H8035 & H8036 SERIES

Integral Monitoring Solution Eliminates the Need for Separate Enclosures

H8035/H8036

BACnet Connectivity Via E8951 Gateway

U.S. Patent No. 6,373,238

Revenue grade measurements

Meets ANSI C12.20 Class 0.2 standards

Save time & labor

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

Labor savings

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

Fast, trouble-free installation

Smart electronics alleviate CT orientation concerns

Reduce wiring time & cost

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

CSI approved

Eases submission process for California Solar Initiative

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.

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	
Type	Modbus RTU [4, 5]
Baud Rate	9600, 8N1 format
Connection	RS-485, 2-wire + shield
ENVIRONMENTAL	
Operating Temp Range	0 to 60 °C (32 to 140 °F), 50 °C (122 °F) for 2400 A
Humidity Range	0 to 95% non-condensing; indoor use only
WARRANTY	
Limited Warranty	5 years
AGENCY APPROVALS	
Agency Approvals	UL508

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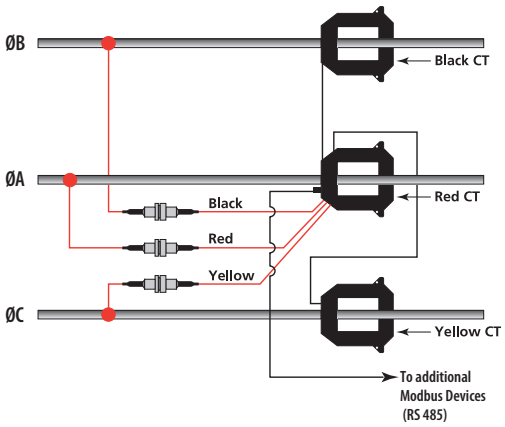
Approved for California CSI Solar applications (check the CSI website for model numbers).
1. Do not install on the line or load side of a VFD unit, or on any other equipment generating harmonics. For line side applications, use the E5x Series meters.
2. Contact factory to interface for voltages above 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

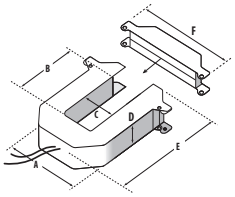
208 OR 480VAC 3Ø, INSTALLATION

Wiring Diagram



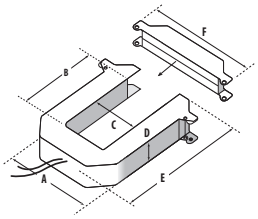
240VAC 1Ø, 3-WIRE INSTALLATION

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)
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)

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

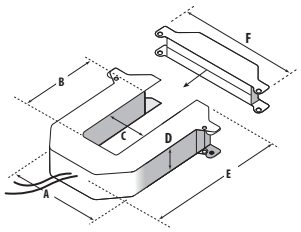
*H8035 models work with H8920-5 LON nodes

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

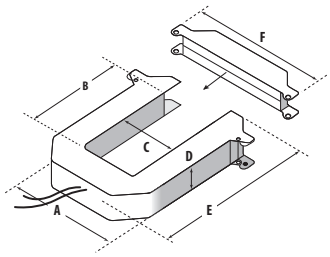
*H8036 models work with H8920-1 LON nodes

DIMENSIONAL DRAWINGS



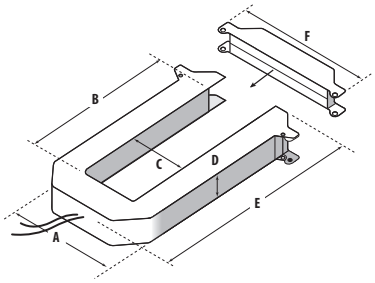
SMALL
100/300 Amp

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 Amp

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

H8035	H8036	
kWh	kWh, Consumption	Minimum Real Power
kW	kW, Real Power	Maximum Real Power
	kVAR, Reactive Power	Voltage, L-L
	kVA, Apparent Power	Voltage, L-N*
	Power Factor	Amps, Average Current
	Average Real Power	*Based on derived neutral voltage.