15kV 95 BIL 600A Dead-Front Switchgear ATPSE-999 (Automatic Transfer with Back-to-Back Switches)

PRODUCT DATA SHEET

Overall Unit Ratings

Maximum Voltage 17kV
Power Frequency . . . . . 60 Hz
Lightning-Impulse Withstand Voltage 95kV
Power Frequency Withstand Voltage 35kV
Short-Circuit Current Rms Asym 22.4KA

Note – all overall unit ratings of distribution switchgear shall be that of the way with the lowest rating. (Per C37.74)

Switched Way Ratings

Manufacturer . . . . . Federal Pacific
Type . . . . . Auto-Jet® II
Continuous. Load-Switching and Loop-Switching Current 600A
Cable-Charging Switching Current 10A
Transformer-Magnetizing Current 21A
Fault-Closing Current 3-Time . . . . . 40.0KA Rms Asym

Fused Way Ratings

Nominal Voltage 14.4V
Maximum Design Voltage 17kV
Continuous Amps . . . . . 200 Amp
Short-Circuit Current Rms Asym 22.4KA

Applicable Standards

Switchgear Per ANSI/IEEE C37.74
Bushings Per ANSI/IEEE 386
Enclosure Per ANSI/IEEE C57.12.28

Approximate Dimensions

Footprint: . . . . . 75” W X 91-3/4” D (67” D With Adapter Base)
Height: . . . . . 68-3/16” H (80-3/16” H With 12” Adapter Base)
Bushing Height: . . . . . 33” H (45” H With 12” Adapter Base)
Overall Width with Operator Cabinets: . . . . 111-9/16”

Approximate Weight . . . . . 4000 Lbs.

Estimated Lead Times

Engineering Drawings (If Required) . . . . . 2 - 4 Weeks
Fabrication On Release . . . . . 16 - 18 Weeks (Projected)

601 Old Airport Road, Bristol, VA 24201 • (276) 669-4084, FAX (276) 645-8206 • www.electro-mechanical.com

ISO9001:2015 REGISTERED

15kV 95 BIL 600A Dead-Front Switchgear ATPSE-999 (Automatic Transfer with Back-to-Back Switches)

PRODUCT DATA SHEET

Major Design Features

Back-to-back motor operators in compartments 2 and 3 allow retrofit of legacy AT-PMH live-front designs with back-to-back switches.

Adapter base permits installation on existing pads of legacy AT-PMH live-front designs.

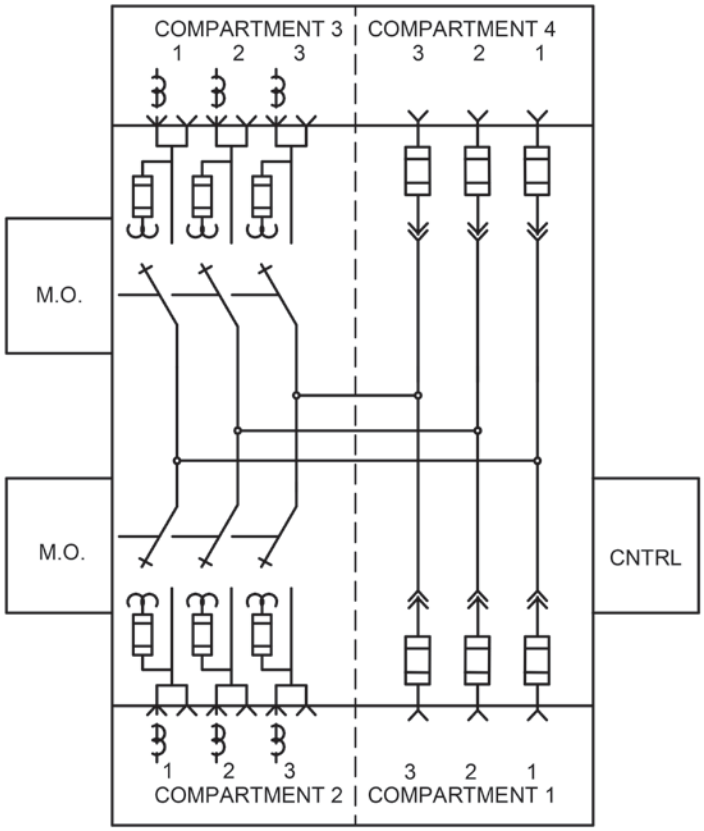
Run and trip motor operator provides 6 – 8 second transfer time

- 25 – 30 Cycle transfer times with available fast-transfer option

SEL-451 relay for transfer functions (also allows basic SCADA functions)

- Supervisory control provisions permit switch operation from a remote location
- Remote indication provisions permit remote monitoring of the presence or absence of preferred- and alternate-source voltage and the operating mode of the source-transfer control (i.e., automatic or manual)
- Communication capability includes software and conversion cable to allow downloading of the event log and settings from the microprocessor control to a user-supplied personal computer

Dual 600/200 amp bushings on the switch side



601 Old Airport Road, Bristol, VA 24201 • (276) 669-4084, FAX (276) 645-8206 • www.electro-mechanical.com

ISO9001:2015 REGISTERED

15kV 95 BIL 600A Dead-Front Switchgear ATPSE-999 (Automatic Transfer with Back-to-Back Switches)

PRODUCT DATA SHEET

Detailed Description -- ATPSE-9-44222-M2

15kV, 95kV BIL, dead front, air-insulated, source transfer, pad-mounted switchgear with two (2) 3-pole 600 amp group operated auto-jet switches each with run-and-trip motor operators and one (1) 3-phase set of fuse mountings for SMU-20 fuses.
Included are:

- Non-compartmented, 304 stainless steel base adapter which allows switch to fit existing pad per customer dimensions provided (76" x 67" overall)
- Heatrex® heater with 120V control power provide (potential transformer)
- Dual 600/200 amp bushings on the switch side
- Fuse storage hooks - compartments 1 and 4
- All Type 304 stainless steel cabinet and internal parts (or non-ferrous) hardware except switch frame and all current-carrying parts
- Hinged roof- stainless steel
- Master and drone fast trip motor operators on compartment 2 and 3 incoming switches
- cable supports in each switch compartment
- Mounting provisions only to accommodate one three-phase fault indicator in each switch compartment, on side of the 600A switch compartment.

- Six (6) current transformers to provide current sensing on the incoming for over-current lockout scheme and current monitoring
- Six (6) potential transformers for voltage sensing and control power on the incoming auto-jet switches
- Supervisory control provisions shall be provided to permit switch operation from a remote location
- Remote indication provisions shall be provided to permit remote monitoring of the presence or absence of preferred- and alternate-source voltage and the operating mode of the source-transfer control (i.E., automatic or manual)
- Communication capability – provides software and conversion cable to allow Downloading of the event log and settings from the microprocessor control to A user-supplied personal computer

- SEL-451 Relay, provides switching intelligence for the automatic transfer is Located in a low-voltage, compartment.
  Relay part number: 04515215xxxx23342xxxx
  Communication accessory, SEL-2830 single-mode fiber optic transceiver PN: 2830m
  (Note: customer needs to verify relay and communication part numbers are acceptable before placing order. If using another method of communication please specify)
- UPS, 48Vdc output for use with sel 451 relay
- Customer furnished labels
- 6 - FP-3097 fuse end fittings
- 6 - SMU-20 fuse units.

15kV 95 BIL 600A Dead-Front Switchgear ATPSE-999 (Automatic Transfer with Back-to-Back Switches)

PRODUCT DATA SHEET

Figure 1 - Fuse Compartment 4 (left) and Switch Compartment 3 (right), shown with hinged roof open.

Figure 2 - Phase 2 (nominal B Phase) fuse panel in Compartment 4 is shown in the open position, with hinged roof open.

Figure 3 - Side view showing dead-front to live-front base adapter (bottom) and the two back-to-back switch motor operators on the side.

Figure 4 - SEL-451 Relay, with SEI UPS.

601 Old Airport Road, Bristol, VA 24201 • (276) 669-4084, FAX (276) 645-8206 • www.electro-mechanical.com

ISO9001:2015 REGISTERED