



## **USPACE B, M, F, and S Rig Circuit Breaker Settings**

### **Issue**

The 2,000 A trip circuit breakers for the diesel generator sets do not have the correct settings to protect the generator and conductors from overloads. The breaker settings are based on the Caterpillar 3512B and 3512C land diesel generator sets with the following ratings:

- Engine: 1,100 bkW / 1,476 bHP / 1,200 RPM
- Generator: Kato 1,050 kW / 1,500 kVA / 1,443 A



**Caution!**

The generator rating is less than what is shown on the nameplate. Do not use the nameplate rating.

### **Resolution**



**Caution!**

Adjust the breaker settings only if the breaker is open and no load is connected to either the line, or the load side.

1. Open the generator breaker.
2. Set the breaker electronic trip unit dip switches as follows (see Figure 1-1 on page 2):
  - a. Rating Plug (Non-Adjustable):  $I_n = 2,000 \text{ A}$
  - b. Overload Protection, Trip Threshold (L, I1):  $0.7 + 0.025 \times I_n$
  - c. Overload Protection, Trip Time (L, t1):  $36\text{s} (3 \times I_n)$
  - d. Selective Short Circuit Protection, Trip Threshold (S, I2): Off

|  |               |
|--|---------------|
| Model: ABB SACE E3 breakers                          | Nov. 20, 2013 |
| Serial #: All with PR121/P LSI electronic trip units |               |
| <b>Alert</b>   |               |

- e. Selective Short Circuit Protection, Trip Time (S, t2): 0.1 (set dip switch 4 (>12) to the down position).
- f. Instantaneous Short Circuit Protection (I, I3): 3 x In
- g. Network Frequency: 60 Hz
- h. Neutral Protection: Off

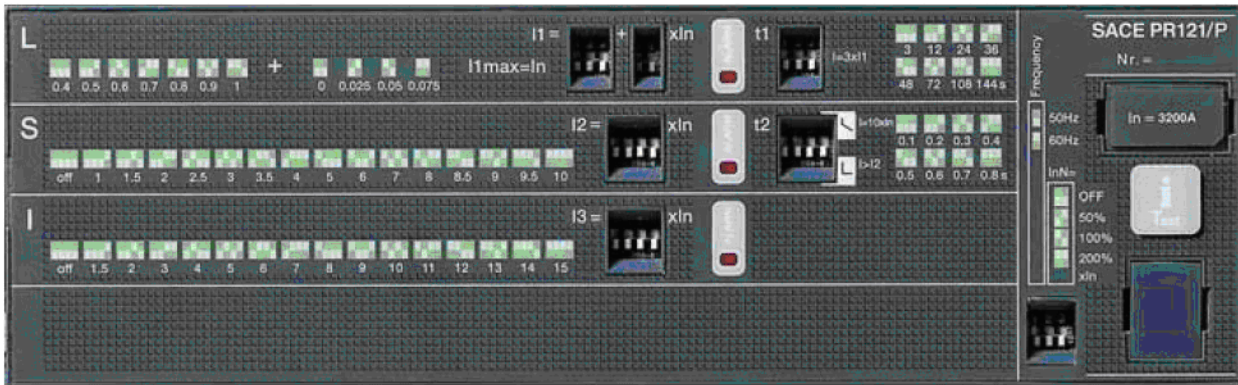


Figure 1-1: PR121/P Breaker Dip Switches.