

## Texmate Power Transducers

- Watt, VAR, Power factor, Watt Hour & VAR Hour
- Single phase & 3 phase models
- Measures distorted signals using time division multiplication
- Direct connect up to 5A or 600V
- $\pm 0.2\%$  or  $\pm 0.1\%$  accuracy
- High noise immunity
- Panel or DIN rail mounting



These Texmate Power transducers provide an accurate measurement of active & reactive power for balanced or unbalanced loads. Additional models measure active & reactive energy (as either watt hours or VAR hours). Dual function units combine watts with VARs, watts with watt hours, and VARs with VAR hours. Power factor transducers are also available.

Each transducer output is an isolated, load independent DC signal (V or mA) for power and a pulse (relay or open collector) for energy. External power choices are 115/230V AC, 24V DC, or 125V DC. Two case styles provide mounting flexibility.

### SPECIFICATIONS

Accuracy:	$\pm 0.2\%$ of rated output standard; $\pm 0.1\%$ on request
AC Input:	120V or 240V & 5A standard; custom to 600V, 10A
Burden:	$\leq 0.1\text{VA}$ on voltage input, $\leq 0.2\text{VA}$ on current input
Response:	$\leq 0.5\%$ of measuring range to max input
Voltage Overload:	1.25x rated input (600Vrms max) continuous, 2x for 10 sec, 4x for 5 sec
Current Overload:	3x rated input continuous, 10x for 10 sec, 50x for 5 sec, 80x for 0.5 sec
Output:	Pulses for watt hour, VAR hour; DC mA or DC Volts for watt, VAR, power factor
Ripple:	$< 0.5\%$ of rated output, peak-to-peak (max)
Response Time:	$< 400\text{ms}$ from 0 to 99% of output
Zero Adjust:	$\pm 5\%$ of rated output (min)
Span Adjust:	$\pm 10\%$ of rated output (min)
Load Resistance:	500 $\Omega$ max, except 10k $\Omega$ max for 0-1mA output

Operating Temperature:	0 to 50°C (32 to 122°F)
Humidity:	$< 95\%$ RH, non-condensing
Temp. Coefficient:	$\leq 100\text{ppm}/^\circ\text{C}$ of span $\leq 60\text{ppm}/^\circ\text{C}$ for ambient of 25°C $\pm 10^\circ\text{C}$
Isolation:	Between Input/Output/Power/Case
Dielectric Test:	2kVrms/1 min, terminal to terminal; (DIN-IEC 688)
Insulation Resistance:	$> 100\text{M}\Omega$ at 500V DC
Housing:	ABS resin (94V-0) or metal
Mounting:	Screw mount metal case or plastic DIN rail 35mm
Auxiliary Power:	AC: 115/230V $\pm 15\%$ , 50/60Hz, 3VA DC: 24V $\pm 20\%$ or 125V $\pm 20\%$
Dimensions:	
Metal "B" Case*:	5.35"W x 5.55"H x 3.74"D (136x95x141mm)
Plastic "D" Case:	4.45"W x 3.74"H x 5.74"D (113x95x146mm)

\*including mounting flanges

### ORDERING INFORMATION

To Order—Insert Code for Each Letter to Select Catalog Number.

**A** **B** **C** **D** **E** **F** **G** Example: TW-3311212

#### WATT, VAR, POWER FACTOR TRANSDUCERS

A	Model
TW-12	Watts, Single phase, 2 wire, 1 element
TW-13	Watts, Single phase, 3 wire, 2 element
TW-33	Watts, Three phase, 3 wire, 2 element
TW-34	Watts, Three phase, 4 wire, 3 element
TQ-12	VARs, Single phase, 2 wire, 1 element
TQ-13	VARs, Single phase, 3 wire, 2 element
TQ-33	VARs, Three phase, 3 wire, 2 element
TQ-34	VARs, Three phase, 4 wire, 3 element
TWQ-12	Watts + VARs, Single phase, 2 wire, 1 element
TWQ-13	Watts + VARs, Single phase, 3 wire, 2 element
TWQ-33	Watts + VARs, Three phase, 3 wire, 2 element
TWQ-34	Watts + VARs, Three phase, 4 wire, 3 element
TPF-12	Power Factor, Single phase, 2 wire, 1 element
TPF-13	Power Factor, Single phase, 3 wire, 2 element
TPF-33	Power Factor, Three phase, 3 wire, 2 element
TPF-34	Power Factor, Three phase, 4 wire, 3 element

B	Input
1	120V & 5A AC (30-600V & 5A for Power Factor models)
2	240V & 5A AC (N/A for Power Factor models)
Y	Custom, up to 600V & 10A AC

C	Frequency
1	60Hz $\pm 3\text{Hz}$
2	50Hz $\pm 3\text{Hz}$
Y	Custom (400Hz)

D	Output
1	0 to 1mA DC
2	4 to 20mA DC
3	0 to 10V DC

E	Power
1	115/230V AC
2	24V DC
3	125V DC

F	Mounting
1	DIN rail plastic case
2	Screw mount metal case

#### WATT-HOUR, VAR-HOUR TRANSDUCERS

A	Model
TWH-12	Watt Hours, Single phase, 2 wire, 1 element
TWH-13	Watt Hours, Single phase, 3 wire, 2 element
TWH-33	Watt Hours, Three phase, 3 wire, 2 element
TWH-34	Watt Hours, Three phase, 4 wire, 3 element
TQH-12	VAR Hours, Single phase, 2 wire, 1 element
TQH-13	VAR Hours, Single phase, 3 wire, 2 element
TQH-33	VAR Hours, Three phase, 3 wire, 2 element
TQH-34	VAR Hours, Three phase, 4 wire, 3 element
TWWH-12	Watts + Watt Hours, Single phase, 2 wire, 1 element
TWWH-13	Watts + Watt Hours, Single phase, 3 wire, 2 element
TWWH-33	Watts + Watt Hours, Three phase, 3 wire, 2 element
TWWH-34	Watts + Watt Hours, Three phase, 4 wire, 3 element
TQQH-12	VARs + VAR Hours, Single phase, 2 wire, 1 element
TQQH-13	VARs + VAR Hours, Single phase, 3 wire, 2 element
TQQH-33	VARs + VAR Hours, Three phase, 3 wire, 2 element
TQQH-34	VARs + VAR Hours, Three phase, 4 wire, 3 element

B	Input
1	120V & 5A AC
2	240V & 5A AC
Y	Custom (up to 600V, 10A AC)

C	Frequency
1	60Hz $\pm 3\text{Hz}$
2	50Hz $\pm 3\text{Hz}$
Y	Custom (400Hz)

D	Frequency Output
1	Reed relay, forward only
2	Reed relay, forward & reverse
3	Open collector, forward only
4	Open Collector, forward & reverse

E	Pulse Output
1	1 pulse per watt hour or VAR hour
2	10 pulses per watt hour or VAR hour
3	100 pulses per watt hour or VAR hour

F	Power
1	115/230V AC
2	24V DC
3	125V DC

G	Mounting
1	DIN rail plastic case
2	Screw mount metal case