

PCEC Troubleshooting Quick Checks

☐ PCE faults out with LED Blinking. How many times is the LED Flashing (before pausing)?

See PCEC Manual Chapter 4:2 Table 16 & 17. Based on the number of LED Flashes, these pages will guide you to a possible fault explanation and the possible solution.

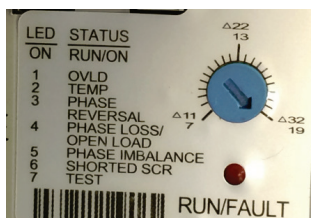
Below are common issues:

- ☐ **3 Flashes:** Change two of the incoming phases and verify that the motor is spinning in the correct direction. If the motor does not turn in the correct direction, change the incoming phases back to their original connections and change dip switch #9 to the desired Line Rotation sequence setting.
- ☐ **4 Flashes:** Check for open line (i.e. open fuse). Check for incorrect wiring to load. Verify proper operation of the fault contactor. Dip Switch 15 is set properly for the motor type. Ensure the PCE overload range falls within the range of the motor FLA. Ensure IN1/IN2 command input is not intermittent from upstream devices.
- ☐ **6 Flashes:** The user must check that Dip Switch 15 is set properly and re-check motor all connections from PCE/FC to motor. If F6 persists, a final ohmmeter check on all three phases (SCRs') must be performed as noted in Table 16. Damaged SCR(s) occur due to excessive external currents. The installer must check all electrical devices from the feeder to the motor before installing another PCEC unit.
- ☐ **Verify all users Dip Switch settings and compare to Factory Default Settings.**
 - ☐ See PCEC User manual Chapter 3:1 & 3:2 for each setting
 - ☐ IMPORTANT: Verify if the motor is a 3-Lead Line Connected or 6-Lead Wye-Delta motor and then ensure that PCE DIP #15 is either DOWN for 6-Lead motor or UP for 3-Lead.
- ☐ **User claims the PCE is dead with no LED flashes, how can this be verified?**
 - ☐ With voltage applied to PCE A1/A2 [without voltage applied to A1/A2, nothing will happen]; hold down the Reset button for approximately 5 seconds. This will engage the Test Mode where the LED will Flash 7 times and will also change the state of the 9/98 & 13/14 contacts. The 7 Flashes verifies an internal check of the unit. If there are no Flashes then the unit is bad.
 - ☐ The fault contactor should be engaged when power is applied to A1/A2 and will de-energize in the test mode.
- ☐ **How does the hydraulic pump motor sound?**
 - ☐ A noisy pump motor usually indicates a motor wiring issue. Check the pump motor wiring and make sure it's connected per the manufacturers specifications. Check all terminals for loose connections.
- ☐ **Completed the checklist above and the PCEC is still not functioning. Call Sprecher+Schuh PCEC factory for additional help.**

Technical Support Main Office Number: 281-442-9000

 - ☐ PCEC Product Manager: Mark Harris 281-227-4218 mrharris@sprecherschuh.com
 - ☐ Secondary Contact: Jason McCoy 281-227-4222 jlmccoy@sprecherschuh.com
 - ☐ USA Customer Service: 877-721-5913

FACTORY DEFAULT SETTINGS



Factory DIP Switch Settings

1	2	3	4	5	6	7	8
ON	ON	ON	ON	ON	ON	ON	ON
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

9	10	11	12	13	14	15	16
ON	ON	ON	ON	ON	ON	ON	ON
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

Checklist completed by: _____

Date: _____

PCEC Part Number: _____

PCEC Troubleshooting Return Process

Prior to submitting an RMA:

- ☐ Did the elevator installer troubleshoot with the Sprecher+Schuh Dealer/Controller Manufacturer support team and also the Sprecher+Schuh Technical Support group?

RMA Process:

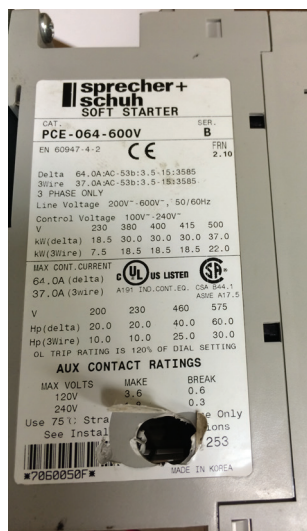
- ☐ The Standard warranty period for all Sprecher+Schuh products is 18 months from the date of shipment. Is the subject PCEC unit in compliance with the warranty period?
- ☐ Call S+S Customer Service team to request a RMA (not S+S technical support).
- ☐ RMA form must detail the fault codes/problems with the individual unit (simple terms of Bad, Failed are not acceptable).
- ☐ RMA units should be shipped to S+S promptly for evaluation (not staged for lot returns)
- ☐ RMA units must be properly packaged. Units damaged in transit due to poor packaging will not be credited.
- ☐ RMA units MUST be returned as a complete PCEC unit (PCE unit and CA7 fault contactor all mounted on the back-pan). Warranty is voided if not in compliance.
- ☐ RMA units will be re-tested in Houston with a 480V 3PH Y-D motor
 - ☐ Units passing the motor test will be returned back to the Sprecher+Schuh Dealer/Controller Manufacturer and will NOT be credited.
 - ☐ Units failing the test may be deemed a warranty or may require further investigation by Rockwell Automation.

Units which should NOT be sent back/Warranty Voided

- ☐ PCEC units which are missing components (ex: missing contactor, back-plate)
- ☐ Signs of tampering/abuse with the PCEC, CA7, CA6 factory components
 - ☐ Tampering/Opening enclosed product housings
 - ☐ Over torqueing terminals power/control
 - ☐ Debris/foreign materials inside product housing
- ☐ Signs of a short-circuit event on the PCE or CA7
- ☐ Damaged SCR's caused by external events
- ☐ Damaged caused by improper voltage to PCE input or Contactor Coil



SHORT CIRCUIT EVENT



ABUSE



TAMPERING



COIL MISSING

SHORT CIRCUIT EVENT