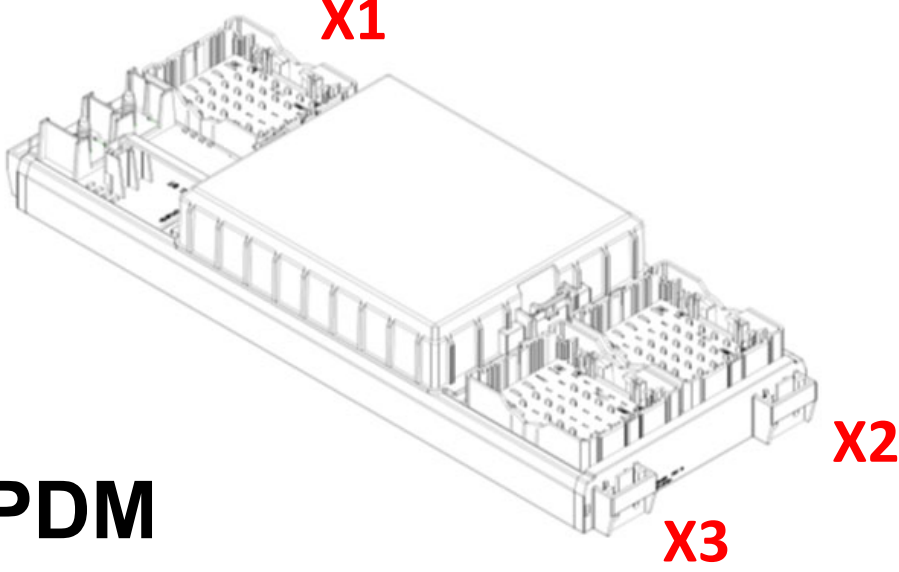
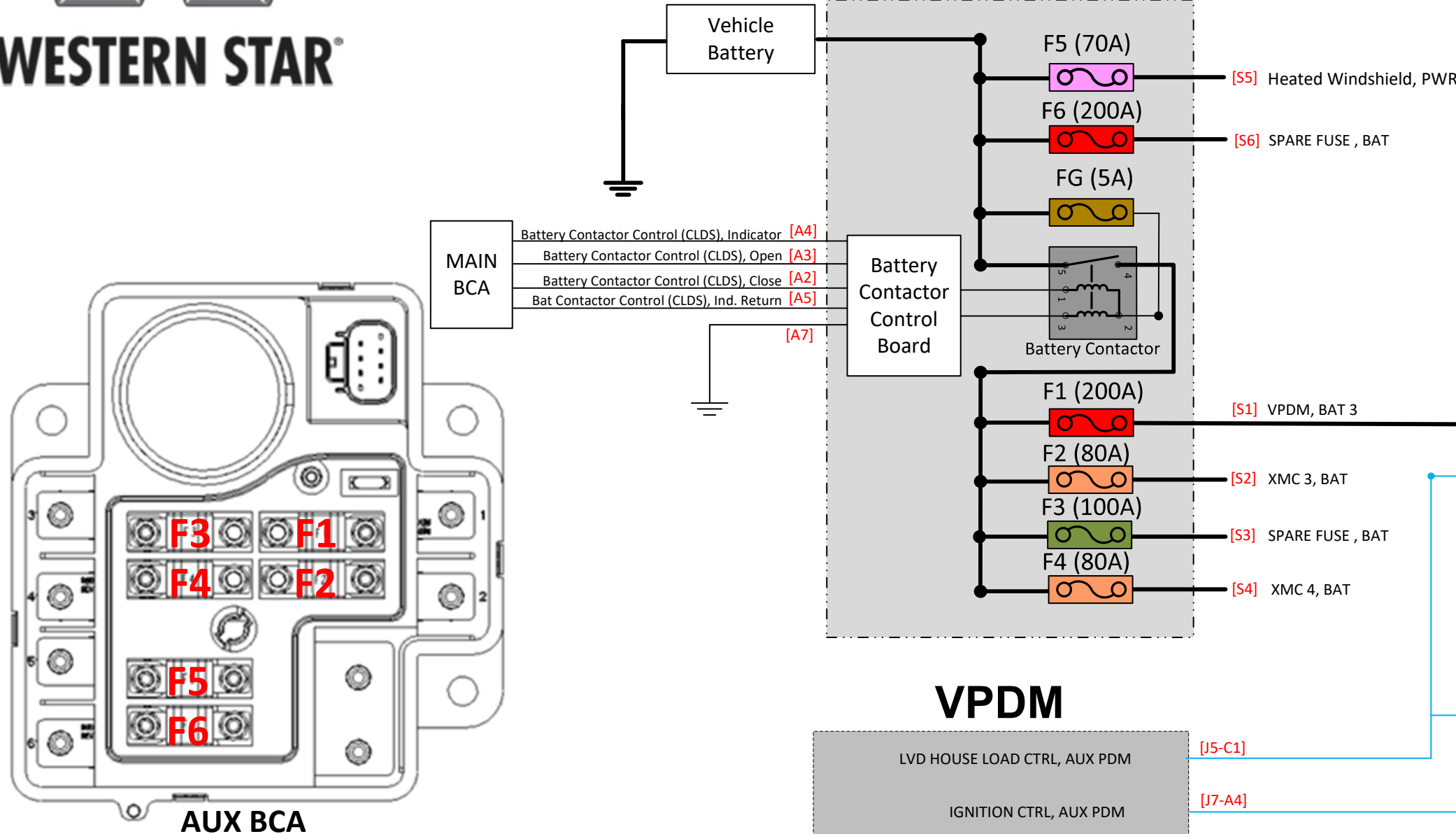




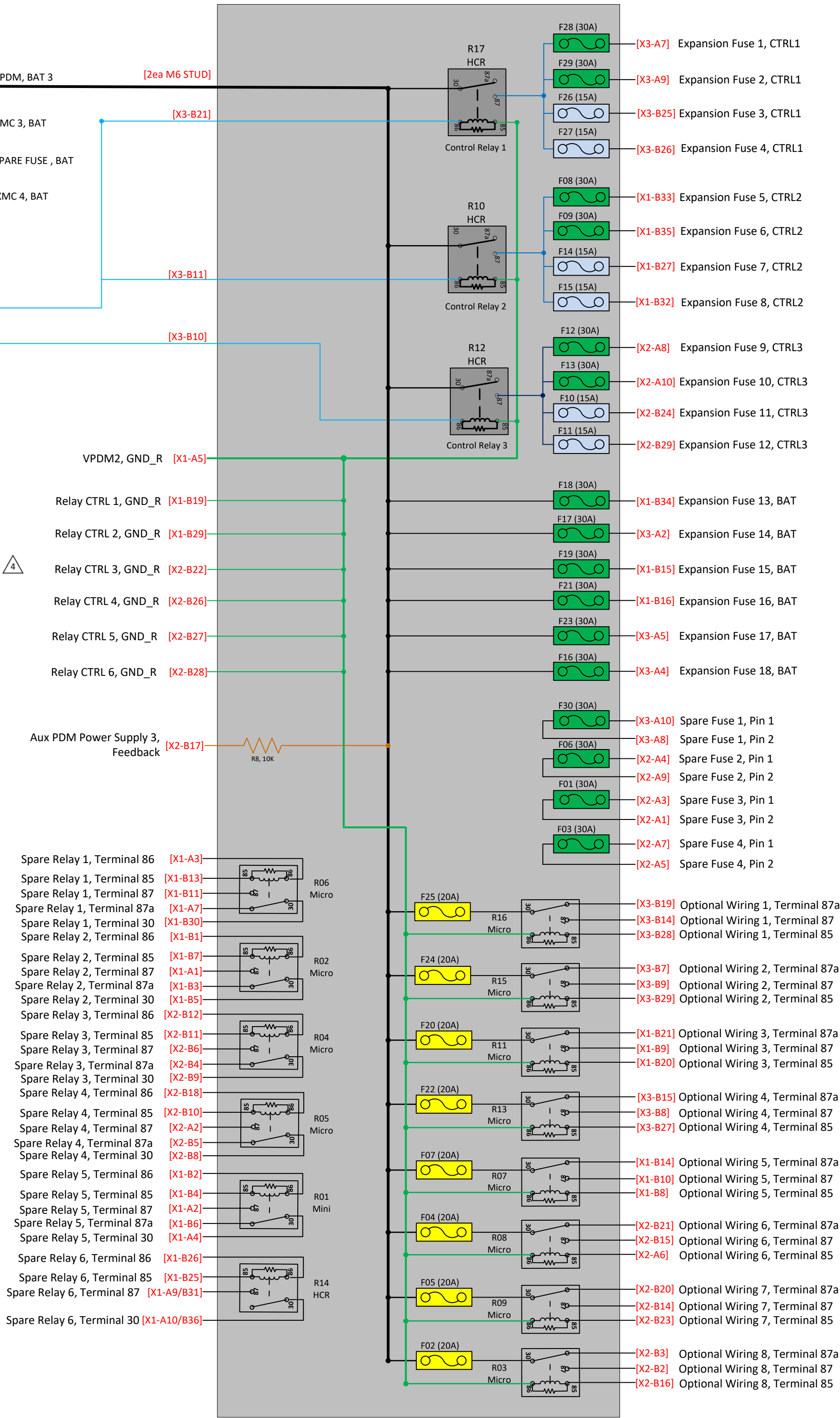
# Auxiliary VPDM

## STI-521

### AUX BCA



### AUX-VPDM



| FU/CB POS | FU/CB TYPE | MAX RATING (Amp) | Standard(S) Optional(O) | CONN | CAV     | Label Description        |
|-----------|------------|------------------|-------------------------|------|---------|--------------------------|
| F01       | FU,T2,T3   | 30A              | O                       | X2   | A1/A3   | SPARE FUSE 3             |
| F02       | FU,T2,T3   | 20A              | O                       | X2   | B2/B3   | OPT WRG FUSE 8           |
| F03       | FU,T2,T3   | 30A              | O                       | X2   | A5/A7   | SPARE FUSE 4             |
| F04       | FU,T2,T3   | 20A              | O                       | X2   | B15/B21 | OPT WRG FUSE 6           |
| F05       | FU,T2,T3   | 20A              | O                       | X2   | B14/B20 | OPT WRG FUSE 7           |
| F06       | FU,T2,T3   | 30A              | O                       | X2   | A4/A9   | SPARE FUSE 2             |
| F07       | FU,T2,T3   | 20A              | O                       | X1   | B10/B14 | OPT WRG FUSE 5           |
| F08       | FU,T2,T3   | 30A              | O                       | X1   | B33     | EXPANSION FUSE 5, CTRL2  |
| F09       | FU,T2,T3   | 30A              | O                       | X1   | B35     | EXPANSION FUSE 6, CTRL2  |
| F10       | FU,T2,T3   | 15A              | O                       | X2   | B24     | EXPANSION FUSE 11, CTRL3 |
| F11       | FU,T2,T3   | 15A              | O                       | X2   | B29     | EXPANSION FUSE 12, CTRL3 |
| F12       | FU,T2,T3   | 30A              | O                       | X2   | A8      | EXPANSION FUSE 9, CTRL3  |
| F13       | FU,T2,T3   | 30A              | O                       | X2   | A10     | EXPANSION FUSE 10, CTRL3 |
| F14       | FU,T2,T3   | 15A              | O                       | X1   | B27     | EXPANSION FUSE 7, CTRL2  |
| F15       | FU,T2,T3   | 15A              | O                       | X1   | B32     | EXPANSION FUSE 8, CTRL2  |
| F16       | FU,T2,T3   | 30A              | O                       | X3   | A4      | EXPANSION FUSE 18, BAT   |
| F17       | FU,T2,T3   | 30A              | O                       | X3   | A2      | EXPANSION FUSE 14, BAT   |
| F18       | FU,T2,T3   | 30A              | O                       | X1   | B34     | EXPANSION FUSE 13, BAT   |
| F19       | FU,T2,T3   | 30A              | O                       | X1   | B15     | EXPANSION FUSE 15, BAT   |
| F20       | FU,T2,T3   | 20A              | O                       | X1   | B9/B21  | OPT WRG FUSE 3           |
| F21       | FU,T2,T3   | 30A              | O                       | X1   | B16     | EXPANSION FUSE 16, BAT   |
| F22       | FU,T2,T3   | 20A              | O                       | X3   | B8/B15  | OPT WRG FUSE 4           |
| F23       | FU,T2,T3   | 30A              | O                       | X3   | A5      | EXPANSION FUSE 17, BAT   |
| F24       | FU,T2,T3   | 20A              | O                       | X3   | B7/B9   | OPT WRG FUSE 2           |
| F25       | FU,T2,T3   | 20A              | O                       | X3   | B14/B19 | OPT WRG FUSE 1           |
| F26       | FU,T2,T3   | 15A              | O                       | X3   | B25     | EXPANSION FUSE 3, CTRL1  |
| F27       | FU,T2,T3   | 15A              | O                       | X3   | B26     | EXPANSION FUSE 4, CTRL1  |
| F28       | FU,T2,T3   | 30A              | O                       | X3   | A7      | EXPANSION FUSE 1, CTRL1  |
| F29       | FU,T2,T3   | 30A              | O                       | X3   | A9      | EXPANSION FUSE 2, CTRL1  |
| F30       | FU,T2,T3   | 30A              | O                       | X3   | A8/A10  | SPARE FUSE 1             |

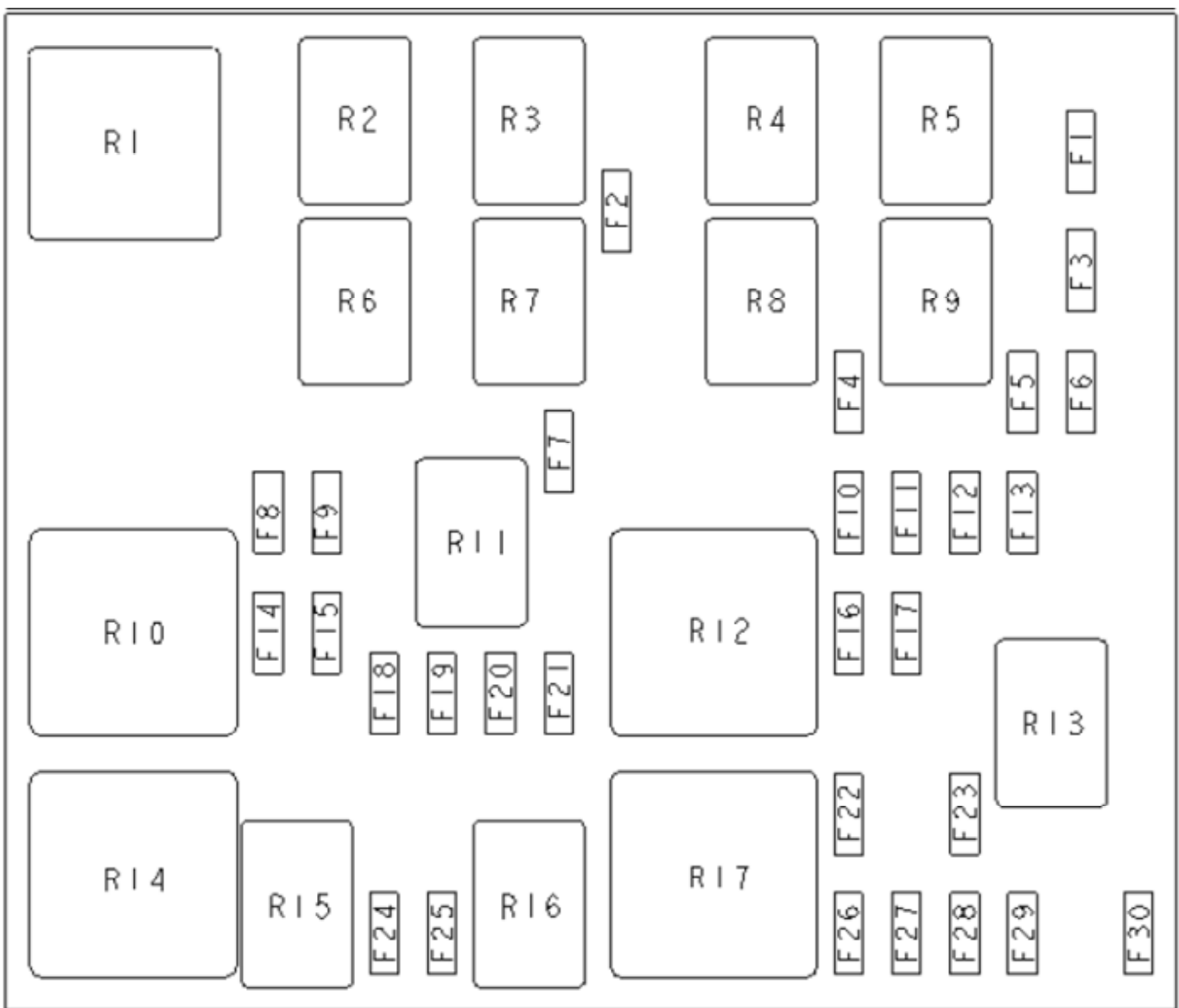
Notes:

1. Fuse and Circuit Breaker ratings are listed as their maximum value and not to be exceeded
2. All outputs listed as O (Optional) are flexible outputs driven by SMARTPARTS and dependant on vehicle configurations. Reference 49-00306 and SMARTPART Functional Assignment Document 49-00330 for more information.
3. High Current Relay R14 requires the use of pin sharing on the high side of the relay as noted in the schematic
4. GND\_R Grounding pins within the Aux. VPDM are only to be used for relay coil grounds, not a sufficient grounding point for any other devices.
5. Type 1 (self-resetting) circuit breakers are not recommended as a suitable replacement. Type 2 or Type 3 Only

| RELAY POS | RELAY TYPE | Standard(S) Optional(O) | Label Description |
|-----------|------------|-------------------------|-------------------|
| R01       | Mini       | O                       | SPARE RELAY 5     |
| R02       | Micro      | O                       | SPARE RELAY 2     |
| R03       | Micro      | O                       | OPT WRG RELAY 8   |
| R04       | Micro      | O                       | SPARE RELAY 3     |
| R05       | Micro      | O                       | SPARE RELAY 4     |
| R06       | Micro      | O                       | SPARE RELAY 1     |
| R07       | Micro      | O                       | OPT WRG RELAY 5   |
| R08       | Micro      | O                       | OPT WRG RELAY 6   |
| R09       | Micro      | O                       | OPT WRG RELAY 7   |
| R10       | HCR        | S                       | CONTROL RELAY 2   |
| R11       | Micro      | O                       | OPT WRG RELAY 3   |
| R12       | HCR        | S                       | CONTROL RELAY 3   |
| R13       | Micro      | O                       | OT WRG RELAY 4    |
| R14       | HCR        | O                       | SPARE RELAY 6     |
| R15       | Micro      | O                       | OPT WRG RELAY 2   |
| R16       | Micro      | O                       | OPT WRG RELAY 1   |
| R17       | HCR        | S                       | CONTROL RELAY 1   |

| Fuse Legend |           |
|-------------|-----------|
|             | 5A        |
|             | 15A       |
|             | 20A       |
|             | 30A       |
|             | 70A MIDI  |
|             | 80A MIDI  |
|             | 100A MIDI |
|             | 200A MDI  |

### Fuse/Circuit Breaker and Relay Map



### Key Position Legend

PWR => Keep Alive Powered  
BAT => Powered During Key-Off  
IGN => Powered During Key-On/Crank  
ACC => Powered During Key-On  
GND => See 28G GND Architecture

### Relay Legend

HCR => High Current Relay  
Mini => ISO Mini Relay  
Micro => ISO Micro Relay

### Spare Relay Trace Sizing

Micro => 30A  
Mini => 50A  
HCR => 80A  
Control => 5A for all relays