

# ***eCAP-9045***

## **Multifunction Capacitor Controller**

**Available in a wide variety of standard and legacy protocols**

Based upon QEI's legendary 6ACP5 platform, the eCAP-9045 provides three-phase, single-phase, 3-step, or 2-step capacitor bank control. It provides SCADA functionality via DNP or any other available byte-oriented server protocol available to the 6ACP5.

The eCAP-9045 accepts voltage and current inputs from either line post sensors or PT's and CT's. Capacitor switching is based on either Voltage or kVAr, with a local Voltage Override included, which has precedence over kVAr control. Neutral current detection is available.

An included +12VDC 2.0A power supply provides power for the 6ACP5 board and customer supplied radio. The 6ACP5 provides six relay outputs (rated 10A/250VAC) arranged as 3 trip/close pairs for independent or ganged control of three cap bank switches.

Front panel switches are included for Phases A,B,C Open/Close, Auto, Manual, remote, and Lock-out indication.



6CTP2-2 Current Transformer Interface



6PTP2 Potential Transformer Interface

## Operation Modes

- Local:** Front Panel Switch Control  
**Remote:** SCADA Master Control  
**CommFail:** Revert to automatic control if communications to the master station fail  
**Auto:** Fully automatic control based on switching algorithms  
**Lockout:** Failure detected - control operations blocked until reset either locally or from master

## Safety

- Burnout Protection** Blocks all switch operations until line voltage reaches an acceptable level  
**Hunting and Retries** Rate of operations as well as the total number of attempts can be limited  
**Neutral Sensing** Programmable time interval & retries for detected neutral fault conditions

## Ordering Info

<b>QEZ-X</b>	X=1 w/o PT, w/o CT
	X=2 w/ PT, w/o CT
	X=3 w/o PT, w/ CT
	X=4 w/ PT, w/ CT

## SPECIFICATIONS

**Input power requirement:** 2.0 Amp @ 120 VAC, 60 Hz nominal, Single Phase  
Note: eCAP-9045 includes +12Vdc power for radio equipment. Actual input power requirement will vary based on radio usage.

**Communications:** One RS-232 serial port for configuration.  
One RS-232 serial port for radio communications.  
Various protocols available.

Note: +12Vdc power for radio equipment is included (+12Vdc nominal @ 2 A max).

### Environmental

**Temperature:** Standard: 32 °F to 158 °F (0 °C to 70 °C)  
**Humidity:** 5% to 95% @ 158 °F, non-condensing

### Mechanical Physical Configurations, typical:

**Cabinet Material:** C. R. Steel  
**Rating:** NEMA 4  
**Mounting:** Wall or Pole-Top  
**Dimensions (HxWxD):** 20 x 16 x 8 inches nominal  
**Weight:** 80.0 lbs



All brand or product designations, names or trademarks mentioned in this document remain the property of the original owner.  
All characteristics subject to change without notice  
Copyright 2009, QEI Incorporated