

Specifications

Table of Contents

Conditions of Sale.....	2	Application Classifications	5
Standard.....	2	Ratings.....	8
Special To This Product	2	Ordering Tables	9
How To Order	4	Dimensional Drawings	26



Standard

The seller's standard conditions of sale set forth in Price Sheet 150 apply, except as modified under the "Warranty Qualifications" section on page 3.

Special To This Product

Inclusions

Alduti-Rupter Switches are available in a wide variety of styles and mounting configurations.

Three-pole integer style switches are pre-engineered, preassembled, and preadjusted—all three poles are mounted on a one-piece base with necessary electrical clearances built in. The complete three-pole interrupter switch assembly and its operating mechanism are provided as a single package that includes removable lifting means, shipped in place, for convenient rigging and hoisting during installation.

Alduti-Rupter Switches are also available in three-pole group-operated designs that feature pole units mounted on individual bases. Switches in these styles are specially designed for installation on substation structures or on overhead lines not suited to integer-style switch configurations.

Single-pole style switches are available in vertical and inverted mounting configurations for use in single-phase switching applications. Single-pole style switches are operable using a conventional hookstick.

All three-pole Alduti-Rupter Switches are provided with an operating mechanism that includes:

- Three switch poles (Integer-style switches are shipped complete with an interphase drive, factory assembled on a single base.)
- A detailed erection drawing (ED) of the applicable mounting arrangement
- All required interphase pipe and vertical operating pipe as specified on the ED (Refer to Table 4 through Table 12 on pages 9 through page 20 for vertical operating pipe included with each standard mounting arrangement.)
- The appropriate set of operating-mechanism components; e.g., handle, rod guides, or guide bearings, couplings, bell-crank assembly
- Complete installation instructions

Mounting Arrangements

Three-pole Alduti-Rupter Switches are available in the Standard Mounting Arrangements section in S&C Information Bulletin 761-80. Departures from standard mounting arrangements are also available and fall into three categories:

1. **Standard minor modifications of standard mounting arrangements** are those so frequently encountered they are included on S&C's basic ED. Applicability of standard minor modifications is listed in Table 14 on page 22. The applicable standard minor modifications may be specified by adding the appropriate "-S" suffix to the ED number.
2. **Special minor modifications of standard mounting arrangements** are those that include such departures as special base drillings or special mounting brackets for operating-mechanism components. For this category of "special," S&C will prepare a custom ED based on the standard mounting arrangement ED. Switches will be supplied with an operating mechanism for the special minor modification of a standard mounting arrangement as required.
3. **Special mounting arrangements** are those that involve complete departures from the standard mounting arrangements brought about by customizing an Alduti-Rupter Switch to fit the user's structure. Custom EDs will be provided as required.

Environmental Operation Conditions

The ambient air-temperature range is -22°F to +104°F (-30°C to +40°C). The altitude must not exceed 3300 feet (1000 m) above sea level. The wind velocity must not exceed 80 miles per hour (37 m/s).

Exclusions

Alduti-Rupter Switches do not include connectors. Various connector arrangements are available, as listed in Table 17 on page 24. When ordering, specify the quantity and catalog number of the connector arrangement desired.

Power Operation

Power operation or, if desired, remote-supervisory control may be provided for Alduti-Rupter Switches by the addition of the appropriate Type AS-1A, Type AS-10, Type LS-2, or 6801M Automatic Switch Operator.

Types AS-1A and AS-10 Switch Operators are for power operation of Alduti-Rupter Switches with rotating-type and reciprocating-type operating mechanisms respectively. These high-speed switch operators have operating times not exceeding 0.75 seconds and 1.2 seconds maximum respectively.

This high operating speed provides sufficient moving-contact velocity in the interrupters to ensure full interrupting capability and long operating life. The operators' high operating speed also provides adequate closing velocity for 25/34.5-kV and 34.5-kV three-pole side-break integer style and three-pole vertical-break integer style switches, as well as 46-kV three-pole double-break integer style switches to permit the assignment of fault-closing ratings. Specifically, the side-break integer style switches have a one-time duty cycle fault-closing rating of 15,000 amperes, RMS, asymmetrical.

The vertical-break integer style switches have one-time duty cycle fault-closing ratings of 20,000 or 30,000 amperes, RMS, asymmetrical for switches rated 600 amperes or 1200 amperes respectively. The double-break integer style switches have a two-time duty-cycle fault closing rating of 36,000 amperes, RMS, peak.

6801M Automatic Switch Operators are available in two versions—rotating, for rotating-type mechanisms; and reciprocating, for reciprocating-type operating mechanisms. Both versions operate in 0.5 seconds. This high operating speed is fully compatible with the moving-contact velocity required by the interrupters to ensure full interrupting capability for the applicable switch styles and mounting arrangements.

Type LS-2 Switch Operators are for power operation of three-pole double-break style Alduti-Rupter Switches rated 69 kV. Operating time for the 69-kV switch when applied with a Type LS-2 operator does not exceed 2.2 seconds.

Power operation is available for certain mounting arrangements only. For integer-style switches and side-break standard-duty switches, mounting arrangements

suitable for power operation are indicated in Table 4 on page 9 and Table 5 on page 11 and page 12, and Table 6 on page 13 and Table 7 on page 14. For all other switch styles, consult the nearest S&C Sales Office for availability.

For additional details concerning Type AS-1A or Type AS-10 Switch Operators, refer to Specification Bulletin 769-31. For ordering information on Type LS-2 Switch Operators, refer to Specification Bulletin 753-31. For additional details concerning 6801M Automatic Switch Operators, refer to Specification Bulletin 1045M-31.

Specification Deviations

Alduti-Rupter Switches are offered with a choice of Cypoxy™ Insulator or porcelain station-post insulator. The standard insulator color is gray. When switches are to be provided with special insulators or special connectors, consult the nearest S&C Sales Office for availability.

Switches of a given voltage rating (except vertical-break style switches rated 25/34.5 kV or 34.5 kV, side-break integer style, vertical-break integer style, 46-kV double-break integer style, and 69-kV double-break style) can be furnished with insulators of the next higher voltage rating—add suffix “-Z3” to the catalog number.

Single- and two-pole group-operated switches are available.

- Single-pole (catalog number suffix “-P1”)
- Two-pole (catalog number suffix “-P2”)

Switches can be supplied with tin-plated terminal pads. To specify, add suffix “-Z5” to the catalog number.

Warranty Qualifications

The standard warranty contained in S&C's standard conditions of sale, as set forth in Price Sheet 150, does not apply when Alduti-Rupter Switches are power operated using a switch operator of non-S&C manufacture.

How To Order

Complete these steps to identify the base catalog number, ED number, accessories, standard minor modifications, and automation components for a complete order:

STEP 1. Obtain the catalog number of the desired switch from Table 4 on page 9 and page 10 through Table 12 on page 20. For integer-style switches, obtain the ED number in the mounting arrangements column in the associated table. For three-pole style switches, obtain the ED number from Information Bulletin 761-80.

Note: The ED string will be added as a separate line item on the order.

Catalog Number:
per ED:

STEP 2. Add suffix designations to the catalog number indicating the accessories desired, selected from Table 15 on page 23.

Suffix(es):

STEP 3. For three-pole double-break integer style switches: Add suffix designations to the catalog number indicating the automation components desired, selected from Table 16 on page 23.

Suffix(es):

STEP 4. If specification deviations are desired, such as switches furnished with insulators of the next-highest voltage rating, or single- or two-pole versions of three-pole switches, refer to the “Specification Deviations” section on page 3. Add any desired suffixes to the catalog number.

Suffix(es):

STEP 5. If a standard minor modification is desired, obtain the suffix of the desired modification from Table 14 on page 22. Add the suffix(es) to the ED number.

Suffix(es):

STEP 6. For vertical-break integer-style switches and double-break integer-style switches: If a mounting pedestal is desired, obtain the catalog number of the desired mounting pedestal from Table 13 on page 21. From

this same table, obtain the catalog number of the required anchor bolts. Order four anchor bolts per switch. Add the mounting pedestal and anchor bolts as separate line items on the order.

Mounting pedestal:

Anchor bolts:

STEP 7. If connectors are desired, obtain the catalog number of the desired connector from Table 17 on page 24. Add the connectors as a separate line item on the order.

Catalog Number:

Example: The catalog number, ED number, mounting pedestal, and anchor bolts for a 46-kV double-break integer style Alduti-Rupter Switch in the pedestal mounting configuration with Cypoxy Insulators, ice shields, six voltage and three current sensors, a 15-foot (457-cm) control cable, one Cypoxy Insulator in the vertical operating shaft, auxiliary contacts, provisions for power operation with a 6801M Automatic Switch Operator, a 12-foot (366-cm) mounting pedestal, and anchor bolts is:

Catalog Number:

Per ED:

Mounting pedestal:

Anchor bolts:

Note: If power operation or remote supervisory control are desired, a Type AS-1A, Type AS-10, Type LS-2, or 6801M Automatic Switch Operator may be added to switches in certain mounting arrangements. For integer-style switches and side-break standard-duty switches, mounting arrangements suitable for power operation are indicated in Table 4 on page 9 and page 10, Table 7 on page 14 and Table 8 on page 15 through page 16, and Table 11 on page 19. For ordering information on Types AS-1A and AS-10 Switch Operators, see Specification Bulletin 769-31. For ordering information on Type LS-2 Switch Operators, refer to Specification Bulletin 753-31. For ordering information on 6801M Automatic Switch Operators, see Specification Bulletin 1045M-31.

Note: Spare or replacement parts are ordered using the same method outlined above.

Table 1. Application Classifications (See symbols in the Applications column in Table 4 through Table 12)

Application			Maximum Inter- rupting Duty, ^① Amperes, RMS	Symbol			
Class		Qualifications		Single-Pole Switch		Three-Pole Switch	
				Solidly or Effectively ^② Grounded System	Ungrounded System	Solidly or Effectively ^② Grounded System	Ungrounded System
Trans- former switching	Parallel switching ^③		600●	A	A	A	A
	Load dropping and magnetizing current switching	Three-phase transformer (or three-phase bank of single-phase transformers) connected solidly grounded-wye on the primary (switch) side and delta on the secondary side	■▲	E	—	E	—
		All other connections of three-phase trans- formers (or three-phase banks of single-phase transformers)—including autotransformers	■	G	G	G	G
		Single-phase transformer connected phase-to- ground on the primary (switch) side	■	E	—	—	—
		Single-phase transformer connected phase-to- phase on the primary (switch) side	■	G	G	—	—
Line switching	Load splitting (parallel or loop switching)		600/1200◆	A	A	A	A
	Load dropping	Three-phase circuits with all load-side three- phase transformers (or three-phase banks of single-phase transformers) connected solidly grounded-wye on the primary (switch) side and delta on the secondary side, and all load-side single-phase transformers connected phase-to- ground on the primary (switch) side	600/1200◆	E	—	E	—
		Three-phase circuits with load-side transformers connected other than as described above	600/1200◆	G	G	G	G
		Single-phase circuits with all load-side trans- formers connected phase-to-ground on the primary (switch) side	600/1200◆	E	—	—	—
		Single-phase circuits with load-side transformers connected other than as described above	600/1200◆	G	G	—	—
	Line dropping		▼	K	L	K	L

① Lower values may apply for conditional applications. Refer to Table 2 on page 7.

② X0/X1 from 0 to +3.0 and R0/X1 from 0 to +1.0.

③ Applies to switching of the primary of a transformer that remains energized from the secondary bus or to disconnecting of a loaded secondary bus from one of two transformers supplying that bus while the primary side of the transformer remains energized.

● For higher current applications, contact your nearest S&C Sales Office.

■ Alduti-Rupter Switches will drop loads through 600 or 1200 amperes, depending upon their continuous rating, and will switch magnetizing currents associated with such loads.

▲ Alduti-Rupter Switches rated 2400 amperes continuous will drop loads of 1600 amperes and switch all associated magnetizing currents.

◆ Depending upon continuous rating of switch.

▼ 20 miles (32 km) of line for all vertical-break integer style switches and for vertical-break style, side-break heavy-duty style, and side-break integer style switches rated 25/34.5 kV and 34.5 kV where maximum operating voltage (line-to-line) exceeds 29.0 kV; 100 miles (161 km) of line for these and all other switches where maximum operating voltage does not exceed 29.0 kV.

□ 12 miles (19 km) of No. 1/0 cable (53.5 mm²), or 5 miles (8 km) of 1000 kc mil (507 mm²) cable, or equivalent, for all vertical-break integer style switches and for vertical-break style, side-break heavy-duty style, and side-break integer style switches rated 25/34.5 kV and 34.5 kV; 80 miles (129 km) of No. 1/0 cable (53.5 mm²), or 30 miles (48 km) of 1000 kc mil (507 mm²) cable, or equivalent, for all other switches.

△ For all vertical-break integer style switches and for all vertical-break style, side-break heavy-duty style, and side-break integer style switches rated 25/34.5 kV and 34.5 kV, contact your nearest S&C Sales Office; 100 amperes for all other switches.

TABLE CONTINUED ►

Application Classifications

Table 1. Application Classifications (See symbols in the Applications column in Table 4 through Table 12)—Continued

Application			Maximum Interrupting Duty, ^① Amperes, RMS	Symbol			
Class							

① Lower values may apply for conditional applications. Refer to Table 2 on page 7.

② X0/X1 from 0 to +3.0 and R0/X1 from 0 to +1.0.

③ Applies to switching of the primary of a transformer that remains energized from the secondary bus or to disconnecting of a loaded secondary bus from one of two transformers supplying that bus while the primary side of the transformer remains energized.

● For higher current applications, contact your nearest S&C Sales Office.

■ Alduti-Rupter Switches will drop loads through 600 or 1200 amperes, depending upon their continuous rating, and will switch magnetizing currents associated with such loads.

▲ Alduti-Rupter Switches rated 2400 amperes continuous will drop loads of 1600 amperes and switch all associated magnetizing currents.

◆ Depending upon continuous rating of switch.

▼ 20 miles (32 km) of line for all vertical-break integer style switches and for vertical-break style, side-break heavy-duty style, and side-break integer style switches rated 25/34.5 kV and 34.5 kV where maximum operating voltage (line-to-line) exceeds 29.0 kV; 100 miles (161 km) of line for these and all other switches where maximum operating voltage does not exceed 29.0 kV.

□ 12 miles (19 km) of No. 1/0 cable (53.5 mm²), or 5 miles (8 km) of 1000 kc mil (507 mm²) cable, or equivalent, for all vertical-break integer style switches and for vertical-break style, side-break heavy-duty style, and side-break integer style switches rated 25/34.5 kV and 34.5 kV; 80 miles (129 km) of No. 1/0 cable (53.5 mm²), or 30 miles (48 km) of 1000 kc mil (507 mm²) cable, or equivalent, for all other switches.

△ For all vertical-break integer style switches and for all vertical-break style, side-break heavy-duty style, and side-break integer style switches rated 25/34.5 kV and 34.5 kV, contact your nearest S&C Sales Office; 100 amperes for all other switches.

Table 2. Conditional Applications (See symbols in parentheses in the Applications column in Table 4 through Table 12)

Alduti-Rupter Switch		Application Symbol	Maximum Operating Voltage Line-to-Line, kV ^①	Maximum Interrupting Duty
Style	Voltage Rating, kV			
Three-pole vertical-break, three-pole vertical-break integer, and three-pole side-break (heavy-duty, standard-duty, and integer)	14.4	L	Over 12.0 and up through 17.0	Line dropping only
	25	G	Over 22.0 and up through 27.0	●
		H	Over 22.8 and up through 27.0	■
		K	Over 19.0 and up through 27.0	Line dropping only■
		L	Over 12.0 and up through 27.0	Line dropping only
	25/34.5 34.5	G	Over 22.0 and up through 29.0	●
			Over 29.0 and up through 38.0	▲
Single-pole heavy-duty	14.4	L	Over 15.5 and up through 17.0	Line dropping only
	25	G	Over 22.0 and up through 27.0	600 amperes◆
		H	Over 22.8 and up through 27.0	■
		K	Over 19.0 and up through 27.0	Line dropping only■
		L	Over 15.5 and up through 27.0	Line dropping only

① Where maximum operating voltage for a conditional application is lower than the lowest range listed, refer to Table 1 on page 5 for applicable maximum interrupting duty values.

● 1200 amperes load dropping for switches rated 1200 amperes continuous where the system is solidly grounded and not less than 50% of the load is served by transformers connected according to the qualifications of application "E" (see Table 1 on page 5); 900 amperes load dropping for switches rated 1200 amperes continuous in all other applications. Alduti-Rupter Switches will switch magnetizing currents associated with these loads.

■ Three-pole vertical-break, three-pole side-break heavy-duty, three-pole side-break standard-duty, and single-pole heavy-duty styles may be applied for cable dropping (charging current) of 3 miles (4.8 km) of No. 1/0 cable (53.5 mm²), or 1.2 miles (1.9 km) of 1000 kc mil (507 mm²) cable, or equivalent, provided phase spacing is 55 inches (140 cm) minimum and mounting configuration is upright or vertical. Three-pole side-break integer styles, catalog numbers 137813R9 and 137813R9-E, may also be so applied.

▲ 900 amperes load dropping for switches rated 1200 amperes continuous. Alduti-Rupter Switches will switch magnetizing currents associated with these loads.

◆ Applies to load dropping. Alduti-Rupter Switches will switch magnetizing currents associated with these loads.

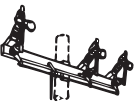
Table 3. 34.5-kV Three-Pole Double-Break Style Switches and 46-kV Switches—Interrupting Ratings

Application Class		Maximum Amperes
Transformer switching	Parallel switching ^①	630
	Load dropping ^②	630
Line switching	Load splitting (parallel or loop switching)	630
	Load dropping	630
	Line dropping	15
Cable switching	Load splitting (parallel or loop switching)	630
	Load dropping	630
	Cable dropping (charging current)	50

① Applies to the switching of the primary of a transformer that remains energized from the secondary bus or to the disconnecting of a loaded secondary bus from one of the two transformers supplying that bus while the primary side of the transformer remains energized.

② Alduti-Rupter Switches can also switch the magnetizing currents associated with such loads.

Table 4. Alduti-Rupter Switches—Three-Pole Side-Break Integer Style, with steel bases^①

Mounting Configuration	Mounting Arrangements②③	Rating						Applications⑤ (see Table 1 and Table 2 on pages 5 through 7)	Station Post Insulators		Page Reference for Dimensional Information
		kV			Amperes, RMS				Cypoxy Catalog Number	Porcelain Catalog Number	
		Nom.	Max	BIL	Cont.	Inter-rupting	Mom. (Asym.) ④				
Vertical, clockwise opening⑥⑦ 	ED-140R21	14.4	17.0	110	1200	1200	40000	AEGHK(L)	137612R6-E●	137612R6●	26
		25	27	150	1200	1200	40000	AE(GHKL)	137613R9-E●	137613R9●	
	ED-672R4	25/34.5	38	150	600	600	40000	AEGHKL	137167R1-E■▲	137167R1■	
		34.5	38	200	600	600	40000	AEGHKL	137164R1-E■	137164R1■	
		34.5	38	200	1200	1200	40000	AE(G)HKL	147164-E■	147164■	
Upright, clockwise opening⑥⑦⑧ 	ED-136R20	14.4	17.0	110	1200	1200	40000	AEGHK(L)	137412R8-E●	137412R8●	28
		25	27	150	1200	1200	40000	AE(GHKL)	137413R9-E●	137413R9●	
	ED-667R3	25/34.5	38	150	600	600	40000	AEGHKL	137367R3-E■▲	137367R3■	30
		34.5	38	200	600	600	40000	AEGHKL	137364R3-E■	137364R■	
		34.5	38	200	1200	1200	40000	AE(G)HKL	147364-E■	147364■	

① The switches shown include the appropriate set of operating-mechanism components as specified on the ED for the switch. Switches do not include connectors (refer to Table 17 on page 24).

② The applicable standard mounting arrangement, designated by the ED number shown, should be specified when ordering. The “-S” suffixes in parentheses identify available standard minor modifications to the basic ED. The applicable standard minor modifications may be specified by adding the appropriate suffix to the ED number. Refer to Table 14 on page 22 for description. Special minor modifications and special mounting arrangements are not available for these switches.

③ Refer to the erection drawings for mounting dimensions and heights.

④ The 3-second rating is 25,000 amperes, RMS, symmetrical.

⑤ Applications indicated by symbols in parentheses are conditional. Refer to Table 2 on page 7.

⑥ Optional crossarm braces SDA-10367-1 are recommended for switches in the vertical mounting configuration and SDA-10367 for switches in the upright mounting configuration.

⑦ Bracket assemblies for mounting either three or six surge arresters can be provided by adding suffix “-A1” or “-A2” respectively to the catalog number of the switch.

⑧ These switches include dead-ending brackets as standard.

Extension-link assemblies can be provided by adding suffix “-D” to the catalog number of the switch. Maximum dead-end loading: 2000 pounds (907 kg) per conductor where pull-off forces are applied to only one side of the switch; 8000 pounds (3629 kg) per conductor where equal pull-off forces are applied to both sides of the switch.

● This switch includes two-hole terminal pads as standard. If four-bolt connectors are required, specify the two- to four-bolt adapter catalog number MDA-1162-1 and the four-bolt connector catalog number 4569R1-B. Refer to Table 17 on page 24 for more information.

■ This switch has a one-time duty-cycle fault-closing rating of 15,000 amperes, RMS, asymmetrical when operated by the applicable S&C switch operator—or a one-time duty-cycle fault-closing capability of 15,000 amperes, RMS, asymmetrical as a manually operated switch (without quick-make mechanism and when operated vigorously through its full travel without hesitation at any point). These values represent the level of available fault current into which the switch can be closed once, with the switch remaining operable and able to carry and interrupt rated continuous current.

▲ Applicable at 34.5 kV where leakage distance to ground meets user's requirements. For 25/34.5-kV Cypoxy station-post insulators the leakage distance is 26¼ inches (667 mm).

TABLE CONTINUED ►

Table 4. Alduti-Rupter Switches—Three-Pole Side-Break Integer Style, with steel bases^①—Continued

Mounting Configuration	Mounting Arrangements②③	Rating						Applications⑤ (see Table 1 and Table 2 on pages 5 through 7)	Station Post Insulators		Page Reference for Dimensional Information
		kV			Amperes, RMS				Cypoxy Catalog Number	Porcelain Catalog Number	
		Nom.	Max	BIL	Cont.	Interrupting	Mom. (Asym.)④				
 Upright, clockwise opening⑥⑦⑧ (extra mounting-pole clearance)	ED-136R20	14.4	17.0	110	1200	1200	40000	AEGHK(L)	138412R2-E●	138412R2●	28
		25	27	150	1200	1200	40000	AE(GHKL)	138413R2-E●	138413R2●	
 Upright, counterclockwise opening⑥⑦⑧	ED-135R20	14.4	17.0	110	1200	1200	40000	AEGHK(L)	137512R8-E●	137512R8●	30
		25	27	150	1200	1200	40000	AE(GHKL)	137513R9-E●	137513R9●	
	ED-669R3	25/34.5	38	150	600	600	40000	AEGHKL	137467R3-E■▲	137467R3■	
		34.5	38	200	600	600	40000	AEGHKL	137464R3-E■	137464R3■	
		34.5	38	200	1200	1200	40000	AE(G)HKL	147464-E■	147464■	
 Tiered-out-board, clockwise opening⑦⑧	ED-144R19	14.4	17.0	110	1200	1200	40000	AEGHK(L)	137812R7-E●	137812R7●	32
		25	27	150	1200	1200	40000	AE(GHKL)	137813R9-E●	137813R9●	
	ED-676R3	25/34.5	38	150	600	600	40000	AEGHKL	137767R3-E■▲	137767R3■	
		34.5	38	200	600	600	40000	AEGHKL	137764R3-E■	137764R3■	
		34.5	38	200	1200	1200	40000	AE(G)HKL	147764-E■	147764■	

① The switches shown include the appropriate set of operating-mechanism components as specified on the ED for the switch. Switches do not include connectors (refer to Table 17 on page 24).

② The applicable standard mounting arrangement, designated by the ED number shown, should be specified when ordering. The “-S” suffixes in parentheses identify available standard minor modifications to the basic ED. The applicable standard minor modifications may be specified by adding the appropriate suffix to the ED number. Refer to Table 14 on page 22 for description. Special minor modifications and special mounting arrangements are not available for these switches.

③ Refer to the erection drawings for mounting dimensions and heights.

④ The 3-second rating is 25,000 amperes, RMS, symmetrical.

⑤ Applications indicated by symbols in parentheses are conditional. Refer to Table 2 on page 7.

⑥ Optional crossarm braces SDA-10367-1 are recommended for switches in the vertical mounting configuration and SDA-10367 for switches in the upright mounting configuration.

⑦ Bracket assemblies for mounting either three or six surge arresters can be provided by adding suffix “-A1” or “-A2” respectively to the catalog number of the switch.

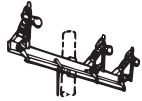
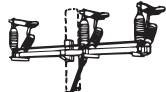
⑧ These switches include dead-ending brackets as standard. Extension-link assemblies can be provided by adding suffix “-D” to the catalog number of the switch. Maximum dead-end loading: 2000 pounds (907 kg) per conductor where pull-off forces are applied to only one side of the switch; 8000 pounds (3629 kg) per conductor where equal pull-off forces are applied to both sides of the switch.

● This switch includes two-hole terminal pads as standard. If four-bolt connectors are required, specify the two- to four-bolt adapter catalog number MDA-1162-1 and the four-bolt connector catalog number 4569R1-B. Refer to Table 17 on page 24 for more information.

■ This switch has a one-time duty-cycle fault-closing rating of 15,000 amperes, RMS, asymmetrical when operated by the applicable S&C switch operator—or a one-time duty-cycle fault-closing capability of 15,000 amperes, RMS, asymmetrical as a manually operated switch (without quick-make mechanism and when operated vigorously through its full travel without hesitation at any point). These values represent the level of available fault current into which the switch can be closed once, with the switch remaining operable and able to carry and interrupt rated continuous current.

▲ Applicable at 34.5 kV where leakage distance to ground meets user's requirements. For 25/34.5-kV Cypoxy station-post insulators the leakage distance is 26¼ inches (667 mm).

Table 5. Alduti-Rupter Switches—Three-Pole Side-Break Integer Style, with insulated bases^{①②③}

Mounting Configuration	Mounting Arrangements④⑤	Rating						Applications⑦ (see Table 1 and Table 2 on pages 5 through 7)	Station Post Insulators		Page Reference for Dimensional Information
		kV			Amperes, RMS				Cypoxy Catalog Number	Porcelain Catalog Number	
		Nom.	Max	BIL	Cont.	Inter-rupting	Mom. (Asym.)⑥				
Vertical, clockwise opening⑧⑨ 	ED-640R5	14.4	17.0	110	1200	1200	40000	AEGHK(L)	137192R2-E●	137192R2●	26
		25	27	150	1200	1200	40000	AE(GHKL)	137193R9-E●	137193R9●	
	ED-642R4	34.5	38	200	600	600	40000	AEGHKL	137194R1-E■	137194R1■	
		34.5	38	200	1200	1200	40000	AE(G)HKL	147194-E	147194	
Upright, clockwise opening⑧⑨⑩ 	ED-636R4	14.4	17.0	110	1200	1200	40000	AEGHK(L)	137392R2-E●	137392R2●	28
		25	27	150	1200	1200	40000	AE(GHKL)	137393R9-E●	137393R9●	
	ED-637R3	34.5	38	200	600	600	40000	AEGHKL	137394R1-E■	137394R1■	30
		34.5	38	200	1200	1200	40000	AE(G)HKL	147394-E■	147394■	

① The switches shown include the appropriate set of operating-mechanism components as specified on the ED for the switch. Switches do not include connectors (refer to Table 17 on page 24).

② Base is a fiberglass-reinforced pultruded structural tube especially constructed for high strength and is finished with a coat of gray polyurethane enamel.

③ Fiberglass interphase shaft is standard with this style.

④ The applicable standard mounting arrangement, designated by the ED number shown, should be specified when ordering. The “-S” suffixes in parentheses identify available standard minor modifications to the basic ED. The applicable standard minor modifications may be specified by adding the appropriate suffix to the ED number. Refer to Table 14 on page 22 for description. Special minor modifications and special mounting arrangements are not available for these switches.

⑤ Refer to erection drawings for mounting dimensions and heights.

⑥ The 3-second rating is 25,000 amperes, RMS, symmetrical.

⑦ Applications indicated by symbols in parentheses are conditional. Refer to Table 2 on page 7.

⑧ Optional crossarm braces SDA-10367-1 are recommended for switches in the vertical mounting configuration and SDA-10367 for switches in the upright mounting configuration. Crossarm provisions 5053 are available when crossarms are supplied by the customer.

⑨ Bracket assemblies for mounting either three or six surge arresters can be provided by adding suffix “-A1” or “-A2” respectively to the catalog number of the switch.

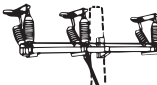
⑩ For provisions only for dead-ending, add suffix “-C” to the catalog number of the switch. Maximum dead-end loading: 700 pounds (318 kg) per conductor where pull-off forces are applied to only one side of the switch; 8000 pounds (3629 kg) per conductor where equal pull-off forces are applied to both sides of the switch. Also specify, if required, one set of six extension-link assemblies by adding suffix “-D” to the catalog number of the switch; i.e. catalog number 137392R1-CD.

● This switch includes two-hole terminal pads as standard. If four-bolt connectors are required, specify the two-to-four bolt adapter catalog number MDA-1162-1 and the four-bolt connector catalog number 4569R1-B. Refer to Table 17 on page 24 for more information.

■ This switch has a one-time duty-cycle fault-closing rating of 15,000 amperes, RMS, asymmetrical when operated by the applicable S&C switch operator—or a one-time duty-cycle fault-closing capability of 15,000 amperes, RMS, asymmetrical as a manually operated switch (without quick-make mechanism and when operated vigorously through its full travel without hesitation at any point). These values represent the level of available fault current into which the switch can be closed once, with the switch remaining operable and able to carry and interrupt rated continuous current.

TABLE CONTINUED ►

Table 5. Alduti-Rupter Switches—Three-Pole Side-Break Integer Style, with insulated bases^{①②③}—Continued

Mounting Configuration	Mounting Arrangements④⑤	Rating						Applications⑦ (see Table 1 and Table 2 on pages 5 through 7)	Station Post Insulators		Page Reference for Dimensional Information
		kV			Amperes, RMS				Cypoxy Catalog Number	Porcelain Catalog Number	
		Nom.	Max	BIL	Cont.	Inter-rupting	Mom. (Asym.)⑥				
Upright, clockwise opening⑧⑨⑩ (extra mounting-pole clearance) 	ED-636R4	14.4	17.0	110	1200	1200	40000	AEGHK(L)	138392R2-E●	138392R2●	28
		25	27	150	1200	1200	40000	AE(GHKL)	138393R2-E●	138393R2●	
Upright, counterclockwise opening⑧⑨⑩ 	ED-635R4	14.4	17.0	110	1200	1200	40000	AEGHK(L)	137492R2-E●	137492R2●	30
		25	27	150	1200	1200	40000	AE(GHKL)	137493R9-E●	137493R9●	
	ED-639R3	34.5	38	200	600	600	40000	AEGHKL	137494R1-E■	137494R1■	
		34.5	38	200	1200	1200	40000	AE(G)HKL	147494-E■	147494■	
Tiered-outboard, clockwise opening⑨⑩ 	ED-644R2	14.4	17.0	110	1200	1200	40000	AEGHK(L)	137792R2-E●	137792R2●	32
		25	27	150	1200	1200	40000	AE(GHKL)	137793R9-E●	137793R9●	

① The switches shown include the appropriate set of operating-mechanism components as specified on the ED for the switch. Switches do not include connectors (refer to Table 17 on page 24).

② Base is a fiberglass-reinforced pultruded structural tube especially constructed for high strength and is finished with a coat of gray polyurethane enamel.

③ Fiberglass interphase shaft is standard with this style.

④ The applicable standard mounting arrangement, designated by the ED number shown, should be specified when ordering. The “-S” suffixes in parentheses identify available standard minor modifications to the basic ED. The applicable standard minor modifications may be specified by adding the appropriate suffix to the ED number. Refer to Table 14 on page 22 for description. Special minor modifications and special mounting arrangements are not available for these switches.

⑤ Refer to erection drawings for mounting dimensions and heights.

⑥ The 3-second rating is 25,000 amperes, RMS, symmetrical.

⑦ Applications indicated by symbols in parentheses are conditional. Refer to Table 2 on page 7.

⑧ Optional crossarm braces SDA-10367-1 are recommended for switches in the vertical mounting configuration and SDA-10367 for switches in the upright mounting configuration. Crossarm provisions 5053 are available when crossarms are supplied by the customer.

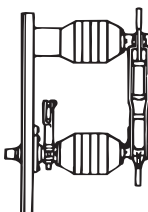
⑨ Bracket assemblies for mounting either three or six surge arresters can be provided by adding suffix “-A1” or “-A2” respectively to the catalog number of the switch.

⑩ For provisions only for dead-ending, add suffix “-C” to the catalog number of the switch. Maximum dead-end loading: 700 pounds (318 kg) per conductor where pull-off forces are applied to only one side of the switch; 8000 pounds (3629 kg) per conductor where equal pull-off forces are applied to both sides of the switch. Also specify, if required, one set of six extension-link assemblies by adding suffix “-D” to the catalog number of the switch; i.e. catalog number 137392R1-CD.

● This switch includes two-hole terminal pads as standard. If four-bolt connectors are required, specify the two-to-four bolt adapter catalog number MDA-1162-1 and the four-bolt connector catalog number 4569R1-B. Refer to Table 17 on page 24 for more information.

■ This switch has a one-time duty-cycle fault-closing rating of 15,000 amperes, RMS, asymmetrical when operated by the applicable S&C switch operator—or a one-time duty-cycle fault-closing capability of 15,000 amperes, RMS, asymmetrical as a manually operated switch (without quick-make mechanism and when operated vigorously through its full travel without hesitation at any point). These values represent the level of available fault current into which the switch can be closed once, with the switch remaining operable and able to carry and interrupt rated continuous current.

Table 6. Alduti-Rupter Switches—Three-Pole Side-Break Heavy-Duty Style^①

Illustration	Mounting Configuration②③	Rating						Applications⑤ (see Table 1 and Table 2 on pages 5 through 7)	Station Post Insulators		Page Reference for Dimensional Information
		kV			Amperes, RMS				Cypoxy Catalog Number⑥	Porcelain Catalog Number⑥	
		Nom.	Max	BIL	Cont.	Inter-rupting	Mom. (Asym.)④				
	Vertical or upright, clock-wise opening	14.4	17.0	110	600	600	40000	AEGHK(L)	137012R3-E●	137012R3●	34
		25	27	150	600	600	40000	AEG(HKL)	137013R7-E●	137013R7●	
	Vertical or upright,⑦ clock-wise opening	34.5	38	200	600	600	40000	AEGHKL	138114R1-E●	138114R1●	35
		34.5	38	200	1200	1200	40000	AE(G)HKL	158114-E	158114	
	Vertical or upright, counterclockwise opening	14.4	17.0	110	600	600	40000	AEGHK(L)	137212R3-E●	137212R3●	34
		25	27	150	600	600	40000	AEG(HKL)	137213R7-E●	137213R7●	
	Vertical or upright,⑦ counterclockwise opening	34.5	38	200	600	600	40000	AEGHKL	138314R1-E●	138314R1●	35
		34.5	38	200	1200	1200	40000	AE(G)HKL	158314-E	158314	

① The switches shown include the appropriate set of operating-mechanism components as specified on the ED for the switch. Switches do not include connectors (refer to Table 17 on page 24).

② Switches are available in a variety of standard mounting arrangements, designated by ED number, as described in Information Bulletin 761-80. Specify the applicable ED number when ordering.

③ Refer to erection drawings for mounting dimensions and heights.

④ The 3-second rating is 25,000 amperes, RMS, symmetrical.

⑤ Applications indicated by symbols in parentheses are conditional. Refer to Table 2 on page 7.

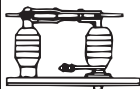
⑥ Standard minor modifications of the standard mounting arrangement(s) for these switches are listed in Table 14 on page 22. The

applicable standard minor modifications listed may be specified by adding the appropriate “-S” suffix to the ED number. Refer to page 2 for special minor modifications and special mounting arrangements for these switches.

⑦ Three-pole side-break heavy-duty style switches rated 34.5 kV, while provided with design features for fault closing, are not assigned fault-closing ratings or capabilities because special mounting arrangements may deny the requisite high-speed closing behavior.

● 1200-A cont./interrupting versions of these are available in some mounting arrangements. When ordered at 1200 A, application class “G” will then become conditional “(G)” for these switches. See Table 2 on page 7 for an explanation of conditional applications.

Table 7. Alduti-Rupter Switches—Three-Pole Side-Break Standard-Duty Style^①

Illustration	Mounting Configuration②③	Rating						Applications⑤ (see Table 1 and Table 2 on pages 5 through 7)	Station Post Insulators		Page Reference for Dimensional Information
		kV			Amperes, RMS				Cypoxy Catalog Number	Porcelain Catalog Number	
		Nom.	Max	BIL	Cont.	Interrupting	Mom. (Asym.)④				
	Upright, counter-clockwise opening	14.4	17.0	110	600	600	40000	AEGHK(L)	137232R1-E	137232R1	36

^① The switches shown include the appropriate set of operating-mechanism components as specified on the ED for the switch. Switches do not include connectors (refer to Table 17 on page 24).

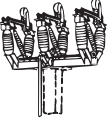
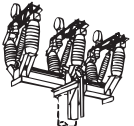
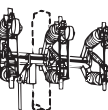
^② Switches are available in a variety of standard mounting arrangements, designated by ED number, as described in Information Bulletin 761-80. Specify the applicable ED number when ordering.

^③ Refer to erection drawings for mounting dimensions and heights.

^④ The 3-second rating is 25,000 amperes, RMS, symmetrical.

^⑤ Applications indicated by symbols in parentheses are conditional. Refer to Table 2 on page 7.

Table 8. Alduti-Rupter Switches—Three-Pole Vertical-Break Integer Style^①

Mounting Configuration	Mounting Arrangements②③	Rating						Applications⑥ (see Table 1 and Table 2 on pages 5 through 7)	Station Post Insulators		Page Reference for Dimensional Information
		kV			Amperes, RMS				Cypoxy Catalog Number	Porcelain Catalog Number	
		Nom.	Max	BIL	Cont.	Inter-rupting	Mom. (Asym.)④⑤				
 Pedestal⑦⑧⑩	ED-151R1	25/34.5	38	150	600	600	40000	AEGHKL	135614R2-E	135614R2	37
		25/34.5	38	150	1200	1200	40000	AE(G)HKL	135814R2-E	135814R2	
		34.5	38	200	600	600	40000	AEGHKL	135714R2-E	135714R2	
		34.5	38	200	1200	1200	40000	AE(G)HKL	135914R2-E	135914R2	
 Pole-top⑨⑩⑪	ED-152R3	25/34.5	38	150	600	600	40000	AEGHKL	135624R2-E●	135624R2	38
		25/34.5	38	150	1200	1200	40000	AE(G)HKL	135824R2-E●	135824R2	
		34.5	38	200	600	600	40000	AEGHKL	135724R2-E	135724R2	
		34.5	38	200	1200	1200	40000	AE(G)HKL	135924R2-E	135924R2	
 Upright⑨⑩⑪	ED-153R5	25/34.5	38	150	600	600	40000	AEGHKL	135634R2-E●	135634R2	39
		25/34.5	38	150	1200	1200	40000	AE(G)HKL	135834R2-E●	135834R2	
		34.5	38	200	600	600	40000	AEGHKL	135734R2-E	135734R2	
		34.5	38	200	1200	1200	40000	AE(G)HKL	135934R2-E	135934R2	
 Vertical⑩⑪	ED-154R5	25/34.5	38	150	600	600	40000	AEGHKL	135644R2-E●	135644R2	40
		25/34.5	38	150	1200	1200	40000	AE(G)HKL	135844R2-E●	135844R2	
		34.5	38	200	600	600	40000	AEGHKL	135744R2-E	135744R2	
		34.5	38	200	1200	1200	40000	AE(G)HKL	135944R2-E	135944R2	

① The switches shown include the appropriate set of operating-mechanism components as specified on the ED for the switch. Switches do not include connectors (refer to Table 17 on page 24).

② The applicable standard mounting arrangement, designated by the ED number shown, should be specified when ordering. The “-S” suffixes in parentheses identify available standard minor modifications to the basic ED. The applicable standard minor modifications may be specified by adding the appropriate suffix to the ED number. Refer to Table 14 on page 22. Special minor modifications and special mounting arrangements are not available for these switches.

③ Refer to erection drawings for mounting dimensions and heights.

④ The 3-second rating for 600- and 1200-ampere switches is 25,000 amperes, RMS, symmetrical.

⑤ The one-time duty-cycle fault closing capability for a manually operated three-pole vertical-break integer style switch (without quick-make mechanism, and when operated vigorously through its full travel without hesitation at any point) for 600-ampere and 1200-ampere switches is 20,000 amperes and 30,000 amperes, RMS, asymmetrical, respectively. The one-time duty-cycle fault-closing rating for 600-ampere and 1200-ampere switches is 20,000 amperes and 30,000 amperes, RMS, asymmetrical respectively when switches are operated by the applicable S&C switch operator. The one-time duty-cycle fault-closing rating defines the level of available fault current into which the switch can

be closed once, with the switch remaining operable and able to carry and interrupt rated continuous current.

⑥ Applications indicated by symbols in parentheses are conditional. Refer to Table 2 on page 7.

⑦ No provisions for dead-ending are offered since the mounting pedestals are not intended for such duty.

⑧ Select mounting pedestal from Table 13 on page 21.

⑨ These switches include dead-ending brackets as standard. Maximum dead-end loading: 2000 pounds (907 kg) per conductor where pull-off forces are applied to only one side of the switch; 8000 pounds (3629 kg) per conductor where equal pull-off forces are applied to both sides of the switch. If required, order one set of six extension-link assemblies by adding suffix “-D” to the catalog number of the switch.

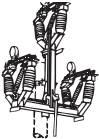
⑩ Bracket assemblies for mounting either three or six surge arresters can be provided by adding suffix “-A1” or “-A2” respectively to the catalog number of the switch.

⑪ Optional crossarm braces SDA-10367-1 are recommended for switches in the vertical mounting configuration and SDA-10367 for switches in the upright mounting configuration.

● Applicable at 34.5 kV where leakage distance to ground meets user's requirements. For 25/34.5-kV Cypoxy station-post insulators the leakage distance is 26¼ inches (667 mm).

TABLE CONTINUED ►

Table 8. Alduti-Rupter Switches—Three-Pole Vertical-Break Integer Style^①—Continued

Mounting Configuration	Mounting Arrangements ^{②③}	Rating						Applications ^⑥ (see Table 1 and Table 2 on pages 5 through 7)	Station Post Insulators		Page Reference for Dimensional Information
		kV			Amperes, RMS				Cyproxy Catalog Number	Porcelain Catalog Number	
		Nom.	Max	BIL	Cont.	Inter-rupting	Mom. (Asym.) ^{④⑤}				
Tiered-out-board^{⑨⑩} 	ED-155R6	25/34.5	38	150	600	600	40000	AEGHKL	135654R2-E●	135654R2	41
		34.5	38	200	600	600	40000	AEGHKL	135754R2-E	135754R2	
		34.5	38	200	1200	1200	40000	AE(G)HKL	135954R2-E	135954R2	
Triangular^{⑨⑩} 	ED-156R5	25/34.5	38	150	600	600	40000	AEGHKL	135664R2-E●	135664R2	42
		34.5	38	200	600	600	40000	AEGHKL	135764R2-E	135764R2	
		34.5	38	200	1200	1200	40000	AE(G)HKL	135964R2-E	135964R2	

① The switches shown include the appropriate set of operating-mechanism components as specified on the ED for the switch. Switches do not include connectors (refer to Table 17 on page 24).

② The applicable standard mounting arrangement, designated by the ED number shown, should be specified when ordering. The “-S” suffixes in parentheses identify available standard minor modifications to the basic ED. The applicable standard minor modifications may be specified by adding the appropriate suffix to the ED number. Refer to Table 14 on page 22. Special minor modifications and special mounting arrangements are not available for these switches.

③ Refer to erection drawings for mounting dimensions and heights.

④ The 3-second rating for 600- and 1200-ampere switches is 25,000 amperes, RMS, symmetrical.

⑤ The one-time duty-cycle fault closing capability for a manually operated three-pole vertical-break integer style switch (without quick-make mechanism, and when operated vigorously through its full travel without hesitation at any point) for 600-ampere and 1200-ampere switches is 20,000 amperes and 30,000 amperes, RMS, asymmetrical, respectively. The one-time duty-cycle fault-closing rating for 600-ampere and 1200-ampere switches is 20,000 amperes and 30,000 amperes, RMS, asymmetrical respectively when switches are operated by the applicable S&C switch operator. The one-time duty-cycle fault-closing rating defines the level of available fault current into which the switch can

be closed once, with the switch remaining operable and able to carry and interrupt rated continuous current.

⑥ Applications indicated by symbols in parentheses are conditional. Refer to Table 2 on page 7.

⑦ No provisions for dead-ending are offered since the mounting pedestals are not intended for such duty.

⑧ Select mounting pedestal from Table 13 on page 21.

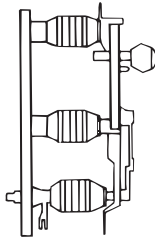
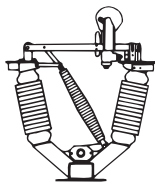
⑨ These switches include dead-ending brackets as standard. Maximum dead-end loading: 2000 pounds (907 kg) per conductor where pull-off forces are applied to only one side of the switch; 8000 pounds (3629 kg) per conductor where equal pull-off forces are applied to both sides of the switch. If required, order one set of six extension-link assemblies by adding suffix “-D” to the catalog number of the switch.

⑩ Bracket assemblies for mounting either three or six surge arresters can be provided by adding suffix “-A1” or “-A2” respectively to the catalog number of the switch.

⑪ Optional crossarm braces SDA-10367-1 are recommended for switches in the vertical mounting configuration and SDA-10367 for switches in the upright mounting configuration.

● Applicable at 34.5 kV where leakage distance to ground meets user's requirements. For 25/34.5-kV Cypoxy station-post insulators the leakage distance is 26¼ inches (667 mm).

Table 9. Alduti-Rupter Switches—Three-Pole Vertical-Break Style^①

Illustration	Mounting Configuration②③	Rating						Applications⑤ (see Table 1 and Table 2 on pages 5 through 7)	Station Post Insulators		Page Reference for Dimensional Information
		kV			Amperes, RMS				Cypoxy Catalog Number⑥	Porcelain Catalog Number⑥	
		Nom.	Max	BIL	Cont.	Inter-rupting	Mom. (Asym.)④				
	Vertical or upright	14.4	17.0	110	600	600	40000	AEGHK(L)	135012R4-E	135012R4	43
		14.4	17.0	110	1200	1200	61 000	AEGHK(L)	320222R9-E	320222R9	
		25	27	150	600	600	40000	AEG(HKL)	135013R5-E	135013R5	
		25	27	150	1200	1200	61 000	AE(GHKL)	320223R9-E	320223R9	
	Vertical⑦	14.4	17.0	200	2400	1600	40000	AEGHKL	135072R2-E●■	135072R2●■	44
		25/34.5	38	150	1200	1200	40000	AE(G)HKL	135894R3-E▲	135894R3	45
		34.5	38	200	600	600	40000	AEGHKL	135794R3-E	135794R3	
		34.5	38	200	1200	1200	40000	AE(G)HKL	135994R3-E	135994R3	
	Upright⑦	14.4	17.0	200	2400	1600	40000	AEGHKL	135092R2-E●■	135092R2●■	44
		25/34.5	38	150	1200	1200	40000	AE(G)HKL	135874R3-E▲	135874R3	45
		34.5	38	200	600	600	40000	AEGHKL	135774R3-E	135774R3	
		34.5	38	200	1200	1200	40000	AE(G)HKL	135974R3-E	135974R3	

① The switches shown include the appropriate set of operating-mechanism components as specified on the ED for the switch. Switches do not include connectors (refer to Table 17 on page 24).

② Switches are available in a variety of standard mounting arrangements, designated by ED number, as described in Information Bulletin 761-80. Specify the applicable ED number when ordering.

③ Refer to erection drawings for mounting dimensions and heights.

④ The 3-second ratings at 14.4 kV and 25 kV for 600- and 1200-ampere switches are 25,000 and 40,000 amperes, RMS, symmetrical, respectively, except for the 25/34.5-kV and 34.5-kV switches which have a 3-second rating of 25,000 amperes, RMS, symmetrical.

⑤ Applications indicated by symbols in parentheses are conditional. Refer to Table 2 on page 7.

⑥ Standard minor modifications of the standard mounting arrangement(s) for these switches are listed in Table 14 on page 22. The applicable standard minor modifications listed may be specified by adding the appropriate “-S” suffix to the ED number. Refer to page 2

for special minor modifications and special mounting arrangements for these switches.

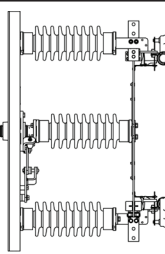
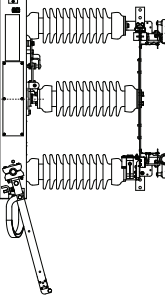
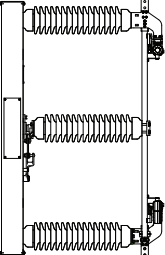
⑦ Three-pole vertical-break style switches rated 25/34.5 kV and 34.5 kV, while provided with design features for fault closing, are not assigned fault-closing ratings or capabilities because special mounting arrangements may deny the requisite high-speed closing behavior.

● These switches can be applied at system voltages above 17.0 kV where a 2400-ampere continuous current rating is required. For applications between 17.0 kV and 27.0 kV, the interrupting rating is 1200 amperes (application classifications AE(G)HKL apply). For applications between 27.0 kV and 38.0 kV, the interrupting rating is 900 amperes (application classifications AE(G) apply).

■ Tin-plated terminal pads (option suffix “-Z5”) are not available with switches rated 2400 amperes continuous. Terminal pads on these switch models are silver-plated as standard.

▲ Applicable at 34.5 kV where leakage distance to ground meets user's requirements. For 25/34.5-kV Cypoxy station-post insulators the leakage distance is 26¼ inches (667 mm).

Table 10. Alduti-Rupter Switches—Three-Pole Double-Break Style^①

Illustration	Mounting Configuration②③	Rating						Applications⑥ (see Table 1 and Table 2 on pages 5 through 7)	Station Post Insulators		Page Reference for Dimensional Information
		kV			Amperes, RMS				Cypoxy Catalog Number⑦	Porcelain Catalog Number⑦	
		Nom.	Max	BIL	Cont.	Inter-rupting	Mom. (Asym.) ④⑤				
	Vertical or Upright	34.5	38	200	630	630	40000	●	320304R11-E	320304R11	46
		46	48.3	250	630	630	40000	●	320305R11-E	320305R11	
	Inverted	34.5	38	200	630	630	40000	●	320404R11-E	320404R11	
		46	48.3	250	630	630	40000	●	320405R11-E	320405R11	
	Vertical or upright⑧	34.5	38	200	630	630	40000	●	320304R11-G-E	320304R11-G	47
		46	48.3	250	630	630	40000	●	320305R11-G-E	320305R11-G	
	Vertical, upright, or tiered⑨	69	72.5	350	1200	600	40000	AEG	N/A	320306	48

^① The switches shown include the appropriate set of operating-mechanism components as specified on the ED for the switch. Switches do not include connectors (refer Table 17 on page 24).

^② Switches are available in a variety of standard mounting arrangements, designated by ED number, as described in Information Bulletin 761-80. Specify the applicable ED number when ordering.

^③ Refer to erection drawings for mounting dimensions and heights.

^④ The 3-second rating is 25,000 amperes, RMS, symmetrical.

^⑤ Three-pole double-break style switches rated 34.5 kV, 46 kV, and 69 kV, while provided with design features for fault closing, are not assigned fault closing ratings or capabilities because special mounting arrangements may deny the requisite high-speed closing behavior.

^⑥ Applications indicated by symbols in parentheses are conditional. Refer to Table 2 on page 7.

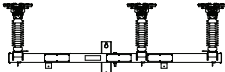
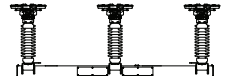
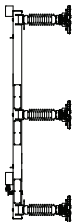
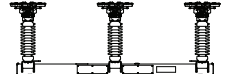
^⑦ Standard minor modifications of the standard mounting arrangement(s) for these switches are listed in Table 14 on page 22. The applicable standard minor modifications listed may be specified by adding the appropriate “-S” suffix to the ED number. Refer to page 2 for special minor modifications and special mounting arrangements for these switches.

^⑧ Switches with a “-G” suffix are furnished with a grounding switch. Special EDs are required—contact your nearest S&C Sales Office.

^⑨ Switches rated 69 kV may be power-operated using Type LS-2 Switch Operator.

● For switches rated 34.5 kV and 46 kV, refer to Table 3 on page 8 for application information.

Table 11. Alduti-Rupter Switches—Three-Pole Double-Break Integer Style^①

Mounting Configuration	Mounting Arrangements ^{②③}	Rating ^④							Cyproxy Insulator Catalog Number	Porcelain Catalog Number	Page Reference for Dimensional Information
		kV			Amperes, RMS			Fault-Closing Capability, Amperes Peak			
		Nom	Max	BIL	Cont.	Interrupting	Peak Withstand ^⑤	Two-Time Duty Cycle ^⑥			
Upright ^{⑦⑧} 	ED-160R1	46	48.3	250	630	630	65 000	36 000	320335R11-E	320335R11	49
Vertical 	ED-161	46	48.3	250	630	630	65 000	36 000	320345R11-E	320345R11	50
Tiered-outboard ^⑧ 	ED-162	46	48.3	250	630	630	65 000	36 000	320355R11-E	320355R11	51
Pole-top ^{⑦⑧} 	ED-163R1	46	48.3	250	630	630	65 000	36 000	320365R11-E	320365R11	52
Pedestal ^{⑧⑨⑩} 	ED-164R1	46	48.3	250	630	630	65 000	36 000	320375R11-E	320375R11	53

① The switches shown include the appropriate set of operating-mechanism components as specified on the ED for the switch. Switches do not include connectors (refer to Table 17 on page 24).

② The applicable standard mounting arrangement, designated by the ED number shown, should be specified when ordering. The "-S" suffixes in parentheses identify available standard minor modifications to the basic ED. The applicable standard minor modifications may be specified by adding the appropriate suffix to the ED number. Refer to Table 14 on page 22 for description. Special minor modifications and special mounting arrangements are not available for these switches.

③ Refer to erection drawings for mounting dimensions and heights.

④ For a full list of switch ratings, see Table 3 on page 8.

⑤ The 3-second rating is 25,000 amperes, RMS, symmetrical.

⑥ Accordingly, these switches may be closed the specified number of times at the indicated current while remaining operable and able to carry and interrupt rated continuous current.

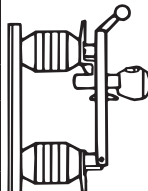
⑦ These switches include dead-ending brackets as standard. Maximum dead-end loading: 2000 pounds (907 kg) per conductor where pull-off forces are applied to only one side of the switch; 8000 pounds (3629 kg) per conductor where equal pull-off forces are applied to both sides of the switch. If required, order one set of six extension-link assemblies by adding suffix "-D" to the catalog number of the switch.

⑧ These switches can be supplied with Lindsey current and/or voltage sensor(s), auxiliary switch, and control cable. Refer to Table 16 on page 23.

⑨ No provisions for dead-ending are offered since the mounting pedestals are not intended for such duty.

⑩ Select mounting pedestal from Table 13 on page 21.

Table 12. Alduti-Rupter Switches—Single-Pole Heavy-Duty Style^①

Illustration	Mounting Configuration	Rating						Applications ^③ (see Table 1 and Table 2 on pages 5 through 7)	Station Post Insulators		Page Reference for Dimensional Information
		kV			Amperes, RMS				Cypoxy Catalog Number	Porcelain Catalog Number	
		Nom.	Max	BIL	Cont.	Inter-rupting	Mom. (Asym.) ^②				
	Vertical	14.4	17.0	110	600	600	40000	AEGHK(L)	136012-E	136012	54
		14.4	17.0	110	1200	1200	61 000	AEGHK(L)	320022R9-E	320022R9	
		25	27	150	600	600	40000	AEG(HKL)	136013R1-E	136013R1	
		25	27	150	1200	1200	61 000	AE(GHKL)	320023R10-E	320023R10	
	Inverted	14.4	17.0	110	600	600	40000	AEGHK(L)	136112R5-E	136112R5	
		14.4	17.0	110	1200	1200	61 000	AEGHK(L)	320122R9-E	320122R9	
		25	27	150	600	600	40000	AEG(HKL)	136113R1-E	136113R1	
		25	27	150	1200	1200	61 000	AE(GHKL)	320123R10-E	320123R10	

^① Switches do not include connectors (refer to Table 17 on page 24).

^② The 3-second ratings for 600- and 1200-ampere switches are 25,000 and 40,000 amperes, RMS, symmetrical, respectively.

^③ Applications indicated by symbols in parentheses are conditional. Refer to Table 2 on page 7.

Table 13. Mounting Pedestals—For Alduti-Rupter Switches

Item	Column Section, Inches (mm)	Column Height, Feet ^① (mm)	Catalog Number	Anchor Bolts ^{② ③}	
				Quantity Required	Catalog Number
Mounting pedestal (one per switch), for vertical-break integer style switches, square steel tube construction, galvanized finish ^④	8 × 8 (203 × 203 mm)	8 (2438)	92426R1-G	4	S-81365-2
		9 (2743)	92427R1-G		
		10 (3048)	92428R1-G		
		11 (3353)	92429R1-G		
		12 (3658)	92434R1-G		
Mounting pedestal (one per switch), for double-break integer style switches, square steel tube construction, galvanized finish ^⑤	8 × 8 (203 × 203 mm)	8 (2438)	92426R1-GI		
		9 (2743)	92427R1-GI		
		10 (3048)	92428R1-GI		
		11 (3353)	92429R1-GI		
		12 (3658)	92434R1-GI		

① Intermediate heights [less than 12 feet (3658 mm)] are available in 3-inch (76.2 mm) increments. Specify by adding one of the following suffixes to the catalog number of the mounting pedestal of nearest lower height.

- “-S3” Three inches (76 mm) additional height
- “-S6” Six inches (152 mm) additional height
- “-S9” Nine inches (229 mm) additional height

Note: Maximum available column height is 12 feet 0 inches (3658 mm).

② Each anchor bolt is of galvanized steel and is furnished with two hex nuts and two flat washers to facilitate leveling the mounting pedestals.

③ Nominal size of anchor bolts is 1¼ inch × 3 feet 8 inches (32 mm × 1118 mm).

④ For vertical-break integer style switches mounted on pedestals with an 8-inch × 8-inch (203 mm × 203 mm) column section, appropriate motor operator mounting brackets need to be ordered separately as follows:

- For a Type AS-10 reciprocating-type operator, use operator mounting bracket SA-39154 (quantity: 2).
- For a 6801M reciprocating-type operator, use operator mounting bracket SDA-10696 (quantity: 1).

⑤ For double-break integer style switches mounted on pedestals with an 8-inch × 8-inch (203 mm × 203 mm) column section, appropriate motor operator mounting brackets need to be ordered separately as follows:

- For a Type AS-1A rotating-type operator, use operator mounting bracket SDA-10358 (quantity: 1).
- For a 6801M rotating-type operator, use operator mounting bracket SDA-10696 (quantity: 1).

Ordering Tables

Table 14. Standard Minor Modifications^{①②}

Item	Applicable to Switch Style	Suffix to be Added to Erection Drawing Number
2½-inch (67 mm) diameter tubular fiberglass insulating section in vertical operating shaft	All except double-break rated 69 kV, rotating double-break integer rated 46 kV and ED-5B	-S1●■
Cyposy Insulator in vertical operating shaft	All	-S2
Insulated interphase sections and one fiberglass insulating section in vertical operating shaft ^③	All except integer, vertical-break rated 25/34.5 kV and 34.5 kV, double-break rated 69 kV, and vertical-break rated 14.4 kV/2400 A	-S3■
Insulated interphase sections and one Cyposy Insulator in vertical operating shaft	All except integer, vertical-break rated 25/34.5 kV and 34.5 kV, double-break rated 69 kV, and vertical-break rated 14.4 kV/2400 A	-S4■
2-inch (51 mm) NPS pipe. Required for rotating-type operating-mechanism vertical shaft when such shaft exceeds three 10-foot 4-inch (3150 mm) sections (four 10-foot 4-inch (3150 mm) sections in the case of three-pole side-break heavy-duty style) ^④	All except double-break integer rated 46 kV and 69 kV	-S5
One extra 2-inch (51-mm) NPS pipe section ^⑤	All rotating ED mechanisms	-S5A
Two extra 2-inch (51-mm) NPS pipe sections ^⑤	All rotating ED mechanisms	-S5B
Three extra 2-inch (51-mm) NPS pipe sections ^⑤	Refer to erection drawing	-S5C
Key interlock—single lock for “locked-open” application	All	-S6
Provision for key interlock—allows future addition of single lock for “locked-open” application	All	-S6L
Auxiliary contact switch with 4 N/O and 4 N/C contacts (600 Vac/20 A, 125 Vdc/1 A, 48 Vdc/1 A)	All	-S7
Provision for power operation of pole-mounted switch by Type AS-1A Switch Operator, Type AS-10 Switch Operator, or LS-2 Switch Operator (for 69-kV switches only)	All except reciprocating double-break rated 69 kV	-S8▲
Provision for power operation of steel-structure or pedestal-mounted switch by Type AS-1A Switch Operator, Type AS-10 Switch Operator, or LS-2 Switch Operator (for 69-kV switches only)	All except reciprocating double-break rated 69 kV	-S9▲
Provision for power operation of pole-mounted switch by 6801M Automatic Switch Operator—rotating or reciprocating ^⑥	All except double-break rated 69 kV	-S16▲
One extra pipe section—1¼-inch (31.8 mm) NPS pipe	All reciprocating ED mechanisms	-V1◆
Two extra pipe sections—1¼-inch (31.8 mm) NPS pipe	All reciprocating ED mechanisms	-V2◆

① Certain standard minor modifications are available for certain mounting arrangements only. Refer to Information Bulletin 761-80 for details.

② Refer to erection drawing for standard minor modifications availability; refer to the erection drawing (called up on the erection drawing) for standard minor modifications compatibility.

③ “-S3” option suffix (insulated interphase sections and one fiberglass insulating section in vertical operating shaft) is not compatible with option suffix “-S5.”

④ Operating mechanisms for double-break integer style switches rated 46 kV or double-break style switches rated 69 kV are equipped with 2-inch (51 mm) NPS pipe as standard.

⑤ Suffix “-S5” is also required when ordering “-S5A,” “-S5B,” or “-S5C” except for 46-kV double-break integer-style switches and 69-kV double-break style switches.

⑥ Double-break integer style switches rated 46 kV. Refer to your nearest S&C Sales Office for ratings changes.

● -S1 option suffix (tubular fiberglass insulating section in vertical operating shaft) is not compatible with any of the following option suffixes: “-S3,” “-S5,” “-S5A,” “-S5B,” “-S5C,” “-S8,” “-S9,” and “-S16.”

■ Not available for power-operated switches.

▲ Not all mounting arrangements are suitable for power operation, contact your nearest S&C Sales Office for availability.

◆ The necessary nonadjustable rod guide assembly (catalog number VU-998) is included when ordering these catalog number suffixes.

Table 15. Accessories—For Alduti-Rupter Switches

Item	For Alduti-Rupter Switch		Suffix to be Added to Switch Catalog Number
	Style	Rating, kV	
Mounting provisions for three surge arresters per switch	Side-break integer and vertical-break integer	14.4 thru 34.5	-A1
Mounting provisions for six surge arresters per switch	Side-break integer and vertical-break integer	14.4 thru 34.5	-A2
Ice shields ^①	Side-break integer, side-break standard-duty, side-break heavy-duty, three-pole double-break, and double-break integer	14.4 thru 46	-B
Dead-ending provisions	Side-break integer with insulated bases (except vertical mounting configurations)	14.4 thru 34.5	-C
Extension-link assembly (one set of six)	Side-break integer, vertical-break integer, and double-break integer (except vertical and pedestal mounting configurations)	14.4 thru 46	-D

^① Applicable to upright side-break integer and upright side-break three-pole switches. Also applicable to upright, pole-top, pedestal, and tiered-outboard double-break integer switches as well as upright

double-break three-pole switches. Not applicable to double-break three-pole switches with ground switch.

Table 16. Automation Components—For Alduti-Rupter Switches—Three-Pole Double-Break Integer Style^①

Item	Suffix to be Added to Switch Catalog Number
Shielded control cable in liquid-tight flexible metal wiring conduit ^{②③④}	
15-foot (457-cm) length	-G15
25-foot (762-cm) length	-G25
35-foot (1067-cm) length	-G35
45-foot (1372-cm) length	-G45
60-foot (1829-cm) length	-G60
Three-phase voltage sensing on one side	-V3
Single-phase voltage sensing on one side and three-phase current sensing	-V1J3
Three-phase voltage sensing on one side and three-phase current sensing	-V3J3
Three-phase voltage sensing on both sides and three-phase current sensing	-V6J3

^① A shielded control cable in liquid-tight flexible metal wiring conduit (suffix "-G15," "-G25," "-G35," "-G45," or "-G60") must be specified when ordering sensing options. Control cables are only available if sensing is specified.

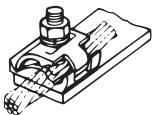
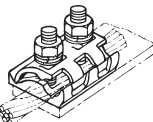
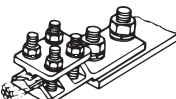
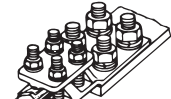
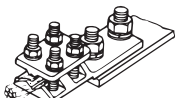
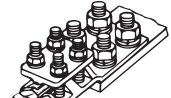
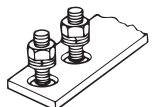
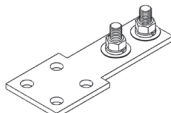
^② Order control cable connector assembly catalog number SDA-10253 for installation on user-supplied control unit or switch operator. Control

cable connector assembly includes base, male insert, cover, and security belt to mate with control-cable connector.

^③ Other lengths are available—contact your nearest S&C Sales Office.

^④ When suffix "-S5A" or "-S5B" are ordered for double-break integer-style switches, longer cables are required—contact your nearest S&C Sales Office.

Table 17. Connectors

Illustration	Description	Accommodating Conductor	Catalog Number	
			For 600-ampere Switches	For 1200-ampere Switches ^①
	Bronze body, tin plated. Includes one 1/2-13x2 1/2 galvanized steel bolt	No. 2 (33.6 mm ²) solid through 500 kc mil (253 mm ²) stranded copper or aluminum	4740R1	—
	Aluminum-alloy body, tin plated. Includes two 1/2-13x2 3/4 galvanized steel bolts	No. 2 (33.6 mm ²) solid through 500 kc mil (253 mm ²) stranded copper or aluminum	4741R2●	—
 For 600-ampere switches or  For 1200-ampere switches	Standard bronze pad terminal, four-bolt, tin plated. Includes two 1/2-13x1 1/2 galvanized steel bolts for attachment to terminal pads of switches	No. 6 solid (13.3 mm ²) through 250 kc mil (127 mm ²) copper or aluminum	4564R1-B	—
		1/0 solid (53.5 mm ²) through 500 kc mil (253 mm ²) copper or aluminum	4565R1-B	—
		2/0 stranded (67.4 mm ²) through 800 kc mil (405 mm ²) copper or aluminum	4567R1-B	4568R1-B
		4/0 stranded (107 mm ²) through 1000 kc mil (507 mm ²) copper or aluminum	—	4569R1-B
 For 600-ampere switches or  For 1200-ampere switches	Standard aluminum-alloy pad terminal, four-bolt. Includes two 1/2-13x1 1/2 galvanized steel bolts for attachment to terminal pads of switches	No. 4 stranded (21.2 mm ²) through 1/0 stranded (53.5 mm ²) copper or aluminum	5326-B	—
		1/0 stranded (53.5 mm ²) through 250 kc mil (127 mm ²) copper or aluminum	5327-B	—
		250 kc mil (127 mm ²) through 400 kc mil (203 mm ²) copper or aluminum	5328-B	5329-B
		350 kc mil (177 mm ²) through 600 kc mil (304 mm ²) copper or aluminum	5330-B	5331-B
		600 kc mil (304 mm ²) through 900 kc mil (456 mm ²) copper or aluminum	—	5333-B
		900 kc mil (456 mm ²) through 1250 kc mil (633 mm ²) copper or aluminum	—	5334-B
	Provision only for compression connectors. Includes two 1/2-13x2 galvanized steel bolts		4581●■	—
	Copper two-to-four bolt adapter. Includes two 1/2-13x1 1/2 galvanized steel bolts for attachment to terminal pads of switches		MDA-1162-1	MDA-1162-1

① Side-break integer style switches rated 14.4 kV, 1200 amperes and 25 kV, 1200 amperes include two-hole terminal pads as standard. If four-bolt connectors are required, specify the two-to-four bolt adapter catalog number MDA-1162-1 and the four-bolt connector catalog number 4569R1-B.

● Mechanical interference with blade prevents use on single-pole heavy-duty style switches.

■ When used with aluminum compression connectors, switch terminal pads should be tin plated. See the "Specification Deviations" section on page 3.

Table 18. Parts—For Alduti-Rupter Switches

Item	For Use on Alduti-Rupter Switches			Catalog Number
	Style	kV	Amperes	
Spare or replacement interrupter	Vertical-break and single-pole heavy-duty	7.2	600	SA-30817R2
		7.2	1200●	SA-35479
		14.4 or 25	600	SA-30818R4
		14.4 or 25	1200●	SA-35480R2
	Single-pole standard-duty	14.4	2400	SA-42789R1
	Vertical-break, three-pole vertical-break integer, and three-pole side-break (heavy-duty and integer)	25/34.5	600	SA-42790R1
		34.5	600	SA-42790R1
	Vertical-break and vertical-break integer	25/34.5	1200	SA-42789R1
		34.5	1200	SA-42789R1
Spare or replacement interrupter with integral mounting bracket and muffler	Three-pole side-break (heavy-duty, standard-duty, and integer)①	7.2	600	4561
		14.4	600	4562R3
		25	600	5092R1
	Side-break integer	14.4	1200	4562R3
		25	1200	5092R1
	Three-pole double-break and three-pole double-break integer	34.5 or 46	630■	SDA-11613
		69	600	SDA-10804
Crossarm brace kit	Side-break integer, upright configuration	All	All	SDA-10367
	Side-break integer, vertical configuration			SDA-10367-1
Provisions for crossarm braces (kit for one switch)	Side-break integer	All	All	5053

① Previous designs of three-pole, side-break, heavy-duty style switches (all those rated 400 amperes and all those bearing catalog number supplements “-R1” or “-R2” or no supplements, except those rated 23 kV) require catalog number SA-30817R2 or SA-30818R4 (single-bolt) interrupters.

● Previous designs of 1200-ampere three-pole, vertical-break style and 1200-ampere single-pole switches (all those bearing catalog number

supplements “-R8” or lower) require catalog number 4551R2 (7.2 kV) or 4552R4 (14.4 kV) interrupters. Contact your nearest S&C Sales Office.

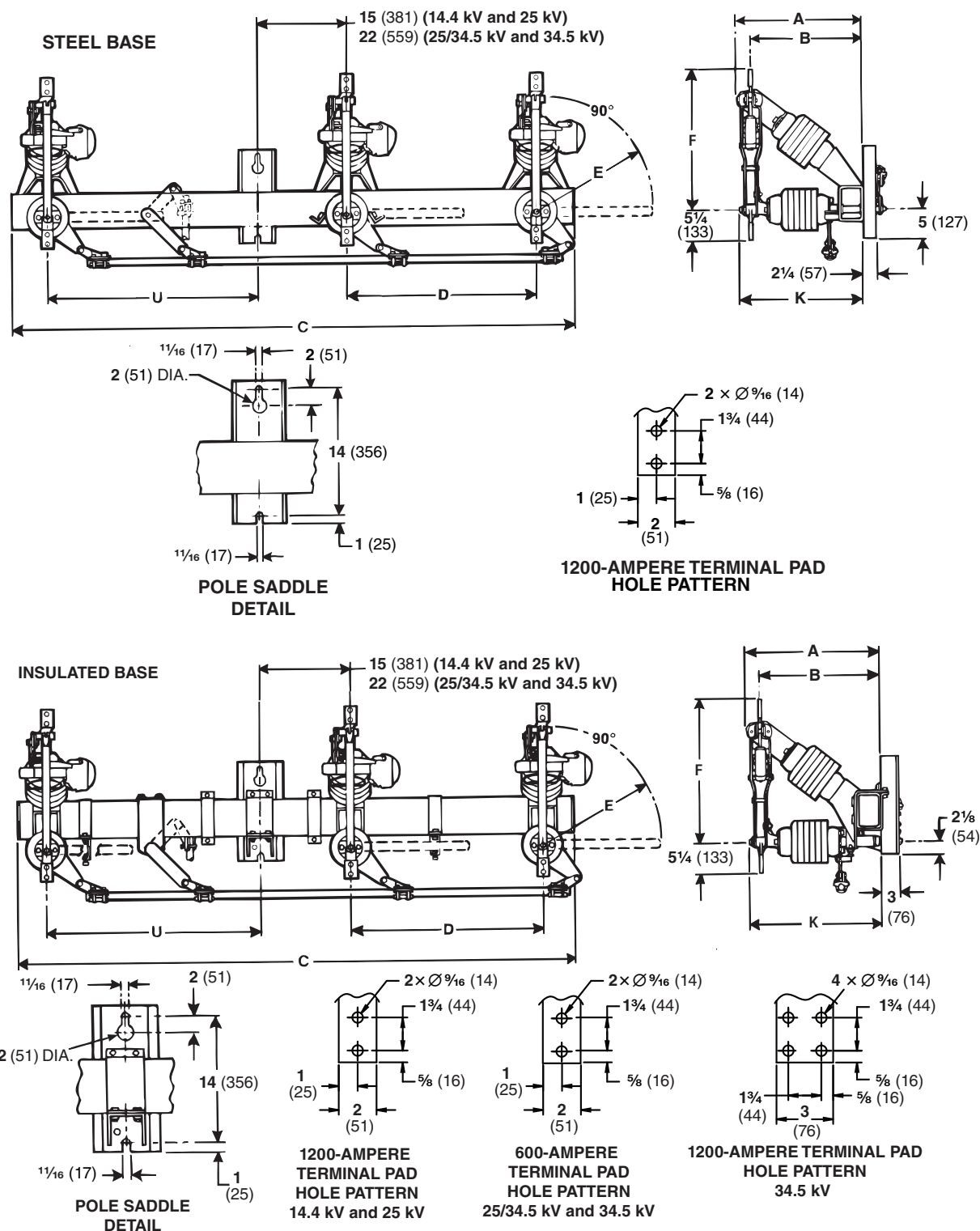
■ Previous designs of three-pole double-break style switches (bearing catalog number supplement “-R10”) and three-pole double-break integer style switches (bearing no catalog number supplement) require interrupter catalog number SDA-10175.

Three-Pole Side-Break Integer Style, with steel bases

Three-Pole Side-Break Integer Style, with insulated bases

Vertical Mounting Configuration 14.4 kV, 25 kV, 25/34.5 kV, and 34.5 kV

Dimensions in inches (mm)



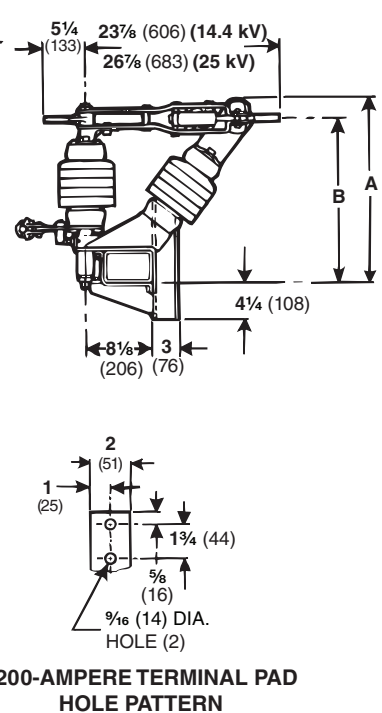
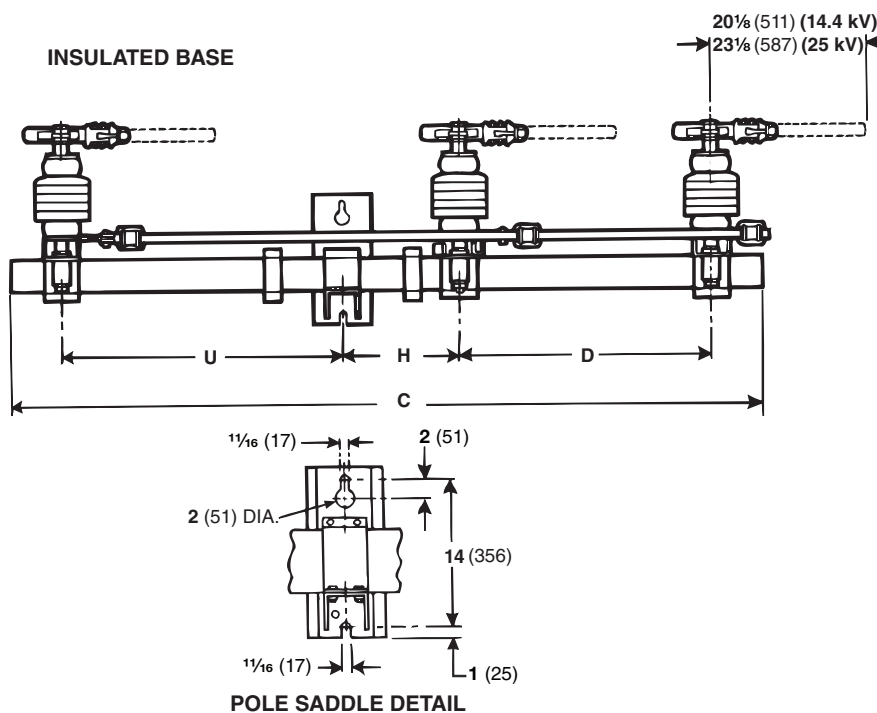
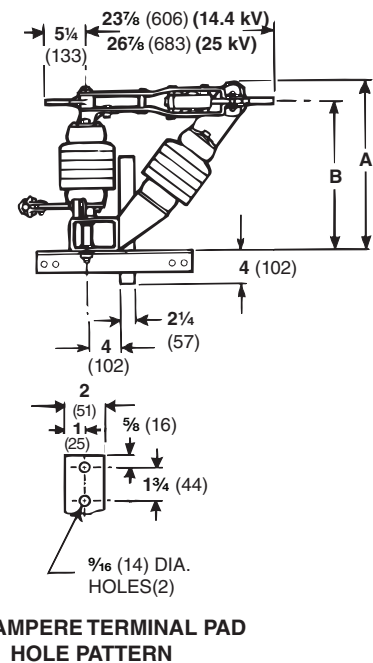
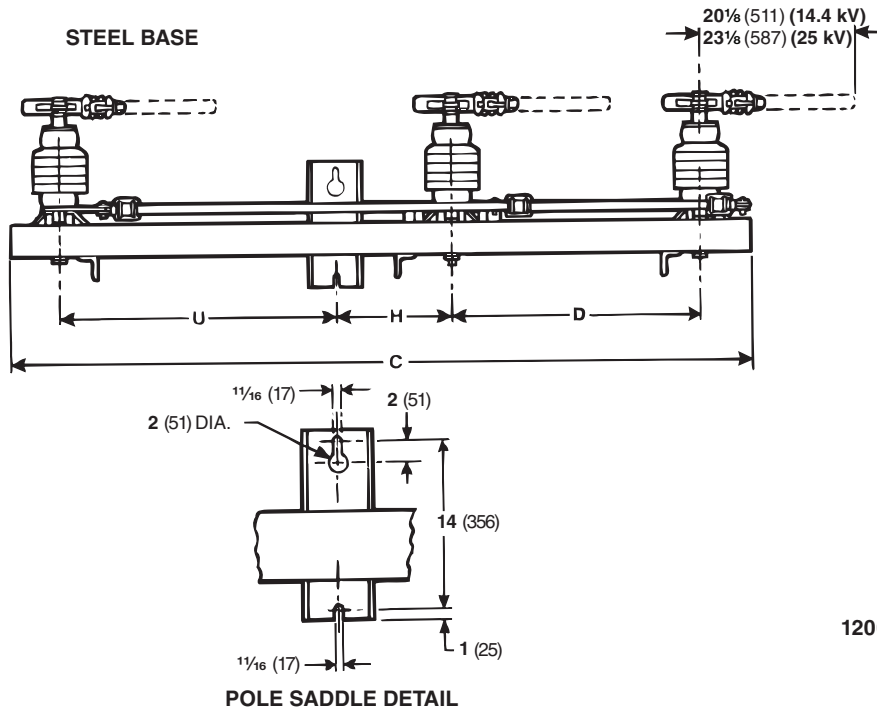
Mounting Configuration	Mounting Arrangements	Rating					Catalog Number		Dimensions in Inches to nearest 1⁄8-inch (mm)								Net Wt., 3-Pole Assem., Lbs. (kg)		Applications (see Table 1 and Table 2 on pages 5 through 7)
		kV			Amperes, RMS														
		Nom.	Max	BIL	Cont.	Mom. (Asym.)	Cypoxy Station Post Insulators	Porcelain Station Post Insulators	A①	B	C	D	E	F	K①	U	Cypoxy Station Post Insulators	Porcelain Station Post Insulators	
Vertical, clockwise opening—steel base	ED-140R21	14.4	17.0	110	1200	40000	137612R6-E	137612R6	21 (533)	18¾ (476)	106 (269)	34 (864)	20⅞ (511)	23⅞ (606)	—	45 (1143)	288 (131)	330 (150)	AEGHK(L)
		25	27	150	1200	40000	137613R9-E	137613R9	25 (635)	22¾ (578)	120 (3048)	40 (1016)	23⅞ (587)	26⅞ (683)	—	53 (1346)	309 (140)	390 (177)	AE(GHKL)
	ED-672R4	25/34.5	38	150	600	40000	137167R1-E	137167R1	—	26¼ (667)	129 (3277)	48 (1219)	28 (711)	31⅞ (803)	29½ (749)	53 (1346)	419 (190)	500 (227)	AEGHKL
		34.5	38	200	600	40000	137164R1-E	137164R1	—	30¼ (768)	129 (3277)	48 (1219)	28 (711)	31⅞ (803)	33½ (851)	53 (1346)	456 (207)	570 (259)	AEGHKL
		34.5	38	200	1200	40000	147164-E	147164	37⅞ (949)	30¼ (768)	129 (3277)	48 (1219)	28 (711)	—	33½ (851)	53 (1346)	466 (211)	550 (249)	AE(G)HKL
Vertical, clockwise opening—insulated base	ED-640R5	14.4	17.0	110	1200	40000	137192R2-E	137192R2	22⅞ (568)	20 (508)	91 (2311)	34 (864)	20⅞ (511)	23⅞ (606)	—	36 (914)	308 (140)	350 (159)	AEGHK(L)
		25	27	150	1200	40000	137193R9-E	137193R9	26⅞ (670)	24 (610)	103 (2616)	40 (1016)	23⅞ (587)	26⅞ (683)	—	41 (1041)	344 (156)	425 (193)	AE(GHKL)
	ED-642R4	34.5	38	200	600	40000	137194R1-E	137194R1	—	31¼ (794)	129 (3277)	48 (1219)	28 (711)	31⅞ (803)	34½ (876)	53 (1346)	486 (220)	600 (272)	AEGHKL
		34.5	38	200	1200	40000	147194-E	147194	37⅞ (949)	31¼ (794)	129 (3277)	48 (1219)	28 (711)	—	33½ (851)	53 (1346)	496 (225)	610 (277)	AE(G)HKL

① Dimension shown specifies the distance from the switch base to the outermost projection of the switch.

Three-Pole Side-Break Integer Style, with steel bases Three-Pole Side-Break Integer Style, with insulated bases

Upright Mounting Configuration 14.4 kV and 25 kV

Dimensions in inches (mm)



Mounting Configuration	Mounting Arrangements	Rating					Catalog Number		Dimensions in Inches to nearest 1⁄8-inch (mm)						Net Wt., 3-Pole Assem., Lbs. (kg)		Applications (see Table 1 and Table 2 on pages 5 through 7)
		kV			Amperes, RMS												
		Nom.	Max	BIL	Cont.	Mom. (Asym.)	Cypoxy Station Post Insulators	Porcelain Station Post Insulators	A①	B	C	D	H	U	Cypoxy Station Post Insulators	Porcelain Station Post Insulators	
Upright, clockwise opening—steel base	ED-136R20	14.4	17.0	110	1200	40000	137412R8-E	137412R8	21¼ (540)	18⅞ (479)	106 (2692)	34 (864)	15 (381)	45 (1143)	308 (140)	350 (159)	AEGHK(L)
		25	27	150	1200	40000	137413R9-E	137413R9	25½ (648)	23 (584)	120 (3048)	40 (1016)	15 (381)	53 (1346)	329 (149)	410 (186)	AE(GHKL)
Upright, clockwise opening (extra mounting-pole clearance)—steel base	ED-136R20	14.4	17.0	110	1200	40000	138412R2-E	138412R2	21¼ (540)	18⅞ (479)	128 (3251)	34 (864)	24 (610)	58 (1473)	333 (151)	375 (170)	AEGHK(L)
		25	27	150	1200	40000	138413R2-E	138413R	25½ (648)	23 (584)	128 (3251)	40 (1016)	24 (610)	52 (1321)	339 (154)	420 (191)	AE(GHKL)
Upright, counter-clockwise opening—steel base	ED-135R20	14.4	17.0	110	1200	40000	137512R8-E	137512R8	21¼ (540)	18⅞ (479)	106 (2692)	34 (864)	15 (381)	45 (1143)	308 (140)	350 (159)	AEGHK(L)
		25	27	150	1200	40000	137513R9-E	137513R9	25½ (648)	23 (584)	120 (3048)	40 (1016)	15 (381)	53 (1346)	329 (149)	410 (186)	AE(GHKL)
Upright, clockwise opening—insulated base	ED-636R4	14.4	17.0	110	1200	40000	137392R2-E	137392R2	22⅜ (568)	20 (508)	91 (2311)	34 (864)	15 (381)	36 (914)	323 (147)	365 (166)	AEGHK(L)
		25	27	150	1200	40000	137393R9-E	137393R9	26⅜ (670)	24 (610)	103 (2616)	40 (1016)	15 (381)	41 (1041)	359 (163)	440 (200)	AE(GHKL)
Upright, clockwise opening (extra mounting-pole clearance)—insulated base	ED-636R4	14.4	17.0	110	1200	40000	138392R2-E	138392R2	22⅜ (568)	20 (508)	117 (2972)	34 (864)	24 (610)	52 (1321)	338 (153)	380 (172)	AEGHK(L)
		25	27	150	1200	40000	138393R2	138393R2	26⅜ (670)	24 (610)	129 (3277)	40 (1016)	24 (610)	54 (1372)	374 (170)	455 (206)	AE(GHKL)
Upright, counter-clockwise opening—insulated base	ED-635R4	14.4	17.0	110	1200	40000	137492R2-E	137492R2	22⅜ (568)	20 (508)	91 (2311)	34 (864)	15 (381)	36 (914)	323 (147)	365 (166)	AEGHK(L)
		25	27	150	1200	40000	137493R9-E	137493R9	26⅜ (670)	24 (610)	103 (2616)	40 (1016)	15 (381)	41 (1041)	359 (163)	440 (200)	AE(GHKL)

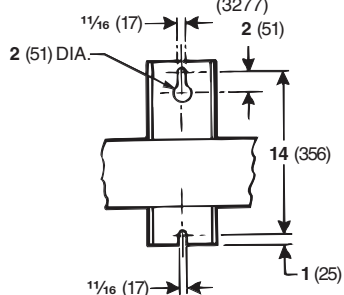
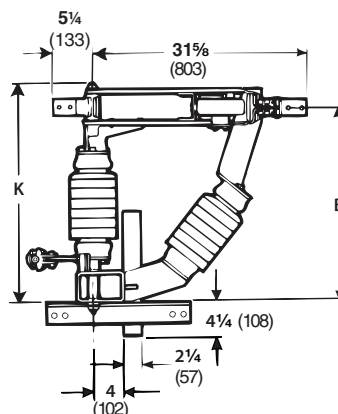
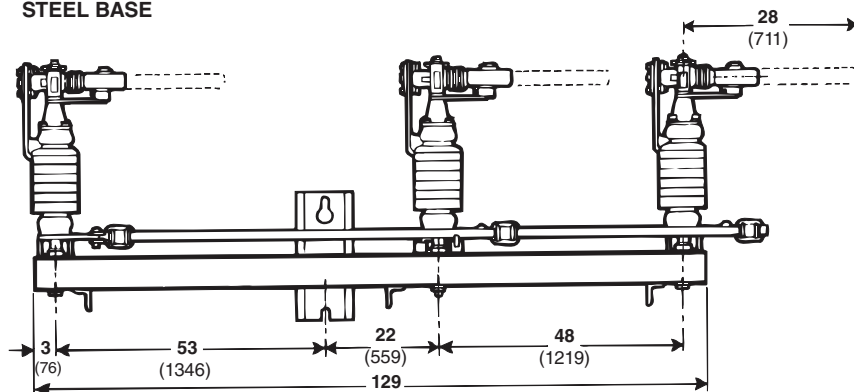
① Dimension shown specifies the distance from the switch base to the outermost projection of the switch.

Three-Pole Side-Break Integer Style, with steel bases Three-Pole Side-Break Integer Style, with insulated bases

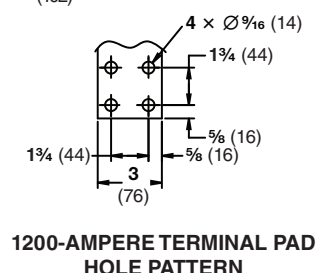
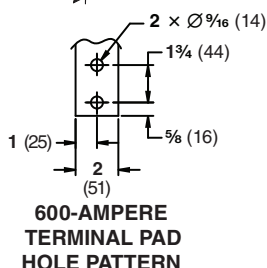
Upright Mounting Configuration 25/34.5 kV and 34.5 kV

Dimensions in inches (mm)

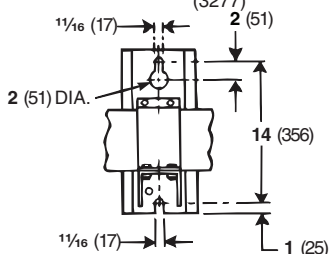
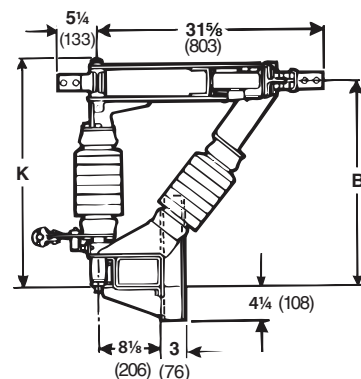
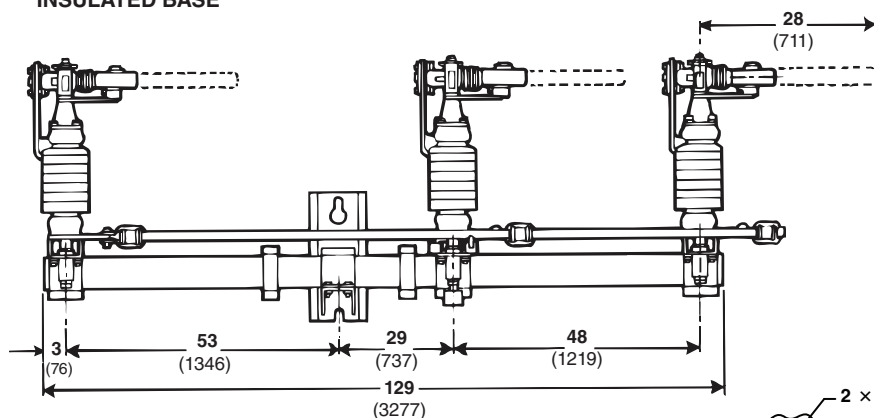
STEEL BASE



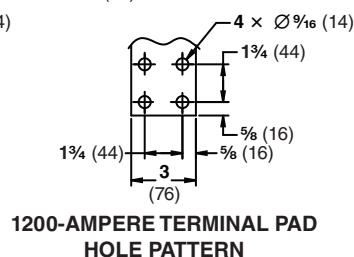
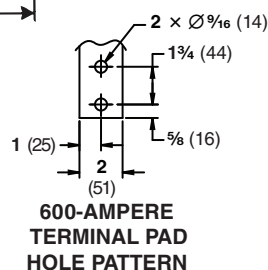
POLE SADDLE DETAIL



INSULATED BASE



POLE SADDLE DETAIL



Mounting Configuration	Mounting Arrangements	Rating					Fault-Closing, Duty-Cycle, One-Time; Amperes, RMS, Asym.	Catalog Number		Dimensions in Inches to nearest 1⁄8-inch (mm)		Net Wt., 3-Pole Assem., Lbs. (kg)		Applications (see Table 1 and Table 2 on pages 5 through 7)
		kV			Amperes, RMS					B	K①	Cypoxy Station Post Insulators	Porcelain Station Post Insulators	
		Nom.	Max	BIL	Cont.	Mom. (Asym.)								
Upright, clockwise opening—steel base	ED-667R3	25/34.5	38	150	600	40000	15000	137367R3-E	137367R3	26¼ (667)	29½ (749)	404 (183)	485 (220)	AEGHKL
		34.5	38	200	600	40000	15000	137364R3-E	137364R3	30¼ (768)	33½ (851)	441 (200)	555 (252)	AEGHKL
		34.5	38	200	1200	40000	15000	147364-E	147364	30¼ (768)	33½ (851)	451 (205)	565 (256)	AE(G) HKL
Upright, counter-clockwise opening—steel base	ED-669R3	25/34.5	38	150	600	40000	15000	137467R3-E	137467R3	26¼ (667)	29½ (749)	404 (183)	485 (220)	AEGHKL
		34.5	38	200	600	40000	15000	137464R3-E	137464R3	30¼ (768)	33½ (851)	441 (200)	555 (252)	AEGHKL
		34.5	38	200	1200	40000	15000	147464-E	147464	30¼ (768)	33⅝ (848)	451 (205)	565 (256)	AE(G) HKL
Upright, clockwise opening—insulated base	ED-637R3	34.5	38	200	600	40000	15000	137394R1-E	137394R1	31¼ (794)	34½ (876)	461 (209)	575 (261)	AEGHKL
		34.5	38	200	1200	40000	15000	147394-E	147394	30¼ (768)	33⅝ (848)	471 (214)	585 (265)	AE(G) HKL
Upright, counter-clockwise opening—insulated base	ED-639R3	34.5	38	200	600	40000	15000	137494R1-E	137494R1	31¼ (794)	34½ (876)	461 (209)	575 (261)	AEGHKL
		34.5	38	200	1200	40000	15000	147494-E	147494	30¼ (768)	33⅝ (848)	471 (214)	585 (265)	AE(G) HKL

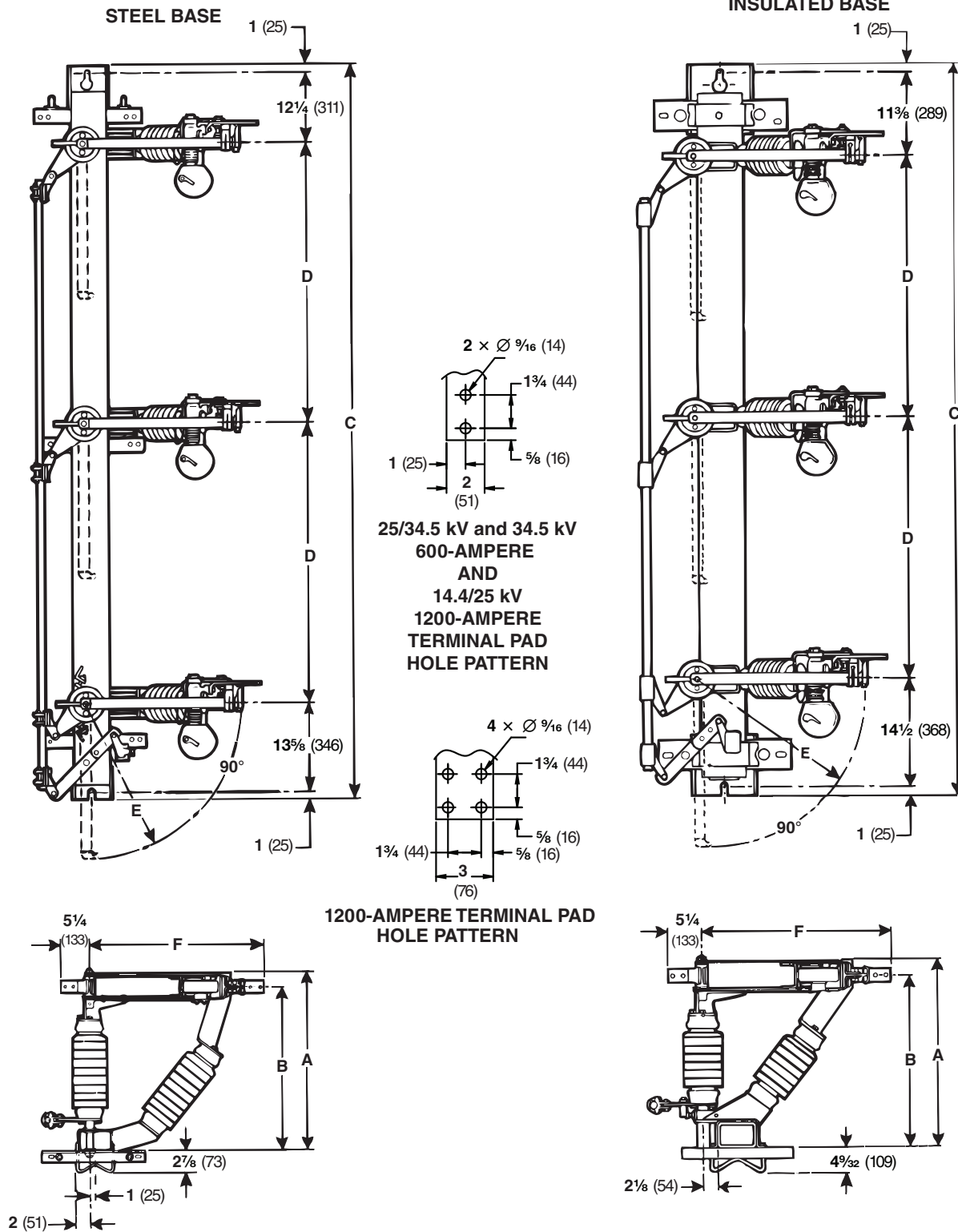
① Dimension shown specifies the distance from the switch base to the outermost projection of the switch.

Dimensional Drawings

Three-Pole Side-Break Integer Style, with steel bases Three-Pole Side-Break Integer Style, with insulated bases

Tiered-Outboard Mounting Configuration 14.4 kV, 25 kV, 25/34.5 kV, and 34.5 kV

Dimensions in inches (mm)



Mounting Configuration	Mounting Arrangements	Rating					Catalog Number		Dimensions in Inches to nearest 1/8-inch (mm)						Net Wt., 3-Pole Assem., Lbs. (kg)		Applications (see Table 1 and Table 2 on pages 5 through 7)
		kV			Amperes, RMS												
		Nom.	Max	BIL	Cont.	Mom. (Asym.)	Cypoxy Station Post Insulators	Porcelain Station Post Insulators	A①	B	C	D	E	F	Cypoxy Station Post Insulators	Porcelain Station Post Insulators	
Tiered-outboard, clockwise opening—steel base	ED-144R19	14.4	17.0	110	1200	40000	137812R7-E	137812R7	21 1/8 (537)	18 3/4 (476)	107 7/8 (2740)	40 (1016)	20 1/8 (511)	23 7/8 (606)	328 (149)	370 (168)	AEGHK(L)
		25	27	150	1200	40000	137813R9-E	137813R9	25 3/8 (645)	22 7/8 (581)	119 7/8 (3045)	46 (1168)	23 1/8 (587)	26 7/8 (683)	344 (156)	425 (193)	AE(GHKL)
	ED-676R3	25/34.5	38	150	600	40000	137767R3-E	137767R3	29 3/8 (746)	26 1/8 (664)	123 7/8 (3146)	48 (1219)	28 (711)	31 3/8 (803)	404 (183)	485 (220)	AEGHKL
		34.5	38	200	600	40000	137764R3-E	137764R3	33 3/8 (848)	30 1/8 (765)	123 7/8 (3146)	48 (1219)	28 (711)	31 3/8 (803)	431 (195)	545 (247)	AEGHKL
		34.5	38	200	1200	40000	147764-E	147764	33 3/8 (848)	30 1/4 (768)	117 (2972)	48 (1219)	28 (711)	31 3/8 (803)	476 (216)	580 (263)	AE(G)HKL
Tiered-outboard, clockwise opening—insulated base	ED-644R2	14.4	17.0	110	1200	40000	137792R2-E	137792R2	22 3/8 (568)	20 (508)	107 7/8 (2740)	40 (1016)	20 1/8 (511)	23 7/8 (606)	338 (153)	380 (172)	AEGHK(L)
		25	27	150	1200	40000	137793R9-E	137793R9	26 3/8 (670)	24 (610)	119 7/8 (3045)	46 (1168)	23 1/8 (587)	26 7/8 (683)	364 (165)	445 (202)	AE(GHKL)

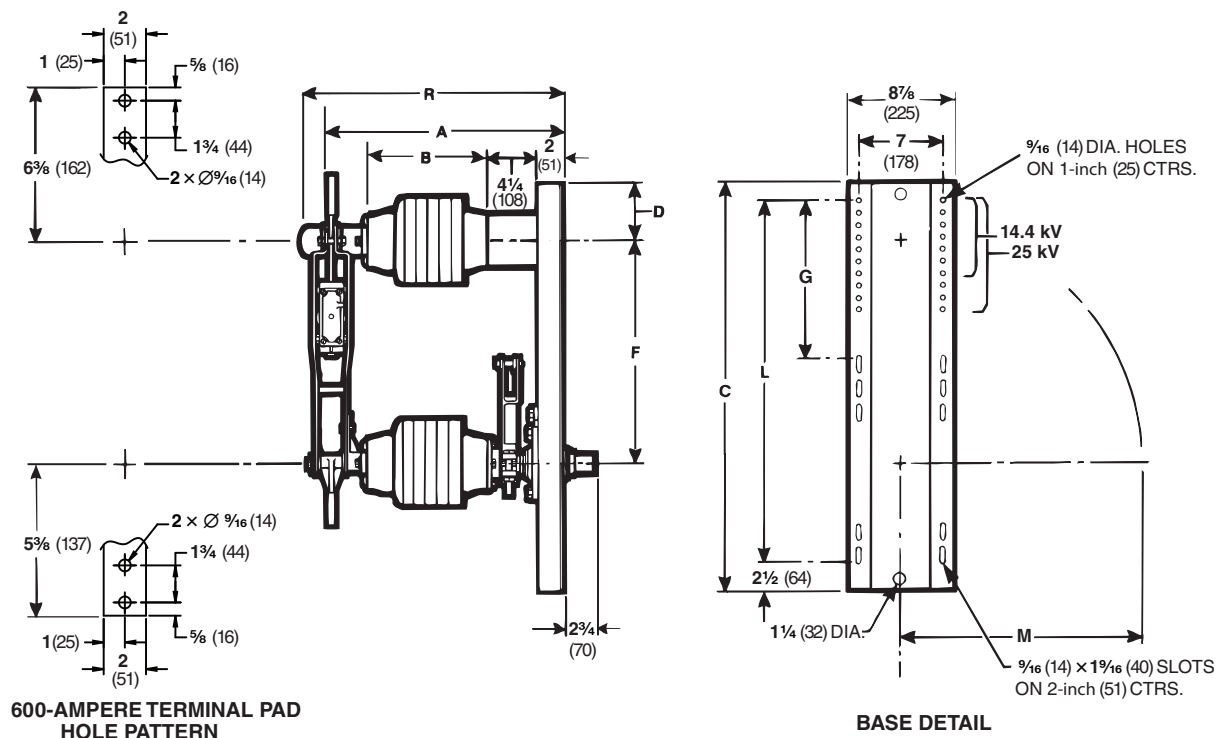
① Dimension shown specifies the distance from the switch base to the outermost projection of the switch.

Dimensional Drawings

Three-Pole Side-Break Heavy-Duty Style

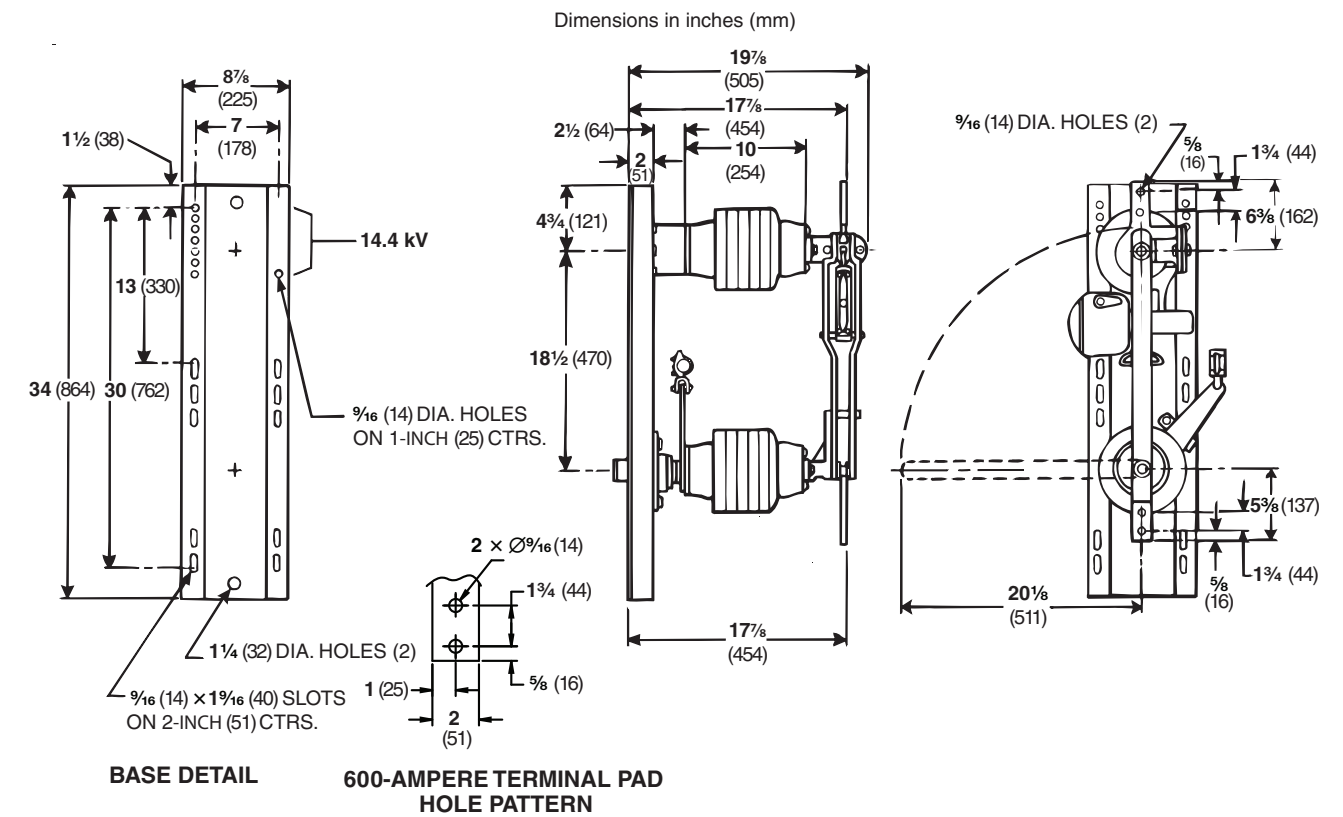
14.4 kV and 25 kV

Dimensions in inches (mm)



Mounting Configuration	Opening Direction	Rating					Catalog Number		Dimensions in Inches to nearest 1⁄8-inch (mm)										Net Wt., 3-Pole Assem., Lbs. (kg)		Applications (see Table 1 and Table 2 on pages 5 through 7)
		kV			Amperes, RMS																
		Nom.	Max	BIL	Cont.	Mom. (Asym.)	Cypoxy Station Post Insulators	Porcelain Station Post Insulators	A	B	C	D	F	G	L	M	R	Cypoxy Station Post Insulators	Porcelain Station Post Insulators		
Vertical, upright, or triangular-upright	Clock-wise	14.4	17.0	110	600	40000	137012R3-E	137012R3	19½ (498)	10 (254)	34 (864)	4¾ (121)	18⅞ (460)	13 (330)	30 (762)	20⅝ (511)	21⅝ (549)	84 (38)	98 (44)	AEGHK(L)	
		25	27	150	600	40000	137013R7-E	137013R7	23½ (597)	14 (356)	39⅞ (994)	6⅞ (175)	21⅝ (537)	18 (457)	35 (889)	23⅝ (587)	25⅝ (651)	101 (46)	128 (58)	AEG(HKL)	
	Counter-clock-wise	14.4	17.0	110	600	40000	137212R3-E	137212R3	19½ (498)	10 (254)	34 (864)	4¾ (121)	18⅞ (460)	13 (330)	30 (762)	20⅝ (511)	21⅝ (549)	84 (38)	98 (44)	AEGHK(L)	
		25	27	150	600	40000	137213R7-E	137213R7	23½ (597)	14 (356)	39⅞ (994)	6⅞ (175)	21⅝ (537)	18 (457)	35 (889)	23⅝ (587)	25⅝ (651)	101 (46)	128 (58)	AEG(HKL)	

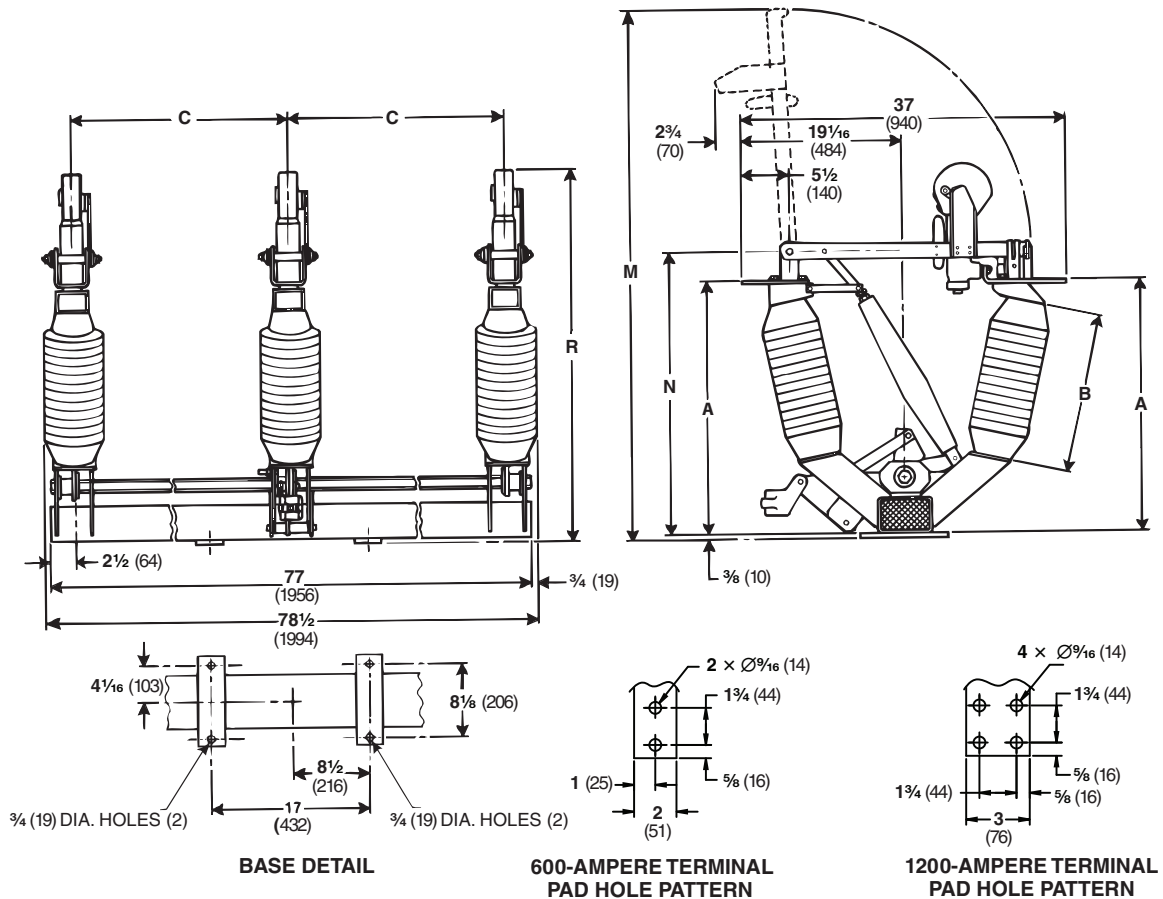
Three-Pole Side-Break Standard-Duty Style
14.4 kV



Mounting Configuration	Opening Direction	Rating					Catalog Number		Net Wt., per Pole, Lbs. (kg)		Applications (see Table 1 and Table 2 on pages 5 through 7)
		kV			Amperes, RMS						
		Nom.	Max	BIL	Cont.	Mom. (Asym.)	Cypoxy Station Post Insulators	Porcelain Station Post Insulators	Cypoxy Station Post Insulators	Porcelain Station Post Insulators	
Upright	Counter-clockwise	14.4	17.0	110	600	40000	137232R1-E	137232R1	71 (32)	85 (39)	AEGHK(L)

Three-Pole Vertical-Break Integer Style
Pedestal Mounting Configuration
 25/34.5 kV and 34.5 kV

Dimensions in inches (mm)

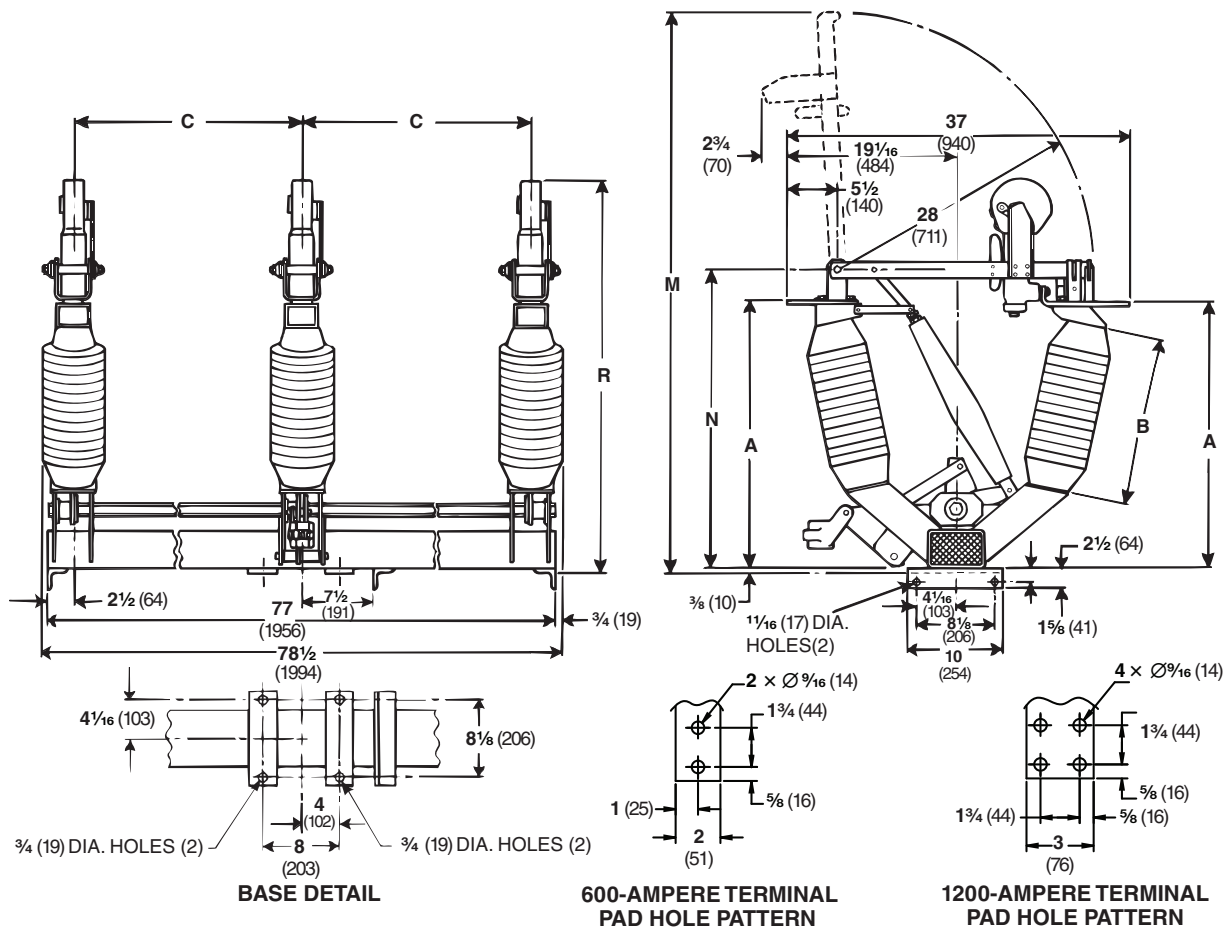


Mounting Configuration	Mounting Arrangements	Rating					Fault-Closing, Duty-Cycle, One-Time; Amperes, RMS, Asym.	Catalog Number		Dimensions in Inches to nearest 1⁄8-inch (mm)						Net Wt., 3-Pole Assem., Lbs. (kg)①		Applications (see Table 1 and Table 2 on pages 5 through 7)
		kV			Amperes, RMS													
		Nom.	Max	BIL	Cont.	Mom. (Asym.)		Cypoxy Station Post Insulators	Porcelain Station Post Insulators	A	B	C	M	N	R	Cypoxy Station Post Insulators	Porcelain Station Post Insulators	
Pedestal	ED-151R1	25/34.5	38	150	600	40000	20 000	135614R2-E	135614R2	25¼ (641)	14 (356)	25 (635)	57 (1448)	28⅝ (727)	39 (991)	362 (164)	476 (216)	AEGHKL
		25/34.5	38	150	1200	40000	30 000	135814R2-E	135814R2	25¼ (641)	14 (356)	25 (635)	57 (1448)	28⅝ (727)	39 (991)	486 (220)	600 (272)	AE(G)HKL
		34.5	38	200	600	40000	20 000	135714R2-E	135714R2	29¼ (743)	18 (457)	36 (914)	61 (1549)	32⅝ (829)	43 (1092)	451 (205)	565 (256)	AEGHKL
		34.5	38	200	1200	40000	30 000	135914R2-E	135914R	29¼ (743)	18 (457)	36 (914)	61 (1549)	32⅝ (829)	43 (1092)	451 (205)	565 (256)	AE(G)HKL

① Not including mounting pedestal.

Three-Pole Vertical-Break Integer Style
Pole-Top Mounting Configuration
25/34.5 kV and 34.5 kV

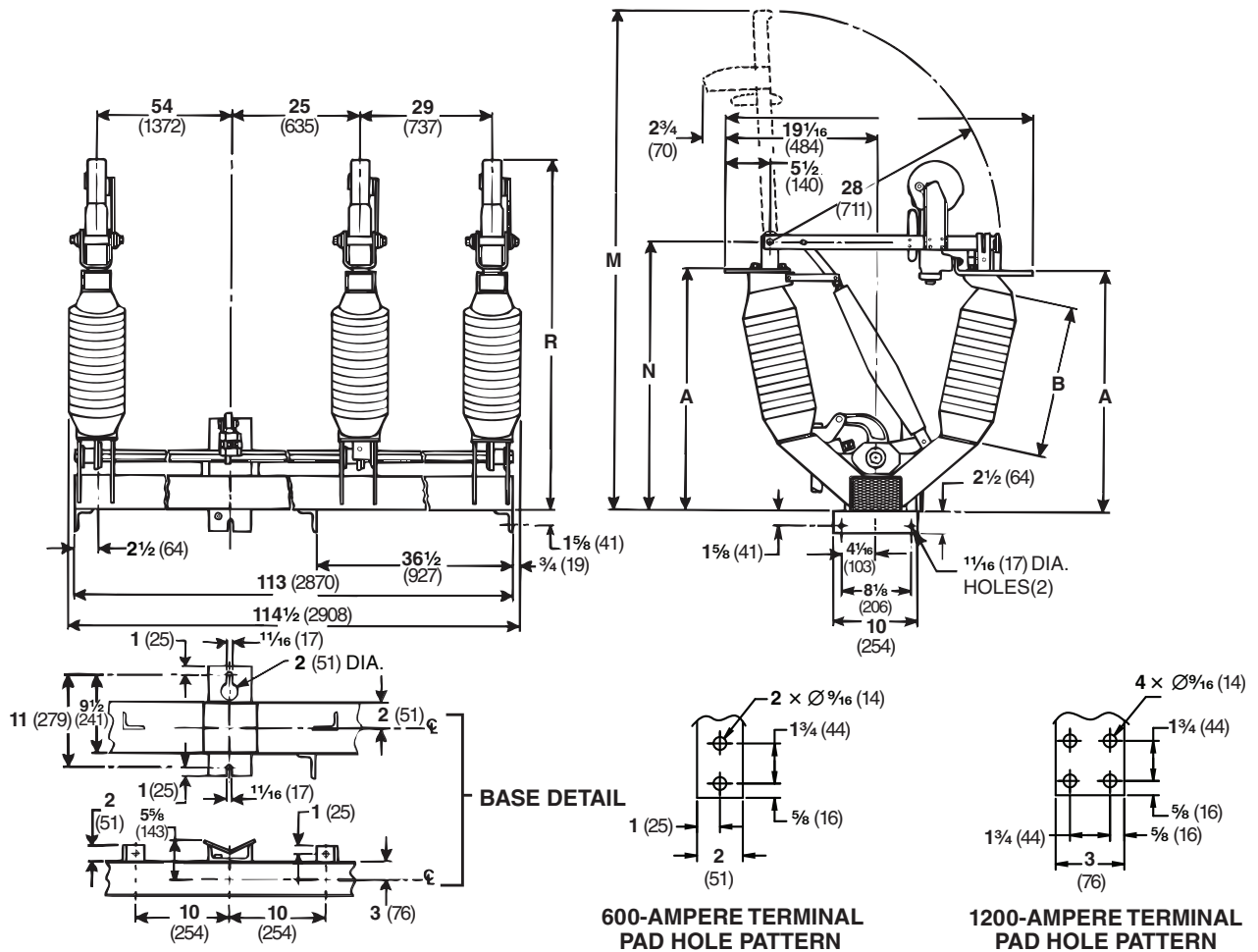
Dimensions in inches (mm)



Mounting Configuration	Mounting Arrangements	Rating					Fault-Closing, Duty-Cycle, One-Time; Amperes, RMS, Asym.	Catalog Number		Dimensions in Inches to nearest 1⁄8-inch (mm)						Net Wt., 3-Pole Assem., Lbs. (kg)		Applications (see Table 1 and Table 2 on pages 5 through 7)
		kV			Amperes, RMS													
		Nom.	Max	BIL	Cont.	Mom. (Asym.)		Cypoxy Station Post Insulators	Porcelain Station Post Insulators	A	B	C	M	N	R	Cypoxy Station Post Insulators	Porcelain Station Post Insulators	
Pole-top	ED-152R3	25/34.5	38	150	600	40000	20 000	135624R2-E	135624R2	25¼ (641)	14 (356)	25 (635)	57 (1448)	28⅝ (727)	39 (991)	380 (172)	494 (224)	AEGHKL
		25/34.5	38	150	1200	40000	30 000	135824R2-E	135824R2	25¼ (641)	14 (356)	25 (635)	57 (1448)	28⅝ (727)	39 (991)	380 (172)	494 (224)	AE(G)HKL
		34.5	38	200	600	40000	20 000	135724R2-E	135724R2	29¼ (743)	18 (457)	36 (914)	61 (1549)	32⅝ (829)	43 (1092)	446 (202)	560 (254)	AEGHKL
		34.5	38	200	1200	40000	30 000	135924R2-E	135924R2	29¼ (743)	18 (457)	36 (914)	61 (1549)	32⅝ (829)	43 (1092)	446 (202)	560 (254)	AE(G)HKL

Three-Pole Vertical-Break Integer Style
Upright Mounting Configuration
25/34.5 kV and 34.5 kV

Dimensions in inches (mm)



Mounting Configuration	Mounting Arrangements	Rating					Fault-Closing, Duty-Cycle, One-Time; Amperes, RMS, Asym.	Catalog Number		Dimensions in Inches to nearest ⅛-inch (mm)					Net Wt., 3-Pole Assem., Lbs. (kg)		Applications (see Table 1 and Table 2 on pages 5 through 7)
		KV			Amperes, RMS					Cypoxy Station Post Insulators	Porcelain Station Post Insulators	A	B	M	N	R	
		Nom.	Max	BIL	Cont.	Mom. (Asym.)											
Upright	ED-153R5	25/34.5	38	150	600	40000	20 000	135634R2-E	135634R2	25¼ (641)	14 (356)	57 (1448)	28⅝ (727)	38⅝ (981)	442 (200)	556 (252)	AEGHKL
		25/34.5	38	150	1200	40000	30 000	135834R2-E	135834R2	25¼ (641)	14 (356)	57 (1448)	28⅝ (727)	38⅝ (981)	442 (200)	556 (252)	AE(G)HKL
		34.5	38	200	600	40000	20 000	135734R2-E	135734R2	29¼ (743)	18 (457)	61 (1549)	32⅝ (829)	42⅝ (1083)	496 (225)	610 (277)	AEGHKL
		34.5	38	200	1200	40000	30 000	135934R2-E	135934R2	29¼ (743)	18 (457)	61 (1549)	32⅝ (829)	42⅝ (1083)	496 (225)	610 (277)	AE(G)HKL

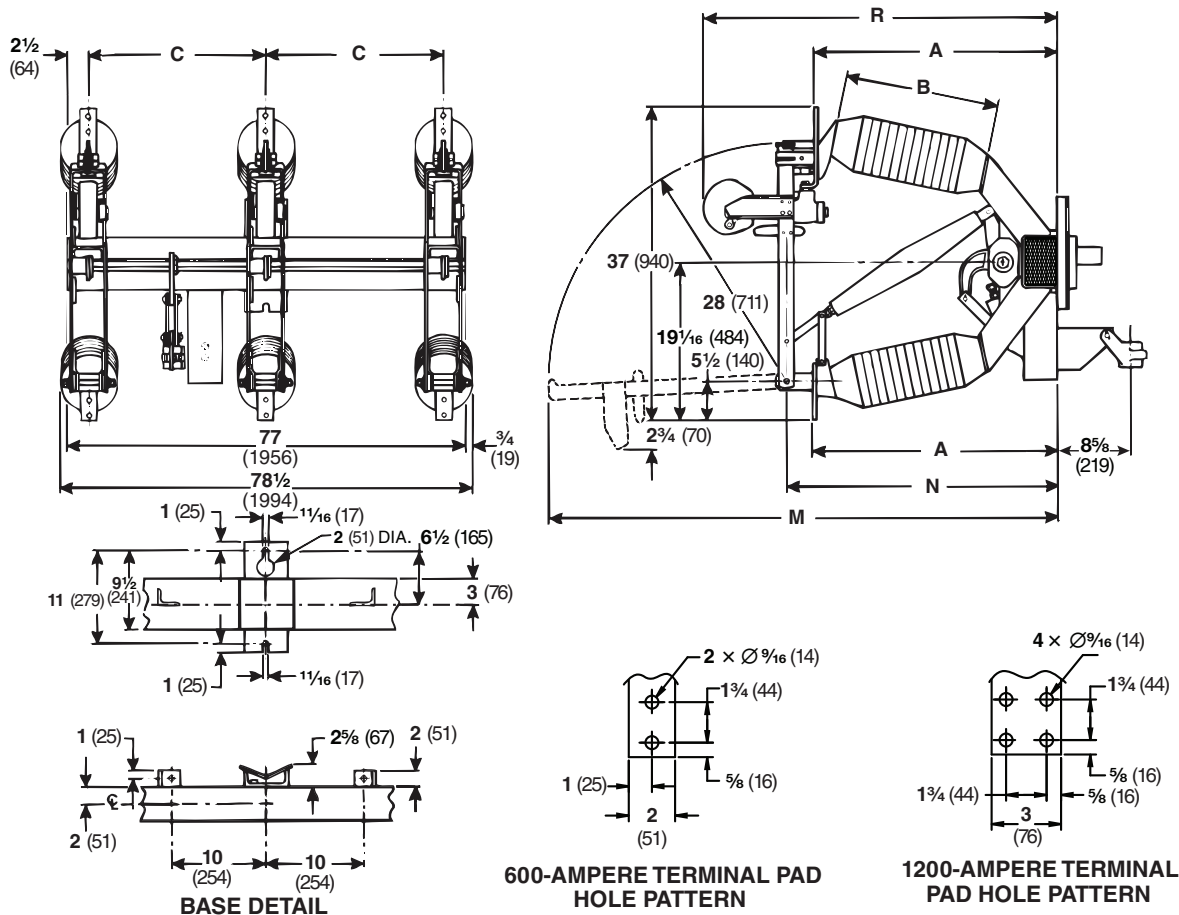
Dimensional Drawings

Three-Pole Vertical-Break Integer Style

Vertical Mounting Configuration

25/34.5 kV and 34.5 kV

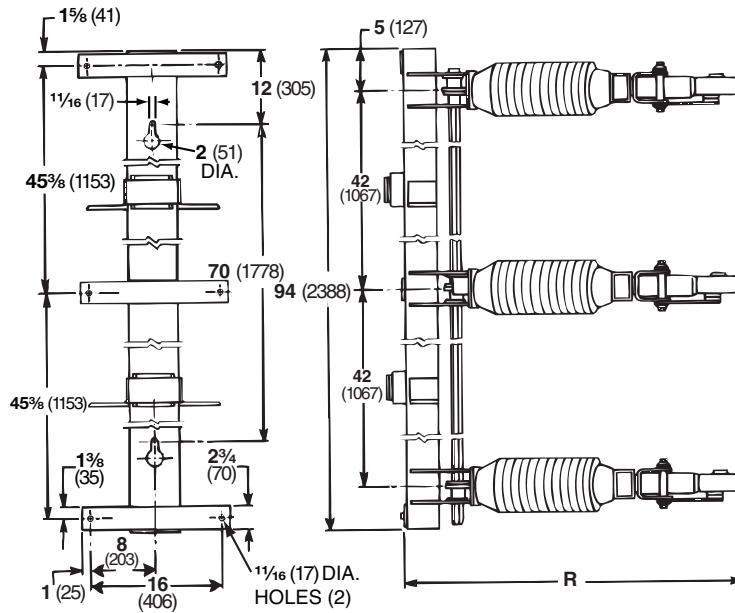
Dimensions in inches (mm)



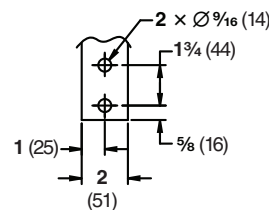
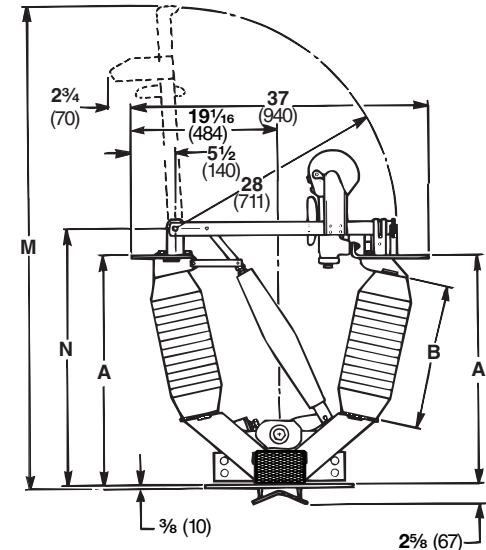
Mounting Configuration	Mounting Arrangements	Rating					Fault-Closing, Duty-Cycle, One-Time; Amperes, RMS, Asym.	Catalog Number		Dimensions in Inches to nearest 1/8-inch (mm)						Net Wt., 3-Pole Assem., Lbs. (kg)		Applications (see Table 1 and Table 2 on pages 5 through 7)
		kV		Amperes, RMS														
		Nom.	Max	BIL	Cont.	Mom. (Asym.)		Cypoxy Station Post Insulators	Porcelain Station Post Insulators	A	B	C	M	N	R	Cypoxy Station Post Insulators	Porcelain Station Post Insulators	
Vertical	ED-154R5	25/34.5	38	150	600	40000	20 000	135644R2-E	135644R2	25¼ (641)	14 (356)	25 (635)	57 (1448)	28⅝ (727)	38⅝ (981)	395 (179)	509 (231)	AEGHKL
		25/34.5	38	150	1200	40000	30 000	135844R2-E	135844R2	25¼ (641)	14 (356)	25 (635)	57 (1448)	28⅝ (727)	38⅝ (981)	395 (179)	509 (231)	AE(G)HKL
		34.5	38	200	600	40000	20 000	135744R2-E	135744R2	29¼ (743)	18 (457)	36 (914)	61 (1549)	32⅝ (829)	42⅝ (1083)	461 (209)	575 (261)	AEGHKL
		34.5	38	200	1200	40000	30 000	135944R2-E	135944R2	29¼ (743)	18 (457)	36 (914)	61 (1549)	32⅝ (829)	42⅝ (1083)	461 (209)	575 (261)	AE(G)HKL

Three-Pole Vertical-Break Integer Style
Tiered-Outboard Mounting Configuration
25/34.5 kV and 34.5 kV

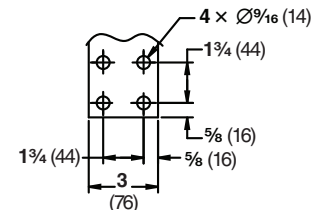
Dimensions in inches (mm)



BASE DETAIL



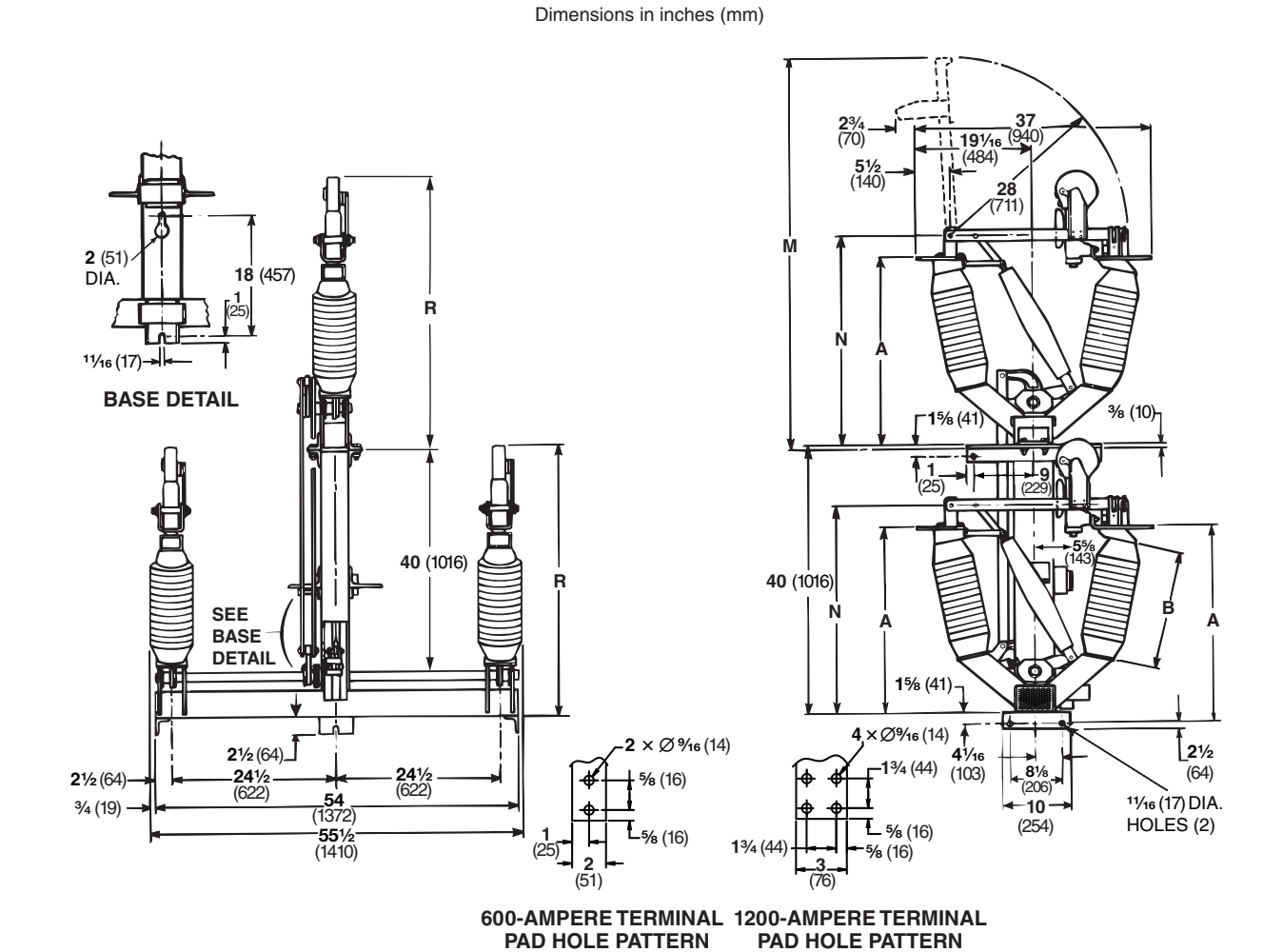
**600-AMPERE TERMINAL PAD
HOLE PATTERN**



**1200-AMPERE TERMINAL PAD
HOLE PATTERN**

Mounting Configuration	Mounting Arrangements	Rating					Fault-Closing, Duty-Cycle, One-Time; Amperes, RMS, Asym.	Catalog Number		Dimensions in Inches to nearest ⅛-inch (mm)					Net Wt., 3-Pole Assem., Lbs. (kg)		Applications (see Table 1 and Table 2 on pages 5 through 7)
		kV			Amperes, RMS					A					Cypoxy Station Post Insulators	Porcelain Station Post Insulators	
		Nom.	Max	BIL	Cont.	Mom. (Asym.)		A	B	M	N	R	Cypoxy Station Post Insulators	Porcelain Station Post Insulators			
Tiered-out-board	ED-155R6	25/34.5	38	150	600	40000	20 000	135654R2-E	135654R2	25¼ (641)	14 (356)	57 (1448)	28⅝ (727)	39 (991)	410 (186)	524 (238)	AEGHKL
		34.5	38	200	600	40000	20 000	135754R2-E	135754R2	29¼ (743)	18 (457)	61 (1549)	32⅝ (829)	43 (1092)	476 (216)	590 (268)	AEGHKL
		34.5	38	200	600	40000	30 000	135954R2-E	135954R2	29¼ (743)	18 (457)	61 (1549)	32⅝ (829)	43 (1092)	476 (216)	590 (268)	AE(G)HKL

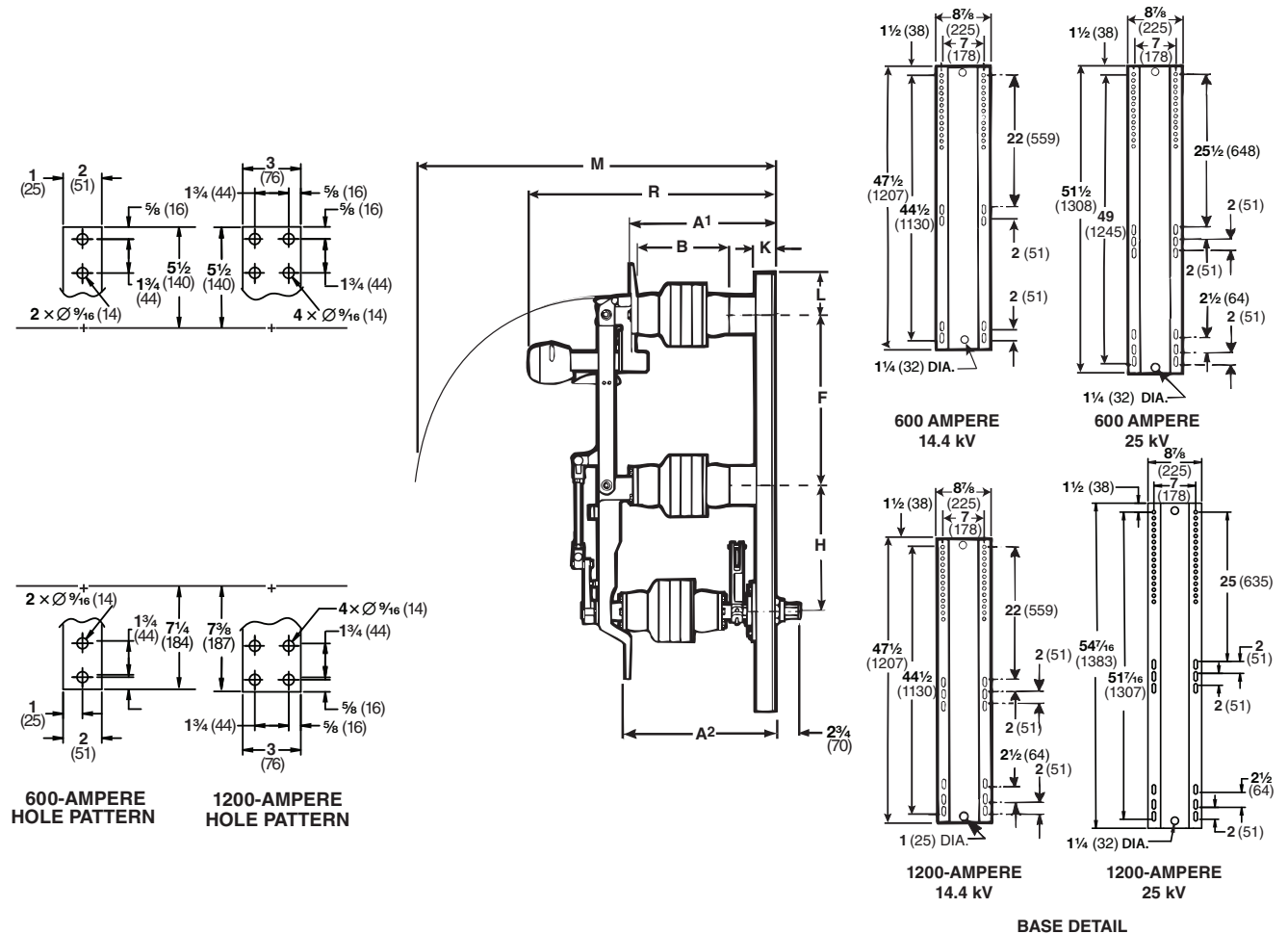
Three-Pole Vertical-Break Integer Style
Triangular Mounting Configuration
25/34.5 kV and 34.5 kV



Mounting Configuration	Mounting Arrangements	Rating					Fault-Closing, Duty-Cycle, One-Time; Amperes, RMS, Asym.	Catalog Number		Dimensions in Inches to nearest 1/8-inch (mm)					Net Wt., 3-Pole Assem., Lbs. (kg)		Applications (see Table 1 and Table 2 on pages 5 through 7)
		kV			Amperes, RMS					Cyproxy Station Post Insulators	Porcelain Station Post Insulators	A	B	M	N	R	
		Nom.	Max	BIL	Cont.	Mom. (Asym.)											
Triangular	ED-156R5	25/34.5	38	150	600	40000	20 000	135664R2-E	135664R2	25 1/4 (641)	14 (356)	57 (1448)	28 5/8 (727)	38 5/8 (981)	442 (200)	556 (252)	AEGHKL
		34.5	38	200	600	40000	20 000	135764R2-E	135764R2	29 1/4 (743)	18 (457)	61 (1549)	32 5/8 (829)	42 5/8 (1083)	496 (225)	610 (277)	AEGHKL
		34.5	38	200	1200	40000	30 000	135964R2-E	135964R2	29 1/4 (743)	18 (457)	61 (1549)	32 5/8 (829)	42 5/8 (1083)	496 (225)	610 (277)	AE(G)HKL

Three-Pole Vertical-Break Style 14.4 kV and 25 kV

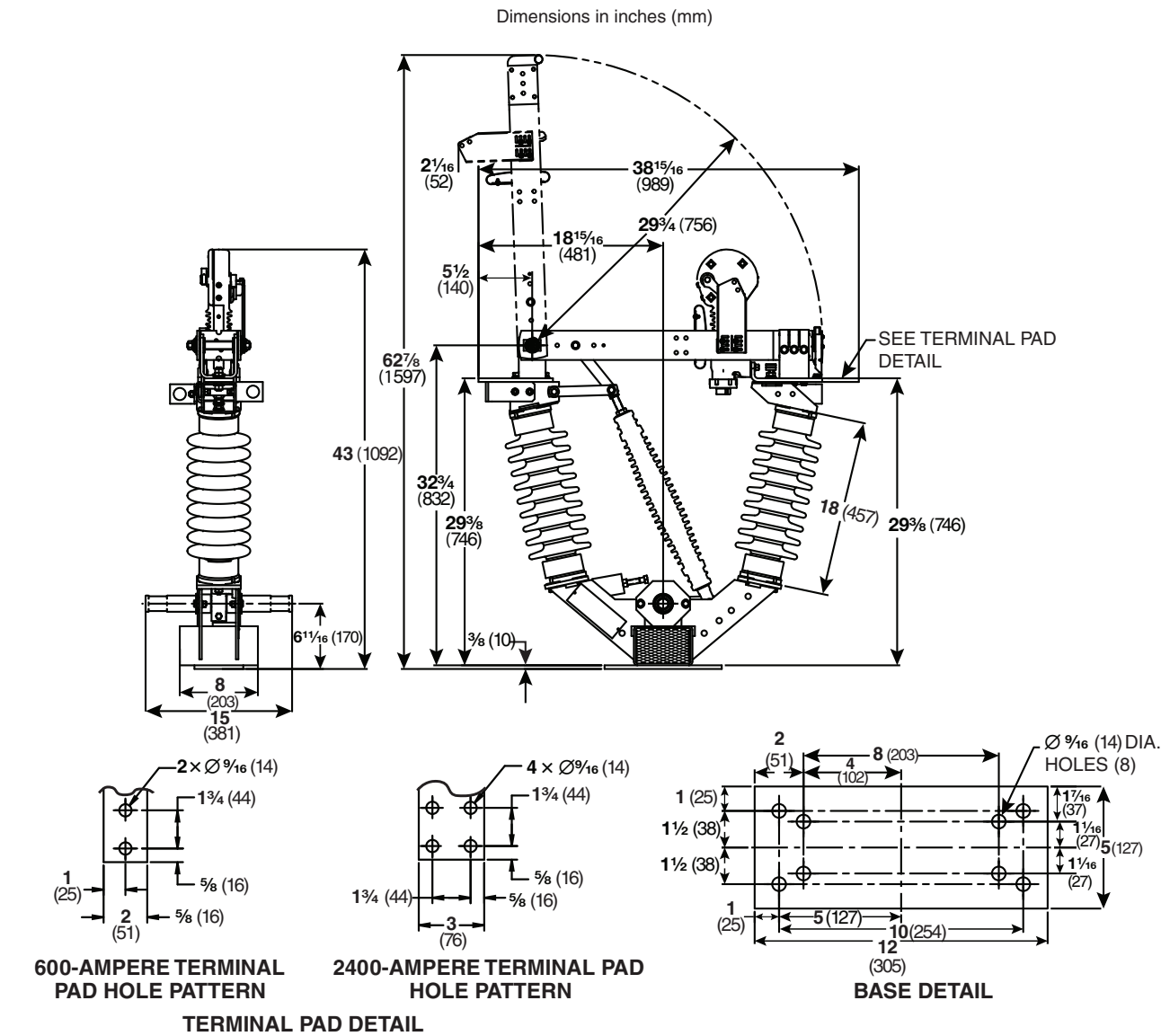
Dimensions in inches (mm)



NOTE: ALL HOLES ARE Ø 5/16 (14) ON 1-inch (25) CTRS.

Mounting Configuration	Rating					Catalog Number		Dimensions in Inches to nearest 1/8-inch (mm)										Net Wt., per Pole, Lbs. (kg)		Applications (see Table 1 and Table 2 on pages 5 through 7)
	kV			Amperes, RMS																
	Nom.	Max	BIL	Cont.	Mom. (Asym.)	Cypoxy Station Post Insulators	Porcelain Station Post Insulators	A1	A2	B	F	H	K	L	M	R	Cypoxy Station Post Insulators	Porcelain Station Post Insulators		
Vertical or upright	14.4	17.0	110	600	40000	135012R4-E	135012R4	15 3/8 (397)	16 1/4 (413)	10 (254)	18 1/2 (470)	3 3/4 (349)	2 (51)	4 1/2 (114)	38 3/8 (975)	26 3/8 (676)	120 (54)	141 (64)	AEGHK(L)	
	14.4	17.0	110	1200	61 000	320222R9-E	320222R9	15 1/2 (394)	16 7/8 (429)	10 (254)	19 3/8 (492)	11 (279)	2 1/4 (57)	4 7/8 (124)	39 3/4 (1010)	25 1/2 (648)	163 (74)	184 (83)	AEGHK(L)	
	25	27	150	600	40000	135013R5-E	135013R5	19 7/8 (505)	20 1/2 (521)	14 (356)	22 1/2 (572)	13 3/4 (349)	2 1/4 (57)	4 1/2 (114)	47 1/4 (1200)	31 (787)	161 (73)	201 (91)	AEG(HKL)	
	25	27	150	1200	61 000	320223R9-E	320223R9	19 1/2 (495)	20 3/8 (518)	14 (356)	21 5/8 (549)	15 (381)	2 1/2 (64)	5 5/8 (143)	46 1/4 (1175)	29 5/8 (752)	194 (88)	234 (106)	AE(GHKL)	

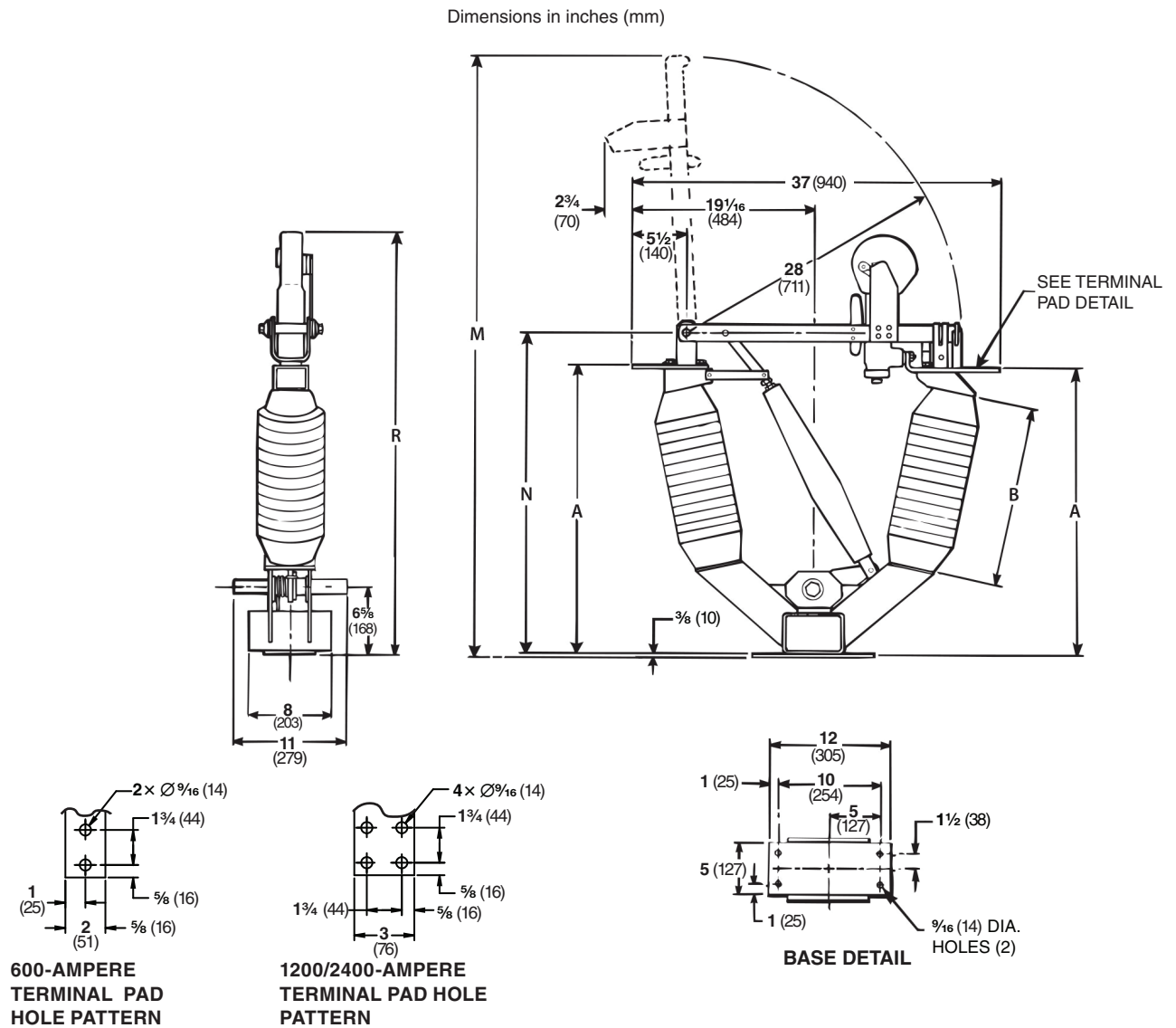
Three-Pole Vertical-Break Style
14.4 kV, 2400-A—continued



Mounting Configuration	Rating					Catalog Number		Net Wt., per Pole, Lbs. (kg)		Applications (see Table 1 and Table 2 on pages 5 through 7)
	kV			Amperes, RMS						
	Nom.	Max	BIL	Cont.	Mom. (Asym.)	Cypoxy Station Post Insulators	Porcelain Station Post Insulators	Cypoxy Station Post Insulators	Porcelain Station Post Insulators	
Vertical	14.4	17.0	200	2400	40000	135072R2-E	135072R2	146 (66)	184 (83)	AEGHKL
Upright	14.4	17.0	200	2400	40000	135092R2-E	135092R2	146 (66)	184 (83)	AEGHKL

Three-Pole Vertical-Break Style

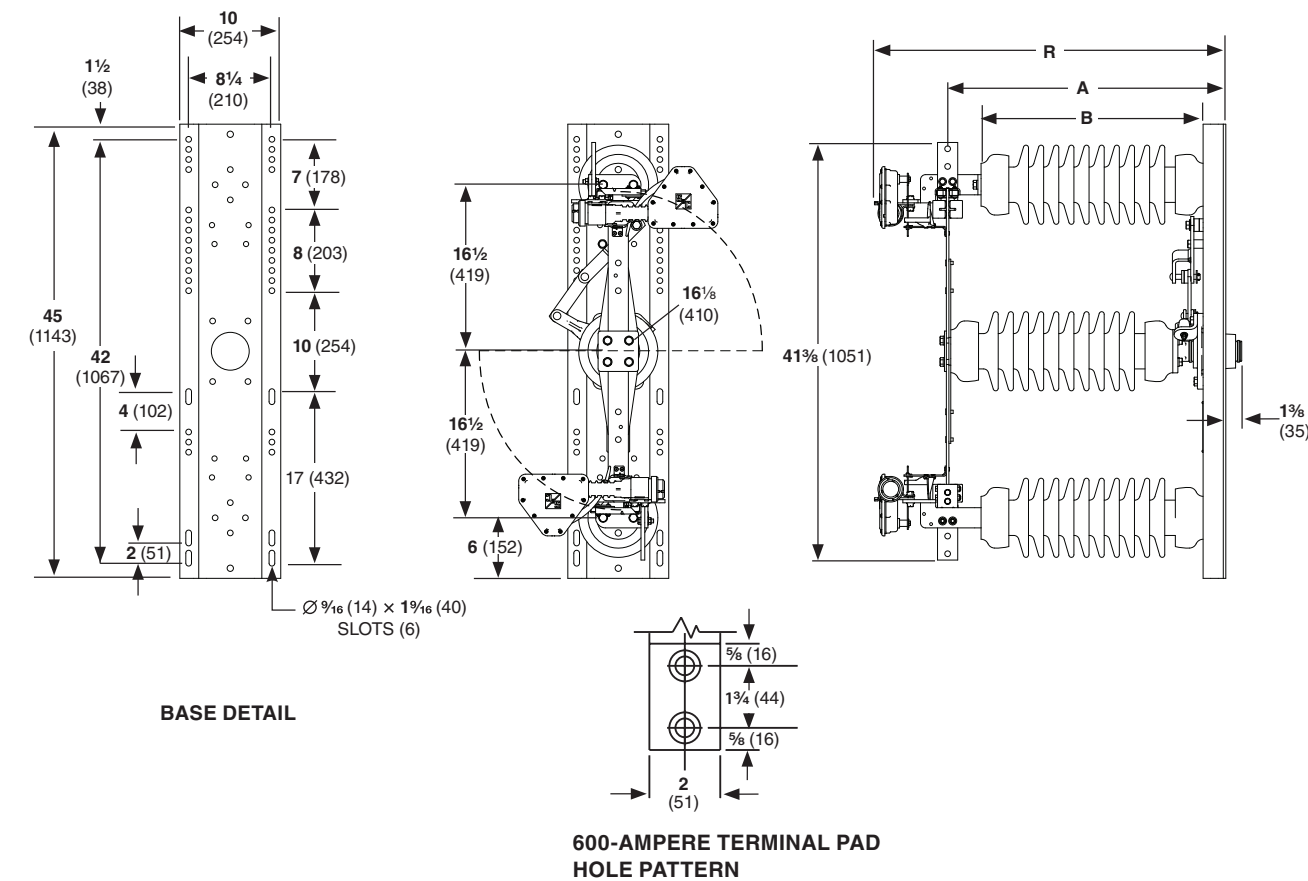
25/34.5 kV and 34.5 kV



Mounting Configuration	Rating					Catalog Number		Dimensions in Inches to nearest 1/8-inch (mm)					Net Wt., per Pole, Lbs. (kg)		Applications (see Table 1 and Table 2 on pages 5 through 7)
	kV			Amperes, RMS											
	Nom.	Max	BIL	Cont.	Mom. (Asym.)	Cypoxy Station Post Insulators	Porcelain Station Post Insulators	A	B	M	N	R	Cypoxy Station Post Insulators	Porcelain Station Post Insulators	
Vertical	25/34.5	38	150	1200	40000	135894R3-E	135894R3	25¼ (641)	14 (356)	57 (1448)	28¼ (718)	39 (991)	123 (56)	150 (68)	AE(G)HKL
	34.5	38	200	600	40000	135794R3-E	135794R3	29¼ (743)	18 (457)	61 (1549)	32¼ (819)	43 (1092)	132 (60)	170 (77)	AEGHKL
	34.5	38	200	1200	40000	135994R3-E	135994R3	29¼ (743)	18 (457)	61 (1549)	32¼ (819)	43 (1092)	132 (60)	170 (77)	AE(G)HKL
Upright	25/34.5	38	150	1200	40000	135874R3-E	135874R3	25¼ (641)	14 (356)	57 (1448)	28¼ (718)	39 (991)	123 (56)	150 (68)	AE(G)HKL
	34.5	38	200	600	40000	135774R3-E	135774R3	29¼ (743)	18 (457)	61 (1549)	32¼ (819)	43 (1092)	132 (60)	170 (77)	AEGHKL
	34.5	38	200	1200	40000	135974R3-E	135974R3	29¼ (743)	18 (457)	61 (1549)	32¼ (819)	43 (1092)	132 (60)	170 (77)	AE(G)HKL

Three-Pole Double-Break Style
34.5 kV and 46 kV

Dimensions in inches (mm)



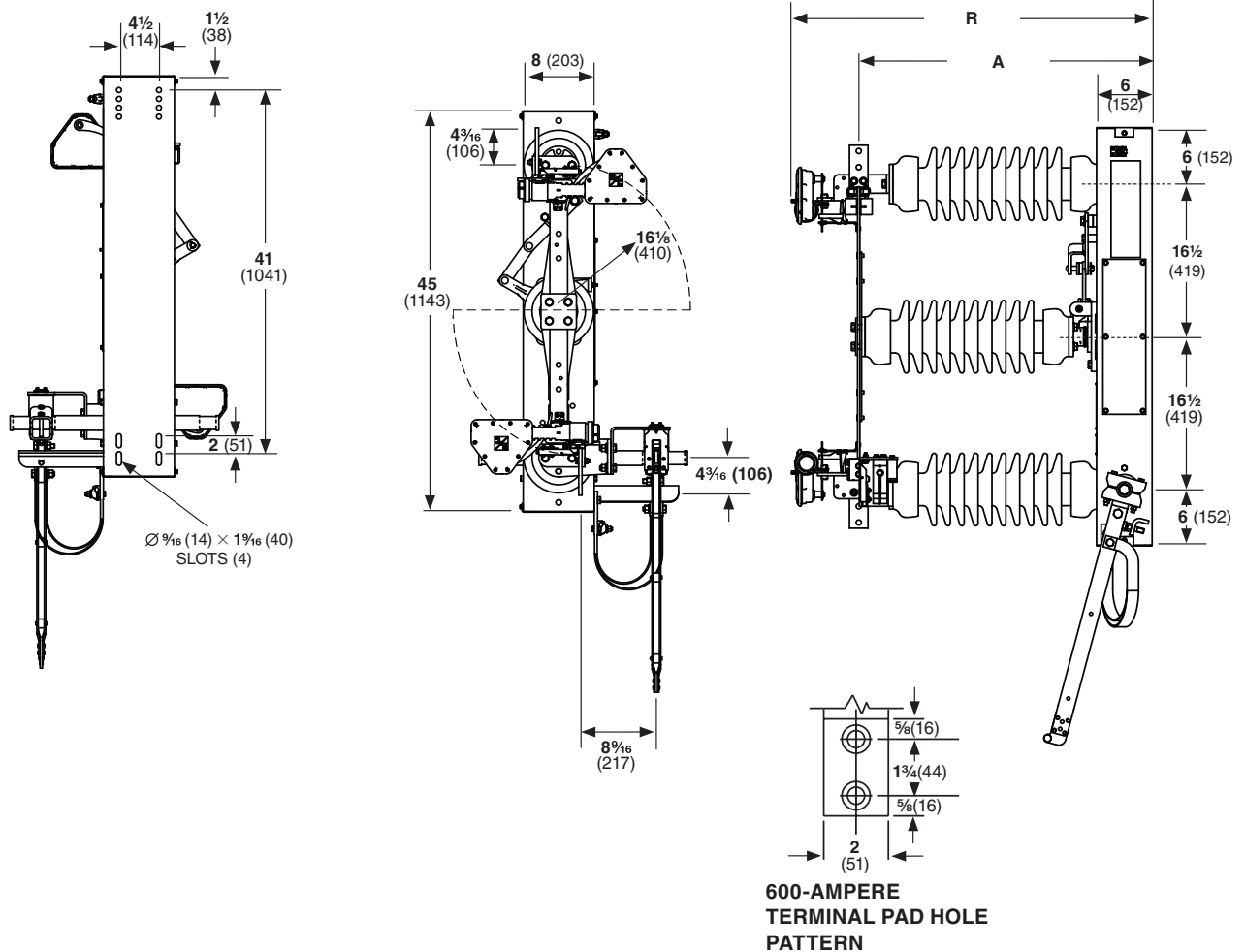
Mounting Configuration	Rating					Catalog Number		Dimensions in Inches to nearest 1/16-inch (mm)			Net Wt., per Pole, Lbs. (kg)	
	kV			Amperes, RMS								
	Nom.	Max	BIL	Cont.	Peak With-stand	Cyposy Station Post Insulators	Porcelain Station Post Insulators	A	B	R	Cyposy Station Post Insulators	Porcelain Station Post Insulators
Vertical or upright	34.5	38	200	630	65 000	320304R11-E	320304R11	23 ⁹ / ₁₆ (599)	18 (457)	30 ¹³ / ₁₆ (783)	150 (68)	180 (82)
	46	48.3	250	630	65 000	320305R11-E	320305R11	27 ⁹ / ₁₆ (700)	22 (559)	34 ¹³ / ₁₆ (884)	186 (84)	204 (93)
Inverted	34.5	38	200	630	65 000	320404R11-E	320404R11	23 ⁹ / ₁₆ (599)	18 (457)	30 ¹³ / ₁₆ (783)	150 (68)	180 (82)
	46	48.3	250	630	65 000	320405R11-E	320405R11	27 ⁹ / ₁₆ (700)	22 (559)	34 ¹³ / ₁₆ (884)	186 (84)	204 (93)

Three-Pole Double-Break Style

Ground Switch

34.5 kV and 46 kV

Dimensions in inches (mm)

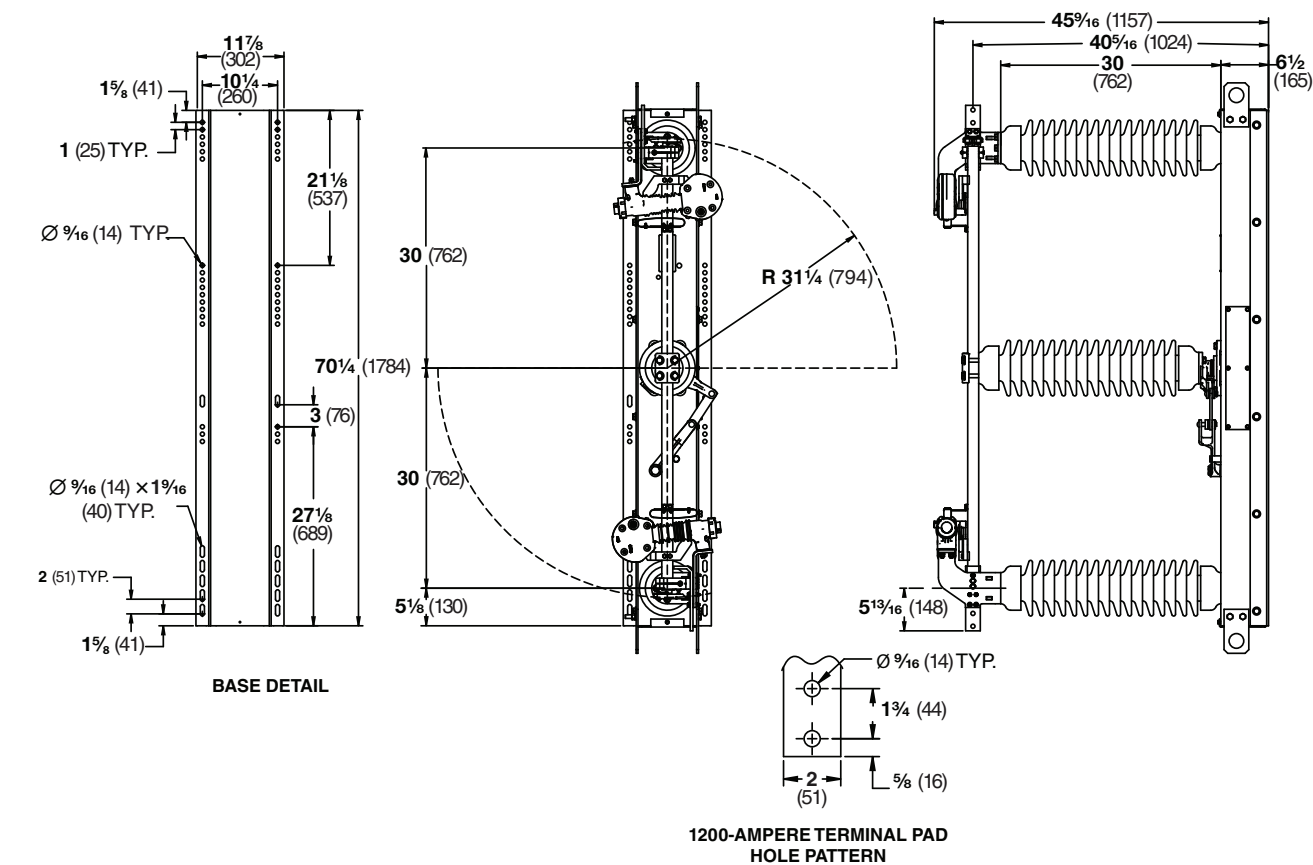


Mounting Configuration	Rating					Catalog Number		Dimensions in Inches to nearest 1/16-inch (mm)		Net Wt., per Pole, Lbs. (kg)	
	kV			Amperes, RMS							
	Nom.	Max	BIL	Cont.	Peak With-stand	Cypoxy Station Post Insulators	Porcelain Station Post Insulators	A	R	Cypoxy Station Post Insulators	Porcelain Station Post Insulators
Vertical or upright	34.5	38	200	630	65 000	320304R11-G-E	320304R11-G	27 ¹¹ / ₁₆ (703)	34 ⁹ / ₁₆ (878)	150 (68)	180 (82)
	46	48.3	250	630	65 000	320305R11-G-E	320305R11-G	31 ¹¹ / ₁₆ (805)	38 ⁹ / ₁₆ (980)	186 (84)	204 (93)

Dimensional Drawings

Three-Pole Double-Break Style
69 kV

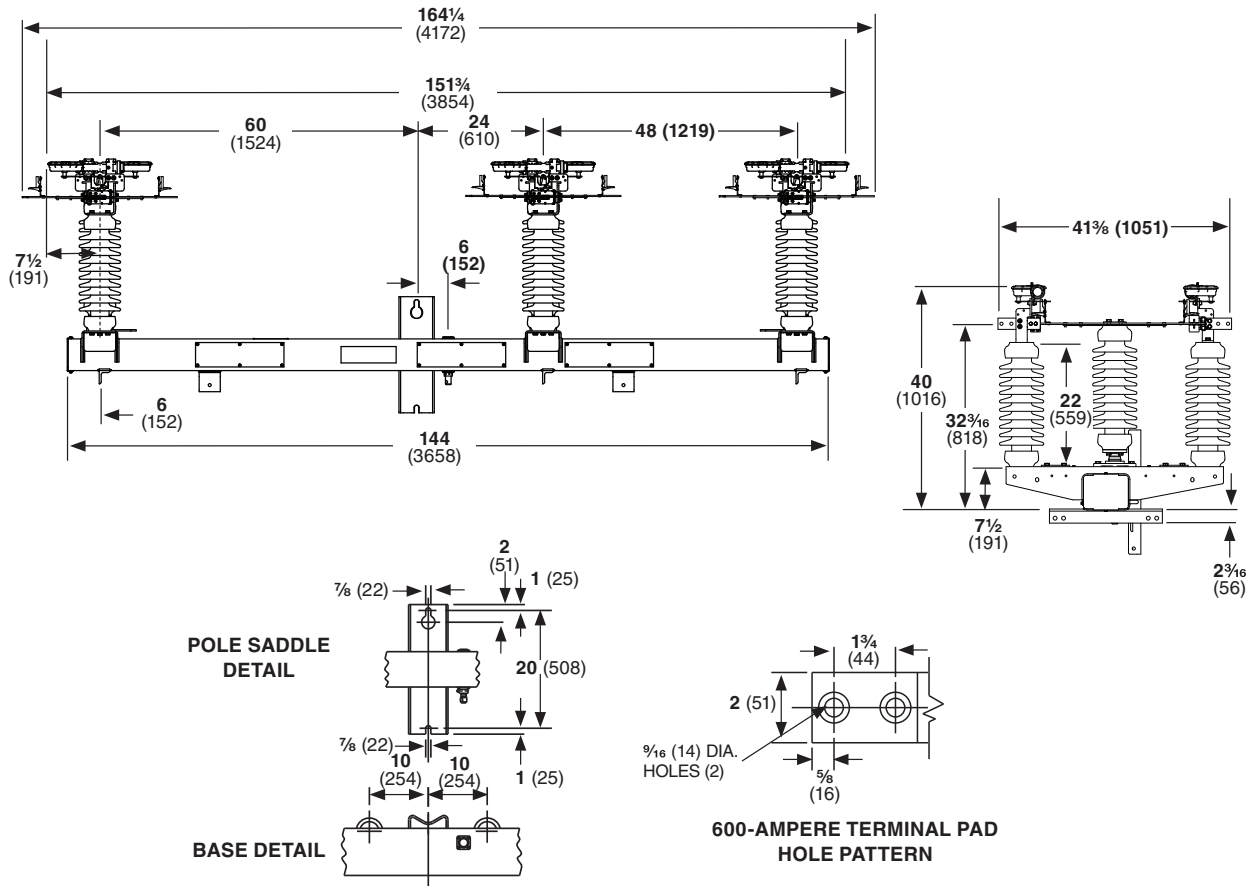
Dimensions in inches (mm)



Mounting Configuration	Rating					Catalog Number	Net Wt., per Pole, Lbs. (kg)	Applications (see Table 1 and Table 2 on pages 5 through 7)
	kV			Amperes, RMS				
	Nom.	Max	BIL	Cont.	Mom. (Asym.)	Porcelain Station Post Insulators	Porcelain Station Post Insulators	
Vertical, upright, or tiered-upright	69	72.5	350	1200	40000	320306	650 (295)	AEG

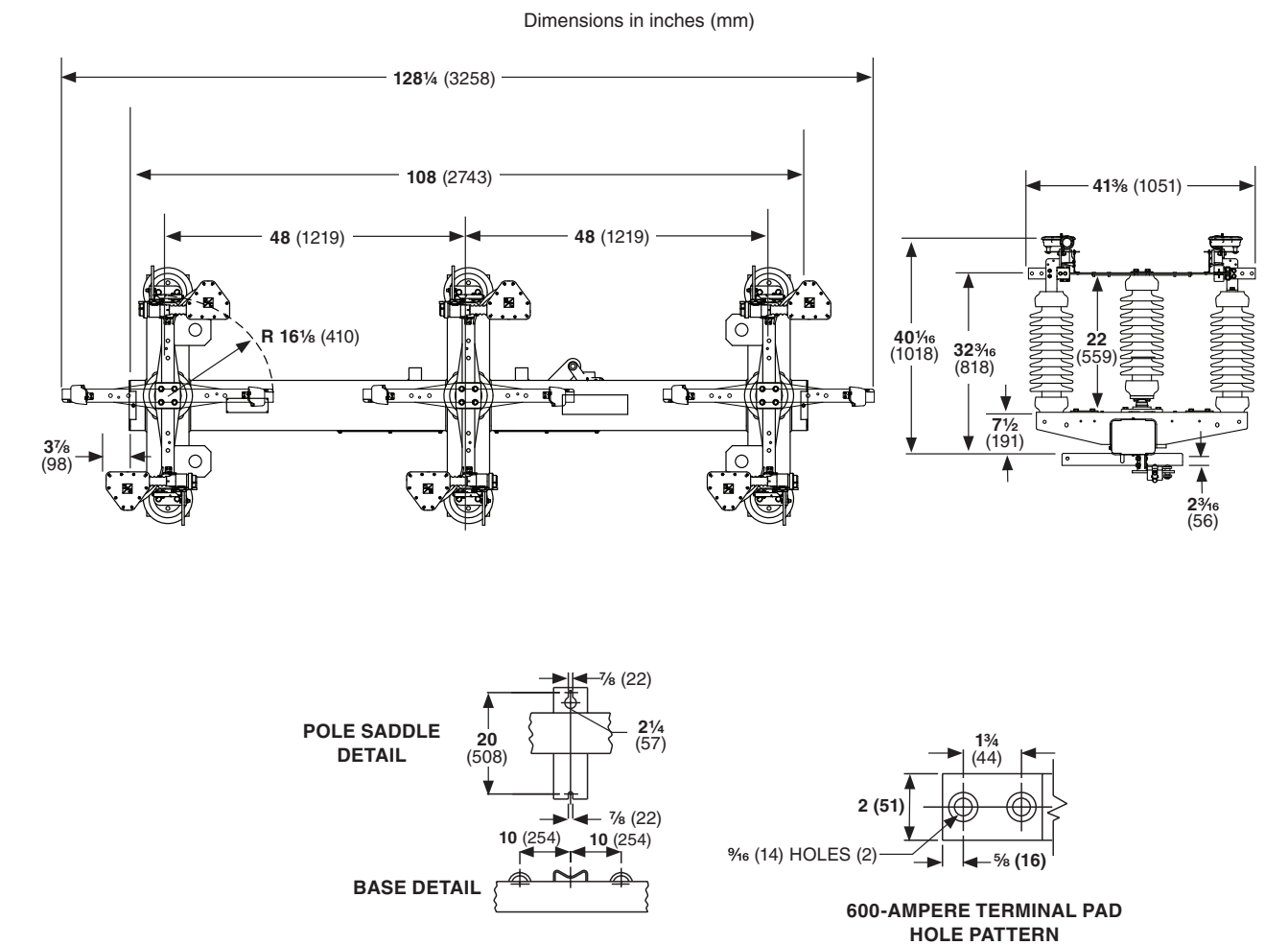
Three-Pole Double-Break Integer Style **Upright Mounting Configuration 46 kV**

Dimensions in inches (mm)



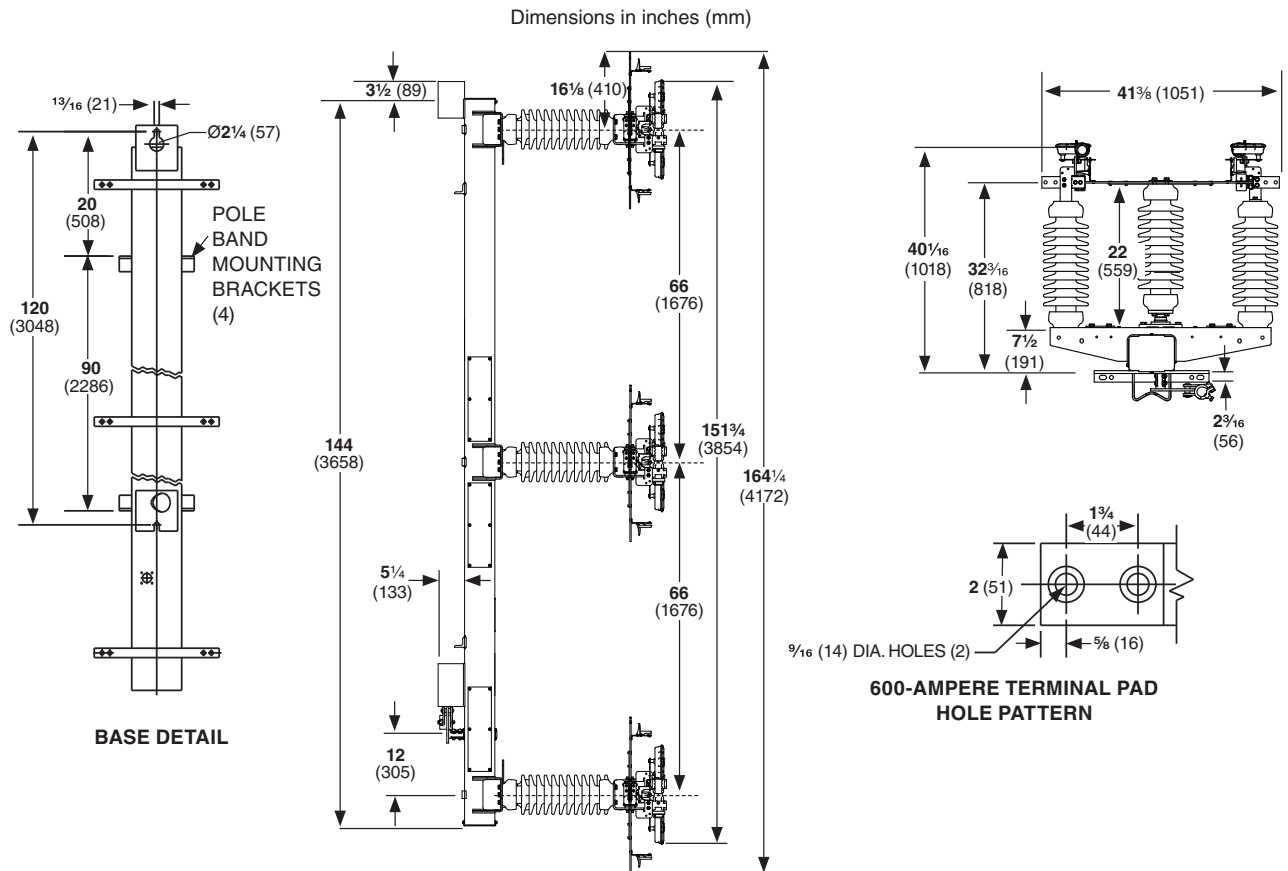
Mounting Configuration	Mounting Arrangement	Rating					Fault-Closing, Duty-Cycle, Two-Time; Amperes, Peak	Catalog Number		Net Wt., 3-Pole Assem., Lbs. (kg)	
		kV			Amperes			Cypoxy Station Post Insulators	Porcelain Station Post Insulators	Cypoxy Station Post Insulators	Porcelain Station Post Insulators
		Nom.	Max	BIL	Cont.	Peak With-stand					
Upright	ED-160R1	46	48.3	250	630	65 000	36 000	320335R11-E	320335R11-E	898 (407)	952 (432)

Three-Pole Double-Break Integer Style
Vertical Mounting Configuration
46 kV



Mounting Configuration	Mounting Arrangement	Rating					Fault-Closing, Duty-Cycle, Two-Time; Amperes, Peak	Catalog Number		Net Wt., 3-Pole Assem., Lbs. (kg)	
		kV			Amperes, RMS			Cypoxy Station Post Insulators	Porcelain Station Post Insulators	Cypoxy Station Post Insulators	Porcelain Station Post Insulators
		Nom.	Max	BIL	Cont.	Peak With-stand					
Vertical	ED-161	46	48.3	250	630	65 000	36 000	320345R11-E	320345R11	784 (356)	838 (380)

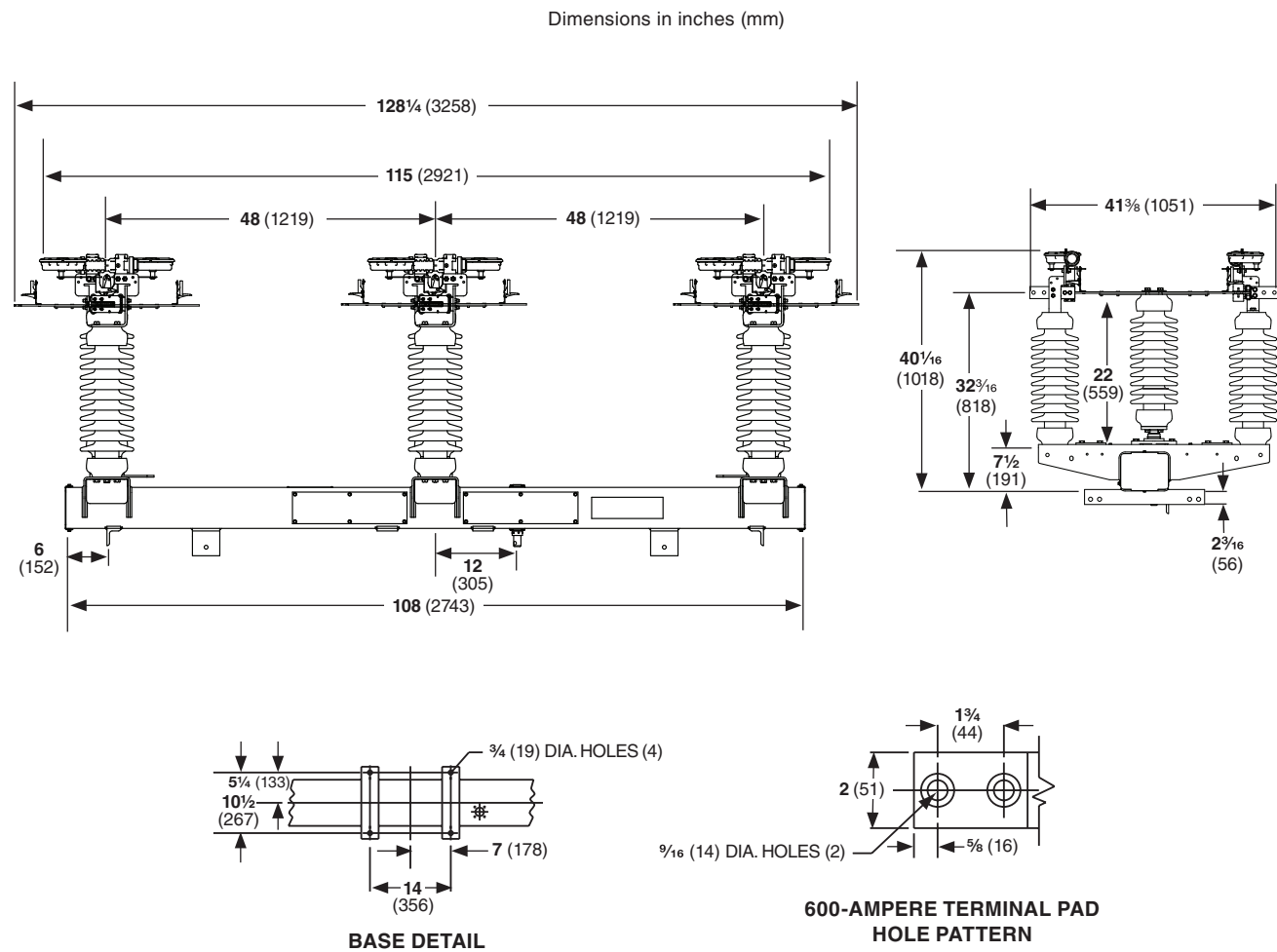
Three-Pole Double-Break Integer Style
Tiered-Outboard Mounting Configuration
46 kV



Mounting Configuration	Mounting Arrangement	Rating					Fault-Closing, Duty-Cycle, Two-Time; Amperes, Peak	Catalog Number		Net Wt., 3-Pole Assem., Lbs. (kg)	
		kV			Amperes			Cypoxy Station Post Insulators	Porcelain Station Post Insulators	Cypoxy Station Post Insulators	Porcelain Station Post Insulators
		Nom.	Max	BIL	Cont.	Peak With-stand					
Tiered-outboard	ED-162	46	48.3	250	630	65 000	36 000	320355R11-E	320355R11	894 (406)	948 (430)

Dimensional Drawings

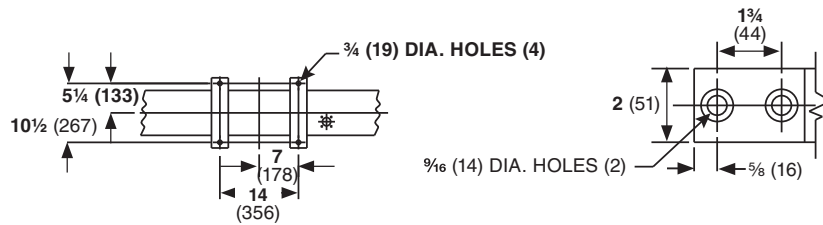
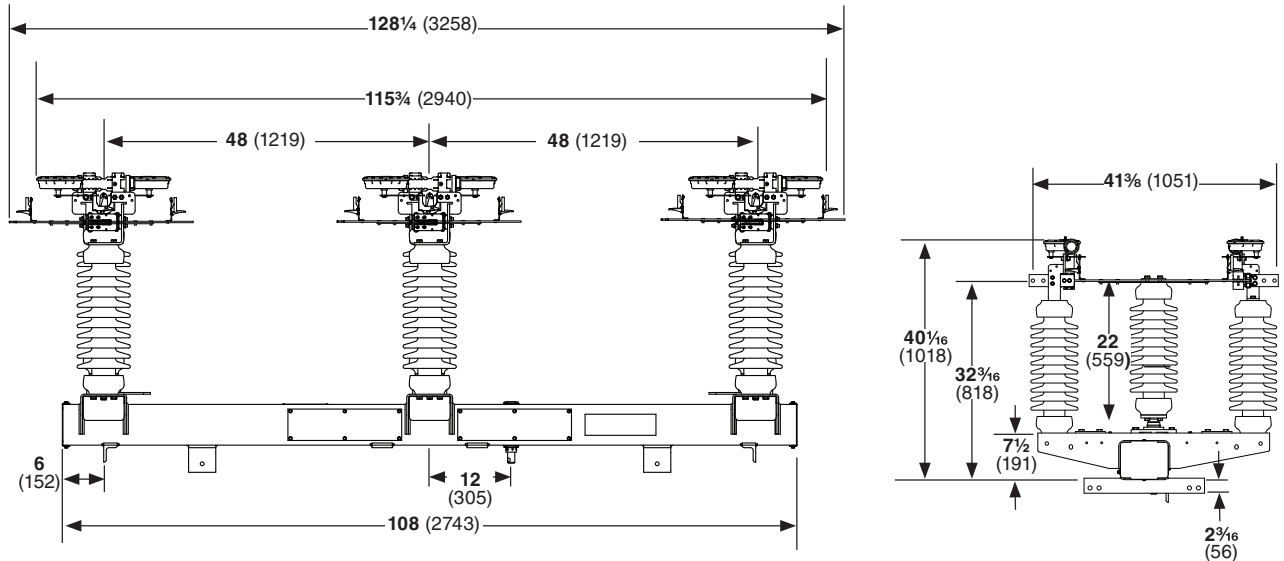
Three-Pole Double-Break Integer Style
Pole-Top Mounting Configuration
46 kV



Mounting Configuration	Mounting Arrangement	Rating					Fault-Closing, Duty-Cycle, Two-Time; Amperes, Peak	Catalog Number		Net Wt., 3-Pole Assem., Lbs. (kg)	
		kV			Amperes			Cypoxy Station Post Insulators	Porcelain Station Post Insulators	Cypoxy Station Post Insulators	Porcelain Station Post Insulators
		Nom.	Max	BIL	Cont.	Peak With-stand					
Pole-top	ED-163R1	46	48.3	250	630	65 000	36 000	320365R11-E	320365R11	820 (372)	980 (445)

Three-Pole Double-Break Integer Style
Pedestal Mounting Configuration
46 kV

Dimensions in inches (mm)



BASE DETAIL

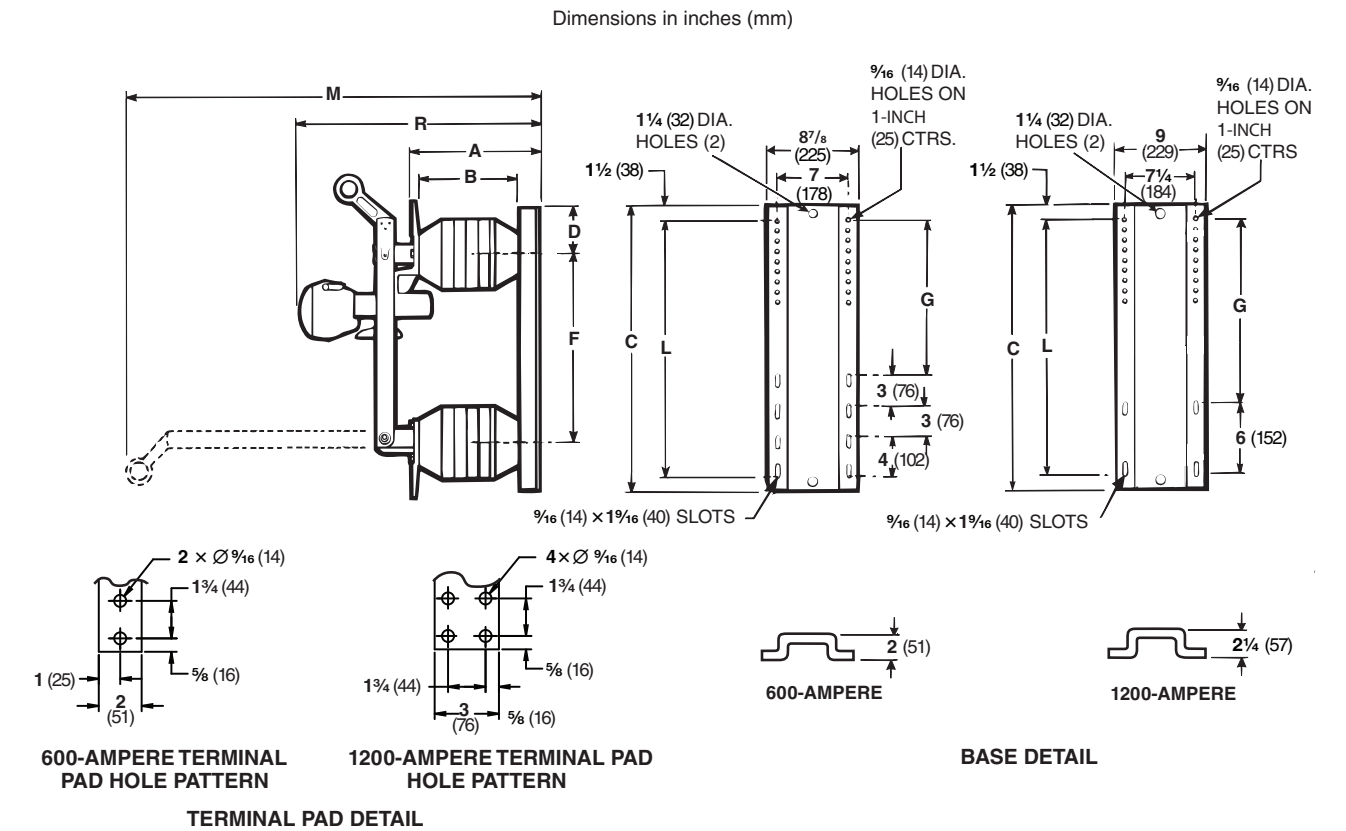
600-AMPERE TERMINAL PAD HOLE PATTERN

Mounting Configuration	Mounting Arrangement	Rating					Fault-Closing, Duty-Cycle, Two-Time; Amperes, Peak	Catalog Number		Net Wt., 3-Pole Assem., Lbs. (kg)①	
		kV			Amperes						
		Nom.	Max	BIL	Cont.	Peak With-stand		Cypoxy Station Post Insulators	Porcelain Station Post Insulators	Cypoxy Station Post Insulators	Porcelain Station Post Insulators
Pedestal	ED-164R1	46	48.3	250	630	65 000	36 000	320375R11-E	320375R11	810 (367)	970 (440)

① Not including mounting pedestal.

Dimensional Drawings

Single-Pole Heavy-Duty Style
14.4 kV and 25 kV



Mounting Configuration	Rating					Catalog Number		Dimensions in Inches to nearest 1/16-inch (mm)										Net Wt., 3-Pole Assem., Lbs. (kg)		Applications (see Table 1 and Table 2 on pages 5 through 7)
	kV		Amperes, RMS																	
	Nom.	Max	BIL	Cont.	Mom. (Asym.)	Cypoxy Station Post Insulators	Porcelain Station Post Insulators	A	B	C	D	F	G	L	M	R	Cypoxy Station Post Insulators	Porcelain Station Post Insulators		
Vertical	14.4	17.0	110	600	40000	136012-E	136012	12 ⁵ / ₈ (321)	10 (254)	28 (711)	4 ³ / ₄ (121)	18 ¹ / ₂ (470)	15 (381)	25 (635)	40 ³ / ₄ (1035)	23 ³ / ₄ (603)	62 (28)	76 (34)	AEGHK(L)	
	14.4	17.0	110	1200	61 000	320022R9-E	320022R9	13 ¹ / ₄ (337)	10 (254)	28 (711)	4 ³ / ₄ (121)	19 ⁹ / ₈ (492)	19 (483)	25 (635)	43 (1092)	23 ³ / ₈ (594)	93 (42)	107 (49)	AEGHK(L)	
	25	27	150	600	40000	136013R1-E	136013R1	16 ⁵ / ₈ (422)	14 (356)	30 (762)	4 ³ / ₄ (121)	20 ¹ / ₂ (521)	17 (432)	27 (686)	47 (1194)	27 ⁷ / ₈ (708)	74 (34)	101 (46)	AEG(HKL)	
	25	27	150	1200	61 000	320023R10-E	320023R10	17 ¹ / ₄ (438)	14 (356)	32 ³ / ₄ (832)	5 ⁷ / ₈ (149)	21 ⁵ / ₈ (549)	23 ³ / ₄ (603)	29 ³ / ₄ (756)	50 ³ / ₈ (1280)	28 ⁵ / ₈ (727)	104 (47)	131 (59)	AE(GHKL)	
Inverted	14.4	17.0	110	600	40000	136112R5-E	136112R5	12 ⁵ / ₈ (321)	10 (254)	28 (711)	4 ³ / ₄ (121)	18 ¹ / ₂ (470)	15 (381)	25 (635)	40 ³ / ₄ (1035)	23 ³ / ₄ (603)	62 (28)	76 (34)	AEGHK(L)	
	14.4	17.0	110	1200	61 000	320122R9-E	320122R9	13 ¹ / ₄ (337)	10 (254)	28 (711)	4 ³ / ₄ (121)	19 ⁹ / ₈ (492)	19 (483)	25 (635)	43 (1092)	23 ³ / ₈ (594)	93 (42)	107 (49)	AEGHK(L)	
	25	27	150	600	40000	136113R1-E	136113R1	16 ⁵ / ₈ (422)	14 (356)	30 (762)	4 ³ / ₄ (121)	20 ¹ / ₂ (521)	17 (432)	27 (686)	47 (1194)	27 ⁷ / ₈ (708)	74 (34)	101 (46)	AEG(HKL)	
	25	27	150	1200	61 000	320123R10-E	320123R10	17 ¹ / ₄ (438)	14 (356)	32 ³ / ₄ (832)	5 ⁷ / ₈ (149)	21 ⁵ / ₈ (549)	23 ³ / ₄ (603)	29 ³ / ₄ (756)	50 ³ / ₈ (1280)	28 ⁵ / ₈ (727)	104 (47)	131 (59)	AE(GHKL)	