

## SOM FACILITIES START-UP AND COMMISSIONING CHECK LIST FOR ELECTRICAL EQUIPMENT

Building:	Project Name:	
Date:	Name:	

### CIRCUIT BREAKERS - LOW VOLTAGE (POWER)

ITEM	DESCRIPTION	STATUS		COMMENTS
1	Visual and Mechanical Inspection			
a	Document equipment nameplate data on test report	P	F	
b	Verify equipment nameplate ratings are in accordance with drawings & specifications	P	F	
c	Inspect physical and mechanical condition	P	F	
d	Confirm correct application of lubricants at manufacturer's recommended locations	P	F	
e	Inspect anchorage, alignment, and grounding	P	F	
f	Inspect arc chutes	P	F	
g	Verify that all maintenance devices are available for servicing and operating the circuit breaker	P	F	
h	Perform all mechanical operator and contact alignment tests on both the circuit breaker & its operating mechanism	P	F	
i	Verify tightness of accessible bolted bus connections by calibrated torque-wrench method	P	F	
j	Check cell fit and element alignment.	P	F	
k	Check racking mechanism	P	F	
l	Verify that the circuit breaker is equipped with the correct rating plugs and current sensors	P	F	

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ITEM	DESCRIPTION	STATUS		COMMENTS
1	Visual and Mechanical Inspection (continued)			
m	Verify that the circuit breaker has the specified trip unit LI, LIS etc.	P	F	

- n Verify that the circuit breaker has the specified accessories, auxiliary contacts, cell switches, shunt trip devices, undervoltage release, etc.
- o Verify that the ground fault system has been wired in accordance with the wiring diagram & that the sensor ground is present
- p Verify that the secondary control plug/connections are in accordance with the wiring diagram and specifications

P F  
P F  
P F

## 2 Electrical Tests

- a Perform a contact-resistance test in accordance with manufacturer's recommended procedure
- b Perform insulation-resistance test at 1000 Vdc from pole-to-pole and from each pole-to-grd with circuit bkr closed & across open contacts of each phase
- c Make adjustments for the final settings in accordance with the coordination study supplied by the owner
- d Determine the following using secondary current injection:
  - Minimum pick-up current by
  - Long-time delay
  - Short-time pick-up and delay
  - Ground-fault pick-up and delay
  - Instantaneous pick-up value

P F  
P F  
P F  
P F  
P F

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ITEM	DESCRIPTION	STATUS		COMMENTS
2	Electrical Tests (continued)			
e	Activate auxiliary protective devices such as undervoltage relays, to insure operation of shunt trip devices	P	F	
f	Check for operation of electrically operated circuit breakers	P	F	
g	Verify correct operation of any auxiliary features such as trip & pick-up indicator, electrical close and trip operation, trip-free, & anti-pump function	P	F	

h Chek electric charging mechanism, if applicable.

P F