

AH08/AH09

AH08/AH09

20/60 Turn Multi-Wrap Coils



DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Follow safe electrical work practices. See NFPA 70E in the USA, or applicable local codes.
- This equipment must only be installed and serviced by qualified electrical personnel.
- Read, understand and follow the instructions before installing this product.
- Turn off all power supplying equipment before working on or inside the equipment.
- Use a properly rated voltage sensing device to confirm power is off.
DO NOT DEPEND ON THIS PRODUCT FOR VOLTAGE INDICATION
- Only install this product on insulated conductors.

Failure to follow these instructions will result in death or serious injury.

NOTICE

- This product is not intended for life or safety applications.
- Do not install this product in hazardous or classified locations.
- The installer is responsible for conformance to all applicable codes.

OPERATION

The AH08 and AH09 multi-turn coils are intended for use in applications where the monitored load exceeds the 2400A rating of standard power meters. A 5A current transformer is applied to the primary, high-current conductor. The AH08/AH09 then amplifies this 0-5A signal for accurate sensing by a power meter.

The AH08 is a 20-turn coil suitable for 100A meters, such as the 100A Enercept. The AH09 is a 60-turn coil used with 300A meters, such as the 300A Enercept or the H8100 Commercial Energy Meter.

QUICK INSTALL

1. Disconnect power to the conductors to be monitored before beginning installation.
2. Select the appropriate multi-turn coil for your application: use the AH08 for connection to a 100A Enercept CT; use the AH09 for connection to a 300A Enercept CT.
3. Select current transformers with 5A outputs and a current rating suitable for the conductor to be monitored (e.g. 5000A:5A).
4. Wire the Enercept CT to the controller or energy meter. Place an AH08/AH09 coil through each Enercept CT (see Wiring section, page 2).
5. Attach the AH08/AH09 terminals to the secondaries of the 5A current transformers.
6. Install the 5A current transformers around the primary conductors.

CALCULATIONS

To correctly interpret data reported by the Enercept or H8100 meter, use a data multiplier:

$$\text{Data multiplier} = \text{Primary current on the 5A transformer} / \text{current rating of the meter}$$

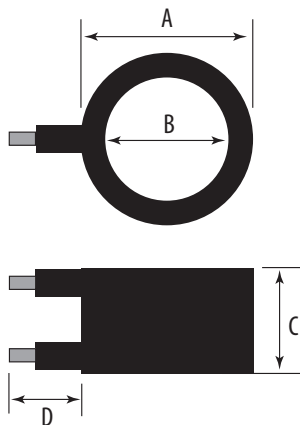
$$\text{Actual current} = \text{data multiplier} * \text{meter reading}$$

Example: Using an Enercept 100A meter and an AH08 20-turn coil to monitor a 5000A conductor produces a meter reading of 40A.

$$\text{multiplier} = 5000A / 100A = 50$$

$$\text{actual current} = 50 * 40A = 2000A$$

DIMENSIONS



AH08

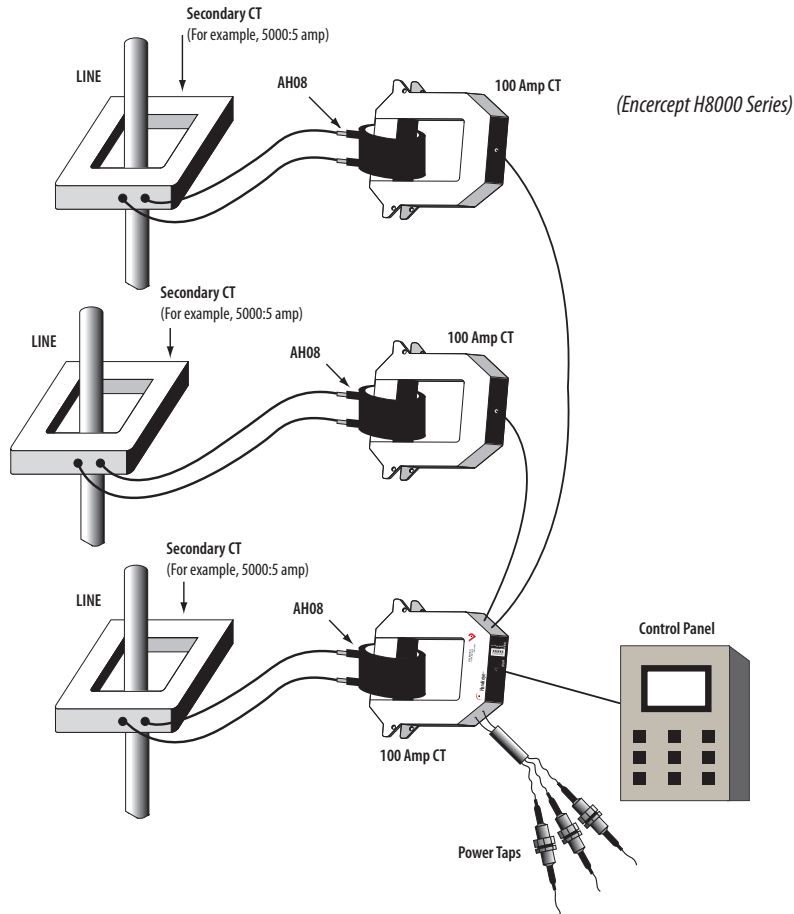
AH09

- A 2.2" (56mm) nom.
- B 1.5" (38mm) nom.
- C 1.2" (29mm) max.
- D 1.25" (32mm) max.

- A 2.5" (64mm) nom.
- B 1.5" (38mm) nom.
- C 1.2" (29mm) max.
- D 1.25" (32mm) max.

WIRING EXAMPLES

Example 1: AH08 attached to Enecept meter, wired directly to the building controller



Example 2: AH08 or AH09 attached to the H8100 meter

