

2000–3000 A contactor-based automatic transfer switch FAQs

Q: What ampere ratings are available?

A: The standard ampere ratings are 3000, 2600, and 2000 A, however, the transfer switch can be de-rated for applications requiring lower amperages.

Q: Is the transfer switch UL® 1008 Listed?

A: Yes, the transfer switch is UL 1008 Listed. It complies with the mandatory construction and performance requirements outlined in the UL standard. It also complies with the optional short-time performance requirements in the UL standard.

Q: What type of switching device is used in construction?

A: The switching device is a two-step, stored energy contactor type mechanism. All the energy required for operating the main contacts is stored and held in readiness.

Q: Does the switching device incorporate a single or dual operator?

A: Dual operator.

Q: Is the transfer switch freestanding?

A: Yes.

Q: What enclosure types are available?

A: NEMA® 1 and 3R.

Q: What is the short-circuit withstand/closing rating?

A: The UL 1008 Listed, short-circuit rating is 100 kA (0.05 sec), up to 600 V.

Q: What is the short-time withstand/closing rating?

A: The UL 1008 Listed, short-time rating is 85 kA (0.5 sec), up to 600 V. This rating is optional and must be selected when configuring the transfer switch.

Q: Will the transfer switch have both short-circuit and short-time withstand closing ratings?

A: When configured in Bid Manager with an 85 kA withstand closing rating, the transfer switch will have both a short-circuit (100 kA) and a short-time (85 kA) withstand closing rating.

Otherwise, when configured in Bid Manager as 100 kA, the transfer switch will only have a short-circuit (100 kA) withstand closing rating.

Q: What is the fuse withstand/closing rating?

A: The UL 1008 Listed, fuse rating is 200 kA, up to 600 V.

Q: Is cable ingress limited to top or bottom?

A: Cables for the Normal, Emergency, and Load connections can enter from the top and/or bottom.

In addition, the load lugs can easily be rotated for top or bottom entry, and a source swap option is available for Normal and Emergency connections.

Q: Is rear and side access available?

A: Rear access is possible by removing the upper and lower rear panels. Side access is available but limited. Reference the product outline drawing for dimensional information.

Q: Is front access available?

A: Yes. The installing contractor will have the ability to access the termination connections in the rear of the transfer switch from the front by removing the upper front panel, lower front panel, internal mesh barriers, and deadfronts. Additional side cabinets are not required.

Q: Can the enclosure depth be increased?

A: Yes. The standard 40-inch depth can easily be extended to 48, 54, or 66 inches to meet integration or application requirements.

Additional depths are available upon request.

Q: What modes of operation will be available?

A: Automatic (electrically initiated, electrically operated); Non-Automatic (manually initiated, electrically operated); Manual (manually initiated, manually operated).

Q: Is a bypass isolation type offered?

A: Will be released in 2017.

Q: Can the contactor assembly be drawn-out?

A: Only a fixed type is currently offered. Drawout will be available on the bypass isolation type in 2017.



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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 initiated via the automatic controller faceplate, HMI remote annunciator, or end-user controls via dry contact interface.

In Non-Automatic mode, a transfer can be initiated using an optional door-mounted selector switch or tethered remote control.

In Manual mode, a transfer can be initiated using controls that are integrally mounted on the face of the contactor assembly.

Q: How does the optional, tethered remote control work when in Non-Automatic mode?

A: The tethered remote control is constructed with three pushbuttons (Source 1 Close, Open, and Source 2 Close) with integral indication lighting. It connects to the transfer switch via a standard Ethernet cable and uses 24 Vdc signaling. A female RJ-45 is mounted on the front door for easy connection.

Q: Is the transfer switch seismic qualified?

A: Yes. It is seismic qualified to CBC 2013, IBC 2012, UBC Zone 4 and OSHPD pre-approved.

Q: Can the transfer switch be serviced while energized?

A: The front door, in conjunction with internal steel barriers, form an isolated control compartment that houses the automatic controller, control power transformer assembly, wire harnesses, relay logic, manual pushbutton controls, manual charging handles, terminal blocks, and a variety of optional features including a 2-position maintenance isolation switch (MIS).

Upon opening the front door, service personnel can electrically isolate the compartment to facilitate maintenance by turning the MIS. This action removes all system and control voltage from the compartment, providing enhanced safety to the technician while allowing the transfer switch to remain energized and optimizing system uptime.

Q: What transition types are available?

A: Both open and closed transition. The open transition type allows the end-user to select in-phase or delayed transition 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: Does the transfer switch include an interlock to prevent paralleled sources?

A: Yes. When open transition is configured, the transfer switch is positively interlocked both mechanically and electrically to prevent the simultaneous closing of both sources under Automatic and Non-Automatic operation. Under Manual operation, the transfer switch is mechanically interlocked only.

Q: What terminal types are supported?

A: UL Listed, Solderless Screw-Type Cu/Al mechanical lugs are provided for Normal, Emergency, and Load connections.

Optionally, provisions for two-hole compression lug or bus connections are available.

Q: Will the design accommodate bus duct flange connections?

A: Yes. Both the NEMA 1 and 3R designs can be custom engineered to support bus duct flange connections for the Normal, Emergency, or Load.

Q: Are floor anchoring points located internal or external to the transfer switch structure?

A: All floor anchoring points are located internal to the transfer switch. This minimizes footprint and facilitates integration into a power distribution gear line-up.

Q: Does a closed transition type require two contactor switching mechanisms?

A: No. The contactor switching mechanism is a dual operator device that allows for independent actuation of the Source 1 and Source 2 main contacts. As a result, only a single contactor switching mechanism is needed for closed transition.

Q: Is a Service Entrance rated version available?

A: No. For service entrance applications, a Magnum®-based transfer switch is the recommended solution.

Q: Are any of the contactor switching mechanism components field replaceable?

A: Yes. The majority of components that make up the contactor switching mechanism can be replaced in the field to include the motor operator, auxiliary contact module, shunt trip module, arc chutes, and main contacts.

Q: Can a transfer and retransfer be manually initiated and operated using the stored energy of the switching mechanism?

A: Yes. An open transition transfer (Source 1 to Source 2) and retransfer (Source 2 to Source 1) can be accomplished before recharging (via manual handles) is required.

Q: Can the main contacts be visually inspected?

A: Yes, once the arc chutes have been removed.

Q: What is the maximum number of auxiliary contacts that can be configured?

A: The standard transfer switch configuration includes four (4) auxiliary contacts for each source. As an option, two (2) additional contacts can be configured for a total of six (6) except when the tethered remote control option is selected.

Q: Does the front door include a padlock provision?

A: Yes.

Q: Is overcurrent protection (OCP) available?

A: No. For applications requiring OCP, a Magnum-based transfer switch is the recommended solution.

Q: When configuring the Kirk-key option, is the key retained in the cylinder during normal operation?

A: Yes. The key can be rotated and removed when both sources are open. The padlock provision on the front door can be used for Lock-Out Tag-Out (LOTO).

Q: How many poles are available?

A: Three- and four-pole configurations are offered to support three-phase applications. For two-pole, single-phase applications, contact the factory for more information.

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Publication No. SA140005EN / Z18109
April 2016

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