*Class 3020*

# POWERLOGIC Enercept® Meter

*The Enercept meter, a part of the pioneering POWERLOGIC® power monitoring system, simplifies installation making it much easier to include energy meters throughout an electrical distribution system. An innovative form factor (patent pending) eliminates the need for a separate meter enclosure and reduces installation cost by as much as 70%. The meter is inside the CTs, and no external PTs are required, making this a cost effective option for basic electrical metering.*

**Cost effective installation**

- Easy to install split-core CTs eliminate the need to disconnect conductors
- Precision metering 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 makes this meter an excellent choice for sub-metering in commercial and industrial applications**

- ±1% accuracy provides ANSI C12.1 metering accuracy
- UL Listed, CUL Listed

**Applications**

- Energy management and performance contracting
- Submetering for commercial tenants
- Activity based costing in commercial and industrial facilities
- Real time power monitoring
- Motor control center monitoring
- Motor maintenance trending
- Power equipment planning
- Data for motor sizing

### Accurate "Energy Information" Reduces Costs

Electrical power constitutes a major cost of business for most commercial and industrial facilities. While in the past electrical energy was often treated as an overhead cost, today more owners are treating it like any other cost and allocating it to specific cost centers—tenants, product lines, or production areas, for example. This not only promotes better energy usage practices, it positions the owner for negotiating with deregulated utilities in the near future.

Square D has long been a pioneer in helping customers understand the cost, quality, and reliability of their electric power. The new Enercept meter offers a solution that makes metering practical in many new applications.

Enercept meters consist of three interconnected split-core CTs with the metering and communication electronics built into one of the CT housings. Simply snap on the CTs, connect the voltage inputs and communication lines, and installation is complete. There are two versions of the Enercept meter—Basic and Enhanced. They differ only in the amount of metering information provided. The Basic meter reports power and energy only. The Enhanced version delivers 26 energy parameters, including volts, amps, power factor, and reactive power. Both versions can be connected to either three phase or single phase circuits.

### POWERLOGIC System Compatibility

Enercept meters employ the MODBUS RTU 2-wire communication protocol, and can utilize the same communication network and POWERLOGIC System Manager™ software as other POWERLOGIC devices. Data from the Enercept meters can be presented in tabular or graphical format, used for alarming and historical logging and trending, and to produce reports.

Optional Enercept® Display Interface acts as a stand-alone operator interface supporting up to 32 meters (63 with a repeater). In addition, the EDT can act as a network adapter allowing Enercept meters to be incorporated into a 4 wire network.

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Schneider Electric Brands

SQUARE D
Schneider Electric

# POWERLOGIC
# Enercept Meter

## Technical Specifications

| | |
|---|---|
| Input Primary Voltage | 208 to 480 VAC rms |
| Number of Phases Monitored | One or Three |
| Frequency | 50/60 Hz |
| Primary Current | Up to 2400 amps cont. per phase |
| Internal Isolation | 2000 VAC rms |
| Case Insulation | 600 VAC rms |
| Temperature Range | 0 to 60°C |
| Humidity Range | 0 - 95% non-condensing |
| Accuracy | ±1.0% of reading |
| Output Physical Characteristics | RS 485, 2 wire plus shield |
| Baud Rate | 9600, 8N1 format |
| Protocol | MODBUS RTU |
| Current Transformer | Split-core: 100, 300, 400, 800, 1600, 2400 amps |

**Data Output Specifications (Basic)**

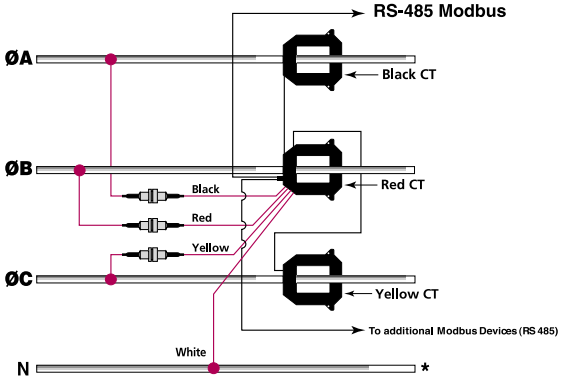
kWh, Consumption
kW

**Data Output Specifications (Enhanced)**

kWh, Consumption
kW
kW Demand
kVAR, Reactive power
kVA, Apparent power
Power factor
Average kW
Minimum kW
Maximum kW
Voltage, line to line
Voltage, line to neutral
Amps, Average current
kW, ØA
kW, ØB
kW, ØC
Power Factor ØA
Power Factor ØB
Power Factor ØC
Voltage, ØA to ØB
Voltage, ØB to ØC
Voltage, ØA to ØC
Voltage, ØA to Neutral
Voltage, ØB to Neutral
Voltage, ØC to Neutral
Amps, Current ØA
Amps, Current ØB
Amps, Current ØC

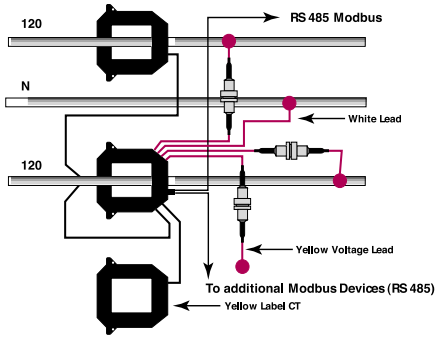
## Wiring Diagrams

### TYPICAL 208 or 480 VAC 3Ø, 3, 4-WIRE INSTALLATION




**** Neutral connection not required for 3Ø, 3-wire system***

### TYPICAL 240 VAC 1Ø, 3-WIRE INSTALLATION




## Ordering Information

**BASIC ENERCEPT METERS**

| CLASS | TYPE | RANGE | CT WINDOW I.D. |
|---|---|---|---|
| 3020 | B01-2 | 100 A | 1.25" x 1.51" |
| 3020 | B03-2 | 300 A | 1.25" x 1.51" |
| 3020 | B04-3 | 400 A | 2.45" x 2.89" |
| 3020 | B08-3 | 800 A | 2.45" x 2.89" |
| 3020 | B08-4 | 800 A | 2.45" x 5.50" |
| 3020 | B16-4 | 1600 A | 2.45" x 5.50" |
| 3020 | B24-4 | 2400 A | 2.45" x 5.50" |

**ENHANCED ENERCEPT METERS**

| CLASS | TYPE | RANGE | CT WINDOW I.D. |
|---|---|---|---|
| 3020 | E01-2 | 100 A | 1.25" x 1.51" |
| 3020 | E03-2 | 300 A | 1.25" x 1.51" |
| 3020 | E04-3 | 400 A | 2.45" x 2.89" |
| 3020 | E08-3 | 800 A | 2.45" x 2.89" |
| 3020 | E08-4 | 800 A | 2.45" x 5.50" |
| 3020 | E16-4 | 1600 A | 2.45" x 5.50" |
| 3020 | E24-4 | 2400 A | 2.45" x 5.50" |

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