

# HIGH VOLTAGE SWITCH DATA SHEET (HVLBS)

DATE : 06/06/2023  
 CUSTOMER : HVES  
 SUB. : Switch 16  
 FEEDER : Main  
 MFR. : S&C Electric  
 M/N Type : PMH-12, Cat. #255122R2  
 S/N :

INTERRUPTING CAPACITY : 40kA  
 KV RATING : 15.5  
 AMPERAGE : 600  
 BIL : 95  
 DUTY CYCLE : 40kA  
 FUSES :  
 PUB. / I.B. :

**ENVIRONMENT** ☐ Indoor ☒ Outdoor ☒ Dry ☐ Wet ☐ Damp ☒ Clean ☐ Dirty

## VISUAL INSPECTION

SATISFACTORY UNSATISFACTORY CORRECTED

1. Inspect insulators for breaks, cracks or burns.
2. Inspect contacts for alignment, pressure, burns or corrosion.
3. Check for proper lubrication, wipes, gaps and clearances. Check blade lock or latch.
4. Inspect inter-phase mechanical linkages, operating rods, levers, bearings for adjustment, lubrication, tightness or damage.
5. Check that ground straps and ground slip rings have good contact.
6. Inspect overall switch including controls and indicators for good working condition.

|                                     |                          |                          |
|-------------------------------------|--------------------------|--------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

## 7. CLOSED CONTACT RESISTANCE (DUCTER) TESTS at : 10 Amps

Measured in ☐ Milliohms ☒ Micro-ohms

SATISFACTORY UNSATISFACTORY CORRECTION REQUIRED

|           |       |                                     |                          |                          |
|-----------|-------|-------------------------------------|--------------------------|--------------------------|
| Phase A : | 21.42 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Phase B : | 21.61 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Phase C : | 22.18 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

## 8. MEGGER TESTS Measured in Megaohms at: 1000 VDC

|                |           |             |                  |           |             |
|----------------|-----------|-------------|------------------|-----------|-------------|
| <u>Primary</u> | Phase A : | 100k M-Ohms | <u>Secondary</u> | Phase A : | 100k M-Ohms |
|                | Phase B : | 100k M-Ohms |                  | Phase B : | 100k M-Ohms |
|                | Phase C : | 100k M-Ohms |                  | Phase C : | 100k M-Ohms |
|                | A - B :   | 100k M-Ohms |                  | A - B :   | 100k M-Ohms |
|                | B - C :   | 100k M-Ohms |                  | B - C :   | 100k M-Ohms |
|                | C - A :   | 100k M-Ohms |                  | C - A :   | 100k M-Ohms |

## COMMENTS

4-Way Switch  
 Tag #11512

# HIGH VOLTAGE SWITCH DATA SHEET (HVLBS)

DATE : 06/06/2023  
 CUSTOMER : HVES  
 SUB. : Switch 16  
 FEEDER : F1  
 MFR. : S&C Electric  
 M/N Type : PMH-12, Cat. #255122R2  
 S/N :

INTERRUPTING CAPACITY : 40kA  
 KV RATING : 15.5  
 AMPERAGE : 600  
 BIL : 95  
 DUTY CYCLE : 40kA  
 FUSES : SMU-20 100E  
 PUB. / I.B. :

**ENVIRONMENT** ☐ Indoor ☒ Outdoor ☒ Dry ☐ Wet ☐ Damp ☒ Clean ☐ Dirty

## **VISUAL INSPECTION**

SATISFACTORY UNSATISFACTORY CORRECTED

- |                                                                                                                                |                                     |                          |                          |
|--------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------|--------------------------|
| 1. Inspect insulators for breaks, cracks or burns.                                                                             | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Inspect contacts for alignment, pressure, burns or corrosion.                                                               | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Check for proper lubrication, wipes, gaps and clearances. Check blade lock or latch.                                        | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Inspect inter-phase mechanical linkages, operating rods, levers, bearings for adjustment, lubrication, tightness or damage. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Check that ground straps and ground slip rings have good contact.                                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Inspect overall switch including controls and indicators for good working condition.                                        | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

## 7. **CLOSED CONTACT RESISTANCE (DUCTER) TESTS** at : 10 Amps

Measured in ☐ Milliohms ☒ Micro-ohms

| <u>SATISFACTORY</u>                 | <u>UNSATISFACTORY</u>    | <u>CORRECTION REQUIRED</u> |
|-------------------------------------|--------------------------|----------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>   |

Phase A : 23.75  
 Phase B : 24.21  
 Phase C : 26.18

## 8. **MEGGER TESTS** Measured in Megaohms at: 1000 VDC

| <u>Primary</u> |             | <u>Secondary</u> |             |
|----------------|-------------|------------------|-------------|
| Phase A :      | 100k M-Ohms | Phase A :        | 100k M-Ohms |
| Phase B :      | 100k M-Ohms | Phase B :        | 100k M-Ohms |
| Phase C :      | 100k M-Ohms | Phase C :        | 100k M-Ohms |
| A - B :        | 100k M-Ohms | A - B :          | 100k M-Ohms |
| B - C :        | 100k M-Ohms | B - C :          | 100k M-Ohms |
| C - A :        | 100k M-Ohms | C - A :          | 100k M-Ohms |

## **COMMENTS**

4-Way Switch  
 Tag #11512

# HIGH VOLTAGE SWITCH DATA SHEET (HVLBS)

DATE : 06/06/2023  
 CUSTOMER : HVES  
 SUB. : Switch 16  
 FEEDER : F2  
 MFR. : S&C Electric  
 M/N Type : PMH-12, Cat. #255122R2  
 S/N :

INTERRUPTING CAPACITY : 40kA  
 KV RATING : 15.5  
 AMPERAGE : 600  
 BIL : 95  
 DUTY CYCLE : 40kA  
 FUSES : SMU-20 100E  
 PUB. / I.B. :

**ENVIRONMENT** ☐ Indoor ☒ Outdoor ☒ Dry ☐ Wet ☐ Damp ☒ Clean ☐ Dirty

## **VISUAL INSPECTION**

SATISFACTORY UNSATISFACTORY CORRECTED

- |                                                                                                                                |                                     |                          |                          |
|--------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------|--------------------------|
| 1. Inspect insulators for breaks, cracks or burns.                                                                             | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Inspect contacts for alignment, pressure, burns or corrosion.                                                               | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Check for proper lubrication, wipes, gaps and clearances. Check blade lock or latch.                                        | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Inspect inter-phase mechanical linkages, operating rods, levers, bearings for adjustment, lubrication, tightness or damage. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Check that ground straps and ground slip rings have good contact.                                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Inspect overall switch including controls and indicators for good working condition.                                        | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

## 7. **CLOSED CONTACT RESISTANCE (DUCTER) TESTS** at : 10 Amps

Measured in ☐ Milliohms ☒ Micro-ohms

| <u>SATISFACTORY</u> | <u>UNSATISFACTORY</u>    | <u>CORRECTION REQUIRED</u> |
|---------------------|--------------------------|----------------------------|
| Phase A : 26.72     | <input type="checkbox"/> | <input type="checkbox"/>   |
| Phase B : 27.84     | <input type="checkbox"/> | <input type="checkbox"/>   |
| Phase C : 27.81     | <input type="checkbox"/> | <input type="checkbox"/>   |

## 8. **MEGGER TESTS** Measured in Megaohms at: 1000 VDC

| <u>Primary</u> |             | <u>Secondary</u> |             |
|----------------|-------------|------------------|-------------|
| Phase A :      | 100k M-Ohms | Phase A :        | 100k M-Ohms |
| Phase B :      | 100k M-Ohms | Phase B :        | 100k M-Ohms |
| Phase C :      | 100k M-Ohms | Phase C :        | 100k M-Ohms |
| A - B :        | 100k M-Ohms | A - B :          | 100k M-Ohms |
| B - C :        | 100k M-Ohms | B - C :          | 100k M-Ohms |
| C - A :        | 100k M-Ohms | C - A :          | 100k M-Ohms |

## **COMMENTS**

4-Way Switch  
 Tag #11512

# HIGH VOLTAGE SWITCH DATA SHEET (HVLBS)

DATE : 06/06/2023  
 CUSTOMER : HVES  
 SUB. : Switch 16  
 FEEDER : F3  
 MFR. : S&C Electric  
 M/N Type : PMH-12, Cat. #255122R2  
 S/N :

INTERRUPTING CAPACITY : 40kA  
 KV RATING : 15.5  
 AMPERAGE : 600  
 BIL : 95  
 DUTY CYCLE : 40kA  
 FUSES : SMU-20 80E  
 PUB. / I.B. :

**ENVIRONMENT** ☐ Indoor ☒ Outdoor ☒ Dry ☐ Wet ☐ Damp ☒ Clean ☐ Dirty

## **VISUAL INSPECTION**

SATISFACTORY UNSATISFACTORY CORRECTED

- |                                                                                                                                |                                     |                          |                          |
|--------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------|--------------------------|
| 1. Inspect insulators for breaks, cracks or burns.                                                                             | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Inspect contacts for alignment, pressure, burns or corrosion.                                                               | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Check for proper lubrication, wipes, gaps and clearances. Check blade lock or latch.                                        | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Inspect inter-phase mechanical linkages, operating rods, levers, bearings for adjustment, lubrication, tightness or damage. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Check that ground straps and ground slip rings have good contact.                                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Inspect overall switch including controls and indicators for good working condition.                                        | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

## 7. **CLOSED CONTACT RESISTANCE (DUCTER) TESTS** at : 10 Amps

Measured in ☐ Milliohms ☒ Micro-ohms

| <u>SATISFACTORY</u>                 | <u>UNSATISFACTORY</u>    | <u>CORRECTION REQUIRED</u> |
|-------------------------------------|--------------------------|----------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>   |

Phase A : 23.18  
 Phase B : 25.22  
 Phase C : 26.10

## 8. **MEGGER TESTS** Measured in Megaohms at: 1000 VDC

| <u>Primary</u> |             | <u>Secondary</u> |             |
|----------------|-------------|------------------|-------------|
| Phase A :      | 100k M-Ohms | Phase A :        | 100k M-Ohms |
| Phase B :      | 100k M-Ohms | Phase B :        | 100k M-Ohms |
| Phase C :      | 100k M-Ohms | Phase C :        | 100k M-Ohms |
| A - B :        | 100k M-Ohms | A - B :          | 100k M-Ohms |
| B - C :        | 100k M-Ohms | B - C :          | 100k M-Ohms |
| C - A :        | 100k M-Ohms | C - A :          | 100k M-Ohms |

## **COMMENTS**

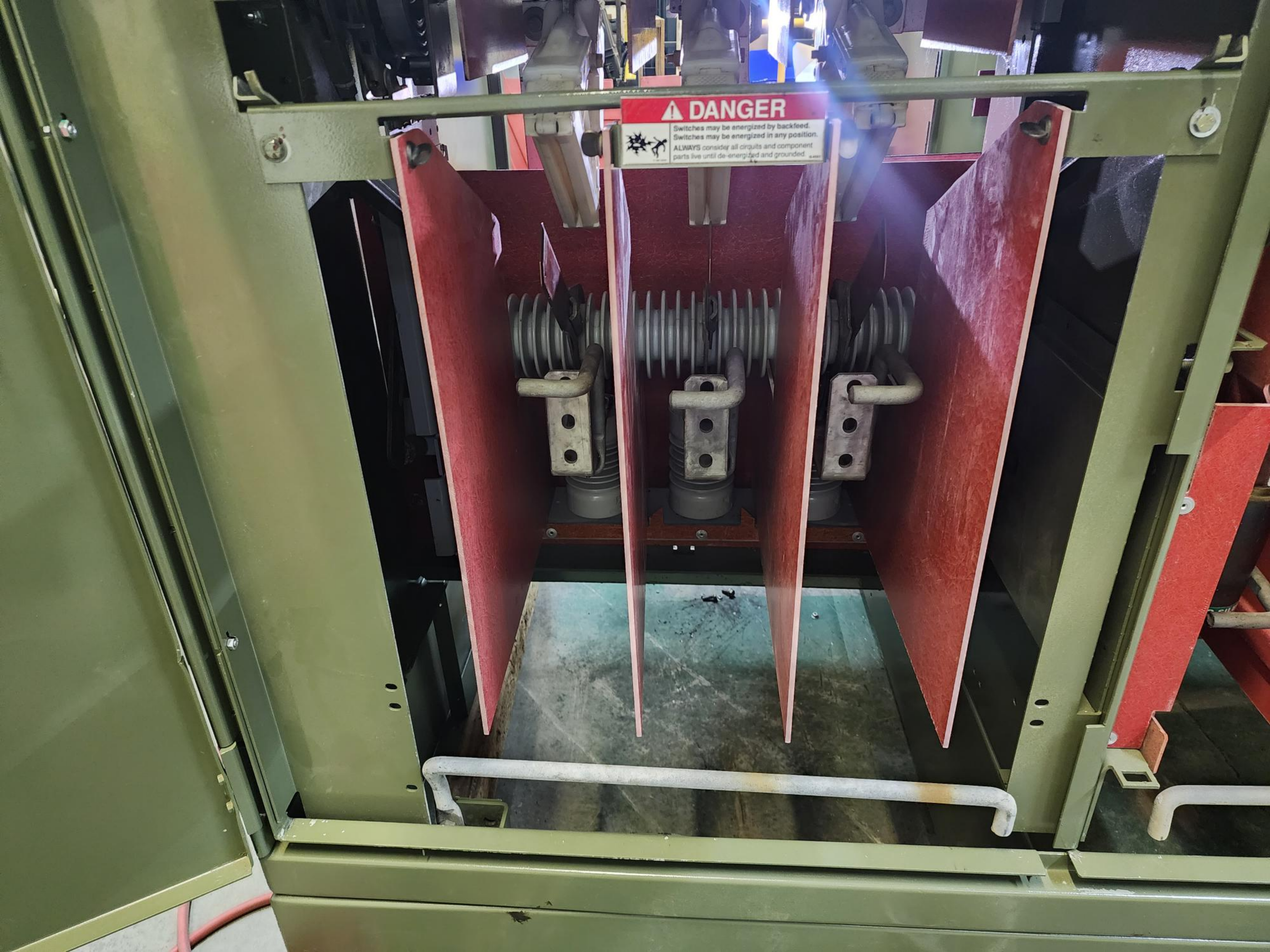
4-Way Switch  
 Tag #11512



**⚠ DANGER**



Switches may be energized by backfeed.  
Switches may be energized in any position.  
ALWAYS consider all circuits and component  
parts live until de-energized and grounded.



3

Compartment 1

**⚠ DANGER**

Fuses may be energized by backfeed.  
Fuses may be energized in any position.  
ALWAYS consider all circuits and component  
parts live until de-energized and grounded.

**⚠ DANGER**

Switches may be energized by backfeed.  
Switches may be energized in any position.  
ALWAYS consider all circuits and component  
parts live until de-energized and grounded.

4

80A

K<sup>1</sup> SP

TCC 180

4

80A

K<sup>1</sup> SP

TCC 180

4

100A

K<sup>1</sup> SP

TCC 180



1

2

3

3

2

1

Compartment 2

Compartment 1

**DANGER**  
HIGH VOLTAGE  
WARNING: ENERGIZED ONLY. CATALAN: NO. 8471

**DANGER**  
HIGH VOLTAGE  
QUALIFIED PERSONS  
ONLY

**DANGER**  
HIGH VOLTAGE  
QUALIFIED PERSONS  
ONLY

**DANGER**  
HIGH VOLTAGE  
QUALIFIED PERSONS  
ONLY

**⚠ DANGER**  
Fuses may be energized by backfeed.  
Fuses may be energized in any position.



3

3

2

1

Compartment 3

**DANGER**

**DANGER**

80K

80K

80K

80K

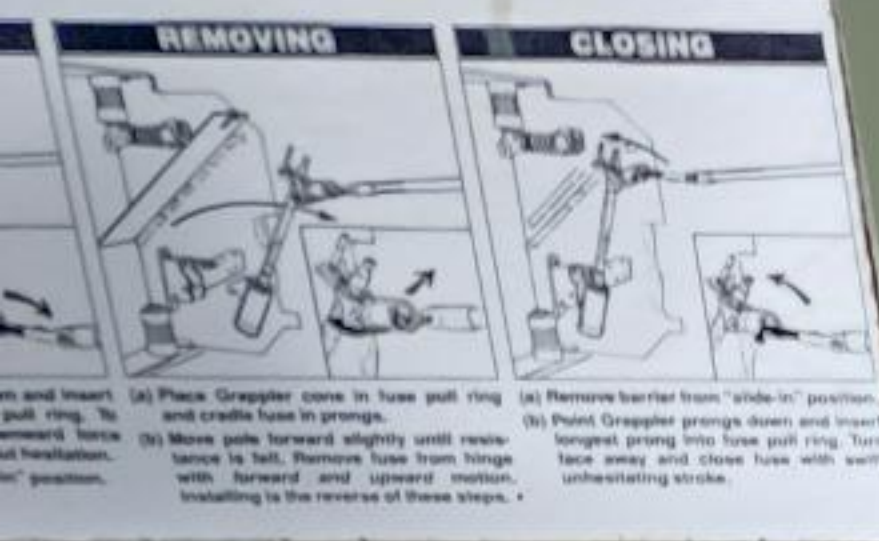
S&C SILEN

S&C SILEN

S&C SILEN

S&C SILEN

SWITCHING WITH UNI-RUPTER™  
**WARNING**  
Instructions can result in a flashover and injury. ALWAYS use an  
suitable universal pole to perform the following procedures.  
refer to the applicable S&C instruction sheet.



Compartment 4

1

2

3

**DANGER**  
Fuses may be energized by backfeed.  
Fuses may be energized in any position.  
ALWAYS consider all circuits and component parts live until de-energized and grounded.





1

2

3

3

2

1

Compartment 4

Compartment 3

**DANGER**  
HIGH VOLTAGE  
KEEP OUT  
QUALIFIED PERSONS  
ONLY

**DANGER**  
HIGH VOLTAGE  
KEEP OUT  
QUALIFIED PERSONS  
ONLY

**DANGER**  
HIGH VOLTAGE  
QUALIFIED PERSONS  
ONLY

**DANGER**  
HIGH VOLTAGE

**DANGER**  
HIGH VOLTAGE

**DANGER**  
HIGH VOLTAGE  
QUALIFIED PERSONS  
ONLY