

WATTHOUR METER / VAR METER

(Transducer Type)

PWD-96 /
PWVD-96

Power Meter (1)

Type	Rated Value (2)	Max. scale value peculiar to meter (kW)	Consumption VA		Accessory Transducer
			Voltage	Current	
Single phase	110V, 5A (1A)	0.35~0.6	2VA	1VA	WT-62M-12
	220V, 5A (1A)	0.7~1.2	3.5VA	1VA	
Three phase	110V, 5A (1A)	0.6~1.2	each phase 2VA	each phase 1.5VA	—
	220V, 5A (1A)	1.2~2.4	each phase 3.5VA	each phase 1.5VA	
Three phase 4 wire (3)	110 $\sqrt{3}$ V, 5A (1A)	0.6~1.2	each phase 1.5VA	each phase 1.5VA	—
	220 $\sqrt{3}$ V, 5A (1A)	1.2~2.4	each phase 3VA	each phase 1.5VA	

Note:

(1) Please refer to page for manufacture limit and Max. scale value.

(2) When above rating is exceeds, please external CT or VT respectively to meter 110V, 5A (1A)
Usable voltage range: 110V: 90~130V; 220V:180~260V

(3) Three phase 4 wire is voltage balance.

* For High-frequency ware, please specify the frequency.

For SCR Wareform Meter

Type name: PWD-96H-□-□

Aux. power is necessary. (3 phase 4-wire can not be manufactured.)

*Max. scale value peculiar to meter is calculated like following formula, when sxtrnal VT/CT.

Max. scale value peculiar to meter = (max.scale value) divided by (VT ratio X CT ratio)

Var Meter (2)

Type	Rated Value (2)	Max. scale value peculiar to meter (kW)	Consumption VA		Accessory Transducer
			Voltage	Current	
Single phase (3)	110V, 5A (1A)	0.35~0.6	2VA	1.5VA	WVT-62M-12
	220V, 5A (1A)	0.7~1.2	3.5VA	1.5VA	
Three phase (3)(4)	110V, 5A (1A)	0.6~1.2	each phase 2VA	each phase 1.5VA	—
	220V, 5A (1A)	1.2~2.4	each phase 3.5VA	each phase 1.5VA	
Three phase 4 wire (4)(5)	110V, 5A (1A)	0.6~1.2	each phase 2VA	each phase 1.5VA	WVT-83M-34
	220V, 5A (1A)	1.2~2.4	each phase 3.5VA	each phase 1.5VA	

Note:

(1) Please refer to page for manufacture limit and Max. scale value.

Standard scale: Lead□var~0~Lag□var.

(2) When above rating is exceeds, please external CT or VT respectively to meter 110V, 5A (1A)
Usable voltage range: 110V: 90~130V, 220V: 180~260V.

(3) Please specify the frequency (50Hz or 60Hz) for single phase circuit and 3 phase unbalanced circuit.

(4) Please use 3 phase, 3 phase 4-wire in positive sequence.

(5) 3 phase 4 wire is voltage balance.

For SCR Control Wareform

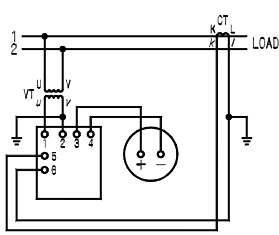
Type name: PWD-96H-□-□. Aux. power is necessary (3 phase 4-wire can not be manufactured)

WATTHOUR METER / VAR METER (Transducer Type)

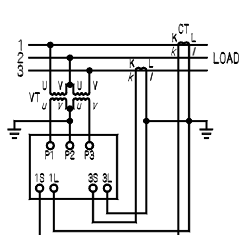
PWD-96 /
PWVD-96

Connection Diagram

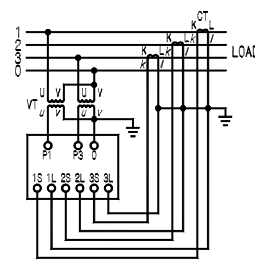
Single phase power meter/
Single phase var meter
PWD-96-12/ PWVD-96-12
External WT(WVT)-62M-12



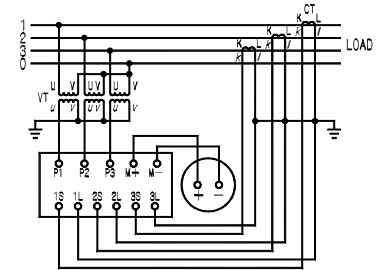
Three phase power meter/
Three phase var meter
PWD-96N-33
PWVD-96N-33



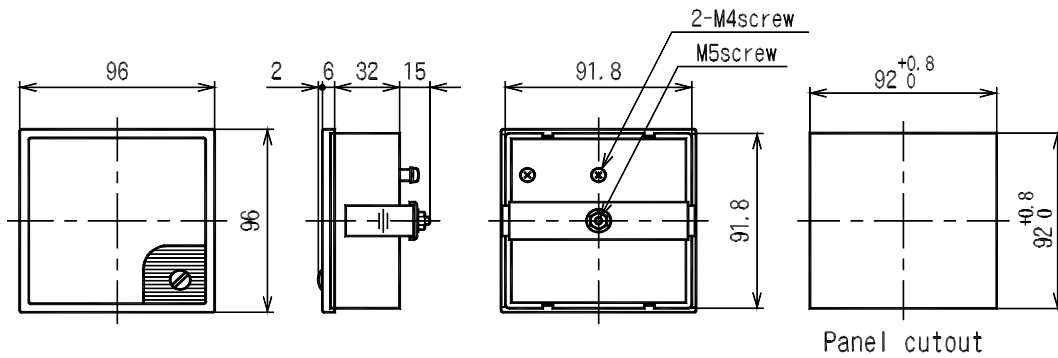
Three phase 4 wire
power meter
PWD-96N-34



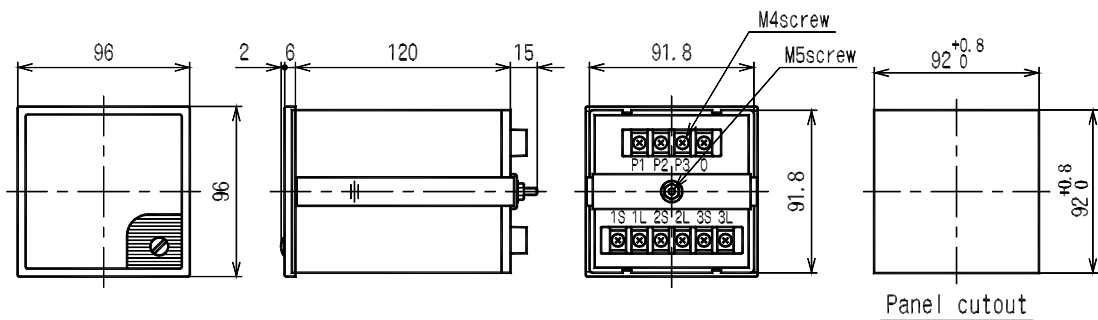
Three phase 4 wire
var meter
PWVD-96-34
External WVT-83M-34



Dimensions (External with Transducer)



Dimensions (Internal with Transducer)



WATTHOUR METER / VAR METER

(Transducer Type)

PWD-96 /

PWVD-96

Production Range of the Max. Scale Value of the Meter

Manufacturability range will be limited where intrinsic max. scale value is within the scope as shown in the list at below. But in the case, the meter used external CT or VT, max. scale value will be calculated as following formula:

$$\text{Max. scale value for meter} = \frac{\text{Max. scale value}}{\text{VT ratio} \times \text{CT ratio}}$$

Type Name	Rating			Manufacturability Intrinsic Range	
				Power Meter	Var Meter
Single phase	110V/5A (1A)			350~600W (70~120W)	350~600var (70~120var)
	220V/5A (1A)			700~1200W (140~240W)	700~1200var (140~240var)
Single phase 3-wire	110V/5A (1A)			600~1200W (120~240W)	—
3 phase 3-wire	110V/5A (1A)			600~1200W (120~240W)	600~1200var (120~240var)
	220V/5A (1A)			1200~2400W (240~480W)	1200~2400var (240~480var)
3 phase 4-wire	Line	Phase	Current	—	—
	110V	110/√3V	5A (1A)	600~1200W (120~240W)	600~1200var (120~240var)
	220V	220/√3V	5A (1A)	1200~2400W (240~480W)	1200~2400var (240~480var)

Reference List For Standard Max. Scale Value Three Phase Power Meter

The following table is for standard three phase power meter.

Also applies for three phase 4 wire, single phase 3 wire power meter and var meter.

For single pahse power meter calculation: listed value x 1/2

VT ratio CT ratio	6600V			3300V			440V			220V			110V		
	(VT6600 / 110V)			(VT3300 / 110V)			(VT440 / 110V)								
5 / 5A	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
	60	50	40	30	25	20	4	5	3	2	1.5	1.2	1	0.8	0.6
7.5 / 5A	90	75	60	45	40	30	6	5	4	3	2.5	2	1.5	1.2	1
10 / 5A	120	100	80	60	50	40	8	7	6	4	3	2.5	2	1.5	1.2
15 / 5A	200	150	120	100	75	60	12	10	8	6	5	4	3	2.5	2
20 / 5A	240	200	150	120	100	80	15	—	12	8	6	5	4	3	2.5
25 / 5A	300	250	200	150	120	100	20	—	15	10	8	7.5	5	4	3
30 / 5A	400	300	240	200	150	120	24	—	20	12	10	8	6	5	4
40 / 5A	480	400	300	240	200	150	30	—	24	15	12	10	8	7.5	5
50 / 5A	600	500	400	300	250	200	40	—	30	20	15	12	10	8	6
60 / 5A	750	600	480	400	300	240	48	—	40	24	—	20	12	10	8
75 / 5A	900	750	600	450	400	300	60	50	40	30	25	20	15	12	10
100 / 5A	1200	1000	800	600	500	400	80	75	60	40	30	25	20	15	12
150 / 5A	2000	1500	1200	1000	750	600	120	100	80	60	50	40	30	25	20
200 / 5A	2400	2000	1500	1200	1000	800	150	—	120	80	60	50	40	30	25
250 / 5A	3000	2500	2000	1500	1200	1000	200	—	150	100	80	75	50	40	30
300 / 5A	4000	3000	2400	2000	1500	1200	240	—	200	120	100	80	60	50	40
350 / 5A	4000	—	3000	2000	—	1500	300	250	200	150	120	100	75	60	50
400 / 5A	4800	4000	3000	2400	2000	1500	300	—	250	150	120	100	80	75	50
450 / 5A	6000	5000	4000	3000	2500	2000	400	300	250	200	150	120	100	75	60
500 / 5A	6000	5000	4000	3000	2500	2000	400	—	300	200	150	120	100	75	60
600 / 5A	7500	6000	4800	4000	3000	2400	500	—	400	240	—	200	120	100	70
750 / 5A	9000	7500	6000	4500	4000	3000	650	500	400	300	250	200	150	120	100
800 / 5A	10MW	8000	7500	5000	—	4000	700	600	500	300	250	200	150	120	100
1000 / 5A	12MW	10MW	8000	6000	5000	4000	800	750	600	400	300	250	200	150	120
1200 / 5A	15MW	12MW	10MW	7500	6000	5000	1000	800	750	500	400	300	250	200	150
1500 / 5A	20MW	15MW	12MW	10MW	7500	6000	1200	1000	800	600	500	400	300	250	200