

# PRODUCT BULLETIN

**Commercial Product Management** 

## **DATE**: 05/25/23

## DOCUMENT NUMBER: 002-023-DSS BULLETIN TYPE: Application Approval PRODUCTS AFFECTED: FPHFR18A3A Single Zone

Product management is approving the request to extend beyond the published vertical maximum line length of 49' to extend to 69' on the FPHFR18A3A in single zone applications.

For applications where the evaporator is below than the condenser, Friedrich requires oil traps as seen in the diagram (Figure 1) to ensure proper protections for oil migration. If oil traps are not used in this orientation premature failure of the system can occur.

The Friedrich engineering lab will continue to evaluate testing of this product. Once complete we will review and update all relevant installation, operation manual, and literature associated with the product. **SUBJECT**: Ductless Line set – Long Line **AUTHOR**: Chris Magee

#### 13.2 Oil trap

When the indoor unit is lower than outdoor unit and height difference is larger than 16.4 ft (5m), set an oil trap every 16.4 ft (5m) (height difference) on suction piping.



#### NOTE:

- 1) To avoid storing too much oil in the oil trap, the oil trap should be as short as possible.
- The horizontal piping should slope down along the refrigerant flow direction, to bring the oil back to compressor, the slope is about 1/200 to1/250.
- 3) In order to ensure cooling/heating performance better, the refrigerant piping should be as short and straight as possible.

Figure 1