

## Master Controller Reverse Cycle Defrost Startup Guide

### Installation Requirements:

- Reverse Cycle Defrost (RCD) requires liquid line one size larger than standard, insulated
- RCD requires two pairs low voltage wire evaporator to condensing unit
- Coil Outlet Probe mounts 6" from evaporator on suction line, well insulated
- Refrigerant charge must be measured, charge to superheat readout (SH) only
- Break vacuum with drum on scale

### Charging Procedure:

- ½ – 1 ½ HP: Initial charge of 1 lb., additional incremental charge(s) of 8 oz.
- 2 – 4 HP: Initial charge of 2 lb., additional incremental charge(s) of 8 oz.
- 5 HP and Larger: Initial charge of 3 lb., additional incremental charge(s) of 1 lb.
- Allow 5 minutes between initial charge and subsequent incremental charge(s) to observe reduction and stabilization of superheat (SH)
- When superheat reaches 15 – 18°, stop charging for 30 minutes, then observe (SH) at reduced space temperature
- If superheat (SH) is 8 – 12°F no additional incremental charge is required
- Target superheat readout at (SH) is 10°F, same as (SS) setpoint

### Final Checks:

- Check all factory default set points per list on Page 26 of *Master Controller Reverse Cycle Defrost Installation and Operations Manual*
- Adjust room temperature cut out at (rS) if required. Defaults: +35° cooler, -10° freezer
- Adjust temperature differential to cut in at (rP) if required. Defaults: 3° cooler, 5° freezer