

H8040 SERIES

Enercept® Self-contained Split-core kW Transducers (4-20mA)



Integral monitoring solution eliminates the need for separate transducers!



Patent pending

DESCRIPTION

The H8040 Series kW (power demand) transducers combine processing electronics and industrial grade CT(s) in an easy to install split-core package. Models designed for balanced loads include one CT only, while models for unbalanced loads have three.

The unique design of the H8040 Series transducers reduces the number of installed components, making them ideal for monitoring electrical power in commercial and industrial facilities using industry standard 4-20mA output.

The transducer instantaneously samples the voltage and current in the monitored conductors to measure and report true RMS power.

The installation of these meters is simple. Connect the three colored voltage leads one at a time to the three power conductors to be monitored, and attach the matching CTs (e.g., red voltage lead and red CT must be on the same conductor). To further simplify the installation these meters automatically detect and compensate for phase reversal eliminating the concern of CT load orientation.

POWER TRANSDUCERS

Applications

- Optimization of chillers, pumps and cooling towers
- Energy management & performance contracting
- Process control
- Real time power monitoring

Reduced Installation and Setup Costs

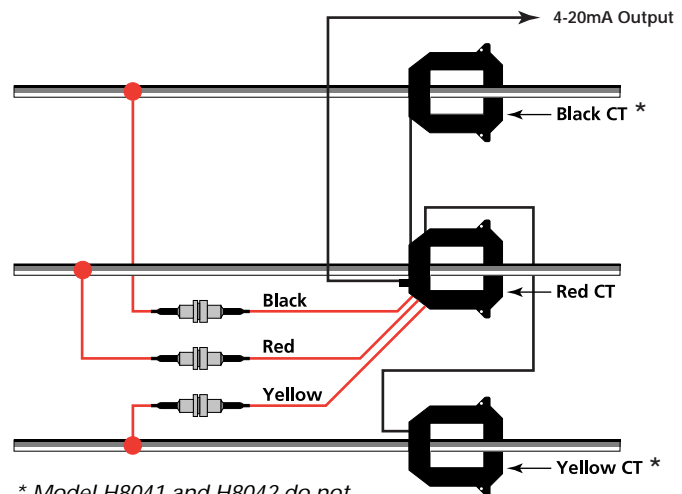
- Fast split-core installation eliminates the need to remove conductors
- Precision meter electronics and current transformers in a single package...reduces the number of installed components...Huge labor savings
- Smart electronics eliminate the need to be concerned with CT orientation...fast trouble free installation

High Accuracy

- ±1% accuracy

APPLICATIONS or WIRING DIAGRAM

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



* Model H8041 and H8042 do not include these two CTs.

Ordering INFORMATION

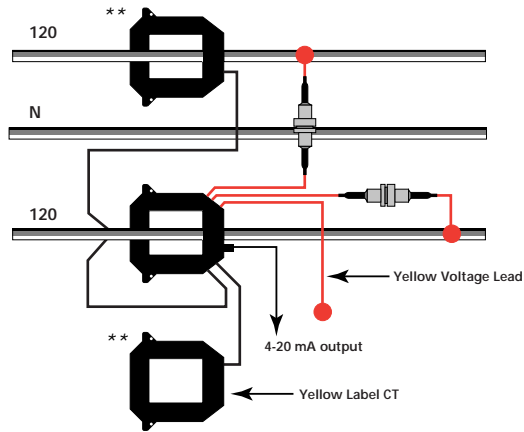
SINGLE CT MODELS FOR USE ONLY WITH W/BALANCED LOADS

MODEL	VOLTAGE	MAXIMUM AMPS	CT SIZE
H8041-0100-2	208/240	100	SMALL
H8041-0300-2	208/240	300	SMALL
H8041-0400-3	208/240	400	MEDIUM
H8041-0800-3	208/240	800	MEDIUM
H8041-0800-4	208/240	800	LARGE
H8041-1600-4	208/240	1600	LARGE
H8041-2400-4	208/240	2400	LARGE
H8042-0100-2	480	100	SMALL
H8042-0300-2	480	300	SMALL
H8042-0400-3	480	400	MEDIUM
H8042-0800-3	480	800	MEDIUM
H8042-0800-4	480	800	LARGE
H8042-1600-4	480	1600	LARGE
H8042-2400-4	480	2400	LARGE

THREE CT MODELS FOR USE WITH ANY 3Ø LOAD

MODEL	VOLTAGE	MAXIMUM AMPS	CT SIZE
H8043-0100-2	208	100	SMALL
H8043-0300-2	208	300	SMALL
H8043-0400-3	208	400	MEDIUM
H8043-0800-3	208	800	MEDIUM
H8043-0800-4	208	800	LARGE
H8043-1600-4	208	1600	LARGE
H8043-2400-4	208	2400	LARGE
H8044-0100-2	480	100	SMALL
H8044-0300-2	480	300	SMALL
H8044-0400-3	480	400	MEDIUM
H8044-0800-3	480	800	MEDIUM
H8044-0800-4	480	800	LARGE
H8044-1600-4	480	1600	LARGE
H8044-2400-4	480	2400	LARGE

TYPICAL 240 VAC 1Ø, 3-WIRE INSTALLATION

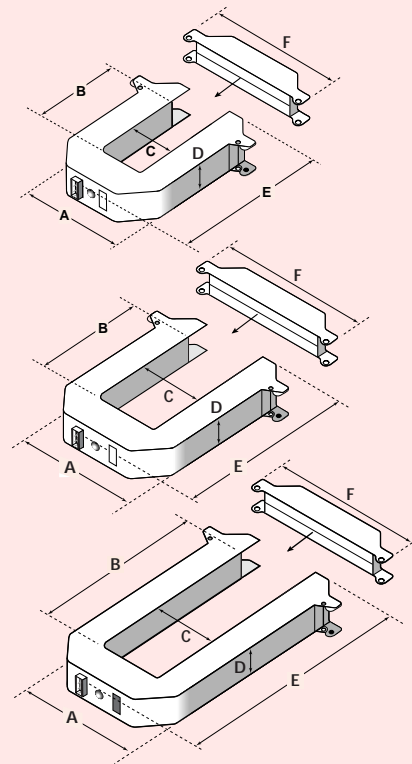


* Use Model H8041 or H8043 for 240V single phase systems
 ** Model H8041 and H8042 do not include these two CTs.

MAXIMUM KW, READING AT 20MA

MODEL	3Ø POWER	1Ø POWER
H8041-0100-2	36.03 kW	24.00 kW
H8041-0300-2	108.1 kW	72.00 kW
H8041-0400-3	144.1 kW	96.00 kW
H8041-0800-3	288.2 kW	192.0 kW
H8041-0800-4	288.2 kW	192.0 kW
H8041-1600-4	576.4 kW	384.0 kW
H8041-2400-4	864.6 kW	576.0 kW
H8042-0100-2	83.14 kW	55.43 kW
H8042-0300-2	249.4 kW	166.3 kW
H8042-0400-3	332.6 kW	221.7 kW
H8042-0800-3	665.1 kW	443.4 kW
H8042-0800-4	665.1 kW	443.4 kW
H8042-1600-4	1330 kW	886.7 kW
H8042-2400-4	1995 kW	1330 kW
H8043-0100-2	36.03 kW	36.03 kW
H8043-0300-2	108.1 kW	108.1 kW
H8043-0400-3	144.1 kW	144.1 kW
H8043-0800-3	288.2 kW	288.2 kW
H8043-0800-4	288.2 kW	288.2 kW
H8043-1600-4	576.4 kW	576.4 kW
H8043-2400-4	864.6 kW	864.6 kW
H8044-0100-2	83.14 kW	83.14 kW
H8044-0300-2	249.4 kW	249.4 kW
H8044-0400-3	332.6 kW	332.6 kW
H8044-0800-3	665.1 kW	665.1 kW
H8044-0800-4	665.1 kW	665.1 kW
H8044-1600-4	1330 kW	1330 kW
H8044-2400-4	1995 kW	1995 kW

DIMENSIONAL DRAWINGS



SMALL 100 Amp (-2) 300 Amp	MEDIUM 400 Amp (-3) 800 Amp	LARGE 800 Amp (-4) 1600 Amp (-4) 2400 Amp
A = 3.75" (95 mm)	A = 4.90" (124 mm)	A = 4.90" (124 mm)
B = 1.51" (38 mm)	B = 2.89" (73 mm)	B = 5.50" (140 mm)
C = 1.25" (32 mm)	C = 2.45" (62 mm)	C = 2.45" (62 mm)
D = 1.13" (29 mm)	D = 1.13" (29 mm)	D = 1.13" (29 mm)
E = 3.91" (99 mm)	E = 5.20" (132 mm)	E = 7.88" (200 mm)
F = 4.75" (121 mm)	F = 5.91" (150 mm)	F = 5.92" (150 mm)

H8040 SERIES SPECIFICATIONS

- Input Primary Voltage 208 or 480 VAC rms
- Number of Phases Monitored One or Three
- Frequency 50/60 Hz
- Maximum 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%
- Output 4-20mA
- Supply Power (loop) 9-30 VDC; 30mA max.
- Current Transformer Split core, 100, 300, 400, 800, 1600, 2400 amps

POWER TRANSDUCERS