## ER 230/460

## Cooling capacity check list;

- 1- Is unit full of refrigerant- ball in sight glass should be floating at the top when running in cool mode.
- 2- Is controller programmed right- review decal on door? If decal is missing, see maintenance manual on web site; electricreefersolutions.com
- 3- Are coils clean, free from air flow obstruction?
- 4- Is evaporator coil iced up- visually check, initiate defrost and monitor amount of water from drain tubes. Is unit defrosting too often- frequent defrosts with minimal water draining- check defrost timer settings and air switch operation.
- 5- Check compressor oil level- Run unit through a complete defrost cycle. Allow unit to cool for 5-10 minutes. While running in cool, check the compressor oil level, it should be half way up the glass. If above the top of glass, oil should be adjusted down to half a sight glass. Too much oil will affect the cooling capacity.
- 6- Check temperature differential (TD)- Check the temperature difference between the returning air to the evap coil and the discharge air blowing out at the top. With a 50-70 degree box, TD should be 11-14 degrees. With a 30-50 degree box, TD should be 10-12 degrees.
- 7- Is trailer insulation insufficient- With an outside temp of 70-90 degrees, cool trailer down to zero (or, as cold as it can get), shut the reefer off and monitor temperature rise. A good trailer will rise 10-12 degrees in an hour.
- 8- Refrigeration issues- diagnose compressor and system the same as a diesel unit. Note; do not operate compressor in a vacuum. (LPCO will shut down operation if suction pressure is in vacuum) Suction regulator should be set at 40 psi.