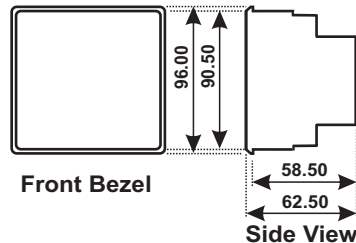




CAT.No./ Model No.  
SDV-VAF96

### MECHANICAL INSTALLATION

Size : 96x96 Sq.mm  
Panel Cut out [ 92.00(±0.5)x92.00(±0.5) ]



Note: All dimensions are in mm

### SPECIFICATION

<b>Display</b>	: 3 rows of 3 digits Seven segment Red color display of 0.56" digit height.
<b>Wiring Input</b>	: 3 Ø-4 wire, 1Ø-2 wire
<b>Rated Input Voltage</b>	: 11 to 325V AC(L-N) and 19V to 563 VAC(L-L).
<b>Rated Input Current</b>	: Nominal 5A AC min (30mA-6A AC)
<b>Frequency Range</b>	: 10.0-88.0 Hz
<b>CT Ratio</b>	: 5A - 25,000A AC i.e. 25.0KA by 15 A CT & 1A - 5000A AC i.e. 5.00KA by 1 A CT (Programmable for any value, 5000 is max. multiplier).
<b>PT Ratio</b>	: (Programmable for any value, 5000 is max. multiplier) <b>Example :</b> a) 11.0KV/110V, Select <b>Ptr</b> = 100. b) 33.0KV/110V, Select <b>Ptr</b> = 300. c) 220KV/110V, Select <b>Ptr</b> = 2000. d) 440KV/110V, Select <b>Ptr</b> = 4000.
<b>RPM</b>	: 80 - 10560 (for pole selection between 1 - 15 & for Freq. Range 10 Hz - 88Hz).
<b>Run Hour</b>	: 0 - 99999.9Hr.
<b>Burden</b>	: 0.5VA @ 5A Per Phase.
<b>Auxiliary Supply</b>	: 230 VAC (±20%), 50Hz, [ Separately mention at the time of Ordering ] 110 VAC (±20%), 60Hz.
<b>Temperature Range</b>	: 0 - 50 °C (Operating) -20 to 70 °C (Storage)
<b>Humidity</b>	: Upto 85% RH (non-condensing)
<b>Mounting</b>	: Panel Mounting
<b>Accuracy</b>	: ± 1.0 %
<b>Resolution</b>	: Voltage/ Current : Depends on P.T and C.T Ratio settings. Frequency : 0.1 Hz. RPM : 1 RPM. Run Hour : 0.1 Hr (6 minutes).

### WORKING

- Step 1 :** Make the connection as per the Wiring Diagram. Then **Switch - ON** the device.
- Step 2 :** It will start displaying all the digits from 0-9, then it will work with **default settings** and start displaying  
**1st page** (Phase to phase voltage),  
**2nd page** (Phase to Neutral Voltages) ,  
**3rd page** (Line Current),  
**4th page** (Avg Phase to phase Vol, Line Current, Frequency),  
**5th page** (Avg Phase to neutral Vol, Line Current, Freq.),  
**6th page** (RPM),  
**7th page** (Engine Run Hour)  
with 6 sec. interval between each page.  
**Default setting are :** a) PTR Ratio : 1  
b) CTR Ratio : 1  
c) No. of Poles : 4  
d) Scroll : Enable (Auto).

**Customized Settings :** For customized setting go to set mode by pressing **Set key**

- Step 3 :** Select PT Ratio, **Ptr** between 0000-5000 with the help of **UP** and **DOWN** Keys as shown in **Fig. (1)**.

Press set key again to go to next parameter setting, CT Ratio i.e Ctr.

- Step 4 :** Select **Ctr** between 0000-5000 as shown in **Fig. (2)** with the help of **UP** and **DOWN** Keys, **example :**

**C.T Ratio :** 5A - 25,000AAC by 5 A CT & 1A - 5000AAC by 1 A CT (Programmable for any value, 5000 is max. multiplier)  
**Example :** a) For Current range upto 200A, select **Ctr** = 200/5=40 for /5A C.T and 200/1=200 for /1A C.T.  
b) For Current range upto 5000A or 5.00KA select **Ctr** = 5000/5=1000 for /5A C.T and 5000/1=5000 for /1A C.T.

- Step 5 :** Select no. of **Poles** , **PoL** : 1 - 15, to calculate **RPM** as shown in **Fig.(3)**. Now press SET key again to go to next selection.

- Step 6 :** **SCROLL ENABLE (AUTO) / SCROLL DISABLE (MANUAL) MODE SELECTION :** Press UP or DOWN KEY to toggle between ENABLE / DISABLE.

As shown in **Fig.(4)**.

Now press SET key again to go to next selection.

- Step 7 :** **Run Engine Hour Enable / Disable :** As shown in **Fig. (5)**. Now press SET key again to go to next selection.

- Step 8 :** **Select 3 Phase or 1 (Single Phase) :** As shown in **Fig. (6)**. Now press SET key again to go to next selection.

- Step 9 :** **Now store/Enter these values with Yes or no :** As shown in **Fig. (7)**.  
**If yes** , then press SET key to come out of the SET mode . Now you Enters into the Running Mode and again If it is in Scroll Enable Mode(**Auto**) then It will display all pages from **Page 1 to Page 7** and Vice -Versa at an interval of 6 seconds between each page and if it is in Scroll Disable Mode(**Manual**) then it will keep on displaying single page and if u want to go to other page then keep on pressing any of the UP/Down key till you reach to the desired page.

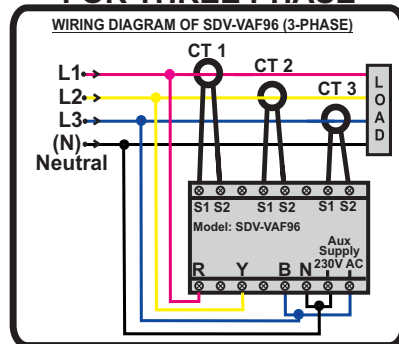
**If no** then it will Enter back to the SET Mode.

**Note :** You can also toggle between Scroll Enable mode(**Auto**) and Scroll Disable mode (**Manual**) while in **Running mode** by pressing **UP and DOWN** Keys simultaneously

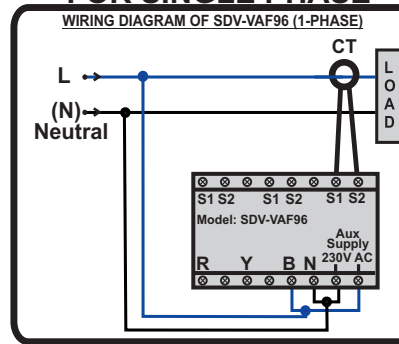
.....Turn Back

### WIRING DIAGRAM

#### FOR THREE PHASE



#### FOR SINGLE PHASE



**SET /ENTER Mode Description**

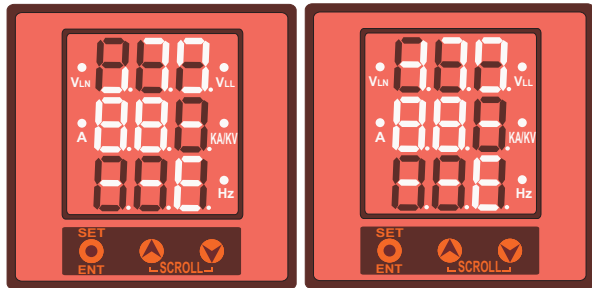


Fig. (1)

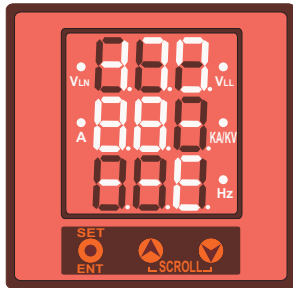


Fig. (2)

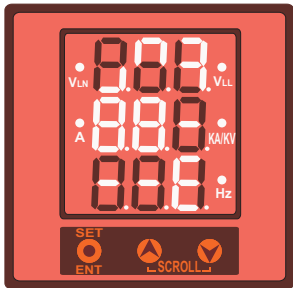


Fig. (3)



Fig. (4)

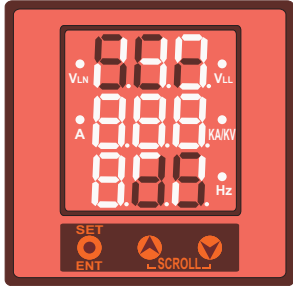
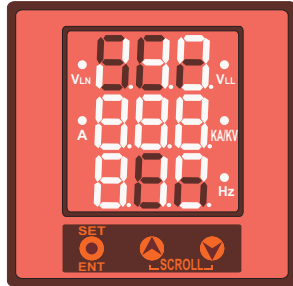


Fig. (5)

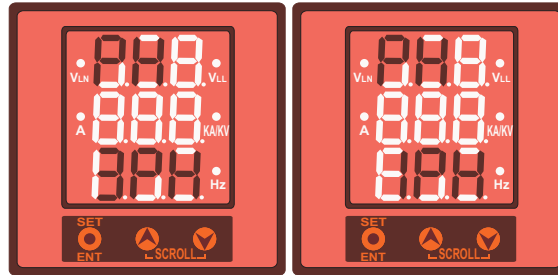


Fig. (6)

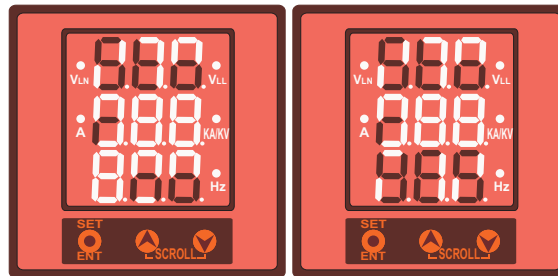
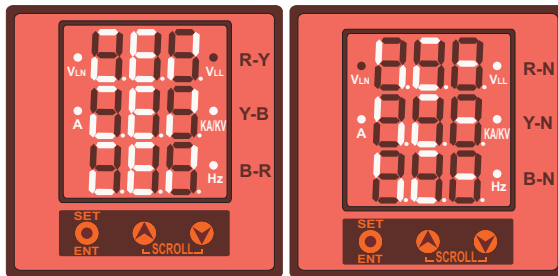


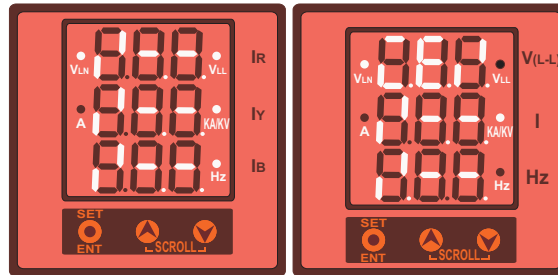
Fig. (7)

**Page wise Description**



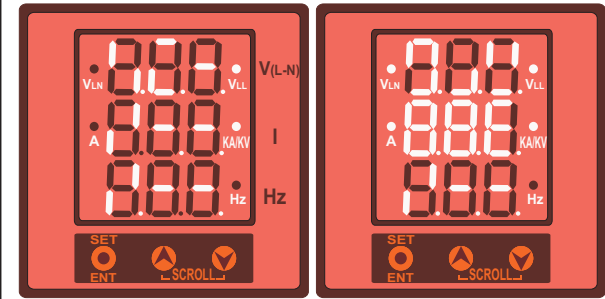
Page 1 (Vol. Line-Line)

Page 2 (Vol. Line-Neutral)



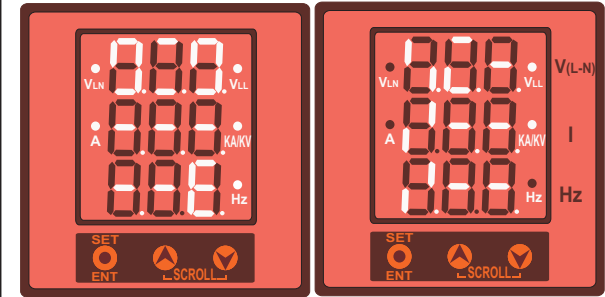
Page 3 (Line Current)

Page 4 (Avg. Line-Line)



Page 5 (Avg. Line-Neutral)

Page 6 (RPM)



Page 7 (Run Hour)

Page 8 (For 1Ø 2Wire System)

**Note :** For 3Ø 4Wire System : Page 1 to 7 get displayed in Scroll Enable(Auto) or Scroll Disable (Manual) Mode.

For 1Ø 2Wire System : Page 6 to 8 get displayed in Scroll Enable(Auto) or Scroll Disable (Manual) Mode.

Further, for any queries contact :

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**09873136248,09458105707**  
**email : dpm.surdhi@gmail.com**