

# POWER METER

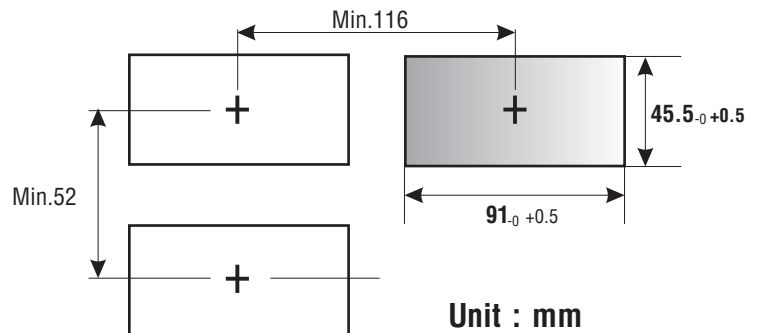
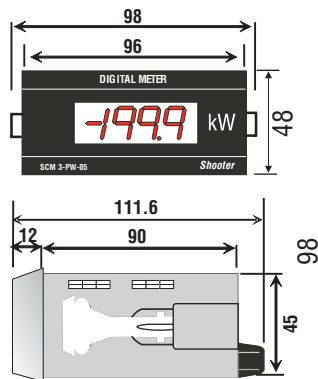
## Ordering information

**S C M 3 - P 0.5 3 - Ru 6**

Measuring input

NO	AC VOLTAGE	AC CURRENT		
1	50 V	1 or 5 A		
2	100 V	1 or 5 A		
3	200 V	1 or 5 A		
4	$(3 \times 100) / \sqrt{3} \text{ V}$	Direct 3P,4W or VT	1 or 5 A	It must be use C.T ( Max. 6A )
5	$(3 \times 200) / \sqrt{3} \text{ V}$		1 or 5 A	
6	$(3 \times 400) / \sqrt{3} \text{ V}$		1 or 5 A	
Rr	Power reverse Relay - 1A.250V			
Ro	Over power Relay - 1A.250V			
3	3 ½ digit - Average value - RMS value			
4	4 ½ digit - Average value - RMS value			
0.5	Class 0.5			
1	Class 1			
PW	Watt			
PR	VAR			
1	1 Element			
3	3 Element			
M	Series Meter for DIN size W96 x H48mm			

## Panel cut - out



## ■ Features

- Indicating 1999.
- AUTO ZERO
- HOLD function(with Watt, Var single phase 2wire ) .  
Available average measuring value for sine wave value/measuring value for root mean
- DIN size of W96 x H48.
- Diverse models of indicator, single preset,

## ■ Rating

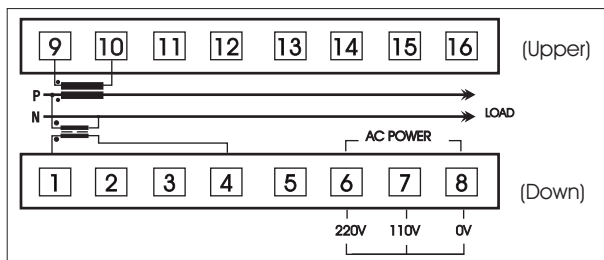
Model	SCM-1PW-05-3-2 SCM -1PR-05-3-2	SCM-1PW-05-3-Pr-3 SCM -1PR-05-3-Ru-2	SCM-3PW-01 SCM -3PR-01	SCM-2PW-01 ( 3P-3W) SCM -3PR-01 (3P-3W)
Measuring	AC Power			
Power supply	110/ 220VAC 50/60Hz			
Operating voltage range	90 to 110% rated voltage			
Power consumption	AC : 4VA			
Display method	7 Segment LED Display			
Indicating accuracy	F.S ±0,2% rdg. ±1digit		AC : FS ± 1,0% rdg. ± 1digit	
Sampling control	300mS			
Operating method	Dual slope A/D conversion			
Response time	2sec (0 to Max)			
Max, input	150% per each range, but 400VAC is 120%, 6 A.AC			
Sampling time	2,50operation/sec			
Power consumption	—————			250VAC 1A 1C

## ■ Characteristic

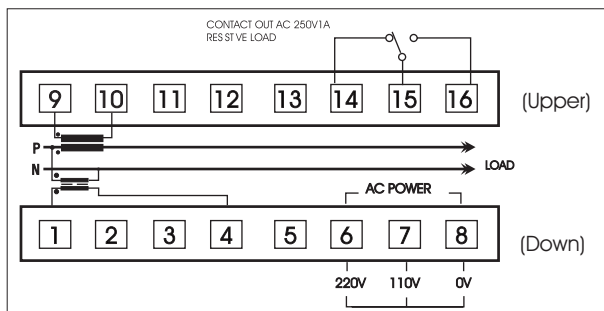
Insulation Resistance	100M Min. (At 500VDC) between power input terminal and control output terminal			
Impulse voltage	2000VAC 50/60Hz for 1 minute between power input terminal and control output terminal			
Noise	The square wave noise (pulse width :1 μs) by the noise simulator±300V	The square wave noise (pulse width 1μs ) by the noise simulator± 1KV		
Vibration	Mechanical durability	0,75mm amplitude at frequency of 10 to 55Hz in each of X, Y, Z directions for 1hour		
	Malfunction durability	0,5mm amplitude at frequency of 10 to 55Hz in each of X, Y, Z directions for 10 minutes		
Shock	Mechanical durability	300m/S <sup>2</sup> (30G) in X, Y, Z directions for 3 times		
	Malfunction durability	100m/S <sup>2</sup> (10G) in X, Y, Z directions for 3 times		
Ambient operating temperature	0 to 50°C	°		
Ambient storage temperature	-25 to 65°C (at non-freezing status)			
Ambient humidity	35 to 85% RH			
Weight	MS : About 52g	SCM1XX : About 170g	SCM1PW1-3-Ru-5 :About 343g	SCM-3PW05 : About 434g

■ Terminal Connection

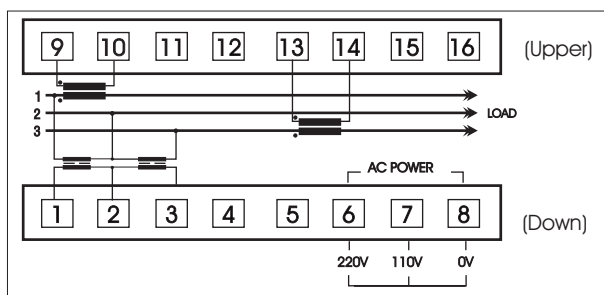
● 1 phase 2wire ( W or Var )



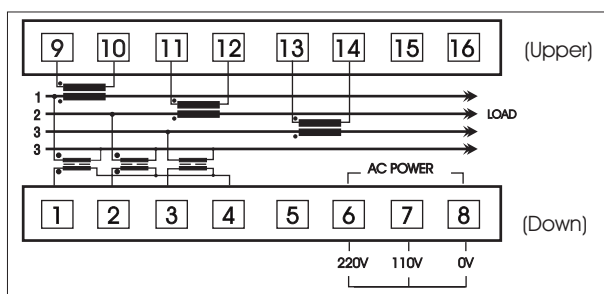
● 1 phase 2wire ( W or Var )  
with power reverse relay



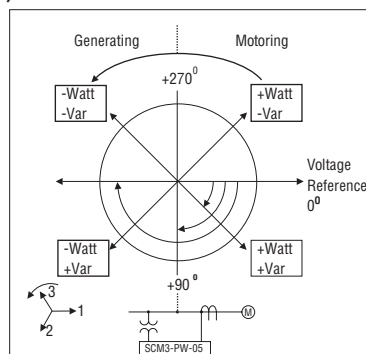
● 3phase 3wires unbalance load( W or Var )



● 3phase 4wires unbalance load( W or Var )



1) Power Measurement Conventions

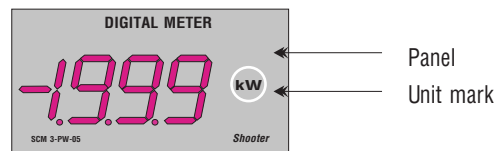


2) Connection terminals

Terminals No.	Items	Contents
1 2	+5V GND	The power terminal (5VDC)
3	HOLD	Note connection diagram
4 5 6 7	D.P1 D.P2 D.P3 D.P COM	Selection terminals of decimal point. - Common terminal of decimal point. $10^3$ $10^2$ $10^1$ <b>1.9.9.9</b>
8 9 10	IN- NC IN+	Measuring signal input terminal

3) Unit mark

There is no unit mark in the SCM meter, please attach the unit mark on the panel board.



4) Caution

- Take care of insulation because it is not insulated between signal input line and power line.
- Be sure to supply the power after checking polarity of the power.
- If polarity of the power is connected in the opposite direction, the inner circuit can be damaged.
- Take care of direction of the connector in order not to mount it in the opposite direction.
- If the display indicate 1 or -1, be sure to turn off the power and check external connection, in this case the input signal is higher than full scale range or the power is lower than the rated voltage.