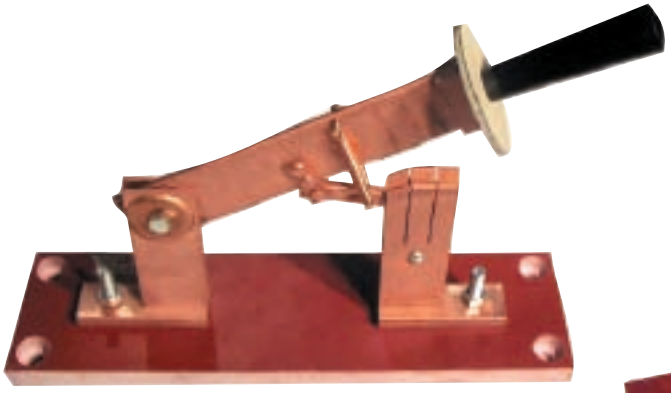
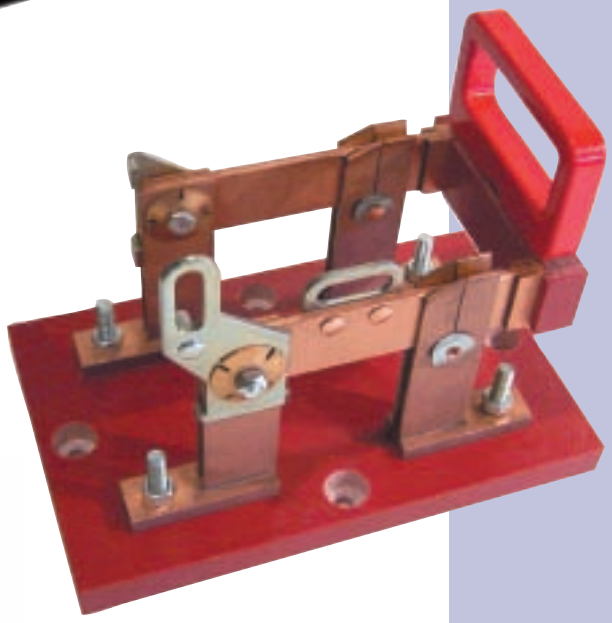
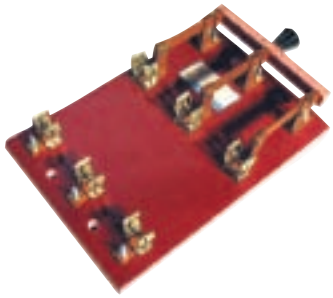
Filnor Inc.

Knife Switch Product Catalog







Listed
698R
Knife
Switch

ISO 9001
Quality System Certified

Knife Switches

30 Ampere - 6000 Ampere Standard
Higher Ampere available upon request
125 Volt - 600 Volt Standard
Higher Voltages available upon request

Filnor, Inc. • 227 N. Freedom • P.O. Box 2328 • Alliance, Ohio 44601 • P-330.821.7667 • F-330.829.3175

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Filnor Inc.

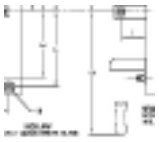
Knife Switch Product Catalog

SECTION A - Class 9850 - TYPE A - Front Connected Knife Switches

SECTION B - Class 9851 - TYPE D - Back Connected Knife Switches

SECTION C - Class 9852 - TYPE L - Back Connected Knife Switches

SECTION D - Class 9854 - TYPE B - Fuse Blocks



SECTION E - Dimensional Information

SECTION F - Maintenance and Installation

Knife Switches

30 Ampere - 6000 Ampere Standard
Higher Ampere available upon request
125 Volt - 600 Volt Standard
Higher Voltages available upon request

UL® Listed 698R Knife Switch

ISO 9001 Quality System Certified

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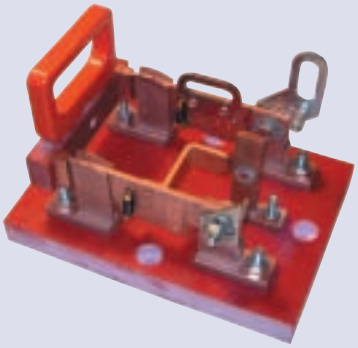
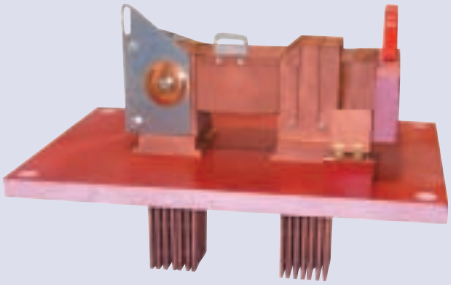
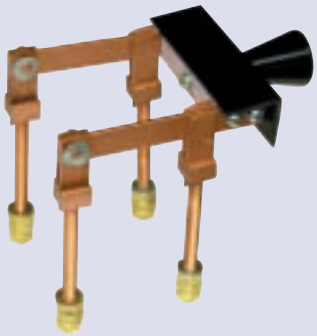
KNIFE SWITCHES

KNIFE SWITCH PRODUCT INTRODUCTION
NON-LOAD BREAK







Filnor's Knife Switch product line was purchased from the Square D Company in 1974, and began production of switches in June of that year. The switch line was forerly the Barkelew Electric Company.

We have over 700 standard switches listed in our catalog. The electrical ratings on the switches range from 30 Amperes at 125 Volts AC/DC to 6000 Amperes at 600 Volts AC/DC. Construction styles are a front-connected (steel panel mounting) or back-connected (insulated panel mounting). All of these switches carry the Underwriters Laboratories Listing.

In conjunction with the standard switch line, we also build many special switch arrangements per our customers' specification. Our special switch units range in current size from 30 Amperes up through 20,000 Amperes, and Voltages up to 38,000 Volts.

Filnor is a switch supplier to a number of different industries such as transportation, utility, telecommunications, and heavy industry just to name a few. Our industry coverage lies from the large steel producers to the small marine diving companies.

With our many years of experience building standard and special switch units, Filnor is highly capable of fulfilling your switch needs.

Class 9850 Front Connected Knife Switches Type A

SECTION A

ORDERING INFORMATION REQUIRED

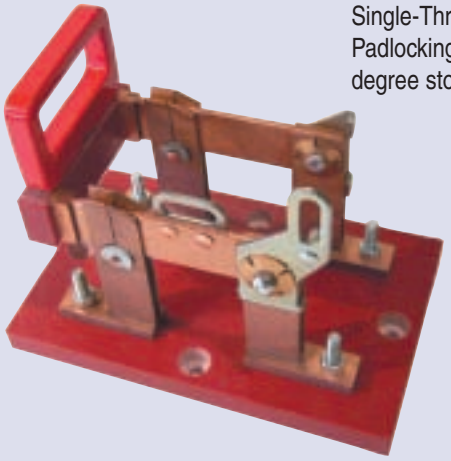
1. Class, Type Number, and Part Letters (if any) of Switch.
2. Voltage and Ampere Rating.
3. If special features other than listed in Section A7 of the Price List are desired, order as Class 9850 similar to Type _____, Part #_____, except _____ (clearly describe special feature).

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES NON-LOAD BREAK

Open Knife Switches are used as disconnect switches on switchboards, distribution and control panels. End users include steel mills, utility plants, transportation industry, and mining equipment.

A-1109 P2GE

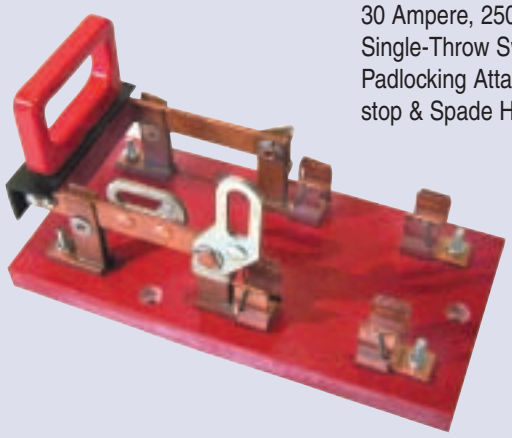
400 Ampere, 250 Volt,Two-Pole, Single-Throw Switch With Padlocking Attachment, 90 degree stop & Spade Handle



Type A, single-throw and double-throw, not-fusible knife switches have a corrosion resistant finish, are mounted on GPO-3 bases and have high clips and hinges. The high clips and hinges simplify the front-of-board connections. Available 30 Amp thru 2000 Amp.

A-1142 P2GE

30 Ampere, 250 Volt,Two-Pole, Single-Throw Switch With Padlocking Attachment, 90 degree stop & Spade Handle, Fusible



Fusible Type A knife switches are arranged with fuse holders which will accept standard Class H or RK5 fuses. When mounted on a panel the single-throw switch is fusible at the bottom. Available 30 Amp through 600 Amp at 125, 250, 480 or 600 volt.

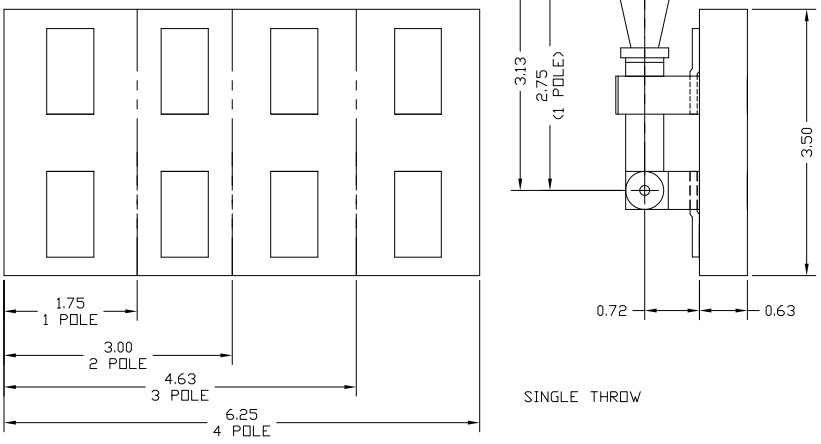
Ratings: Ampere ratings of Type A, not fusible, knife switches are based on a temperature rise of not more than 30 degrees C. above an ambient temperature of not more than 40 degrees C. when mounted in open air. Enclosed ratings are based on the switches being mounted in enclosures with adequate ventilation and with bus or cable of appropriate size.

Our standard switches are designed to Underwriters Labs. Knife Switches Standard U.L 363 and are listed as

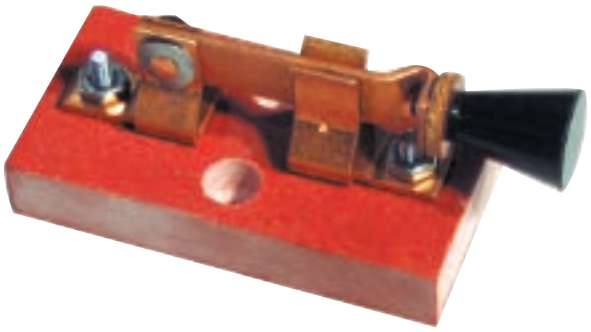
Listed 698R Knife Switch

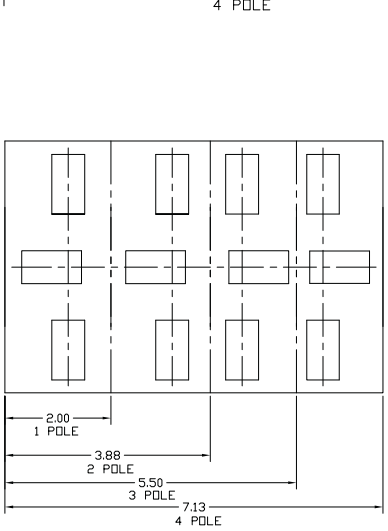
TYPE A FRONT-CONNECTED KNIFE SWITCHES
NON-LOAD BREAK

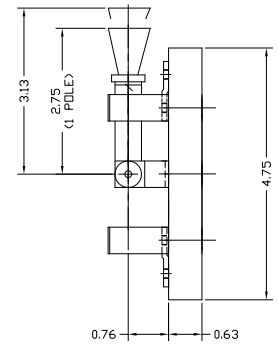
30 Ampere 125 Volt AC / DC Knife Switches

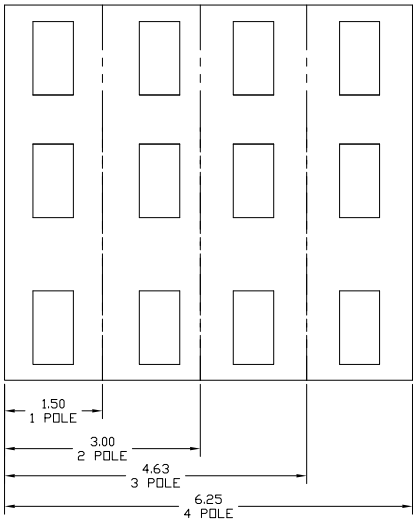


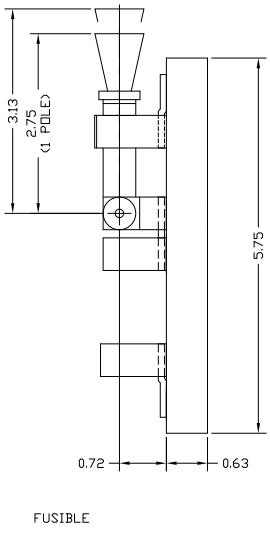
A-10S
Single-Pole, Single-Throw Switch











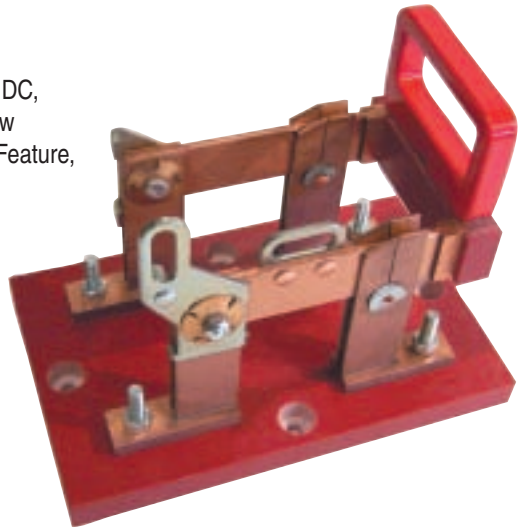
Poles	Single Throw	Double Throw	Fusible
	Cat No	Cat No	Cat No
1	A-10S	A-14D	A-18F
2	A-11S	A-15D	A-19F
3	A-12S	A-16D	A-20F
4	A-13S	A-17D	A-21F

- 30 Ampere 125 Volt Disconnects Front Connected
- For additional dimensional information please contact the factory.

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
Single-Throw, Not Fusible, NON-LOAD BREAK

A-1111 P2GE

600 Ampere, 250 Volt DC, Two-Pole, Single-Throw Switch, With Padlock Feature, 90º Stop, Not Fusible



Open knife switches are used as disconnect switches mounted on switchboards, distribution and control panel boards. Extensive use of knife switches are found in the heavy industries and laboratories, for control and test panels, where visible disconnects are required.

Type A, single-throw, not-fusible knife switches have a corrosion resistant finish, are mounted on GPO-3 bases and have high clips and hinges. The high clips and hinges simplify the front-of-board connections.

SINGLE-THROW

Ampere Rating	One Pole			Two Pole			Three Pole			Four Pole		
	Type	Weight	Drawing	Type	Weight	Drawing	Type	Weight	Drawing	Type	Weight	Drawing
250 VOLT DC & 480 VOLT AC												
*30	A-1002	1/2	Refer to Section E Figure 1	A-1102	1 1/2	Refer to Section E Figure 2	A-1202	3	Refer to Section E Figure 3	A-1302	4	Refer to Section E Figure 4
60	A-1003	3/4		A-1103	3 1/4		A-1203	4 1/2		A-1303	8	
60	N/A	N/A		A-1104-B	3 1/4		N/A	N/A		N/A	N/A	
100	A-1005	2 3/4		A-1105	5 3/4		A-1205	8 1/2		A-1305	12 1/2	
200	A-1007	4 1/2		A-1107	10 1/2		A-1207	15 1/2		A-1307	20	
300	A-1008	7		A-1108	13		A-1208	19		A-1308	23	
400	A-1009	10		A-1109	19		A-1209	30		A-1309	34	
600	A-1011	15		A-1111	24		A-1211	35		A-1311	48	
800	A-1012	24		A-1112	41		A-1212	58		A-1312	76	
1200	A-1014	29		A-1114	50		A-1214	75		A-1314	96	
1600	A-1015	34		A-1115	57		A-1215	86		A-1315	110	
2000	A-1016	48		A-1116	83		A-1216	105		A-1316	140	
600 VOLT DC & AC												
30	A-6711	2 1/4	Refer to Section E Figure 5	A-6721	5 1/4	Refer to Section E Figure 6	A-6731	7	Refer to Section E Figure 7	A-6741	10	Refer to Section E Figure 8
60	A-6712	2 1/2		A-6722	5 3/4		A-6732	8		A-6742	11	
100	A-6713	3 1/2		A-6723	9		A-6733	14 1/2		A-6743	20	
200	A-6714	6		A-6724	14 3/4		A-6734	25		A-6744	33	
300	A-6710	9		A-6720	18		A-6730	30		A-6740	40	
400	A-6715	10		A-6725	26		A-6735	45		A-6745	50	
600	A-6716	14		A-6726	32		A-6736	54		A-6746	72	
800	A-6717	27		A-6727	47		A-6737	66		A-6747	87	
1200	A-6719	33		A-6729	57 1/2		A-6739	86		A-6749	110	
1600	A-1015Y	36		A-1115Y	59		A-1215Y	88		A-1315Y	112	
2000	A-1016Y	50		A-1116Y	85		A-1216Y	107		A-1316Y	142	

* 250 volt DC & AC
For 30 ampere 480 volt AC use 60 ampere switch.
Prices for 600 Volt Switches include quick break blades as required by U.L. on all switches over 100 Amperes.
Weight in pounds (lbs.)
Dimensions in Inches (in.)

FOR OPTIONS AND SPECIAL FEATURES REFER TO PAGE 14 IN SECTION A

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
Double-Throw, Not Fusible, NON-LOAD BREAK

A-2014

1200 Ampere, One-Pole, Double-Throw Switch, 250 Volt, Not Fusible

Type A, double-throw, not-fusible knife switches are similar in construction to the single-throw version. For applications where it is necessary to manually transfer between two power supplies or two loads, the double-throw switches are particularly well suited.

DOUBLE-THROW

Ampere Rating	One Pole			Two Pole			Three Pole			Four Pole		
	Type	Weight	Drawing	Type	Weight	Drawing	Type	Weight	Drawing	Type	Weight	Drawing
250 VOLT DC & 480 VOLT AC												
*30	A-2002	1 1/2	Refer to Section E Figure 9	A-2102	2	Refer to Section E Figure 10	A-2202	4	Refer to Section E Figure 11	A-2302	6	Refer to Section E Figure 12
60	A-2003	2 1/4		A-2103	6		A-2203	8		A-2303	13	
100	A-2005	3 3/4		A-2105	9 1/2		A-2205	13		A-2305	19	
200	A-2007	6		A-2107	16 1/2		A-2207	23		A-2307	30	
300	A-2008	9		A-2108	19		A-2208	33		A-2308	36	
400	A-2009	13		A-2109	26		A-2209	46		A-2309	54	
600	A-2011	22		A-2111	35		A-2211	54		A-2311	74	
800	A-2012	36		A-2112	65		A-2212	94		A-2312	115	
1200	A-2014	44		A-2114	78		A-2214	125		A-2314	150	
1600	A-2015	55		A-2115	94		A-2215	141		A-2315	175	
2000	A-2016	72		A-2116	126		A-2216	170		A-2316	220	
600 VOLT DC & AC												
30	A-7711	2 3/4	Refer to Section E Figure 13	A-7721	10	Refer to Section E Figure 14	A-7731	15	Refer to Section E Figure 15	A-7741	20	Refer to Section E Figure 16
60	A-7712	3		A-7722	11		A-7732	16 1/2		A-7742	21 1/2	
100	A-7713	5		A-7723	15		A-7733	24		A-7743	32	
200	A-7714	9		A-7724	22		A-7734	38		A-7744	51	
300	A-7710	15		A-7720	28		A-7730	45		A-7740	60	
400	A-7715	17		A-7725	38		A-7735	68		A-7745	90	
600	A-7716	22		A-7726	50		A-7736	80		A-7746	110	
800	A-7717	41		A-7727	74		A-7737	108		A-7747	132	
1200	A-7719	50		A-7729	89		A-7739	139		A-7749	170	
1600	A-2015Y	57		A-2115Y	96		A-2215Y	143		A-2315Y	177	
2000	A-2016Y	74		A-2116Y	128		A-2216Y	172		A-2316Y	222	

* 250 volt DC & AC
For 30 Ampere 480 Volt AC use 60 Ampere switch.
Prices for 600 Volt switches include quick break blades as required by U.L. on all switches over 100 Amperes.
Weight in Pounds (lbs.) Dimensions in Inches (in.)

FOR OPTIONS AND SPECIAL FEATURES REFER TO PAGE 14 IN SECTION A

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
Single-Throw, Fusible, NON-LOAD BREAK

A-1142 P2GE

30 Ampere, 250 Volt,Two-Pole, Single-Throw Switch With Padlocking Attachment, 90 degree Stop & Spade Handle, Fusible

Fusible Type A knife switches are arranged with fuse holders which will accept standard National Electric Code fuses. When mounted on a panel the single-throw switch is fusible at the bottom.

NOTE: Standard fusible switches for Class "H" or "RK-5" fuses.

SINGLE-THROW

Ampere Rating	One Pole			Two Pole			Three Pole			Four Pole		
	Type	Weight	Drawing	Type	Weight	Drawing	Type	Weight	Drawing	Type	Weight	Drawing
250 VOLT DC & AC												
30	A-1042	3/4	Refer to Section E Figure 17	A-1142	1 1/2	Refer to Section E Figure 18	A-1242	3 1/2	Refer to Section E Figure 19	A-1342	6 1/4	Refer to Section E Figure 20
60	A-1043	1 1/2		A-1143	3		A-1243	6 1/2		A-1343	10 3/4	
100	A-1045	5 1/2		A-1145	9		A-1245	14		A-1345	21	
200	A-1047	9		A-1147	17		A-1247	24		A-1347	37	
400	A-1049	16		A-1149	29		A-1249	48		A-1349	67	
600	A-1051	22		A-1151	44		A-1251	60		A-1351	88	
480 VOLT AC												
30	A-6511	3	Refer to Section E Figure 21	A-6521	6	Refer to Section E Figure 22	A-6531	7 1/2	Refer to Section E Figure 23	A-6541	12	Refer to Section E Figure 24
60	A-6512	5		A-6522	9 1/2		A-6532	8 3/4		A-6542	19	
100	A-6513	8		A-6523	14		A-6533	17		A-6543	27	
200	A-6514	10		A-6524	20		A-6534	25		A-6544	42	
400	A-6515	17		A-6525	35		A-6535	50		A-6545	72	
600	A-6516	22		A-6526	47		A-6536	65		A-6546	91	
600 VOLT DC & AC												
30	A-6914	3 1/2	Refer to Section E Figure 25	A-6924	8 3/4	Refer to Section E Figure 26	A-6934	15	Refer to Section E Figure 27	A-6944	20	Refer to Section E Figure 28
60	A-6915	4 1/2		A-6925	9 1/2		A-6935	16		A-6945	21	
100	A-6916	8 1/2		A-6926	19		A-6936	31		A-6946	41	
200	A-6917	17		A-6927	32		A-6937	48		A-6947	64	
400	A-6918	28		A-6928	49		A-6938	72		A-6948	96	
600	A-6919	36		A-6929	62		A-6939	90		A-6949	120	

Prices for 600 Volt switches include quick break blades as required by U.L. on all switches over 100 Amperes. Prices do not include fuses.

FOR OPTIONS AND SPECIAL FEATURES REFER TO PAGE 14 IN SECTION A

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
Double-Throw, Fusible, NON-LOAD BREAK

A-2227

200 Ampere, Three-Pole, Double-Throw, Fusible Switch, Both Throws

Fusible Type A double throw knife switches are fusible on both throws. In order to provide clearance between the handle and the fuses, these switches are constructed with low hinges and high clips.

DOUBLE-THROW

Ampere Rating	One Pole			Two Pole			Three Pole			Four Pole		
	Type	Weight	Drawing	Type	Weight	Drawing	Type	Weight	Drawing	Type	Weight	Drawing
250 VOLT DC & AC												
*30	A-2022	3	Available Upon Request	A-2122	5	Available Upon Request	A-2222	7	Available Upon Request	A-2322	12	Available Upon Request
60	A-2023	6		A-2123	8		A-2223	13		A-2323	19	
100	A-2025	9		A-2125	15		A-2225	26		A-2325	40	
200	A-2027	15		A-2127	25		A-2227	46		A-2327	67	
400	A-2029	27		A-2129	49		A-2229	88		A-2329	117	
600	A-2031	35		A-2131	74		A-2231	117		A-2331	166	
480 VOLT AC												
30	A-7411	3 1/2	Available Upon Request	A-7421	10	Available Upon Request	A-7431	10	Available Upon Request	A-7441	23	Available Upon Request
60	A-7412	5 1/2		A-7422	14		A-7432	15		A-7442	35	
100	A-7413	10		A-7423	25		A-7433	28		A-7443	60	
200	A-7414	15		A-7424	33		A-7434	49		A-7444	74	
400	A-7415	28		A-7425	60		A-7435	93		A-7445	127	
600	A-7416	42		A-7426	75		A-7436	127		A-7446	146	
600 VOLT DC & AC												
30	A-7814	9 1/2	Available Upon Request	A-7824	15	Available Upon Request	A-7834	26	Available Upon Request	A-7844	35	Available Upon Request
60	A-7815	10		A-7825	16		A-7835	27		A-7845	38	
100	A-7816	15		A-7826	30		A-7836	52		A-7846	70	
200	A-7817	28		A-7827	50		A-7837	76		A-7847	102	
400	A-7818	42		A-7828	74		A-7838	100		A-7848	135	
600	A-7819	53		A-7829	90		A-7839	130		A-7849	175	

* 250 volt DC & AC
For 30 Ampere 480 Volt AC use 60 Ampere switch.
Prices for 600 Volt switches include quick break blades as required by U.L. on all switches over 100 Amperes. Prices do not include fuses.
Weight in Pounds (lbs.) Dimensions in Inches (in.)

FOR OPTIONS AND SPECIAL FEATURES REFER TO PAGE 14 IN SECTION A

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
Single or Double-Throw, Not Fusible, NON-LOAD BREAK

A-1261 P2GE

100 Ampere, Single-Throw Field Discharge Switch, With Padlocking Attachment, 90 degree Stop, Spade Handle

Field Discharge Switches

Field discharge switches are used to overcome the high inductive current caused by suddenly opening a generator field. When opening the generator circuit, the field discharge switch closes the field across a resistor allowing the inductive discharge to die out gradually, which might otherwise result in a rupture of field insulation.

Upon opening these two-pole switches, the discharge blade, which is an offset extension of one of the main blades, makes contact with a high clip. The high clip, which is connected to the resistor, is located between the hinges of the two blades. Another feature of the switch is each pole is equipped with quick-break blades. The discharge blade and the quick break blades combine to provide a make before break operation. Upon opening the switch, the resistance current is made before the line-to-field circuit is broken, limiting the field discharge voltage. When closing the switch, the discharge blade breaks the resistance current before the main blades make contact.

Ampere Rating	Single Throw		Double Throw	
	Type	Weight	Type	Weight
60	A-1260	4	A-1265	7
100	A-1261	6 1/2	A-1266	11
200	A-1262	12	A-1267	18

Prices do not include resistors.

Polarity Reversing Switches

Another version of the Type A knife switch is the polarity reversing switch. This switch is two-pole, double-throw, and is equipped with rocker type blades. The cross-connection used to give the reversing action is made of copper bus straps mounted between the poles on the front of the switch.

Ampere Rating	Type	Base Size (W x H)
100	A-2139R	10 1/4 x 7
200	A-2140R	15 x 7 3/4
300	A-2141R	15 x 7 3/4
400	A-2142R	17 x 10 1/4
600	A-2143R	20 x 10
800	A-2144R	20 x 14
1200	A-2145R	22 x 15
1600	A-2146R	22 x 19 3/8
2000	A-2147R	22 x 22

15 Volts DC Maximum

ORDERING INFORMATION

1. Class, Type, Number and Part letters (if any) of switch
2. Voltage and Ampere Rating
3. If special features (if other than listed in section A7) are desired, order on Class 9850, similar to Type _____, Part _____ except.

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
Options & Special Features, NON-LOAD BREAK

Auxiliary Switches Options

Micro Switch Auxiliary Style

Auxiliary switches, single-pole, double-throw, actuated when main switch is in closed position, can be added to Type A knife switches as follows:

Part Letter	Description	Price
X1	One auxiliary switch added to single-throw main switch.	$ 145.00
X2	Two auxiliary switches added to single-throw main switch on same actuator.	$ 245.00
X3	One auxiliary switch on each throw of double-throw main switch. Requires two auxiliary switches with one actuator.	$ 245.00

Micro Switch Auxiliary

Knife Type Auxiliary Style

Knife type auxiliary switches, this 15 ampere, 250 volt auxiliary switch is makes contact after the main switch closes and breaks contact before the main switch opens.

Part Letter	Description	Price
A1	1-Knife type auxiliary for single-throw switch. (price from table below)	see chart
A2	2-Knife type auxiliary for single-throw switch. (price from table below)	see chart
A3	2-Knife type auxiliary for double-throw switch, one on each throw. (price from table below)	see chart
A4	4-Knife type auxiliary for double-throw switch, two on each throw. (price from table below)	

Ampere Rating	Price per auxiliary switch
30-100	$ 56.00
200-300	$ 80.00
400-1200	$ 120.00
1600 & over	$ 160.00

Knife Type Auxiliary

Padlocking Feature Options

Padlocking attachment for three locks to lock switch only in the OPEN position. NOTE: Double-throw switches to be furnished with padlocking attachment should be mounted in horizontal position to avoid the locks making contact with the switch clips. Switches also requiring 90º stops are to be priced from item P2G.

Part Letter	Description	Price
P2	Padlocking attachment in the open position.	see chart
G	90º stops for single-throw switches. Required only on two poles of 2, 3, or 4-pole switches. Switches also requiring padlocking attachment, Form P2, are to be priced from item P2G. The following prices are for each pole requiring a stop.	see chart
P2G	Padlocking attachment as described in item P2 and 90º stops as required. This combination only applies to single-throw switches.	see chart

Ampere Rating	Price
30-200	$ 32.00
300-600	$ 48.00
800-1200	$ 56.00
1600 - 2000	$ 80.00

Ampere Rating	Price
30-200	$ 8.00
300-600	$ 16.00
800-1200	$ 32.00
1600 - 2000	$ 72.00

Ampere Rating	Price 1 Pole	Price 2 - 4 Pole
30-200	$ 32.00	$ 40.00
300-600	$ 48.00	$ 64.00
800-1200	$ 72.00	$ 88.00
1600 - 2000	$ 120.00	$ 152.00

P2G - Padlocking Feature with 90º Stop

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
Options & Special Features, NON-LOAD BREAK

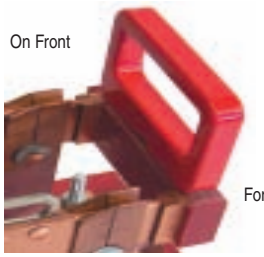
Handles

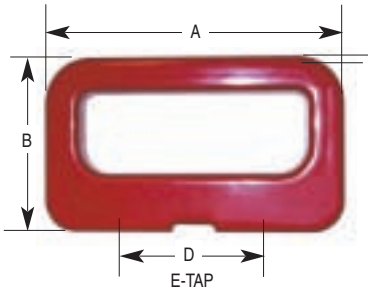
Substitute molded spade handle on 2, 3, or 4 pole switches which are furnished with straight handles as standard. Straight handles must be furnished on all single-pole switches. Spade handles, Form E1 (see diagram below), are furnished as standard on: All 4-Pole Switches: All 3-Pole, 600 Volt Switches: All 800 Ampere and over, except Single-Pole Switches.

Option Handle Spade

NOTE: Standard handle supplied is a straight handle.

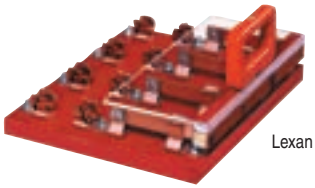
Part Letter	Description	Price
E1	Spade handles on top of switch blade. See diagram for Form E1. (Price from table below)	see chart
E	Spade handles on front of switch blade. See diagram for Form E. (Price from table below)	see chart





Ampere Rating	Poles	Dimensions				
		A	B	C	D	E
30-100	2 & 3	3	2	1/2	1 1/8	10 - 32
200-300	2 & 3	3 7/8	2 1/2	5/8	1 5/8	1/4 - 20
400-600	2 & 3	5 1/8	3	7/8	2	5/16 - 18
800 +	2 & 3	5 1/8	3	7/8	3 5/16	3/8 - 16

Part Letter	Description	Price
S	Lexan covers available. Consult factory for more information.	consult factory


Lexan Cover

Rocker Blades For Double-Throw Switches

Part Letter	Description	Price
R	See table below. Substitute rocker blades in place of standard blades on double-throw switches. The following prices are to be added for each switch pole. NOTE: The above prices are for factory installed rocker blades. For prices of rocker blades for field installation, consult the factory. For 30 Ampere 480 Volt use 60 Ampere price.	see chart

Ampere Rating	Price 250 Volt DC 480 Volt AC	Price 600 Volt DC & AC
*30	$ 16.00	$ 40.00
60	$ 24.00	$ 40.00
100	$ 32.00	$ 56.00
200	$ 72.00	$ 104.00
300	$ 112.00	$ 144.00
400	$ 128.00	$ 160.00
600	$ 144.00	$ 192.00
800	$ 256.00	$ 320.00
1200	$ 288.00	$ 384.00

Class 9851 Back Connected Knife Switches With Stud & Nut Terminations Type D

SECTION B

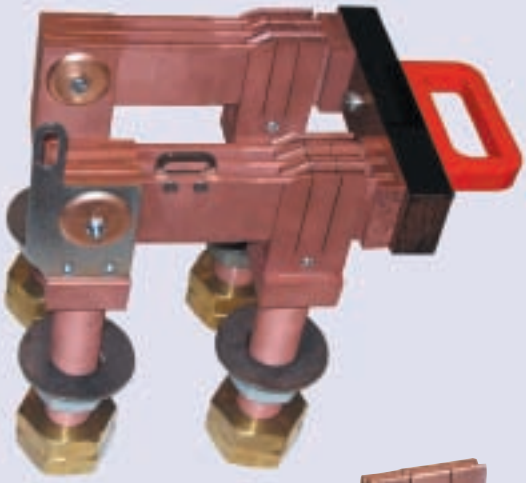
ORDERING INFORMATION REQUIRED

1. Class, Type Number, and Part Letters (if any) of Switch.
2. Voltage and Ampere Rating.
3. If special features other than listed in Section D7 of the Price List are desired, order as Class 9851 similar to Part # _____, except _____ (clearly describe special feature).

TYPE D BACK-CONNECTED KNIFE SWITCHES
NON-LOAD BREAK

D-8026 P2GE

600 Ampere, Two Pole, Single-Throw Switch, With Padlock Feature



1200 Ampere Fuse Holder

400 Ampere Blade Clip

30 Ampere Back Connected Fuse Clip

SPECIAL SWITCHES
Special designs are available. We may already have a design for what you require, if not our engineering department will investigate and inform you if we can build it. Please contact Filnor directly for your special switch requirements.

SPARE PARTS
Spare parts are available for all knife switches and fuse clips. Accessories are also available for adding to knife switches.

Construction

All current carrying parts of Type D knife switches are milled and provided with a corrosion resistant finish. Designed for back connection, these switches are furnished without bases for mounting on insulating panels of customers' switch-boards. Switches rated at 1200 Amperes and larger are shipped on throw-away bases as standard. Prices will be quoted upon request for switches rated 800 Amperes and smaller, mounted on throw-away bases.

Connections are made to Type D switches by means of round studs of hard-drawn copper. Switches rated 600 Amperes and smaller are furnished with studs to fit boards from 1/2" to 2" thick. 800 Amperes and larger have studs to fit boards 1" to 2" thick.

Fusible hinge swicthes have steel studs and nuts that fit and board 1/2" to 2" thick. The steel studs or screws are only for mounted purposes. No electrical connections are made to fusible hinges.

Type D Field Discharge Switches

Field discharge switches are used to overcome the high inductive current caused by suddenly opening a generator field. When opening the generator circuit, the field discharge switch closes the field across a resistor allowing the inductive discharge to die out gradually, which might otherwise result in a rupture of field insulation.

Upon opening these two-pole switches, the discharge blade, which is an offset extension of one of the main blades, makes contact with a high clip. The high clip, which is connected to the resistor, is located between the hinges of the two blades.

Another feature of the switch is each pole is equipped with quick-break blades. The discharge blade and the quick break blades combine to provide a make before break operation. Upon opening the switch, the resistance current is made before the line-to-field circuit is broken, limiting the field discharge voltage. When closing the switch, the discharge blade breaks the resistance current before the main blades make contact.

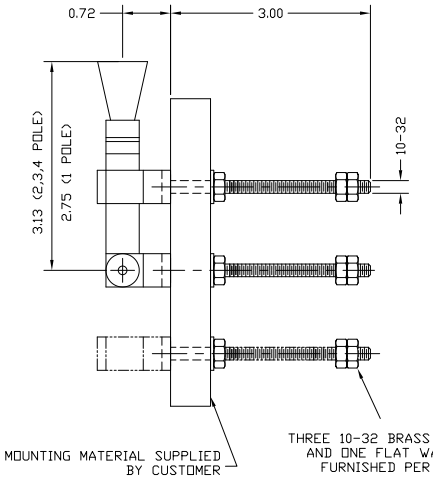
Available 60 Ampere through 200 Ampere. Larger sizes available on special orders.

Ratings

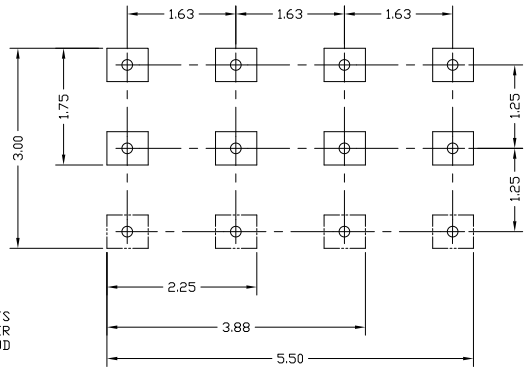
Ampere ratings of Type D, not-fusible knife switches are based on a temperature rise of not more than 30 degrees C above an ambient temperature of not more than 40 degrees C when mounted in the open air.

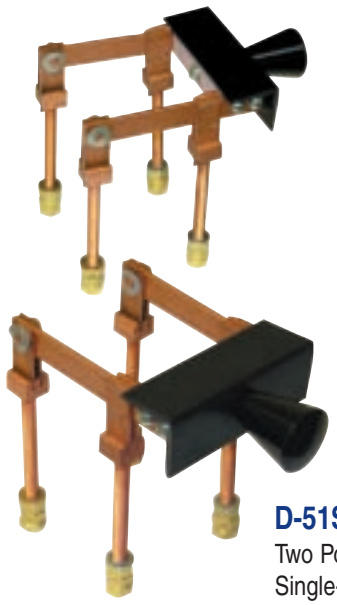
Enclosed ratings are based on the switches being mounted in enclosures with adequate ventilation and with bus or cable of appropriate size. Fusible switches are not to be loaded continuously at more than 80% of the fuse rating.

TYPE D BACK-CONNECTED KNIFE SWITCHES
NON-LOAD BREAK

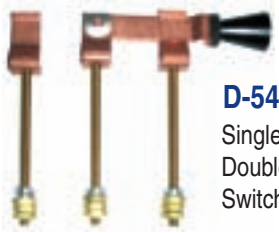


SINGLE & DOUBLE THROW

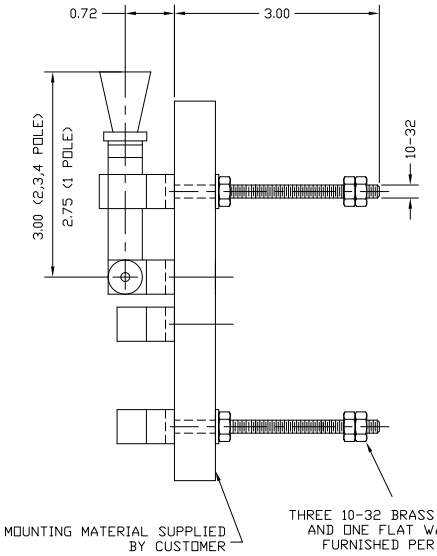




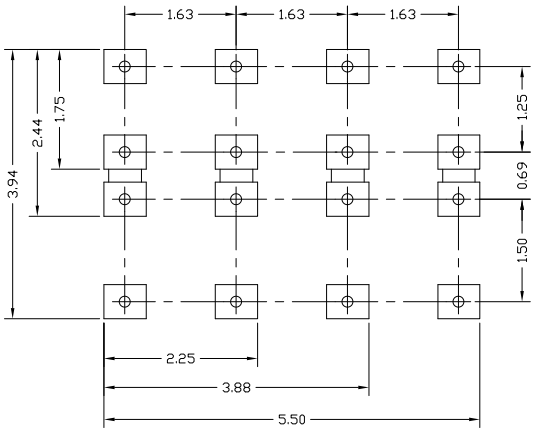
D-51S
Two Pole,
Single-Throw
Switch



D-54D
Single Pole,
Double-Throw
Switch



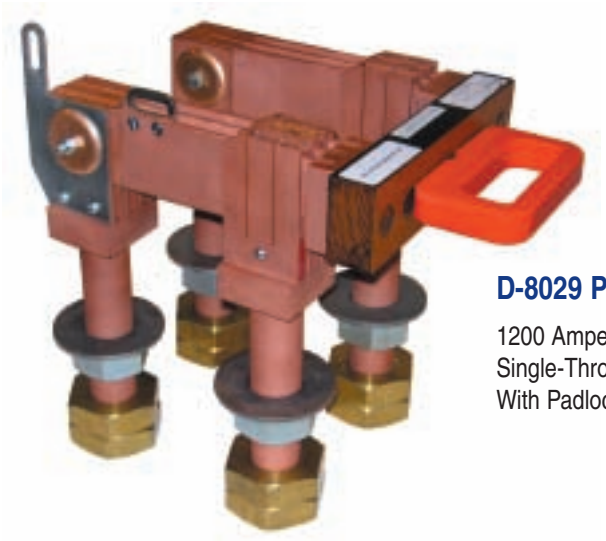
FUSIBLE



Poles	Single Throw	Double Throw	Fusible
	Cat No	Cat No	Cat No
1	D-50S	D-54D	D-58F
2	D-51S	D-55D	D-59F
3	D-52S	D-56D	D-60F
4	D-53S	D-57D	D-61F

30 Ampere 125 Volt Disconnects Back Connected.
For additional dimensional information, please contact the factory.

TYPE D BACK-CONNECTED KNIFE SWITCHES
Single-Throw, Not Fusible, NON-LOAD BREAK



D-8029 P2G

1200 Ampere, Two-Pole, Single-Throw Switch, With Padlock Feature

Open knife switches are used as disconnect switches mounted on switchboards, distribution and control panel boards. Extensive use of knife switches are found in the heavy industries and laboratories, for control and test panels, where visible disconnects are required.

Type D, single-throw, not-fusible knife switches have a corrosion resistant finish and low hinges and clips. Designed for back-connection, these switches are provided without bases for mounting on insulating panels of customers' switchboards.

Type D switches can also be furnished mounted on insulating panels. Prices will be quoted upon receipt of complete information including panel size.

SINGLE-THROW

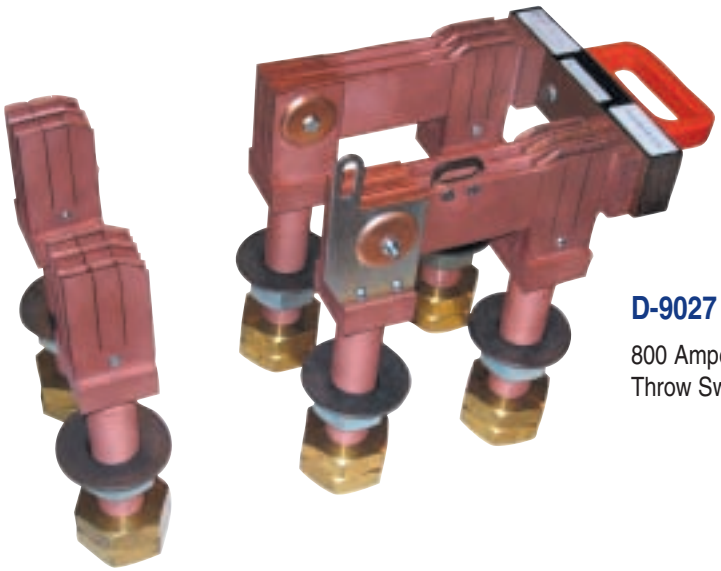
Ampere Rating	One Pole			Two Pole			Three Pole			Four Pole		
	Type	Weight	Drawing	Type	Weight	Drawing	Type	Weight	Drawing	Type	Weight	Drawing
250 VOLT DC & 480 VOLT AC												
*30	D-8010	1/2	Refer to Section E Figure 10	D-8020	3/4	Refer to Section E Figure 10	D-8030	1	Refer to Section E Figure 10	D-8040	1 1/2	Refer to Section E Figure 10
60	D-8012	1		D-8022	1 1/2		D-8032	2 1/4		D-8042	2 3/4	
100	D-8013	1 1/2		D-8023	3		D-8033	4 1/4		D-8043	6	
200	D-8014	2 1/2		D-8024	5		D-8034	8		D-8044	12	
300	D-8006	3 1/2		D-8007	8		D-8008	12		D-8009	15	
400	D-8015	5		D-8025	13		D-8035	19		D-8045	26	
600	D-8016	8		D-8026	19		D-8036	29		D-8046	38	
800	D-8017	10		D-8027	25		D-8037	36		D-8047	48	
1200	D-8019	15		D-8029	36		D-8039	50		D-8049	67	
1600	D-8051	22		D-8061	43		D-8071	50		D-8081	84	
2000	D-8052	35		D-8062	67		D-8072	92		D-8082	123	
600 VOLT DC & AC												
30	D-8711	1 1/4	Refer to Section E Figure 10	D-8721	2	Refer to Section E Figure 10	D-8731	3	Refer to Section E Figure 10	D-8741	4	Refer to Section E Figure 10
60	D-8712	1 1/2		D-8722	2 1/4		D-8732	4		D-8742	5	
100	D-8713	1 3/4		D-8723	2 3/4		D-8733	6		D-8743	8	
200	D-8714	3		D-8724	6		D-8734	10		D-8744	15	
300	D-8710	4		D-8720	10		D-8730	15		D-8740	20	
400	D-8715	6		D-8725	16		D-8735	25		D-8745	32	
600	D-8716	9		D-8726	23		D-8736	35		D-8746	50	
800	D-8717	11		D-8727	27		D-8737	39		D-8747	52	
1200	D-8719	17		D-8729	40		D-8739	56		D-8749	75	

* For 250 Volt DC & AC
For 30 Ampere 480 Volt AC use 60 Ampere switch.

Prices for 600 Volt switches include quick break blades as required by U.L. on all switches over 100 Amperes.

FOR MODIFICATIONS AND SPECIAL FEATURES REFER TO SECTION D-7 OF PRICE LIST

TYPE D BACK-CONNECTED, KNIFE SWITCHES
Double-Throw, Not Fusible, NON-LOAD BREAK



Type D double-throw not-fusible knife switches are similar in construction to the single-throw version. For applications where it is necessary to manually transfer between two power supplies or two loads, the double-throw switches are particularly well suited.

D-9027 P2

800 Ampere, Two-Pole, Double-Throw Switch, With Padlock Feature

DOUBLE-THROW

Ampere Rating	One Pole			Two Pole			Three Pole			Four Pole		
	Type	Weight	Drawing	Type	Weight	Drawing	Type	Weight	Drawing	Type	Weight	Drawing
250 VOLT DC & 480 VOLT AC												
*30	D-9010	1/2	Refer to Section E Figure 20	D-9020	1	Refer to Section E Figure 20	D-9030	1 1/2	Refer to Section E Figure 20	D-9040	2	Refer to Section E Figure 20
60	D-9012	1 1/2		D-9022	2		D-9032	2 3/4		D-9042	3 1/2	
100	D-9013	2		D-9023	4		D-9033	5 1/2		D-9043	8	
200	D-9014	4		D-9024	7		D-9034	10		D-9044	15	
300	D-9006	5		D-9007	11		D-9008	15		D-9009	20	
400	D-9015	7		D-9025	17		D-9035	24		D-9045	35	
600	D-9016	10		D-9026	27		D-9036	36		D-9046	52	
800	D-9017	14		D-9027	35		D-9037	50		D-9047	68	
1200	D-9019	23		D-9029	63		D-9039	78		D-9049	95	
1600	D-9051	34	Section E Figure 2	D-9061	80		D-9071	96		D-9081	120	
2000	D-9052	53		D-9062	110		D-9072	140		D-9082	170	
600 VOLT DC & AC												
30	D-9711	1 3/4	Refer to Section E Figure 20	D-9721	3	Refer to Section E Figure 20	D-9731	4	Refer to Section E Figure 20	D-9741	5 1/2	Refer to Section E Figure 20
60	D-9712	2		D-9722	3 1/2		D-9732	5 1/2		D-9742	7	
100	D-9713	2 1/2		D-9723	5		D-9733	10		D-9743	12	
200	D-9714	4 1/2		D-9724	9		D-9734	16		D-9744	22	
300	D-9710	6		D-9720	14		D-9730	26		D-9740	35	
400	D-9715	8		D-9725	21		D-9735	38		D-9745	50	
600	D-9716	12		D-9726	32		D-9736	50		D-9746	65	
800	D-9717	15		D-9727	37		D-9737	53		D-9747	72	
1200	D-9719	25		D-9729	67		D-9739	84		D-9749	103	

* For 250 Volt DC & AC
For 30 Ampere 480 Volt AC use 60 Ampere switch.

Prices for 600 Volt Switches include quick break blades as required by U.L. on all switches over 100 Amperes.

FOR MODIFICATIONS AND SPECIAL FEATURES REFER TO SECTION D-7 OF PRICE LIST

TYPE D BACK-CONNECTED KNIFE SWITCHES
Single-Throw, Fusible, NON-LOAD BREAK

D-8122

60 Ampere, Two-Pole,
Single-Throw Fusible Switch

Fusible Type D knife switches are arranged with fuse holders which will accept standard National Electric Code fuses. When mounted on a panel the single-throw switch is fusible at the bottom.

NOTE: Standard fusible switches for Class "H" or "RK-5" fuses.

SINGLE-THROW

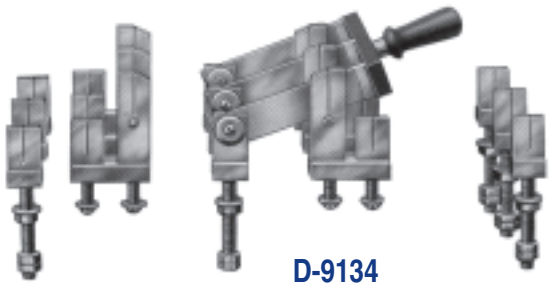
Ampere Rating	One Pole			Two Pole			Three Pole			Four Pole		
	Type	Weight	Drawing	Type	Weight	Drawing	Type	Weight	Drawing	Type	Weight	Drawing
250 VOLT DC & 480 VOLT AC												
*30	D-8111	3/4	Refer to Section E Figure 20	D-8121	1	Refer to Section E Figure 20	D-8131	1 1/4	Refer to Section E Figure 20	D-8141	2	Refer to Section E Figure 20
+30	D-8411	3/4		D-8421	1		D-8431	1 1/2		D-8441	2	
*60	D-8112	1		D-8122	1 3/4		D-8132	2 1/2		D-8142	3 1/2	
+60	D-8412	1		D-8422	1 3/4		D-8432	2 1/2		D-8442	3 1/4	
100	D-8113	2		D-8123	3 1/4		D-8133	5 1/4		D-8143	7	
200	D-8114	4		D-8124	6 1/4		D-8134	9		D-8144	13	
400	D-8115	8		D-8125	16		D-8135	22		D-8145	31	
600	D-8116	12		D-8126	24		D-8136	39		D-8146	52	
600 VOLT DC & AC												
30	D-8914	1 1/2	Refer to Section E Figure 20	D-8924	2 1/2	Refer to Section E Figure 20	D-8934	4 1/2	Refer to Section E Figure 20	D-8944	6	Refer to Section E Figure 20
60	D-8915	1 3/4		D-8925	3		D-8935	5 1/2		D-8945	7 1/2	
100	D-8916	3 1/2		D-8926	5		D-8936	8		D-8946	11	
200	D-8917	6		D-8927	9		D-8937	14		D-8947	19	
400	D-8918	10		D-8928	20		D-8938	30		D-8948	40	
600	D-8919	15		D-8929	30		D-8939	48		D-8949	64	

* For 250 Volt DC & AC
\+ For 480 Volt AC

Prices for 600 Volt switches include quick break blades as required by U.L. on all switches over 100 Amperes.

FOR MODIFICATIONS AND SPECIAL FEATURES REFER TO SECTION D-7 OF PRICE LIST

TYPE D BACK-CONNECTED KNIFE SWITCHES
Double-Throw, Fusible, NON-LOAD BREAK



D-9134

200 Ampere, Three-Pole, Double-Throw Fusible Switch, Both Throws

Fusible Double Throw Type D knife switches are fusible on both throws. In order to provide clearance between the handle and the fuses, these switches are constructed with low hinges and high clips, as shown in the image to the left.

DOUBLE-THROW

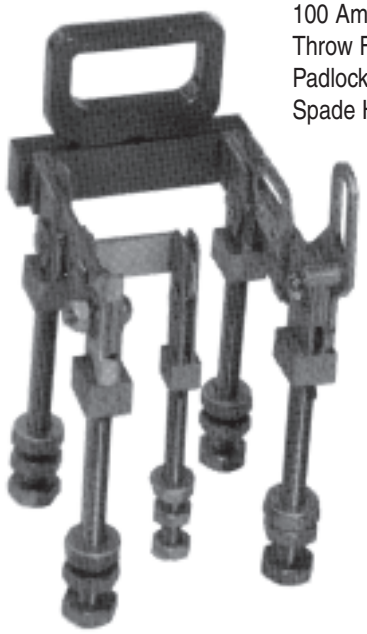
Ampere Rating	One Pole			Two Pole			Three Pole			Four Pole		
	Type	Weight	Drawing	Type	Weight	Drawing	Type	Weight	Drawing	Type	Weight	Drawing
250 VOLT DC & 480 VOLT AC												
*30	D-9111	1 1/4	Refer to Section E Figure 20	D-9121	1 1/2	Refer to Section E Figure 20	D-9131	2 1/2	Refer to Section E Figure 20	D-9141	4	Refer to Section E Figure 20
+30	D-9411	1 1/4		D-9421	1 1/2		D-9431	2 1/4		D-9441	3 3/4	
*60	D-9112	1 3/4		D-9122	3		D-9132	5		D-9142	7	
+60	D-9412	1 3/4		D-9422	3		D-9432	4 3/4		D-9442	6 3/4	
100	D-9113	3		D-9123	5 1/2		D-9133	11		D-9143	14	
200	D-9114	5 1/2		D-9124	11		D-9134	19		D-9144	26	
400	D-9115	11		D-9125	21		D-9135	43		D-9145	60	
600	D-9116	16		D-9126	34		D-9136	73		D-9146	99	
600 VOLT DC & AC												
30	D-9814	1 1/2	Refer to Section E Figure 20	D-9824	3	Refer to Section E Figure 20	D-9834	5 1/2	Refer to Section E Figure 20	D-9844	6	Refer to Section E Figure 20
60	D-9815	2		D-9825	4		D-9835	7		D-9845	8	
100	D-9816	4		D-9826	7		D-9836	14		D-9846	15	
200	D-9817	6 1/2		D-9827	13		D-9837	22		D-9847	30	
400	D-9818	13		D-9828	25		D-9838	50		D-9848	65	
600	D-9819	20		D-9829	40		D-9839	80		D-9849	110	

* For 250 Volt DC & AC
\+ For 480 Volt AC

Prices available upon request.

FOR MODIFICATIONS AND SPECIAL FEATURES REFER TO SECTION D-7 OF PRICE LIST

TYPE D BACK-CONNECTED KNIFE SWITCHES
Single or Double-Throw, Not Fusible, NON-LOAD BREAK



D-535 P2GE

100 Ampere, Two-Pole, Single-Throw Field Discharge Switch With Padlock Feature, 90 Degree Stop & Spade Handle

Field Discharge Switches

Field discharge switches are used to overcome the high inductive current caused by suddenly opening a generator field. When opening the generator circuit, the field discharge switch closes the field across a resistor allowing the inductive discharge to die out gradually, which might otherwise result in a rupture of field insulation.

Upon opening these two-pole switches, the discharge blade, which is an offset extension of one of the main blades, makes contact with a high clip. The high clip, which is connected to the resistor, is located between the hinges of the two blades.

Another feature of the switch is each pole is equipped with quick-break blades. The discharge blade and the quick break blades combine to provide a make before break operation. Upon opening the switch, the resistance current is made before the line-to-field circuit is broken, limiting the field discharge voltage. When closing the switch, the discharge blade breaks the resistance current before the main blades make contact.

Prices do not include resistors.

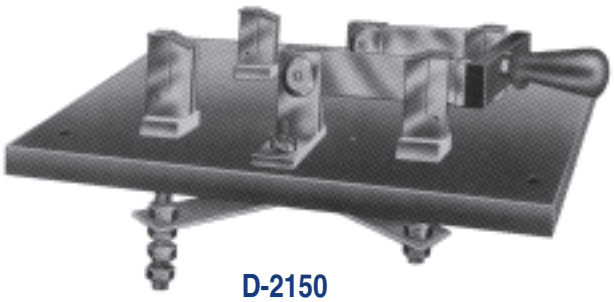
Ampere Rating	Single Throw		Double Throw	
	Type	Weight	Type	Weight
60	D-534	2 1/4	D-578	2 3/4
100	D-535	3 3/4	D-579	4 3/4
200	D-536	6 1/4	D-580	8 1/4

Polarity Reversing Switches

Another version of the Type D switch is the polarity reversing switch. As shown in the image to theright, the switch is two pole, double throw and is equipped with standard blades. The cross connections, used to give the reversing action, are made of copper bus straps mounted on the back of the switch. Connections to the hinges are made on the front with connections to the clips made on the back of the switch.

15 Volts DC Maximum

Ampere Rating	Type	Base Size (HxW)
100	D-2149	15 x 10
200	D-2150	16 x 11 1/4
300	D-2151	19 x 11 1/4
400	D-2152	20 x 12
600	D-2153	22 x 12
800	D-2154	22 x 15
1200	D-2155	24 x 15
1600	D-2156	27 x 20
2000	D-2157	28 x 22



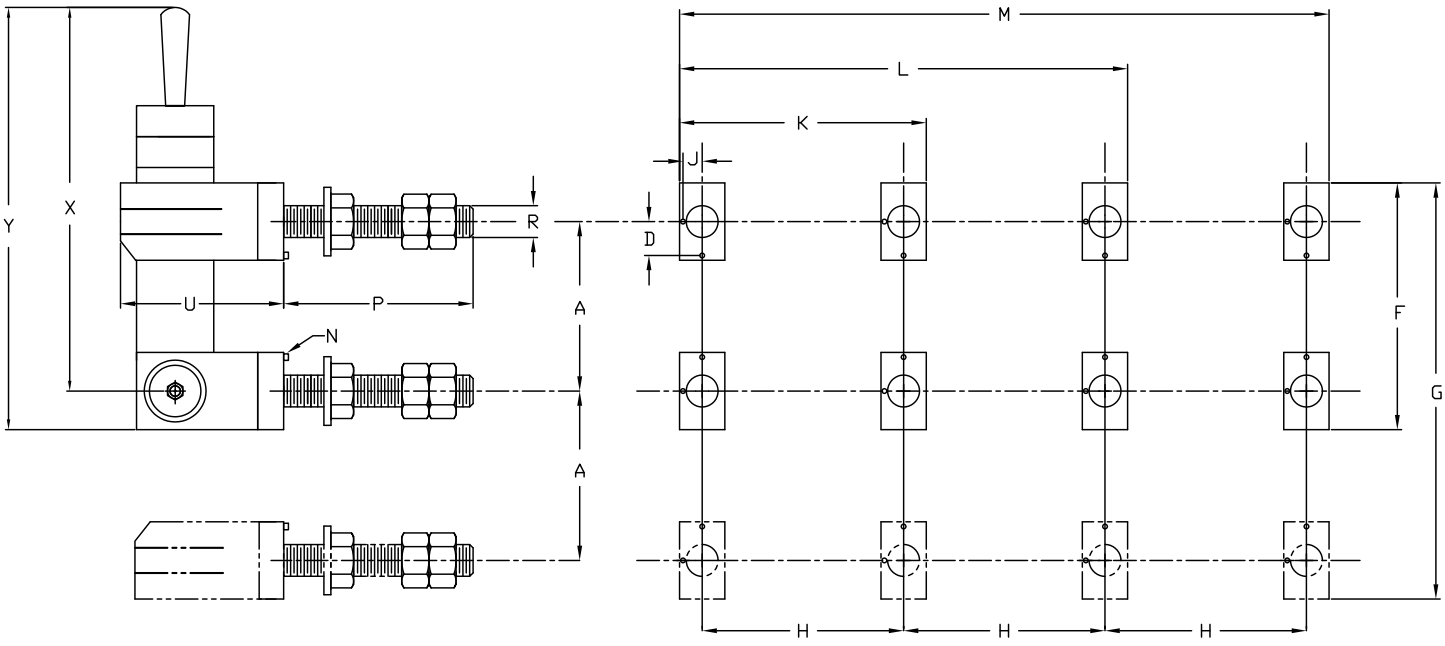
D-2150

200 Ampere, Two-Pole, Polarity Reversing Switch

FOR MODIFICATIONS AND SPECIAL FEATURES REFER TO SECTION D-7 OF PRICE LIST

TYPE D BACK-CONNECTED KNIFE SWITCHES
Single or Double-Throw, Not Fusible, NON-LOAD BREAK

NOT FOR CONSTRUCTION UNLESS ENDORSED



FOR MODIFICATIONS AND SPECIAL FEATURES REFER TO SECTION D-7 OF PRICE LIST

TYPE D BACK-CONNECTED KNIFE SWITCHES
Single or Double-Throw, Not Fusible, NON-LOAD BREAK

NOT FOR CONSTRUCTION UNLESS ENDORSED

Common to all Voltages

Ampere Rating	D	J	N	P	R	U
*30	3/16	-	1/16	2 13/16	1/4	1 3/8
60	7/32	-	1/16	2 15/16	5/16	1 43/64
100	5/16	-	1/8	3 1/4	3/8	2 1/8
200	7/16	-	1/8	3 5/8	1/2	2 25/32
300	1/2	-	1/8	3 3/4	5/8	3 1/4
400	5/8	-	1/8	3 15/16	3/4	3 11/16
600	3/4	-	1/8	4 3/16	7/8	4 3/8
800	11/16	-	3/16	5	1	3 7/8
1200	7/8	-	3/16	5 1/16	1 1/4	4 7/16
1600	-	1	3/16	7 3/8	1 1/2	4 9/16
2000	-	1/4	3/16	8 3/8	1 3/4	4 7/8

* 250 Volt DC & AC only

Refer to drawing on page 22.

250 VOLT DC 480 VOLT AC

Ampere Rating	A	F	G	H	K	L	M	X				Y			
								1 Pole	2 Pole	3 Pole	4 Pole	1 Pole	2 Pole	3 Pole	4 Pole
*30	2 1/16	2 9/16	4 5/8	2 5/16	2 13/16	5 1/8	7 7/16	4 7/32	4 1/2	4 1/2	5 1/4	4 1/2	4 3/4	4 3/4	5 1/2
60	2 11/16	3 5/16	6	2 7/8	3 3/8	6 1/4	9 1/8	4 7/8	5 5/32	5 5/32	5 15/16	5 3/16	5 1/2	5 1/2	6 1/4
100	2 15/16	3 13/16	6 3/4	3 1/16	3 3/4	6 13/16	9 7/8	6 13/16	7 3/16	7 3/16	6 9/16	7 1/4	7 5/8	7 5/8	7
200	3 9/16	4 13/16	8 3/8	3 7/16	4 5/16	7 3/4	11 3/16	9 3/32	9 17/32	9 17/32	8 1/32	9 3/4	10 3/16	10 3/16	8 11/16
300	3 13/16	5 5/16	9 1/8	3 11/16	4 11/16	8 3/8	12 1/16	9 15/16	9 15/16	9 15/16	8 7/16	10 11/16	10 11/16	10 11/16	9 3/16
400	4 5/16	6 1/16	10 3/8	4 1/16	5 3/16	9 1/4	13 5/16	11	10 7/8	10 7/8	9 7/8	11 7/8	11 3/4	11 3/4	10 3/4
600	4 11/16	6 13/16	11 1/2	4 5/16	5 9/16	9 7/8	14 3/16	11 15/16	11 15/16	11 15/16	10 7/16	13	13	13	11 1/2
800	4 9/16	6 5/16	10 7/8	5 1/16	6 13/16	11 7/8	16 15/16	12	10 15/32	10 15/32	10 1/2	12 7/8	11 3/8	11 3/8	11 3/8
1200	5 1/8	7 1/4	12 3/8	5 1/2	7 1/2	13	18 1/2	12 13/16	11 5/16	11 5/16	11 5/16	13 7/8	12 3/8	12 3/8	12 3/8
1600	5 1/2	7 3/4	13 1/4	5 7/8	8 1/4	14 1/8	20	13 1/4	11 3/4	11 3/4	11 3/4	14 3/8	12 7/8	12 7/8	12 7/8
2000	5 5/8	8	13 5/8	6 5/8	9 3/4	16 3/8	23	14 1/16	12 5/16	12 9/16	12 9/16	15 1/4	13 1/2	13 3/4	13 3/4

* 250 Volt DC & AC only.

600 VOLT DC 480 VOLT AC

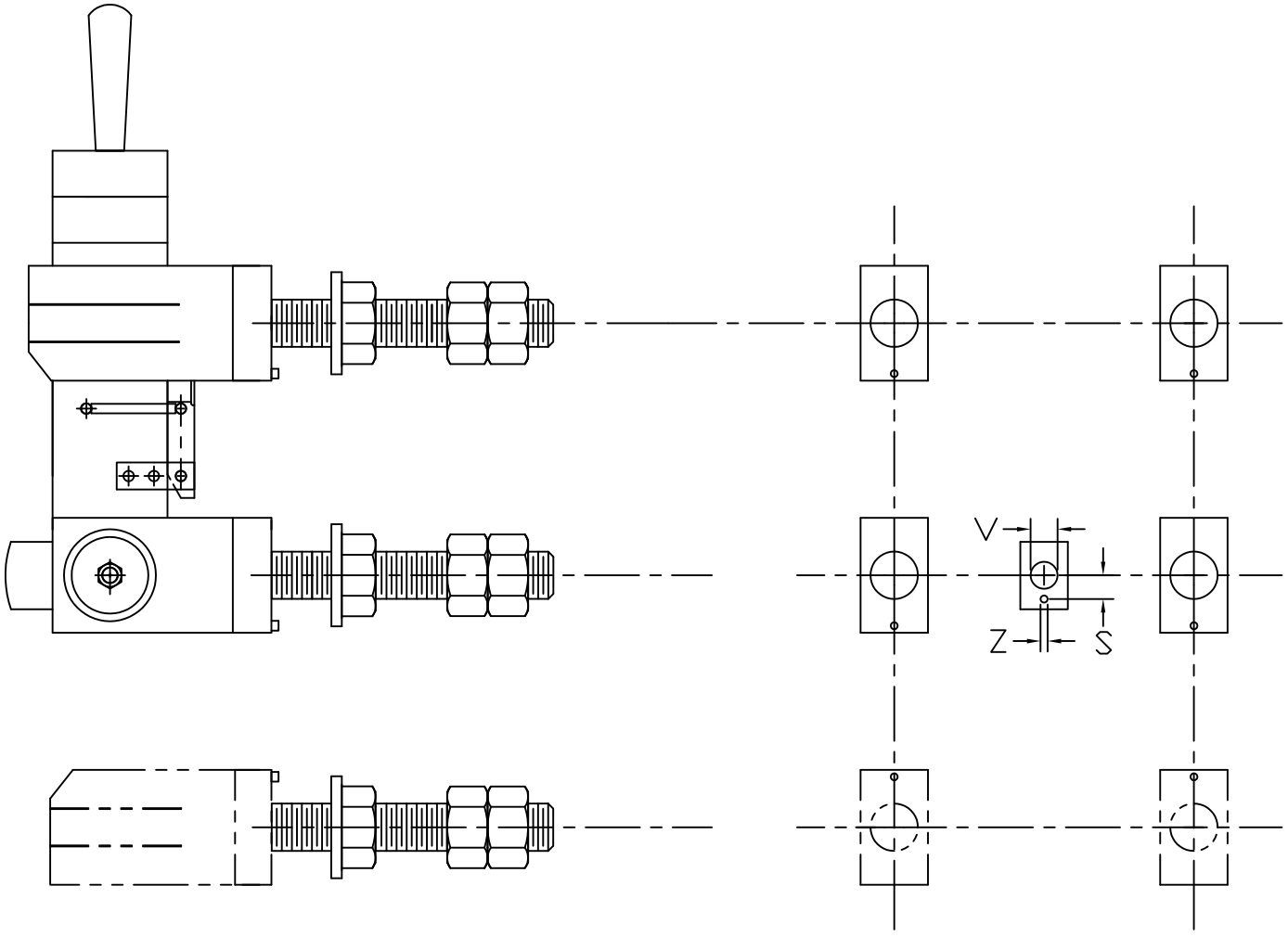
Ampere Rating	A	F	G	H	K	L	M	X				Y			
								1 Pole	2 Pole	3 Pole	4 Pole	1 Pole	2 Pole	3 Pole	4 Pole
30	4 3/16	4 13/16	9	4 5/8	5 1/8	9 3/4	14 3/8	6 7/16	6 7/16	7 15/32	7 15/32	6 3/4	6 3/4	7 13/16	7 13/16
60	4 3/16	4 13/16	9	4 5/8	5 1/8	9 3/4	14 3/8	6 7/16	6 7/16	7 15/32	7 15/32	6 3/4	6 3/4	7 13/16	7 13/16
100	4 15/16	5 13/16	10 3/4	5 5/16	6	11 5/16	16 5/8	8 27/32	9 3/16	8 9/16	8 9/16	9 5/16	9 5/8	9	9
200	5 9/16	6 13/16	12 3/8	5 11/16	6 9/16	12 1/4	17 15/16	11 3/32	11 17/32	10 1/32	10 1/32	11 3/4	12 5/32	10 11/16	10 11/16
300	5 9/16	7 1/16	12 5/8	5 11/16	6 11/16	12 3/8	18 1/16	11 11/16	11 11/16	10 3/16	10 3/16	12 7/16	12 7/16	10 15/16	10 15/16
400	6 5/16	8 1/16	14 3/8	5 13/16	6 15/16	12 3/4	18 9/16	12 7/8	12 7/8	11 7/8	11 7/8	13 3/4	13 3/4	12 3/4	12 3/4
600	6 11/16	8 13/16	15 1/2	6 1/16	7 5/16	13 3/8	19 7/16	13 15/16	13 15/16	12 7/16	12 7/16	15	15	13 1/2	13 1/2
800	6 9/16	8 5/16	14 7/8	6 5/8	8 3/8	15	21 5/8	14	12 15/32	13 15/32	12 15/32	14 7/8	13 3/8	14 3/8	13 3/8
1200	7 1/8	9 1/4	16 3/8	7	9	16	23	14 13/16	13 5/16	14 5/16	13 5/16	15 1/4	14 3/8	15 3/8	14 3/8
1600	6 3/4	9	15 3/4	7 3/8	9 3/4	17 1/8	24 1/2	13 1/2	13	14 5/16	13	14 5/8	14 1/8	15 7/16	14 1/8
2000	7 5/8	10	17 5/8	8	11 1/8	19 1/8	27 1/8	14 13/16	14 9/16	15 5/8	14 9/16	16	15 3/4	16 13/16	15 3/4

NOTE: For 30 Ampere 480 Volt AC use 60 Ampere switch.

FOR MODIFICATIONS AND SPECIAL FEATURES REFER TO SECTION D-7 OF PRICE LIST

TYPE D BACK-CONNECTED KNIFE SWITCHES
Single or Double-Throw, Field Discharge, Not Fusible, NON-LOAD BREAK

NOT FOR CONSTRUCTION UNLESS ENDORSED



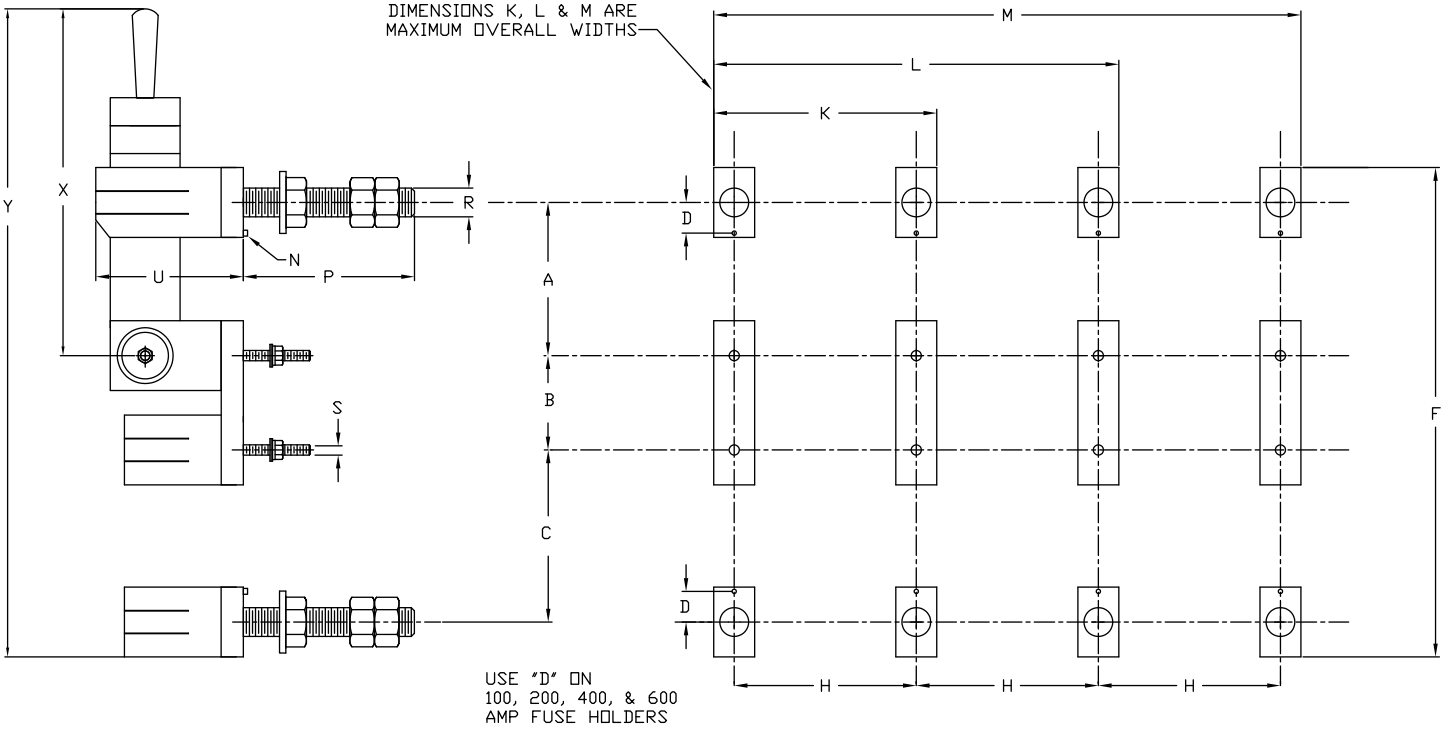
TYPE D FIELD DISCHARGE SWITCHES

Dimensions	60	100	200	300	400	600
S	7/32	7/32	5/16	5/16	7/16	7/16
V	5/16	5/16	3/8	3/8	1/2	1/2
Z	1/16	1/16	1/8	1/8	1/8	1/8

FOR MODIFICATIONS AND SPECIAL FEATURES REFER TO SECTION D-7 OF PRICE LIST

TYPE D BACK-CONNECTED KNIFE SWITCHES
Single-Throw, Fusible at Bottom, NON-LOAD BREAK

NOT FOR CONSTRUCTION UNLESS ENDORSED



FOR MODIFICATIONS AND SPECIAL FEATURES REFER TO SECTION D-7 OF PRICE LIST

TYPE D BACK-CONNECTED KNIFE SWITCHES
Single-Throw, Fusible at Bottom, NON-LOAD BREAK

NOT FOR CONSTRUCTION UNLESS ENDORSED

Common to all Voltages

Ampere Rating	D	N	P	R	S	U
*30	3/16	1/16	2 13/16	1/4	.163	1 3/8
+30	7/32	1/16	2 15/16	5/16	.190	1 43/64
60	7/32	1/16	2 15/16	5/16	.190	1 43/64
100	5/16	1/8	3 1/4	3/8	.190	2 1/8
200	7/16	1/8	3 5/8	1/2	5/16	2 25/32
400	5/8	1/8	3 15/16	3/4	5/16	3 11/16
600	3/4	1/8	4 3/16	7/8	5/16	4 3/8

* 250 Volt
+ 480 & 600 Volt

Refer to drawing on page 25.

250 VOLT DC & AC

Ampere Rating	A	B	C	F	H	K	L	M	X				Y			
									1 Pole	2 Pole	3 Pole	4 Pole	1 Pole	2 Pole	3 Pole	4 Pole
30	2 1/16	11/16	1 1/2	4 3/4	2 5/16	3	5 5/16	7 5/8	4 7/32	4 1/2	4 1/2	5 1/4	6 11/16	7	7	7 11/16
60	2 11/16	13/16	2 3/8	6 1/2	2 7/8	3 11/16	6 9/16	9 7/16	4 7/8	5 5/32	5 5/32	5 15/16	8 3/8	8 11/16	8 11/16	9 7/16
100	2 15/16	1 9/32	4 7/8	9 13/32	3 1/16	3 3/4	6 13/16	9 7/8	6 13/16	7 3/16	7 3/16	6 9/16	13 3/8	13 3/4	13 3/4	13 1/8
200	3 9/16	1 21/32	5 3/4	12 7/32	3 7/16	4 5/16	7 3/4	11 3/16	9 3/32	9 17/32	9 17/32	8 1/32	17 1/8	17 9/16	17 9/16	16 1/16
400	4 5/16	2 5/16	6 3/4	15 1/8	4 1/16	5 3/16	9 1/4	13 5/16	11	10 7/8	10 7/8	9 7/8	21	20 7/8	20 7/8	19 7/8
600	4 11/16	2 7/8	8 1/8	17 13/16	4 5/16	5 9/16	9 7/8	14 3/16	11 15/16	11 15/16	11 15/16	10 7/16	24	24	24	22 1/2

480 VOLT AC

Ampere Rating	A	B	C	F	H	K	L	M	X				Y			
									1 Pole	2 Pole	3 Pole	4 Pole	1 Pole	2 Pole	3 Pole	4 Pole
30	2 11/16	13/16	4 3/8	8 1/2	2 7/8	3 11/16	6 9/16	9 7/16	4 7/8	5 5/32	5 5/32	5 15/16	10 3/8	10 11/16	10 11/16	11 7/16
60	2 11/16	13/16	4 7/8	9	2 7/8	4	6 7/8	9 3/4	4 7/8	5 5/32	5 5/32	5 15/16	10 7/8	11 5/32	11 5/32	12
100	2 15/16	1 9/32	6 7/8	11 31/32	3 1/16	3 3/4	6 13/16	9 7/8	6 13/16	7 3/16	7 3/16	6 9/16	15 3/8	15 3/4	15 3/4	15 1/8
200	3 9/16	1 21/32	8 1/4	14 23/32	3 7/16	4 5/16	7 3/4	11 3/16	9 3/32	9 17/32	9 17/32	8 1/32	19 5/8	20 1/16	20 1/16	18 9/16
400	4 5/16	2 5/16	9 3/4	18 1/8	4 1/16	5 3/16	9 1/4	13 5/16	11	10 7/8	10 7/8	9 7/8	24	23 7/8	23 7/8	22 7/8
600	4 11/16	2 7/8	11 1/8	20 13/16	4 5/16	5 9/16	9 7/8	14 3/16	11 15/16	11 15/16	11 15/16	10 7/16	27	27	27	25 1/2

600 VOLT DC & AC

Ampere Rating	A	B	C	F	H	K	L	M	X				Y			
									1 Pole	2 Pole	3 Pole	4 Pole	1 Pole	2 Pole	3 Pole	4 Pole
30	4 3/16	13/16	4 3/8	10	4 5/8	5 7/16	10 1/16	4 11/16	6 7/16	6 7/16	7 15/32	7 15/32	11 15/16	11 15/16	13	13
60	4 3/16	13/16	4 7/8	10 1/2	4 5/8	5 3/4	10 3/8	15	6 7/16	6 7/16	7 15/32	7 15/32	12 7/16	12 7/16	13 1/2	13 1/2
100	4 15/16	1 9/32	6 7/8	13 31/32	5 5/16	6	11 5/16	16 5/8	8 27/32	9 3/16	8 9/16	8 9/16	17 3/8	17 3/4	17 1/8	17 1/8
200	5 9/16	1 21/32	8 1/4	16 23/32	5 11/16	6 9/16	12 1/4	17 15/16	11 3/32	11 17/32	10 1/32	10 1/32	21 5/8	22 1/16	20 9/16	20 9/16
400	6 5/16	2 5/16	9 3/4	20 1/8	5 13/16	6 15/16	12 3/4	8 9/16	12 7/8	12 7/8	11 7/8	11 7/8	25 13/16	25 13/16	24 13/16	24 13/16
600	6 11/16	2 7/8	11 1/8	22 13/16	6 1/16	7 5/16	13 3/8	19 7/16	13 15/16	13 15/16	12 7/16	12 7/16	29	29	27 1/2	27 1/2

NOTE: For dimensions of Double-Throw Fusible switches contact the factory.

FOR MODIFICATIONS AND SPECIAL FEATURES REFER TO SECTION D-7 OF PRICE LIST

SECTION C

Class 9852 Back Connected Knife Switches Type L With Bus Bar Laminations For Terminations

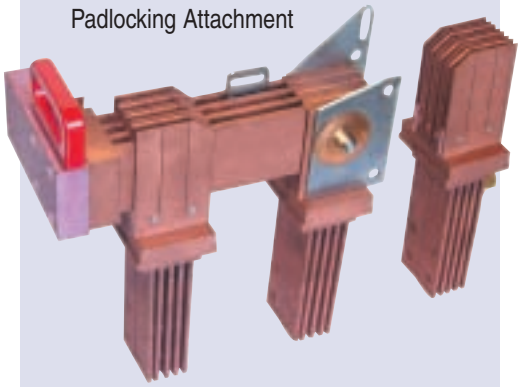
ORDERING INFORMATION REQUIRED

1. Class, Type Number, and Part Letters (if any) of Switch.
2. Voltage and Ampere Rating.
3. Special direction of laminations of the terminal studs, if other than all horizontal.
4. If special features other than listed in Section L4 of the Price List are desired, order as Class 9852 similar to Type _____, Part # _____, except _____ (clearly describe special feature).

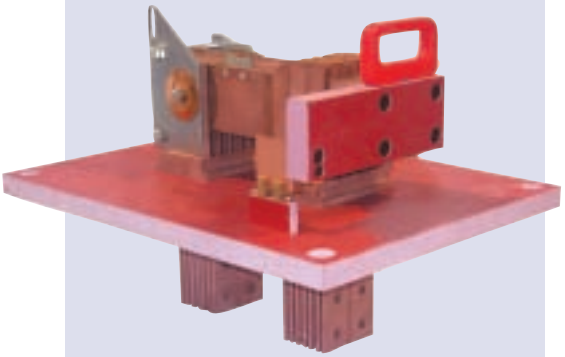
TYPE L BACK-CONNECTED KNIFE SWITCHES
NON-LOAD BREAK

L-9355

4000 Ampere, One Pole, Double-Throw Switch, With Padlocking Attachment

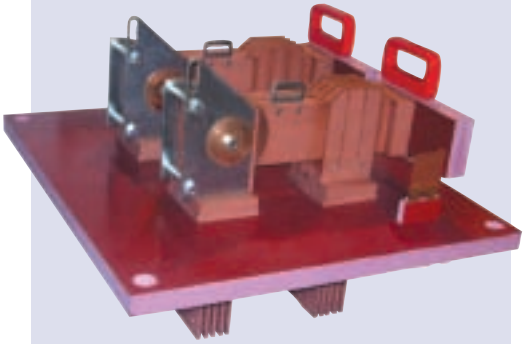


4000 Ampere, Single Pole, Single-Throw With Padlocking Attachment 90º Stops & Knife Type auxiliary Switch



Special Design Switch

4000 Ampere, 1500 V, Two Pole, Single Throw Switch, Padlocking Feature.



Type L Back-Connected Knife Switches

Type L Laminated Stud Switches are made in capacities of 800 ampere and larger, and are designed as isolation or disconnect switches. Designed for heavy-duty service on switchboards or individual panels, these switches comply with all requirements of the National Electric Code. auxiliary switches can be supplied if required.

For factory mounting on GPO-3 or other insulating panels, prices will be quoted on receipt of panel sizes and full information. Switches available 800 ampere through 6000 ampere on Standard design. Special designs available.

Polarity Reversing Switches

Another version of the Type L Knife Switch is the Polarity Reversing Switch. As shown in the illustration, this switch is two-pole, double throw. The cross-connections are used to provide the reversing action, and are made of copper bus mounted on the back of the switch. Back connections are made to horizontal laminated studs.

Due to the compactness of the switch, the terminals are available only in the horizontal direction. Standard designs for low voltage, while special designs available in higher voltages.

SPARE PARTS
Spare parts are available for all knife switches and fuse clips. Accessories are also available for adding to knife switches.

SPECIAL SWITCHES
Special designs are available. We may already have a design for what you require, if not our engineering department will investigate and inform you if we can build it. Please contact Filnor directly for your special switch requirements.

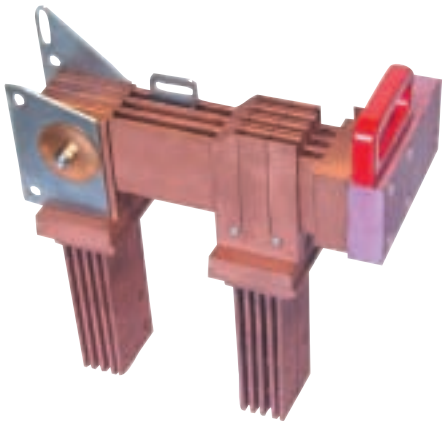
Standard Knife Switches are designed to Underwriters Laboratories Standard U.L. 363 and are listed as

Listed 698R Knife Switch

TYPE L BACK-CONNECTED KNIFE SWITCHES
Single-Throw, Not Fusible, NON-LOAD BREAK

L-8155 P2E

4000 Ampere, One Pole, Single-Throw Switch, With Padlocking Attachmnent and Spade Handle



800 and 1200 Ampere	1 1/4"
1600 - 3000 Ampere	1 1/2"
4000 - 6000 Ampere	2"

Type L Laminated Stud Switches are made in capacities of 800 ampere and larger, and are designed as isolation or disconnect switches. Designed for heavy-duty service on switch-boards or individual panels, these switches comply with all requirements of the National Electric Code.

Ampere ratings are based on a temperature rise of not over 30° C above an ambient of 40° C. Current carrying parts of rugged milled construction are made from hard drawn copper of 98% conductivity. Hinge clips and stud leaves are solidly pinned and soldered into slots milled in the base blocks.

All Type L switches are furnished unmounted as standard, but are shipped on throw away bases with all contacts fitted. When mounting on permanent panels, the parts must be carefully aligned to secure best performance. For factory mounting on GPO-3 or other insulating panels, prices will be quoted on receipt of panel sizes and full information.

Horizontal laminations of the studs are furnished as standard on the switches listed on this page. Direction of laminations can be furnished all vertical or part vertical and part horizontal to suit
customers' bus or cable arrangements. Assuming the switch to be mounted with the blades vertical, the direction of the laminated terminals must be specified for both single and double-throw switches, if other than all horizontal.

The customer's bus structure must be designed with adequate capacity to prevent feeding heat into the switch. On AC bus allowance must be made for skin effect, inductive heating and magnetic effects on nearby ferrous metal parts. When mounting in enclosures, adequate ventillation must be provided.

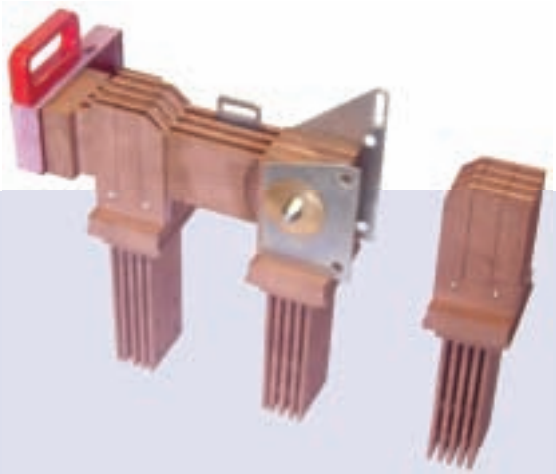
Switches listed below are manufactured to be mounted on customers' panel of the following thickness.

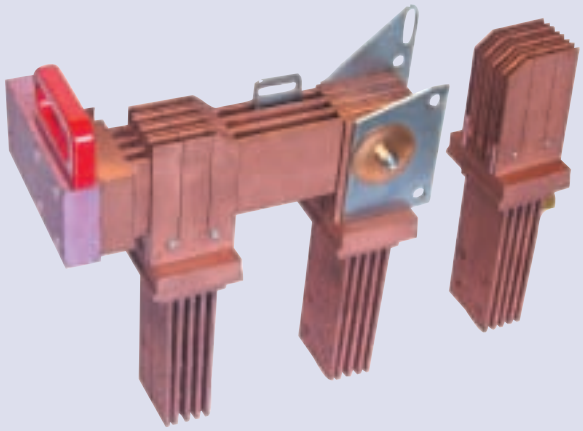
Ampere Rating		One Pole			Two Pole			Three Pole		
DC	AC	Type	Weight	Drawing	Type	Weight	Drawing	Type	Weight	Drawing
250 VOLT DC & 480 VOLT AC SINGLE-THROW										
800	800	L-8317	10	Refer to Section E Figure 20	L-8327	21	Refer to Section E Figure 20	L-8337	32	Refer to Section E Figure 20
1200	1200	L-8319	15		L-8329	32		L-8339	48	
1600	1600	L-8151	22		L-8161	43		L-8171	63	
2000	1900	L-8152	35		L-8162	67		L-8172	92	
2500	2300	L-8153	64		L-8163	105		L-8173	160	
3000	2700	L-8154	68		L-8164	115		L-8174	180	
4000	3000	L-8155	86		L-8165	142		L-8175	210	
5000	-	L-8156	99		L-8166	198		L-8176	250	
6000	-	L-8157	115		L-8167	230		L-8177	340	
600 VOLT DC & AC SINGLE-THROW										
800	800	L-8358	11	Refer to Section E Figure 20	L-8368	23	Refer to Section E Figure 20	L-8378	35	Refer to Section E Figure 20
1200	1200	L-8359	16		L-8369	34		L-8379	52	
1600	1600	L-8351	23		L-8361	47		L-8371	71	
2000	1900	L-8352	37		L-8362	76		L-8372	115	
2500	2300	L-8353	66		L-8363	134		L-8373	202	
3000	2700	L-8354	70		L-8364	142		L-8374	214	
4000	3000	L-8355	89		L-8365	180		L-8375	271	
5000	-	L-8356	103		L-8366	208		L-8376	313	
6000	-	L-8357	120		L-8367	242		L-8377	362	

TYPE L BACK-CONNECTED KNIFE SWITCHES
Double-Throw, Not Fusible, NON-LOAD BREAK

L-9355

4000 Ampere, One Pole, Double-Throw Switch, With Padlocking Attachment



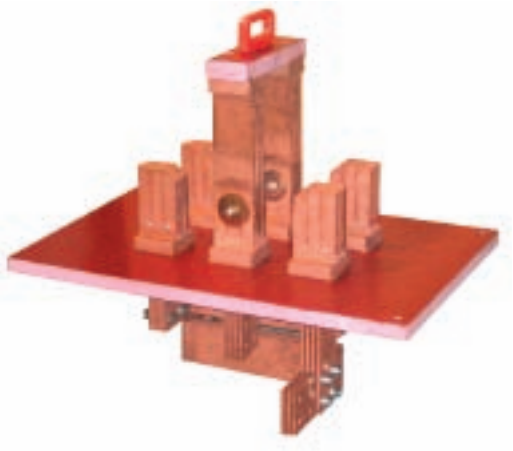


Ampere Rating		One Pole			Two Pole			Three Pole		
DC	AC	Type	Weight	Drawing	Type	Weight	Drawing	Type	Weight	Drawing
250 VOLT DC & 480 VOLT AC DOUBLE-THROW										
800	800	L-9317	14	Refer to Section E Figure 20	L-9327	29	Refer to Section E Figure 20	L-9337	45	Refer to Section E Figure 20
1200	1200	L-9319	22		L-9329	46		L-9339	70	
1600	1600	L-9151	34		L-9161	80		L-9171	96	
2000	1900	L-9152	53		L-9162	110		L-9172	140	
2500	2300	L-9153	90		L-9163	170		L-9173	240	
3000	2700	L-9154	98		L-9164	188		L-9174	265	
4000	3000	L-9155	120		L-9165	216		L-9175	300	
5000	-	L-9156	150		L-9166	280		L-9176	360	
6000	-	L-9157	172		L-9167	345		L-9177	520	
600 VOLT DC & AC DOUBLE-THROW										
800	800	L-9318	15	Refer to Section E Figure 20	L-9328	31	Refer to Section E Figure 20	L-9338	48	Refer to Section E Figure 20
1200	1200	L-9320	23		L-9330	48		L-9340	74	
1600	1600	L-9351	35		L-9361	72		L-9371	107	
2000	1900	L-9352	55		L-9362	114		L-9372	167	
2500	2300	L-9353	92		L-9363	175		L-9373	280	
3000	2700	L-9354	100		L-9364	193		L-9374	302	
4000	3000	L-9355	123		L-9365	248		L-9375	371	
5000	-	L-9356	154		L-9366	310		L-9376	466	
6000	-	L-9357	177		L-9367	365		L-9377	536	

TYPE L BACK-CONNECTED KNIFE SWITCHES
NON-LOAD BREAK

L-2165

1600 Ampere, Two Pole,
Polarity Reversing Switch



Polarity Reversing Switches

Another version of the Type L Knife switch is the polarity reversing switch. As shown in the image to the left, the switch is two pole, double-throw. The cross connections used to give the reversing action are made of copper bus mounted on the back of the switch.

Back connections are made to horizontal laminated studs. Due to the compactness of the switch, the terminals are available only in the horizontal direction.

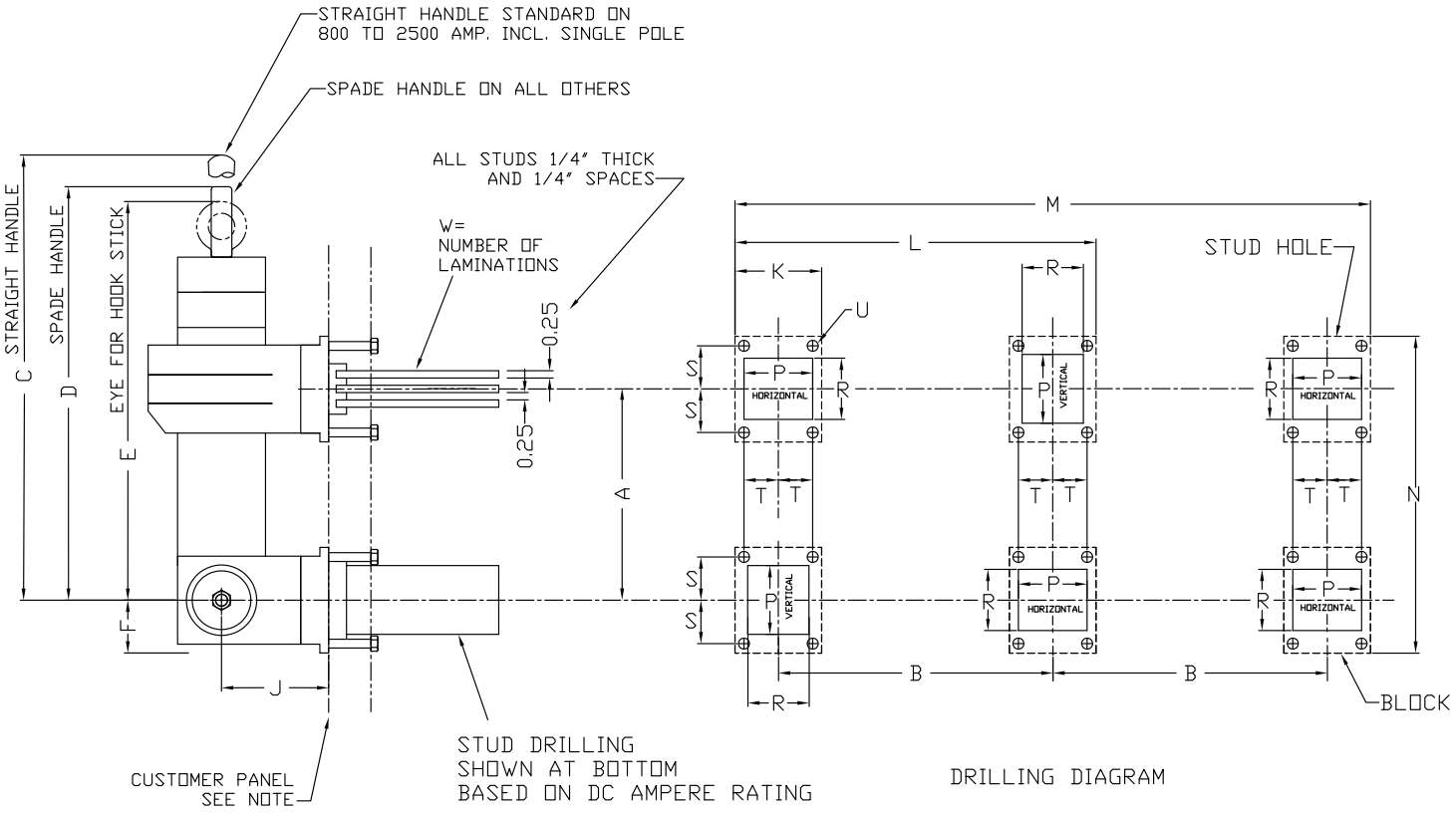
Ampere Rating	Type	Base Size (HxW)
800	L-2160	27 x 18 x 1 1/4"
1200	L-2161	24 x 20 x 1 1/4"
1600	L-2162	28 x 20 x 1 1/2"
2000	L-2163	35 x 20 x 1 1/2"
2500	L-2164	36 x 24 x 1 1/2"
3000	L-2165	36 x 24 x 1 1/2"
4000	L-2166	36 x 24 x 2"
5000	L-2167	38 x 24 x 2"
6000	L-2168	38 x 24 x 2"

15 Volts DC maximum.

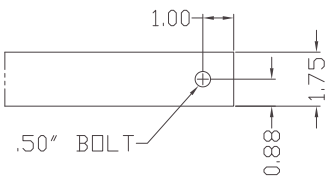
FOR MODIFICATIONS AND SPECIAL FEATURES REFER TO SECTION L-4 OF PRICE LIST

TYPE L BACK-CONNECTED KNIFE SWITCHES
Single or Double-Throw, Not Fusible, NON-LOAD BREAK

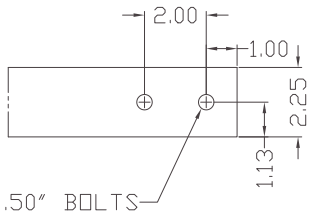
NOT FOR CONSTRUCTION UNLESS ENDORSED



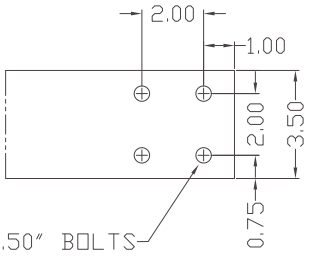
STUD DRILLING BASED ON DC AMPERE RATING



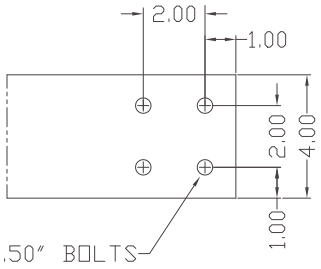
800 AMP.



1200, 1600 & 2000 AMP.



2500, 3000 & 4000 AMP.



5000 & 6000 AMP.

FOR MODIFICATIONS AND SPECIAL FEATURES REFER TO SECTION L-4 OF PRICE LIST

TYPE L BACK-CONNECTED KNIFE SWITCHES
Single or Double-Throw, Not Fusible, NON-LOAD BREAK

NOT FOR CONSTRUCTION UNLESS ENDORSED

250 VOLT DC & 480 VOLT AC																			
Ampere Rating		A	B	C*	D	E*	F	G	H	J	K	L	M	N	P	R	S	T	U	W
DC	AC																			
800	800	5 5/8	5 3/8	12 5/8	13 1/8	10 1/2	1 3/8	4 7/8	6	3	2 1/8	7 1/2	12 7/8	8 3/8	1 7/8	1 1/4	1	3/4	3/8	2
1200	1200	5 1/8	6 3/8	11 1/2	11 3/4	9 3/8	1 1/16	4 1/16	7	2 11/16	3 1/8	9 1/2	15 7/8	7 1/4	1 7/8	1 7/8	11/16	1 1/4	3/8	3
1600	1600	5 5/8	6 3/8	13 3/8	13 1/2	10 3/4	1 3/8	5 1/8	8	3 1/4	3 1/8	9 1/2	15 7/8	8 3/8	2 3/8	1 7/8	1 1/16	1 1/4	3/8	3
2000	1900	7	6 1/2	15 3/4	16 1/4	13 1/8	1 7/8	7 1/8	8 1/2	4 1/2	3	9 1/2	16	10 3/4	2 3/8	2 3/8	1 1/2	1 3/16	3/8	4
2500	2300	7 1/4	6 1/2	16 1/4	16 3/4	14 1/8	2	7 3/16	8 1/2	4 9/16	4	11 1/2	19	11 1/4	3 5/8	2 1/8	1 1/2	1 1/2	7/16	3
3000	2700	7 1/4	7 1/2	16 1/4	16 3/4	14 1/8	2	7 3/16	8 1/2	4 9/16	4	11 1/2	19	11 1/4	3 5/8	2 5/8	1 9/16	1 9/16	7/16	4
4000	3000	7 1/4	8 1/4	16 3/4	17 1/4	14 3/8	2	7 3/16	8 1/2	4 9/16	4 3/4	13	21 1/4	11 1/4	3 5/8	3 1/8	1 1/2	2 1/16	7/16	5
5000	-	7 3/4	9 3/8	18 1/4	17 3/4	15 1/4	2 1/4	7 3/16	8 1/2	4 9/16	5 7/8	15 1/4	24 5/8	12 1/4	4 1/8	3 5/8	1 1/2	2 9/16	9/16	6
6000	-	7 3/4	9 3/8	18 1/4	17 3/4	15 1/4	2 1/4	7 3/16	8 1/2	4 9/16	5 7/8	15 1/4	24 5/8	12 1/4	4 1/8	4 1/8	1 1/2	2 9/16	9/16	7

600 VOLT DC & AC																				
Ampere Rating		A	B	C*	D	E*	F	G	H	J	K	L	M	N	P	R	S	T	U	W
DC	AC																			
800	800	6 7/8	6 7/8	13 7/8	14 3/8	11 3/4	1 3/8	4 7/8	6	3	2 1/8	9	15 7/8	9 5/8	1 7/8	1 1/4	1	3/4	3/8	2
1200	1200	6 3/8	7 7/8	12 3/4	13	10	1 1/16	4 1/16	7	2 11/16	3 1/8	11	18 7/8	8 1/2	1 7/8	1 7/8	11/16	1 1/4	3/8	3
1600	1600	6 7/8	7 7/8	14 5/8	14 3/4	12	1 3/8	5 1/8	8	3 1/4	3 1/8	11	18 7/8	9 5/8	2 3/8	1 7/8	1 1/16	1 1/4	3/8	3
2000	1900	8 1/4	8	17	17 1/2	14 3/8	1 7/8	7 1/8	8 1/2	4 1/2	3	11	19	12	2 3/8	2 3/8	1 1/2	1 3/16	3/8	4
2500	2300	8 1/2	9	17 1/2	18	15 3/8	2	7 3/16	8 1/2	4 9/16	4	13	22	12 1/2	3 5/8	2 1/8	1 1/2	1 1/2	7/16	3
3000	2700	8 1/2	9	17 1/2	18	15 3/8	2	7 3/16	8 1/2	4 9/16	4	13	22	12 1/2	3 5/8	2 5/8	1 9/16	1 9/16	7/16	4
4000	3000	8 1/2	9 3/4	18	18 1/2	15 5/8	2	7 3/16	8 1/2	4 9/16	4 3/4	14 1/2	24 1/4	12 1/2	3 5/8	3 1/8	1 1/2	2 1/16	7/16	5
5000	-	9	10 7/8	19 1/2	19	16 1/2	2 1/4	7 3/16	8 1/2	4 9/16	5 7/8	16 3/4	27 5/8	13 1/2	4 1/8	3 5/8	1 1/2	2 9/16	9/16	6
6000	-	9	10 7/8	19 1/2	19	16 1/2	2 1/4	7 3/16	8 1/2	4 9/16	5 7/8	16 3/4	27 5/8	13 1/2	4 1/8	4 1/8	1 1/2	2 9/16	9/16	7

*C and *E dimensions are for Single Pole only.

NOTE: Switches are manufactured to be mounted on customers' panels of the following thickness:

800 and 1200 Ampere	1 1/4"
1600 - 3000 Ampere	1 1/2"
4000 - 6000 Ampere	2"

FOR MODIFICATIONS AND SPECIAL FEATURES REFER TO SECTION L-4 OF PRICE LIST

Class 9854 Fuse Blocks & Fuse Cips Type B

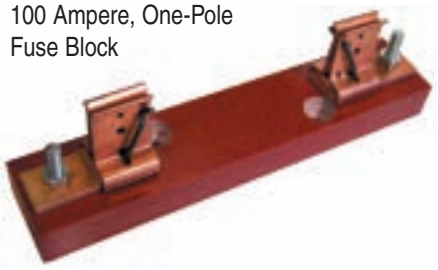
SECTION D

ORDERING INFORMATION REQUIRED

1. Class and Type Number.
2. Voltage and Ampere Rating.
3. Number of Poles.
4. Front or Back-Connected (for fuse holders).

FUSE BLOCKS & FUSE HOLDERS
For National Electric Code Fuses, NON-LOAD BREAK

B-3613
100 Ampere, One-Pole Fuse Block



D-42
600 Ampere Fuse Clip, Back Connected

Fuse Blocks

Fuse blocks are manufactured using GPO-3 bases and a corrosion resistant finish on current carrying parts. Terminals on the 30 ampere unit have wire binding washers. 60 ampere through 600 ampere have terminal screw and nut without lugs.

Fuse Holders

Fuse holders for front connection have mounted screws for 1/2" panel thickness on 200 ampere and smaller, and for 1" thick panels on 400 and 600 ampere.

Back connection fuse holder terminal studs on 200 ampere and smaller fit and panel up to 2" thick. The 400 and 600 ampere holders fit panels from 1" to 2" thick. Fuse holders have a corrosion resistant finish and are not furnished with terminal lugs.

FUSE BLOCKS

Ampere Rating	One Pole			Two Pole			Three Pole			Four Pole		
	Type	Weight	Drawing	Type	Weight	Drawing	Type	Weight	Drawing	Type	Weight	Drawing
250 VOLT												
30	B-3611	1/2	Refer to Section E Figure 20	B-3621	1	Refer to Section E Figure 20	B-3631	1 1/2	Refer to Section E Figure 20	B-3641	2	Refer to Section E Figure 20
60	B-3612	1		B-3622	2 3/4		B-3632	3		B-3642	4	
100	B-3613	2		B-3623	5		B-3633	6 3/4		B-3643	9	
200	B-3614	3 1/2		B-3624	8 1/4		B-3634	12 3/4		B-3644	16	
400	A-3615	7 3/4		A-3625	17		A-3635	26		A-3645	35	
600	A-3616	9 1/2		A-3626	20		A-3636	30		A-3646	40	
600 VOLT												
30	B-3651	3/4	Refer to Section E Figure 20	B-3661	2	Refer to Section E Figure 20	B-3671	3	Refer to Section E Figure 20	B-3681	5	Refer to Section E Figure 20
60	B-3652	1 1/2		B-3662	4		B-3672	5 1/2		B-3682	6	
100	B-3653	2		B-3663	7 1/2		B-3673	10 3/4		B-3683	14	
200	B-3654	5		B-3664	14		B-3674	16		B-3684	24	
400	A-3655	8		A-3665	19		A-3675	30		A-3685	40	
600	A-3656	11		A-3666	22		A-3676	36		A-3686	48	

Prices do not include fuses.

FUSE HOLDERS

Ampere Rating	Front Connected			Back Connected		
	Volts	Type	Drawing	Volts	Type	Drawing
0-30	250	A-25	60A Fuse Clip/FC 0-60 Ampere	250	D-35	60A Fuse Clip/BC 0-60 Ampere
31-60	250	A-26		250	D-36	
0-30	600	A-27		600	D-37	
31-60	600	A-28		600	D-38	
61-100	250-600	A-29	200A Fuse Clip/FC 61-600 Ampere	250-600	D-39	400A Fuse Clip/BC 61-600 Ampere
101-200	250-600	A-30		250-600	D-40	
201-400	250-600	A-31		250-600	D-41	
401-600	250-600	A-32		250-600	D-42	

Two Fuse Holders required per fuse. Unmounted, without lugs (do not include fuses).

800 - 6000 AMPERE FUSE BLOCKS FOR CLASS L FUSES, NON-LOAD BREAK

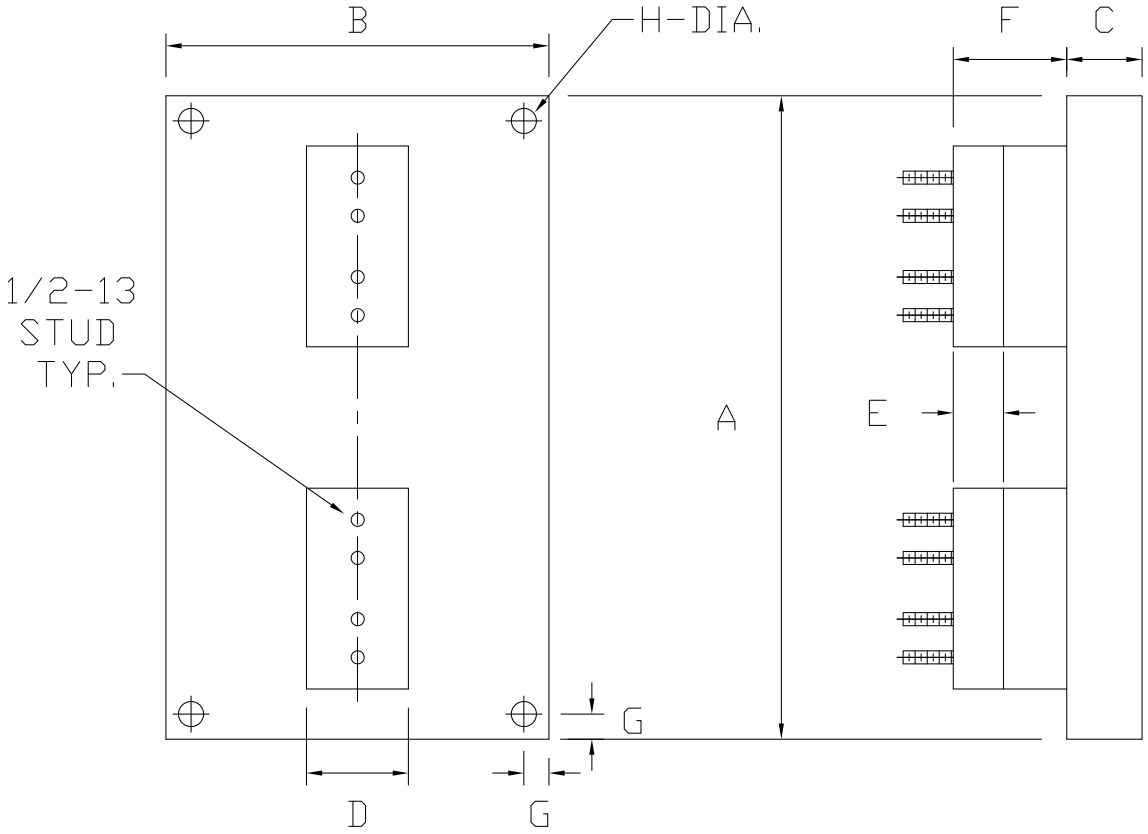
B-3690
800 Ampere, 600 Volt
Fuse Block

Fuse Blocks are designed to accept Class L Fuses in he 800 - 6000 Ampere range at 600 Volts AC.

Fuse Blocks are constructed of copper for current carrying pads, and NEMA Grade GPO-3 for insulating base.

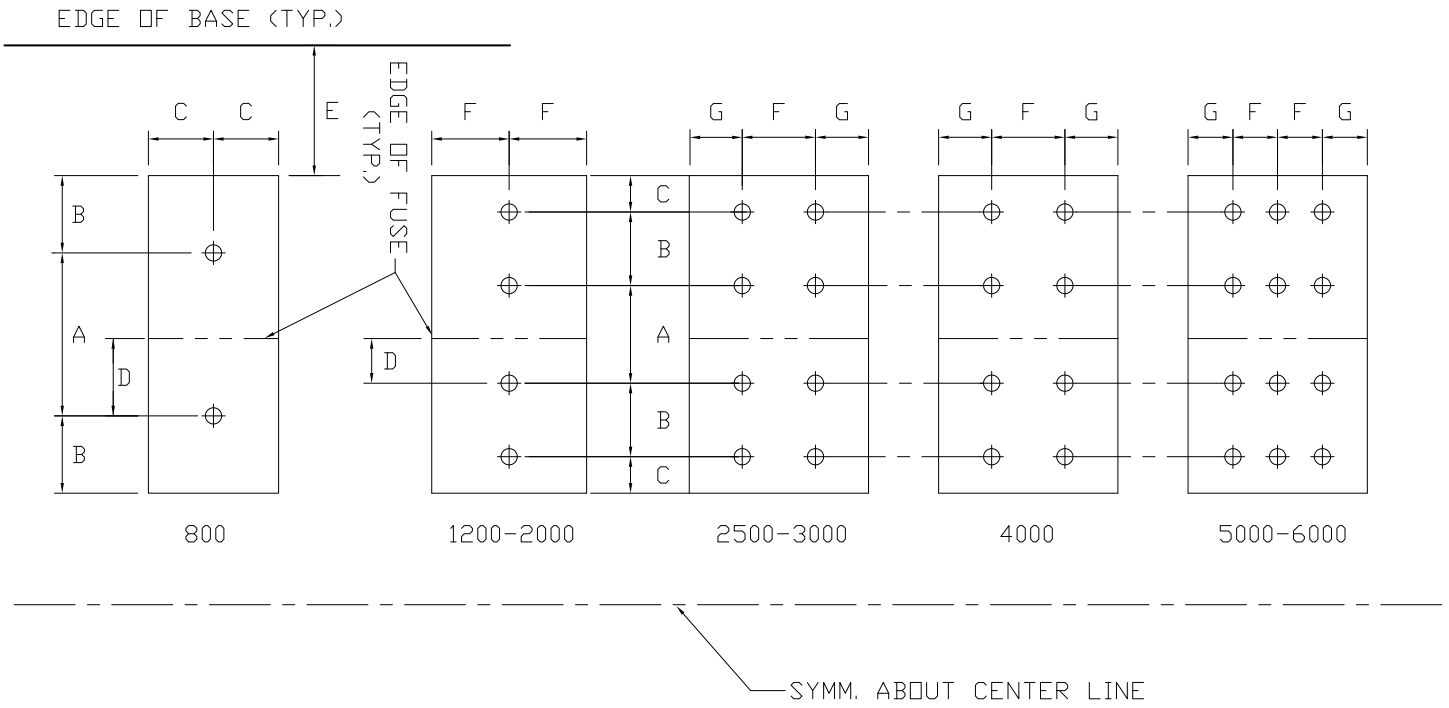
Each stud will be supplied with one steel hex nut, washer, and lock washer.

For Terminal Pad Dimensions, see page 32.



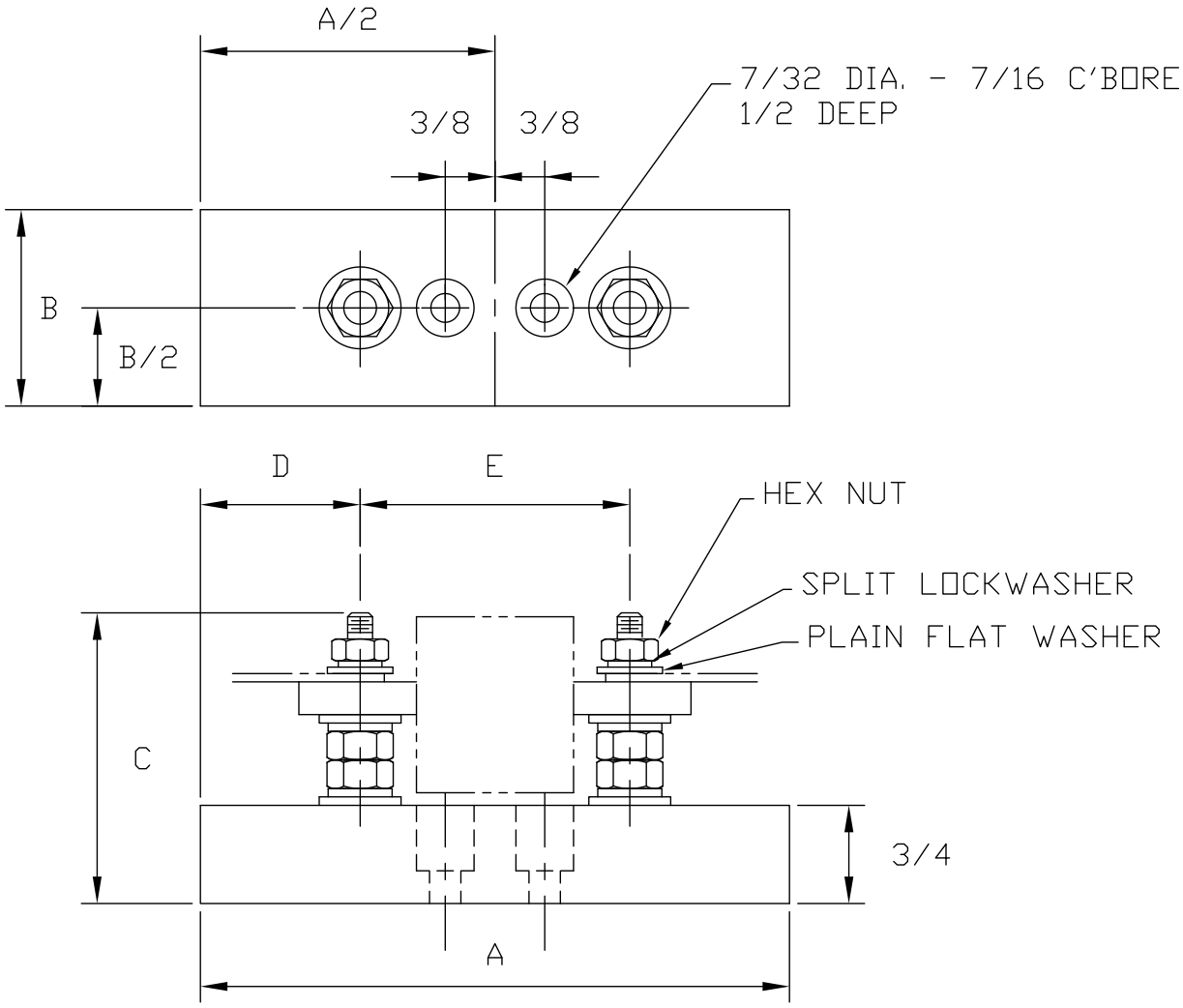
Ampere Rating	Type	A	B	C	D	E	F	G	H
800	B-3690	17 5/8	4 1/2	1	2	1/2	1 1/8	3/4	9/16
1200	B-3691	21 3/4	4 7/8	1	2 3/8	5/8	1 1/8	3/4	9/16
1600	B-3692	21 3/4	5 1/4	1	2 3/4	5/8	1 3/8	3/4	9/16
2000	B-3693	21 3/4	5 1/4	1	2 3/4	1	1 5/8	3/4	9/16
2500	B-3694	23 3/4	6 3/4	1	3 3/4	1	2 1/4	3/4	9/16
3000	B-3695	23 3/4	7	1	4	1	2 1/4	3/4	9/16
4000	B-3696	23 3/4	8	1	5	1	2 5/8	3/4	9/16
5000	B-3697	23 3/4	9	1	5 1/2	1	2 3/4	3/4	9/16
6000	B-3698	23 3/4	10	1	6	1	3 1/4	3/4	9/16

TERMINAL PAD DIMENSIONS
For 800 - 6000 Ampere Fuse Blocks, NON-LOAD BREAK



Ampere Rating	Type	A	B	C	D	E	F	G
800	B-3690	2 1/2	1 3/16	1	1 3/16	2		
1200	B-3691	1 1/2	1 9/16	1 1/8	11/16	2	1 3/16	
1600	B-3692	1 1/2	1 9/16	1 1/8	11/16	2	1 3/8	
2000	B-3693	1 1/2	1 9/16	1 1/8	11/16	2	1 3/8	
2500	B-3694	1 1/2	1 9/16	1 1/8	11/16	3	1 11/16	1 1/32
3000	B-3695	1 1/2	1 9/16	1 1/8	1 1/16	3	1 11/16	1 5/32
4000	B-3696	1 1/2	1 9/16	1 1/8	11/16	3	2 1/2	1 1/4
5000	B-3697	1 5/8	1 3/4	7/8	3/4	3	2 5/8	1 1/8
6000	B-3698	1 5/8	1 3/4	7/8	3/4	3	1 5/8	1 3/8

RECTIFIER FUSE BLOCKS
NON-LOAD BREAK



Dimensions in Inches

Ampere Rating	Volts	Type	A	B	C	D	E	STUD
70-400	130	B-3600	4 1/2	1 1/2	2 7/16	1 7/32	2 1/16	1/4 - 20
500-1000	130	B-3601	4 1/2	1 1/2	2 7/16	1 1/32	2 7/16	5/16 - 18
35-60	250	B-3602	4 1/2	1 1/2	2 7/16	1 1/32	2 7/16	5/16 - 18
70-200	250	B-3603	4 1/2	1 1/2	2 7/16	1 1/16	2 3/8	1/4 - 20
250-600	250	B-3604	4 1/2	1 1/2	2 7/16	55/64	2 25/32	5/16 - 18
35-60	500	B-3605	4 1/2	1 1/2	2 7/16	1 1/32	2 7/16	5/16 - 18
70-200	500	B-3606	4 1/2	1 1/2	2 7/16	13/16	2 7/8	1/4 - 20
250-400	500	B-3607	6	2	2 15/16	1 23/64	3 9/32	3/8 - 16
500-600	500	B-3608	6	2	2 15/16	1 19/32	3 13/32	3/8 - 16
35-200	600	B-3609	4 1/2	1 1/2	2 7/16	7/16	3 5/8	1/4 - 20
225-600	600	B-3610	6	2	2 15/16	31/32	4 1/16	3/8 - 16
35-100	700	B-3619	4 1/2	1 1/2	2 7/16	7/16	3 5/8	1/4 - 20
125-400	700	B-3620	6	2	2 15/16	63/64	4 1/32	3/8 - 16
500-600	700	B-3629	8	2 1/2	2 15/16	1 29/64	5 3/32	3/8 - 16

NOTE: Fuse and terminal lug not supplied.

Base material is NEMA grade GPO-3 insulating material.

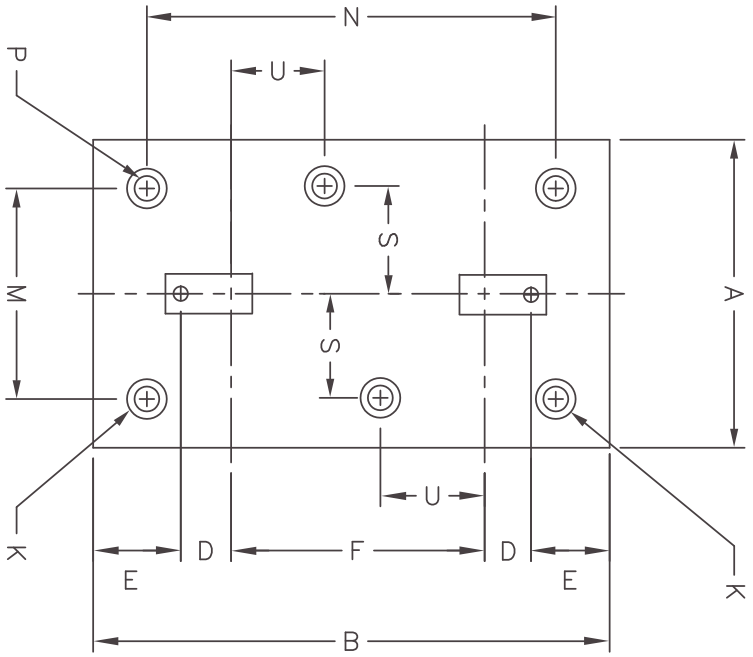
Terminal stud mounting holes are insulated for panel mounting.

Dimensional Information

SECTION E

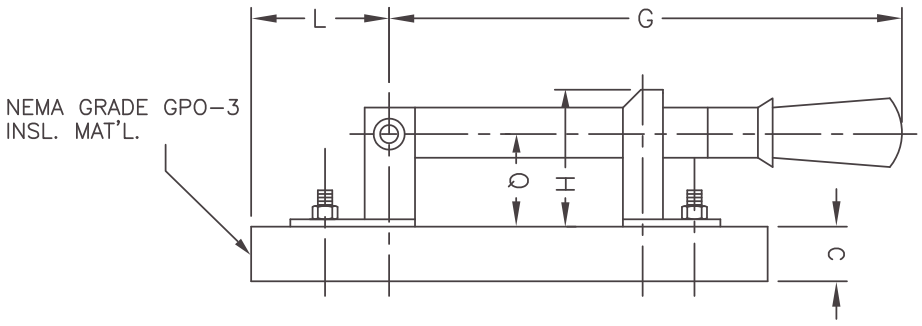
TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
1 Pole, 250 Volt DC - 480 Volt AC, Single-Throw, Not Fusible, NON-LOAD BREAK

Figure 1



ALL COPPER CONDUCTORS
ARE C.D.A. 110 E.T.P.

HIGH JAW
250 VOLT DC – 480 VOLT AC

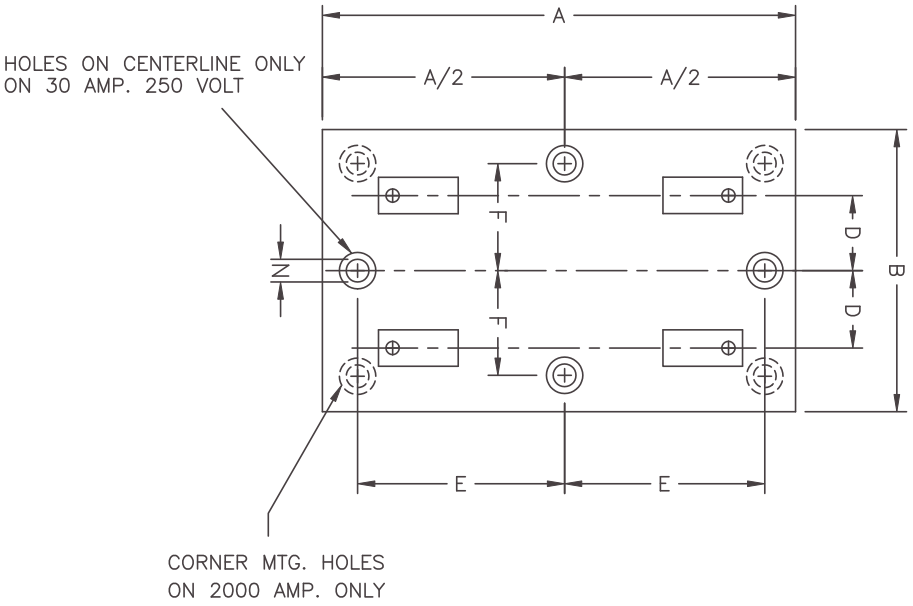


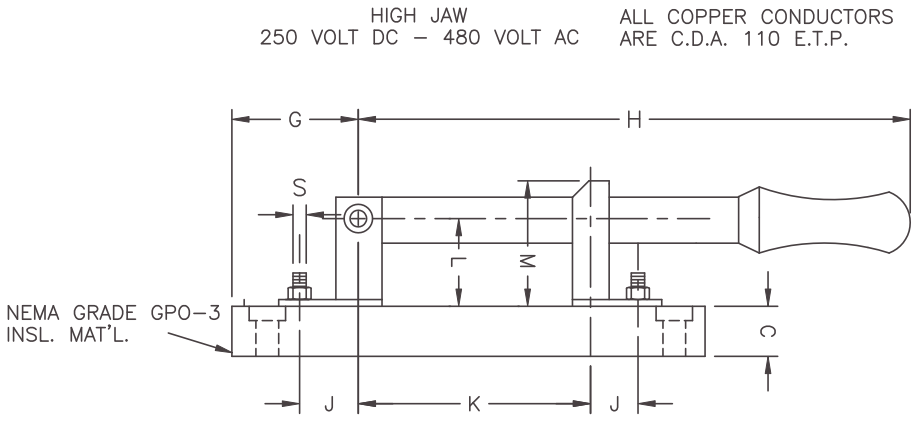
AMP	Cat No	A	B	C	D	E	F	G	H	K	L	M	N	P	Q	S	U
* 30	A-1002	1.63	4.50	0.63	0.53	0.69	2.06	4.22	1.59	0.44	1.22	-	-	0.22	1.25	0.44	0.78
+ 60	A-1003	1.63	6.75	0.63	0.69	1.34	2.69	4.88	2.05	0.44	2.03	-	-	0.22	1.63	0.38	0.97
100	A-1005	2	6.75	0.75	0.88	1.03	2.94	6.83	2.66	0.56	1.91	-	-	0.28	2.38	0.56	1.09
200	A-1007	3	10	0.75	1.31	1.91	3.56	9.09	4.25	0.75	3.22	2	9	0.34	3.34	-	-
300	A-1008	4	12	0.75	1.53	2.56	3.81	9.94	5.06	0.75	4.09	2.75	10.75	0.34	4	-	-
400	A-1009	4	12	0.75	1.78	2.06	4.31	11	5.25	0.88	3.84	2.75	10.75	0.41	4.06	-	-
600	A-1011	4	15	0.75	2.19	2.97	4.69	11.94	6.25	0.88	5.16	2.5	13.50	0.41	4.75	-	-
800	A-1012	7	15.50	1	1.97	3.50	4.56	11.97	5.34	1.25	5.47	5	13.50	0.56	4.19	-	-
1200	A-1014	7	20	1	2.44	5	5.13	12.81	6.50	1.25	7.44	5	18	0.56	5.06	-	-

* 250 Volt only
+ 480 Volt only

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
2 Pole, 250 Volt DC - 480 Volt AC, Single-Throw, Not Fusible, NON-LOAD BREAK

Figure 2



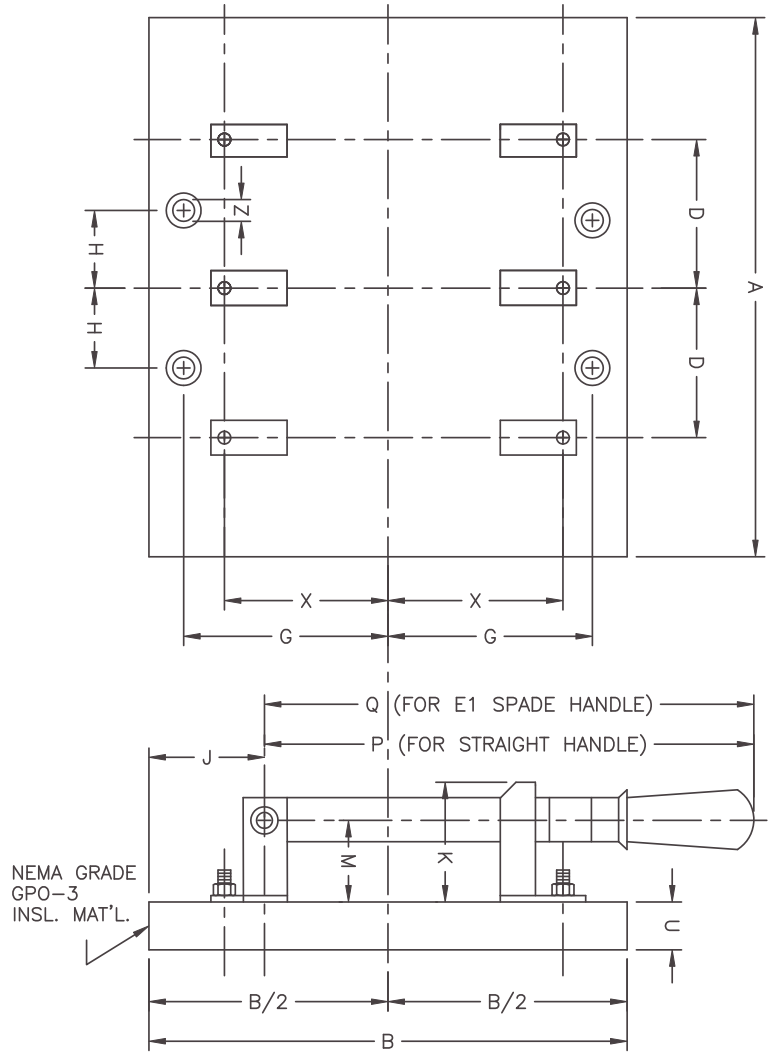


AMP	Cat No	A	B	C	D	E	F	G	H	J	K	L	M	N	S
* 30	A-1102	4.50	3.50	0.63	1.16	1.63	-	1.22	4.50	0.53	2.06	1.25	1.59	0.22	0.19
+ 60	A-1103	6	4.50	0.63	1.44	2.56	1.81	1.66	5.09	0.69	2.69	1.63	2.05	0.22	0.19
100	A-1105	7.13	5	0.75	1.53	2.94	2	2.09	7.17	0.88	2.94	2.38	2.97	0.28	0.25
200	A-1107	9.50	6	0.75	1.72	4.13	2.38	2.97	9.53	1.31	3.56	3.34	4.25	0.34	0.31
300	A-1108	10	6	0.75	1.84	4.25	2.38	3.09	9.94	1.53	3.81	4	5.06	0.34	0.31
400	A-1109	13.50	7	0.75	2.03	6	2.75	4.59	10.88	1.78	4.31	4.06	5.25	0.41	0.38
600	A-1111	15	7.75	0.75	2.16	6.50	3	5.16	11.94	2.19	4.69	4.75	6.25	0.41	0.38
800	A-1112	15	10	1	2.53	6.37	4.13	5.22	10.47	1.97	4.56	4.19	5.34	0.56	0.50
1200	A-1114	18	10	1	2.75	8.13	4.13	6.44	11.31	2.44	5.13	5.06	6.50	0.56	0.50
1600	A-1115	20	14	1	2.94	9	6	7.25	11.75	2.75	5.50	3.25	6.06	0.56	-
2000	A-1116	22	15	1	2.31	9.75	6.50	5.38	12.31	2.81	5.63	3.59	7.03	0.56	-

* For 30 Ampere 250 Volt DC & AC
\+ For 30 Ampere 480 Volt AC

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
3 Pole, 250 Volt DC - 480 Volt AC, Single-Throw, Not Fusible, NON-LOAD BREAK

Figure 3

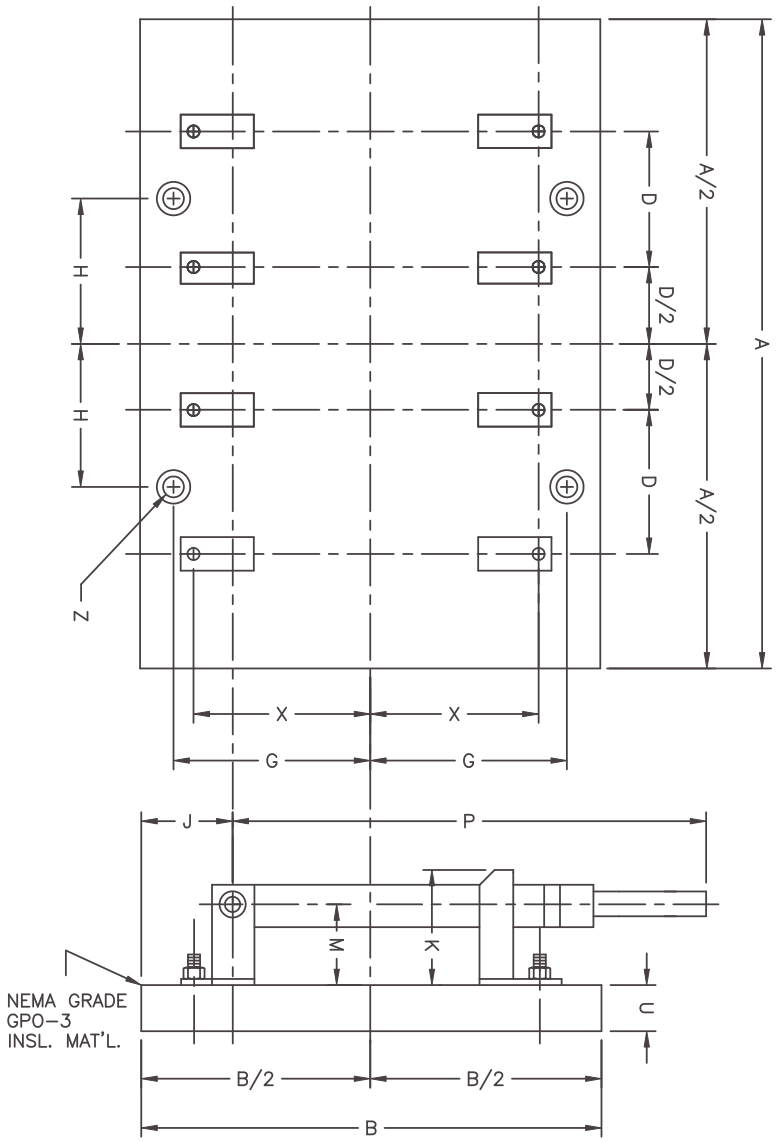


AMP	Cat No	A	B	D	G	H	J	K	M	P	Q	U	X	Z
* 30	A-1202	6	4.50	2.31	1.63	1.19	1.53	1.59	1.25	4.81	4.50	0.63	1.56	0.22
+ 60	A-1203	7	6	2.88	2.38	1.56	1.66	2.05	1.63	5.75	5.16	0.63	2.03	0.22
100	A-1205	7.88	7	3.06	2.88	1.63	2.03	2.97	2.38	6.63	7.17	0.75	2.34	0.28
200	A-1207	9.63	10.25	3.44	4.19	1.91	3.34	4.25	3.34	7.91	9.53	0.75	3.09	0.34
300	A-1208	9	10	3.69	4.25	1.81	3.09	5.06	4	9.06	9.94	0.75	3.44	0.34
400	A-1209	10.75	13.38	4.06	6	2.03	4.53	5.25	4.06	10.13	10.88	0.75	3.94	0.41
600	A-1211	13.50	15	4.31	6.50	2.16	5.16	6.25	4.75	11.19	11.94	0.75	4.53	0.41
•800	A-1212	14	16	5.06	7	2.50	5.72	5.34	4.19	-	11.47	1	4.25	0.56
• 1200	A-1214	16	18	5.50	8	2.75	6.44	6.50	5.06	-	12.31	1	5	0.56
• 1600	A-1215	22	19.38	5.88	8.44	9.75	6.94	6.06	3.25	-	12.38	1.25	5.50	0.56
• 2000	A-1216	22	19.38	6.63	8.69	10	6.88	7.03	3.59	-	12.94	1.25	5.63	0.56

* 250 Volt Only
+ 480 Volt Only
• Standard With Spade Handle

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
4 pole, 250 AC - 480 Volt DC, Single-Throw, Not Fusible, NON-LOAD BREAK

Figure 4

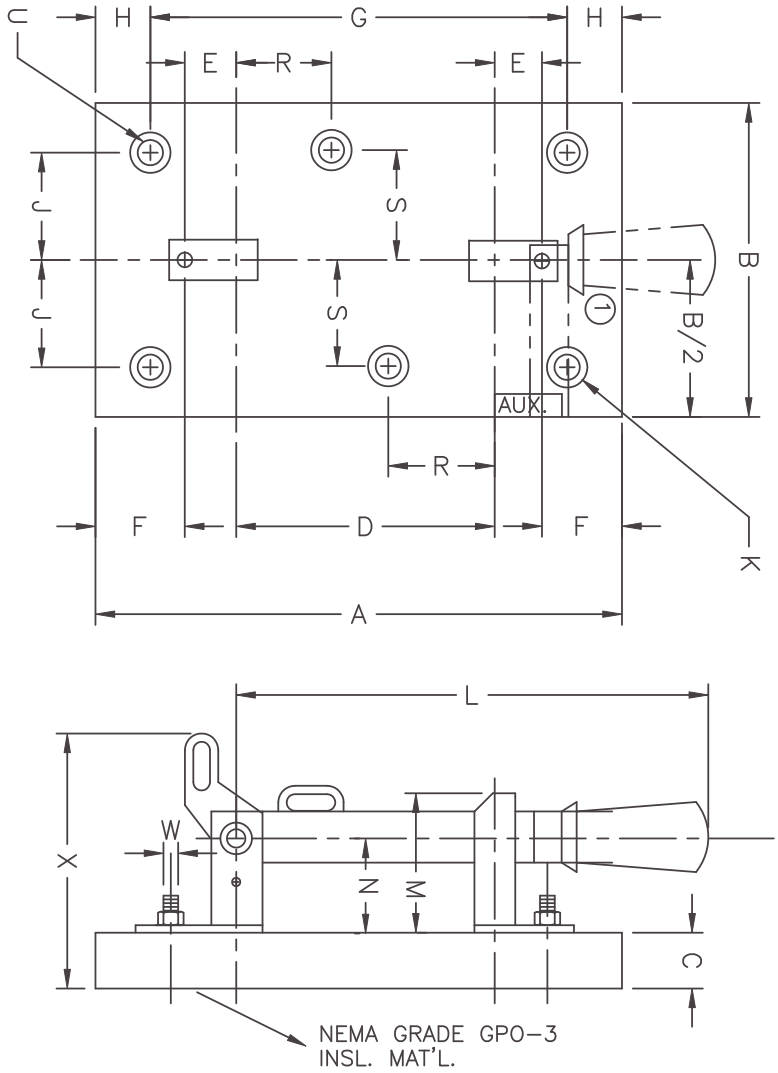


AMP	Cat No	A	B	D	G	H	J	K	M	P	U	X	Z
* 30	A-1302	9.25	4.50	2.31	1.75	2.31	1.22	1.59	1.25	5.25	0.63	1.56	0.22
+ 60	A-1303	11	7	2.88	2.88	2.88	2.16	2.05	1.63	5.91	0.63	2.03	0.22
100	A-1305	11	7	3.06	2.88	3	2.03	2.97	2.38	6.55	0.75	2.34	0.28
200	A-1307	12	9.25	3.44	4	3.44	2.84	4.25	3.34	8.03	0.75	3.09	0.34
300	A-1308	13.44	10.75	3.69	4.63	3.69	3.47	5.02	4	8.44	0.75	3.44	0.34
400	A-1309	15	13.50	4.06	5.63	4.06	4.59	5.13	4.06	9.88	0.75	3.94	0.41
600	A-1311	16.75	14.75	4.31	6.25	4.31	5.03	6.13	4.75	10.44	0.75	4.53	0.41
800	A-1312	20	14	5.06	6	5.06	4.72	5.34	4.19	10.47	1	4.25	0.56
1200	A-1314	22	19.38	5.50	8.19	5.50	7.13	6.50	5.06	11.31	1	5	0.56
1600	A-1315	30	20	5.88	8.75	13.75	7.25	6.06	3.25	11.75	1	5.50	0.56
2000	A-1316	30	20	6.63	7	6.63	7.19	7.03	3.59	12.56	1	5.63	0.56

* 250 Volt
\+ 480 Volt

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
1 pole, 600 Volt, Single-Throw, Not Fusible, NON-LOAD BREAK

Figure 5

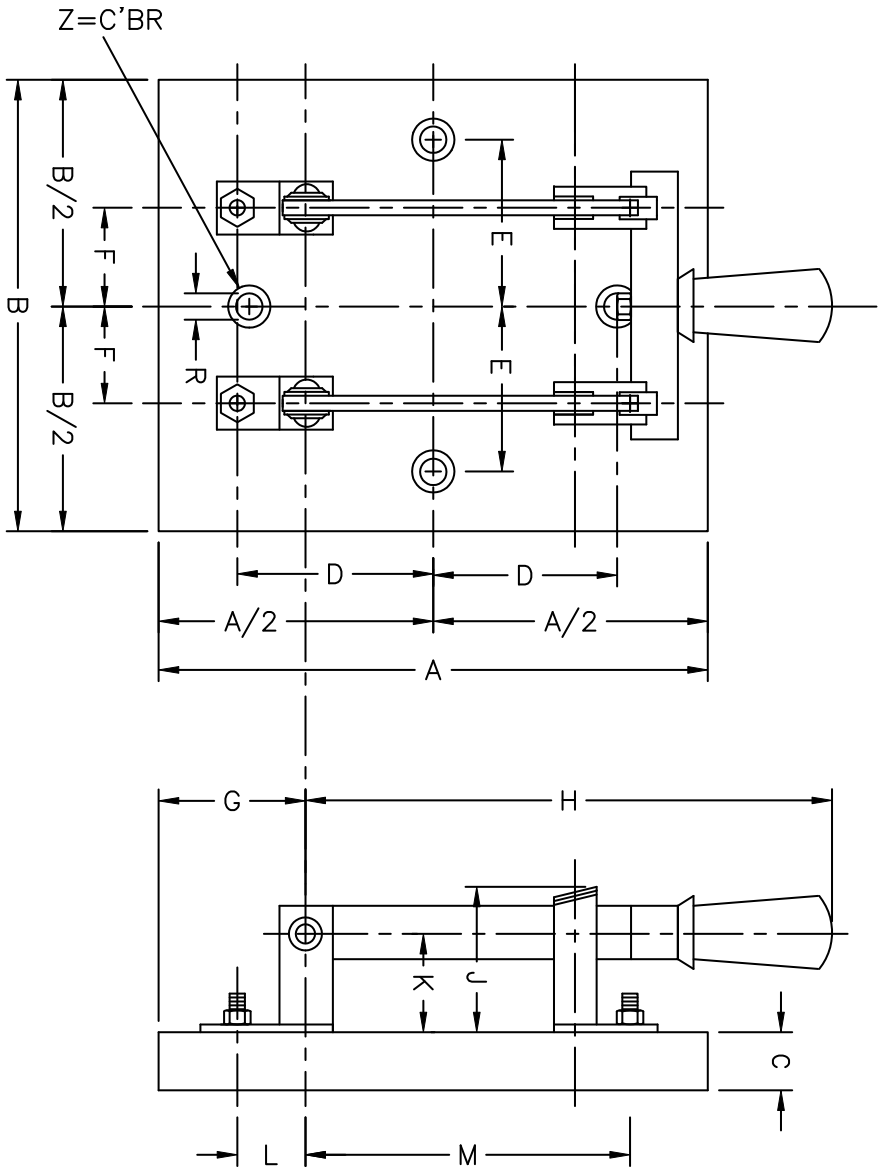


AMP	Cat No	A	B	C	D	E	F	G	H	J	K	L	M	N	R	S	U	W	X
30	A-6711	8	1.63	0.63	4.19	0.69	1.22	-	-	-	0.44	6.44	2.05	1.63	1.44	0.38	0.25	#10	-
60	A-6712	8	1.63	0.63	4.19	0.69	1.22	-	-	-	0.44	6.44	2.34	1.63	1.44	0.38	0.25	#10	-
100	A-6713	10	2	0.75	4.94	0.88	1.66	-	-	-	0.56	8.83	2.97	2.38	1.34	0.56	0.28	0.25	-
200	A-6714	12	4	0.75	5.56	1.31	1.91	10.75	0.63	1.38	0.75	11.09	4.25	3.34	-	-	0.38	0.31	6.66
300	A-6710	12	4	0.75	5.56	1.53	1.69	10.75	0.63	1.38	0.75	11.69	5.06	4	-	-	0.38	0.38	-
400	A-6715	15	4	0.75	6.31	1.78	2.56	13.75	0.63	1.38	0.75	12.88	5.25	4.06	-	-	0.38	0.38	-
600	A-6716	18	4	0.75	6.69	2.19	3.47	16	1	1	0.75	13.94	6.25	4.75	-	-	0.38	0.38	-
800	A-6717	20	7	1	6.56	1.97	4.75	17.75	1.13	2.38	1.25	13.97	5.34	4.19	-	-	0.56	0.50	-
1200	A-6719	20	7	1	7.13	2.44	4	17.75	1.13	2.38	1.25	14.81	6.50	5.06	-	-	0.56	0.50	-

Terminal Screw - Zinc Plated Steel

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
2 pole, 600 Volt, Single-Throw, Not Fusible, NON-LOAD BREAK

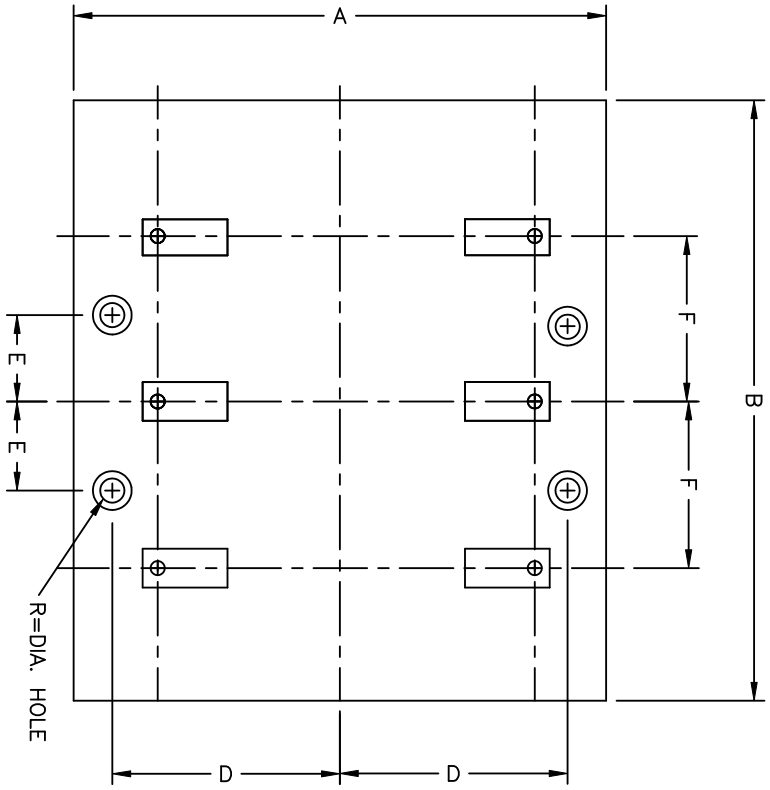
Figure 6

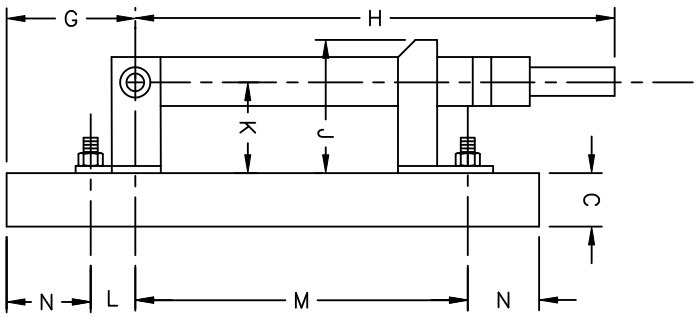


AMP	Cat No	A	B	C	D	E	F	G	H	J	K	L	M	R	Z
30	A-6721	7.88	7	0.63	3.13	2.75	2.31	1.84	6.72	2.05	1.63	0.69	4.88	0.22	0.56
60	A-6722	7.88	7	0.63	3.13	2.75	2.31	1.84	6.72	2.05	1.63	0.69	4.88	0.22	0.56
100	A-6723	10.25	7	0.75	4.38	2.75	2.66	2.66	9.17	2.97	2.38	0.88	5.81	0.28	0.56
200	A-6724	11.50	8	0.75	4.88	3.13	2.84	2.66	11.53	4.25	3.34	1.31	6.88	0.38	0.75
300	A-6720	11.50	8	0.75	4.88	3.13	2.84	2.66	11.69	5.06	4	1.53	7.09	0.38	0.75
400	A-6725	15	10	0.75	6.50	4	2.91	4.34	12.88	5.25	4.06	1.78	8.09	0.38	0.75
600	A-6726	15	11.38	0.75	6.63	4.81	3.03	4.16	13.94	6.25	4.75	2.19	8.88	0.44	0.88
800	A-6727	16	14	1	7	6	3.31	4.72	12.47	5.34	4.19	1.97	8.53	0.56	1.25
1200	A-6729	20	14	1	8.50	5.50	3.50	6.44	13.31	6.50	5.06	2.44	9.56	0.56	1.25
1600	A-1115Y	20	14	1	8.50	5.50	3.69	6.63	13	6.06	3.25	2.75	9.50	0.56	1.25
2000	A-1116Y	23	14	1	8.50	5.50	4	7.69	14.56	7.03	3.59	2.81	10.44	0.56	1.25

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
3 pole, 600 Volt, Single-Throw, Not Fusible, NON-LOAD BREAK

Figure 7

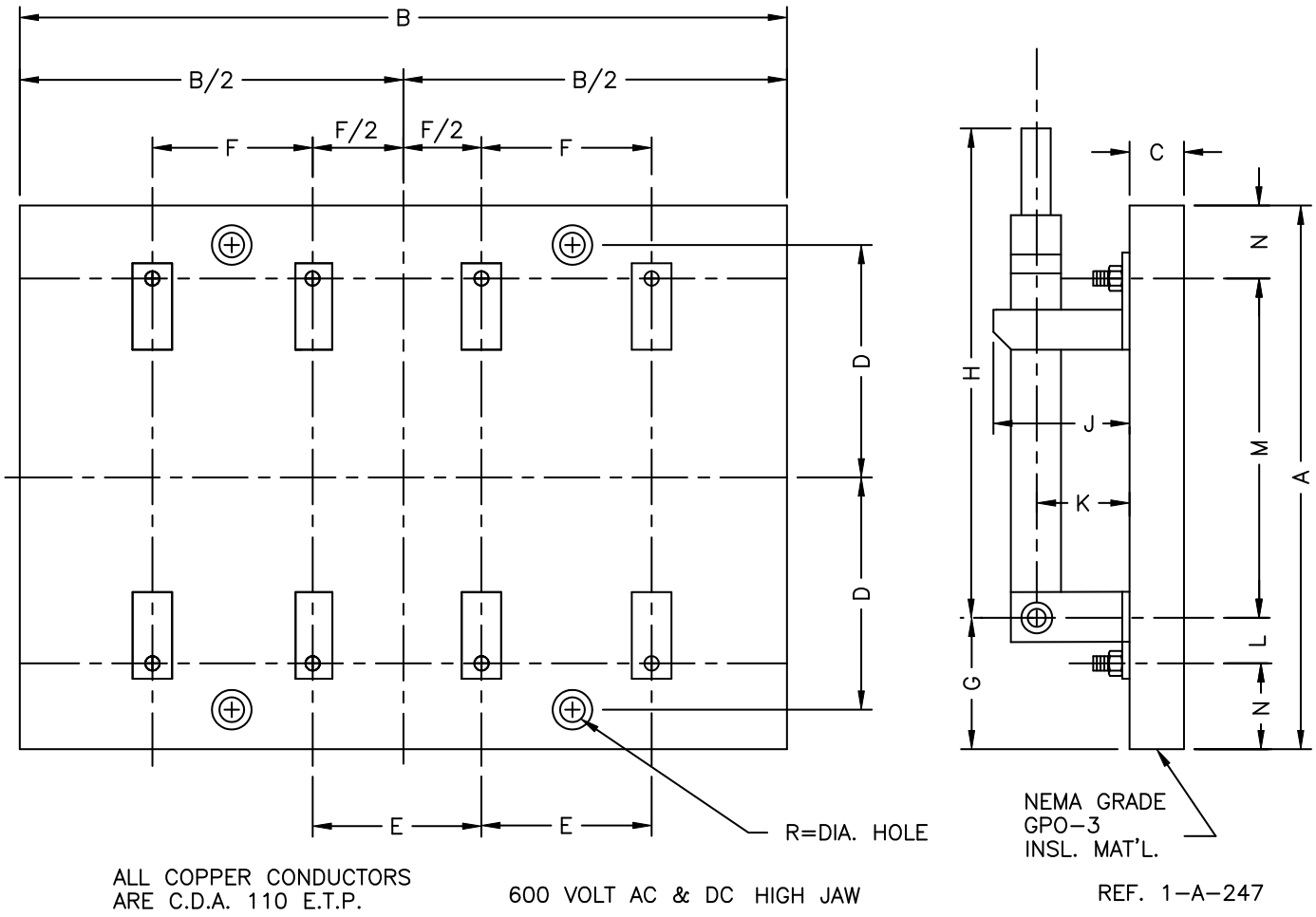




AMP	Cat No	A	B	C	D	E	F	G	H	J	K	L	M	N	R
30	A-6731	7.75	11.50	0.63	3.25	2.31	4.63	1.78	7.47	2.05	1.63	0.69	4.88	1.09	0.25
60	A-6732	7.75	11.50	0.63	3.25	2.31	4.63	1.78	7.47	2.05	1.63	0.69	4.88	1.09	0.25
100	A-6733	9.25	15	0.75	3.88	6.75	5.31	2.16	8.55	2.97	2.38	0.88	5.81	1.28	0.31
200	A-6734	12.88	14	0.75	5.50	2.88	5.69	3.66	10.03	4.25	3.34	1.31	6.88	2.34	0.38
300	A-6730	11.38	15	0.75	4.81	2.88	5.69	2.91	10.19	5.06	4	1.53	7.09	1.38	0.38
400	A-6735	14.75	16.75	0.75	6.38	2.88	5.81	4.22	11.88	5.25	4.06	1.75	8.09	2.44	0.38
600	A-6736	14.75	16.75	0.75	6.38	3	6.06	4.03	12.44	6.25	4.75	2.19	8.88	1.84	0.44
800	A-6737	19.38	22	1	8.44	9.75	6.63	6.41	13.47	5.34	4.19	1.97	8.53	4.44	0.56
1200	A-6739	19.38	22	1	8.50	9.88	7	6.13	14.31	6.50	5.06	2.44	9.56	3.69	0.56
1600	A-1215Y	19.38	22	1	8.69	3.69	7.38	6.31	14	6.06	3.25	2.75	9.50	3.56	0.56
2000	A-1216Y	22	25	1	10	11.50	8	7.19	15.56	7.03	3.59	2.94	10.44	4.38	0.56

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
4 pole, 600 Volt, Single-Throw, Not Fusible, NON-LOAD BREAK

Figure 8



ALL COPPER CONDUCTORS
ARE C.D.A. 110 E.T.P.

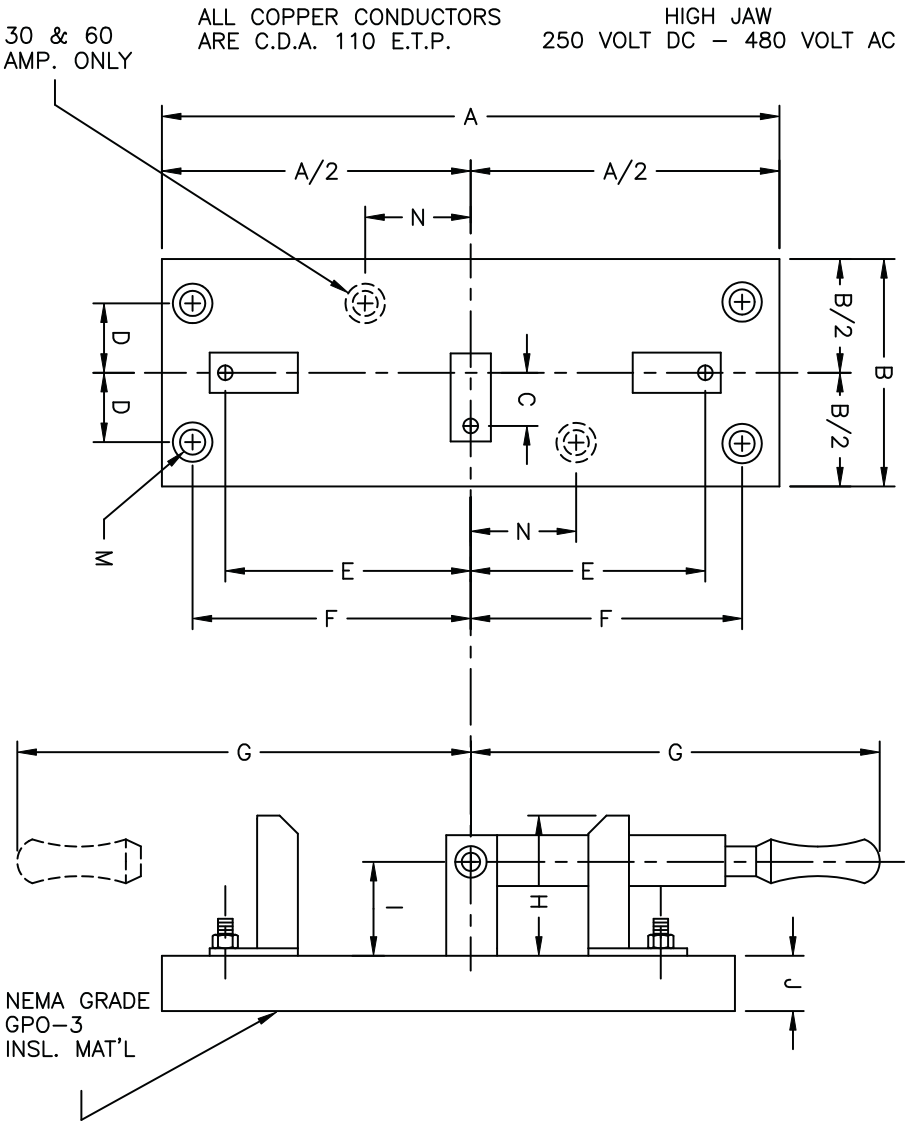
600 VOLT AC & DC HIGH JAW

REF. 1-A-247

AMP	Cat No	A	B	C	D	E	F	G	H	J	K	L	M	N	R
30	A-6741	8	16	0.63	3.25	4.63	4.63	1.91	7.47	2.02	1.63	0.69	4.88	1.22	0.31
60	A-6742	8	16	.063	3.25	4.63	4.63	1.91	7.47	2.02	1.63	0.69	4.88	1.22	0..31
100	A-6743	10	18	0.75	4.25	5.31	5.31	2.53	8.55	2.97	2.38	0.88	5.81	1.66	0.31
200	A-6744	12	22	0.75	5	5.69	5.69	3.22	10.03	4.25	3.34	1.31	6.88	1.91	0.38
300	A-6740	12	22	0.75	5	5.69	5.69	3.22	10.19	5.06	4.00	1.53	7.09	1.69	0.38
400	A-6745	14	22	0.75	6.50	5.81	5.81	3.84	11.88	5.25	4.06	1.78	8.09	2.06	0.44
600	A-6746	15	22	0.75	7	6.06	6.06	5.16	12.44	6.25	4.75	2.19	8.88	1.97	0.44
800	A-6747	19.38	28.50	1	8.50	6.63	6.63	6.41	12.47	5.34	4.19	1.97	8.53	4.44	0.56
1200	A-6749	19.38	26	1	8.50	7	7	6.13	13.31	6.50	5.06	2.44	9.56	3.69	0.56
1600	A-1315Y	20	32	1	8.75	7.38	7.38	6.63	13	6.06	3.25	2.75	9.50	3.88	0.56
2000	A-1316Y	23	32	1	10.25	8	8	6.19	14.56	7.03	3.59	2.81	10.44	4.88	0.56

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES 1 Pole, 250 Volt DC - 480 Volt AC, Double-Throw, Not Fusible, NON-LOAD BREAK

Figure 9

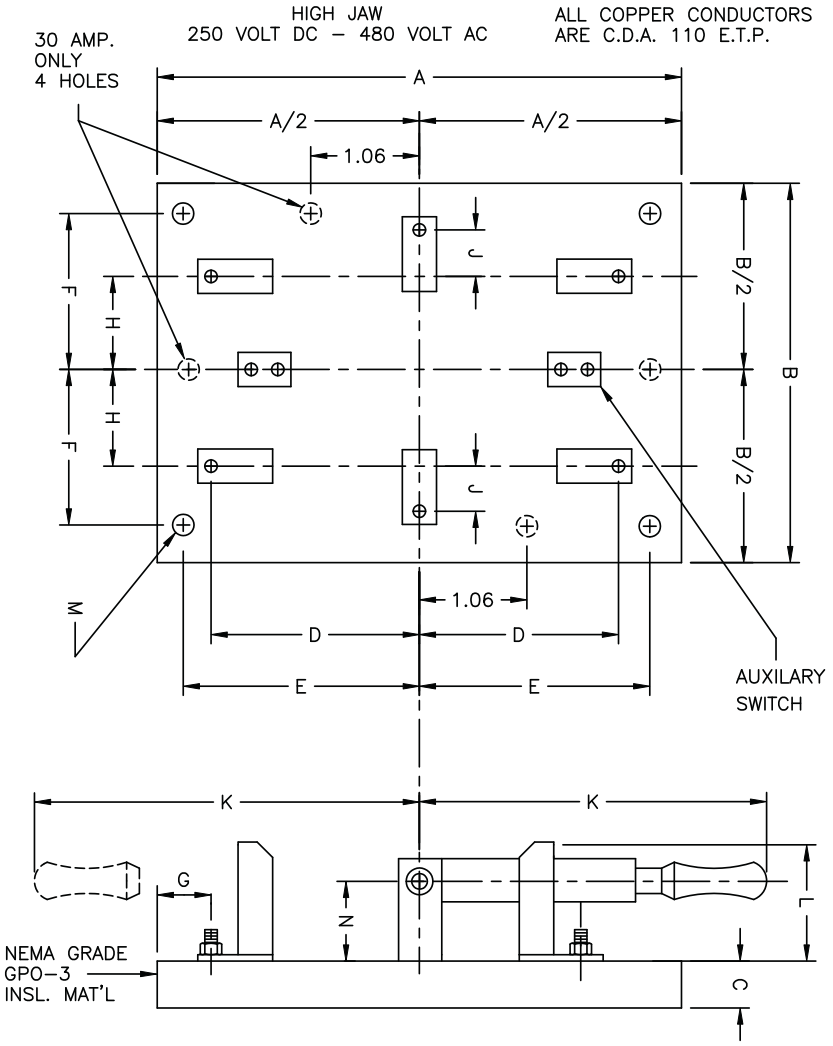


AMP	Cat No	A	B	C	D	E	F	G	H	I	J	M	N
* 30	A-2002	6.75	2	0.48	0.50	2.59	-	4.22	1.59	1.25	0.63	0.22	1.06
60	A-2003	9.25	2	0.56	0.50	3.38	-	4.88	2.05	1.63	0.63	0.22	1.38
100	A-2005	10	3	0.63	1	3.81	4.50	6.83	2.97	2.38	0.75	0.28	-
200	A-2007	12	4	1	1.38	4.88	5.38	9.09	4.25	3.34	0.75	0.34	-
300	A-2008	15	4	1	1.38	5.34	6.88	9.94	5.06	4	0.75	0.34	-
400	A-2009	18	4	1.13	1.25	6.09	8.25	11	5.13	4.06	0.75	0.41	-
600	A-2011	20	5.5	1.31	2	6.88	9.25	11.94	6.25	4.75	0.75	0.41	-
800	A-2012	20	7	2	2.13	6.53	9	11.97	5.34	4.19	1	0.56	-
1200	A-2014	22	8	2.25	3	7.56	10	12.81	6.50	5.06	1	0.56	-
1600	A-2015	22	15	4.38	6.50	8.25	9.75	13.25	6.06	3.25	1	0.56	-
2000	A-2016	27	13	+	5.50	8.44	12.50	14.06	7.03	3.59	1	0.56	-

* 250 Volt only for 30 Ampere. 480 Volt AC use 60 Ampere dimensions.
+ For Bus Connections 3.52" - for Block Lug 4.25"

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
2 Pole, 250 Volt, Double-Throw, Not Fusible, NON-LOAD BREAK

Figure 10

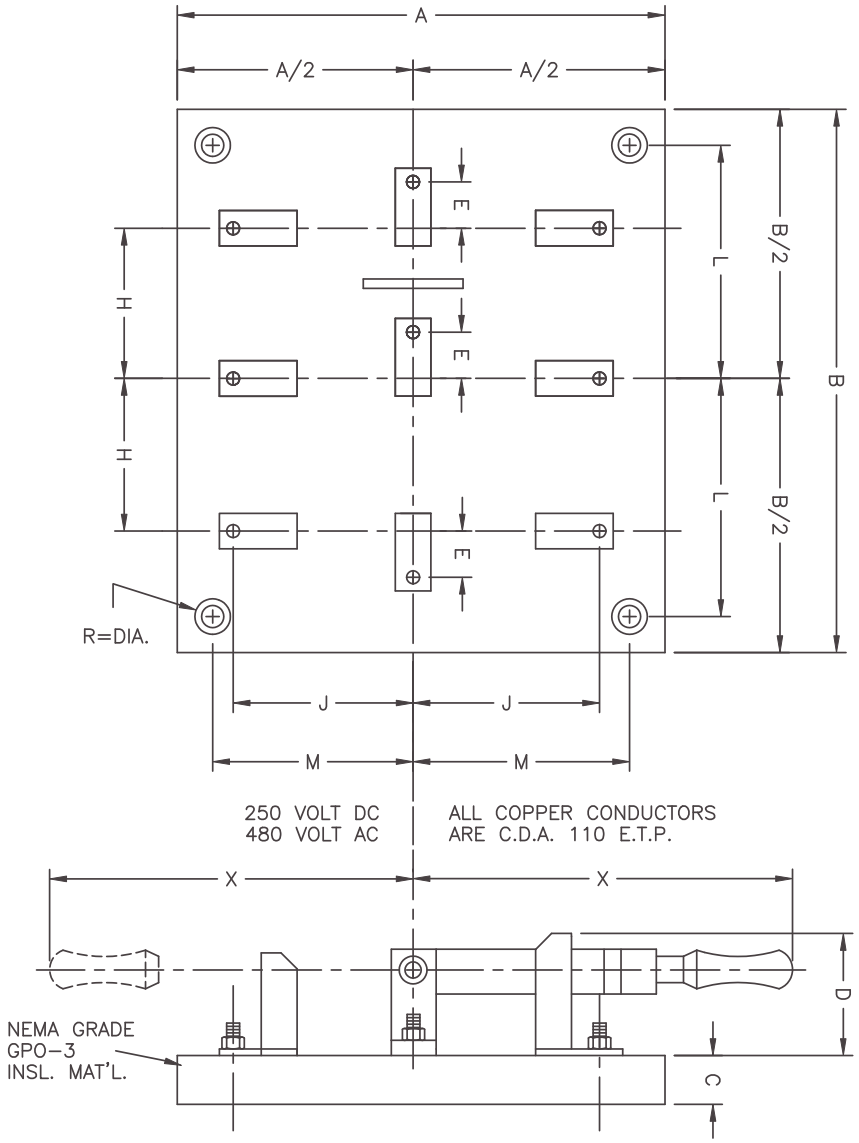


AMP	Cat No	A	B	C	D	E	F	G	H	J	K	L	M	N
* 30	A-2102	6.50	5	0.63	2.59	2.66	2	-	1.16	0.48	4.50	1.59	0.25	1.25
60	A-2103	9.50	6	0.63	3.38	4.28	2.59	1.06	1.44	0.56	5.16	2.05	0.25	1.63
100	A-2105	10.25	7	0.75	3.81	4.50	2.88	1.31	1.53	0.63	7.17	2.97	0.31	2.38
200	A-2107	15	7.75	0.75	4.88	6.75	3.13	1.81	1.72	1	9.53	4.25	0.38	3.34
300	A-2108	15	7.75	0.75	5.34	6.75	3.13	2.63	1.84	1	9.94	5.06	0.38	4
400	A-2109	17	10.25	0.75	6.09	7.50	4.13	2.41	2.03	1.13	10.88	5.25	0.38	4.06
600	A-2111	20	10	0.75	6.88	9.25	4.25	2.88	2.16	1.31	11.94	6.25	0.38	4.75
800	A-2112	20	14	1	6.53	9	6	2.78	2.53	2	10.47	5.34	0.56	4.19
1200	A-2114	22	15	1	7.56	9.88	6.38	3.50	2.75	2.25	11.31	6.50	0.56	5.06
1600	A-2115	22	19.38	1	8.25	9.81	8.56	3.81	2.94	4.38	11.75	5.56	0.56	3.25
2000	A-2116	24	22	1	8.25	10.50	9.34	-	3.31	4.25	12.31	7.06	0.56	3.59

* 250 Volt only - for 480 Volt AC use 60 Ampere switch
Add suffix "A3" to Cat No. for one auxiliary on each Throw.
Use Ccrner mounting holes for 60-1600 Ampere - CBR 30-600 Ampere mounting holes.

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
3 Pole, 250 Volt DC - 480 Volt AC, Double-Throw, Not Fusible, NON-LOAD BREAK

Figure 11

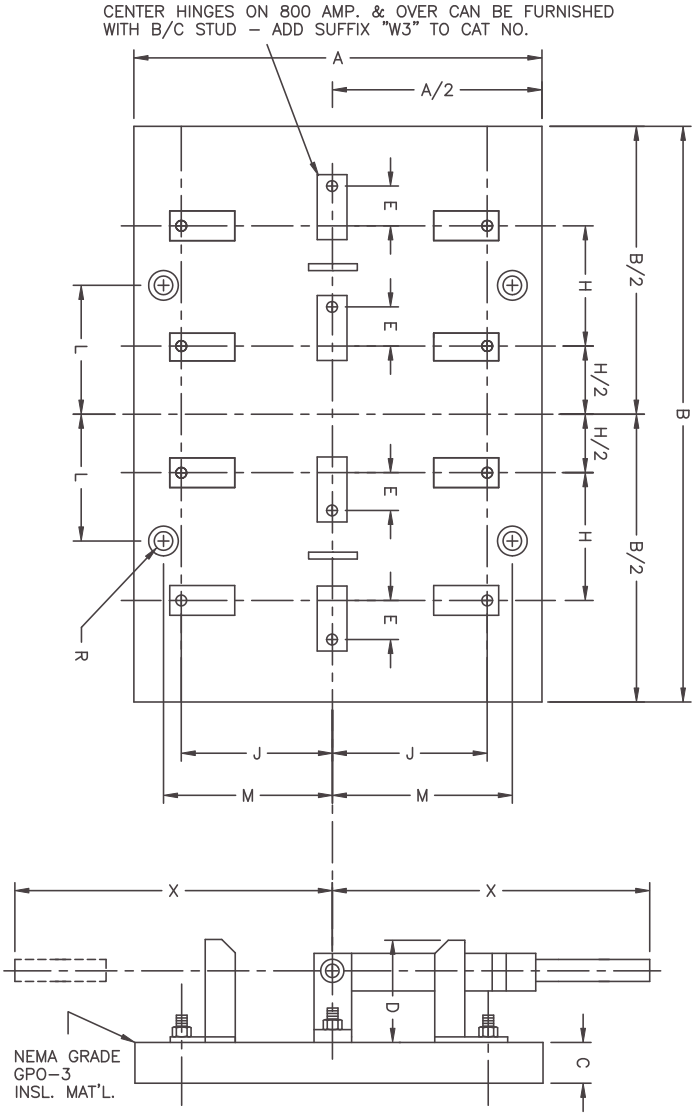


AMP	Cat No	A	B	C	D low	D high	E	H	J	L	M	R	X
* 30	A-2202	6.75	7.75	0.63	1.19	1.56	0.48	2.31	2.59	1.19	2.88	0.25	4.50
+ 60	A-2203	9.25	9.25	0.63	1.48	2.02	0.56	2.88	3.38	4.13	4.13	0.25	5.16
100	A-2205	10.25	9.63	0.75	2.03	2.97	0.63	3.06	3.81	1.50	4.50	0.31	7.17
200	A-2207	14	12.88	0.75	2.78	4.25	1	3.44	4.88	5.44	6	0.38	9.53
300	A-2208	15	11.38	0.75	3.38	5.06	1	3.69	5.34	1.88	6.75	0.38	9.94
400	A-2209	16.75	14.75	0.75	3.38	5.25	1.13	4.06	6.09	6.38	7.38	0.38	10.88
600	A-2211	22	15	0.75	4	6.25	1.31	4.31	6.88	6.50	9.50	0.44	11.94
800	A-2212	22	19.38	1	3.88	5.34	2	5.06	6.53	8.56	9.88	0.56	11.47
1200	A-2214	24	22	1	4.75	6.50	2.25	6.50	7.56	9.88	10.88	0.56	12.31

* For 30 Ampere 250 Volt DC & AC
\+ For 30 Ampere 480 Volt AC

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
4 Pole, 250 Volt DC - 480 Volt AC, Double-Throw, Not Fusible, NON-LOAD BREAK

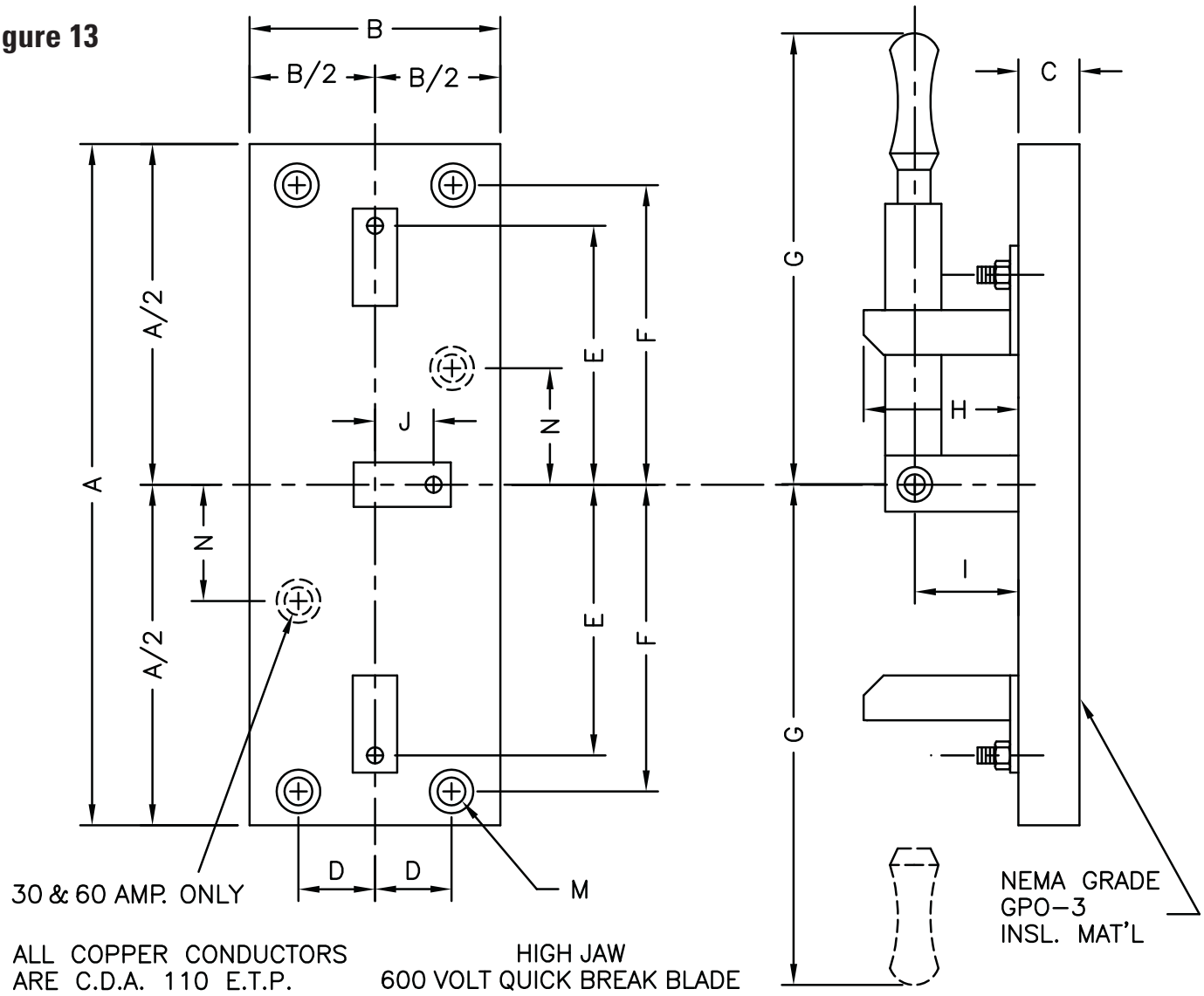
Figure 12



AMP	Cat No	A	B	C	D low	D high	E	H	J	L	M	R	X
* 30	A-2302	7.25	9.25	0.63	1.19	1.59	0.48	2.31	2.59	2.31	3.13	0.22	5.25
+ 60	A-2303	9	12	0.63	1.48	2.05	0.56	2.88	3.38	2.88	3.88	0.22	5.91
100	A-2305	10.75	13.44	0.75	2.03	2.97	0.63	3.06	3.81	3.06	4.63	0.28	6.55
200	A-2307	13.50	15	0.75	2.78	4.25	1	3.44	4.88	3.44	6	0.34	8.03
300	A-2308	14.75	16.75	0.75	3.38	5.06	1	3.69	5.34	3.69	6.75	0.34	8.44
400	A-2309	19.38	22	0.75	3.38	5.25	1.13	4.06	6.09	10	8.69	0.41	9.88
600	A-2311	19.38	22	0.75	4	6.25	1.31	4.31	6.88	9.88	8.56	0.41	10.44
800	A-2312	22	24	1	3.88	5.34	2	5.06	6.53	10.75	9.75	0.56	10.47
1200	A-2314	24	29	1	4.75	6.50	2.25	6.50	7.56	13.38	10.88	0.56	11.31
1600	A-2315	24	30	1	-	6.06	4.38	5.88	8.25	13.75	10.75	0.56	11.75
2000	A-2316	24	44	1	-	7.03	4.25	10	8.44	20.50	10.50	0.56	12.56

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
1 Pole, 600 Volt, Double-Throw, Not Fusible, NON-LOAD BREAK

Figure 13



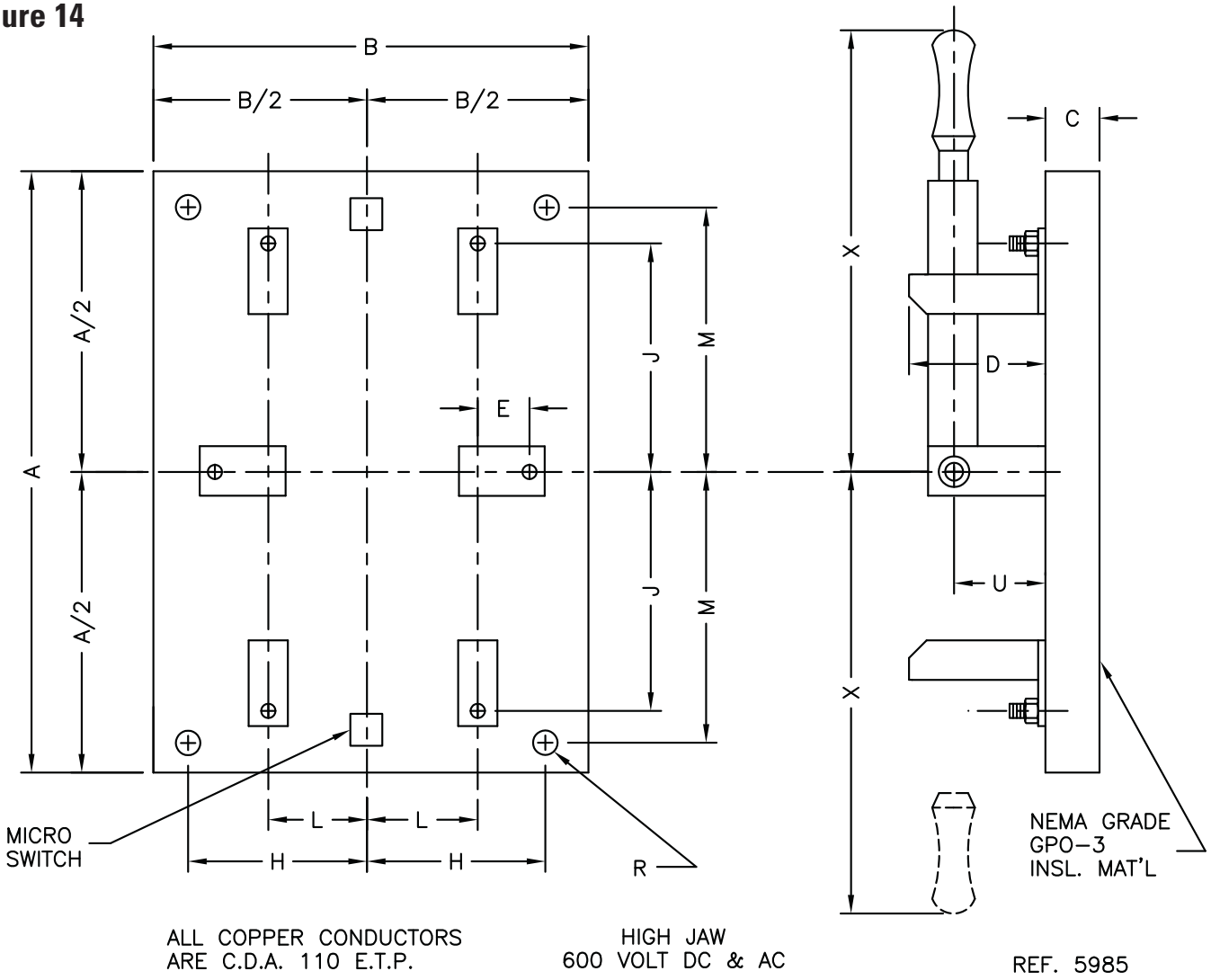
ALL COPPER CONDUCTORS
ARE C.D.A. 110 E.T.P.

HIGH JAW
600 VOLT QUICK BREAK BLADE

AMP	Cat No	A	B	C	D	E	F	G	H	I	J	M	N
30	A-7711	11.50	2	0.63	0.50	4.88	-	6.44	2.05	1.63	0.56	0.28	2.09
60	A-7712	11.50	2	0.63	0.50	4.88	-	6.44	2.34	1.63	0.56	0.28	2.09
100	A-7713	15	4	0.75	1.25	5.81	3.38	8.83	2.97	2.38	0.63	0.31	-
200	A-7714	18	4	0.75	1.25	6.88	2.88	11.09	4.25	3.34	1	0.38	-
300	A-7710	18	4	0.75	1.25	7.09	2.78	11.69	5.06	4	1	0.38	-
400	A-7715	24	4.50	0.75	1.50	8.09	11.25	12.88	5.25	4.06	1.13	0.38	-
600	A-7716	24	5	0.75	1.75	8.88	11.25	13.94	6.25	4.75	1.31	0.56	-
800	A-7717	22	8	1	3	8.53	10	13.97	5.34	4.19	2	0.56	-
1200	A-7719	27	13	1	5.25	9.56	12.25	14.81	6.50	5.06	2.25	0.56	-
1600	A-2015Y	30	16	1	6.75	9.50	12.75	14.50	6.06	3.25	4.38	0.56	-
2000	A-2016Y	30	16.44	1	6.97	10.44	12.75	16.06	7.03	3.59	4.25	0.56	-

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
2 Pole, 600 Volt, Double-Throw, Not Fusible, NON-LOAD BREAK

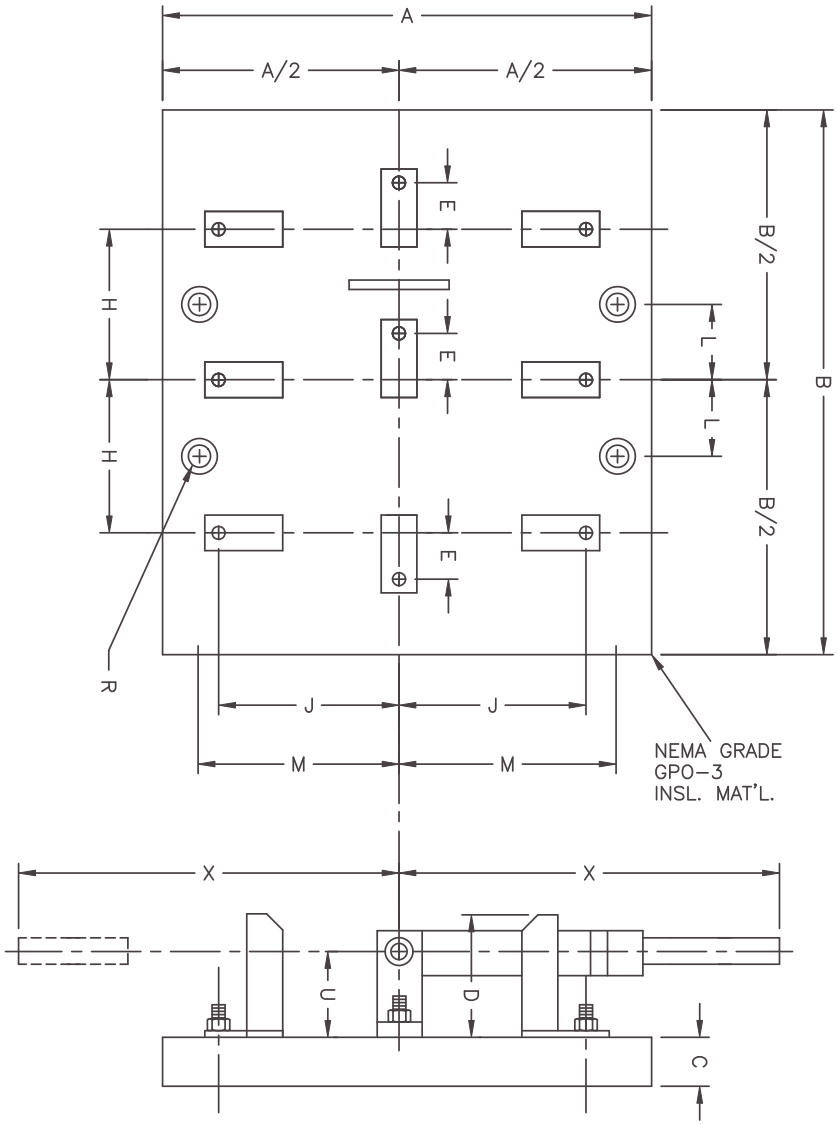
Figure 14



AMP	Cat No	A	B	C	D	E	H	J	L	M	R	U	X
30	A-7721	11.50	7.75	0.63	2.05	0.56	3.25	4.88	2.31	2.13	0.25	1.63	6.72
60	A-7722	11.50	7.75	0.63	2.34	0.56	3.25	4.88	2.31	2.13	0.25	1.63	6.72
100	A-7723	15	10	0.75	2.97	0.63	4.13	5.81	2.66	6.63	0.31	2.38	9.17
200	A-7724	17	10.25	0.75	4.25	1	4.25	6.88	2.84	2.75	0.38	3.34	11.53
300	A-7720	17	10.25	0.75	5.06	1	4.25	7.09	2.84	2.75	0.38	4	11.69
400	A-7725	22	12	0.75	5.25	1.13	5.13	8.09	2.91	10	0.38	4.06	12.88
600	A-7726	24	14	0.75	6.25	1.31	6	8.88	3.03	10.75	0.44	4.75	13.94
800	A-7727	24	15	1	5.34	2	6.50	8.53	3.31	10.88	0.56	4.19	12.47
1200	A-7729	30	20	1	6.50	2.25	8.50	9.56	3.50	13.50	0.56	5.06	13.31
1600	A-2115Y	30	24	1	6.06	4.38	10.75	9.50	3.69	13.75	0.56	3.25	13
2000	A-2116Y	30	25.75	1	7.03	4.25	11.63	10.44	4.44	13.75	0.56	3.59	14.56

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES 3 Pole, 600 Volt, Double-Throw, Not Fusible, NON-LOAD BREAK

Figure 15

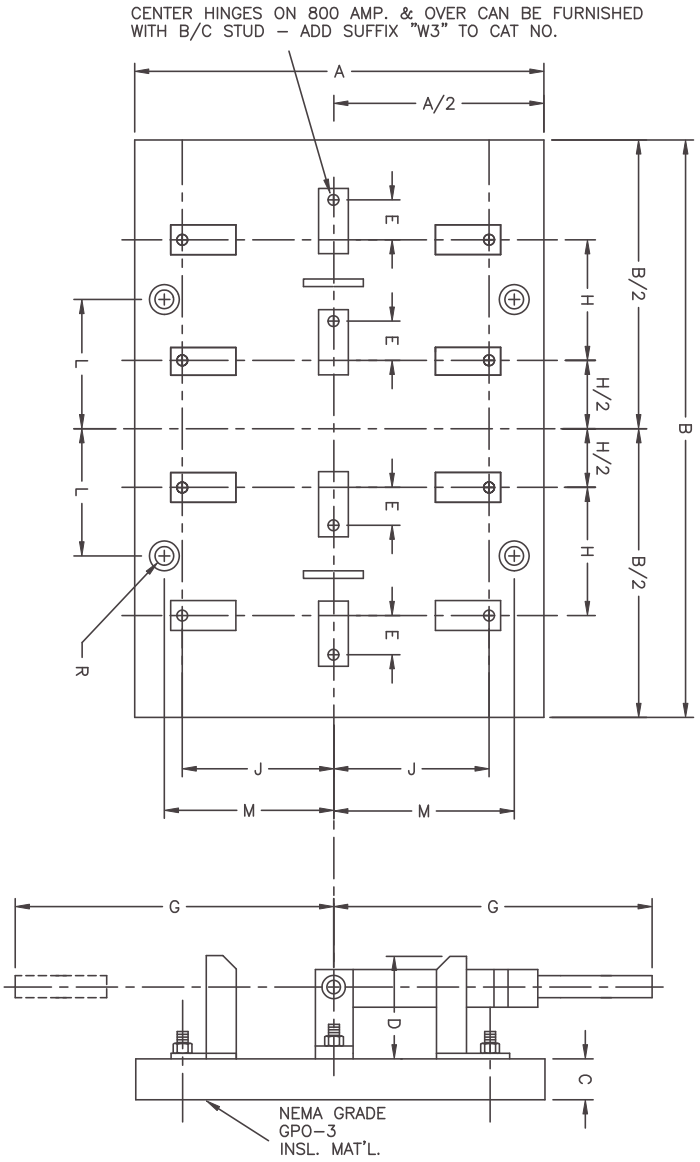


AMP	Cat No	A	B	C	D	E	H	J	L	M	R	U	X
30	A-7731	14	12.88	0.63	2.05	0.56	4.63	4.88	2.31	6.25	0.25	1.63	7.47
60	A-7732	14	12.88	0.63	2.34	0.56	4.63	4.88	2.31	6.25	0.25	1.63	7.47
100	A-7733	13.50	15	0.75	2.97	0.63	5.31	5.81	2.63	5.75	0.31	2.38	8.55
200	A-7734	18	16	0.75	4.25	1	5.69	6.88	2.81	8	0.38	3.34	10.03
300	A-7730	18	16	0.75	5.06	1	5.69	7.09	2.88	8	0.38	4	10.19
400	A-7735	22	19.38	0.75	5.25	1.13	5.81	8.09	8.63	10	0.38	4.06	11.88
600	A-7736	22	19.38	0.75	6.25	1.31	6.06	8.88	8.63	10	0.44	4.75	12.44
* 800	A-7737	24	22	1	5.34	2	6.63	8.53	10	11	0.56	4.19	13.47
* 1200	A-7739	30	27	1	6.50	2.25	7	9.56	12.50	14	0.56	5.06	14.31
* 1600	A-2215Y	30	30	1	6.06	4.38	7.38	9.50	13.75	13.75	0.56	3.25	14
* 2000	A-2216Y	30	30	1	7.03	3.52	8.88	10.44	16.06	13.75	0.56	3.59	15.56

* Center hinge on 800 Ampere and over has Back Connected terminal stud - add suffix "W3" to Cat No.

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
4 Pole, 600 Volt, Double-Throw, Not Fusible, NON-LOAD BREAK

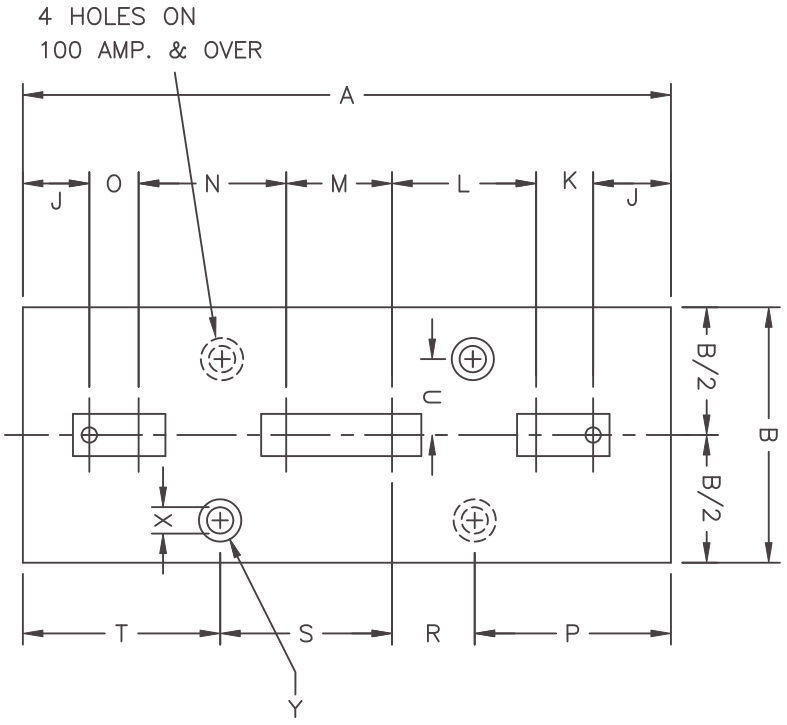
Figure 16



AMP	Cat No	A	B	C	D	E	G	H	J	L	M	R
30	A-7741	14.75	16.75	0.63	2.05	0.56	7.47	4.63	4.88	4.63	6.38	0.22
60	A-7742	14.75	16.75	0.63	2.05	0.56	7.47	4.63	4.88	4.63	6.38	0.22
100	A-7743	14	20	0.75	2.97	0.63	8.55	5.31	5.81	5.31	5.75	0.28
200	A-7744	19.38	22	0.75	4.25	1	10.03	5.69	6.88	5.69	8.69	0.34
300	A-7740	19.38	21	0.75	5.06	1	10.19	5.69	7.09	5.69	8.69	0.34
400	A-7745	22	24	0.75	5.25	1.13	11.88	5.81	8.09	5.81	10	0.41
600	A-7746	22	26	0.75	6.25	1.31	12.44	6.06	8.88	6.06	10	0.41
800	A-7747	24	28.50	1	5.34	2	12.47	6.63	8.53	13.13	10.88	0.56
1200	A-7749	32	36	1	6.50	2.25	13.31	7	9.56	16.75	14.75	0.56
1600	A-2315Y	28	44	1	6.06	4.38	13	7.38	9.50	20.75	12.75	0.56
2000	A-2316Y	30	43.50	1	7.03	4.25	14.56	8.88	10.44	20.50	13.75	0.56

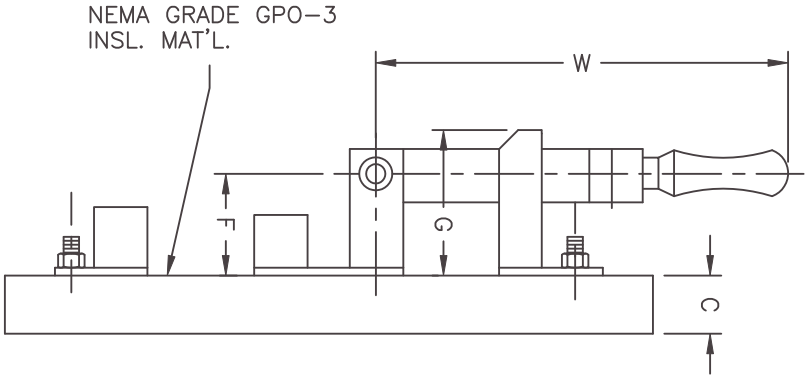
TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
1 Pole, 250 Volt, Single-Throw, Fusible, NON-LOAD BREAK

Figure 17



HIGH JAW
250 VOLT AC & DC

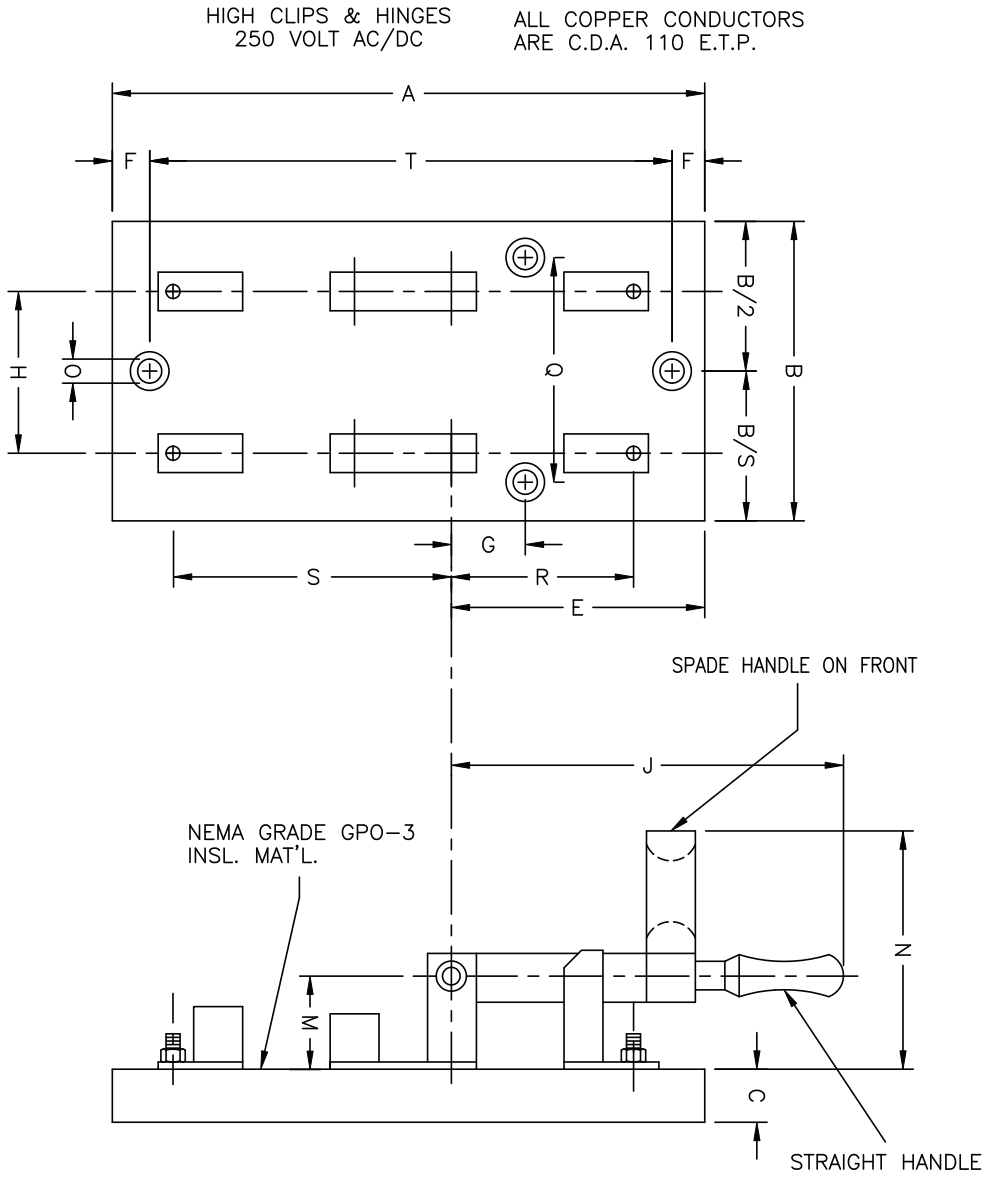
ALL COPPER CONDUCTORS
ARE C.D.A. 110 E.T.P.



AMP	Cat No	A	B	C	F	G	J	K	L	M	N	O	P	R	S	T	U	W	X	Y
30	A-1042	6.75	1.63	0.63	1.25	1.59	0.67	0.53	2.06	0.69	1.50	0.63	2.22	1.03	1.44	2.06	0.31	4.22	0.22	0.44
60	A-1043	9.25	1.63	0.63	1.63	2.05	0.97	0.69	2.69	0.81	2.38	0.75	2.91	1.44	2	2.91	0.38	4.88	0.22	0.44
100	A-1045	14	2	0.75	2.38	2.97	1.58	0.88	2.94	1.28	4.88	0.88	3.92	1.47	3.72	4.89	0.50	6.83	0.28	0.56
200	A-1047	18	4	0.75	3.34	4.25	2.20	1.31	3.56	1.66	5.75	1.31	0.64	6.44	10.31	0.61	1.38	9.09	0.34	0.75
400	A-1049	21	4	0.75	4.06	5.25	2.03	1.78	4.31	2.31	6.75	1.78	6	2.13	5.69	7.19	1.25	11	0.34	0.75
600	A-1051	26	8	0.75	4.75	6.25	2.97	2.19	4.69	2.88	8.13	2.19	1	8.84	15.16	1	3	11.94	0.41	0.88

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
2 Pole, 250 Volt, Single-Throw, Fusible, NON-LOAD BREAK

Figure 18

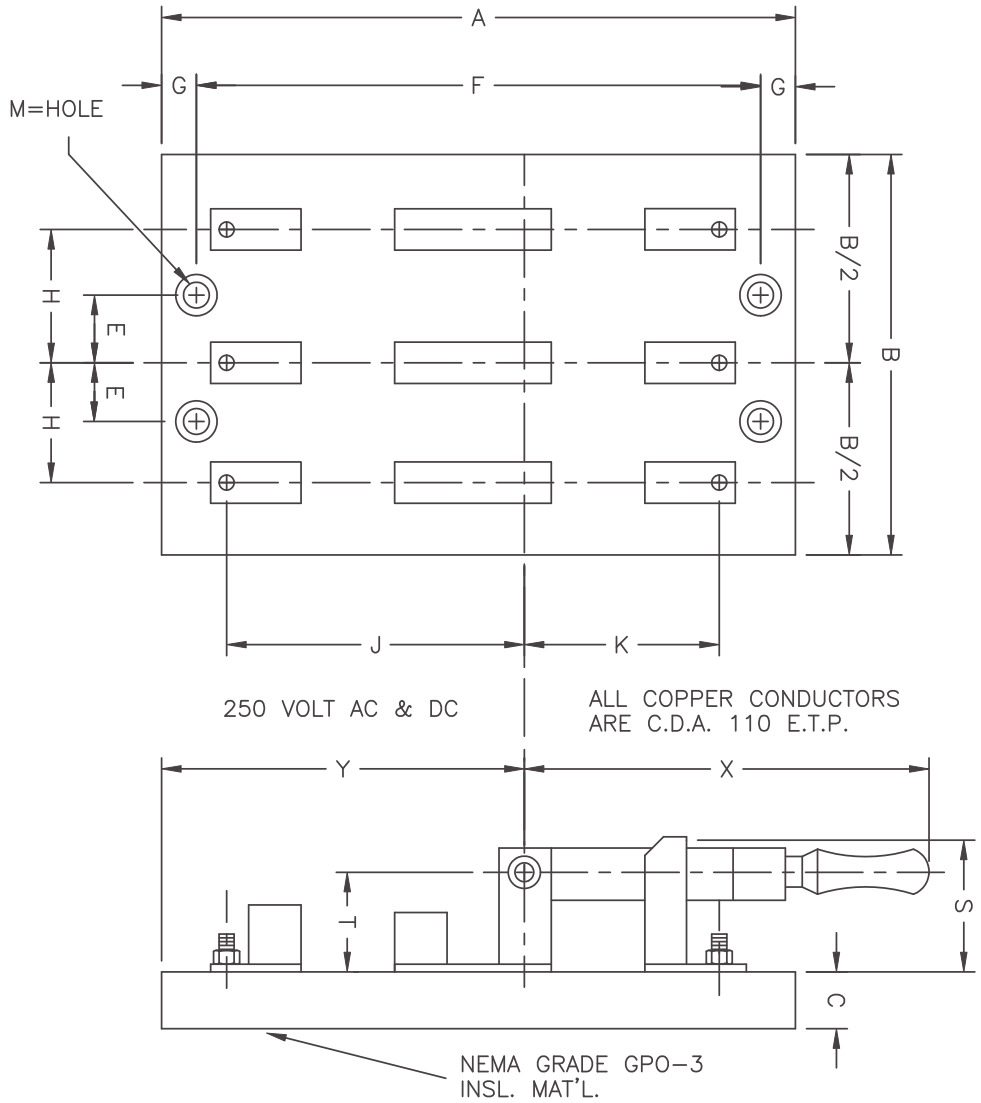


AMP	Cat No	A	B	C	E	F	G	H	J	K	M	N	O	Q	R	S	T
30	A-1142	6.75	3.50	0.63	3.27	0.63	-	2.31	4.50	1.59	1.25	3.50	0.22	-	2.59	2.81	5.50
60	A-1143	9.25	4.50	0.63	4.38	0.50	1.31	2.88	5.16	2.05	1.63	3.94	0.22	3.50	3.38	3.94	8.25
100	A-1145	14	5.25	0.75	5.38	0.75	1.44	3.06	7.17	2.97	2.38	4.81	0.28	4	3.81	7.03	12.50
200	A-1147	17	6.75	0.75	6.50	0.63	1.75	3.44	9.53	4.25	3.34	6.47	0.34	5.50	4.88	8.72	15.75
400	A-1149	22	8	0.75	8.63	1	2.13	4.06	10.88	5.25	4.06	7.94	0.41	6.25	6.09	10.84	20
600	A-1151	26	8	0.75	9.81	1	2.31	4.31	11.94	6.25	4.75	8.81	0.41	6.50	6.88	13.19	24

Add suffix "E" to Cat No. for spade handle on front

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
3 Pole, 250 Volt, Single-Throw, Fusible, NON-LOAD BREAK

Figure 19

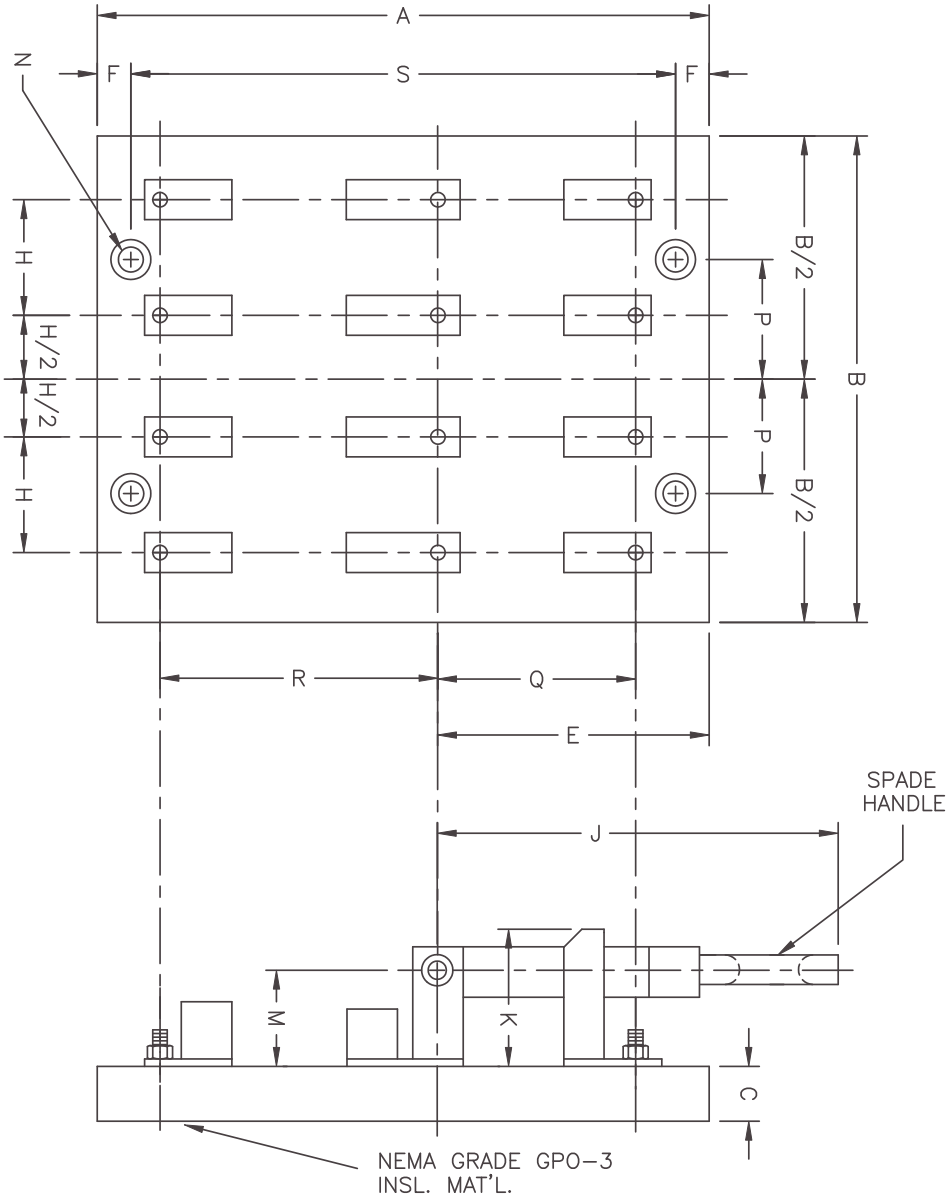


AMP	Cat No	A	B	C	E	F	G	H	J	K	M	S low	S high	T low	T high	X	Y
30	A-1242	7	6	0.63	1.16	5.50	0.75	2.31	2.81	2.59	0.25	1.69	2.09	0.88	1.25	4.50	4.06
60	A-1243	9.25	7.25	0.63	1.53	8	0.63	2.88	3.94	3.38	0.22	2.13	2.67	1.09	1.63	5.16	4.88
100	A-1245	14	8	0.75	1.63	12.44	0.78	3.06	7.03	3.81	0.28	2.75	3.72	1.44	2.38	7.17	8.63
200	A-1247	17	10.25	0.75	1.91	15.75	0.63	3.44	8.72	4.88	0.31	3.78	5.25	1.88	3.34	9.53	10.25
400	A-1249	22	12	0.75	2.03	20	1	4.06	10.84	6.09	0.38	4.38	6.25	2.19	4.06	10.88	13.38
600	A-1251	26	12	0.75	2.13	23.75	1.13	4.31	13.19	6.88	0.44	5	7.25	2.50	4.75	11.94	16.13
800	A-1252	19.38	22	1	3.63	17.25	1.06	7.31	6.75	6.53	0.56	5.53	6.59	3.09	4.19	11.47	9.81
1200	A-1254	22	24	1	4	20	1	8.13	8.13	7.56	0.56	6.63	7.75	3.94	5.06	12.31	11.25

NOTE: Cat No. above are for High Jaw. For Low Jaw add suffix "J".

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
4 Pole, 250 Volt, Single-Throw, Fusible, NON-LOAD BREAK

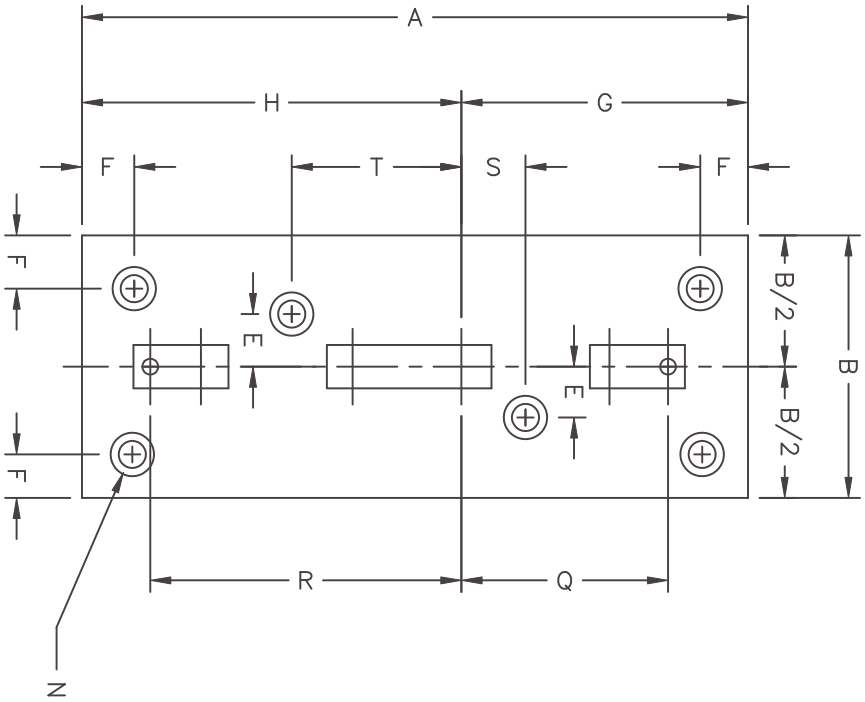
Figure 20



AMP	Cat No	A	B	C	E	F	H	J	K	M	N	P	Q	R	S
30	A-1342	7	8.50	0.63	3.39	0.50	2.31	5.25	1.59	1.25	0.25	2.31	2.59	2.81	6
60	A-1343	9	11	0.63	4.22	0.63	2.88	5.91	2.05	1.63	0.25	2.88	3.38	3.94	7.75
100	A-1345	15	11.38	0.75	5.38	0.75	3.06	6.55	2.97	2.38	0.28	3.06	3.81	7.03	13.50
200	A-1347	16.75	14.75	0.75	6.63	0.63	3.44	8.03	4.25	3.34	0.34	3.44	4.88	8.72	15.50
400	A-1349	22	15	0.75	8.63	1	4.06	9.88	5.25	4.06	0.38	4.06	6.09	10.84	20
600	A-1351	28	16	0.75	10.88	1.13	4.31	10.44	6.25	4.75	0.44	4.25	6.88	13.19	25.75
1200	A-1354	32	24	1	11.75	1.25	8.13	11.31	6.50	5.06	0.56	8.13	7.56	8.13	21.50

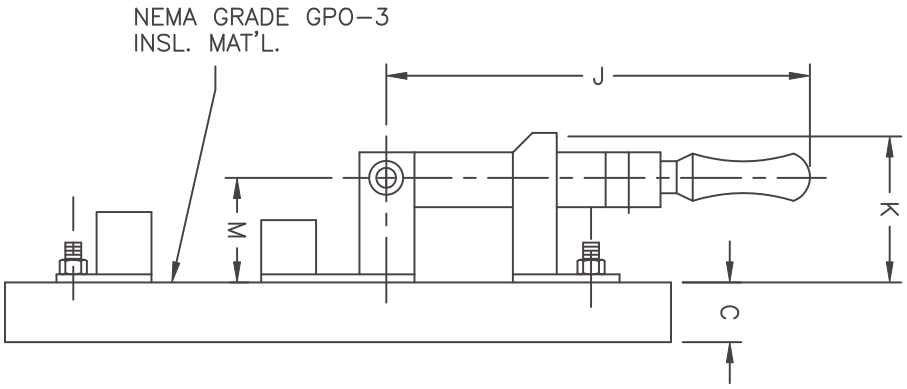
TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
1 Pole, 480 Volt, Single-Throw, Fusible, NON-LOAD BREAK

Figure 21



HIGH JAW
480 VOLT AC

ALL COPPER CONDUCTORS
ARE C.D.A. 110 E.T.P.

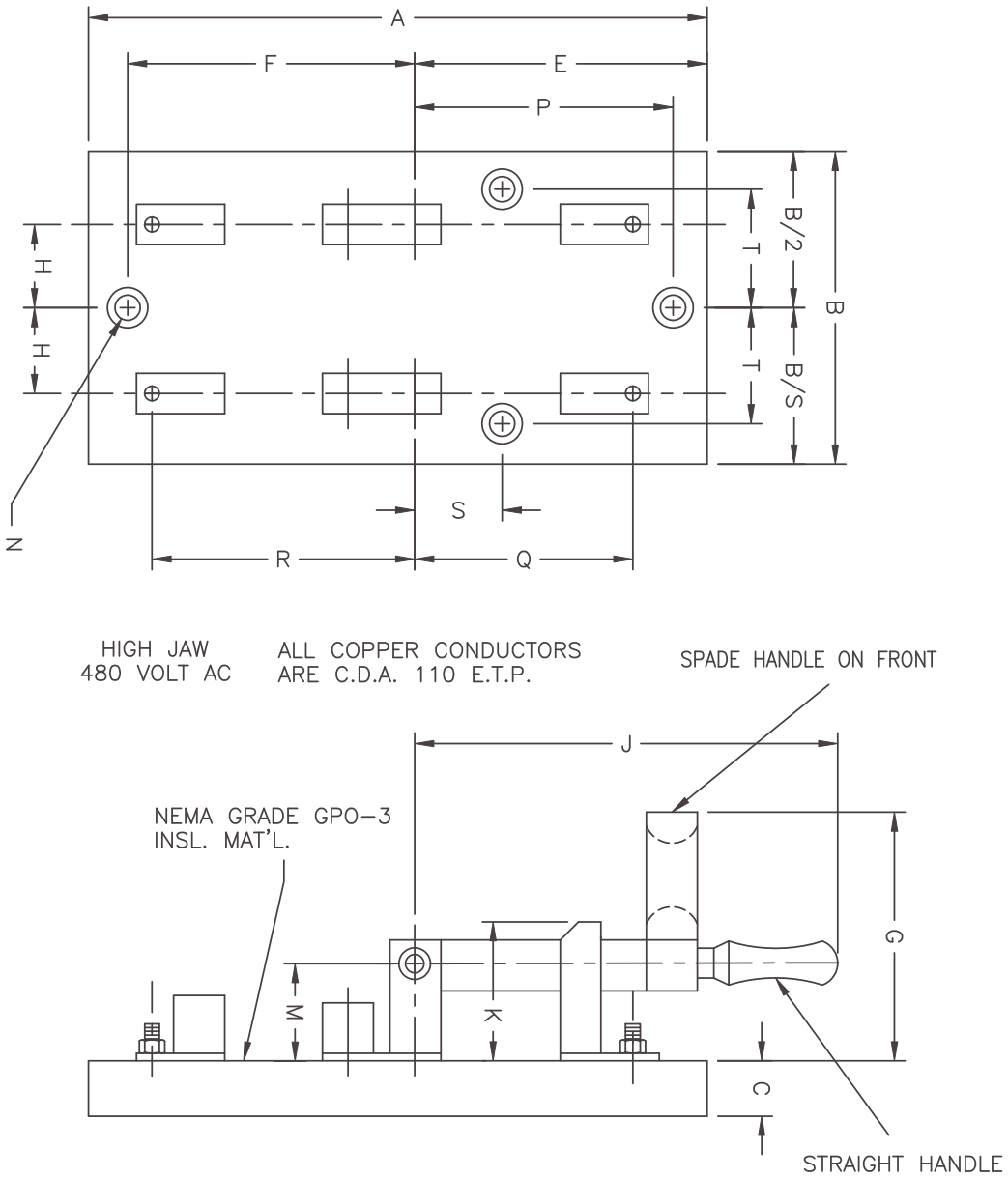


AMP	Cat No	A	B	C	E	F	G	H	J	K	M	N	Q	R	S	T
30	A-6511	11.50	1.63	0.63	0.41	-	4.44	7.06	4.88	2.05	1.25	0.25	3.38	5.94	1.34	3
60	A-6512	11.50	1.63	0.63	0.41	-	4.19	7.31	4.88	2.05	1.63	0.25	3.38	6.44	1.34	3.25
100	A-6513	15	2	0.75	0.50	-	4.88	10.13	6.83	2.97	2.38	0.31	3.81	9.03	1.50	4.69
200	A-6514	21	3	0.75	-	-	7.88	13.13	9.09	4.25	3.34	0.34	4.88	11.22	-	-
400	A-6515	24	4.50	0.75	-	1	8.13	15.88	11	5.25	4.06	0.41	6.09	13.84	-	-
600	A-6516	29	8	0.75	-	1	9.88	19.13	11.94	6.25	4.75	0.44	6.88	16.19	-	-

NOTE: E,S,T for 30 Ampere through 100 Ampere

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
2 Pole, 480 Volt, Single-Throw, Fusible, NON-LOAD BREAK

Figure 22

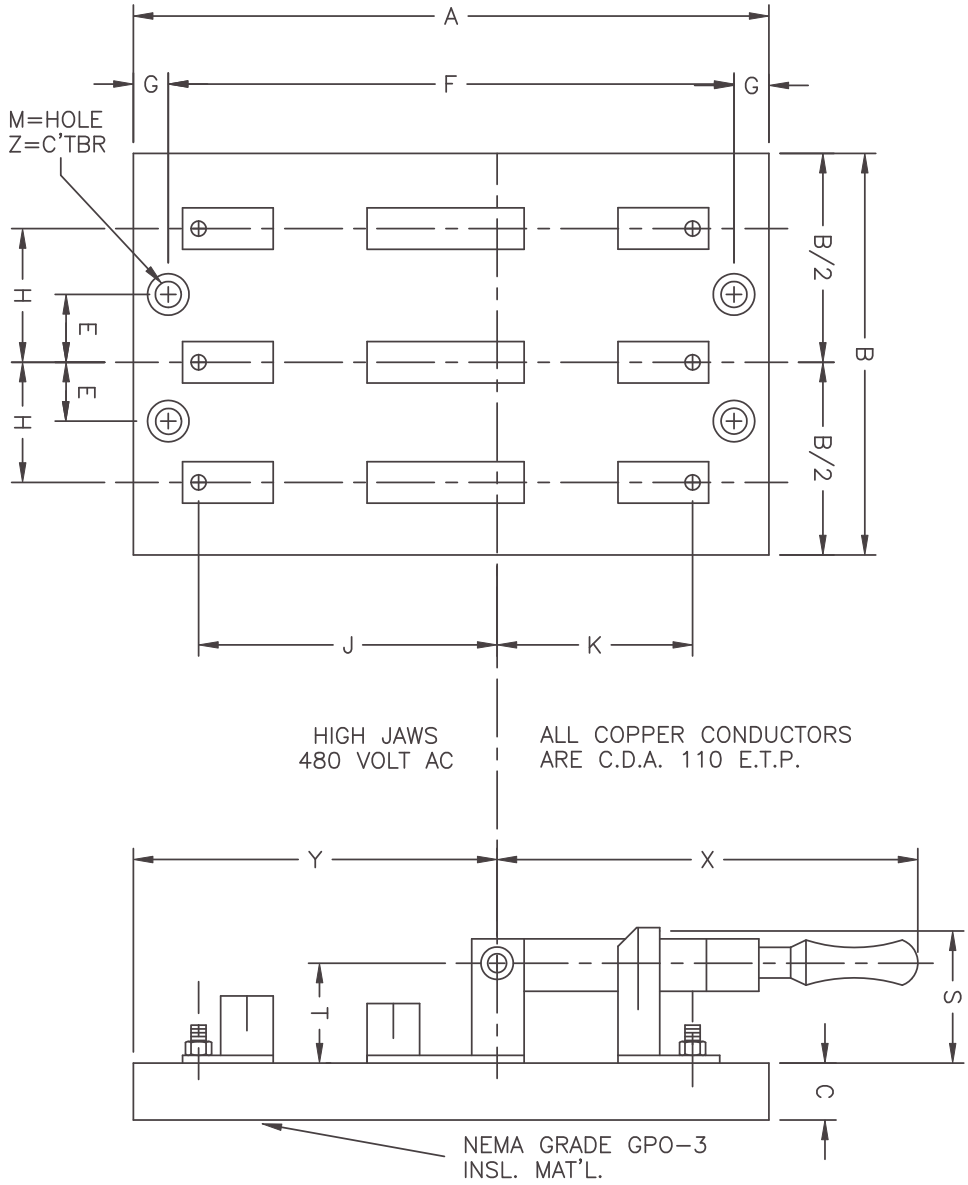


AMP	Cat No	A	B	C	E	F	G	H	J	K	M	N	P	Q	R	S	T
30	A-6521	11.50	5	0.63	4.44	6.44	3.13	1.44	5.16	2.05	1.63	0.25	3.81	3.38	5.94	1.31	1.88
60	A-6522	11.50	5	0.63	4.19	6.69	3.94	1.44	5.16	2.05	1.63	0.25	3.56	3.56	6.44	1.19	1.88
100	A-6523	15	6	0.75	4.88	9.38	4.81	1.53	7.17	2.97	2.38	0.31	4.13	3.81	9.03	1.47	2.38
200	A-6524	20	7	0.75	6.81	12.19	6.94	1.72	9.53	4.25	3.34	0.38	5.81	4.88	11.22	1.78	2.50
400	A-6525	26	8	0.75	9.33	15.38	7.94	2.03	10.88	5.25	4.06	0.41	7.63	6.22	13.56	2.13	3

Add suffix "E" to Cat No. for Spade Handle on front.

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
3 Pole, 480 Volt, Single-Throw, Fusible, NON-LOAD BREAK

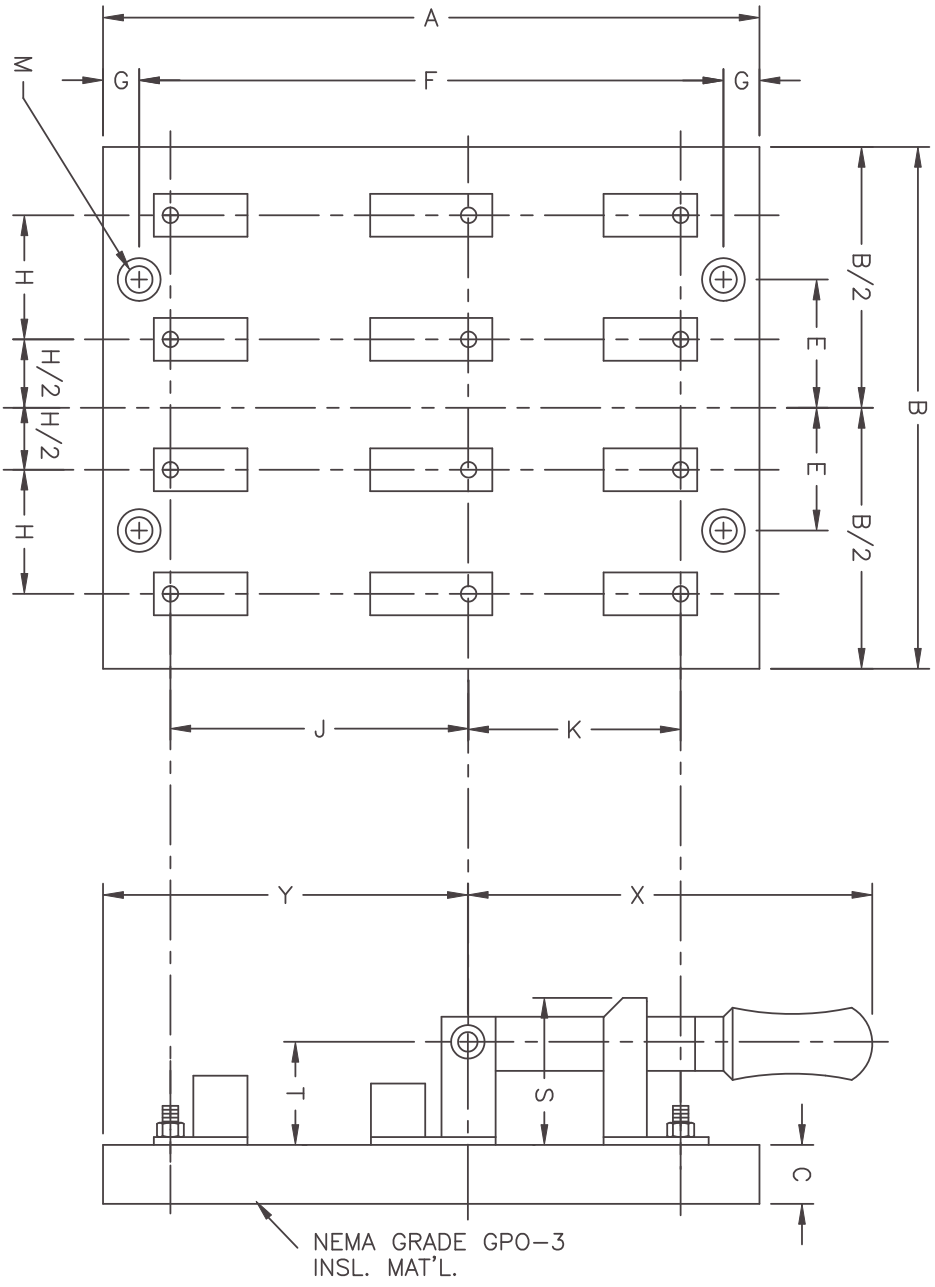
Figure 23



AMP	Cat No	A	B	C	E	F	G	H	J	K	M	S	T	X	Y	Z
30	A-6531	11.50	7.75	0.63	1.44	10	0.75	2.88	5.94	3.38	0.22	2.05	1.63	5.16	7.06	0.56
60	A-6532	11.50	7.25	0.63	1.44	10	0.75	2.88	6.44	3.38	0.22	2.05	1.63	5.16	7.31	0.56
100	A-6533	15	9.25	0.75	1.53	13.50	0.75	3.06	9.03	3.81	0.28	2.97	2.38	7.17	10.06	0.56
200	A-6534	20	10	0.75	1.72	18	1	3.44	11.22	4.88	0.34	4.25	3.34	9.53	13.13	0.75
400	A-6535	26	12	0.75	2.03	23.75	1.13	4.06	13.84	6.09	0.41	5.25	4.06	10.88	6.88	0.88
600	A-6536	29	12	0.75	2.16	27	1	4.31	16.19	6.88	0.41	6.25	4.75	11.94	19.13	0.88
800	A-6537	24	22	1	3.63	21.50	1.25	7.31	9.75	6.53	0.56	5.34	4.19	11.47	13.63	1.25
1200	A-6539	29	24	1	4	26.38	1.31	8.13	11.13	7.56	0.56	6.50	5.06	12.31	16.25	1.25

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
4 Pole, 480 Volt, Single-Throw, Fusible, NON-LOAD BREAK

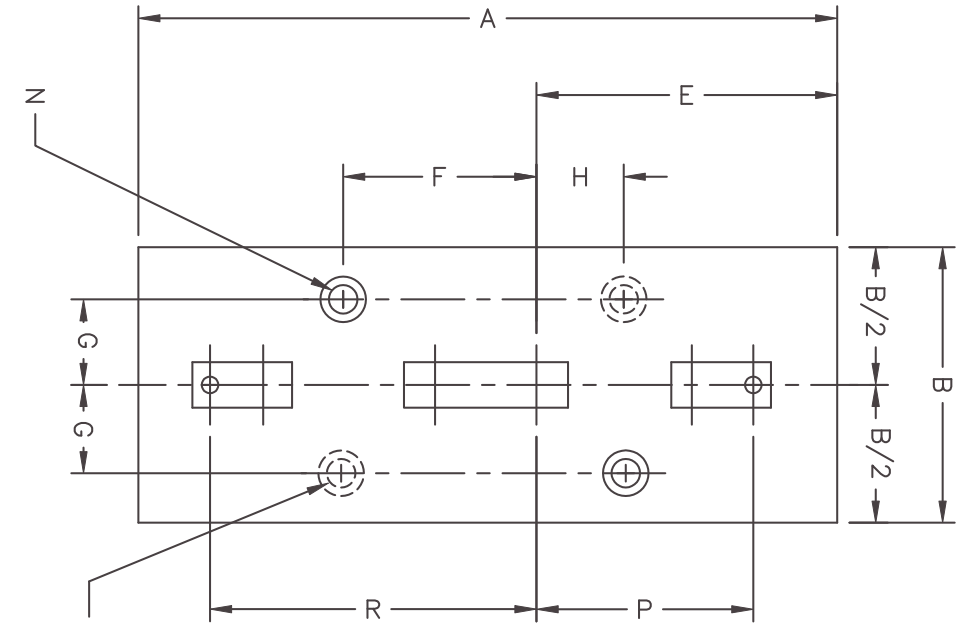
Figure 24



AMP	Cat No	A	B	C	E	F	G	H	J	K	M	S	T	X	Y
30	A-6541	11.50	11.50	0.63	2.88	10	0.75	2.88	5.88	3.38	0.22	2.05	1.63	5.25	7.06
60	A-6542	11.50	11.50	0.63	2.88	10	0.75	2.88	6.38	3.38	0.22	2.34	1.95	5.91	7.25
100	A-6543	15	13.50	0.75	3.06	13.50	0.75	3.06	9.03	3.81	0.28	2.97	2.38	6.55	10.06
200	A-6544	20	14	0.75	3.44	18	1	3.44	11.22	4.88	0.34	4.25	3.34	8.03	13.13
400	A-6545	28	16	0.75	4.06	26	1	4.06	13.84	6.09	0.38	5.25	4.06	9.88	17.88

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
1 Pole, 600 Volt, Single-Throw, Fusible, NON-LOAD BREAK

Figure 25

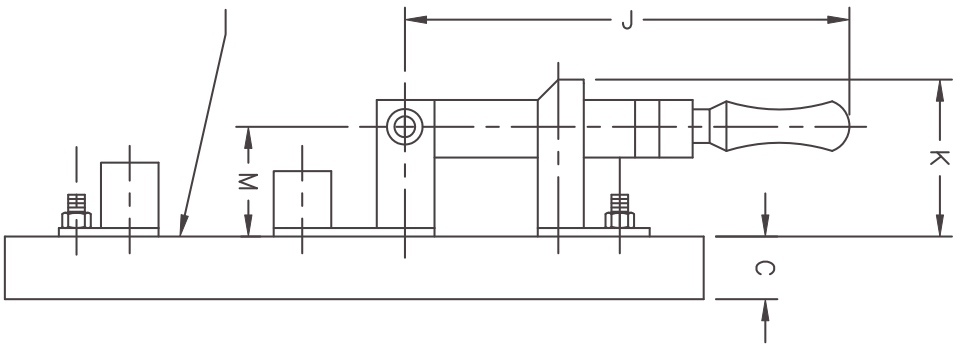


200 AMP. &
OVER ONLY

HIGH JAW
600 VOLT

ALL COPPER CONDUCTORS
ARE C.D.A. 110 E.T.P.

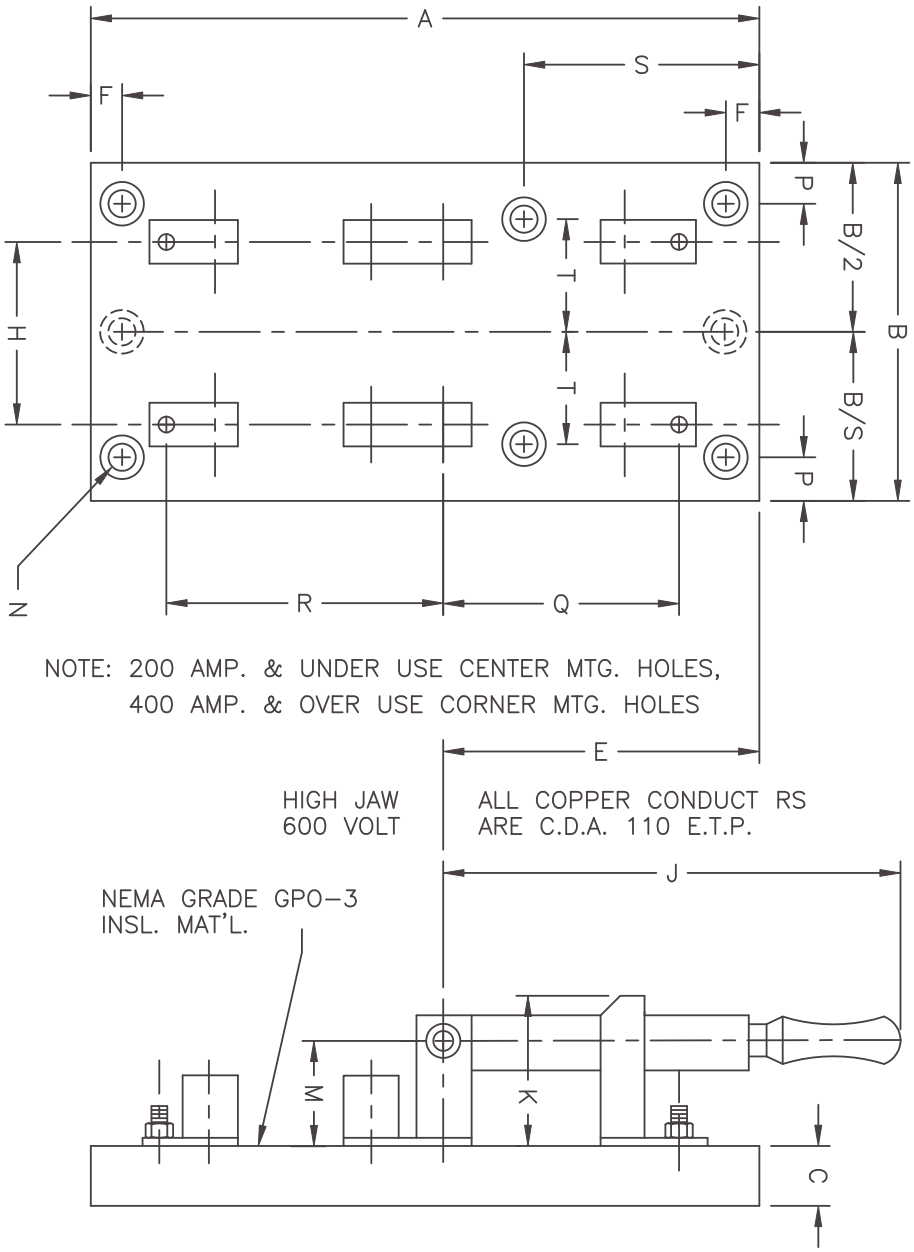
NEMA GRADE GPO–3
INSL. MAT'L.



AMP	Cat No	A	B	C	E	F	G	H	J	K	M	N	P	R
30	A-6914	12.50	2	0.63	5.75	3	0.38	2.09	6.44	2.05	1.63	0.22	4.88	5.94
60	A-6915	13.50	2	0.63	6	3.25	0.50	2.09	6.44	2.34	1.95	0.22	4.88	6.44
100	A-6916	18	2	0.75	7.44	4.72	0.50	2.44	8.83	2.97	2.38	0.28	5.81	9.03
200	A-6917	24	4.50	0.75	8.81	5.75	1.50	2.75	11.09	3.94	3.34	0.34	6.88	11.22
400	A-6918	29	8	0.75	11.66	16.34	3	10.66	12.88	5.25	4.06	0.41	8.09	13.84

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
2 Pole, 600 Volt, Single-Throw, Fusible, NON-LOAD BREAK

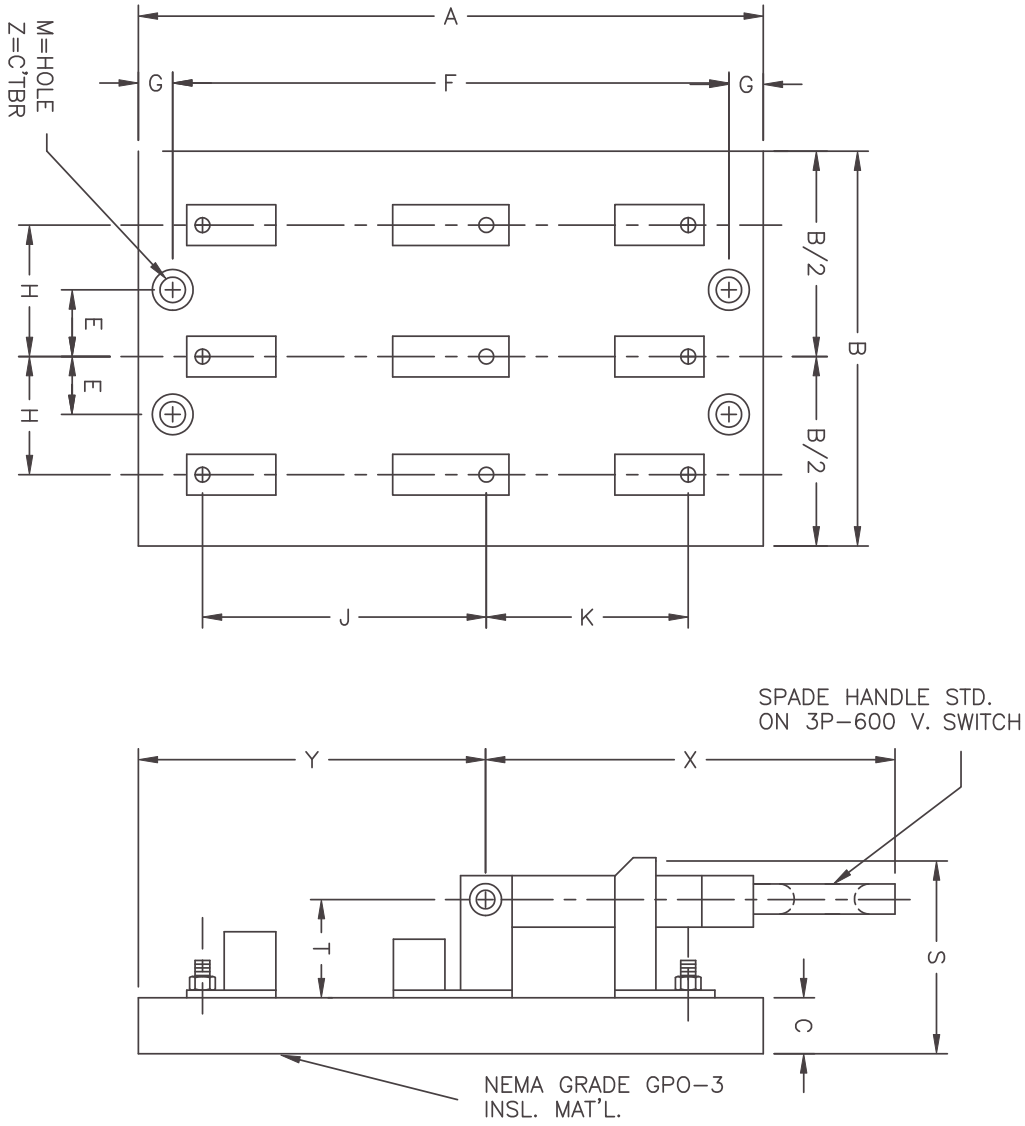
Figure 26



AMP	Cat No	A	B	C	E	F	H	J	K	M	N	P	Q	R	S	T
30	A-6924	13.50	7	0.63	6.25	0.63	4.63	6.82	2.05	1.63	0.25	-	4.88	5.94	4.13	2.88
60	A-6925	13.50	7	0.63	5.97	0.63	4.63	6.82	2.34	1.95	0.25	-	4.88	6.44	3.88	2.88
100	A-6926	18	10	0.75	7.38	0.75	5.31	9.17	2.97	2.38	0.31	-	5.81	9.03	6.63	-
200	A-6927	22	8	0.75	8.81	0.88	5.69	11.53	4.25	3.34	0.34	-	6.88	11.25	6.03	3.25
400	A-6928	28	11	0.75	11.19	1	5.81	12.88	5.25	4.06	0.38	1	8.09	13.84	-	-
600	A-6929	34	14	0.75	13.38	1	6	13.94	6.13	4.75	0.44	1	8.88	6.19	-	6

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
3 Pole, 600 Volt, Single-Throw, Fusible, NON-LOAD BREAK

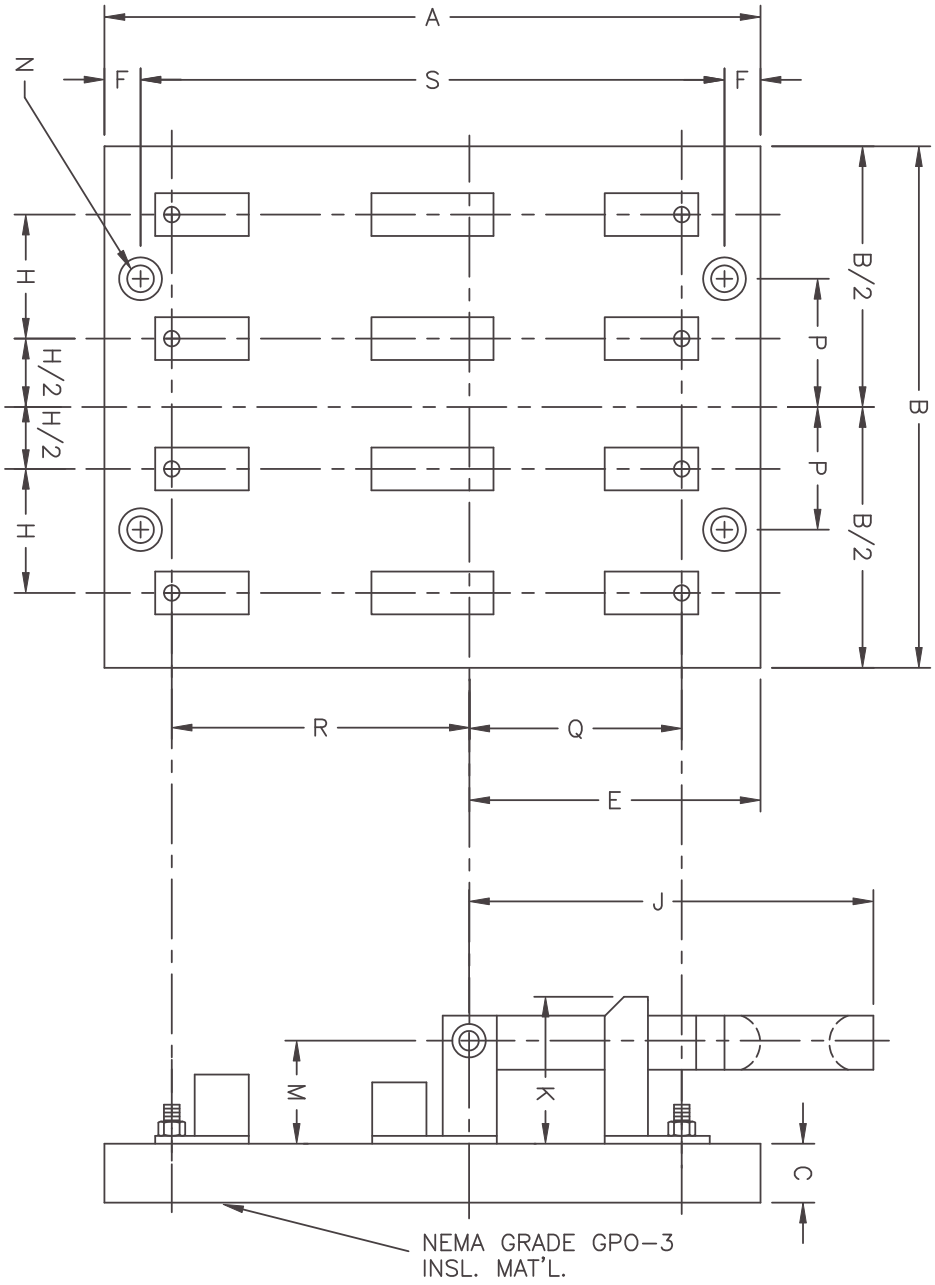
Figure 27



AMP	Cat No	A	B	C	E	F	G	H	J	K	M	S	T	X	Y	Z
30	A-6934	14	11.50	0.63	2.31	12.50	0.75	4.63	5.94	4.88	0.22	2.67	1.63	7.47	7.53	0.56
60	A-6935	15	11.38	0.63	2.31	13.50	0.75	4.63	6.44	4.88	0.22	3.09	1.63	7.47	8.28	0.56
100	A-6936	20	14	0.75	2.66	18.50	0.75	5.31	9.03	5.81	0.28	2.97	2.38	8.55	11.66	0.56
200	A-6937	24	14	0.75	2.84	22.50	0.75	5.69	11.22	6.88	0.34	4.94	3.34	10.03	14.09	0.75
400	A-6938	28	16	0.75	2.91	26	1	5.81	13.84	8.09	0.41	6.25	4.06	11.88	16.88	0.88
600	A-6939	32	20	0.75	3.03	30	1	6.06	16.19	8.88	0.41	7.25	4.75	12.44	19.06	0.88
800	A-6994	26	25	1	4.44	24	1	8.88	9.75	8.53	0.56	6.34	5.19	13.47	13.63	1.25
1200	A-6995	29	26	1	4.75	27	1	9.50	11.13	9.56	0.56	7.50	6.06	14.31	15.25	1.25

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
4 Pole, 600 Volt, Single-Throw, Fusible, NON-LOAD BREAK

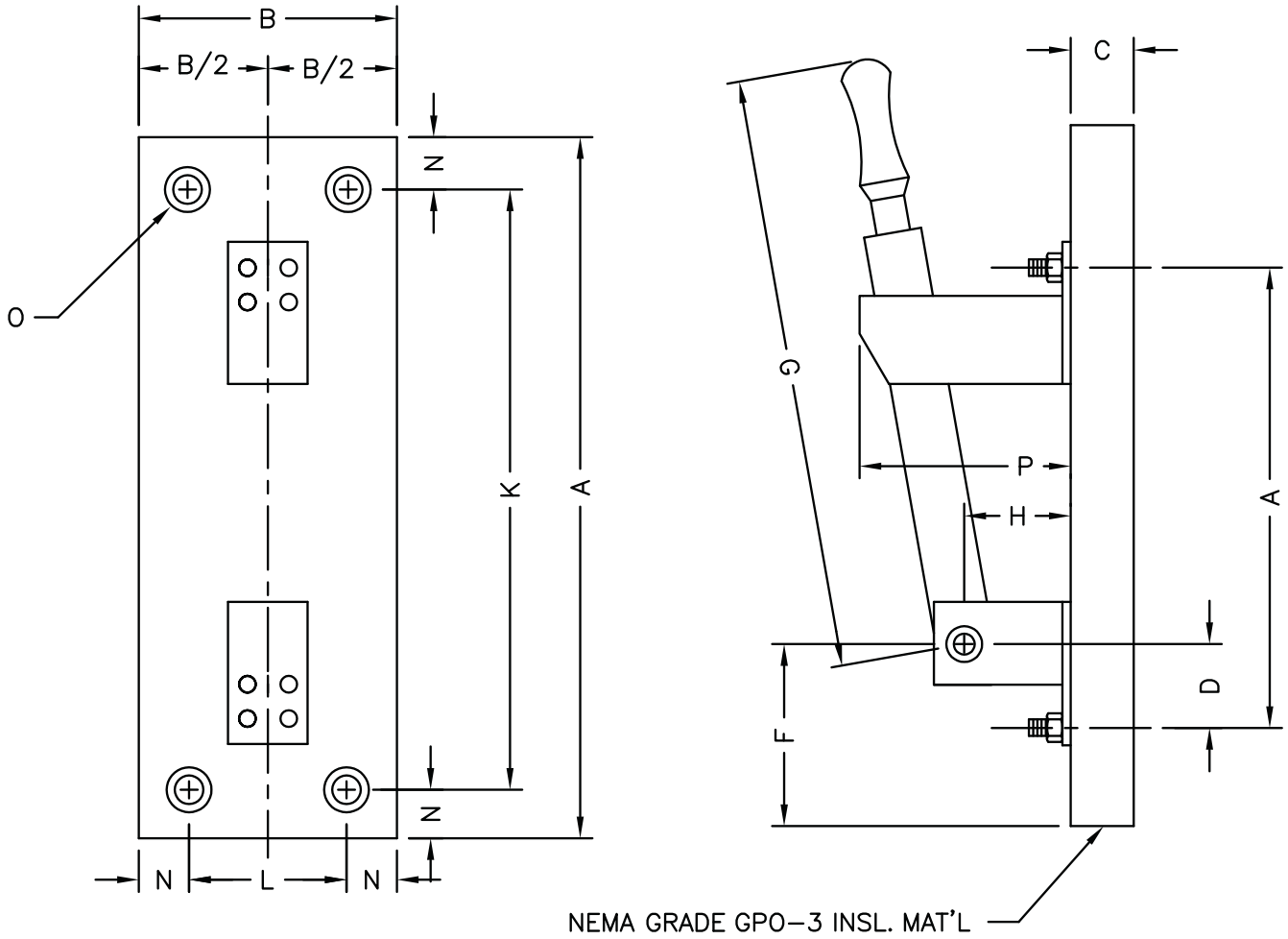
Figure 28



AMP	Cat No	A	B	C	E	F	H	J	K	M	M	P	Q	R	S
30	A-6944	14.75	16.75	0.75	6.56	0.75	4.63	7.47	2.05	1.63	0.25	4.63	4.88	5.94	13.25
60	A-6945	14.75	16.75	0.75	6.56	0.75	4.63	7.47	2.34	1.95	0.25	4.63	4.88	6.44	13.25
100	A-6946	19.38	22	0.75	8.06	1.25	5.31	8.55	2.97	2.38	0.31	9.75	5.81	9.03	16.88
200	A-6947	24	22	0.75	8.53	0.75	5.69	10.03	4.25	3.34	0.38	5.69	6.88	9.56	22.50
400	A-6948	28	22	0.75	11.13	1	5.81	11.88	5.25	4.06	0.38	5.81	8.09	13.84	26

TYPE A FRONT-CONNECTED, HEAVY-DUTY KNIFE SWITCHES
1 Pole, 1.6 - 2 KA, 250 Volt, AC & DC, Single-Throw, Not Fusible, NON-LOAD BREAK

Figure 29



ALL COPPER CONDUCTORS
ARE C.D.A. 110 E.T.P.

HIGH JAW
250, 500, & 600 VOLT AC & DC

250 Volt DC & 480 Volt AC

AMP	Cat No	A	B	C	D	E	F	G	H	K	L	N	O	P
1600	A-1015	20	7	1	2.75	11	7.25	13.25	3.25	18	5	1	0.56	6.06
2000	A-1016	20	7	1	2.81	11.25	7.19	14.06	3.59	18	5	1	0.56	7.03

600 Volt AC & DC

AMP	Cat No	A	B	C	D	E	F	G	H	K	L	N	O	P
1600	A-1015Y	20	7	1	2.75	12.25	6.63	14.50	3.25	18	5	1	0.56	6.06
2000	A-1016Y	23	7	1	2.81	13.25	6.19	14.06	3.59	19	5	1	0.56	7.03

Maintenance & Installation Instructions

SECTION F

Care & Servicing Open Knife Switches

Filnor knife switches are careful fit and adjusted at the factory. All contacts are tested and a rigid inspection is performed on each switch before it is shipped.

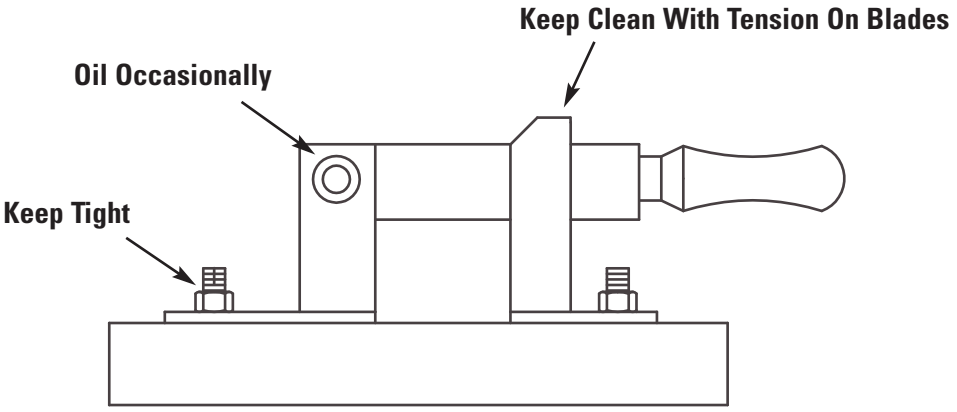
On standard Type A Front-Connected knife switches, which are mounted on GPO-3 bases, they are ready for use when packed.

With ordinary care, the only service required is an occasional lubrication of the hinges and an application of Alvania No. 2 grease or vaseline at the point the blade enters the clip. If the blade and clip contacts should oxidize, through lack of use or corrosive atmosphere, cleaning them with a few strokes of a fine cut file will restore the current carrying capacity and operation.

Spring washers on the hinge provide continual contact pressure on the rotating connection.

The first requisite of a switch is that the contacts be in perfect alignment and fit. In case of misuse or accident, the leaves of the clip and hinge should be fitted to the blade so that a 0.003 inch thick feeler gauge will be rejected in at least 75% of the contact area.

Filnor switches are designed for heavy duty use, and because of the rugged construction, best materials, proven design, and good workmanship, they will provide long and satisfactory service with little care and little attention if properly installed.



WARNING: DO NOT OPEN UNDER LOAD

Instructions For Installing Unmounted Knife Switches On Panels

Correct assembly and adjustment of knife switch parts is necessary to obtain satisfactory operation. The following procedure is used on factory mounted switches and is recommended for all assemblies.

TOOLS - Fitting "pins" referred to on the right are steel rods, having same diameter as the blade thickness. Pliers should be parallel jaw type. They should have smooth contact surfaces without knurling or may be covered with tape. Plastic or rawhide hammer should be used on switch parts in lieu of metal hammer.

30 Ampere	.3/32" dia
60, 100 Ampere	.1/8" dia
200 Ampere	.3/16" dia
300, 400, 800, 1600 Ampere	.1/4" dia
600, 1200, 2000 Ampere	.5/16" dia

HINGE & BLADE - Blades are carefully assembled in hinges with Alvania No. 2 grease and proper tension placed on hinge washers, having approximately the following torque on nuts.

100 Ampere	.2 inch lbs
200 Ampere	.3 inch lbs
300, 400 Ampere	.7 inch lbs
600 Ampere	.8 inch lbs
800, 1200 Ampere	.9 inch lbs

MOUNTING - The hinge and blade sub-assemblies should be mounted on cross bar with blade screws loose. The clips and hinges (and fuse holders if fusible) should then be mounted on panel with nuts loose. Then with blades in clips (and fuse in place if fusible) all nuts and screws should be tightened. Handle may be added at most opportune time.

CLIP FIT - Proper fit of the clip to blade is of the utmost importance. Although all parts have a preliminary fit at the factory, it is essential that they have a final alignment and fit after mounting, which can be accomplished as follows.

a) First the blades should be checked at the point of entering clips exactly between leaves simultaneously. Leaves can be tapped with plastic hammer to provide this alignment.

b) With the blade in the clip, check for a good flat contact. If correction are required, use the following methods.

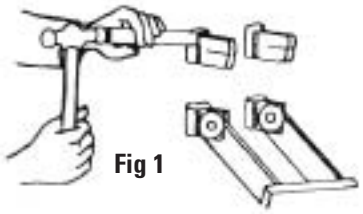


Fig 1

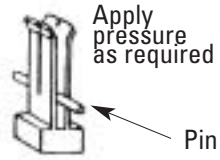


Fig 3

If alignment of clip on blade is not parallel, the clip can be adjusted by using a piece of fiber between clip block and hammer to move the clip on base as shown in **Fig 1**.

If clip leaf is bowed out at bottom, it can be straightened by placing pin between leaves at top and pinching at bottom with pliers as shown in **Fig 2**, or by placing blade partially in clip and tapping bottom with a plastic hammer.

If clip leaf is flared out at top, it should be pulled into place by placing pin between leaves and pinching in with pliers at top below flare in **Fig 3**.

If leaves are not parallel with blade after alignment with fiber and hammer, they may be adjusted by placing point of screwdriver between leaves at top and pulling leaf into place as shown in **Fig 4**.

Fig 2

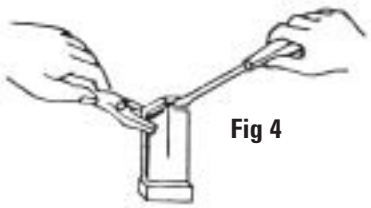


Fig 4

CAUTION - Hammer and pliers should be used gently so as not to bend the leaves more than required or a kink may develop that is difficult to remove.

NOTE - In attaching terminal lugs or bus to studs or terminals, great care should be taken to make certain that the nuts are as tight as possible and also not to force the parts out of alignment in the process.

CARE - With ordinary care, the only service required is an occasional drop of oil on hinge and small application of Alvania No. 2 grease or vaseline at the point the blade enters the clip.

If contacts should oxidize through lack of use or corrosive atmosphere, they should be carefully cleaned with a fine cut file or emery cloth and refit in accordance with the above.

Filnor Inc.

Other Filnor Switch Products Available

Type BM Open Style Front Connected
Bolted Pressure Contact Switches

Type EBM Switches
Enclosed Bolted Pressure Switch with side operated manual handle, non-load break.

Type BPI Switches
Enclosed Bolted Pressure Switch with side operated Quick Brake Mechanism and Arc Breaking capability.

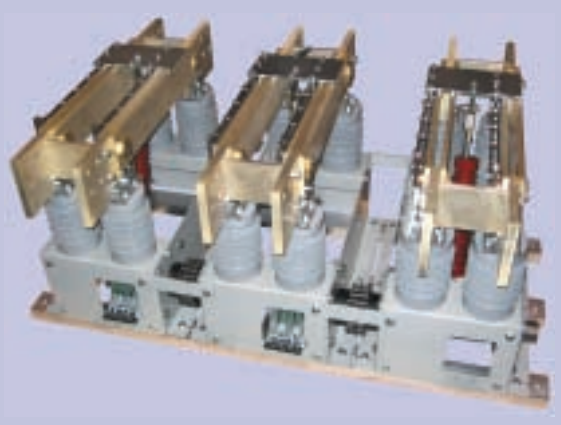
Type DB Switches
High Current Switch applications.

Medium Voltage Switches
Isolation and grounding applications. 200 - 12,000 Ampere, 5 kV - 38 kV.

Custom Designed Switches
Switches designed to suit your exact specifications.

Transfer Switches
Open or enclosed.

Please contact Filnor, Inc. for complete information on the above products, as well as additional Resistor and Control Units not listed.



Special Design Medium Voltage Switch
6300 A, 15 kV, 3-Pole, Single Throw, Motor Operated, Medium Voltage Bolted Pressure Switch

3000 A, 250 V DC, 2-Pole, Single Throw, Fusible, Type BPI Switch Crane Rail Disconnect

UL® Listed 698R Knife Switch

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info@filnor.com

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Knife Switches

30 Ampere - 6000 Ampere Standard
Higher Ampere available upon request
125 Volt - 600 Volt Standard
Higher Voltages available upon request

UL® Listed 698R Knife Switch

ISO 9001 Quality System Certified