

APPLICABLE SOCKET:
[SO-1021-7127](#)

FEATURES AND CHARACTERISTICS

- Contacts: 2 PDT OR 4 PDT
- Hermetically sealed
- Weight: 10 oz. max.
- Sensing range: 90 to 150 Vrms
- Temperature range: -55°C to +125° C
- Custom units available

GENERAL SPECIFICATIONS

Input voltage	90 to 150 Vrms, line to neutral 3 phase WYE
Input frequency	44 to 450 Hz
Pick-up time delay	50ms to 10 sec ±10%
Drop-out time delay	50ms to 10 sec ±10%
Sensing accuracy	Voltage ±2% to ±10% Frequency: ±2% based on a true sinusoidal input wave form
Phase sequence sensing	ABC
Configuration and contact rating	2 PDT or 10 Amps; 4 PDT, 10 Amps
Temperature range	-55° C to + 125° C
Maximum operating current per phase	75 milliamperes RMS
Voltage transients	PER MIL-STD-704A, CAT.B
Operating cycles at rated resistive load	100,000 cycles min.
Vibration	0.06" D.A., 5 to 80 Hz, 20 g, 80 to 2000 Hz
Shock	50 g, 11 ± 1 ms, 1/2 sine, 3 axes
Acceleration	20 g in any axis
Finish	Tin Plate PER MIL-T-10727
Detailed ordering information	See next page



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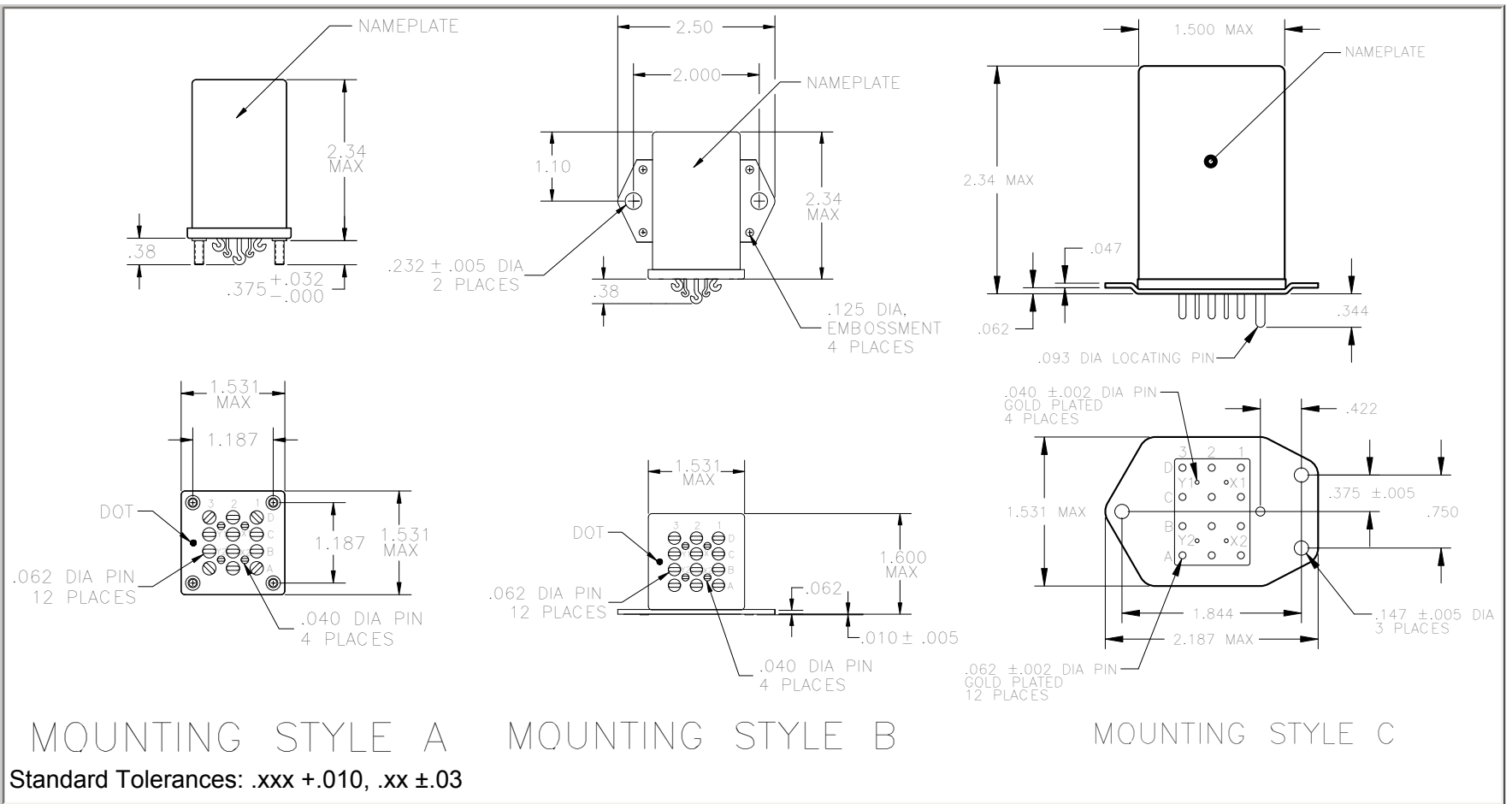
Data sheets are for initial product selection and comparison. Contact Leach International prior to choosing a component.

		Options										
		V710	-	B	J	A	C	-	100 / 120	-	C	A
Basic series designation: AC Voltage sensor												
1-Frequency trip points: 380 Hz and 420 Hz												
2-Output Configuration: 2 PDT, 10 Amps Res, @28 Vdc												
3-Time delay on pickup: .05 second ±10%												
4-Time delay on dropout: 1 second ±10%												
5-Under voltage trip point: 100 VRMS												
6-Over voltage trip point: 120 VRMS												
7-Temperature And Accuracy: -55° C to +85° C, ±10%												
8-Mounting Style And Terminals: Style (A,B,C)												

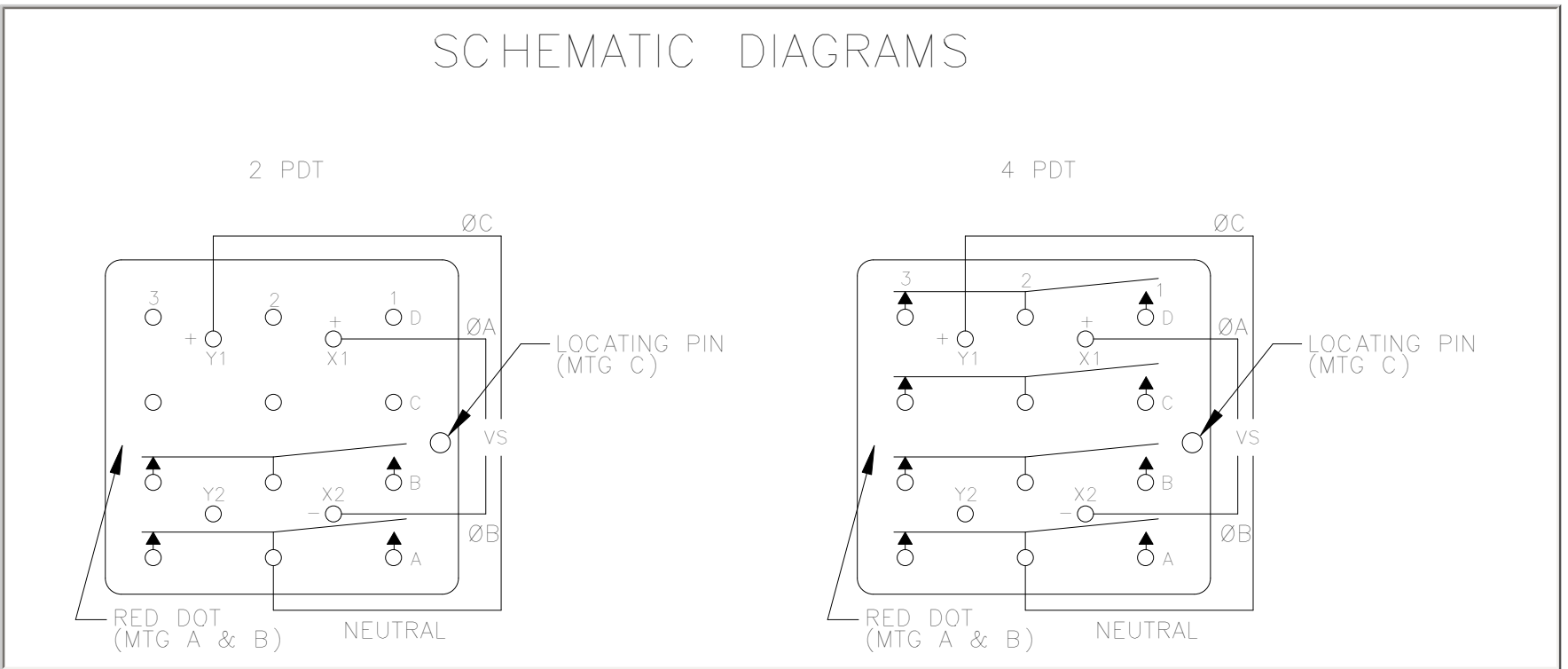
<p>1. SERIES NUMBER Indicates function, physical dimensions and weight V710-AC Power monitoring sensor, 1.53 x 1.60 x 2.34 wt 10 oz. max.</p>		<p>4. TIME DELAY ON PICKUP _____ 5. TIME DELAY ON DROPOUT _____</p>																																																													
<p>2. FREQUENCY TRIP POINT</p> <table border="1"> <thead> <tr> <th>Code Letter</th> <th>Under Frequency</th> <th>Trip Point Over Frequency</th> </tr> </thead> <tbody> <tr><td>A</td><td>390</td><td>410</td></tr> <tr><td>B</td><td>380</td><td>420</td></tr> <tr><td>C</td><td>370</td><td>430</td></tr> <tr><td>D</td><td>360</td><td>440</td></tr> <tr><td>E</td><td>350</td><td>450</td></tr> <tr><td>F</td><td>58</td><td>62</td></tr> <tr><td>G</td><td>56</td><td>64</td></tr> <tr><td>H</td><td>54</td><td>66</td></tr> <tr><td>I</td><td>52</td><td>68</td></tr> <tr><td>J</td><td>48</td><td>52</td></tr> <tr><td>K</td><td>46</td><td>54</td></tr> <tr><td>L</td><td>44</td><td>56</td></tr> </tbody> </table>		Code Letter	Under Frequency	Trip Point Over Frequency	A	390	410	B	380	420	C	370	430	D	360	440	E	350	450	F	58	62	G	56	64	H	54	66	I	52	68	J	48	52	K	46	54	L	44	56	<table border="1"> <thead> <tr> <th>Code Letter</th> <th>Seconds</th> <th>Seconds</th> </tr> </thead> <tbody> <tr><td>A</td><td>.05</td><td>.05</td></tr> <tr><td>B</td><td>.50</td><td>.50</td></tr> <tr><td>C</td><td>1</td><td>1</td></tr> <tr><td>D</td><td>2</td><td>2</td></tr> <tr><td>E</td><td>5</td><td>5</td></tr> <tr><td>F</td><td>10</td><td>10</td></tr> </tbody> </table>		Code Letter	Seconds	Seconds	A	.05	.05	B	.50	.50	C	1	1	D	2	2	E	5	5	F	10	10
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<p>3. OUTPUT CONFIGURATION, CONTACT RATINGS MIL-PRF-83536 TYPE J 2 PDT, Leach series J relay, 10 Amp resistive, @28 Vdc and 115 Vac, 400 Hz K 4 PDT, Leach series K relay, 10 Amp resistive, @28 Vdc and 115 Vac, 400 Hz NOTE: For additional data on contact ratings, contact the factory.</p>		<p>6. UNDER VOLTAGE TRIP POINT Sensing range: 90 to 150 Vrms Specify trip point within indicated sensing range using three digits, e.g. Trip Point: 90 Vrms Specify: 090</p> <p>7. OVER VOLTAGE TRIP POINT Sensing range: 90 to 150 Vrms Specify trip point within indicated sensing range using three digits, e.g. Trip Point: 124 Vrms Specify: 124</p>																																																													
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NOTES

<p>1. Operating Mode A. The output relay will energize when all of the following conditions exist: 1. Each of the three phase voltages is within the under and over trip point limits 2. The frequency is within the selected under and over trip point limits 3. The phase rotation is ABC 4. The pickup time delay period is completed B. The output relay will change to or remain in the de-energized state when any or all of the above conditions are not met (including an open circuit phase) C. The output relay will change state (energize or de-energize) after the selected time delay ±10% D. The time delays for pickup and dropout are independent and an internal signal from the sensing circuit to change the state of the relay always initiates a full time delay period</p>
<p>2. Dielectric Strength Input to case 1,000 VRMS 10 Amp contacts contacts to case 1,250 VRMS Across open contacts 1,250 VRMS</p>
<p>3. Hysteresis Units have a typical voltage hysteresis of 2% maximum and frequency hysteresis of 2 Hertz maximum to eliminate cycling due to small changes in voltage and/or frequency at each trip point.</p>
<p>4. Contact factory for power monitor sensor requirements such as frequency and voltage trip points and time delay values not covered in this publication.</p>



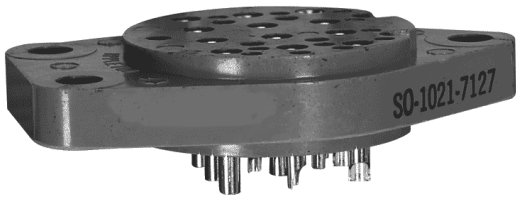
SCHEMATIC DIAGRAM



SO-1021-7127/7126

ENGINEERING DATA SHEET

RELAY SOCKET
10 AMP



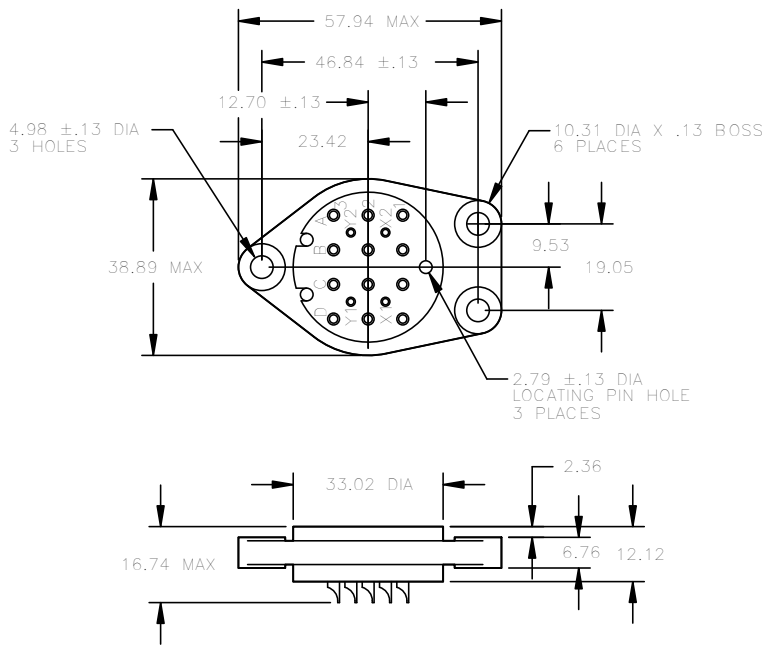
BASIC SOCKET SERIES DESIGNATION FOR:

Series V110, V210, V310, V710, F410, P510

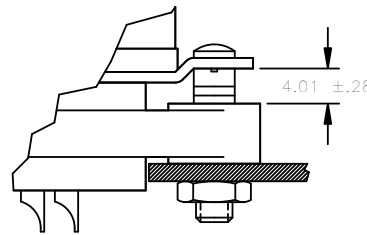
DESIGNED TO THE STANDARDS AND REQUIREMENTS OF:

MS 25462-1

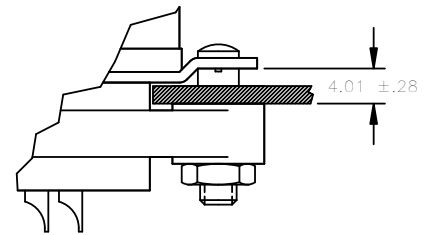
SOCKET DRAWING



HARDWARE MOUNTING



TOP MOUNTED



BOTTOM MOUNTED

GENERAL CHARACTERISTICS

1. Supplied with mounting hardware (SO-1021-7127) or without mounting hardware (SO-1021-7126).	
2. Standard tolerances	.xx ±.01; xxx ±.005.
3. Weight	.080 lb. max.
4. Temperature range	-55° C to +125° C



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