



TEKNOTHERM

MARINE

PROVISION PLANT

We have long experience of various type of Provision Refrigeration Plant. It could be from small types as well as very big ones.

All depending on the vessel and its operation purpose and the amount of people, as shall be served with provisions from the stores. For these plants we calculate the cooling demand and design the entire plant and comprised components. Normally the plant is designed for automatically operation with direct expansion of refrigerant. Today we are used to operate with all type of environmentally friendly refrigerant as is applicable with a low-temperature system.

The most common way to build up a provision refrigeration plant is to utilize 2-two identical condensing units. Under normal automatic operation one condensing unit has sufficient capacity to maintain the specified temperatures while the second unit acts as stand-by.



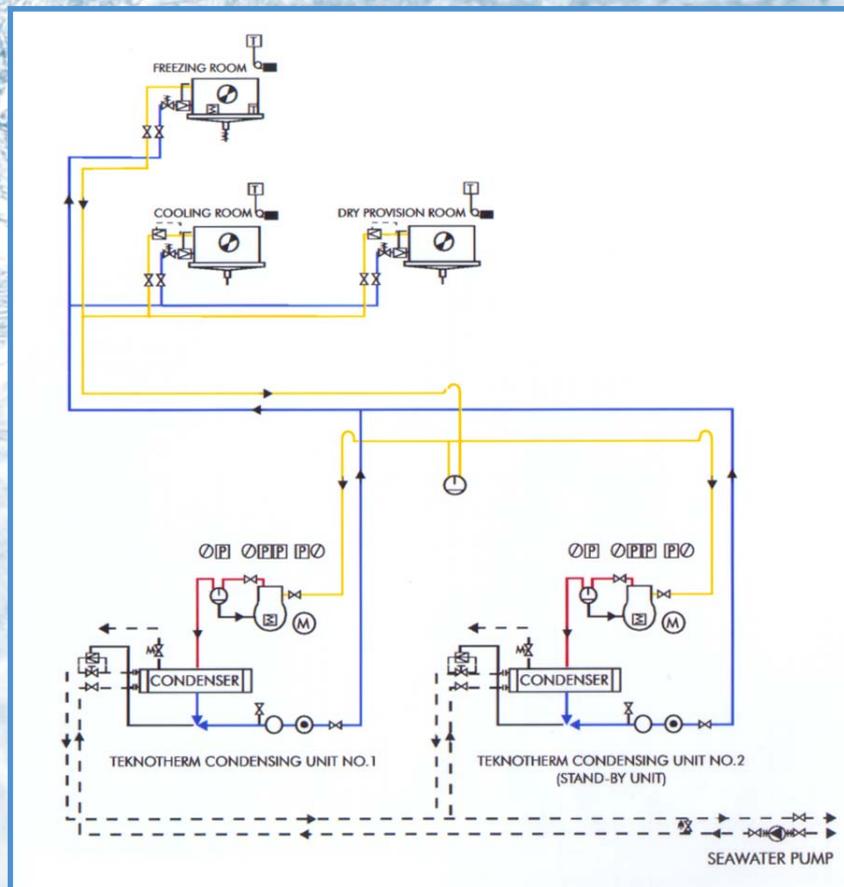
The evaporators for the cooling- and freezing rooms are of forced draft type with element in Cu/Al, housing and drip tray in epoxy-coated aluminium with built in fans. Defrosting of evaporators to be automatic by means of timer. Evaporator for freezing room has electric defrosting element. Freezing room has self-regulating heater in the drainpipe from drip tray.

Whatever the requirements, TEKNOTHERM will provide an optimal designed plant that meets your demands.

Temperatures in freezing- and cooling rooms are individually controlled by room thermostats, which activate a solenoid valve mounted in liquid line to each room's air-cooler. When there is no cooling demand in the room the thermostat will close the solenoid valve, and the liquid supply to the actual evaporator will be stopped. This according to so-called "pump-down" function secures a min. of refrigerant to be trapped in the air-cooler at non-cooling mode.

When there is no cooling demand, all solenoid valves to the air-coolers will be closed and the "pump-down" sequence takes place. After a while the low-pressure cutout will stop the compressor.

The compressor will start automatically when the cooling demand increases.



**This is a typical refrigeration plant for Provision stores,
with seawater cooled condenser**