



Intermodal Power and Signal Connectors

BACKGROUND

Customer's refrigeration units are installed on containers holding perishable materials. Each refrigeration unit has power and signal receptacles. The mating plugs are on board ship so the volume is on the receptacles. Today's environmental restrictions require electric cooling without benefit of the diesel engine when the containers are off loaded the ship and put into transit. This requires quick disconnect electrical connectors.

PROBLEM

The containers are filled with perishable materials, fruits or vegetables, that must be refrigerated during long ocean voyages. In addition the salt laden air will corrode standard aluminum connectors. The past technology required connectors and metal parts to be plated with cadmium to prevent corrosion. Today's RoHS requirements prohibit the use of cadmium and necessitate the incorporation of non-metallic connector shell components.

AIO SOLUTION

Amphenol has designed a series of connectors that have incorporated the use molded nylon shells in place of the traditional plated aluminum components. This innovative design produces both a cost effective design and a design that exceeds the environment. Standard neoprene inserts and crimp gold plated contacts from GT and threaded 5015 series are incorporated to maximize the standardization effort.

