Bypass isolation contactor-type automatic transfer switch 2000–3000 A FAQs

Q: Can the bypass isolation automatic transfer switch be serviced while energized?
A: Yes. The unique three-door compartmentalized, dual draw-out design allows service personnel to safely perform concurrent maintenance without disrupting power to the load. Prior to performing maintenance, a technician can electrically isolate the control compartment from system and control voltage by rotating the maintenance isolation switch (MIS). When electrically isolated, the control compartment door can be opened and slid forward (with the adjoining control panel) for easy access to inspect, test or maintain electrical components and wiring. The unique design provides enhanced safety to the technician while allowing the transfer switch to remain energized.

Q: What transition types are available?
A: Closed and open transition. The open transition type supports time-delayed, load voltage decay or in-phase via programmable set points. The closed transition type can be configured to default to open transition if source synchronization doesn’t occur after a user-programmable delay timer expires.

Q: What amperage ratings are available?
A: The standard amperage ratings are 2000, 2600 and 3000—but the transfer switch can be derated for applications requiring lower amperages.

Q: Does the bypass switch operate automatically?
A: Yes. Both the bypass switch and the ATS operate automatically.

Q: Is the bypass isolation automatic transfer switch UL® 1008 listed?
A: Yes.

Q: What is the UL 1008 short-circuit withstand/closing current rating?
A: The short-circuit rating is 100 kA (0.05 sec), up to 600 V.

Q: What is the UL 1008 short-time withstand/closing current rating?
A: The short-time rating (optional) is 85 kA (0.5 sec), up to 600 V.

Q: What is the UL 1008 fuse withstand/closing current rating?
A: The fuse rating is 200 kA, up to 600 V.

Q: What modes of operation does the transfer switch support?
A: The following operation modes are standard for both the ATS and bypass switch:
- Automatic (electrically initiated, electrically operated)
- Non-automatic (manually initiated, electrically operated)
- Manual (manually initiated, manually operated)

Q: Can a transfer be manually initiated under load?
A: Yes. This can be done while in the automatic, non-automatic or manual mode of operation.

In automatic mode, a transfer can be manually initiated via the controller, remote annunciator or optional selector switch. In non-automatic mode, a transfer can be initiated using a door-mounted selector switch or via an optional tethered remote control. In manual mode (automatic controller disabled), a transfer can be initiated and operated using integral pushbuttons located directly on the switch assembly.

Q: How does the optional, tethered remote control function when in non-automatic mode?
A: A tethered remote control connects to the transfer switch via a standard Ethernet cable and a simple three-pushbutton control with indication allows the operator to manually initiate a transfer at a distance.

Q: Can the ATS and bypass switch assemblies be drawn out from their isolated compartments?
A: Yes. Both the ATS and bypass switch assemblies can be drawn out independent of one another to facilitate inspection, testing, maintenance or removal.

Q: Can the ATS or bypass switch be drawn out with the main contacts closed?
A: No. As a safety precaution, interlocks will cause the main contacts to open in advance of the unloaded ATS or bypass switch, disengaging from the electrical bus in the compartment rear during rack-out or reengaging the electrical bus during rack-in.
Q: Can the ATS or bypass switch be racked in/racked out with the door closed?
A: Yes. A small racking shutter is provided to facilitate rack-in or rack-out with the door closed using a ½-inch ratchet.

Q: When the ATS or bypass switch is drawn out, are energized bus connections exposed?
A: No. Internal shutters (located at the rear of each compartment) are provided and will close to isolate bus connections when the ATS or bypass switch is drawn out from the racked-in position.

Q: Can the ATS be drawn out and isolated from the normal and emergency power sources for routine testing?
A: Yes. With the bypass switch in automatic or non-automatic mode, the ATS can be isolated for test or fully withdrawn for inspection or removal. Should an unplanned outage occur during testing, the bypass switch will automatically transfer to the alternate power source when it is available.

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Q: Can the ATS and bypass switch compartment doors be opened independently of one another?
A: Yes. Independent door action facilitates the routine testing and maintenance of the ATS and bypass switch, ensuring operational readiness and redundancy for mission-critical applications.

Q: What terminal connection types are supported?
A: For a 2600–3000 A rating, (12) 1/0–750 kcmil Cu/Al mechanical lugs per phase will be provided for the normal, emergency and load connections. For a 2000 A rating, (8) 1/0–750 kcmil are provided. Optionally, provisions for compression lug and bus connections are available.

Q: What enclosure types are available?
A: NEMA® 1 and 3R enclosure types are available.

Q: Will the design accommodate bus duct connections?
A: Yes. Both the NEMA 1 and 3R designs can be engineered to support bus duct flange for the normal, emergency or load connections.

Q: Is the transfer switch seismic qualified?
A: Yes. It is seismic qualified to CBC, IBC, UBC zone 4 and OSHPD pre-approved.

Q: Are floor-anchoring points located internal or external to the transfer switch structure?
A: Twelve floor-anchoring points are located internal to the transfer switch. This minimizes footprint and facilitates integration into an equipment lineup.

Q: Is cable ingress limited to top or bottom?
A: Cable entry for the normal connections can be made at the top, and emergency connections can be made at the bottom. Load connections can be made from the top or bottom. A source swap option is available to reverse cable entry locations for the normal and emergency connections.

Q: Does the bypass isolation transfer switch facilitate front access for terminating cables during installation?
A: Yes. A side cabinet option is available providing front access. Otherwise, cable terminations require rear access.

Q: Can the enclosure depth be increased?
A: Yes. The standard depth can be extended (at the rear) to facilitate integration into an equipment lineup or to meet other application requirements.

Q: Can the enclosure depth be modified to align with standard switchboard depths for integration?
A: Yes. The depth can be adjusted to align with cross-bus connections in adjoining structures. If one or more cable connections are needed, a side cabinet can be added.