

TYPE PSI/II LIVE-FRONT 6-COMPARTMENT PAD-MOUNTED SWITCHGEAR 15kV / 25kV



The Federal Pacific 6-Compartment Live-Front PSI/II Pad-mounted Switchgear (available as UL® Listed) expands the load segmentation possibilities for underground distribution systems by allowing larger concentrated loads to be served from a single enclosure, requiring less space and less expense.

NOTE: 5-compartment pad-mounted switchgear designs are not currently available at 35kV.

Features:

- Available as UL® Listed (manual, some SCADA, no Automatic Transfer)
- Live-front 600-Ampere Switch Compartments
- Live-front 200-Ampere Fuse Compartments
- Manual, Automatic Source Transfer, and SCADA Controlled
- An exceptional combination of switch compartments (up to 5 in bus-tie configurations, up to 4 in other configurations) and fuse compartments (up to 5), including bus-tie configurations (5 compartments, all switched or bussed ways, no fusing).
- Meets IEEE C37.74 requirements, including 3-time fault-closing of switches.
- Meets enclosure security requirements in ANSI C57.12.28

Federal Pacific 6-Compartment, Live-front Pad-mounted Switchgear (available as UL® Listed) provides the convenience of installing a single enclosure with two 600-ampere switches and up to four three-phase sets of fuses. Installations with concentrated loads can now be served from a single switchgear assembly. The six-compartment configurations require less land space than two four-compartment units, which was the only choice in the past. In addition, the 6-compartment units are more economical than two four-compartment units both in initial and installed costs. There is no sacrifice in operating flexibility and, as a result, an outage on the main-feeder cable can be readily isolated and sectionalized.

PSI/II MANUAL LIVE-FRONT PAD-MOUNTED SWITCHGEAR

Powder epoxy primer and powder polyester topcoat finish coatings are electrostatically deposited and baked on to provide a tough, durable, high-gloss finish with characteristics proven by ANSI C57.12.28 standard testing to protect the metal throughout the service life of the pad-mounted switchgear.

Cross-kinked roof lets water flow off enclosure.

All compartments ventilated at roof-line and at door flanges.

Self-latching door security system controls access to interior. Latching system includes hinged padlockable cover with overhang to shield padlock shackle. Penta-head bolt is not exposed when cover is padlocked; can be rotated clockwise or counterclockwise to open door. Interior latches do not have any fast moving parts.

11-gauge steel enclosure, roof and doors

Set of three stainless steel hinges and hinge pins on each door

Bottom flange of enclosure is gasketed to protect finish.

Enclosure integrity and security is assured with Federal Pacific Type PSI/II Pad-mounted Switchgear.

Dual-purpose barriers provide a second barrier against inadvertent contact with energized parts of switches. Barriers can be removed and slide between switch blade and upper contacts, isolating lower section from energized bus at top. Barriers are not to be installed in the slide-in position for more than one week.

Ground studs up front for clear access

Switch terminals readily accessible for connection of skirted terminators

Surge Arresters (optional, not visible) mount below and to the rear of switch terminals, out of the way when installing terminators or pulling of cable.

Switch interphase barriers are removable to facilitate pulling and terminating cables when the unit is de-energized. Interphase barriers are not to be removed unless switchgear is completely de-energized, tested for voltage and grounded.

Compartment ground with two-hole NEMA pad for connection of concentric neutral cable and grounding clamps

Live-front switches utilize conventional, skirted terminators in switch and fuse compartments.



Federal Pacific's unique positive latch indicator extends to show that fuse is fully seated, latched and ready for next opening operation.

Dual-purpose barriers provide a second barrier against inadvertent contact with energized fuse live parts. Barriers can be removed and slide between open fuse and upper contacts, isolating lower section from energized bus at top as illustrated on the center phase of the compartment. Barriers are not to be left in the slide-in position for more than one week.

Compartment ground with two-hole NEMA pad for connection of concentric neutral cable and grounding clamps.



Ground studs up front for clear access

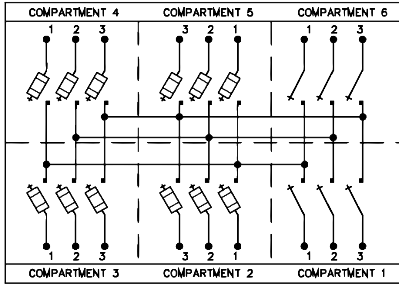
Fuse interphase barriers are removable to facilitate pulling and terminating cables when unit is de-energized.

Fuse terminals readily accessible for connection of skirted terminators.

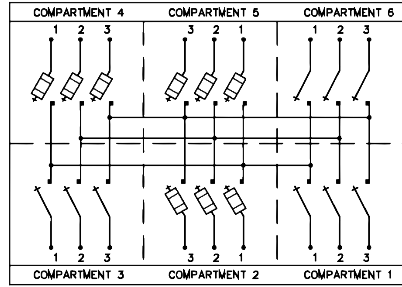
Temporary storage position for fuse dual-purpose barrier, not appropriate for long term storage (more than one week).

*Fuse compartment (at center) includes dual-purpose barriers, shown with barrier removed on center phase and normal hanging position on other two phases. Barriers are **NOT** to be left in the slide-in position for more than one week. Interphase barriers are **NOT** to be removed when the unit is energized. Temporary storage position for switch dual-purpose barrier is illustrated on door at left and for fuse dual-purpose barrier is illustrated on door at center.*

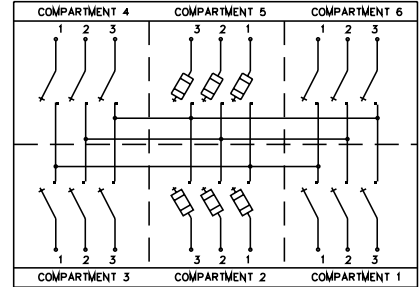
15kV Live-Front Circuit Configurations



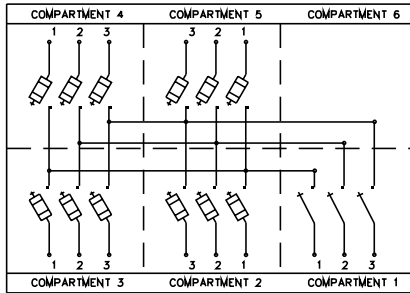
Drawing Number 37-0146-001 – Two incoming switches and four fused feeders



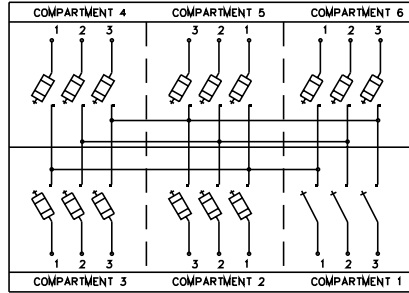
Drawing Number 37-0146-002 – Three incoming switches and three fused feeders



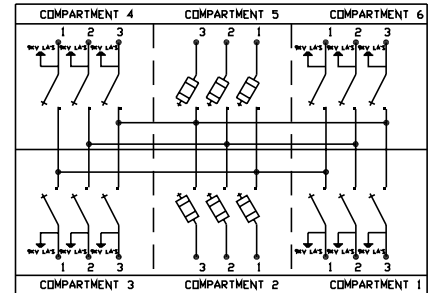
Drawing Number 37-0146-003 – Four incoming switches and two fused feeders



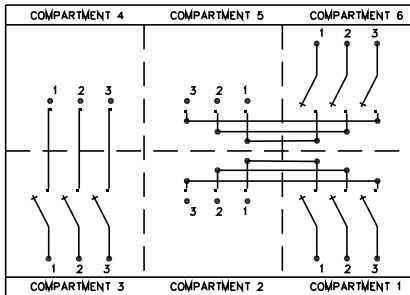
Drawing Number 37-0146-004 – One incoming switch, four fused feeders and one blank



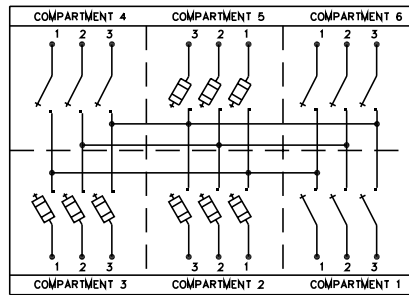
Drawing Number 37-0146-005 – One incoming switch and five fused feeders



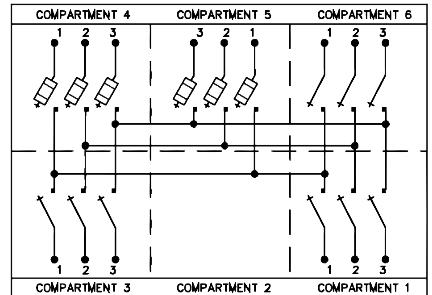
Drawing Number 37-0146-006E – Four incoming switches with surge arresters and two fused feeders



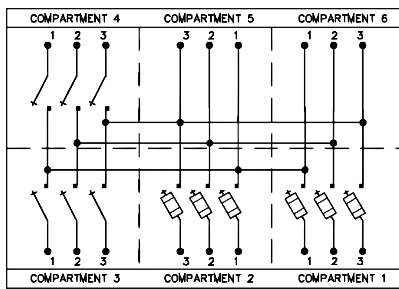
Drawing Number 37-0146-012 – Three independent switched circuits each with one incoming switch and one outgoing bus-only termination



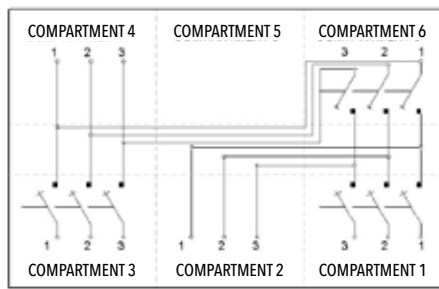
Drawing Number 37-0146-019E – Three incoming switches and three fused feeders



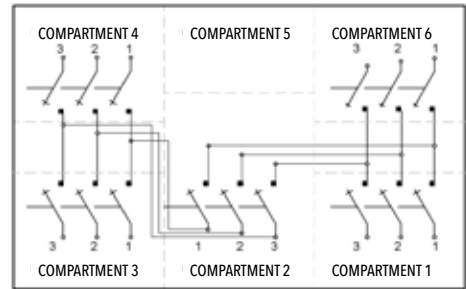
Drawing Number 37-0146-022E – Three incoming switches and two fused feeders



Drawing Number 37-0146-032E – Two incoming switches, two fused feeders and two bus-only feeders



Drawing Number 37-0146-023 – Bus-Tie Configuration with two outgoing bus-only taps

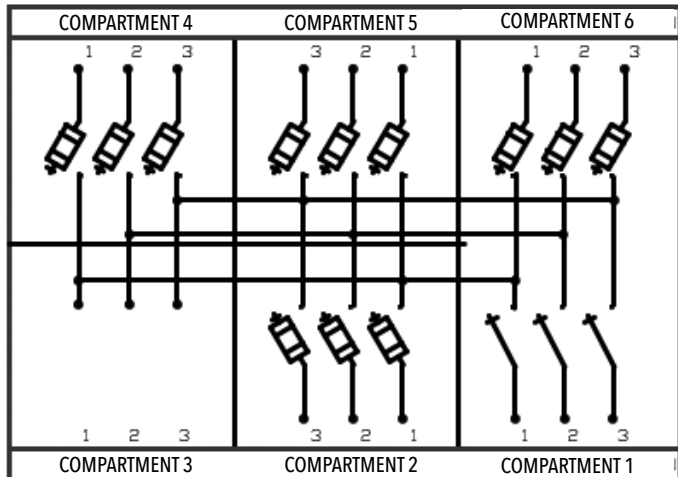


Drawing Number 37-0146-033 – Bus-Tie Configuration with two switched feeders (more commonly used)

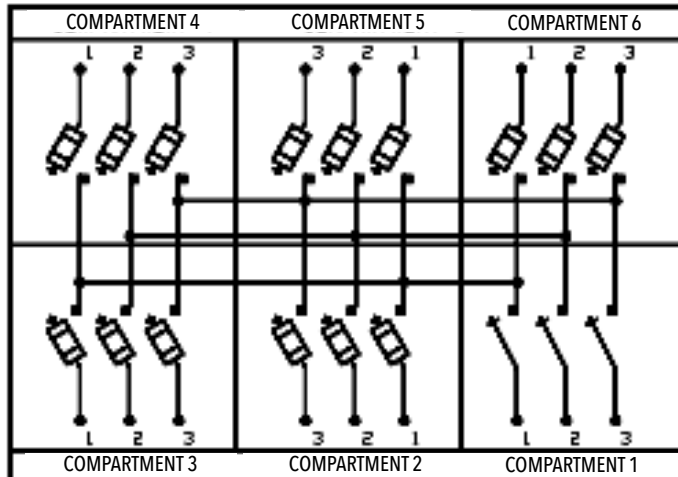
Typical configurations for models of 15kV Federal Pacific Live-Front 6-Compartment Pad-mounted Switchgear. Consult factory for other available circuit configurations. Dimensions will vary depending on circuit configuration, however, a typical dimension for 15kV units is 59" H x 110.3" W x 58.5" D. Do not use dimensions for construction purposes.

Other designs not shown may be available. Consult factory for details.

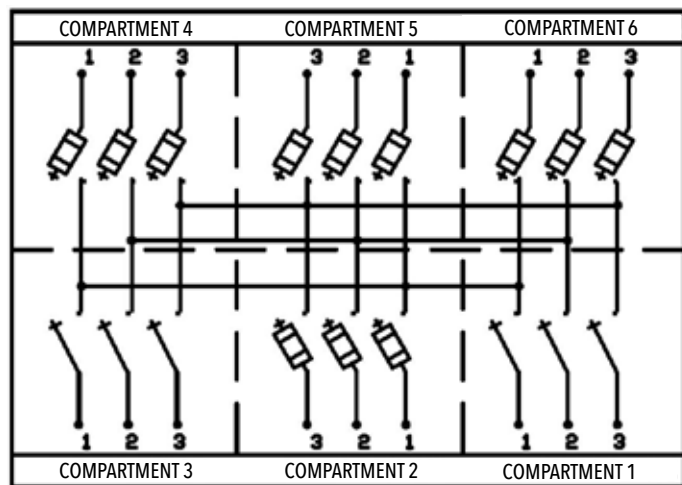
25kV Live-Front Circuit Configurations



Drawing Number 37-2656-002E – Circuit with one switched way and four fused ways.



Drawing Number 37-2656-003E – Circuit with one switched way and five fused ways.



Drawing Number 37-2656-005E – Circuit with two switched ways and four fused ways.

Typical configurations for models of 25kV Federal Pacific Live-Front 6-Compartment Pad-mounted Switchgear. Consult factory for other available circuit configurations. Dimensions will vary depending on circuit configuration; however, typical dimensions are 127" wide, 74-1/2" deep, and 70" high. Do not use dimensions for construction purposes.

Other designs not shown may be available. Consult factory for details.