ABSTRACT

FLASH VOLUME SYSTEM

A refrigerant vapor compression system includes a refrigerant circuit having a compressor, a heat rejection heat exchanger, a heat absorption heat exchanger and a main expansion device arranged between the heat rejection heat exchanger and the heat absorption heat exchanger relative to a flow of refrigerant. A secondary expansion device is disposed downstream from the heat rejection heat exchanger and a flash tank assembly is disposed downstream from the heat rejection heat exchanger. The flash tank assembly includes a first header arranged downstream from and in fluid communication with the second expansion device, a second header arranged upstream from and in fluid communication with the main expansion device, and a plurality of tanks connected at a first end to the first header and at a second end to the second header. A load of the flash tank assembly is equally balanced between each of the plurality of tanks.

[No Suitable Figure]