

Enercept® Networked Power Transducers

Integral Monitoring With N2 Protocol



H8025

US Patent No. 6,373,238

APPLICATIONS

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

FEATURES

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)

DESCRIPTION

The Enercept H8025/8026 are innovative three-phase networked (N2) 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 (H8025) are ideal for applications where only kW and kWh are required. The Enercept Enhanced power transducers (H8026) 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.

SPECIFICATIONS

<i>Inputs:</i>	
Voltage Input	208 to 480VAC, 50/60 Hz RMS †(††)
Current Input	Up to 2400A continuous per phase †
<i>Accuracy:</i>	
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
<i>Outputs:</i>	
Type	N2 Bus
Baud Rate	9600
Connection	RS-485, 2-wire + common
<i>Environmental:</i>	
Operating Temperature Range	0° to 60°C (32° F to 140°F), 50°C (122°F) for 2400A
Humidity Range	0 - 95% non-condensing

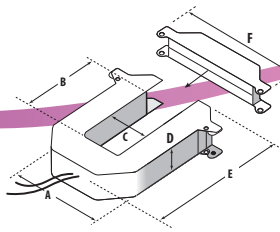
UL

† Contact factory to interface for voltages above 480VAC or current above 2400 Amps.

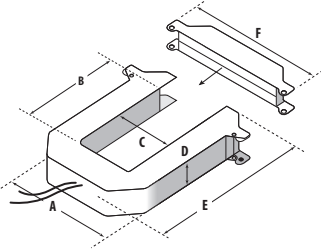
†† Do not apply 600V Class current transformers to circuits having a phase-to-phase voltage greater than 600V, unless adequate additional insulation is applied between the primary conductor and the current transformers. Veris assumes no responsibility for damage of equipment or personal injury caused by products operated on circuits above their published ratings.

DIMENSIONAL DRAWINGS

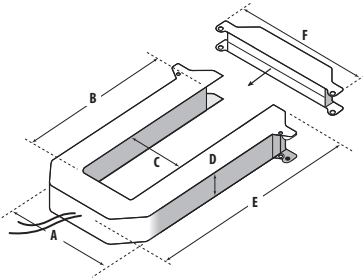
APPLICATION/WIRING EXAMPLES



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 = 5.9" (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

- | | |
|--------------|-----------------------|
| H8025 | H8026 |
| 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 |
| | kW, Real Power ØA* |
| | kW, Real Power ØB* |
| | kW, Real Power ØC* |

*Based on derived neutral voltage.

ORDERING INFORMATION



N2 Basic Power Transducers

MODEL	MAX. AMPS	CT SIZE
H8025-0100-2	100	SMALL
H8025-0300-2	300	SMALL
H8025-0400-3	400	MEDIUM
H8025-0800-3	800	MEDIUM
H8025-0800-4	800	LARGE
H8025-1600-4	1600	LARGE
H8025-2400-4	2400	LARGE

N2 Enhanced Data Stream Power Transducers

MODEL	MAX. AMPS	CT SIZE
H8026-0100-2	100	SMALL
H8026-0300-2	300	SMALL
H8026-0400-3	400	MEDIUM
H8026-0800-3	800	MEDIUM
H8026-0800-4	800	LARGE
H8026-1600-4	1600	LARGE
H8026-2400-4	2400	LARGE

ACCESSORIES

- CT Mounting brackets (AH06)
- H8920 Series LON nodes

