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|  | **APARNA PROPERTY MANAGEMENT SERVICES PRIVATE LIMITED**  **STANDARD OPERATING PROCEDURE FOR AIR CIRCUIT BREAKER OPERATION** |

**Objective:**

To establish a procedure for standard operation of Air circuit breaker

**Policy:**

The Electrical operations shall be carried out in safe, smooth, trouble free without affecting the tenants / occupants with reduced down time.

**Responsibility:**

The Electrical Technician is responsible under the guidance of contractor’s supervisor

**Procedure:**

**Procedure for Opening & Closing the ACB:**

1. Check and ensure that all the incoming, outgoing power and control cables are properly terminated
2. Check and ensure the that ACB unit is fully plugged in the chassis by observing status indicator (it should be in ‘Service’ position)
3. Check and ensure that ACB spring is charged. Observe spring charge indicator
4. Check and verify voltage at incoming of the breaker is health (380-430 Volts) before attempting to close the breaker
5. Press ON/BRKKR CLOSE pushbutton on control panel to close the breaker if it is electrically operated.
6. Breaker can also be closed by pressing ON (green) pushbutton on ACB unit itself if it is not electrically operated
7. Press OFF/BRKRTRIP pushbutton on control panel to open/trip the ACB if it is electrically operated
8. Breaker can also be opened/tripped by pressing OFF (red) pushbutton on ACB unit itself if it is not electrically operated

**Procedure for racking in, racking out and spring charging:**

1. Pull the racking handle out from the holder (down-right side of breaker)
2. Insert the racking handle in the operating slot (notch) located in the bottom-center portion of ACB
3. Gently rotate the racking handle anti-clockwise to rack out the breaker
4. Observe the status indicator for position of the breaker (Service/Test/Isolated)
5. Breaker will be in Service position when it is fully racked in
6. Both power and control cables will be connected with breaker in Service position
7. When the breaker is racked out half way, it will show ‘Test’ position
8. When breaker is in ‘Test’ position, only control wiring is connected with the breaker and power terminals are disconnected.
9. Breaker can be Opened & Closed in ‘Test’ position to check the operation
10. By rotating the handle anti-clockwise further from ‘Test’ position, it will reach ‘Isolated’ position where both power and control wiring is totally disconnected
11. Do not rotate the handle further once the breaker reaches ‘Isolated’ position
12. Gently rotate the racking handle in clockwise direction to rack in the breaker. Rotate until you hear ‘click’ sound and status indicator shows ‘Service’ position to ensure proper seating of contacts
13. Remove the racking handle from the operation slot (notch) and inset it back in holder
14. Manual spring charging can be done by pulling out the spring charging handle out and gently pushing out to right side direction until it moves freely. Observe spring charge indicator while charging the breaker manually

**Revision Guide:**

Any change in the system needs review of SOP.

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| **Rev : 02** | **Prepared By** | **Approved By** |
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