proposed (see Patent Literature 1 or Patent Literature 2, for example).

However, R1123 and R1132 exhibit low stability compared to a conventional refrigerant such as R410A. Accordingly, when a refrigerant generates a radical, there is a possibility that the refrigerant is converted into another compound due to disproportionation reaction. The disproportionation reaction causes a discharge of a large amount of heat and hence, there is a possibility that reliability of a compressor or a refrigeration cycle device is lowered due to abnormal heat generation. In view of the above, when R1123 or R1132 is used in a compressor or a refrigeration cycle device, it is necessary to suppress the above-mentioned disproportionation reaction.

Citation List

Patent Literatures

PTL 1: WO 2012/157764 (A1)

PTL 1: WO 2012/157765 (A1)

SUMMARY ~~OF THE INVENTION~~

~~The~~ Embodiments of the present invention provide~~s~~ a refrigeration cycle device which can suppress a disproportionation reaction even when a working fluid containing R1123 is used.

~~That is~~In an aspect, a refrigeration cycle device ~~according to the present invention~~ includes a refrigeration cycle circuit formed by connecting a compressor, a condenser, an expansion valve and an evaporator to each other. As a refrigerant sealed in the refrigeration cycle circuit, a working fluid containing 1,1,2-trifluoroethylene (R1123) and difluoromethane (R32) is used. The refrigeration cycle device is also configured such that a degree of opening of the expansion valve is controlled such that the refrigerant has two phases at a suction portion of the compressor.