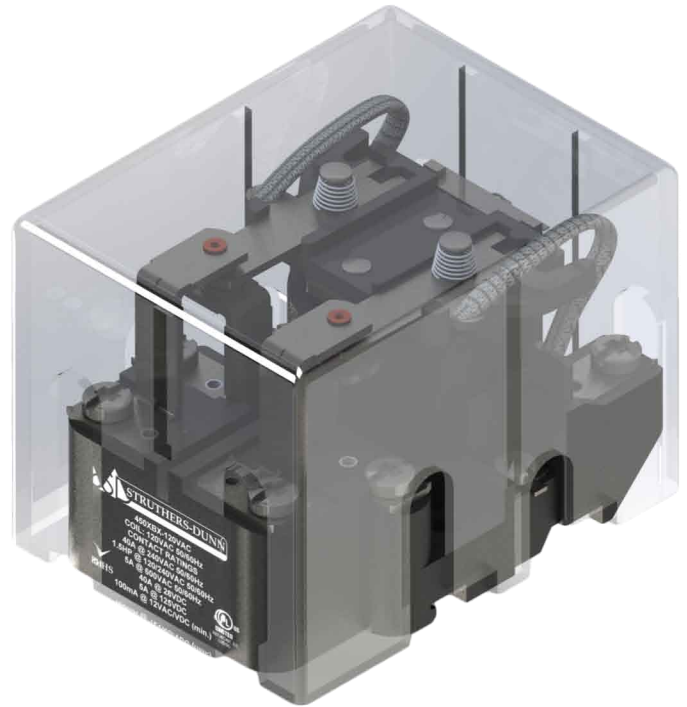




450 SERIES HEAVY DUTY POWER RELAY



- UL Standard 60947-1 (UL 508) Qualified
- Standard Base with DIN Rail and Panel Mount Option
- 10,000,000 Cycles Mechanical and 100,000 Cycles Electrical
- Optional LED - Coil Power Indication
- Optional Polycarbonate Protective Cover
- Class F (155°C) Insulation System
- Max. Rating: 40 Amps or 50 Amps
 - 40 Amps @ 277 VAC - 50 Amps @ 240VAC
 - 40 Amps @ 28 VDC - 50 Amps @ 28VDC



GENERAL CHARACTERISTICS

Insulation System	Class F (155°C)	
Mechanical Life	10,000,000 operations	
Electrical Life	100,000 operations	
Operate Time	20ms	
Release Time	15ms	
Dielectric	Between coil and contact	2200VAC
	Between poles	2200VAC
	Between contacts	1500VAC
Ambient Temperature	AC Coil	-55°C to 70°C
	DC Coil	-55°C to 105°C
Connection	Listed wire connectors required for UL Listed Installations	
Weight	227-311 g	

INPUT CHARACTERISTICS

Rated Voltage	6, 12, 24, 120, 208, 220, 240, 277, 480VAC 6, 12, 24, 48, 110/125, 250VDC
Operating Range	AC: 85% to 110% of Rated Voltage DC: 80% to 110% of Rated Voltage
Dropout Voltage	10% of Rated Voltage
Insulation Resistance	1000 MΩ @ 500VDC

COIL CHARACTERISTICS

Nominal Voltage	Power Consumption	Coil Resistance
6 VAC	~10VA	0.85Ω
12VAC		2.85Ω
24VAC		12Ω
120VAC		290Ω
208VAC		850Ω
220VAC		1040Ω
240VAC		1200Ω
277VAC		1500Ω
480VAC	4500Ω	
6VDC	~2W	18Ω
12VDC		70Ω
24VDC		290Ω
48VDC		1200Ω
110/125VDC		6000Ω
250VDC		34000Ω

CONTACT CHARACTERISTICS

Configurations	XAX (SPDT) (1 Form C); XBX (DPDT) (2 Form C); BXX (DPST) (2 Form A); HXX (SPST-NO-DM) (Form X); XXH (SPST-NC-DB) (Form Y); XHX (SPDT-DM-DB) (Form Z)	
Contact Material:	AgSnO ₂ - Silver Tin Oxide	
AC Rating:	40A	50A
	40A @ 277VAC 50/60Hz 20A @ 600VAC 50/60Hz 30A @ 120VAC (Ballast) 15A @ 240VAC (Ballast)	50A @ 240VAC 50/60Hz 10A @ 600VAC 50/60Hz
	Motor Load Rating: 2HP @ 120/240VAC 50/60Hz	
DC Rating:	40A @ 28VDC	50A @ 28VDC
DC Rating With Blowout Magnet:	20A @ 125VDC	20A @ 125VDC
	4A @ 250VDC	4A @ 250VDC
	1A @ 500VDC	2A @ 500VDC
Minimum Load Rating:	100mA @ 12 VAC/DC (min.)	100mA @ 12 VAC/DC (min.)
Auxiliary Switch Rating:	10A @ 125/250VAC	10A @ 125/250VAC
Pilot Duty:	A300	A300
Certifications:	UL/CUL Listed, UL/CUL Recognized	

*Additional Coil Voltages Available Upon Request

*Tungsten Contacts Also Available

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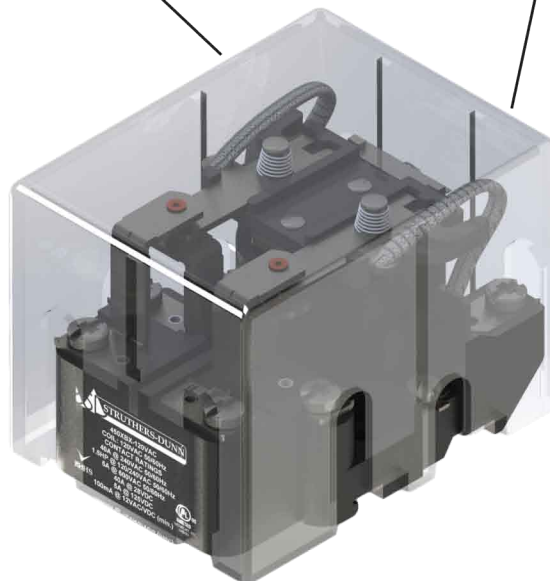
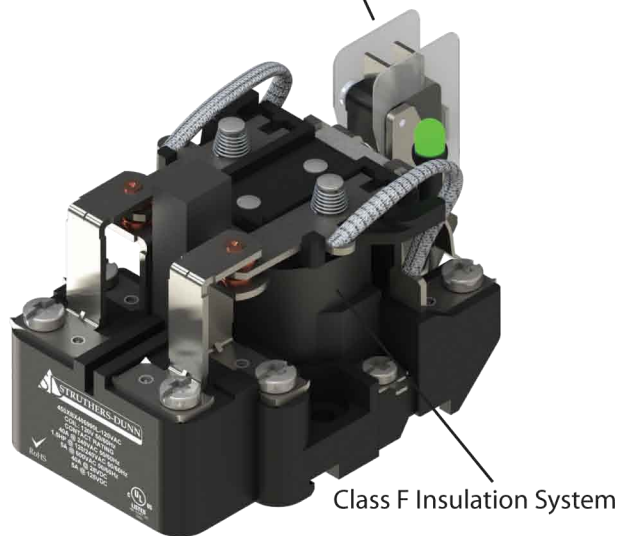


SPECIAL FEATURES

*Optional Auxiliary Switch - (Code "90")
*Dual Auxiliary Switch Available - (Code "91")

Optional Coil Suppression Diode - (Code "V")
(DC Version Only)

Optional Polycarbonate
Protective Cover - (Code "C")

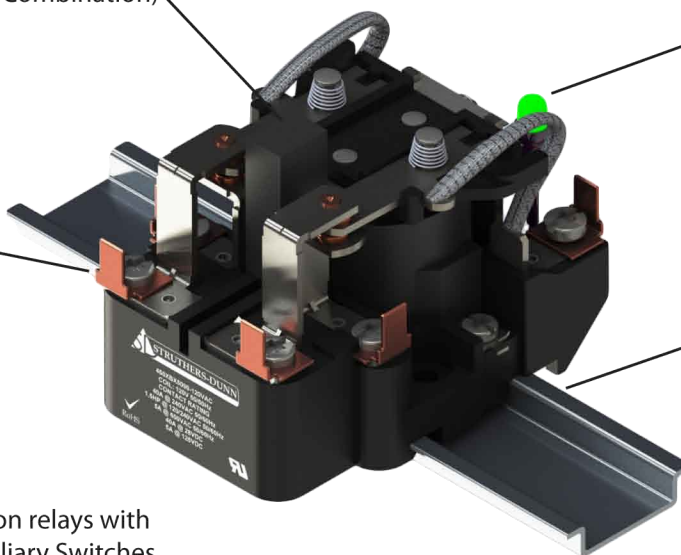


Optional Blowout Magnet - (Code "69")
(Not Available with XXH Contact Combination)

Optional Green
LED Indicator - (Code "L")

*Optional Quick Connect
Terminals - (Code "Q")

Standard Din Rail
& Panel Mount Combination

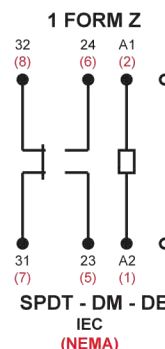
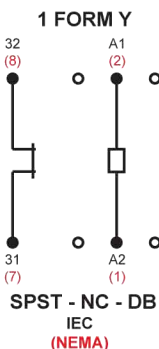
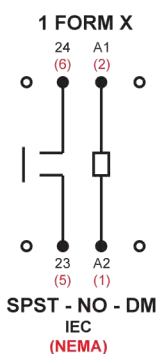
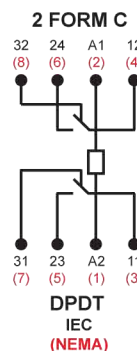
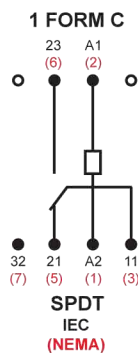
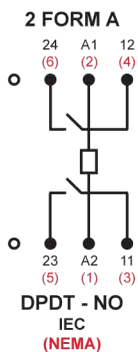


*Note: Covers can not be used on relays with
Quick Connect Terminals or Auxiliary Switches

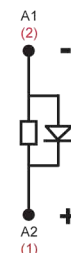


450 SERIES HEAVY DUTY POWER RELAY

WIRING DIAGRAMS



COIL SUPPRESSION DIODE



POLARITY SENSITIVE

PART NUMBERING INFORMATION

Series Part Number: 450 XBX 40 C 69 Q L V 90 120VAC

Contact Combination:

- XAX (SPDT) (1 Form C)
- XBX (DPDT) (2 Form C)
- BXX (DPST) (2 Form A)
- HXX (SPST-NO-DM) (1 Form X)
- XXH (SPST-NC-DB) (1 Form Y)
- XHX (SPDT-DM-DB) (1 Form Z)

Contact Type:

- 40 Amp Silver Alloy – 40
- 50 Amp Silver Alloy – 50
- (Tungsten Contacts Also Available)

Enclosure:

- No Cover Standard – No Code
- Polycarbonate Protective Cover – C

Din-rail:

- Standard Din Rail Mount Base – No Code

Other Options:

- Blowout Magnet – 69 (not available with a XXH contact combination)
- ¼" Quick Connect Terminals – Q
- LED indicator – L
- Coil Suppression Diode – V (VDC version only)
- Auxiliary Switch – 90 *
- Dual Auxiliary Switch – 91 *

Coil Voltage – Class F, 155°C

- VAC – 6, 12, 24, 120, 208, 220, 240, 277, 480
- VDC – 6, 12, 24, 48, 110/125, 250
- (Other Coil Voltages Available Upon Request)

***NOTE: Covers cannot be used on relays with QC Terminals, Auxiliary Switches or 50A Relays with AC Coils.**

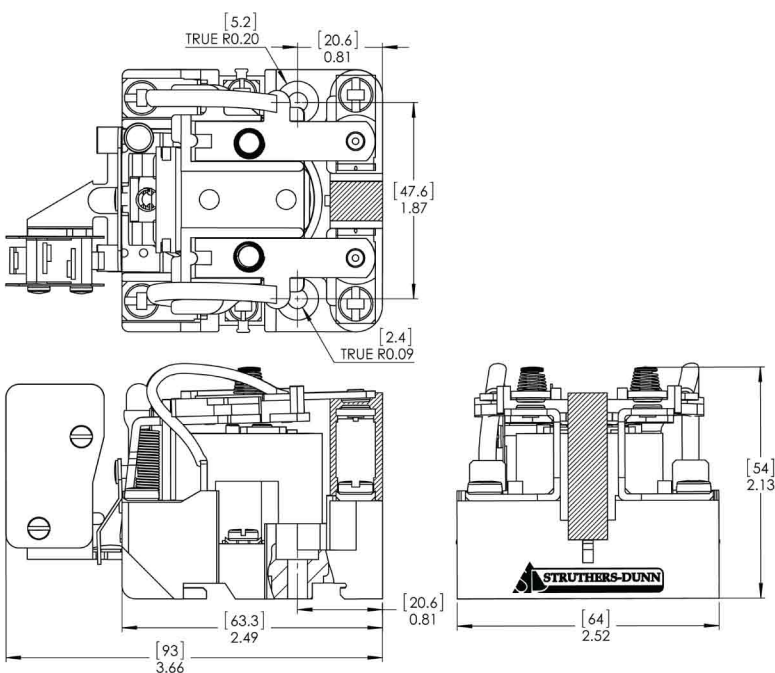
***NOTE: Covers cannot be used on relays with QC Terminals Auxiliary Switches or 50A relays with AC Coils.**



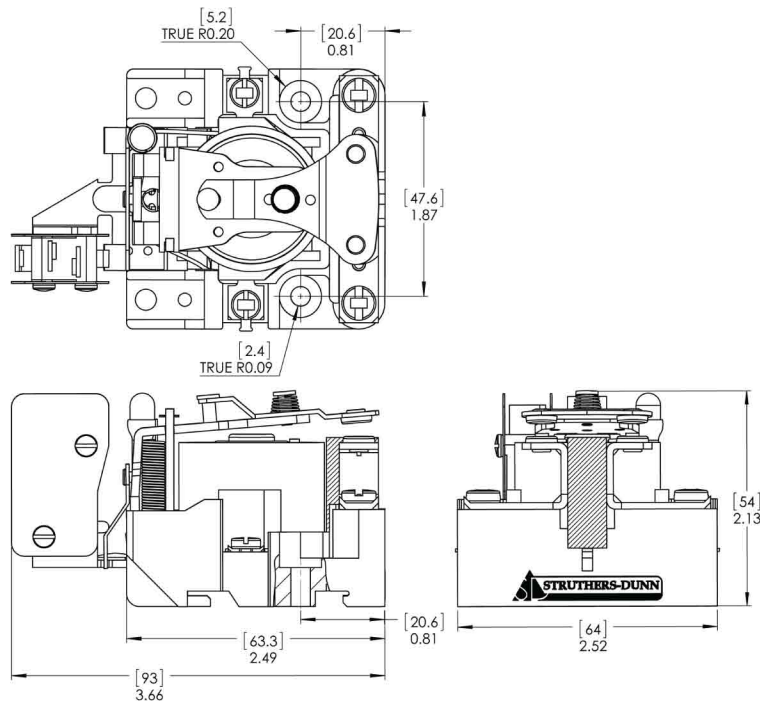
450 SERIES HEAVY DUTY POWER RELAY

OUTLINE DIMENSIONS

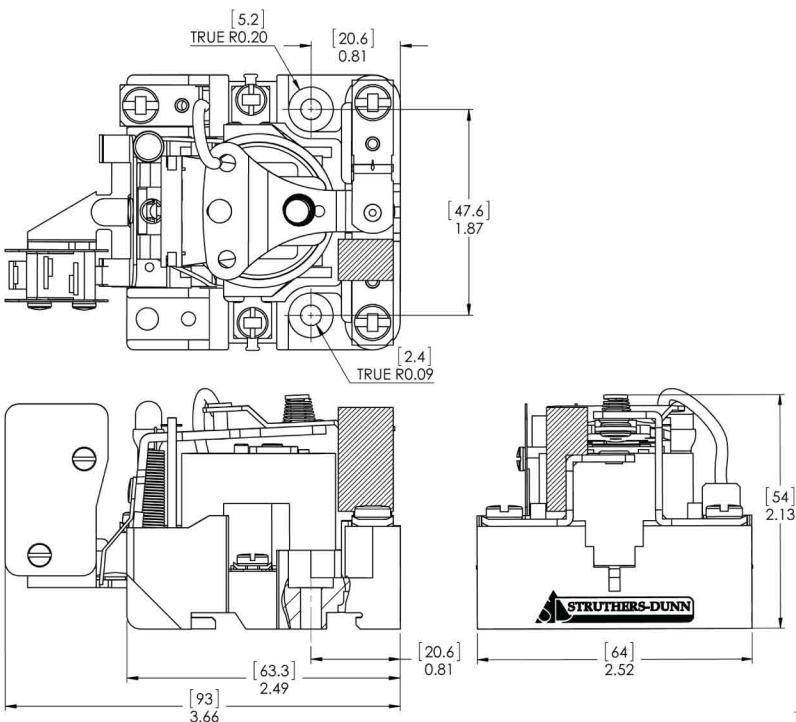
450BXX (DPST - 2 FORM A)



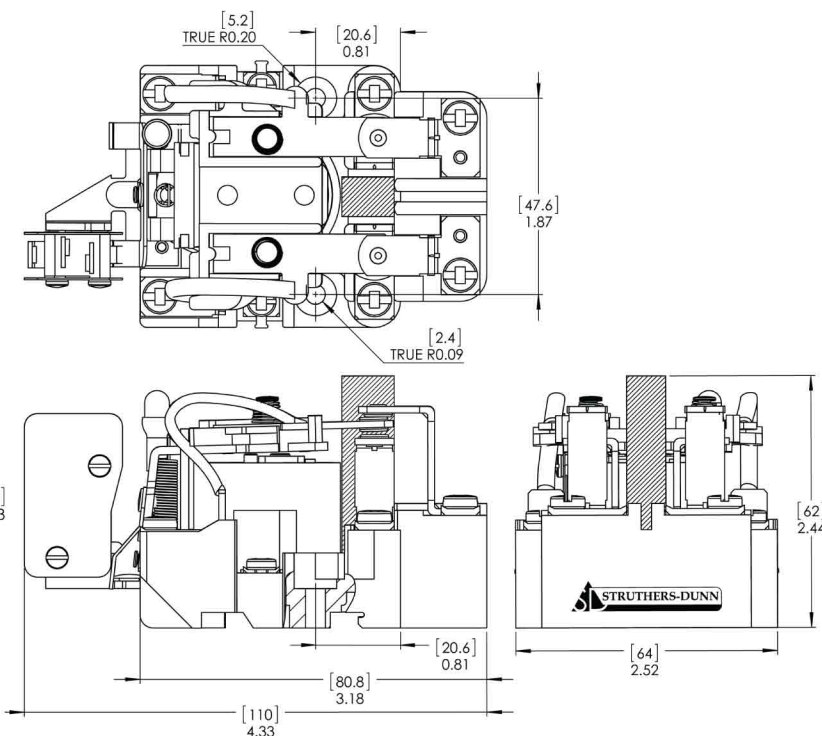
450HXX (SPST-NO-DM - 1 FORM X)



450XAX (SPDT - 1 FORM C)



450XBX (DPDT - 2 FORM C)





450 SERIES HEAVY DUTY POWER RELAY

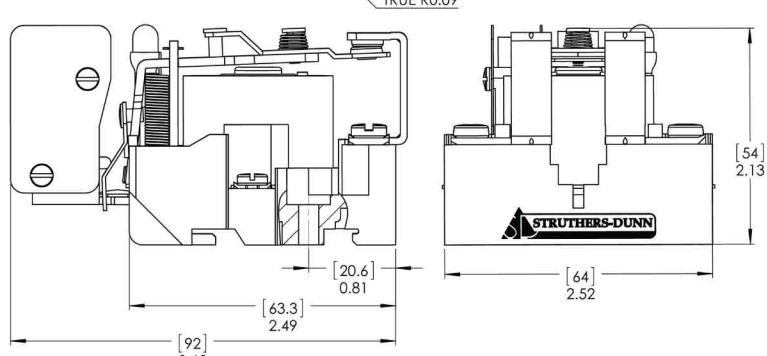
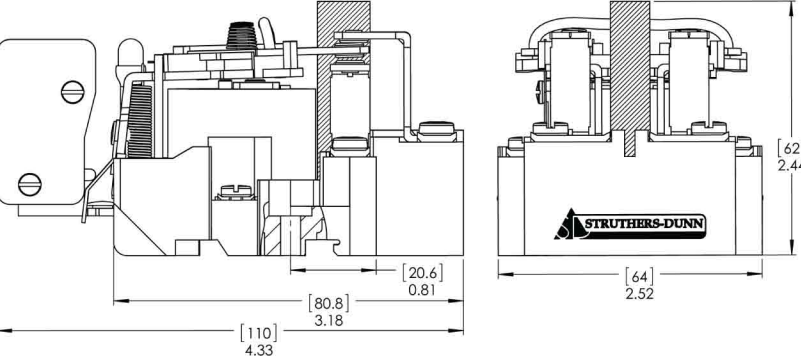
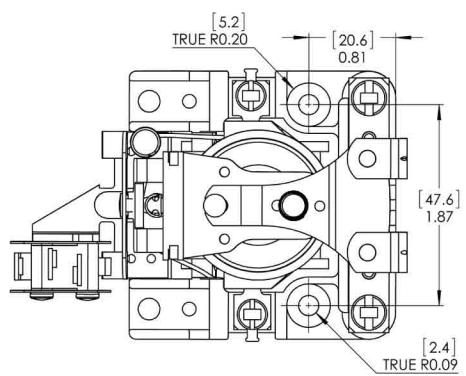
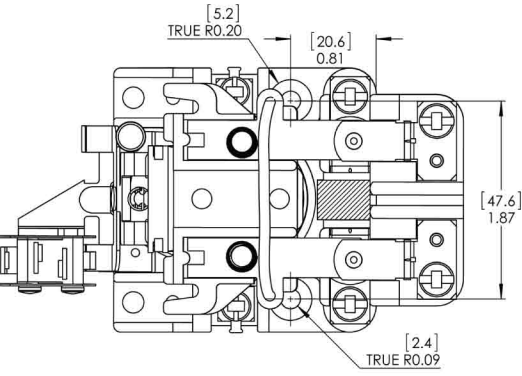
OUTLINE DIMENSIONS

450XHX

(SPDT-DM-DB - 1 FORM Z)

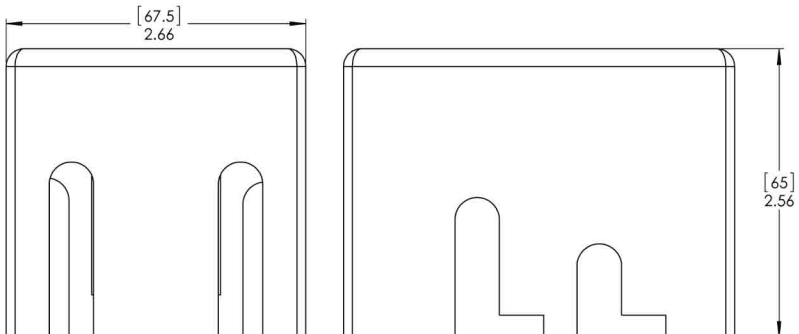
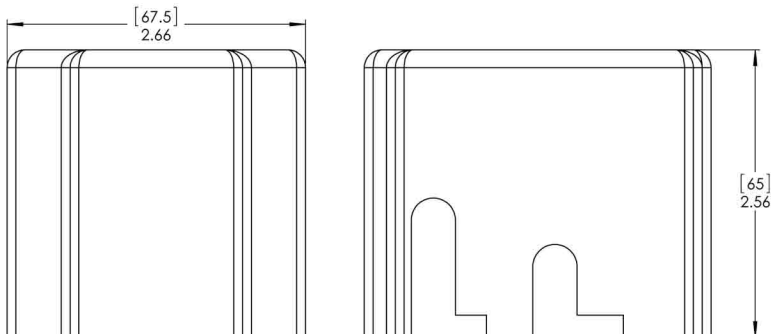
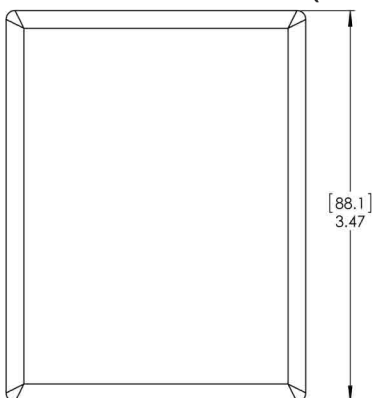
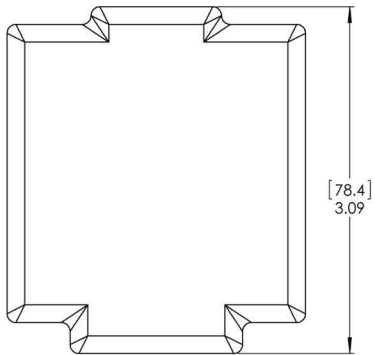
450XXH

(SPST-NC-DB - 1 FORM Y)



COVER - SHORT BASE
(BXX, HXX, XAX, XXH)

COVER - LONG BASE
(XBX, XHX)



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NOTES:

Lined area for user notes, consisting of approximately 25 horizontal lines.