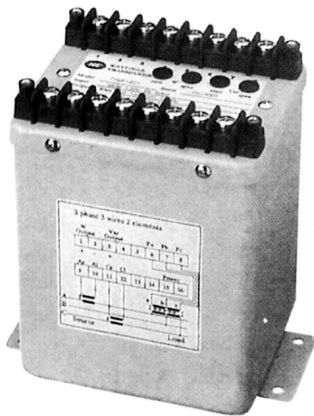


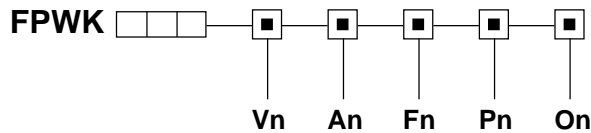
# WATT / VAR TRANSDUCER



## Applied Standards & Rules

Measuring and conversion	IEC 688 / 1992 - 04
Dielectrical strength	IEC 688 2KVac / 1 min.
Surge and Impulse test	ANSI C37.90 / 1989
	IEC 255-3 (1989) 4KV 1.2 x 50 us

## Order form



Example : FPWK201-V1-A2-F2-P1-O3

## Input & Output parameters

Vn : Voltage input	Vn rating range	V1	V2	V3	Vy Specified	On : Output		
		120 V 75 - 150 V	240 V 150 - 300 V	480 V 300 - 600 V		O1 0 - 1 mA	O2 0 - 20 mA	O3 4 - 20 mA
An : Current input	An rating range	A1 1 A 0 - 1.5 A	A2 5A 0 - 7.5 A	A3 10A 0 - 15 A	Ay Specified	O4 0 - 1 V	O5 0 - 5 V	O6 0 - 10 V
Fn : Frequency input	Fn rating range	F1 50 Hz 48 - 52 Hz	F2 60 Hz 58 - 62 Hz		Fy Specified	O7 2 - 10 V	Oy Specified	
Pn : Auxiliary power	Pn rating range	P1 AC 120 V 120 V ± 15%	P2 AC 240 V 240 V ± 15%	Ps Internal Powered	Py Specified	Py : DC24 / 48 / 125 V ± 15% or other range under specified		

Model	Application system	Std. calibration vs output full span ( Watt / Var ) = D										
		Watt / Var	Elements - Connection	V1 = 120 V			V2 = 240 V			V3 = 480 V		
				1A	5A	10A	1A	5A	10A	1A	5A	10A
FPWK101	1E 1 phase 2 wires		100	500	1K	200	1K	2K	400	2K	4K	
FPWK111	1.5E 1 phase 3 wires, unbalance		200	1K	2K	400	2K	4K	800	4K	8K	
FPWK201	2E 3 phase 3 wires, unbalance		200	1K	2K	400	2K	4K	800	4K	8K	
FPWK211	2.5E 3 phase 4 wires, unbalance		300	1.5K	3K	600	3K	6K	1.2K	6K	12K	
FPWK301	3E 3 phase 4 wires, unbalance		300	1.5K	3K	600	3K	6K	1.2K	6K	12K	

## Note

- Standard output calibration  
bipolar 0 to ± 1mA for 0 to ± D Watts or Vars  
4-12-20mA for -D to 0 to +D Watts or Vars
- External power mode suitably for all output types  
Internal power mode, only suitably for 0-1mA / 0-20mA / 0-1V / 0-5V / 0-10V output

## Specification

<b>Accuracy ( 23 ± 3°C )</b>	0.2% reading / PF ± 0.05% RO		
<b>Maximum output load</b>	DC current mode : maximum 10V drop DC voltage mode : maximum 5mA drive		
<b>Dielectric strength</b>	AC 2KV 1 minute between terminals; AC 2.6KV 1 minute / terminals to case		
<b>Surge and impulse test</b>	ANSI C37.90 / 1989, IEC 255-3 (1989) 4 KV 1.2 x 50 us		
<b>Maximum input over</b>	Current related input	Voltage related input	
	1A / 5A	10A	
	4 x rated / continuous	2 x rated / continuous	1.5 x rated / continuous
	10 x rated / 10 seconds	25 x rated / 1 second	2 x rated / 10 seconds
	50 x rated / 1 second	50 x rated / 0.5 second	
	80 x rated / 0.5 second		
<b>Input burden</b>	Current less 0.2 VA; voltage less 0.1 VA		
<b>Response time &amp; ripple</b>	≤ 400 ms for step change 0-99%    ripple less 0.5% ro peak to peak		
<b>Frequency</b>	50 ± 2 Hz; 60 ± 2 Hz; 400 ± 5 Hz ( Watt only )		
<b>Waveform</b>	Watt - 2% 3rd, Var - sinusoidal		
<b>Stability</b>	Temperature range ( 20 to 26°C )    long term stability / year Maximum 60 ppm / °C    less 0.2% draft / year typically ..... FPW Maximum 70 ppm / °C    less 0.2% draft / year typically ..... FPK		
<b>Storage condition</b>	Temperature range -25 to 70°C, RH 20 to 95% non condensed		
<b>Operating condition</b>	Temperature range -20 to 65°C, RH 0 to 99% non condensed		
<b>Magnetic field effect</b>	< 0.01% under 100 ampere turns at 1M center		
<b>Power dissipation</b>	< 7 VA		

## Terminal Connection

