

## Engineering Data

- Meets MIL-R-6106 Type IV
- Weight: 10.5 ounces (284 g)
- Altitude:
  - Rated: 50,000 feet
  - Extended: 80,000 feet with encapsulated terminals
- Ratings:
  - Voltage: 115/200V, 400 Hz, 3 $\Phi$
  - Load Ratings:
    - Resistive: 60 Amps
    - Inductive: 60 Amps
    - Motor: 40 Amps
    - Minimum Current: 4 Amps
    - Rupture: 400 Amps
- Environmental Seal: MIL-STD-202, METHOD 112 Test Condition C Procedure IV
- Seal: 6 x 10-4 STD CC/SEC
- Economizer Coil: 30 Vdc
  - Inrush: 1.25 Amps (20 milliseconds max)
  - Steady State: 0.25 Amps

## Power Contact Ratings (Continuous Duty)<sup>①</sup>

	115/200 Vac 400 Hz	28 Vdc
• Resistive	60 A.	20 A.
• Inductive	60 A.	10 A.
• Motor	40 A.	....
• Minimum Current	4 A.	....
• Rupture	400 A.	....
• Contact Drop		
- Initial	0.150 V Max.	....
- After Life Test	0.175 V. Max.	....
• Contact Bounce	2 Milliseconds	

<sup>①</sup> DC ratings are maximum overload capability. By wiring two poles in series, 28 Vdc rating can be increased to the same as the full AC ratings.

## Options

- AC operated coils
- Encapsulated terminals
- Internal coil suppression
- Suitable for synchronized power supplied transfer

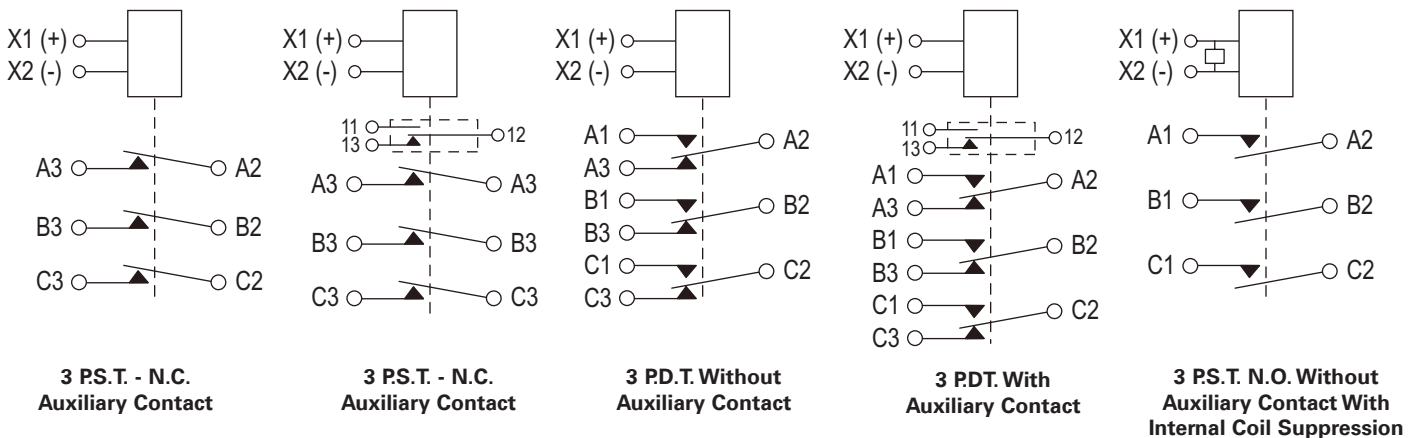
## Selection Table

Poles and Throw-Circuit	Number of Auxiliary Contacts 1 P.D.T.	Government Type Number M6106	Catalog Number
3 P.S.T.-N.O.	—	/10-001	SM15AWD1
	1	/10-002	SM15AXD1
3 P.S.T.-N.C.	—	/11-001	SM15BWD1
	1	/11-002	SM15BXD1
3 P.D.T.	—	/9-001	SM15CWD1
	1	/9-002	SM15CXD1
3 P.S.T.-N.O.	—	10-005*	SM15AWD3

\* Unit supplied with internal coil suppression. 45 V max. peak inverse voltage.



## Typical Wiring Diagrams



## Engineering Data

### Specifications

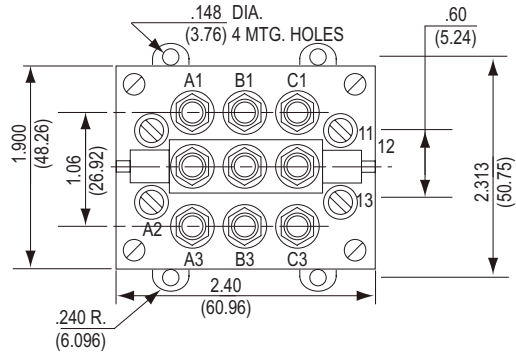
- Meets MIL-R-6106/9, /10, /11 Type IV Environmentally Sealed
  - Continuous Duty Operation
- Power Contacts 400 Hz:
  - Voltage: 115 V Single Phase  
115 V/ 200 V Three Phase
  - Load Ratings per Pole:
    - Resistive: 60 Amps
    - Inductive: 60 Amps
    - Motor: 40 Amps
    - Minimum Current: 4 Amps
    - Overload: 320 Amps
    - Rupture: 400 Amps
  - Electrical Life at Rated Loads: 100,000 operations (50,000 motor)
  - Mechanical Life at 15 Amps: 200,000 operations
- Auxiliary Contacts 115 V 400 Hz/ 28 Vdc:
  - Resistive: 3 Amps
  - Inductive: 1.5 Amps
  - Mechanical: 0.5 Amps
- Operating Temperature: -55°C to 71°C
- Shock: ½ Sine, 25 g's 6 to 9 MS
  - Contact Opening: 1 millisecond maximum
- Acceleration: 15 g's
- Insulation Resistance Minimum
  - Initial: 200 Megohms
  - After Test: 100 Megohms
- Vibration:
  - 5 to 10 Hz 0.08" DA
  - 10 to 55 Hz 0.06" DA
  - 55 to 400 Hz 10 g's
  - 400 to 800 Hz 8 g's
  - 800 to 2000 Hz 8 g's (-55°C to 25°C) 7 g's at 71°
- Dielectric Strength Sea Level 2-5 sec. 60 Hz:
  - Coil & Auxiliary Contacts: 1250 V Initial, 1000 V After Test,
  - Across open power contacts: 1250 V Initial 625 V After Life.
  - All Other Points: 1800 V Initial, 1350 V After Test
- Dielectric Strength Altitude 1 minute 60 Hz:
  - Coil & Auxiliary Contacts: 500 V Initial & After Test
  - All Other Points: 700 V Initial & After Test

### Coil Data

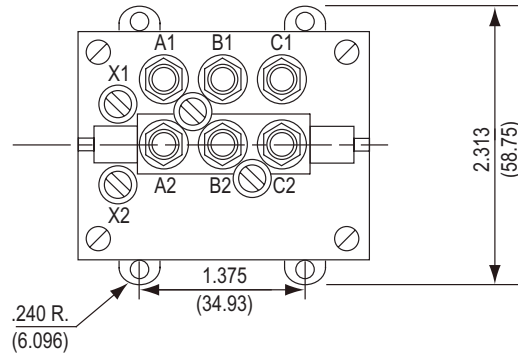
- 28 Vdc: Inrush 1.25 Amps (20 MS Max); Steady State 0.25 Amps
- Pick-up: 17 Vdc. Hold in: 7.0 Vdc  
Drop-out: 1.5 Vdc Unit must drop out at 1.5 Vdc and below and can drop out at any voltage below 7 Vdc.
- Operate Time: 25 MS. Release Time: 25 MS
- Contact Bounce: 2 MS maximum main and auxiliary contacts

## Dimensions Drawings

Top View - SM15CXD1 3PDT and Auxiliary Contacts



Top View - SM15AWD1 3 PST N.O. Contacts. Without Auxiliary Contacts



### Side View

