

Title (en)  
Multi-system air-conditioner and method for controlling the same

Title (de)  
Mehrsystem-Klimaanlage und Steuerverfahren dafür

Title (fr)  
Climatiseur multi-système et procédé de commande correspondant

Publication  
**EP 1956306 A2 20080813 (EN)**

Application  
**EP 07120691 A 20071114**

Priority  
KR 20070012409 A 20070206

Abstract (en)  
A multi-system air-conditioner for limiting a frequency-rising width of a compressor according to the air-volume of the indoor units, and enabling the indoor units to discharge the most comfortable-temperature air irrespective of the setup air-volume of the indoor units. The multi-system air-conditioner includes an outdoor unit, a plurality of indoor units connected to the outdoor unit, and a compressor for varying its own frequency according to operation capacity of the indoor units. The method for operating the multi-system air-conditioner includes: comparing, by each of the indoor units, a setup temperature with a room temperature, and calculating a capacity required for each indoor unit; calculating the sum of all the required capacities of the indoor units to calculate a combination ratio of all the operating indoor units; and comparing the calculated combination ratio with a reference combination ratio to determine whether the combination ratio of the indoor units is equal to or less than the reference combination ratio, limiting a frequency-rising width of the compressor to a predetermined value according to air-volumes of the operating indoor units when the calculated combination ratio is equal to or less than the reference combination ratio, and operating the air-conditioner at the limited value.

IPC 8 full level  
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**F24F 3/065** (2013.01 - EP KR); **F24F 11/30** (2017.12 - KR); **F24F 11/70** (2017.12 - EP KR US); **F25B 49/022** (2013.01 - KR); **F24F 2110/10** (2017.12 - KR); **F25B 2600/024** (2013.01 - KR); **F25B 2700/2104** (2013.01 - KR)

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