H6000 SERIES

kW/kWh Transducers

GREAT FOR AUTOMATION SYSTEMS!

DESCRIPTION

The H6001 is a one to three phase industrial grade automation system compatible kW/kWh transducer. The H6001 accepts three Veris 1.0 V current transformer inputs and three direct connect voltage inputs. The transducer multiplies the input current signal and voltage input for each phase to calculate true RMS power. The instantaneous power (kW) of all three phases is summed and converted to an industry standard 4-20 mA output signal for use in demand management (load shedding) applications. The transducer also accumulates this instantaneous value over time and produces a pulsed output proportional to the energy usage (kWh). The frequency of the output pulses is proportional to the total power consumed and can be used to measure energy usage for an entire building, selected area, or individual loads (chillers, compressors, etc.).

Pulse rate ouput is also field selectable to match the requirements of virtually all automation panels and data loggers. kW range is determined by the ampere ranges of the CTs used to provide the input current signal.

NOTE: To interface with 5 A CTs, consult factory.

Applications

- Energy management & performance contracting
- Submetering for commercial tenants
- Departmental costing in manufacturing facilities
- Power monitoring for tool wear and process control

SAFE CTs...eliminates need for costly CT shorting bars

- Current transformers (CTs) utilize accurate low-voltage output... nonhazardous, even if left unshorted!
- Eliminates need for current shorting bars
- Split-core CTs eliminate need to remove conductor, easy installation

Easy installation

- Compact conduit enclosed H6001 measures just 9.50" x 8.25" x 4.00" (LxWxD)
- Conduit ready version features hinged panel door with padlock hasp
- No expensive potential transformers (PTs) for 600 V or less
- Easy field voltage selection (120 to 600 VAC)
- 4-20 mA output loop continuity LED
- Pulse output rate LED...high pulse rate test mode

Accurate analog and pulse outputs

- Accurate to ±0.5% of reading...true RMS power!
- Meets ANSI C12.1 Standards
- 4-20 mA output for demand kW
- Pulse output for kWh...adjustable rate compatible with automation systems and data loggers
- Adjustable undervoltage & phase loss/reversal output protects valuable equipment. Fail-safe.
- kW and/or kWh display options. kWh maintains reading in event of power loss

POWER MONITORING

Ordering INFORMATION

UL 1244
E164665

MODEL	DESCRIPTION	UL	
H6001	kW/kWh Transducer in N.E.M.A. 1 enclosure	●	
H6002	kWh LCD display front mounted in H-6001	●	
H6004	kW/kWh LCD displays front mounted in H-6001	●	
H6005	kW/kWh Transducer for mounting in field enclosure		●

NOTES:
- *Order CTs separately.*
- *Surge suppression is recommended in high lightning areas to prevent damage to transducer.*
- *To adapt 5A CTs to Veris 1V level, you must use an H6902B adapter. Please consult factory.*

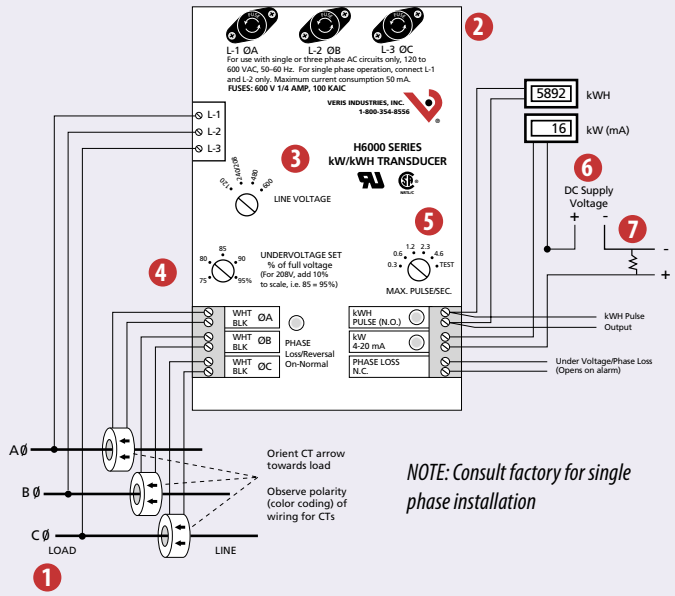
Optional Ordering INFORMATION

MODEL	DESCRIPTION		
PS-24	Universal Power Supply	●	●

H6000 SERIES

APPLICATIONS/WIRING EXAMPLE:

1. Veris Safe Split Core CTs-1.0 V output. Orient CT arrow towards load. Observe polarity (color coding) of wiring for CTs
2. Fuse or breaker per NEC
3. Select desired line voltage up to 600 VAC
4. Undervoltage/phase loss percentage set-point
5. Pulse rate selection per automation system
6. Non-polarity sensitive 4-20 mA loop. Observe panel polarity
7. For voltage output, install resistor at automation panel. [250 Ω for 1 to 5 V, or 500 Ω for 2-10V]



NOTE: Consult factory for single phase installation

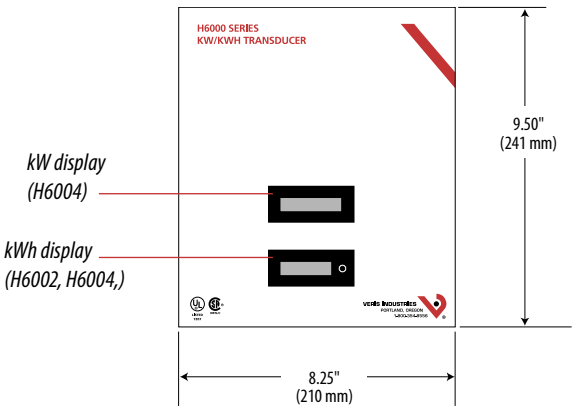
SPECIFICATIONS

Transducer Model H6000 kW & kWh

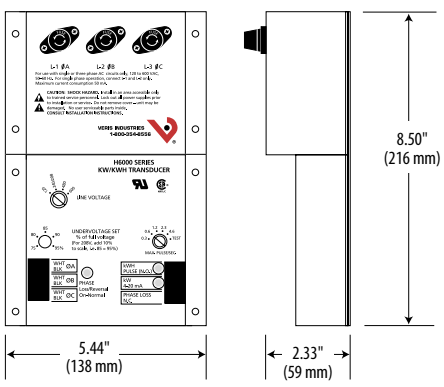
Amperage Ratings	0 - 2400 A (sized by CT; consult factory for higher amperages)
Amperage Input	1.0 V Safe CTs ONLY....Consult factory for 0-5 A output CT retrofit interface
Voltage Range (field selectable)	120, 208, 240, 277, 480 or 600 VAC (other ranges: consult factory)
Isolation	2500 VAC rms
Analog Output	4-20 mA. Provide 10 - 30 VDC power supply.
Pulse Output	N.O., Opto FET, 100 mA @ 24 VAC/DC
Max. Pulse/Sec.	Field selectable .3, .6, 1.2, 2.3, 4.6
Phase Loss/low Voltage Alarm Output Rating	N.C., Opto FET, 100 mA @ 24 VAC/DC
Low Voltage Alarm Trip Point	Adjustable 75 - 95%
Sealing	N.E.M.A. 1.
Temperature Range	-15º to 40º C
Humidity Range	0 - 95% non-condensing
Enclosure Dimensions	(L x W x D).....9.50" x 8.25" x 4.00"
Model H6005 (no enclosure) Dimensions	(L x W x D).....8.50" x 5.44" x 2.33"
Enclosure Construction (except model H6005)	Steel, NEMA type 1, conduit knock outs, hinged door, padlock hasp
System Accuracy	±1% from 10% to 100% of the maximum rated current of the CT's

NOTE: Internal fuses rated only to 600 VAC/100 kAIC source max. Install per NEC & local codes!
This product uses Veris 1.0 V output CTs. To interface with 5 A CTs (e.g. 800:5) consult factory.

DIMENSIONAL DRAWINGS (H6001 – H6004)



H6005



POWER MONITORING

Hawkeye®