:

- S1 Operating handle●
- S2 Interphase barriers■
- S3 Interphase barriers plus full end barriers
- S4 Operating handle and interphase barriers●
- S5 Operating handle and interphase barriers plus full end barriers●

● The handle type furnished will be determined by the standard mounting arrangement ED number specified.

■ Not applicable to back-supported frame-style Mini-Rupter Switches.

Table 1. Top-Supported Frame Style, Main Contact at Top, for Use with Removable Side Handle

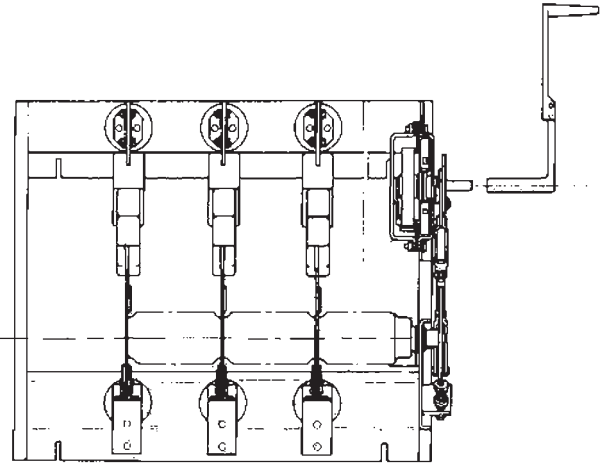
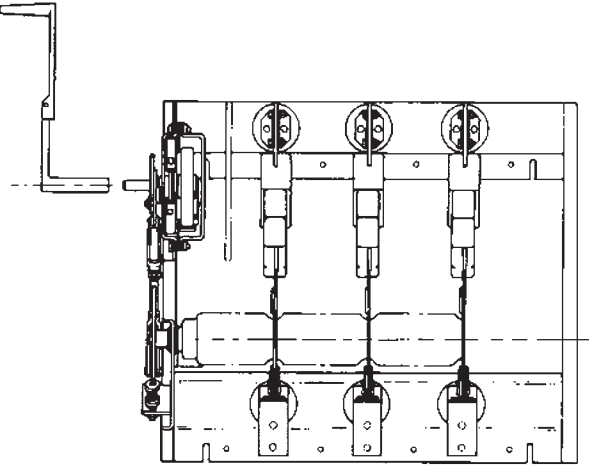
Handle on Right				Handle on Left			
							
ED Number	Switch Catalog Number ^①	Rating, kV, BIL ^②		ED Number	Switch Catalog Number ^①	Rating, kV, BIL ^②	
		Without Barriers	With Interphase and End Barriers			Without Barriers	With Interphase and End-Barriers
ED-240-1	255022	75	95	ED-242-1	255122	75	95
ED-240-2	255032	75	95	ED-242-2	255132	75	95
ED-241-1	255043	95	125	ED-243-1	255143	95	125
ED-241-2	255053	95	125	ED-243-2	255153	95	125

① For complete voltage and current ratings, refer to Specification Bulletin 785-31.

② To maintain rated BIL, quick-make quick-break mechanism must be isolated from the adjacent outer-pole live parts. The ED shipment

includes a small side barrier for this purpose unless the shipment includes interphase barriers plus full end-barriers. (End-barriers are not required to maintain the published BIL ratings of top-supported frame-style Mini-Rupter Switches.)

Table 2. Back-Supported Frame Style, Main Contact at Top, for Use with Removable Side Handle

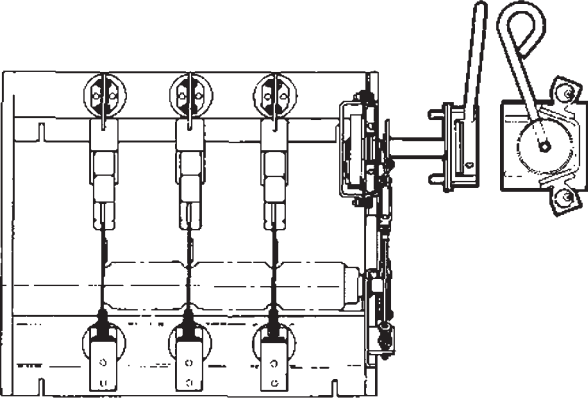
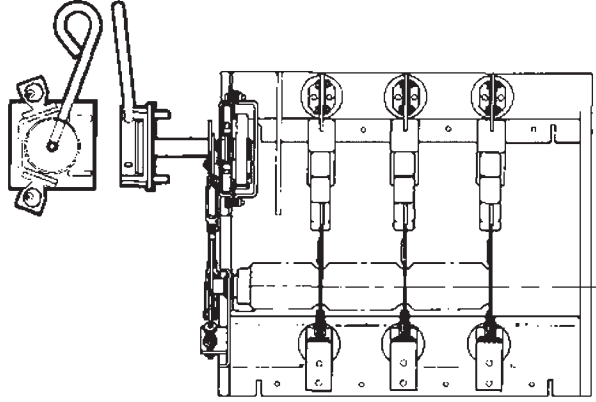
Handle on Right				Handle on Left			
							
ED Number	Switch Catalog Number ^①	Rating, kV, BIL ^②		ED Number	Switch Catalog Number ^①	Rating, kV, BIL ^②	
		Without Barriers	With Interphase and End Barriers			Without Barriers	With Interphase and End-Barriers
ED-244	255222	75	95	ED-253	255272	75	95
ED-247	255232	95	—	ED-256	255282	95	—
ED-250	255243	—	125	ED-259	255293	—	125

① For complete voltage and current ratings, refer to Specification Bulletin 785-31.

② To maintain rated BIL, quick-make quick-break mechanism must be isolated from the adjacent outer-pole live parts. This isolation is

achieved on switches rated 125 kV BIL by providing the requisite interphase and full end-barriers. For switches with lower BIL ratings, S&C provides a small side barrier for this purpose, unless the shipment includes interphase barriers *plus full end-barriers*.

Table 3. Back-Supported Frame Style, Main Contact at Top, for Use with Nonremovable Side Handle

Handle on Right				Handle on Left			
							
ED Number	Switch Catalog Number ^①	Rating, kV, BIL ^②		ED Number	Switch Catalog Number ^①	Rating, kV, BIL ^②	
		Without Barriers	With Interphase and End Barriers			Without Barriers	With Interphase and End-Barriers
ED-245	255222	75	95	ED-254	255272	75	95
ED-248	255232	95	—	ED-257	255282	95	—
ED-251	255243	—	125	ED-260	255293	—	125

① For complete voltage and current ratings, refer to Specification Bulletin 785-31.

② To maintain rated BIL, quick-make quick-break mechanism must be isolated from the adjacent outer-pole live parts. This isolation is

achieved on switches rated 125 kV BIL by providing the requisite interphase and full end-barriers. For switches with lower BIL ratings, S&C provides a small side barrier for this purpose, unless the shipment includes interphase barriers *plus full end-barriers*.

Table 4. Back-Supported Frame Style, Main Contact at Top, for Use with Nonremovable Front Handle

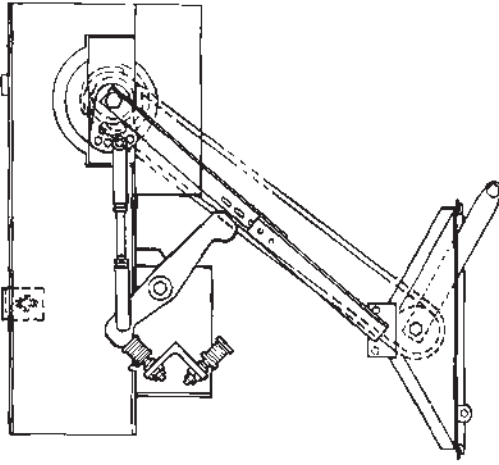
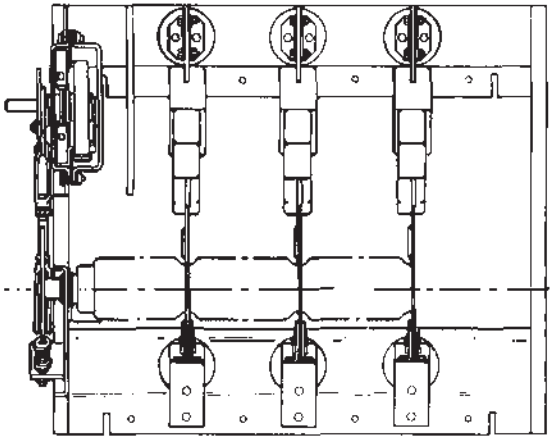
Handle on Right			
ED Number	Switch Catalog Number ^①	Rating, kV, BIL ^②	
		Without Barriers	With Interphase and End-Barriers
ED-246	255222	75	95
ED-249	255232	95	—
ED-252	255243	—	125

① For complete voltage and current ratings, refer to Specification Bulletin 785-31.

② To maintain rated BIL, quick-make quick-break mechanism must be isolated from the adjacent outer-pole live parts. This isolation is

achieved on switches rated 125 kV BIL by providing the requisite interphase and full end-barriers. For switches with lower BIL ratings, S&C provides a small side barrier for this purpose, unless the shipment includes interphase barriers *plus full end-barriers*.

Table 5. Back-Supported Frame Style, Main Contact at Top, for Use with Nonremovable Front Handle

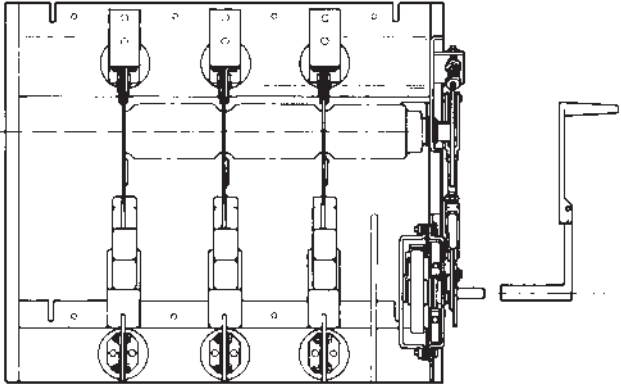
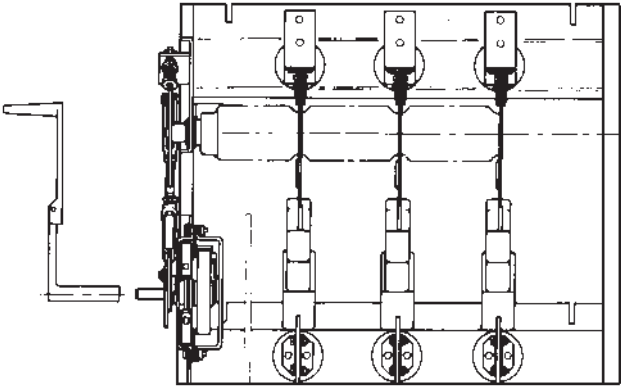
Handle on Left			
			
ED Number	Switch Catalog Number ^①	Rating, kV, BIL ^②	
		Without Barriers	With Interphase and End-Barriers
ED-255	255272	75	95
ED-258	255282	95	—
ED-261	255293	—	125

① For complete voltage and current ratings, refer to Specification Bulletin 785-31.

② To maintain rated BIL, quick-make quick-break mechanism must be isolated from the adjacent outer-pole live parts. This isolation is

achieved on switches rated 125 kV BIL by providing the requisite interphase and full end-barriers. For switches with lower BIL ratings, S&C provides a small side barrier for this purpose, unless the shipment includes interphase barriers *plus full end-barriers*.

Table 6. Back-Supported Frame Style, Main Contact at Bottom, for Use with Removable Side Handle

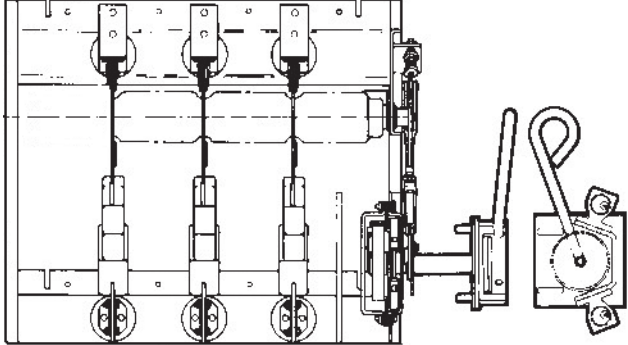
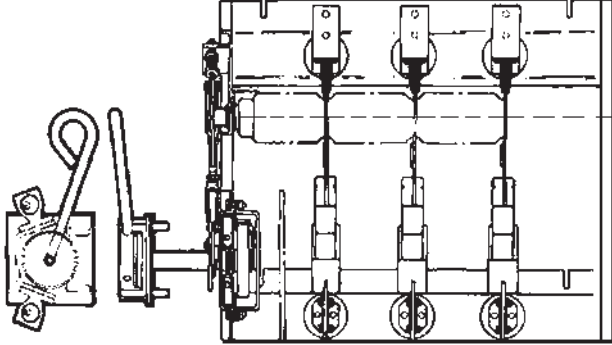
Handle on Right				Handle on Left			
							
ED Number	Switch Catalog Number ^①	Rating, kV, BIL ^②		ED Number	Switch Catalog Number ^①	Rating, kV, BIL ^②	
		Without Barriers	With Interphase and End Barriers			Without Barriers	With Interphase and End-Barriers
ED-245	255222	75	95	ED-254	255272	75	95
ED-248	255232	95	—	ED-257	255282	95	—
ED-251	255243	—	125	ED-260	255293	—	125

① For complete voltage and current ratings, refer to Specification Bulletin 785-31.

② To maintain rated BIL, quick-make quick-break mechanism must be isolated from the adjacent outer-pole live parts. This isolation is

achieved on switches rated 125 kV BIL by providing the requisite interphase and full end-barriers. For switches with lower BIL ratings, S&C provides a small side barrier for this purpose, unless the shipment includes interphase barriers *plus full end-barriers*.

Table 7. Back-Supported Frame Style, Main Contact at Bottom, for Use with Nonremovable Side Handle

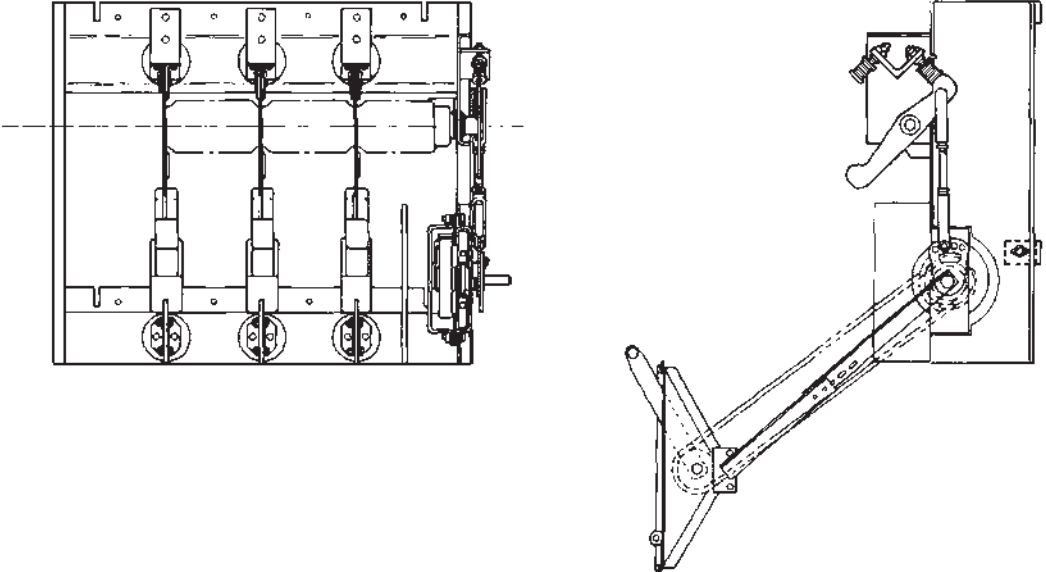
Handle on Right				Handle on Left			
							
ED Number	Switch Catalog Number ^①	Rating, kV, BIL ^②		ED Number	Switch Catalog Number ^①	Rating, kV, BIL ^②	
		Without Barriers	With Interphase and End Barriers			Without Barriers	With Interphase and End-Barriers
ED-245	255222	75	95	ED-254	255272	75	95
ED-248	255232	95	—	ED-257	255282	95	—
ED-251	255243	—	125	ED-260	255293	—	125

① For complete voltage and current ratings, refer to Specification Bulletin 785-31.

② To maintain rated BIL, quick-make quick-break mechanism must be isolated from the adjacent outer-pole live parts. This isolation is

achieved on switches rated 125 kV BIL by providing the requisite interphase and full end-barriers. For switches with lower BIL ratings, S&C provides a small side barrier for this purpose, unless the shipment includes interphase barriers *plus full end-barriers*.

Table 8. Back-Supported Frame Style, Main Contact at Bottom, for Use with Nonremovable Front Handle

Handle on Right			
			
ED Number	Switch Catalog Number ^①	Rating, kV, BIL ^②	
		Without Barriers	With Interphase and End-Barriers
ED-264	255522	75	95
ED-267	255532	95	—
ED-270	255543	—	125

① For complete voltage and current ratings, refer to Specification Bulletin 785-31.

② To maintain rated BIL, quick-make quick-break mechanism must be isolated from the adjacent outer-pole live parts. This isolation is

achieved on switches rated 125 kV BIL by providing the requisite interphase and full end-barriers. For switches with lower BIL ratings, S&C provides a small side barrier for this purpose, unless the shipment includes interphase barriers *plus full end-barriers*.

Table 9. Back-Supported Frame Style, Main Contact at Bottom, for Use with Nonremovable Front Handle

Handle on Left			
ED Number	Switch Catalog Number ^①	Rating, kV, BIL ^②	
		Without Barriers	With Interphase and End-Barriers
ED-273	255572	75	95
ED-276	255582	95	—
ED-279	255593	—	125

① For complete voltage and current ratings, refer to Specification Bulletin 785-31.

② To maintain rated BIL, quick-make quick-break mechanism must be isolated from the adjacent outer-pole live parts. This isolation is

achieved on switches rated 125 kV BIL by providing the requisite interphase and full end-barriers. For switches with lower BIL ratings, S&C provides a small side barrier for this purpose, unless the shipment includes interphase barriers *plus full end-barriers*.