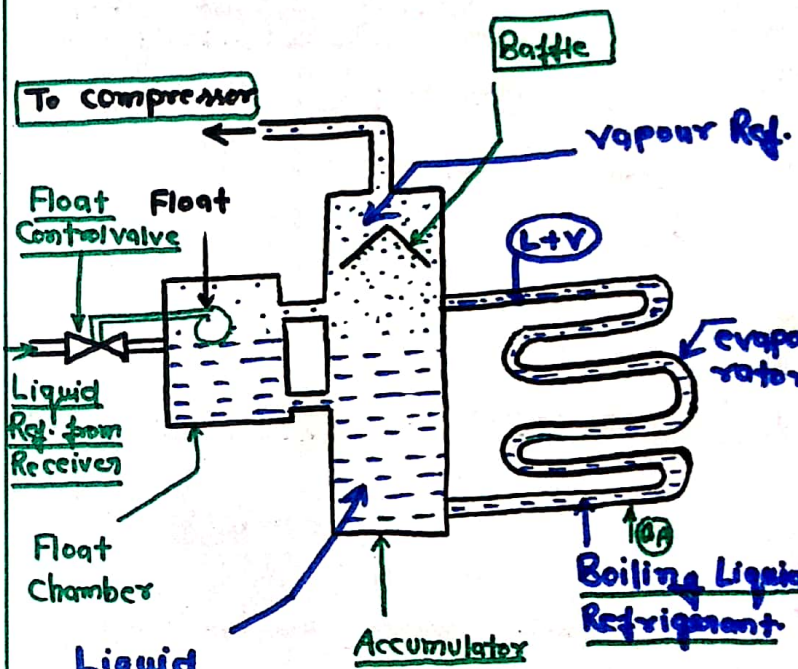
FLOODED EVAPORATOR:-

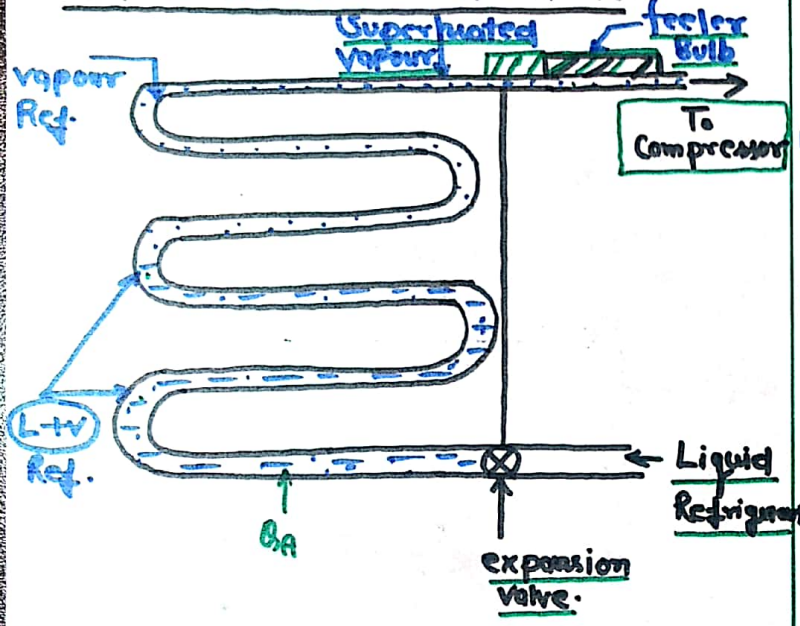
- Evaporator is always kept filled with liquid Refrigerant.
- Float valve is used as a throttling to maintain Constant liquid in the evaporator.
- Accumulator is used to prevent liquid carry over to compressor.
- Having Higher H.T. rate so that smaller evaporator can be used.
- Used in large installation, specially in chemical and food processing industries.
- The evaporator coil is connected with Accumulator.



CONSTRUCTION:-

Accumulator✓
Float chamber✓
Float✓
Float Valve✓
Evaporator tube✓

DRY EXPANSION EVAPORATOR:



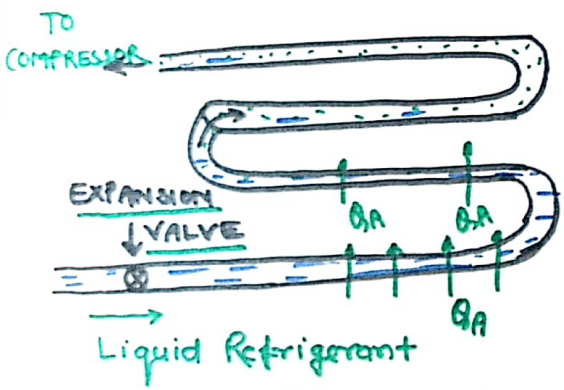
↦ The expansion valve controls the rate of flow of liquid ref. so that liquid refrigerant is vapourised by time it reaches at the end of evaporator coil.

↦ feeler bulb of expansion valve controls the rate of flow of Refrigerant

↦ Rate of Liquid fed in evaporator is depends on the load on evaporator.

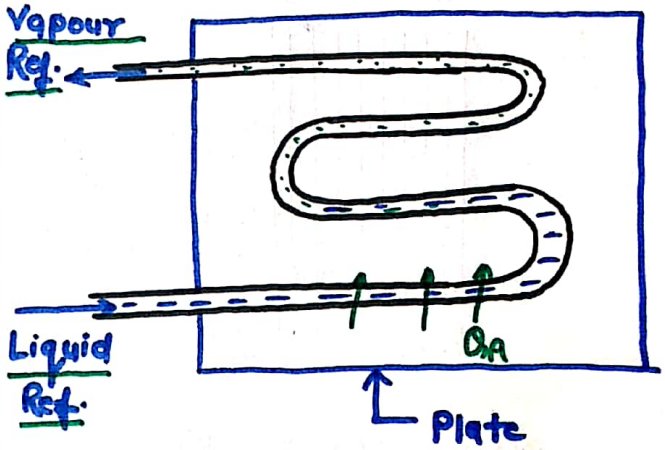
↦ Called as Dx evaporator, used for Rc < 150 TR.

BARE TUBE EVAPORATOR:-



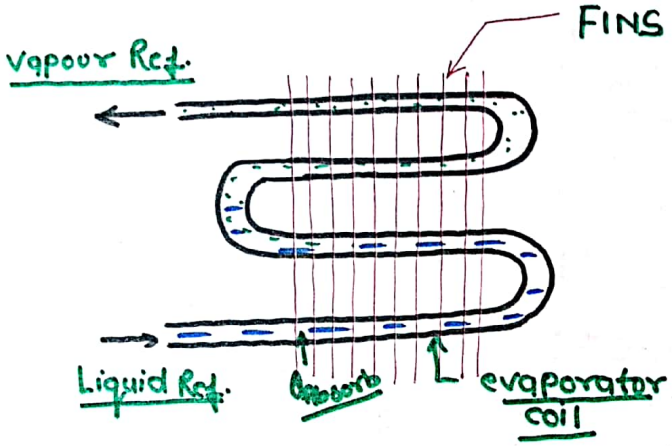
- Many more tube of Copper & steel.
- May be spiral, zig-zag flat.
- ↦ Domestic Refrigerator because of easy cleaning and defrosting.
- ↦ Less Contact Area, so less H.T. rate.
- ↦ Simple open tube.

PLATE EVAPORATOR:-



- ↦ evaporator coiled are welded at a side of plate.
- ↦ Generally used for Domestic freezer, icecream - cabinet, cooler, etc.

FINNED EVAPORATOR:-



- Metal fins (K → High) are attached with evaporator coil for better H.T. rate.
- Used in A.C.
- evaporator size is compact for same capacity compared with others.

EXPANSION VALVE :-