



P.A.S.D.

GENERAL SHIPPING & STORAGE RECOMMENDATIONS

This general guide is not intended to cover all of the various storage situations. Specific information for shipping, handling and storage of electrical apparatus should be sought from the appropriate equipment instruction bulletin. Please consult Powell if special shipping or storage conditions are anticipated.

Shipping and storage of electrical equipment requires specific measures to prevent the deterioration of the apparatus over a long unused period. The mechanical and dielectric integrity must be protected. Electrical equipment is designed for use in a variety of environments. When the equipment is in transit and storage, these design considerations are not functional. In general, the following measures must be considered. The warranty of the equipment is not valid if proper handling and storage practices are not implemented. If equipment shipment is prolonged, such as ocean transit, these storage measures also apply to shipment.

1. Equipment designed for indoor installation must be stored indoors in a climate controlled environment to prevent condensation of moisture. Exposure to rain and the elements, even for a short period, can permanently damage the equipment. Space heaters within the equipment should be energized, if so equipped. Humidity controlling desiccant materials should be utilized when space heaters are not provided or cannot be energized. The temperature should be kept above freezing and the relative humidity should be kept low. The equipment should be stored in such a manner as to leave all doors and panels accessible for inspection. The equipment must be inspected on a routine basis to assure its integrity.
2. Equipment design for outdoor exposure may be stored either in indoor or outdoor storage locations. The equipment must be protected from airborne external contaminants if stored outdoors. Outdoor storage will also require additional care maintain the temporary covers over the openings and shipping splits which are covered during installation. This equipment must be provided with control power to facilitate energization of space heaters, as well as other temperature and humidity controlling equipment. The temperature should be kept above freezing and the relative humidity should be kept low. The equipment should be stored in such a manner as to leave all doors and panels accessible for inspection. The equipment must be inspected on a routine basis to assure its integrity.
3. The auxiliary control devices, ship loose material and protective relays must also be protected. This includes items such as battery chargers, UPS systems, lighting, installation hardware and air conditioning. If prolonged storage is anticipated, humidity controlling desiccant materials should be utilized. Desiccant packets should be installed in all compartments and packing containers.