

Equipment Lock and Tag Procedures

BaBar Drift Chamber Low Voltage Power Supply

Purpose

This document defines the procedure for removing AC power and discharging electrical hazards from the above equipment.

Scope

The document will locate the appropriate circuit breakers for lock and tag and will specify a procedure to be followed for implementing the current lock and tag procedure as specified in the *Lock and Tag Program for the Control of Hazardous Energy* (SLAC-I-730-0A10Z-001).

Distribution

- (1) copy BaBar Safety web page Master File
- (1) copy IR-2 control room
- (1) copy posted at equipment

Note: *Please check for the latest changes before using this procedure. Please review SLAC's lock and tag procedure for general rules, which may not be covered in this procedure.*

Equipment Lock and Tag Procedures

I. Equipment Identification - ELP/2

General Description

The BaBar Drift Chamber uses one low voltage power supply delivers 300 amperes at 10 volts to the electronics which is located on the rear end plate. The power supply is located in the IR 2 electronics building, B620B, rack 11. Two 250MCM cables deliver the power to the rear end plate power distribution buses. Lock and Tag is required when service is required at the power supply terminals or on the rear end plate power distribution buses.

Manufacturer

Electronic Measurements Inc.

Equipment Number(s)

- Model 20T250

Location of Equipment Evaluated

- IR-2, B620B, RK 11, ELEVATION 11

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II. Operator Controls

- Computer Control System (Remote) - N/A
- equipment control (Local)
- power Breaker panel 2PB620B-04, CKT# 38,40,42, which is located in building B620B rack 01.

NOTIFY ALL AFFECTED EMPLOYEES WHEN THIS PROCEDURE IS IN APPLICATION.

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III. Energy Sources - ELP/3

Energy Sources

Electrical	208 V AC, 3 Ø
Steam	N/A
Hydraulic	N/A
Pneumatic	N/A
Natural Gas	N/A
Other	N/A
Stored Energy Sources	Filter capacitors

1

Sources and Location: The power supply has a three phase circuit breaker on the front panel located in B620B, rack 11, elevation 11.

Lockable (Y/N): YES

Lock or Control Device: Multi-lock clip, padlock, and tag.

2

Sources and Location:

The disconnect circuit breaker is a 208VAC three phase breaker, number 2PB620B-04, breakers 38, 40, 42, which is located in building B620B, attached to rack 01.

Lockable (Y/N): YES

Lock or Control Device: Multi-lock clip, padlock, and tag.

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IV. Shutdown Procedures - ELP/4

1

Action Step: Turn off the circuit breaker on front panel of power supply.

Lock Type and Location: N/A

Verify De-energized State: YES

How: Observe that the equipment goes off by observing the front panel red light goes out and that both the voltage and current meters display are blank.

2

Action Step: Turn off circuit breaker 2PB620B-04, breakers 38, 40, 42.

Lock Type and Location: Multi-pole circuit breaker, padlock, and tag.

Verify De-energized State: yes

How: Turn the power supply front panel circuit breaker, located in rack 11, on. Verify the equipment did not turn on by observing the front panel red light is off and that both the voltage and current meters are blank.

Turn the power supply front panel circuit breaker off.

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V. Start-up Procedure - ELP/5

1

Action Step: Clear tools and personnel and secure barriers.

2

Action Step: Secure equipment for operating. Insure that the all protection covers are properly installed.

Energy Source Activated: N/A

3

Action Step: Remove lock and tag and multi-lock clip from breaker. Close the breaker number 2PB620B-4, breakers 38, 40, 42.

Energy Source Activated: N/A

4

Action Step: Power up equipment

Energy Source Activated: N/A

NOTIFY ALL AFFECTED EMPLOYEES WHEN THIS PROCEDURE IS IN APPLICATION.

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VI. Affected and Authorized Employees - ELP/6

- Technicians
- Engineers
- Physicists

NOTIFY ALL AFFECTED EMPLOYEES WHEN THIS PROCEDURE IS IN APPLICATION.