

## 3PHASE PHANTOM LOADING KIT

### Technical Specification:

<b>Type</b>	: Continuously Variable Type
<b>Model No.</b>	: SR-VPF-320/10-3P
<b>Input</b>	: 415V AC $\pm$ 10%, 50Hz, 3P 4W or 3P 3W
<b>Capacity</b>	: 450VA in Total
<b>Application</b>	: To test and calibrate 3P 4W, 3P 3W and 1P 2W Active, Reactive, and Apparent Power Energy Meter, Voltmeter, Ammeter, PF Meter.
<b>Salient Feature</b>	: <ol style="list-style-type: none"><li>1. Variable 3P Output Voltage ( 0 – 320V AC, P-N ).</li><li>2. Variable 3P Output Current ( 0 – 10.0A AC per Phase ).</li><li>3. Variable Phase Angle in all 3 Phases ( <math>0^{\circ}</math> - <math>360^{\circ}</math> ).</li><li>4. Voltage Selection ( 110V AC / 220VAC(P-N) with Off )</li><li>5. Current Selection ( 1A AC /10A AC per Phase with Off )</li><li>6. Current Forward / Reverse Selection</li></ol>

### **Voltage Output:**

Voltage Range	: 0 – 320V AC per Phase (P-N)
Range Selection	: 110V / 220V / Off
110V Range	: 0 – 150V AC
220V Range	: 0 – 320V AC
Burden	: 100VA per phase
Volt Adjustment	: By a manual Variac in each phase

### **Current Output:**

Current Range	: 0 – 10.0A AC per Phase
Range Selection	: 1.0A / 5.0A /Off
1.0A Range	: 0 – 1.5A AC
5.0A Range	: 0 – 10.0A AC
Burden	: 50VA per phase
Amp Adjustment	: By a manual Variac in each phase

## Phase Angle :

Phase Angle : 2 Nos. of Selector Switches is provided to change Phase Angle of 3 Phases at the same time as follows.

1. **Coarse Selection(X,Y,Z)** : Using this Switch, Phase Angleranges  $X = 0^{\circ} - 120^{\circ}$ ,  $Y = 121^{\circ} - 240^{\circ}$ ,  $Z = 241^{\circ} - 360^{\circ}$  are selectable.
2. **Fine Selection(A,B,C,D)** : Using this Switch, Phase Angles will be selected in 4 ranges within the range selected by **Coarse Selection** Switch. For example, if  $X = 0^{\circ} - 120^{\circ}$  is selected by Coarse Selection, by **Fine Selection**  $A = 0^{\circ} - 30^{\circ}$ ,  $B = 30^{\circ} - 60^{\circ}$ ,  $C = 60^{\circ} - 90^{\circ}$  and  $D = 90^{\circ} - 120^{\circ}$  ranges will be selected.

Phase Angle will be continuously adjustable by a Manual Variac in each phase for  $30^{\circ}$  in the range selected by **Fine Selector** Switch.

## Phase Angle Selection Table :

Fine	A	B	C	D
Coarse	Phase Angle	Phase Angle	Phase Angle	Phase Angle
$X = 0^{\circ} - 120^{\circ}$	$0^{\circ} - 30^{\circ}$	$30^{\circ} - 60^{\circ}$	$60^{\circ} - 90^{\circ}$	$90^{\circ} - 120^{\circ}$
$Y = 121^{\circ} - 240^{\circ}$	$120^{\circ} - 150^{\circ}$	$150^{\circ} - 180^{\circ}$	$180^{\circ} - 210^{\circ}$	$210^{\circ} - 240^{\circ}$
$Z = 241^{\circ} - 360^{\circ}$	$240^{\circ} - 270^{\circ}$	$270^{\circ} - 300^{\circ}$	$300^{\circ} - 330^{\circ}$	$330^{\circ} - 0^{\circ}$

## Power Factor :

Range : Measurement of Power Factor range will be -ZPF to Unity to +ZPF

Forward / Reverse : Forward / Reverse selection Switch is provided for Output Currents.

Protection : Glass Fuse is provided for Input Power, Voltage Outputs and Current Outputs.

Meter : 1 No. Multi Function Meter is provided for the indications of 3P Voltages, 3P Currents, Power Factor and Phase Angle.

Terminals : For 3P Voltage Outputs R, Y, B, N terminals are provided. For 3P Current Outputs R1-R2, Y1-Y2, B1-B2 terminals are provided.

Input Cable : Suitable 4 Core ( 2mts ) input power cable of suitable size will be provided.

Output Cable : Not in our scope of supply.

Enclosure : Two types of enclosures will be provided.

1. Table Top Model
2. Portable Type ( Box Type )

Customer should mention the type while ordering.

Test Certificate : In-house Test Certificate will be provided along with Kit.

Guarantee : Guarantee Certificate for 12 Months from the date of Supply will be provided along with Kit.

Manual : Detailed instruction manual will be supplied along with Kit.

Spares : One set of spare fuses will be supplied along with Kit.