ISOLATED PHASE BUS DUCT (IPBD)
PACKING, STORING AND SHIPPING STANDARDS
The specification standard covers Isolated Phase Bus Duct and accessories for long term storage of the bus system. Long term storage is any amount of time over thirty (30) days after receipt of material or sixty (60) days after shipment from the factory. This standard is to to ensure bus quality in process of packing, storing and shipping.

1. **Packing process and specification of IPB**

All of the Isolated Phase Bus requires customized packing to assure and make use of optimal packing, loading, and securing for shipment. All packing labels and packing list should be reviewed prior to unpacking. Check if there is any visual damage to the exposed surface are of the IPBD. Terminals and end connections should be covered in two (2) layers of plastic bags. If removed, rewrap with heavy duty shrink wrap or equivalent to protect the terminal end connections to assure outside elements do not make direct contact with the plated end surfaces. It is also important to limit the amount of rain and dust if any of the end plastic protections is removed from water/rain intrusion and dust.

2. **Packing methods of IPBD**

The packing methods of IPBD consist of pallet type and frame type, framed according to the actual dimensions of the IPBD. The in factory packing technician takes into consideration pallet and frame design, welding pallet and frame with 10# or 12# channel steel for reinforcement bracing. The framework which
includes soft pine that is termite treated has small pieces of asbestos pads to avoid direct contact on the wood which may be abrasive to painted surfaces and cause surface wear. Clean strapping or rope is also used, it is imperative that plastic boot or shoe shields are warn when unpacking or covering the bus duct. This will avoid contact with shoe bottoms which may contact sand or dirt particles on the aluminum and painted surfaces. After loading all the buses, fixing the whole bus on pallet with draw bar of Φ12 round bar.

3. Packing of IPBD Accessories

According to type of transportation, we adopt different packing methods for different products. Frame type used for large-scale steel structures and outlet boxes, encased type packing used for equipment cabinets, and carton packing for small size fittings and important products such as terminal plates, connection plates, etc...

Packed boxes should be printed with the following marks or custom marks supplied by the customer. Customer marking requirements always take precedents:

- a、Packing list (including Name, type and serial No., Drawing No. and Quantity
- b、Contract No.
- c、Case No. (if applicable)
- d、Manufacturer name
- e、Consignee, consigner and destination
- f、Gross weight and net weight
- g、Dimensions of packing box
Note Additional Markings: Handle with care, Keep dry, Collision prevention, No upside down, etc.

**Packing requirements for special products**

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<th>Sr/No.</th>
<th>Item</th>
<th>Packing requirements</th>
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|        | Equipment cabinet(s)  | 1. Packing equipment cabinet with wooden case  
|        |                       | 2. Loosening and collision contact prevention  
|        |                       | 2.1 Cabinet must be fixed firmly in the case  
|        |                       | 2.2 All bolts must be fastened completely  
|        |                       | 3. Moisture-proof  
|        |                       | 3.1 Packing case must be moisture-proof  
|        |                       | 3.2 Outside the cabinet and packing case must be sealed with double layer of plastic bags in order to be moisture-proof.  
|        | Stainless steel bolts | 1. Each type of bolt should be packed individually with plastic bags, then sealed.  
|        |                       | 1.1 Mark on outside surface of plastic bags (type, quantity, etc)  

Notes: If 1 carriage is installed with 2 sets of PT in PT cabinet, we should arrange partial shipment for the carriage and cabinet, and then assemble them at site. Meanwhile, the carriage should also be packed with wooden case, and its packing requirement should be the same as the cabinet.
1.2 Outside surface of the whole packing case should also be packed with plastic bag and sealed.

2. The packed stainless steel bolts should not be shipped individually and must be packed into the case (metal or wooden case)

3. The packing case should be moisture-proof.

4. Mark “Keep dry” on the outside of the packing case.

| Rubber bellows | 1. Each type of bolts should be packed individually and sealed. Mark on outside surface of plastic bag. (type, quantity, etc)
|                | 2. Packed rubber bellows should not be shipped individually and should be packed into packing case (metal or wooden box). Keep them away from other hard products in case of damage.
|                | 3. The packing case must be moisture-proof.
|                | 4. Mark “Keep dry” at the outside of packing case.

| Insulator, instrument and other components | 1. Single products should be packed individually
|                                            | 2. Each packing case should be separated (wooden board or paperboard, etc). The surface should avoid damage (wrap cotton cushion or other protective layer).
|                                            | 3. Packing case should not be shipped individually and we should pack them into the case (metal or wooden case). Keep them away from other hard products to avoid
4. Storage of IPBD:

The following is the optimum site or storage conditions for IPBD and Accessories stored in a a dry and ventilated environment.

1. Ambient environment of storage:

   Ambient temperature: (20-30) °C

   Relative humidity: not exceed 60%

2. Storage period: three (3) months, don’t open the package during storage period; and the storage conditions shall be guaranteed.

3. If the storage period exceeds 3 months, buyer should promptly open the package for checking and do moisture-proof and dust-proof processing, covering bus with new packing bag plastic based on inspection of original plastic which has a tendency to dry out in three (3) months based on solar and temperature conditions which may cause water and particle intrusion. Checking storage site of packing shelf regularly in case storage environment changes or packing case damaged due to manmade factors is recommended to repair loose portions of packing;
4. Pay attention to the following notes:

4.1 Storage site should be dry and ventilated; and don’t place packing case (frame) directly in the open air without any protective measures in case bus is exposed to wind, rain and sun. It is strictly forbidden to immerse bus into water, to avoid water don’t entry into bus.

4.2 Keep packing case (frame) away from high temperatures.

4.3 Check and apply Vaseline on silver plating products surface regularly. Don’t expose these products to rain and sun.

4.4 Store all switch equipment and fittings packed with wooden case in a dry and ventilated room.