Honeywell

SXB40/SXB50 Self-Contained Split-Core kW/kWh Transducers

SPECIFICATION DATA

OVERVIEW

The Honeywell SXB40/SXB50 Series kW (real power)/kWh (consumption) transducers combine processing electronics and industrial grade CTs in an easy-to install split-core package. These devices continuously measure voltage and current values for the monitored conductors and update calculations to provide highly accurate true RMS power readings. Models designed for balanced loads include one CT only, while models for unbalanced loads have three CTs.

APPLICATIONS

The unique design of the SXB40/SXB50 Series transducers reduces the number of installed components, making them ideal for monitoring electrical power in commercial and industrial facilities The SXB40 uses industry-standard 4-20mA output, and the SXB50 uses a pulse output.

Installation is simple. The SXB40/SXB50 eliminates the need to mount and wire a transducer and enclosure. CTs and voltage leads are color-matched, and the meters are designed to detect and automatically compensate for phase reversal. No more worries about CT load orientation.

- Optimize chillers, pumps & cooling towers
- Energy managing & performance contracting
- Control processes
- Activity-based costing in commercial and industrial facilities
- Monitor real-time power

FEATURES

- **Fast split-core installation eliminates the need to remove conductors—perfect for retrofits.**
- **Precision meter electronics and current transformers in a single package reduces the number of installed components, resulting in huge labor savings.**
- **Smart electronics eliminate the need to be concerned with CT orientation, providing fast, trouble-free installation.**

SPECIFICATIONS

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

Input Primary Voltage: 208/240, or 480VAC RMS

Number of Phases Monitored: One or Three

Frequency: 50/60Hz

NOTE: SXB meters are rated for use at 50-60Hz. Exposure to extreme harmonics from VFDs or similar sources will result in signal problems and may permanently damage the product

Maximum Primary Current: Up to 2400 amps cont. per phase

Internal Isolation: 2000VAC RMS

Insulation Class: 600VAC RMS††

Temperature Range: 0° to 60°C (32° F to 140°F); 50°C (122°F) for 2400A

Humidity Range: 0 - 95% non-condensing

Output: (SXB40) 4-20mA

Supply Power (current loop): (SXB40) 9-30VDC; 30mA max.

Pulsed Output:
(SXB50) Field -selectable; 1, 0.5, 0.25, 0.1kWh/pulse*

Pulsed Output Type:
(SXB50) Normally Open, Opto-FET, 100mA@24VDC

Pulsed Width:
(SXB50) 200 msec

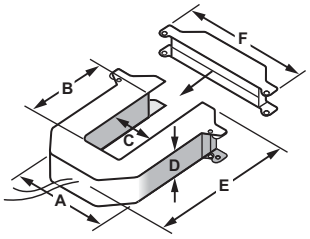
c UL US LISTED

63-1340-02

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

* Count must be multiplied by the number of phases when using single CT models to monitor balanced multiphase systems.

DIMENSIONS



SMALL
100/300 AMP

A = 3-51/64 (96)
B = 1-13/64 (30)
C = 1-19/64 (31)
D = 1-13/64 (30)
E = 4 (100)
F = 4-51/64 (121)

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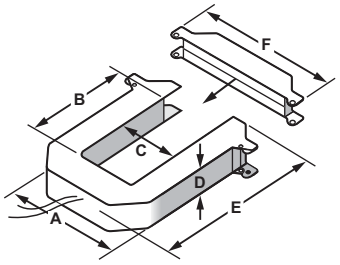
Fig. 1. Dimensions of small CT.



MEDIUM
400/800 AMP

A = 4-29/32 (125)
B = 2-29/32 (73)
C = 2-1/2 (62)
D = 1-13/64 (30)
E = 5-13/64 (132)
F = 5-29/32 (151)

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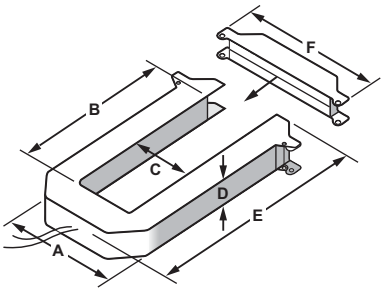
Fig. 2. Dimensions of medium CT.



LARGE
800/1600/2400 AMP

A = 4-29/32 (125)
B = 5-1/2 (139)
C = 2-1/2 (62)
D = 1-13/64 (30)
E = 7-29/32 (201)
F = 6 (151)

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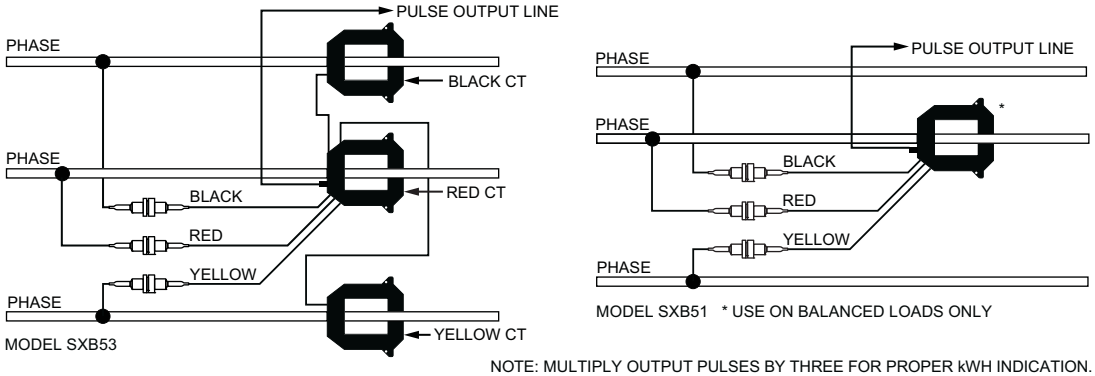
Fig. 3. Dimensions of large CT.

WIRING



NOTE: MULTIPLY OUTPUT PULSES BY THREE FOR PROPER kWH INDICATION.

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Fig. 4. Typical 208/480 VAC 3Ø, 3- or 4-wire installation.

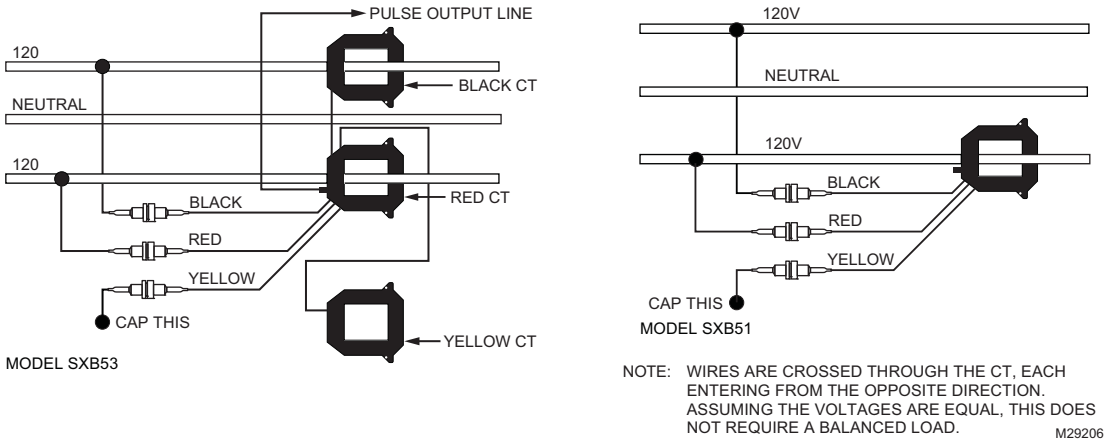

Fig. 5. Typical 240/120 VAC 1Ø, 3-wire installation.

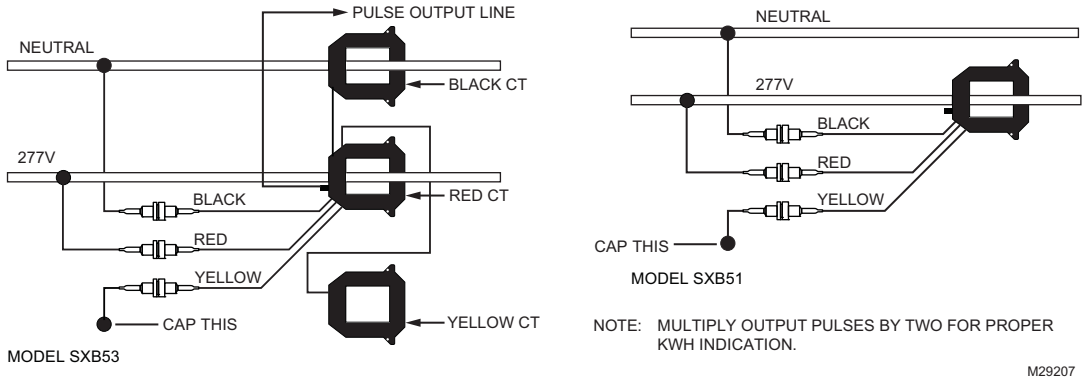

Fig. 6. Typical 277 VAC 1Ø, 2-wire installation.

ORDERING INFORMATION

Model	Voltage	Max. Amps	Output	CT Size	CT Type
SXB42-100	480	100	4-20mA	Small	Single CT Model
SXB42-300		300		Small	
SXB42-400		400		Medium	
SXB42-800-3		800		Medium	
SXB42-800-4		800		Large	
SXB42-1600-4		1600		Large	
SXB42-2400		2400		Large	
SXB43-100	208/240	100		Small	Three CT Model
SXB43-300		300		Small	
SXB43-400		400		Medium	
SXB43-800-3		800		Medium	
SXB43-800-4		800		Large	
SXB43-1600-4		1600		Large	
SXB43-2400		2400		Large	
SXB44-100	480	100		Small	
SXB44-300		300		Small	
SXB44-400		400		Medium	
SXB44-800-3		800		Medium	
SXB44-800-4		800		Large	
SXB44-1600-4		1600		Large	
SXB44-2400		2400		Large	
SXB51-100	208/480	100	Pulse	Small	Single CT Model
SXB51-300		300		Small	
SXB51-400		400		Medium	
SXB51-800-3		800		Medium	
SXB51-800-4		800		Large	
SXB51-1600-4		1600		Large	
SXB51-2400		2400		Large	
SXB53-100		100		Small	Three CT Model
SXB53-300		300		Small	
SXB53-400		400		Medium	
SXB53-800-3		800		Medium	
SXB53-800-4		800		Large	
SXB53-1600-4		1600		Large	
SXB53-2400		2400		Large	

Single CT Models for Use with Balanced 3Ø Loads
Three CT Models for Use with Unbalanced 3Ø Loads

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