

AUTO-JET® & AUTO-JET® II SWITCHES 5-35kV

Federal Pacific has designed and manufactured a family of laboratory tested and field proven air-insulated, load-break switches since 1978. The original Auto-jet® switch and later the Auto-jet® II switch provide the same unique method of load interruption, producing a laminated jet of air which extinguishes the arc.

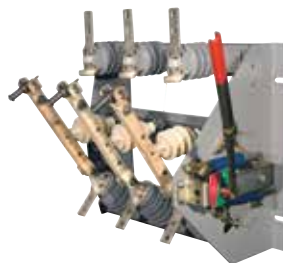
Both switches are designed to provide a safe, convenient means of three-pole switching of distribution transformers, cable loops and laterals, and provide automatic or manual switching of preferred and alternate sources.

The Auto-jet® II was introduced to accommodate smaller sized live-front and dead-front pad-mounted switchgear. The larger sized Auto-jet® is used in specialty applications and at 38 kV. Both provide 600 amperes continuous and load-break at rated voltage, 40,000 amperes RMS/ASYM momentary and three-time fault-close capability. Switches rated to 1200 amperes continuous and load-break with a 61,000 ampere one-time duty-cycle fault-closing rating are available.

All switches have a heavy-gauge steel frame, which assures proper contact alignment and eliminates any problem of switch-to-enclosure alignment. An optional all stainless-steel switch is available (current-carrying parts are not

stainless-steel). A quick-make, quick-break stored-energy mechanism with heavy-duty, long-life die springs provides high-speed opening and closing independent of the operating handle speed. This high-speed mechanism assures the duty-cycle fault-closing capability and load interruption with the patented Federal Pacific interrupter. The switch blades are made of high conductivity copper. Current transfer from the switch blade through the hinge to the load terminals is accomplished by a unique current transfer means, consisting of a beryllium-copper louvered contact band encircling a copper pin at the hinge point. Magnetic forces, due to a higher than normal current flow, tend to rotate the louvers on the contact band toward a vertical position, providing a higher contact pressure for fault-current duty.

Electrical integrity is enhanced by 100% x-rayed cycloaliphatic epoxy insulators. Typical applications include metal-enclosed switchgear, pad-mounted switchgear, metal-enclosed wall-mounted switch cabinets and transformer primary compartments. The switches are available with either left or right hand operator and either direct hex shaft side operation or front chain-drive operation.



AUTO-JET® II
15kV, 600 AMPERE



AUTO-JET® II
15kV, 1200 AMPERE



AUTO-JET® 34.5kV,
600 AMPERE

AUTO-JET® RATINGS

Catalog Number	Mounting Arrangements †	kV				Amperes, RMS				Fault-Close Duty-Cycle	Net Weight (Lbs.)
		Nom.	Max. Des.	BIL	Max. Cont.	Interrupting			Mom. & Fault-Close (ASYM KA)		
						Max. Load	Cable	Mag.			
0008-4-53151M ①⑤	N,H	34.5	38	150	600	600	20	21	40*	3*	178
0035-4-53152 ①⑤	N,H	34.5	38	150	600	600	20	21	40*	3*	178
0036-4-53153 ①⑤	N,H	34.5	38	150	600	600	20	21	40*	3*	178

AUTO-JET® II RATINGS

Catalog Number	Mounting Arrangements ⑥	kV				Amperes, RMS				Fault-Close Duty-Cycle	Net Weight (Lbs.)
		Nom.	Max. Des.	BIL	Max. Cont.	Interrupting			Mom. & Fault-Close (ASYM KA)		
						Max. Load	Cable	Mag.			
0037-4-53168M ①⑤	N,H	14.4	17	95**	600	600	10	21	40*	3*	110
0037-4-53169M ④⑤	N,H	14.4	17	95**	600	600	10	21	40*	3*	110
0037-4-53152 ②⑤	N,H	14.4	17	95**	600	600	10	21	40*	3*	110
0037-4-53151 ③	N,H	14.4	17	95**	600	600	10	21	40*	3*	110
34-5121-02 †	N,H	14.4	15.5	95**	1200	1200	10	21	60†	1†	110
0038-4-53152M ①⑤	N,H	25	27	125**	600	600	15	21	40*	3*	130
0039-4-53152M ④⑤	N,H	25	27	125**	600	600	15	21	40*	3*	130
0038-4-53152 ②⑤	N,H	25	29	125**	600	600	15	21	40*	3*	130
0039-4-53152 ③⑤	N,H	25	29	125**	600	600	15	21	40*	3*	130
34-5135-01 ②⑤	N,H	25	27	125**	900	1200	15	21	40*	3*	130
34-5136-01 ③⑤	N,H	25	27	125**	900	1200	15	21	40*	3*	130

- ① For front operation with handle on right.
- ② For side operation (3/4" hex operating shaft) handle on right.
- ③ For side operation (3/4" hex operating shaft) handle on left.
- ④ For front operation handle on left.
- ⑤ Handles and barriers not included.

⑥ Mounting arrangements:

(N) Normal

(H) Horizontal



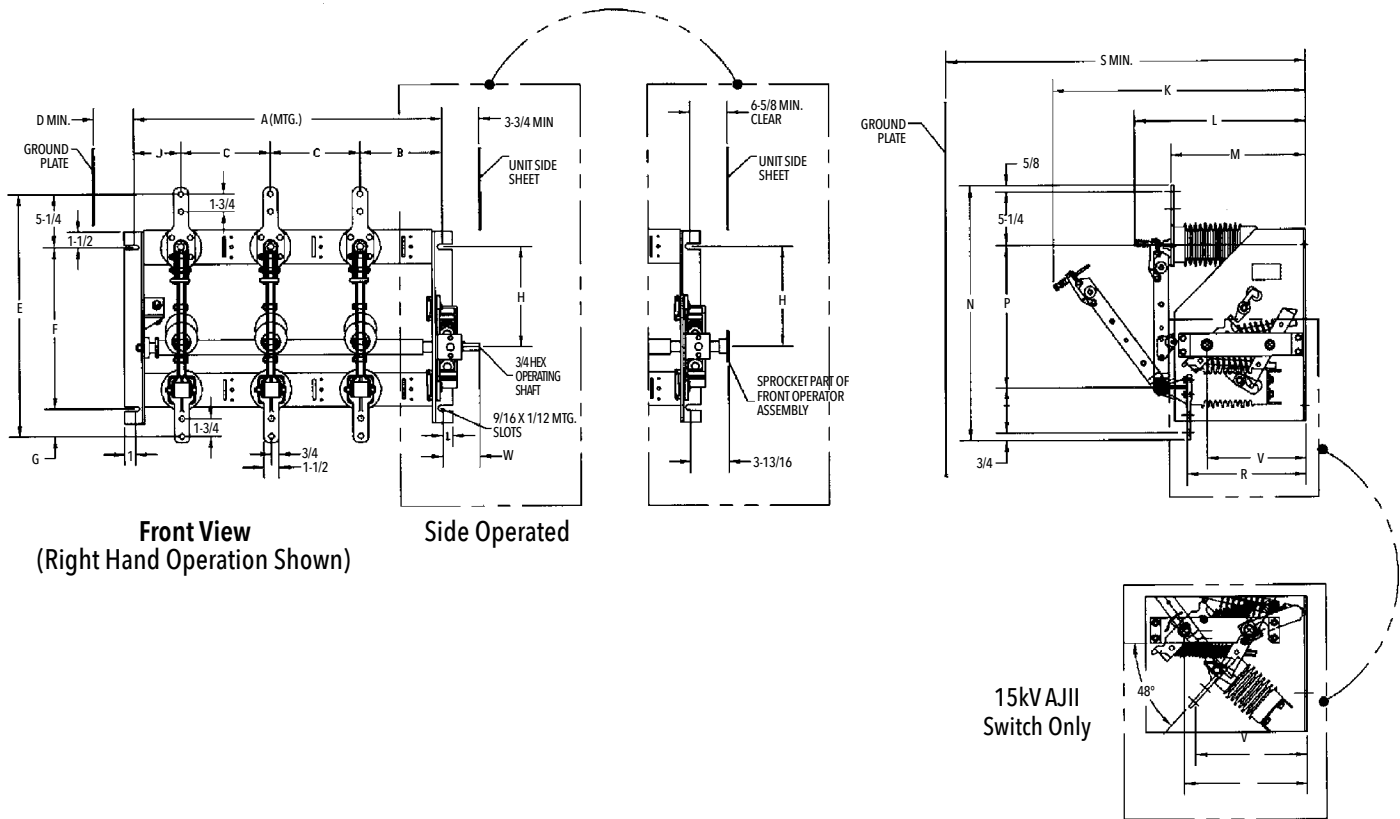
* The three time duty-cycle fault-closing rating means that the switch can be closed three times into rated fault amperes and remain operable and able to carry and interrupt its rated load current.

† This switch has a one-time duty-cycle fault-closing rating of 61,000 ampere asymmetrical and a three-time duty-cycle fault-closing rating of 40,000 amperes asymmetrical, following which it will remain operable and able to carry and interrupt load current.

** Barriers installed.

Three-Phase Auto-jet® Switches

Dimensions not to be used for construction purposes.
Refer to the factory for detailed construction drawings.



AUTO-JET® SWITCH

kV Class	Amps Cont. & Load-Break	Catalog Number	DIMENSIONS - INCHES																		
			A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	V	W
35	600	0008-4-53151M	44	12-1/4	13	5-1/2	27-1/2	16	4-7/8	4-3/8	5-3/4	37-1/2	22-5/8	18-13/16	29	16-5/8	17-1/16	48	4-1/2	6-1/4	4-5/8
		0035-4-53152	44	12-1/4	13	5-1/2	27-1/2	16	4-7/8	4-3/8	5-3/4	37-1/2	22-5/8	18-13/16	29	16-5/8	17-1/16	48	4-1/2	6-1/4	5-3/8
		0036-4-53153	44	12-1/4	13	5-1/2	27-1/2	16	4-7/8	4-3/8	5-3/4	37-1/2	22-5/8	18-13/16	29	16-5/8	17-1/16	48	4-1/2	6-1/4	5-3/8

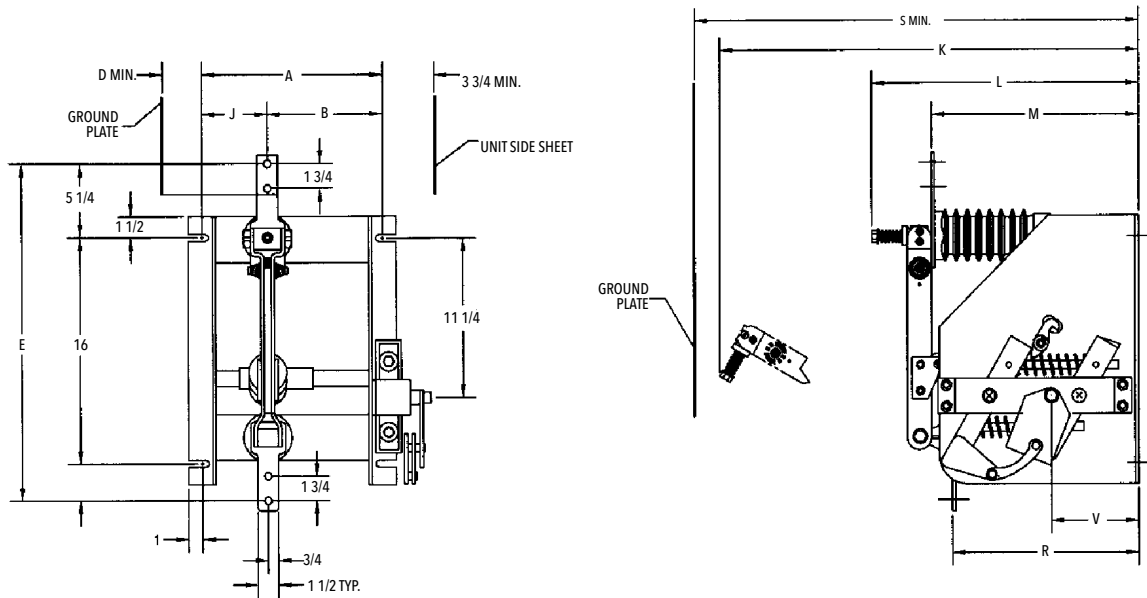
AUTO-JET® II SWITCH

kV Class	Amps Cont. & Load-Break	Catalog Number	DIMENSIONS - INCHES																		
			A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	V	W
15	600	0037-4-53168M	26-5/8	7	7-11/16	3-1/4	24-7/16	16	3/4	9-3/4	4-1/4	21	12-5/8	9-5/16	25-13/16	14-1/8	11-1/16	27	2-3/4	12-1/4	3-19/32
		0037-4-53169M	26-5/8	7	7-11/16	3-1/4	24-7/16	16	3/4	9-3/4	4-1/4	21	12-5/8	9-5/16	25-13/16	14-1/8	11-1/16	27	2-3/4	12-1/4	3-19/32
		0037-4-53152	26-5/8	7	7-11/16	3-1/4	24-7/16	16	3/4	9-3/4	4-1/4	21	12-5/8	9-5/16	25-13/16	14-1/8	11-1/16	27	2-3/4	12-1/4	3-19/32
		0037-4-53151	26-5/8	7	7-11/16	3-1/4	24-7/16	16	3/4	9-3/4	4-1/4	21	12-5/8	9-5/16	25-13/16	14-1/8	11-1/16	27	2-3/4	12-1/4	3-19/32
25	600	0038-4-53152M	31	8-1/4	9	4	23-7/8	16	2-5/8	9-15/16	4-3/4	28	17-3/8	13-7/16	25-1/4	14-1/8	11-11/16	36	4-1/2	9-7/8	3-11/16
		0039-4-53152M	31	8-1/4	9	4	23-7/8	16	2-5/8	9-15/16	4-3/4	28	17-3/8	13-7/16	25-1/4	14-1/8	11-11/16	36	4-1/2	9-7/8	3-11/16
		0038-4-53152	31	8-1/4	9	4	23-7/8	16	2-5/8	9-15/16	4-3/4	28	17-3/8	13-7/16	25-1/4	14-1/8	11-11/16	36	4-1/2	9-7/8	3-11/16
		0039-4-53152	31	8-1/4	9	4	23-7/8	16	2-5/8	9-15/16	4-3/4	28	17-3/8	13-7/16	25-1/4	14-1/8	11-11/16	36	4-1/2	9-7/8	3-11/16

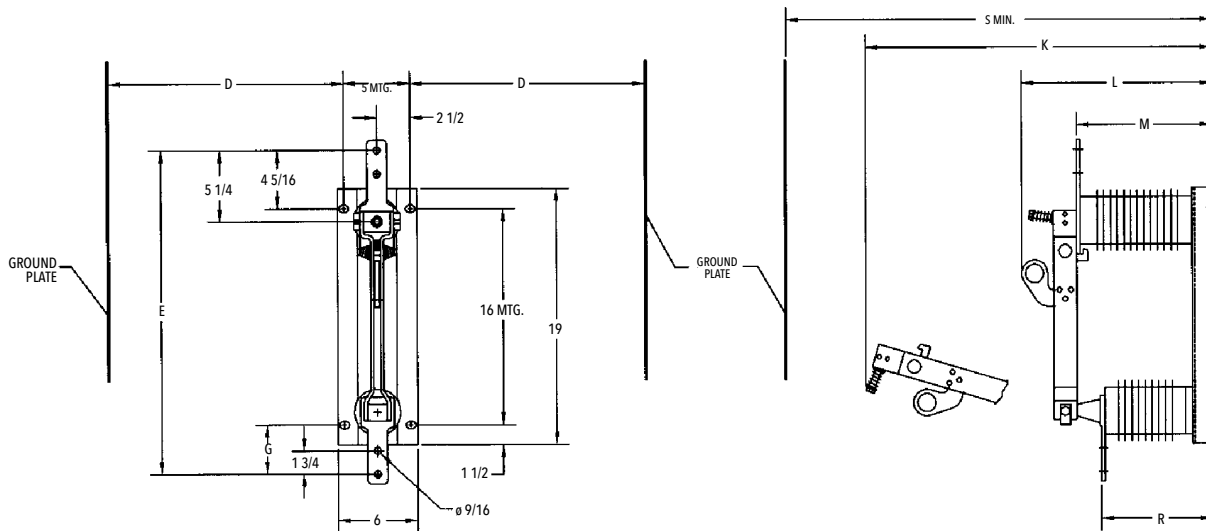
Single-Phase Auto-jet® Switches

Dimensions not to be used for construction purposes.
Refer to the factory for detailed construction drawings.

Front Mount - Side Operated



Channel Mounted - Hookstick Operated



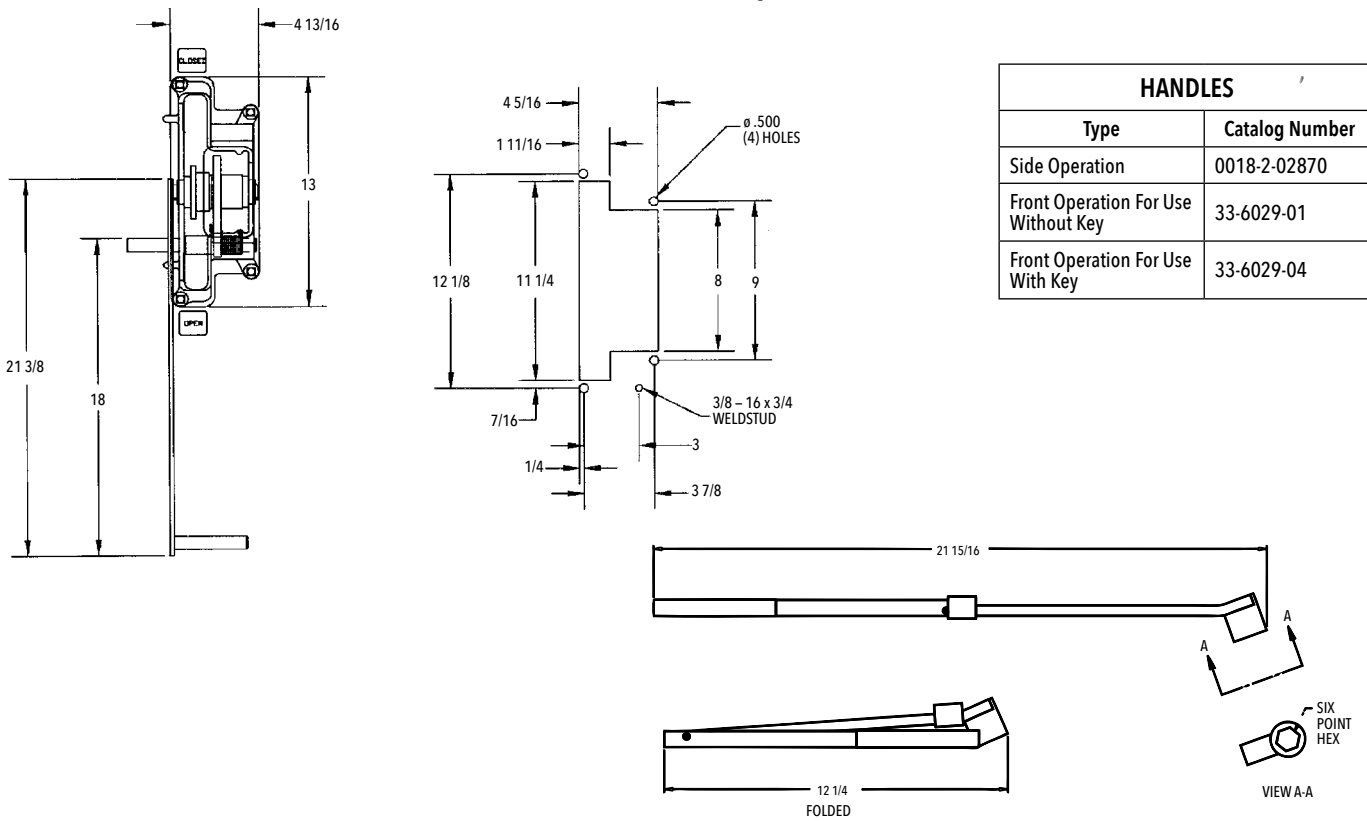
Application Notes for Single-Phase Auto-Jet® Switches:

- 1) Hookstick-Operated Single-Phase Auto-Jet® Switches are rated for 600 amps maximum continuous current. This design is not rated for load switching.
- 2) Side-Operated Single-Phase Auto-Jet® Switches with spring operators are rated for 600 amps maximum continuous current and 600 amps maximum load switching.

Type	kV Class	kV BIL	Catalog Number	Dimensions - Inches											
				A	B	D	E	G	J	K	L	M	R	S	V
Hookstick	15	95	0006-4-53151	N/A	N/A	5-1/4	23-7/8	3-9/16	N/A	26	14-3/4	10-1/16	7-15/16	32	N/A
	25	125	0007-4-53151	N/A	N/A	6-3/4	23-7/8	3-9/16	N/A	27	15-5/16	11-1/8	9-1/4	35	N/A
Side Operated	15	95	0013-4-53153 ①	13	8-1/4	2-13/16	23-7/8	2-5/8	4-3/4	29	17-3/4	13-7/16	11-7/8	35	6-1/4
	25	125	See Factory	15	10-1/4	5-1/2	23-7/8	2-5/8	4-3/4	30-1/2	19-1/4	14-15/16	13-7/16	38-1/2	6-1/4

① For side operation with handle on right.

Side and Front Operators



15kV, 25kV, 35kV Pad-Mounted Unit Rating kV, BIL	Recommended Minimum Clearances In Inches				
	Phase-to-Phase or Phase-to-Ground Without Barrier ①	Phase-to-Phase or Phase-to-Ground With Barrier ②	Energized Bus (or device) to Barrier ③	Barrier to Ground in Vicinity of Energized Bus (or device) ④	Terminator Skirts to Barriers ⑤
95	5-1/2"	3"	1-1/4"	1"	1/2"
125	7-1/2"	5"	2"	1-1/4"	1-1/4"
150	10"	7-1/2"	3"	2"	2"

NOTES:

