



450 SERIES HEAVY DUTY POWER RELAY

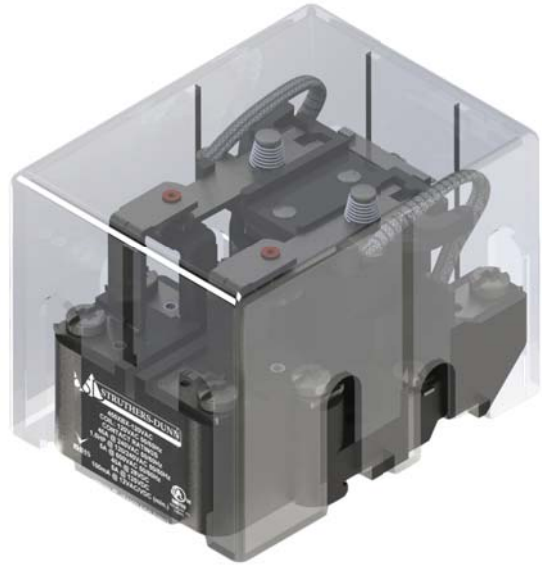


- UL Standard 60947-1 (UL 508) Qualified
- Standard Base with DIN Rail and Panel Mount Option
- 10,000,000 Cycles Mechanical and 100,000 Cycles Electrical
- Optional LED - Coil Power Indication
- Optional Polycarbonate Protective Cover
- Class F (155°C) Insulation System
- Max.UL Rating: 40 Amps or 50 Amps
 - 40 Amps @ 240 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	-30°C to 55°C
	DC Coil	-30°C to 55°C
Connection	6-32 coil terminal screws 8-32 contact terminal screws (Listed wire connectors required for UL Listed Installations)	
Weight	227-311 g	
Certifications:	UL/CUL Listed, UL/CUL Recognized	



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:	AgSnO2 - Silver Tin Oxide	
UL CONTACT RATINGS		
	40A	50A
AC Rating:	40A @ 240VAC 50/60Hz 5A @ 600VAC 50/60Hz	50A @ 240VAC 50/60Hz 10A @ 600VAC 50/60Hz
Motor Load Rating:	1.5HP @ 120/240VAC 50/60Hz	
DC Rating (With Blowout Magnet):	40A @ 28VDC 5A @ 125VDC	50A @ 28VDC 10A @ 125VDC
Auxiliary Switch Rating:	10A @ 125/250VAC	
ADDITIONAL CONTACT RATINGS		
Pilot Duty:	A300	
AC RATING	30A @ 120VAC (Ballast) 15A @ 240VAC (Ballast) 20A @ 600VAC 40A @ 277VAC	N/A
DC Rating (With Blowout Magnet):	20A @ 125VDC 4A @ 250VDC	20A @ 125VDC 4A @ 250VDC
Minimum Load Rating:	100mA @ 12 VAC/DC (min.)	

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		3.2 Ω
24VAC		12Ω
120VAC		290Ω
208VAC		850Ω
220VAC		1040Ω
240VAC		1200Ω
277VAC		1500Ω
480VAC		4500Ω
6VDC		~2W
12VDC	70Ω	
24VDC	290Ω	
48VDC	1200Ω	
110/125VDC	6000Ω	
250VDC	34000Ω	

*Additional Coil Voltages Available Upon Request

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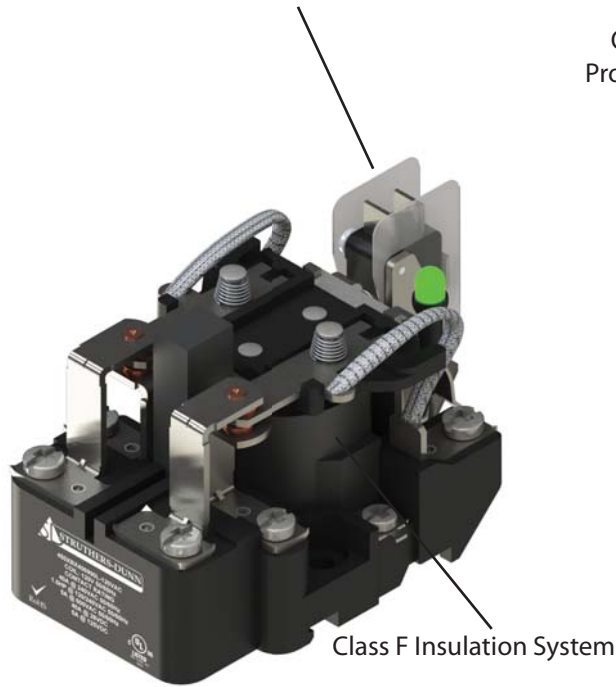
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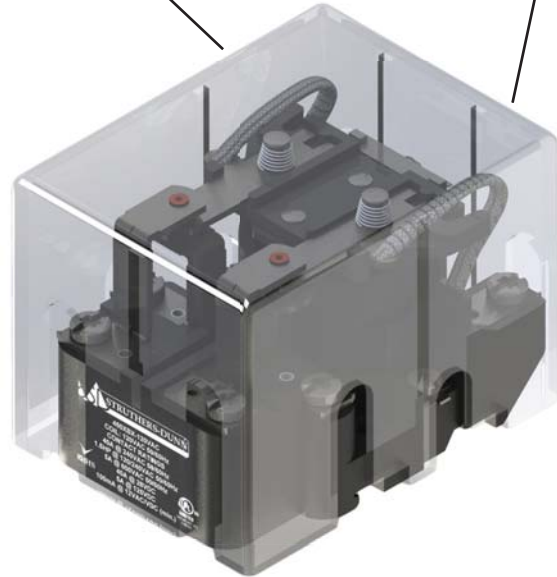
SPECIAL FEATURES

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



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

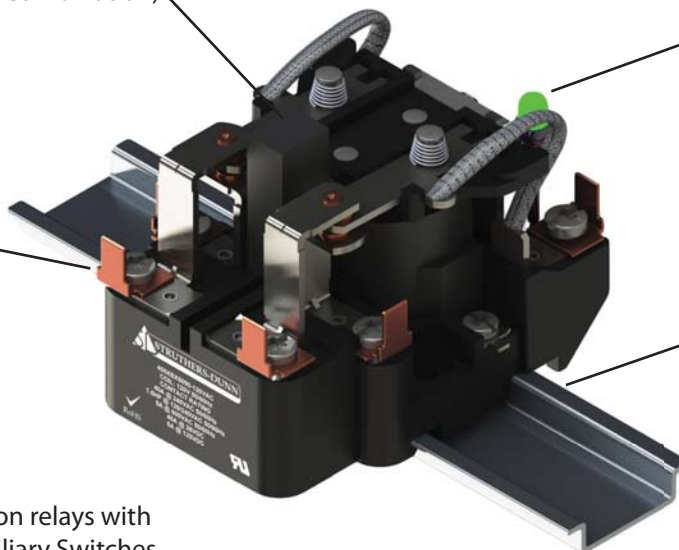
Optional Polycarbonate Protective Cover - (Code "C")



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

Optional Green LED Indicator - (Code "L")

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



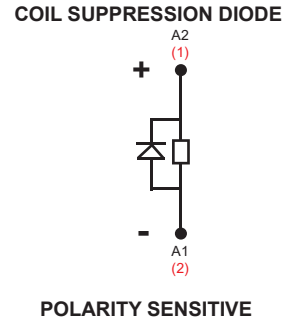
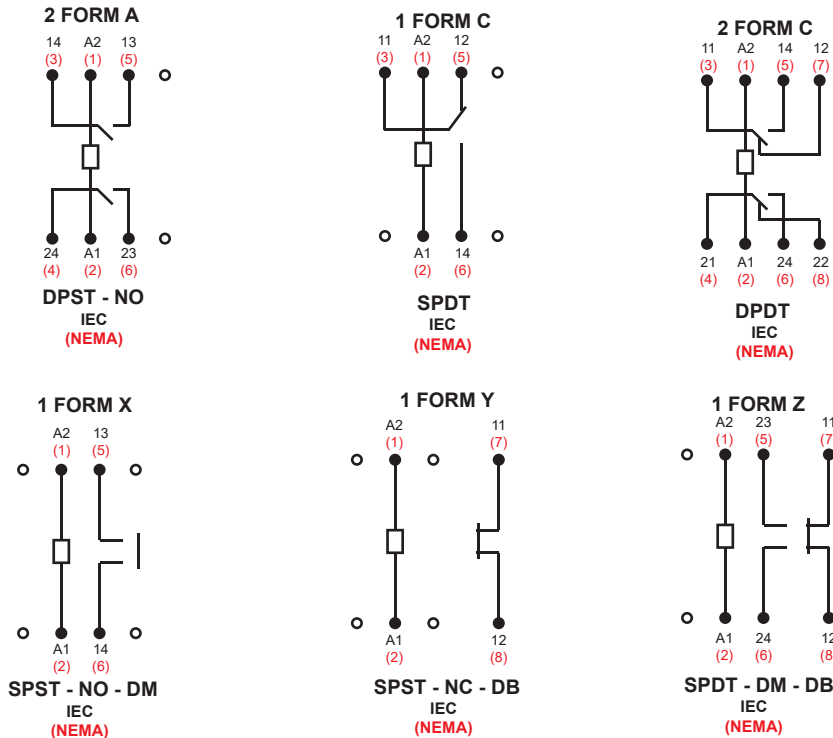
Standard Din Rail & Panel Mount Combination

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



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WIRING DIAGRAMS -SEE PAGES 4 AND 5 FOR TERMINAL LOCATIONS



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)
- 3/8" 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.**

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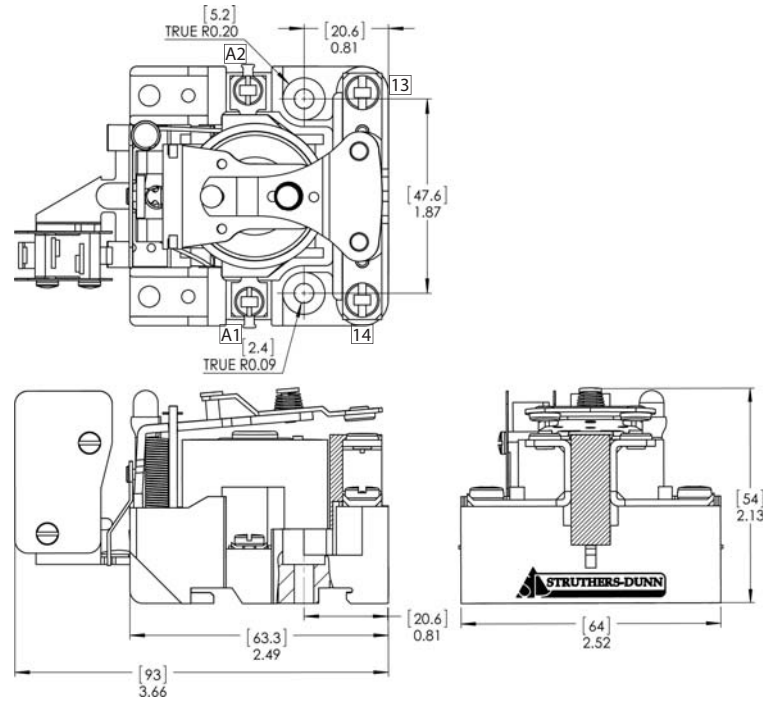
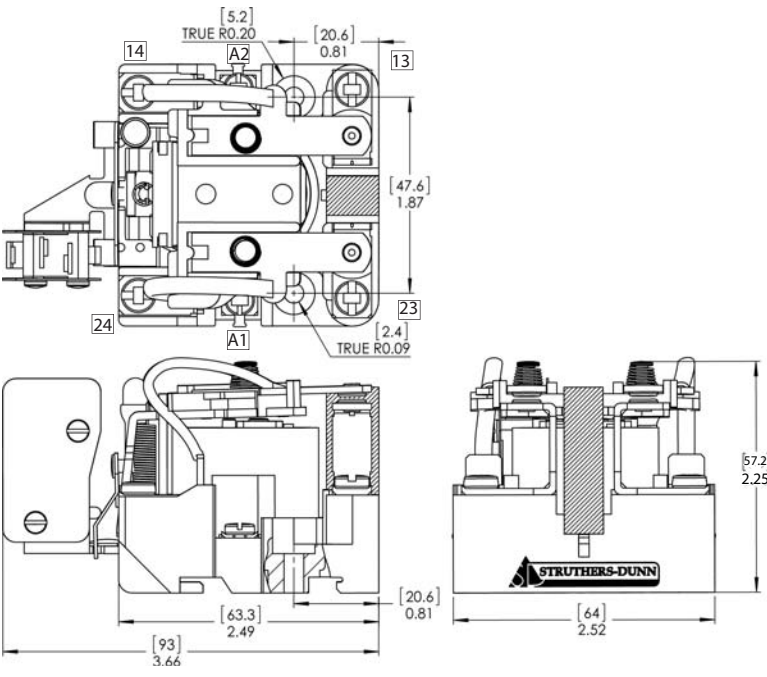


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OUTLINE DIMENSIONS

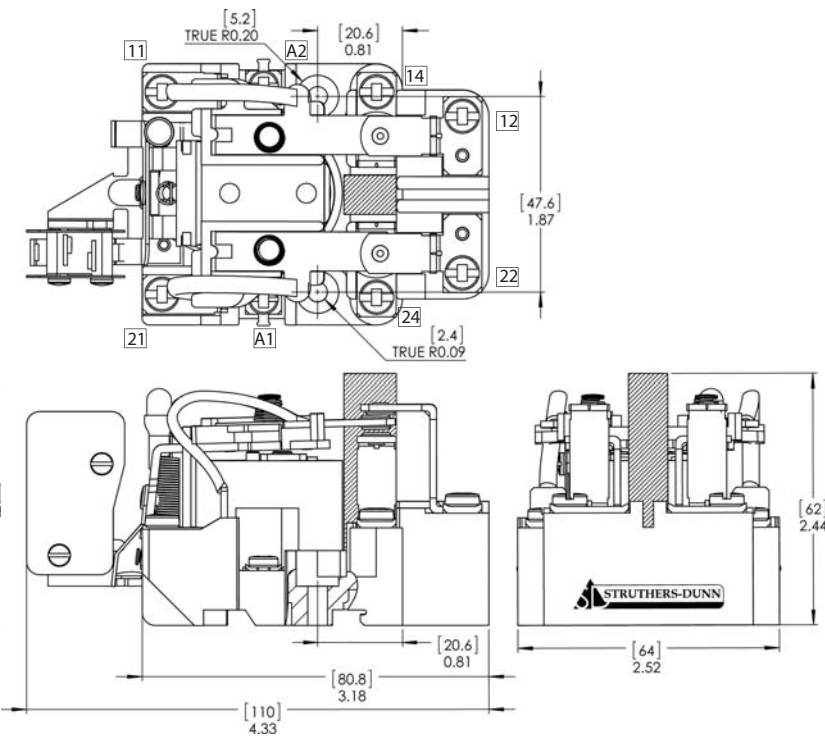
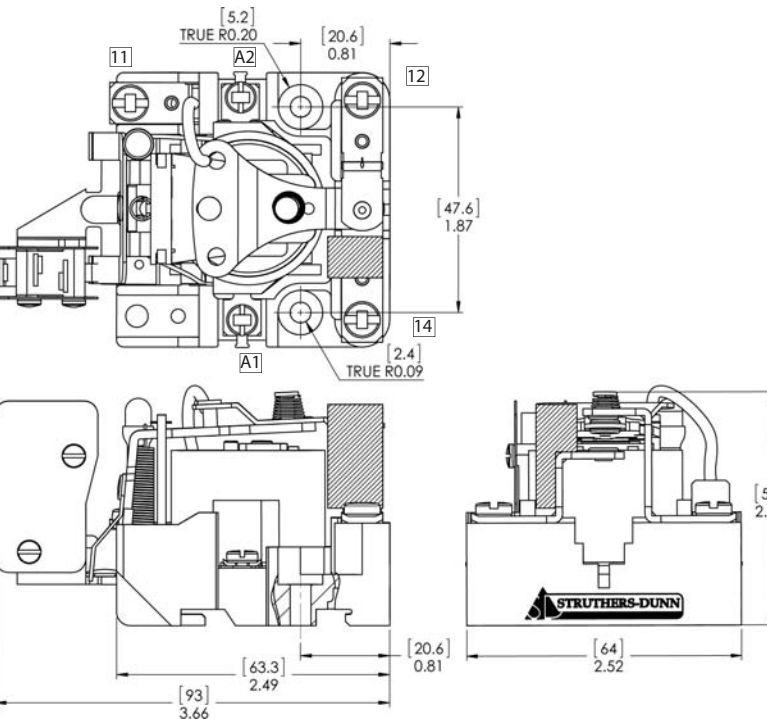
450BXX (DPST - 2 FORM A)

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



450XAX (SPDT - 1 FORM C)

450XBX (DPDT - 2 FORM C)





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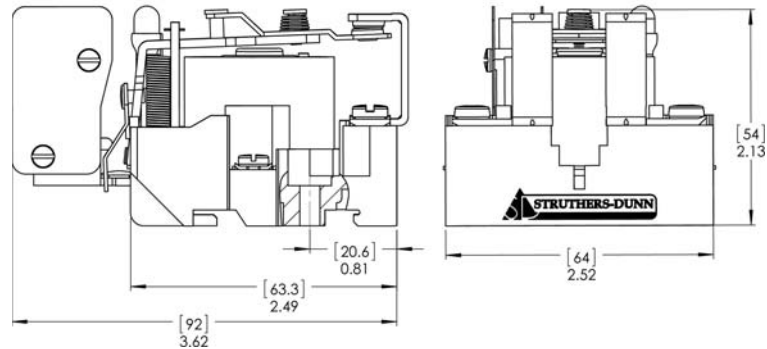
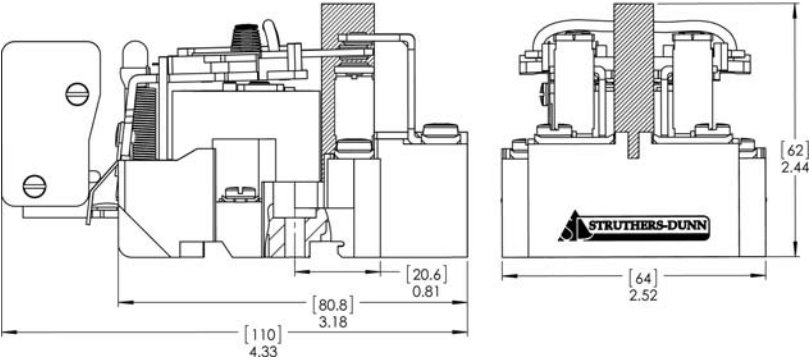
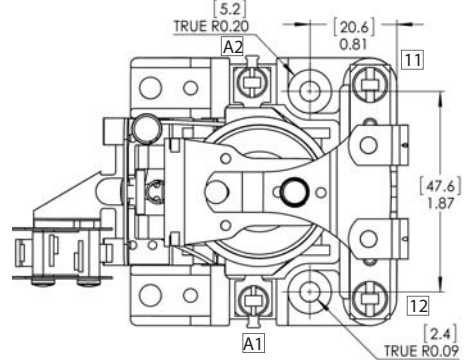
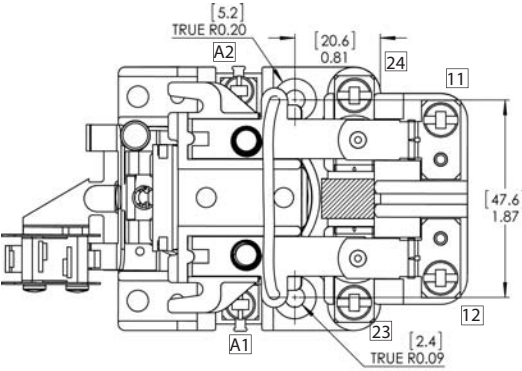
OUTLINE DIMENSIONS

450XHX

(SPDT-DM-DB - 1 FORM Z)

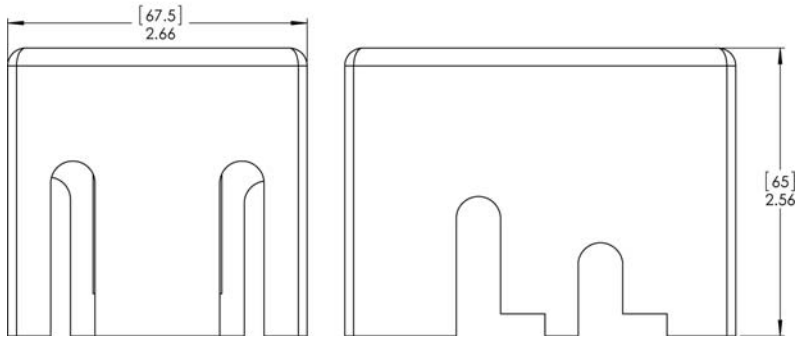
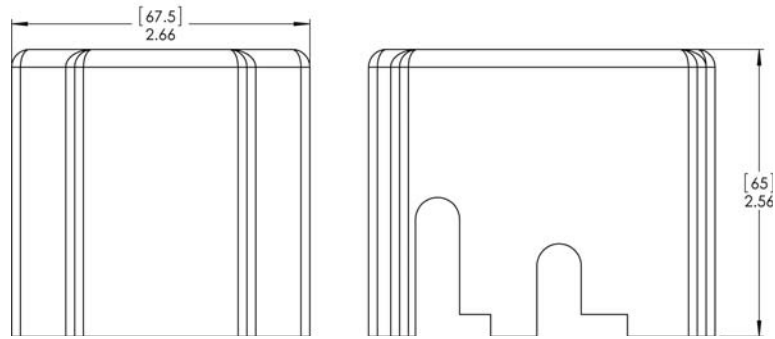
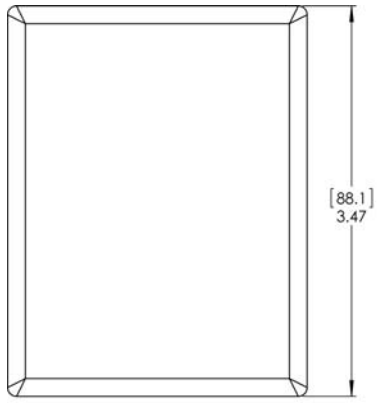
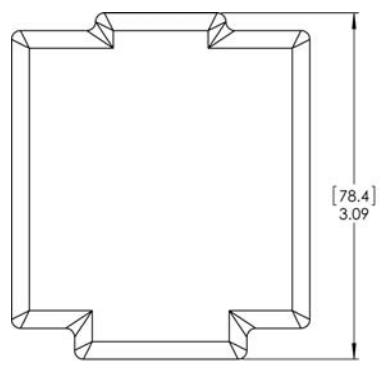
450XXH

(SPST-NC-DB - 1 FORM Y)



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

COVER - LONG BASE
(XBX, XHX)



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