Capacitor Switching Transponder (CST)

By Aclara

Expertise You Can Trust. Built using the extensive knowledge of Hubbell and Aclara engineering teams, TWACS® CSTs are installed on capacitor banks enabling visibility and control of your distribution network.

Features

- Automate remote management of capacitor banks and other distribution automation devices
- Obtain on-demand status information for troubleshooting, alarms, voltage profiles and switch status
- Reduce overhead related to capacitor bank patrols and line loss
- Eliminate manual switching
- Monitor neutral currents to pinpoint partial bank failures or blown fuses
- Includes local/remote door interlocking and configurable open/close timers and alarming

General

Communication Method	• Aclara TWACS® PLC •
Emission Regulations	• EMI/RFI Emission conducted radiated: Class A, 47CFR Part 15 Subpart J (meets Class B limits) All wiring: 5′ length in grounded conduit US: FCC Part 15, Class B per ANSI C12.1-2001Test No. 27 - “Radio Frequency Conducted and RadiatedEmissions” • EMI/RFI Susceptibility: IEC 61000-4-3; 2002 Radiated, RF, electromagnetic field immunity and IEC 61000-4-6;2006: Immunity to conducted disturbances, induced by RF fields. 30 Volts/meter, MIL-STD-461/462, 150 kHz - 10 GHz; 80% modulation • Vertical and horizontal polarization; no misoperation or loss of data allowed US: Per ANSI C12.1-2001Test No. 26- “Effect of Radio Frequency Interference” Canada: MIL-STD-461B per CAN3-C17-M84
Ingress Protection	IP66 per IEC 60529
Life Expectancy	15+ years
Material	UV stabilized polycarbonate
Mounting Type	4-jaw or 6-jaw meter socket
Operating Temperature	• -40°C to +60 °C (-40°F to +140°F) • Complies with IEEE 495 Temperature • Cycling Test to +85 °C
Power Supply	120VAC +15% / -20%
Storage Temperature Range	-40°C to +85°C (-40°F to +185°F)
Surge Protection	• AC Line Surge: Category C, Common and Transverse, ring wave and bi-wave; no misoperation or loss of data allowed US: ANSI/IEEE C62.41-2002 per ANSI C12.1-2001 Canada: ANSI/IEEE C62.41 per CAN3-C17-M84 • Surge Withstand Capability: ANSI/IEEE C37.90.1-2002 Electrical Fast Transient 2.5kHz at 4kV Oscillatory 1MHz and 2.5kV, 2500 V, Common mode and differential mode; applied per Southern California Edison's requirements; no misoperation or loss of data allowed US: ANSI/IEEE C37.90.1-2002 Canada: ANSI/IEEE C37.90 per CAN3-C17-M84

Dimensions

Depth	4 in
Height	10 in
Weight	2 lb
Width	8 in

Electrical Ratings

Current Rating	34 A RMS, Inbound signaling @ 120VAC A
Dielectric Strength	High Voltage Isolation on Meter Chassis: Dielectric Withstand (Insulation) US: Insulation High Potential (Hi-Pot) test of 2500 Vrms between all high voltage inputs and the meter chassis, applied for 1 minute, per ANSI C12.1-200; Canada: Same as above per CAN3-C17-M84
Frequency Rating	60Hz +/- 2.0%
Voltage - Radio Interference	Voltage Interruption Test US: Per ANSI C12.1-2001, Test No. 16
Voltage Rating	120VAC +15% / -20%
Withstand Current - Short Time (2 sec)	Electrical Fast Transient Withstand: 4000 V, Unidirectional wave Rise time < 5 nanoseconds Crest time > 50 nanoseconds 2 seconds @ 60 pulses / second No misoperation or loss of data allowed US: IEEE/ANSI C37.90.1-2002

Product Assets

Specifications - Capacitor Switching Transponder (CST)

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