

# PowerLogic™ Enercept™

## Functions and characteristics

PER01199



PowerLogic Enercept

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 such as tenants, product lines or production areas. This not only promotes better energy usage practices, it positions the owner for negotiation with deregulated utilities.

The PowerLogic Enercept meter offers a solution that makes metering practical in many applications. It is easy to include PowerLogic Enercept meters throughout an electrical system. Its three interconnected, easy-to-install split-core CTs combine highly accurate digital metering and communications electronics inside one of the CT housings. An innovative form factor eliminates the need for a separate meter enclosure and can help reduce installation cost by as much as 70 percent. Simply snap on the CTs, connect the voltage inputs and communication lines, and installation is complete. Since the meter is inside the CT and no external PTs are required, the PowerLogic Enercept meter is a cost effective option for basic electrical metering.

There are two versions of the Enercept meter — Basic and Enhanced — differing only in the metering information provided. The Basic meter reports power and energy. The Enhanced version delivers 26 additional parameters, including volts, amps, power factor and reactive power. Both versions can be connected to either three phase or single phase circuits.

### Applications

- Measure efficiency, reveal opportunities and verify savings.
- Sub-bill tenants for energy costs.
- Allocate energy costs to departments or processes.
- Leverage existing infrastructure capacity and avoid over-building.
- Verify the reliable operation of equipment.

### Main characteristics

**Precision metering electronics and current transformers in a single package**  
Reduces the number of installed components, resulting in large labor savings

**Easy-to-install split-core CTs**  
Eliminates the need to disconnect conductors.

**High accuracy**  
±1% of reading from 10-100% of the rated current of the CTs.

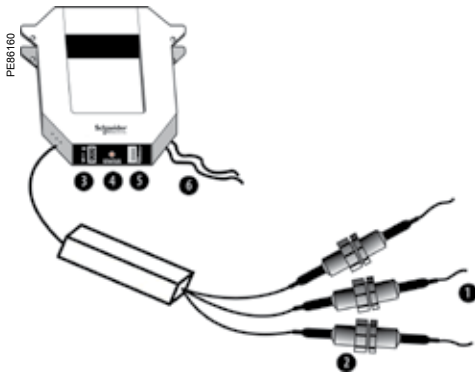
**Modbus RTU protocol**  
Integrates easily into existing networks using Modbus communications.

**Smart electronics eliminate CT orientation errors**

**Uses RS-485 wiring**  
Simplifies the installation process and integration into an existing network.

### Part numbers

Enercept Basic/Enercept Enhanced	
Enercept Basic	3020B012S
	3020B032S
	3020B043S
	3020B083S
	3020B084S
	3020B164S
	3020B244S
Enercept Enhanced	3020E012S
	3020E032S
	3020E043S
	3020E083S
	3020E084S
	3020E164S
	3020E244S



- PowerLogic Enercept  
 1 Voltage leads.  
 2 Fuses.  
 3 Modbus RS-485 port.  
 4 Status LED.  
 5 Modbus address selection switch.  
 6 To external CTs.

Selection guide		Basic	Advanced
<b>General</b>			
Installation		Split-core CTs installed directly on conductor to be monitored	Split-core CTs installed directly on conductor to be monitored
Power / active energy accuracy		■	■
<b>Instantaneous rms values</b>			
Current and voltage		-	■
Total power	Active	■	■
	Reactive	-	■
	Apparent	-	■
Power per phase	Active	-	■
	Power factor	Total and per phase	■
<b>Energy values</b>			
Active energy		■	■
<b>Demand values</b>			
Total active power	Present and max. values	-	■
<b>Power supply</b>			
AC		208 to 480 Vac	208 to 480 Vac
<b>Communication</b>			
RS 485 port		■	■
Modbus protocol		■	■

# PowerLogic Enercept

## Functions and characteristics (cont.)

P1EB0159



PowerLogic Enercept

### Electrical characteristics

Type of measurement		
Measurement accuracy	Power	1 % of reading from 10 % to 100% of rated current
	Energy	1 % of reading from 10 % to 100% of rated current
Data update rate		1.2 seconds
Input-voltage characteristics	Measurement range	208 to 480 Vac
	Power supply	AC 208 to 480 Vac

### Mechanical characteristics

Weight	Small	1.0 kg
	Medium	1.5 kg
	Large	2.0 kg
Dimensions	Small	100 x 121 mm
	Medium	132 x 151 mm
	Large	201 x 151 mm

### Environmental conditions

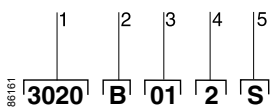
Operating temperature	0 to 60°C (50°C max for 2400A model)
Storage temperature	0 to 60°C (50°C max for 2400A model)

### Safety

U.S. and Canada	UL, CUL listed
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### Communication

RS 485	One port
Protocol	Modbus RTU



PEB6161  
Example Enercept product part number.

- 1 Model.
- 2 Feature set.
- 3 Number of Amps.
- 4 Size.
- 5 Brand.

### Part numbers

Item	Code	Description
1 Model	3020	Highly accurate meter that monitors branch circuits and the incoming power mains and includes full alarming capabilities
2 Feature set	B = Basic	Reports power and energy
	E = Enhanced	Reports 26 different energy parameters, including: Volts Amps Power factor Reactive power
3 Number of Amps	01	100 Amps
	03	300 Amps
	04	400 Amps
	08	800 Amps
	16	1600 Amps
	24	2400 Amps
4 Size	2	Small
	3	Medium
	4	Large
5 Brand	S	Schneider Electric