# INTEGRAL MONITORING SOLUTION ELIMINATES THE NEED FOR SEPARATE ENCLOSURES



# Enercept<sup>®</sup> Networked Power Transducers (Modbus<sup>®</sup> RTU)

The **Enercept H8035/8036** 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, eliminating the concern of CT load orientation. Up to 63 Enercepts can be daisy-chained on a single RS-485 network.

## APPLICATIONS

- Energy managing & performance contracting
- Monitoring for commercial tenants
- Activity-based costing in commercial and industrial facilities
- Real-time power monitoring

#### The world's most cost-effective power transducer

- Monitor energy parameters (kW, kWh, kVAR, PF, Amps, Volts) at up to 63 locations on a single RS-485 network...greatly reduces wiring time and cost
- Fast split-core installation eliminates the need to remove conductors...saves time and labor
- Precision electronics and current transformers in a single package—reduces the number of installed components— huge labor savings
- Smart electronics eliminate CT orientation concerns—fast trouble-free installation

#### High accuracy

±1% total system accuracy, (10% to 100% of CT rating)

# **SPECIFICATIONS**

Input Primary Volta	<b>ge</b> 208 to 480VAC RMS <sup>++</sup>			
Number of Phases	Nonitored One to Three			
Frequency	50/60Hz			
Primary Current	Up to 2400 amps cont. per phase <sup>††</sup>			
Internal Isolation	2000VAC RMS			
Insulation Class	600VAC RMS <sup>†††</sup>			
<b>Temperature Rang</b>	e 0° to 60°C (32° F to 140°F),			
	50°C (122°F) for 2400A			
Humidity Range	0 - 95% non-condensing			
Systems Accuracy	$\pm$ 1% of reading from 10% to 100% of			
the rated current	of the CTsaccomplished by matching			
the CTs with electronics and calibrating them as a system				
<b>Output Physical Characteristics</b> RS-485, 2 wire + shield				
Baud Rate	9600, 8N1 format			
Protocol	Modbus RTU**(*)			

\*\* Detailed protocol specifications are available at: http:// www.veris.com/modbus/

\* Other protocols available. Please consult factory.

<sup>++</sup> Contact factory to interface for voltages above 480VAC or current above 2400 Amps.

<sup>+++</sup> Do not apply 600V Class current transformers to circuits having a phase-to-phase voltage greater than 600V, 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.

## H8035 Data Output Specifications

#### **Data Output**

kWh, kW

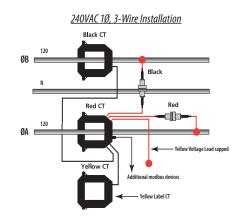
## H8036 Data Output Specifications

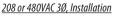
Data output: kWh, Consumption kW, Real Power kVAR, Reactive power kVA, Apparent power Power factor Average Real power Minimum Real power Maximum Real power Voltage, line to line Voltage, line to neutral<sup>†</sup> Amps, Average current kW, Real power ØA<sup>†</sup> kW, Real power ØC<sup>†</sup>

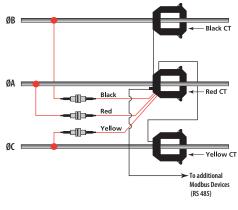
<sup>+</sup> Based on derived neutral voltage.

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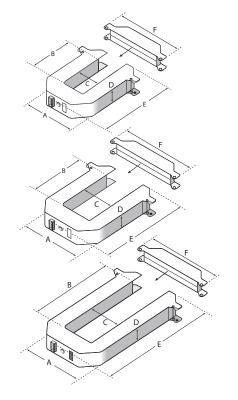
# **APPLICATION/WIRING EXAMPLES**







## **DIMENSIONAL DRAWINGS**



SMALL 100 Amp 300 Amp			MEDIUM 400 Amp 800 Amp		800 Amp 1600 Amp 2400 Amp			
A =	3.8"	(96 mm)	A =	4.9"	(125 mm)	A =	4.9"	(125 mm)
B =	1.5"	(38 mm)	B =	2.9"	(73 mm)	B =	5.5"	(139 mm)
C =	1.3"	(31 mm)	C =	2.5"	(62 mm)	C =	2.5"	(62 mm)
D =	1.1"	(29 mm)	D =	1.1"	(29 mm)	D =	1.1"	(29 mm)
E =	3.9"	(100 mm)	E =	5.2"	(132 mm)	E =	7.9"	(201 mm)
F =	4.8"	(121 mm)	F =	5.9"	(151 mm)	F =	5.9"	(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

## **ACCESSORIES**

CT Mounting brackets...see page 220. H8920 LON nodes...see page 102.



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Summary: Report electronically filed by Mr. Ryan E Glenn on behalf of 4550 Lena Drive, LP and BERRY, LINDA MRS.