

AC MULTI-FUNCTION

AC WATT/WATT HOUR METER

MODEL **WH50**

ACCURATE TO 0.25% OF READING

FEATURES

- Dual setpoint alarm indication for Watt output, optional relay closure available.
- 4 1/2 digit LED for indication of Watts, 8 digit LCD counter (with battery back-up) for Watt Hours.
- Separate outputs for Watts, and Watt-Hours and available RS232C with remote parameter selection.
- Designed to withstand motor start-up transients.

APPLICATIONS

- Equipment power consumption.
- Process control.
- Equipment calibration.
- Standard outputs provide signal for interface with meters, recorders, or data acquisition equipment.

SINGLE-PHASE MODELS-INTEGRAL CURRENT SENSOR (ONE ELEMENT)

INPUTS		F.S. IN (WATTS)	SENSOR SIZE	WATT OUTPUTS WH50-			F.S. COUNT PER HR	WATT HOUR OUTPUTS		RS232C INTERFACE
VOLTAGE	CURRENT			0-10Vdc	4-20mA	0-5Vdc		5V PULSE	ANALOG	
0 to 150	0 to 5.0	625	1	001D	001E	001X5	6250 2500 12500	STANDARD OUTPUT FOR WATT HRS. TTL LEVEL 5V PULSE	0-10Vdc OUTPUT FOR WATT HRS. ADD SUFFIX "-H"	RS232C IN ADDITION TO STANDARD OUTPUTS ADD SUFFIX "-Y"
	0 to 20.0	2500		019D	019E	019X5				
	0 to 100	12.5K		028D	028E	028X5				
0 to 300	0 to 5.0	1250	1	002D	002E	002X5	12500 5000 2500	STANDARD OUTPUT FOR WATT HRS. TTL LEVEL 5V PULSE	0-10Vdc OUTPUT FOR WATT HRS. ADD SUFFIX "-H"	RS232C IN ADDITION TO STANDARD OUTPUTS ADD SUFFIX "-Y"
	0 to 20.0	5000		020D	020E	020X5				
	0 to 100	25.0K		029D	029E	029X5				
0 to 600	0 to 5.0	2500	1	003D	003E	003X5	2500 10000 5000	STANDARD OUTPUT FOR WATT HRS. TTL LEVEL 5V PULSE	0-10Vdc OUTPUT FOR WATT HRS. ADD SUFFIX "-H"	RS232C IN ADDITION TO STANDARD OUTPUTS ADD SUFFIX "-Y"
	0 to 20.0	10000		021D	021E	021X5				
	0 to 100	50.0K		030D	030E	030X5				

THREE-PHASE THREE-WIRE 60 HERTZ (TWO ELEMENT)

INPUTS		F.S. IN (WATTS)	SENSOR SIZE	WATT OUTPUTS WH50-			F.S. COUNT PER HR	WATT HOUR OUTPUTS		RS232C INTERFACE
VOLTAGE	CURRENT			0-10Vdc	4-20mA	0-5Vdc		5V PULSE	ANALOG	
0 to 150	0 to 5.0	1250	1	004D	004E	004X5	12500 5000 2500	STANDARD OUTPUT FOR WATT HRS. TTL LEVEL 5V PULSE	0-10Vdc OUTPUT FOR WATT HRS. ADD SUFFIX "-H"	RS232C IN ADDITION TO STANDARD OUTPUTS ADD SUFFIX "-Y"
	0 to 20.0	5000		022D	022E	022X5				
	0 to 100	25K		031D	031E	031X5				
0 to 300	0 to 5.0	2500	1	005D	005E	005X5	2500 10000 5000	STANDARD OUTPUT FOR WATT HRS. TTL LEVEL 5V PULSE	0-10Vdc OUTPUT FOR WATT HRS. ADD SUFFIX "-H"	RS232C IN ADDITION TO STANDARD OUTPUTS ADD SUFFIX "-Y"
	0 to 20.0	10000		023D	023E	023X5				
	0 to 100	50K		032D	032E	032X5				
0 to 600	0 to 5.0	5000	1	006D	006E	006X5	5000 2000 10000	STANDARD OUTPUT FOR WATT HRS. TTL LEVEL 5V PULSE	0-10Vdc OUTPUT FOR WATT HRS. ADD SUFFIX "-H"	RS232C IN ADDITION TO STANDARD OUTPUTS ADD SUFFIX "-Y"
	0 to 20.0	20000		024D	024E	024X5				
	0 to 100	100K		033D	033E	033X5				

THREE-PHASE FOUR-WIRE 60 HERTZ (THREE ELEMENT)

INPUTS		F.S. IN (WATTS)	SENSOR SIZE	WATT OUTPUTS WH50-			F.S. COUNT PER HR	WATT HOUR OUTPUTS		RS232C INTERFACE
VOLTAGE	CURRENT			0-10Vdc	4-20mA	0-5Vdc		5V PULSE	ANALOG	
0 to 150	0 to 5.0	2K	1	007D	007E	007X5	2000 8000 4000	STANDARD OUTPUT FOR WATT HRS. TTL LEVEL 5V PULSE	0-10Vdc OUTPUT FOR WATT HRS. ADD SUFFIX "-H"	RS232C AND STANDARD OUTPUTS ADD SUFFIX "-Y"
	0 to 20.0	8K		025D	025E	025X5				
	0 to 100	40K		034D	034E	034X5				
0 to 300	0 to 5.0	4K	1	008D	008E	008X5	4000 16000 8000	STANDARD OUTPUT FOR WATT HRS. TTL LEVEL 5V PULSE	0-10Vdc OUTPUT FOR WATT HRS. ADD SUFFIX "-H"	RS232C AND STANDARD OUTPUTS ADD SUFFIX "-Y"
	0 to 20.0	16K		026D	026E	026X5				
	0 to 100	80K		035D	035E	035X5				

All voltage specifications are line-to-neutral voltage.

SPECIFICATIONS

INPUT

VOLTAGE: See tables
 CURRENT: See tables
 FREQUENCY RANGE: 58-62 Hz., optional 50 Hz.
 BURDEN:
 Voltage: Less than 0.1VA
 Current: Less than 0.28VA per element
 OVERLOAD:
 Voltage (cont.): 150V range: 175V
 300V range: 350V
 600V range: 600V
 Current: 5A and 10A range: 2 times F.S. (cont.) 6 times (10 Sec/Hr)
 20A range: 1.5 times F.S. (cont.) 6 times (10Sec/Hr)
 100A range: 1.25 times F.S. (cont.) 4 times (10Sec/Hr)
 DIELECTRIC TEST (Input/Output/Case): 1500Vac (RMS)

OUTPUT

WH COUNTER: 8 digit LCD with pushbutton reset
 WATTMETER: 4 1/2 digit vacuum fluorescent
 OUTPUT LOADING (OHMS):
 0-10Vdc, 0-5Vdc: 2K min.
 4-20mA: 0-500
 RESPONSE TIME (99%): Less than 400 milliSeconds

ACCURACY

INTEGRAL SENSOR: +/- 0.25% of RDG. +/- 0.05% F.S.
 With factory supplied current transformers: +/- 0.25% F.S.
 TEMPERATURE EFFECT (0° to 50°C):
 +/- 0.005% per Degree C
 OPERATING HUMIDITY: 0-95% non-condensing
 INSTRUMENT POWER: 115Vac (+/-10%), 50/60 Hz.

