

COOLING / REFRIGERATION			197
Model(s)	Page(s)	Model (s)	Page(s)
49P11-843 SureSwitch™	197 – 198	16E09-101	199– 200
		90-160 thru 90-172 / 90-244 thru 90-249	201

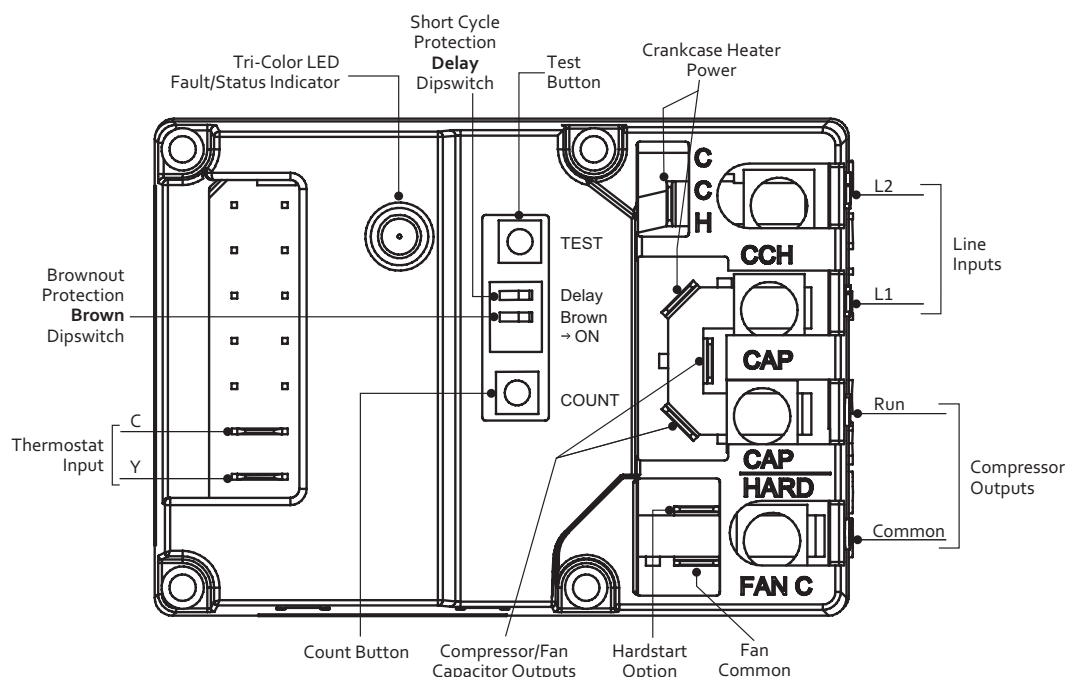
SPECIFICATIONS

ELECTRICAL RATINGS

Line Voltage Input.....	240 VAC, 50/60 Hz
Full Load Amperes (FLA)	40 A
Locked Rotor Amperes (LRA)	200A
Control (Coil) Voltage (Y, C)	24 VAC, 50/60 Hz

RECOMMENDED TERMINAL TORQUE – L1, L2, R and C

#4 – 6 AWG	45 in-lbs
#8 AWG	40 in-lbs
#10 – 14 AWG	35 in-lbs



49P11-843 SureSwitch Terminals and Switches

OPERATION

CALL FOR COMPRESSOR OPERATION

24 VAC between the Y and C terminals will signal a call for compressor operation. The C compressor and fan outputs will be energized. Loss of 24 VAC between Y and C will de-energize the outputs.

TEST

SureSwitch includes a Test Mode to assist in system installation and troubleshooting. Press the “TEST” button for one second to energize the compressor and fan for five seconds without a Y call.

RANDOM START DELAY

At power-up and when SureSwitch recovers from a brownout, a random start delay of 5-90 seconds will be activated. This delay is in addition to the short cycle delay. During this delay

the compressor will not be energized, even if a call for compressor operation is present. The random start delay can help reduce spikes in power consumption when multiple loads are re-energized after a blackout or brownout.

The random start delay cannot be disabled, but is only active at initial power-up and when recovering from a brownout. Normal compressor cycling will not activate the random start delay.

SHORT CYCLE PROTECTION

At power-up, and any time the compressor is de-energized, SureSwitch will activate a three minute short cycle delay. During this delay the compressor will not be energized, even if a call for compressor operation is present, to prevent compressor damage due to rapid on and off cycling. Normal operation resumes when the delay expires.

Short cycle protection can be disabled by setting the “**Delay**” dipswitch to the **OFF** position.

LINE-VOLTAGE BROWNOUT PROTECTION

Brownout protection will de-energize the compressor and fan if line voltage drops below 180 VAC for more than four seconds during a call for compressor operation. Compressor operation will not resume until line voltage returns to a minimum of 190 VAC. In addition, SureSwitch will not attempt to start the compressor if line voltage is less than 187 VAC.

Brownout protection can be disabled by setting the “**Brown**” dipswitch to the **OFF** position.

LIFETIME CYCLE COUNT

A count of compressor cycles since the control was installed is stored in the control’s memory. To display the count, press and hold the “**COUNT**” button for one second. The LED will flash to indicate the total number of compressor cycles, rounded to the nearest 100 cycles:

- GREEN – One Flash per 10,000 Cycles
- RED – One Flash per 1,000 Cycles
- YELLOW – One Flash per 100 Cycles

EXAMPLE: 52,318 cycles would flash five GREEN, then two RED, then three YELLOW

LED STATUS CODES

The tri-color LED will flash fault and status codes while SureSwitch is powered.

LED Color	Status
NONE	No Power
GREEN Slow Flash	Standby – No Call
GREEN Solid	Call for Compressor – Compressor and Fan Energized
GREEN Fast Flash	Short Cycle/Random Start Delay
GREEN/RED Alternating	Brownout Detected
GREEN/RED/YELLOW Alternating	Compressor Test Mode – Compressor and fan Energized