• Economizer Coil: 30 Vdc

-Inrush: 1.25 Amps

(20 milliseconds max)

-Steady State: 0.25 Amps

# **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: 115/200 V, 400 Hz, 3Æ -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

## **Selection Table**

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

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

# **Typical Wiring Digrams**



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

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



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# **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: 1/2 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**



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