



FCU⁴⁷ SAFESCREEN SYSTEM INSTALLATION

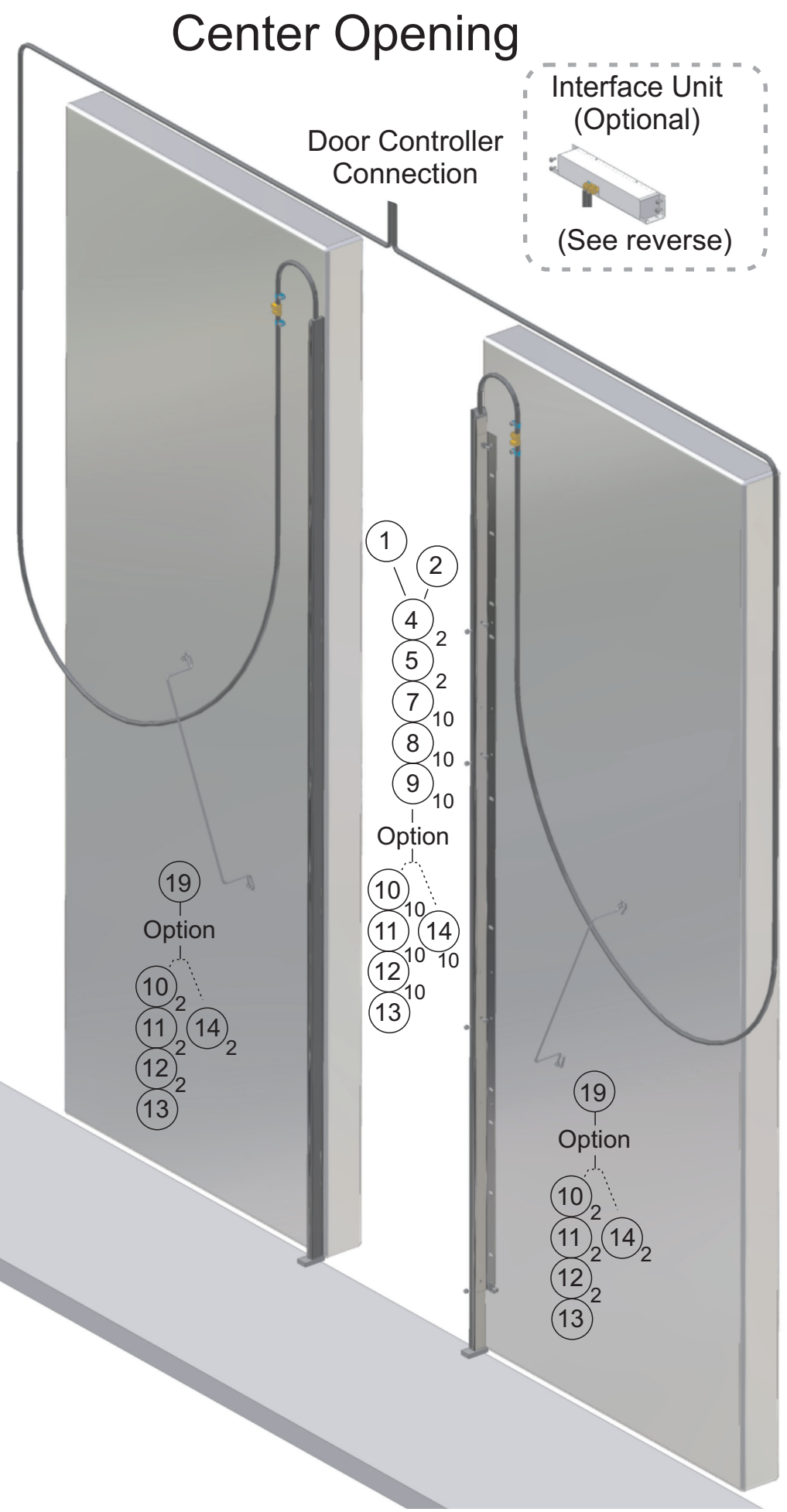
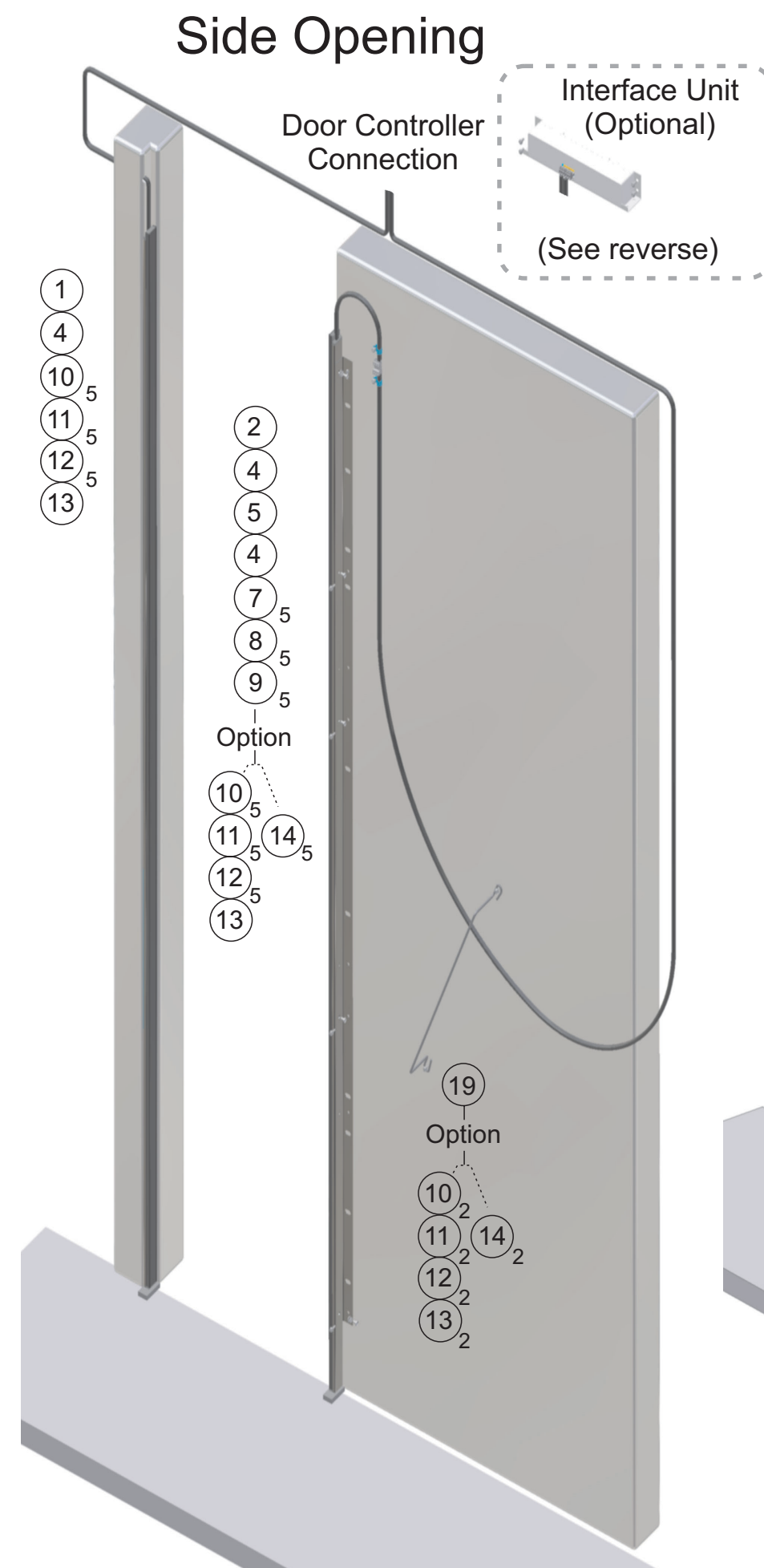
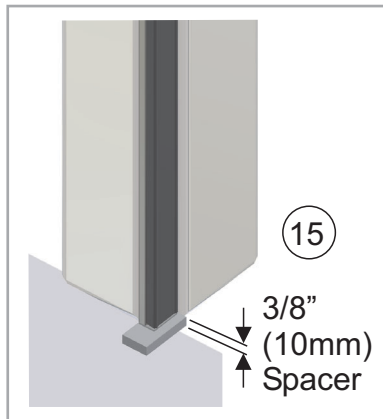
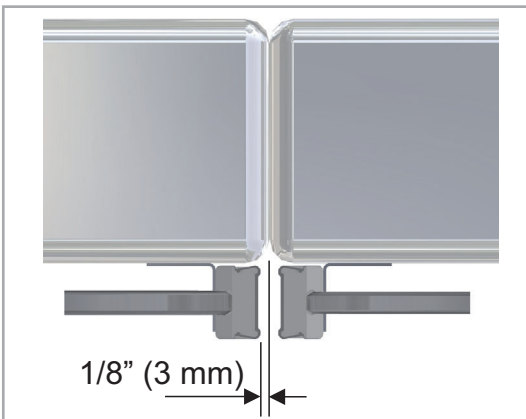
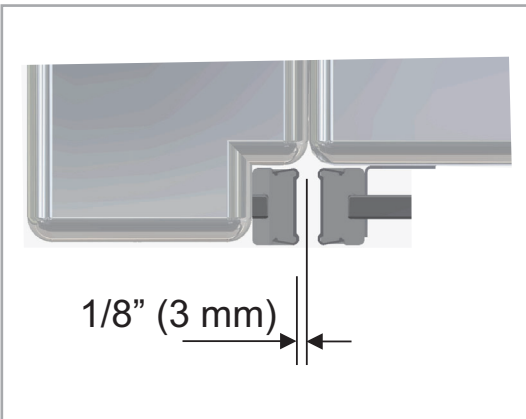
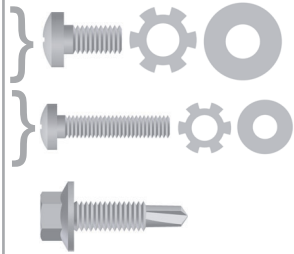
PACKING LIST FCU 0547

Product:

| | |
|----------------------------|-----|
| 1 - Safescreen Receiver | x 1 |
| 2 - Safescreen Transmitter | x 1 |
| 3 - Cable Assembly | x 2 |
| 4 - Mounting Bracket | x 2 |
| 5 - Installation Guide | x 1 |

Accessories:

| | |
|---------------------------------------|------|
| 6 - M5 x 10mm Screw (standard) | x 10 |
| 7 - M5 Washer Plain | x 10 |
| 8 - M5 Washer Shakeproof | x 10 |
| 9 - M4 x 20mm Screw (thread forming) | x 24 |
| 10 - M4 Washer Plain (large diameter) | x 24 |
| 11 - M4 Washer Shakeproof | x 24 |
| 12 - Drill Bit 3.6mm (optional) | x 1 |
| 13 - #10 x 13mm Screw (self drill) | x 14 |
| 14 - Spacer Block | x 1 |
| 15 - Cable Clips | x 6 |
| 16 - Nytie | x 8 |
| 17 - Self adhesive pads | x 4 |
| 18 - Cable retainer | x 2 |





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INDICATOR LOCATIONS

FINAL CHECK & TROUBLESHOOTING

| SAFESCREEN RECEIVER | | |
|------------------------------------|--|--|
| Indicator | Status | Action |
| Green | On - Supply OK | Check AC (DC) Supply & Cables for damage |
| | Off - No Supply | |
| Red | Off - No Obstruction | Remove obstruction |
| | On - Obstruction (beam broken) | |
| | Flash - Single Beam Override Active | |
| SAFESCREEN TRANSMITTER | | |
| Indicator | Status | Action |
| Green | On - Supply OK | Check AC (DC) Supply & Cables for damage |
| | Off - No Supply | |
| OPTIONAL INTERFACE UNIT - FPS 0271 | | |
| Indicator | Status | Action |
| Green | On - Supply OK | Check AC (DC) Supply |
| | Off - No Supply | |
| Red | Off - No Obstruction (relay energised) | Remove obstruction |
| | On - Obstruction (beam broken) | |

OPTIONAL INTERFACE UNIT - ADDITIONAL INFORMATION

FPS 0271 - BUZZER / NUDGING FEATURES

The FPS 0271 buzzer/nudging power supply offers a variety of features to facilitate elevator door control set-up during continuous beam interruption.

As with our standard power supply, the FPS 0271 features a simple relay that activates whenever beam paths are blocked.

In addition to the "standard" relay, the FPS 0271 includes a second relay, that will activate after beam paths have been continuously blocked for a pre-determined period of time. This "time-out period" can be determined by the installer during set-up by way of a variable potentiometer mounted on the power supply circuit board.

As elevator controllers have become more intelligent over time, Formula have included a relay configuration option that may be invoked through "Switch #3".

For older elevator systems, door speed/power are typically a door-operator controlled function. The door controller simply controls the instructions to open or close doors. Therefore, if a constant obstruction is detected, the "standard" relay will activate as normal, and remains activated until the "time-out" relay switches.

On older elevators, the "time-out" relay would switch in a resistor to effectively reduce the motor power to slow-down the closing speed of the doors. However, with the beam-path obstruction still present, the "standard" relay would still be activated, therefore the controller would still not know that the doors can now be instructed to close.

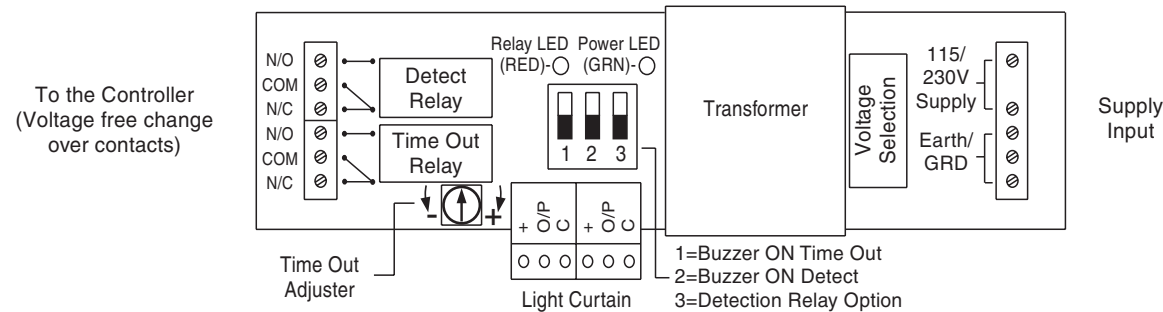
Switch #3 resolves this conflict. If switch #3 is in the "on" position, as soon as the "time-out" relay activates, the "standard" relay immediately reverts to a "no obstruction" state, even though an obstacle remains. Therefore, the "time-out" relay switches in the door speed resistor on the operator, and at the same time the door controller sees an "all clear" from the "standard" relay, thereby allowing the doors to be instructed to close.

Leaving switch #3 in the "off" position may be a requirement for more sophisticated controllers that can invoke slow-speed closing from the "time-out" relay and can ignore the "standard" relay signal.

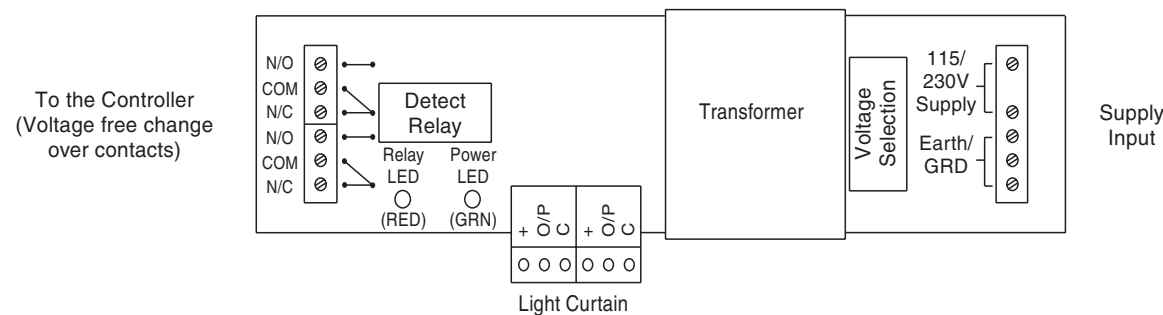
In order to see this feature in operation, let a power supply time-out (this can be done bench-mounted without edges connected), and turn switch #3 on and off. This should activate and de-activate the "standard" relay.

OPTIONAL INTERFACE UNIT - DETAILS

INTERFACE UNIT - FPS 0271



INTERFACE UNIT - FPS 0270



FIELD WIRING

- Cable insulation to be rated 60°C minimum. Copper conductors must be used. >60°C
- Nominal tightening torque value 0.45Nm 0.45Nm
- Route cable through the holes provided adjacent to the point of connection.

EVENT SEQUENCE - BUZZER / NUDGING OPERATION

| Event | Standard Relay (Switch 3 OFF) | Standard Relay (Switch 3 ON) | Time-out Relay |
|------------------------------------|-------------------------------|------------------------------|----------------|
| No obstruction | Dormant | Dormant | Dormant |
| Obstruction before time-out period | Active | Active | Dormant |
| Obstruction after time-out period | Active | Dormant | Active |

Contacts:

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