

Adding a Filter Drier to a Frigomatic System

A filter drier may be added to the system if the evaporator is freezing randomly which indicates the gas charge has not be lost but there is a blockage. Do not confuse with an undercharged system. This can be caused by moisture in the system or debris which works its way around the system blocking the capillary tube. The filter drier has the possibility of collecting the offending items and holding them, this can then allow the system to operate without issue.

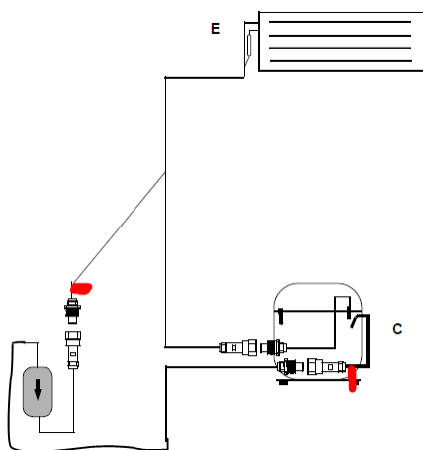
Correct Drier

Frigoboat drier 1A020300 can be used, check the drier has a sticker with additional 50g on the case this will not require a service engineer. If the drier does not have the additional 50g then a service engineer may be required to balance the system.

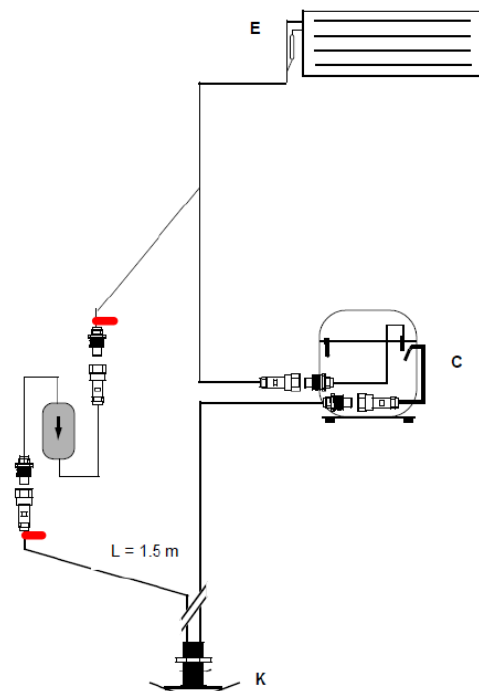
Installation

The drier is fitted with self-sealing couplings and can be installed as shown in the following diagrams. The drier is installed on the high pressure side between the red couplings of the evaporator and the compressor. The couplings are self-sealing so the present charge in the system should not be released as you break the red connections.

Air Cooled / Pump water cooled



Keel Cooled



Securing Drier in position



The filter drier works correctly in the vertical position with the arrow indicating direction of flow as shown in the enclosed photo. Filter drier should be secured with copper pipe not chafing or vibrating.

Testing the system

Once the drier is installed and secured in place then the system can be run. It should in theory start cooling the evaporator and all being well achieve temperature in the cabinet.

Check the suction line back to the compressor whilst the compressor has been running for a reasonable period if there is frost on this line outside the cabinet the system is overcharged.

If the evaporator is frozen over its entire surface and the suction line back to the compressor outside the cabinet is dry then the system is correctly charged.

If the system requires adjustment then ask penguin for refrigerant charging instructions.

Problem not solved

If the compressor is running with the drier installed and the evaporator shows no sign of cooling then then you can try warming the capillary as it enters the evaporator with a hot wet rag. This may free any moisture that has frozen.

If the system still will not operate a service engineer will be required. Contact Penguin for details.

