

DIVISION 16 - ELECTRICAL

Section 16622 Automatic Transfer Switch

Introduction

The intent of this section is to require that at each location where an emergency generator system is utilized an automatic transfer switch (ATS) *or bypass isolation transfer switch shall* be utilized.

Since more and more equipment is being added to the system which is "protected" by the emergency generator system it is important that a top quality transfer switch be utilized. In addition it has been found that though many of the manufacturers of emergency generators can provide a switch in conjunction with the emergency generator that these are usually of a lower overall quality and more subject to breakdown. Therefore we would suggest that the ATS be of similar quality to that in the accompanying specification.

The ATS should be sized to meet both the maximum short circuit current available from the combined sources (in case of a direct fault during transfer), and for 125% of the available current from either the normal or emergency power source *with a 3 cycle rating in excess of UL 1008*.

Since the ATS generally contains electronic items make sure that the location of the transfer switch is compatible (i.e. adequate cooling and minimum dust) with the transfer switch.

A sample specification (see attached Appendix Section 16622) has been provided for your use outlining all of the standard requirements necessary for new installations here. As a minimum all of the items outlined in this specification should be included.

Whenever GFI is used, provide 4 pole switches.

Transfer switch shall have programmable auto exercising feature for once a week

Part 1 - General

- Complete submittals and operational manuals shall be provided as a part of the system.
- The warranty shall be the same as that of the emergency generator that it is associated with.
- Complete maintenance manuals and spare parts lists be provided as a part of the project close out documents.

Part 2 - Products

- Caterpillar, or prior approved equal. Russelectric, Zenith and ASCO may be specified after first documenting proof of third party testing for a 3 cycle rating. (Prior to completing contract documents submit proof at design development stage of design).
- Provide only 4 pole automatic transfer switches.
- Provide manual 4 pole – 3 way bypass switches on the normal supply side and on the load side, configure to allow bypassing and isolation of the automatic transfer switch to allow for servicing and replacement of the automatic transfer switch while maintaining normal power to the emergency load.

Part 3 - Execution

- Startup and check out to be by a manufacturer's certified technician.

End of Section 16622