Type AS-30 Switch Operators provide power operation for indoor-distribution Alduti-Rupter® Switches in S&C Metal-Enclosed Switchgear.

Type AS-30 Switch Operators are especially suited for heavy-duty switching applications through 34.5 kV. In S&C Metal-Enclosed Switchgear, they are always installed in grounded metal compartments isolated from high voltage and are chain-coupled to the interrupter switches.

The AS-30 Switch Operator charges the switch's quick-make quick-break mechanism, which opens and closes the switch swiftly, positively, independent of the speed of the switch operator, contributing to the switch's ability to achieve fast circuit interruption and duty-cycle fault-closing ratings.

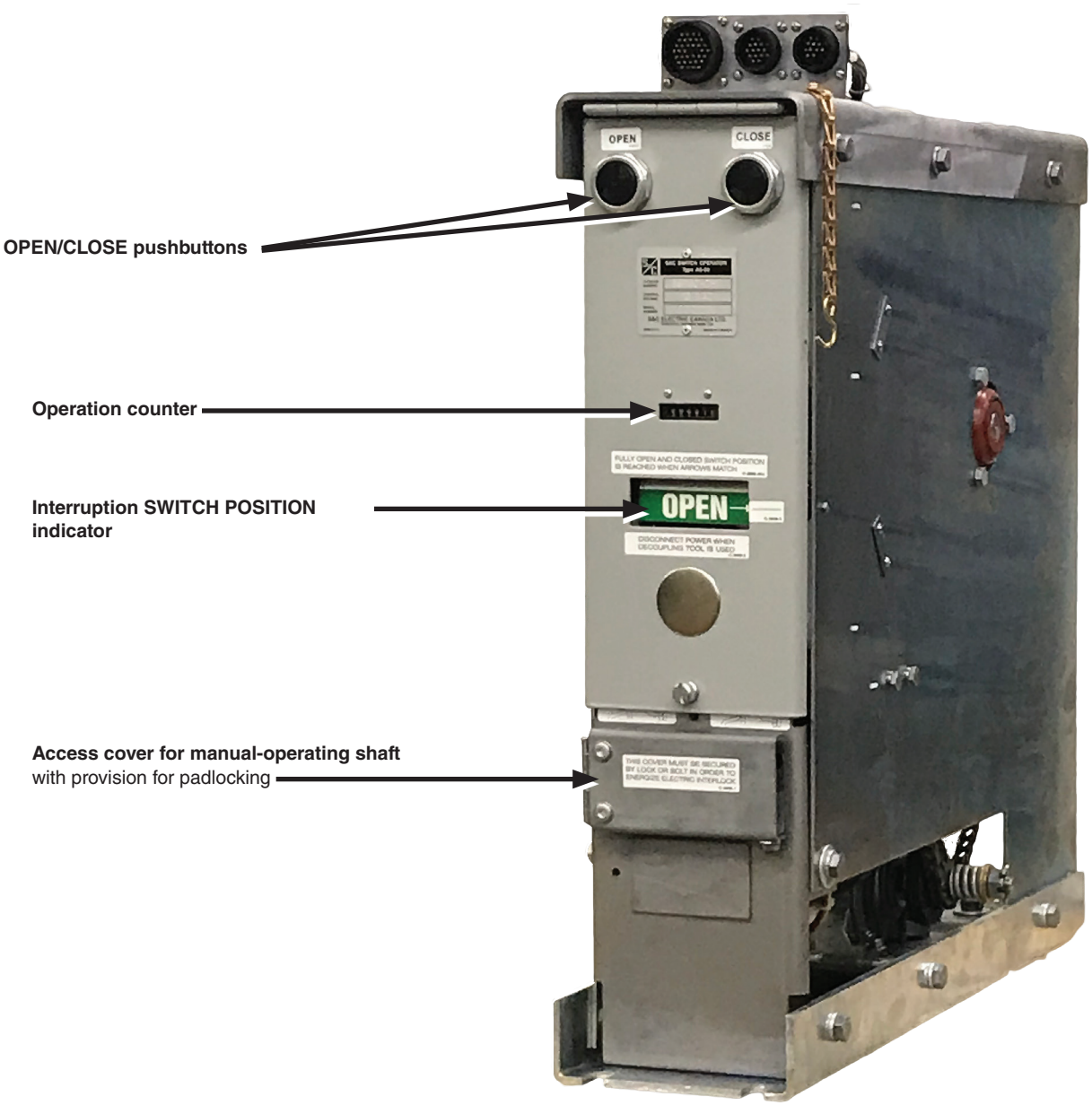

Figure 1. S&C Type AS-30 Switch Operator.

AS-30 Switch Operators, in combination with Alduti-Rupter Switches, are applied in S&C Metal-Enclosed Switchgear with:

- Micro-AT® Source-Transfer Controls for automatic switching to ensure critical-load service continuity in primary-selective systems
- S&C Type SPD Open-Phase Detectors to provide protection of three-phase loads from **Open Phase** conditions, including single-phasing resulting from blown feeder fuses
- S&C Type ZSD Overcurrent Relays to achieve three-phase isolation of the circuit following a fault
- Other, more complex automatic control schemes

For manually controlled electrical operation of the switch operator, AS-30 Switch Operators feature OPEN/CLOSE pushbuttons mounted on the front panel. Interrupter-switch position is shown by a mechanically operated position target mounted behind an opening in the front panel. An **Operation** counter is provided as a standard feature. See Figure 1 on page 1.

In an emergency, such as loss of control power, the interrupter switch may be actuated manually by means of a "hexagon head" manual-operating shaft, which projects from the lower front panel of the switch operator, behind a small hinged access cover. Opening the hinged access cover opens an electrical interlock to prevent energization of the switch-operator motor in the event control power returns unexpectedly.

A simple cranking action with the manual-operating wrench (provided) opens or closes the switch. The hinged access cover can be padlocked to prevent manual operation. The manual-operating wrench may be stored inside the low-voltage compartment that contains the switch operator or in any other appropriate location. See Figure 2.

A decoupling mechanism is provided to permit exercising and testing the switch operator and source-transfer (or other) control at any convenient time without requiring an outage and without requiring exposure to high voltage. The switch operator is coupled or decoupled to the interrupter switch by inserting the prongs of the decoupling tool (provided) into the holes of the switch-operator coupling lever and giving the tool a twist. See Figure 3.

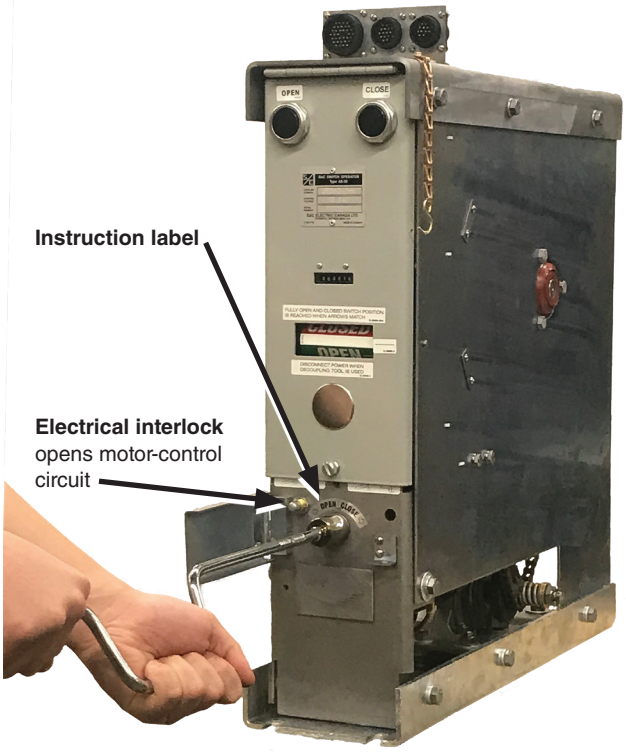

Figure 2. Direction of cranking to manually operate the interrupter is illustrated on the instruction label.

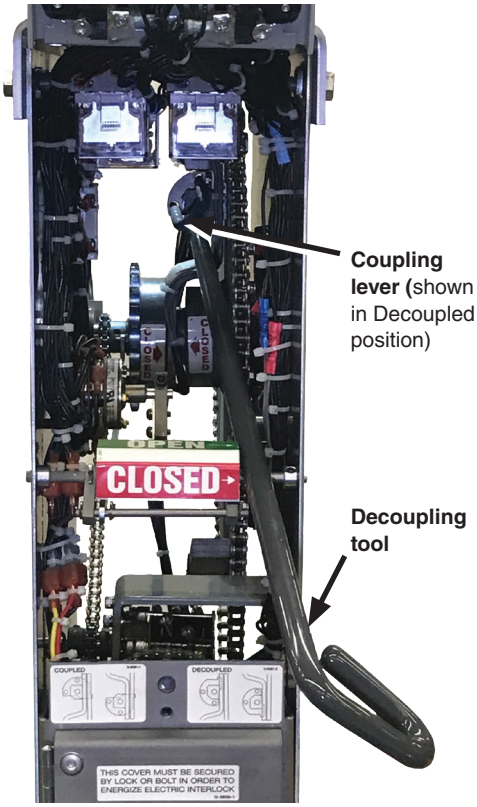

Figure 3. Inserting a decoupling tool to couple to, or decouple from, the switch operator to the interrupter switch.

Not shown:

Connectors for optional extra auxiliary switches

Optional remote-control receptacle

Optional key interlock blocks access to manual-operating shaft

Optional key interlock locks interrupter switch open

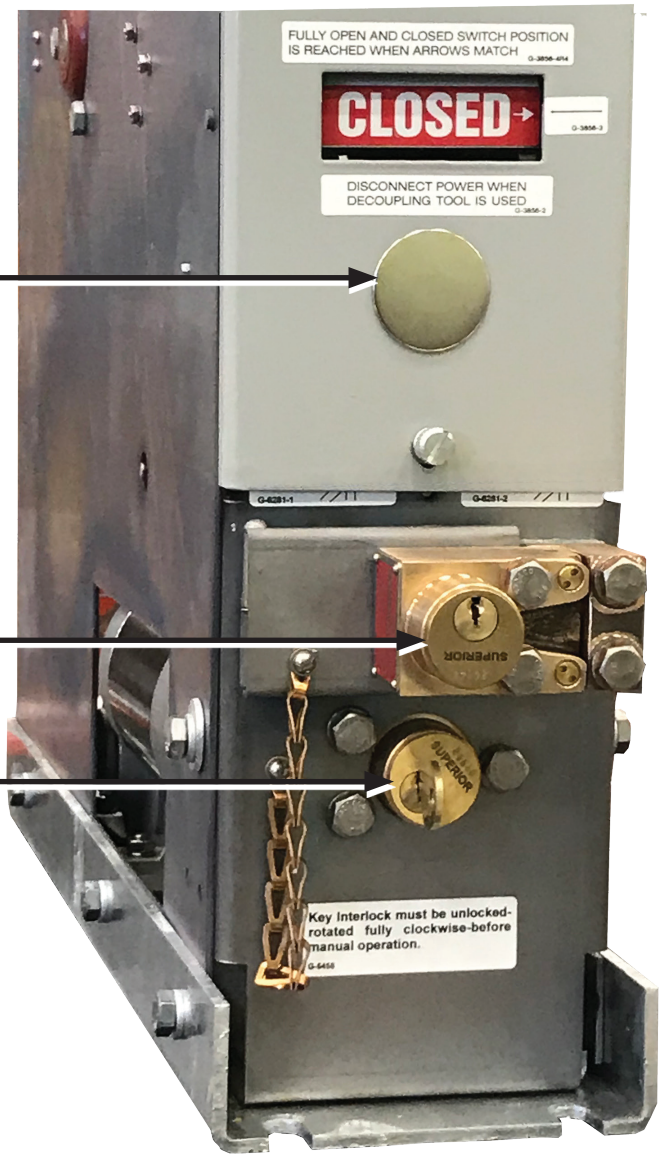

Figure 4. A variety of options are available for Type AS-30 Switch Operators.