# H8035 & H8036 SERIES

Integral Monitoring Solution Eliminates the Need for Separate Enclosures



The Enercept H8035 and H8036 Series are innovative three-phase networked (Modbus RTU) power transducers that combine measurement electronics and high accuracy industrial grade CTs in a single package. The need for external electrical enclosures is eliminated, greatly reducing installation time and cost.

There are two application-specific platforms to choose from. The Basic Enercept energy transducers (H8035) are ideal for applications where only kW and kWh are required. The Enercept Enhanced power transducers (H8036) output 26 variables including kW, kWh, volts, amps, and power factor, making them ideal for monitoring and diagnostics.

Color-coordination between voltage leads and CTs makes phase matching easy. Additionally, the Enercept automatically detects and compensates for phase reversal, virtually eliminating the concern of CT load orientation. Up to 63 Enercepts can be daisy-chained on a single RS-485 network.

# Revenue grade measurements

Meets ANSI C12.20 Class 0.2 standards

# Labor savings

Precision electronics and current transformers in a single package... reduces the number of installed components

# Reduce wiring time & cost

Monitor energy parameters (kW, kWh, kVAR, PF, Amps, Volts) at up to 63 locations on a single RS-485 network

## Save time & labor

Fast split-core installation virtually eliminates the need to remove conductors

# Fast, trouble-free installation

Smart electronics alleviate CT orientation concerns

# **CSI** approved

Eases submission process for California Solar Initiative

#### **APPLICATIONS**

- Energy managment and performance contracting
- Monitoring for commercial tenants
- Activity-based costing in commercial and industrial facilities
- · Real-time power monitoring
- Load shedding

### **SPECIFICATIONS**

#### **INPUTS** Voltage Input 208 to 480 Vac, 50/60 Hz RMS 1, 2, 3 **Current Input** Up to 2400 A continuous per phase 2,3 **ACCURACY** System Accuracy ±1% of reading from 10% to 100% of the rated current of the CTs, accomplished by matching the CTs with electronics and calibrating them as a system **OUTPUTS** Modbus RTU 4,5 Type **Baud Rate** 9600, 8N1 format Connection RS-485, 2-wire + shield **ENVIRONMENTAL** 0 to 60 °C (32 to 140 °F), 50 °C (122 °F) for 2400 A **Operating Temp Range**

Humidity Range	0 to 95% non-condensing; indoor use only
WARRANTY	
Limited Warranty	5 years
AGENCY APPROVALS	
Agency Approvals	UL508
Agency Approvals	UL508



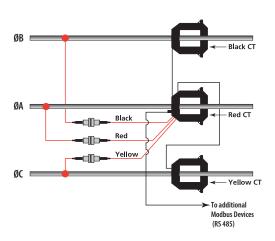
Approved for California CSI Solar applications (check the CSI website for model numbers).

1. Do not install on the line or load side of a VFD unit, or on any other equipment generating harmonics. For line side applications, use the E5x Series meters.

- 2. Contact factory to interface for voltages above 480 Vac or current above 2400 A.
- 3. Do not apply 600 V Class current transformers to circuits having a phase-to-phase voltage greater than 600 V, unless adequate additional insulation is applied between the primary conductor and the current transformers. Veris assumes no responsibility for damage of equipment or personal injury caused by products operated on circuits above their published ratings.
- 4. Detailed protocol specifications are available at www.veris.com/modbus.
- 5. Modbus TCP, BACnet MS/TP, BACnet IP and LON TP/FT-10 protocols available via accessories

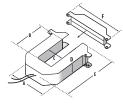
## 208 OR 480VAC 3Ø, INSTALLATION

Wiring Diagram



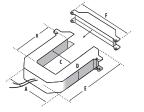
## 240VAC 1Ø, 3-WIRE INSTALLATION

Wiring Diagrams



SMALL
100/300 Amp

A =	3.8"	(96 mm)
B =	1.2"	(30 mm)
C =	1.3"	(31 mm)
D =	1.2"	(30 mm)
E =	4.0"	(100 mm
г	4.011	/121



#### MEDIUM 400/800 Amp

A=	4.9"	(125 mm)
B =	2.9"	(73 mm)
C =	2.5"	(62 mm)
D =	1.2"	(30 mm)
E =	5.2"	(132 mm)
F=	6.0"	(151 mm)

#### ORDERING INFORMATION

Modbus Basic Power Transducers\*

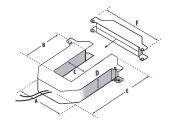
MODEL	MAX. AMPS	CT SIZE
H8035-0100-2	100	SMALL
H8035-0300-2	300	SMALL
H8035-0400-3	400	MEDIUM
H8035-0800-3	800	MEDIUM
H8035-0800-4	800	LARGE
H8035-1600-4	1600	LARGE
H8035-2400-4	2400	LARGE

\*H8035 models work with H8920-5 LON nodes Modbus Enhanced Data Stream Power Transducers\*

MODEL	MAX. AMPS	CT SIZE
H8036-0100-2	100	SMALL
H8036-0300-2	300	SMALL
H8036-0400-3	400	MEDIUM
H8036-0800-3	800	MEDIUM
H8036-0800-4	800	LARGE
H8036-1600-4	1600	LARGE
H8036-2400-4	2400	LARGE

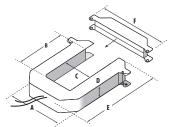
\*H8036 models work with H8920-1 LON nodes

## **DIMENSIONAL DRAWINGS**



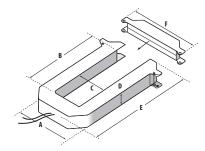
## SMALL 100/300 Amp

A =	3.8"	(96 mm)
B =	1.2"	(30 mm)
C =	1.3"	(31 mm)
D =	1.2"	(30 mm)
E =	4.0"	(100 mm)
F =	4.8"	(121 mm)



#### MEDIUM 400/800 Amp

A=	4.9"	(125 mm)
B =	2.9"	(73 mm)
C =	2.5"	(62 mm)
D =	1.2"	(30 mm)
E =	5.2"	(132 mm)
F=	6.0"	(151 mm)



#### LARGE 800/1600/2400 Amn

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A =	4.9"	(125 mm)
B =	5.5"	(139 mm)
C =	2.5"	(62 mm)
D =	1.2"	(30 mm)
E =	7.9"	(201 mm)
F =	6.0"	(151 mm)

## **DATA OUTPUTS**

<u>H8035</u> <u>H8036</u>

kWh kWh, Consumption kW kW, Real Power

kVAR, Reactive Power

kVA, Apparent Power Power Factor

Average Real Power

Minimum Real Power Maximum Real Power

Voltage, L-L Voltage, L-N\*

Amps, Average Current

 ${}^{*}$ Based on derived neutral voltage.