

CISCO TWO-WAY CAPACITOR BANK CONTROLLER/MONITOR SPECIFICATIONS MODEL KFZ00-RCR1109



CORPORATE SYSTEMS ENGINEERING

For Control When It Counts



Overview

The CSE multifunction all season Capacitor Bank Controllers (CapBank) are two-way terminals for remote control and monitoring of power factor correction for line capacitors and other similar control capabilities. CSE CapBank controls are based upon one or more of the following functions:

- ✦ Power Factor
- ✦ Voltage
- ✦ VAR Management
- ✦ Load Current
- ✦ Temperature
- ✦ Time of day and day of week

The functions listed above can be factory programmed as defined by the Utility; however, these functions can be overridden by the Control Platform. The Control Platform is flexible and can be an interface with an existing software application, such as SCADA/EMS, or a part of the CSE Demand Response Control Platform. The Control Platform is configurable to operate by SCADA control or as an independent Control Platform with SCADA override. CSE applications are windows based, menu driven and can be used on any PC.

The two-way communications is achieved via Cisco Mesh Network. This two-way communication is managed utilizing a high speed processor and flash memory. With two-way communication, users can monitor real-time line conditions, retrieve load data and program the CapBank. Data from the CapBank can be retrieved during off-peak hours conserving airtime and communication costs or in near real-time.

Hardware Features

Ability to Integrate with:

- Dispatch at energy control center
- Retail energy desk (Energy Supply and Marketing)
- Supervisory control (SCADA)
- Customer Information System (CIS, CICS, or other)

Communication Options:

- Cisco Mesh Networks
- Other Communication Paths available

Capacitor Bank Control Features:

- Cost effective remote controllable & programmable
- Historical event counters
- Over four million individual addresses with remote programmability
- Data recall parameters
- Visual indicators
- Remote test functions
- Standard 4-jaw or 6-jaw meter socket Mount: NEMA 250 enclosure with seal & latch
- Field Safety - local out of service



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CISCO TWO-WAY CAPACITOR BANK CONTROLLER/MONITOR MODEL KFZ00-RCR1109

ADDRESS CODES

Individual Address:	4,194,304 (2 ²²) Possibilities.
Common Individual Address:	Addresses all units.
Group:	16,384 (2 ¹⁴) Possible groups
Group Address:	127 (2 ⁷ -1) Possible groups with subgroups
Subgroup Address:	128 (2 ⁷) Possible subgroups each
Address Assignment (Remote):	From one up to 8 Upper and associated Lower Extended Addresses.
Address Function:	Controls load (Interrupts/Restores relay contact).

COMMUNICATION OPTIONS

Type:	Cisco Mesh Networks Other Communication Paths available:
Regulatory Compliance:	FCC

DATA RECALL PARAMETERS

Last Message Received	Recalls the last command received.
CapBank Switch Position	Recalls the position of the CapBank switch
Trip/Close Operation Counter	Number of times the Trip and/or Close have been operated
VAR Recordings	Provides the VAR details

VISUAL INDICATORS

LED 1 Trip:	LED 1 in steady state on denotes trip operation. Blinking state denotes delay period prior to trip.
LED 2 Close:	LED 2 in steady state on denotes close operation. Blinking state denotes delay period prior to close.
LED 3 Test:	LED 3 in blinking state denotes unit is under test.
LED 4 Local Control Status:	LED 4 in steady state on denotes unit is in local state out of service, manual operation only.

TEST FUNCTIONS

Operation Including Relay Coil Continuity and Propagation Test on LED 3:	LED 3 indication in response to Test Command and Propagation signal from a handheld transmitter or Load Management System Transmitter.
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DEVICE ENCLOSURE

Type:	High-impact Molded Lexan® with neoprene enclosure gasket for raintight operation. Meets NEMA 250 – Enclosures for Electrical Equipment (1000 Volts Maximum). Provision for utility meter seal.
Dimensions:	8 5/16" X 9 3/4" X 5 1/2" – 2.75 lbs.
Mounting:	Standard 4 or 6 jaw meter socket.
Tinted Lid:	For LED observation.

POWER REQUIREMENTS

Power Input:	120 or 240 VAC ±20%; 60 Hz. Specified at time of order.
Power Consumption:	5 Watts maximum at 120 or 240VAC with full load.

OPERATING ENVIRONMENT

Operating Temperature:	Specified at time of order.
Relative Humidity:	0 -100% (non-condensing).

REGULATORY COMPLIANCE

Surge Withstand Capability:	Meets and exceeds ANSI C37.90a requirements.
Federal Communications Commission (FCC)	FCC Part 15 Radiated Emission ANSI C63.4

All devices are 100% Factory Tested and Inspected in accordance with Factory Acceptance Testing Procedures mutually determined with each utility.

Specifications subject to change

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CELLULAR TWO-WAY CAPACITOR BANK CONTROLLER/MONITOR MODEL KFP00-RCR1109



CORPORATE SYSTEMS ENGINEERING

We Put You in Control When It Counts



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The two-way communications is achieved via cellular network. This two-way communication is managed utilizing a high speed processor and flash memory. With two-way communication, users can monitor real-time line conditions, retrieve load data and program the CapBank. Data from the CapBank can be retrieved during off-peak hours conserving airtime and communication costs or in near real-time.

Hardware Features

Ability to Integrate with:

- Dispatch at energy control center
- Retail energy desk (Energy Supply and Marketing)
- Supervisory control (SCADA)
- Customer Information System (CIS, CICS, or other)

Communication Options:

- Cellular Dual-band CDMA 800 / 1900 MHz
- Built in UDP/TCP/IP stack
- Other Communication Paths available

Capacitor Bank Control Features:

- Cost effective remote controllable & programmable
- Historical event counters
- Over four million individual addresses with remote programmability
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Type:	Cellular Dual-band CDMA 800 / 1900 MHz Built in UDP/TCP/IP stack Other Communication Paths available:
Regulatory Compliance:	FCC Cellular Operation – Verizon Network Certified

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