

## ACCESSORY SE SERVICE ENTRANCE

Lake Shore Electric Corporation, Service Entrance Accessory provides for the Automatic Transfer Switch (UL 1008 Listed) to be labeled as suitable for use as Service Equipment.

When a Lake Shore Electric Corporation Transfer Switch is connected to the load end of service conductors to a building or other structure it can be rated and listed as Service Equipment. This allows a great deal of flexibility to the design professional in creating an efficient and economical electrical power system.

The Service Entrance Rated Transfer Switch is manufactured with the traditional high quality offered by Lake Shore Electric Corporation and in addition to the accessories requested:

- Provides a service disconnecting means
- Provides permanent marking identifying it as a service disconnect
- Suitable for the prevailing conditions
- Provides over current protection for each ungrounded service conductor
- Provides a means of disconnecting the grounding of the grounded conductor
- Provides clear indication of the position of the disconnect

This dual application allows for the elimination of separate service equipment in series with the transfer switch. The cost savings can be significant.

- Additional equipment is not needed.
- Interposing cable and conduit are eliminated.
- Labor for equipment mounting is reduced.
- Labor for interposing cable and conduit is eliminated.

The logical application of service entrance equipment is where the alternate power supply is capable of accepting the entire service load and/or the placement of the Automatic Transfer Switch is placed in a readily accessible location consistent with Article 230 of the National Electric Code.

Section 230-2 of the National Electric Code clearly identifies emergency systems, legally required standby systems, optional standby systems and parallel power production systems as separate services. Therefore, there is a requirement to provide additional Service Equipment for these sources of power. Since Service Equipment must be provided for the onsite power plant, the same benefits that apply when the Lake Shore Service Entrance Rated Transfer Switch is used as the Utility Service Equipment apply when it is used as the on site power Service Equipment.



This switch can be used as service entrance equipment for either the Utility or Standby service. Please note that it cannot be used as service equipment for more than one supply per Article 230.72.B.

When the Service Entrance accessory is selected, the Transfer Switch is suitable for use as Service Entrance Equipment and provided with the following:

Padlockable Enclosure

Over Current Trip and Bell Alarm for the Service Disconnect

Pilot Lights to indicate "Over Current Condition"

Lockable Selector Switch

Neutral bus with three (3) main lugs and one (1) ground lug

A Main Bonding Jumper is provided per 250.8 of NEC (2002)

Enclosure mounted instructions for disconnection of the service

Service Entrance Nameplate.

LED to indicate disconnect position.

**NOTE:** When ordering this option, the service for which the Transfer Switch will be rated must be clarified (i.e. Utility, Emergency or both). Unless otherwise directed, we will assume Utility.

### GROUND FAULT PROTECTION

Article 230-95 of the National Electric Code states that *"Ground fault protection of (service entrance) equipment shall be provided for solidly grounded Wye electrical services of more than 150 volts to ground but not exceeding 600 volts phase to phase for each service disconnecting means rated 1000 amperes or more."*

If the automatic transfer switch you select requires Ground Fault Protection, please refer to Lake Shore Electric Bulletin 07539, for an explanation of this accessory.

