S&C Compact IntelliRupter® PulseCloser® Fault Interrupter Quick Operating Guide

> **⚠ WARNING**
>
> IntelliRupter PulseCloser Fault Interrupter must be installed, operated, and maintained by qualified persons who are knowledgeable in overhead electric power distribution equipment and the associated hazards. This guide is not a replacement for adequate training and experience in safety procedures for this type of equipment. Read S&C Instruction Sheets 766-510, 766-530, and 766-540 thoroughly and carefully before installing and operating your IntelliRupter PulseCloser Fault Interrupter.
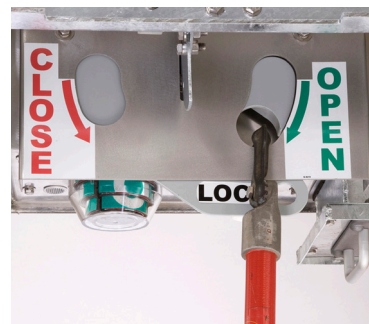
If status indicator is off:
- Supply voltage to the External Power Supply (EPS) if it is not energized.
- If the EPS is energized, replace protection and control module.

If status indicator does not indicate Wi-Fi connection:
- If EPS is energized, move computer at least 20 feet closer.
- Try another computer furnished with IntelliLink® Setup Software and appropriate security keys.
- Replace communication module.

If IntelliRupter® fault interrupter does not respond to SCADA commands:
- Enable remote operation (see "IntelliLink Setup Software Operation—Main" screen). Remove all hot line tags and push up on right interrupter open/close/ready lever.
- Apply local hot line tag. If IntelliRupter fault interrupter does not send a hot line tag status point to SCADA, replace communication module.

Pole 1 **Pole 2** **Pole 3**

Upper terminal pad (Y)

Lower terminal pad (X)

Communication module

External power supply (see 766-512)

Interrupter Open/Close/Ready Lever
To open interrupters:
Pull down on right lever. In down position, closing is blocked.

To close interrupters:
Power must be available from the battery (if furnished) or energized External Power Module. Remove hot line tags, if applicable. Push up on right lever. Then pull down once on left lever for First Closing Profile, or quickly pull down twice on left lever for Second Closing Profile.
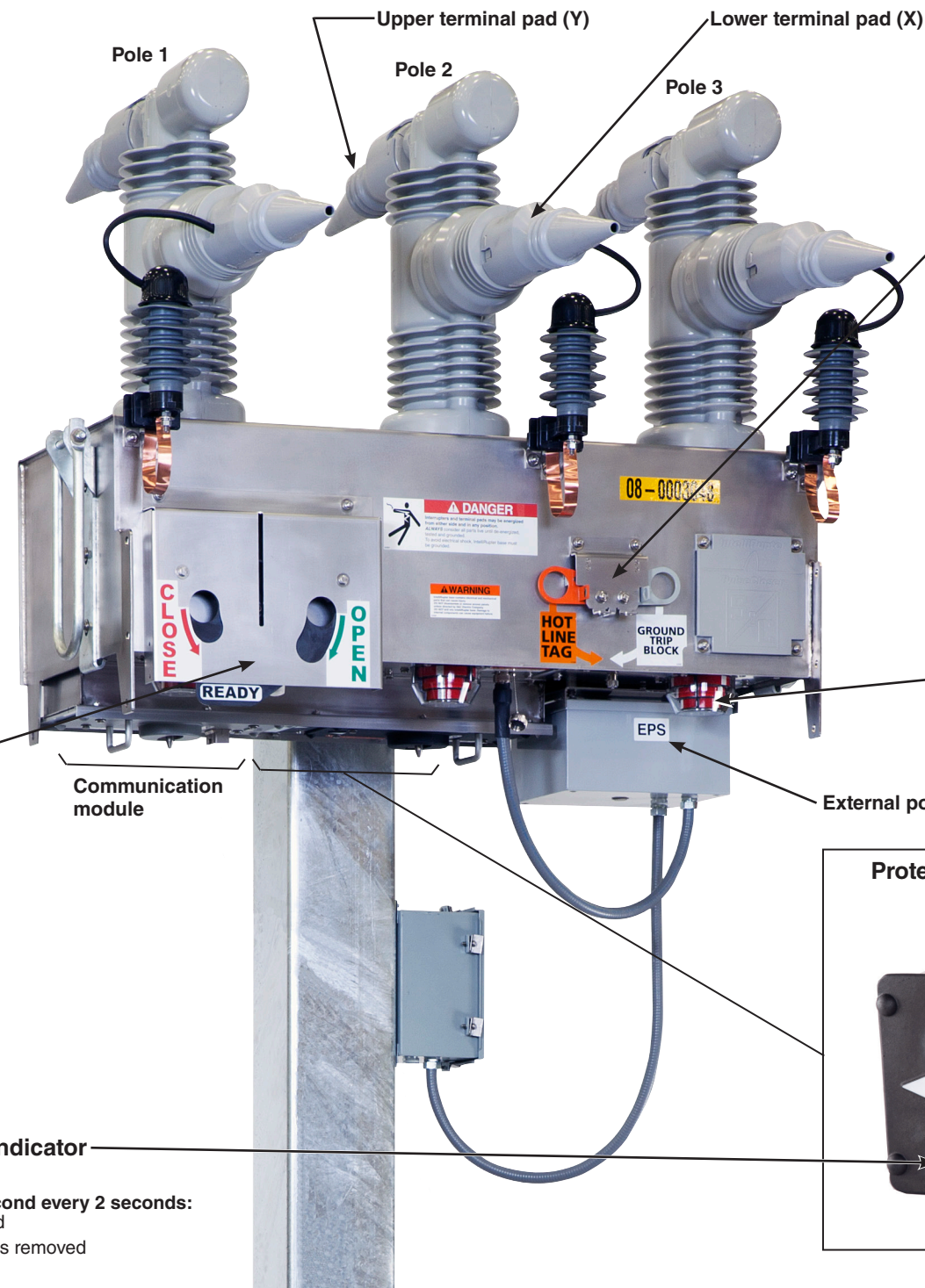
Hot Line Tag Indicator
(amber LED)
Flashes for ½ second every 2 seconds:
Hot line tag applied
Off: All hot line tags removed

Hot Line Tag Lever
To manually apply a hot line tag:
Pull down on HOT LINE TAG lever.

To clear a manually applied hot line tag:
Push up on HOT LINE TAG lever.

To clear an electronically applied hot line tag when a hot line tag has been applied manually:
Push up on HOT LINE TAG lever. Then pull down and push up on HOT LINE TAG lever once, without delay.

To clear an electronically applied hot line tag when a hot line tag has *not* been applied manually:
Pull down and push up on HOT LINE TAG lever twice, without delay.

Ground Trip Block Lever
(if furnished)
To manually apply ground trip block:
Pull down on GROUND TRIP BLOCK lever. (When in the applied position the selected elements will be blocked or change as indicated in the setup, see S&C Instruction Sheet 766-530.)

To remove a manually applied GTB:
Push up on ground trip block lever. (Placing the GROUND TRIP BLOCK lever in the up position will not enable any elements that have not been enabled in the active protection profile.)

Interrupter Open/Closed Indicator (one per pole)
Green: Interrupter open—"O"
Red: Interrupter closed—"I"
Colors are reversed on an IntelliRupter fault interrupter furnished with Option "-F2"

Protection and Control Module

Status Indicator (white LED)
Flashes for ½ second every 30 seconds: Normal operation
Pulsates dim to bright: Wi-Fi connected
Flashes for ½ second every second: Any Error State, or a Settings Mismatch is active
Flashes 3 times (½ second on—½ second off) every 30 seconds: Loop Restoration is timing or Ready, or IntelliTeam is Ready
On 10 seconds, then flashes for ½ second every 30 seconds: Wi-Fi disconnected, open/close command from interrupter open/close/ready lever, Wi-Fi, or SCADA, or ground trip block lever moved
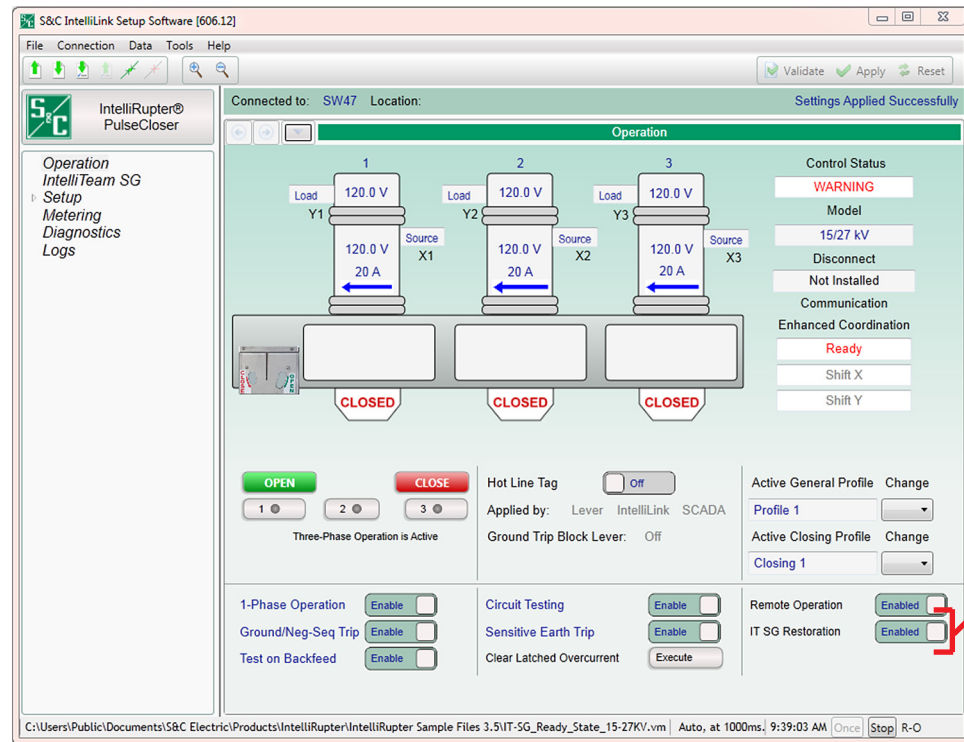**Solid On:** Remote Operation disabled
Off: IntelliRupter fault interrupter not powered, or not functioning properly
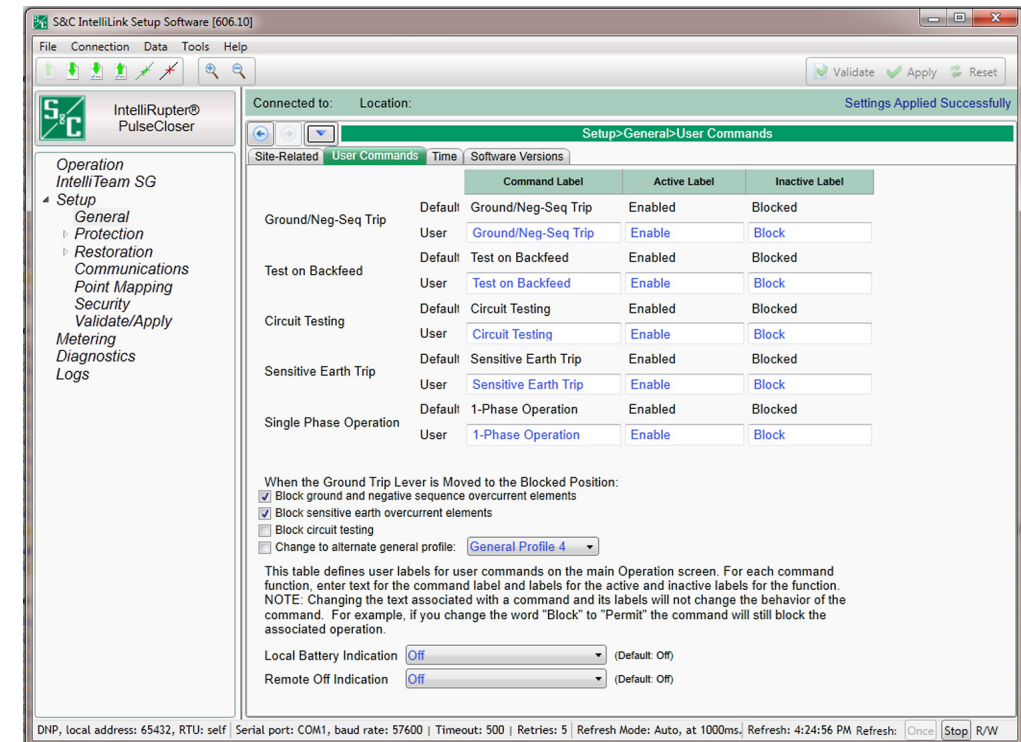
Instruction Sheet 766-546

NOTICE

To disable automatic load restoration through the IntelliTeam® SG Automatic Restoration System (if furnished), select: **IT SG Operation** – *Disabled*.

To disable Loop Restoration (if furnished), select: **Loop Restoration** – *Disabled*.

IntelliLink® Setup Software: *Operation* Screen

Match the location of the interrupter open/close/ready lever on the IntelliRupter fault interrupter to the open/close/ready lever on this screen.

- Poles are labeled left to right, configured here as **A, B,** and **C.**

- X and Y terminal designations are configurable and affect directionality. The default configuration is:
  Upper terminals pads (Y1, Y2, and Y3) are labeled **Y**, and Lower terminal pads (X1, X2, and X3) are labeled **X**.

- Voltage is shown for the three poles at each terminal pad. Phase-to-ground voltage (**1-grd, 2-grd,** and **3-grd**), or phase-to-phase voltage (**1-2, 2-3,** and **3-1**) can be selected.

- Interrupter open/close indicators match the indicators on IntelliRupter fault interrupter, in this case they are **OPEN**.

- When IntelliRupter fault interrupter has tripped open, the state of each pole is shown, for example: **TESTING-SEF**, **LOCKOUT-VOLTS** (lockout on voltage trip), or **LOCKOUT-FREQ** (lockout on frequency trip). For **LOCKOUT-OC** (lockout on overcurrent trip), a lightning bolt indicates the faulted phase(s) on the side fault occurred. The current on each pole at the time of tripping is also shown.

- When IntelliRupter fault interrupter is closed, load current and current direction are shown for each pole.

- *Control Status* shows the status of the protection and control module (in this case **ALARM**). It may also display: **OKAY**, **WARNING**, **ERROR**, **MAINT MODE**, or **SETTINGS MISMATCH**.

- *Disconnect* shows the position of the visual disconnect: **OPEN**, **CLOSED**, or **Not Installed**.

- *Loop Restoration* or **Communication Enhanced Coordination** status is displayed when when either feature is furnished and *Enabled*.

- **OPEN** and **CLOSE** buttons trip and close the interrupters. A single phase can be operated if *Single Phase Operation* is *Active*.

- **Single Phase Operation**, **Ground Trip Block**, and **Test on Backfeed** can be enabled or disabled.

- **Hot Line Tag** can be enabled or disabled, and the application method is indicated.

- **Circuit Testing**, and **Sensitive Earth Trip** can be enabled or disabled.

- **Clear Latched Overcurrent** can be executed.

- **Active General Profile** and **Active Closing Profile** can be selected.

- **Remote Operation** can be enabled or disabled.

- **IT SG Restoration** can be enabled or disabled.

- *Connected to:* and *Location:*—at the top of the screen, show the name and address of the IntelliRupter fault interrupter connected through IntelliLink or IntelliLink Remote software.

IntelliLink Setup Software: *Setup—General—User Commands* Screen

- Enter a *Command Label*, an *Active Label*, and an *Inactive Label*—**for every *User Command*.** These will be displayed on the *Operation* screen. **Text entered for *Active* or *Inactive Labels* does not change their functionality.**

- *Ground Trip Blocked* **Functions**—check to enable desired functionality.

- *Local Battery Indication*—select *On* if a battery is installed, then the Status Indicator on the Control Module will flash ½ *second every second* when the battery is Low, Bad, or Disconnected. If no battery is installed, select *Off*.

- *Remote Off Indication*—the Status Indicator on the Control Module can be configured to display **solid on** when *Remote Operation* is disabled.

- *Connected to:* and *Location:*—at the top of the screen, show the name and address of the IntelliRupter fault interrupter connected through IntelliLink or IntelliLink Remote software.

NOTICE

Refer to S&C Instruction Sheet 766-530 for detailed information about IntelliRupter fault interrupter configuration.