

R600a용 리니어 압축기 (Linear Compressor for R600a)

김정우

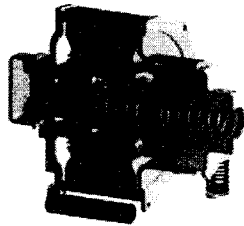
 LG 전자(주) DA 연구소 Comp Gr.

LGE's Linear Compressors

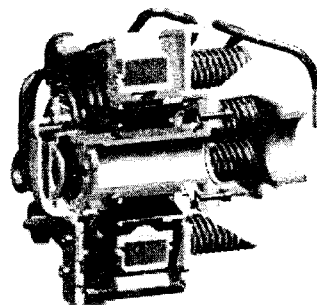
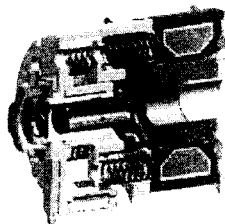
R134a

R600a

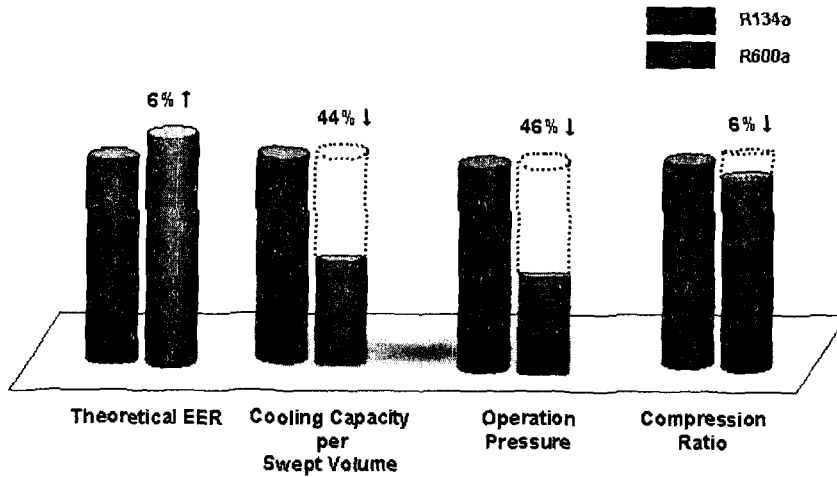
1st Model



2nd Model



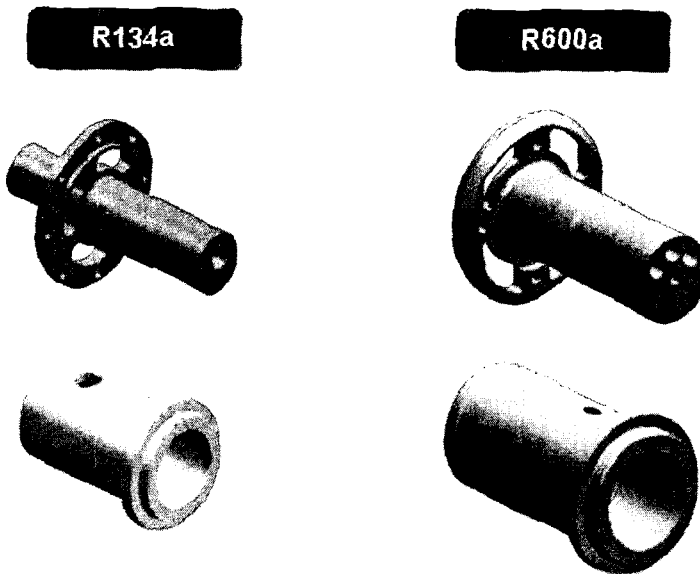
Theoretical Comparisons, R134a / R600a



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Piston and Cylinder

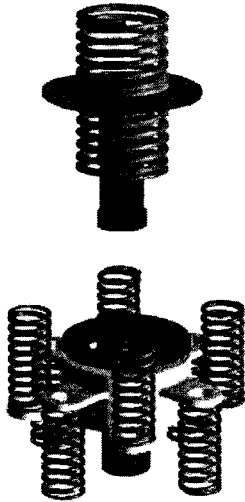


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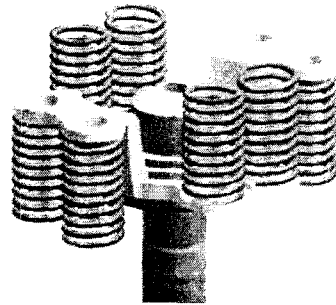


Spring

R134a



R600a

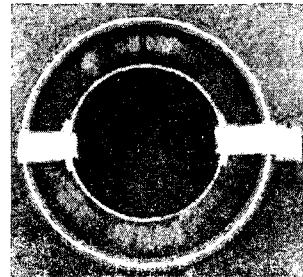


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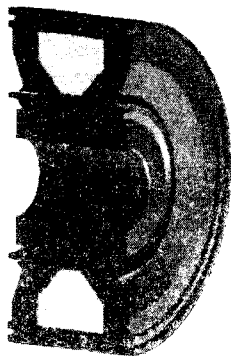
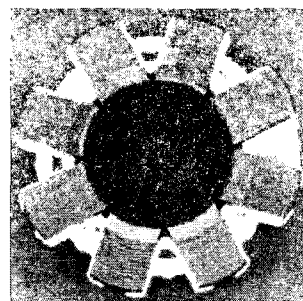


Linear Motor

R134a



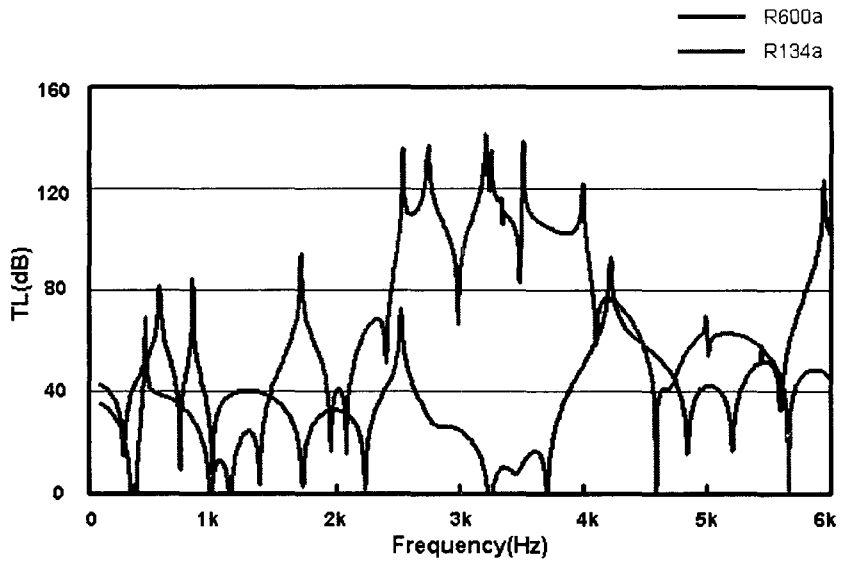
R600a



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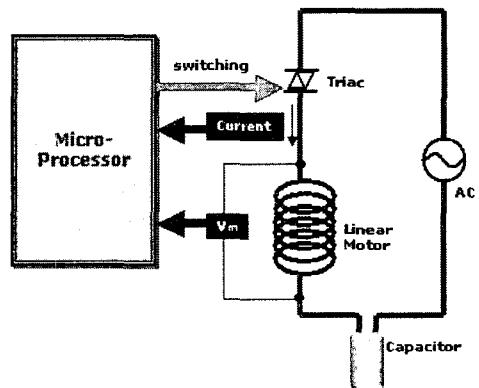
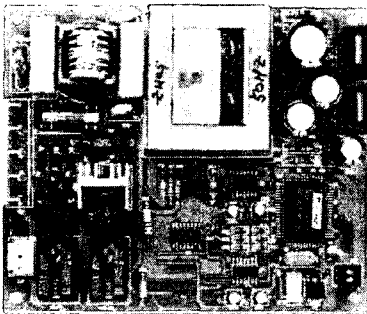
Muffler Tuning



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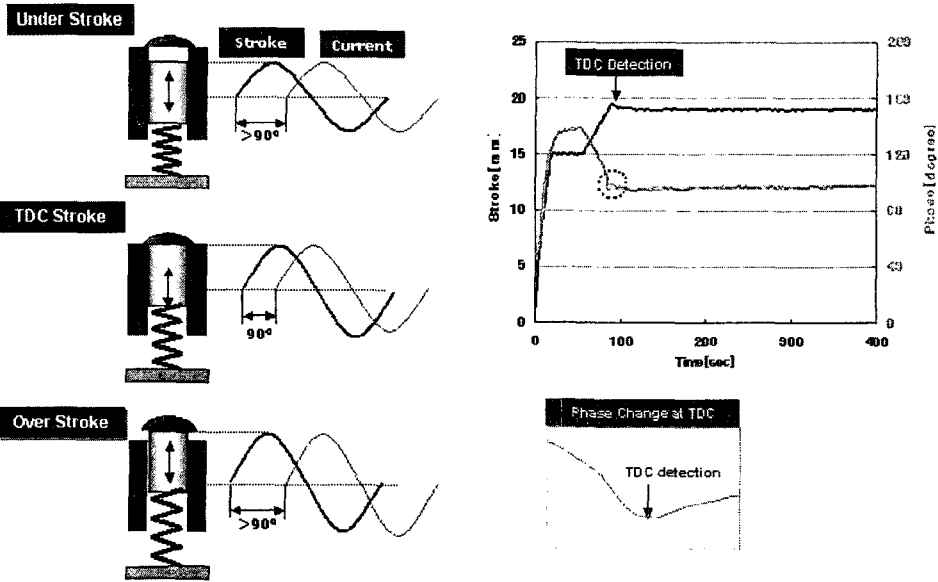
Hardware of Controller



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TDC Searching by Controller

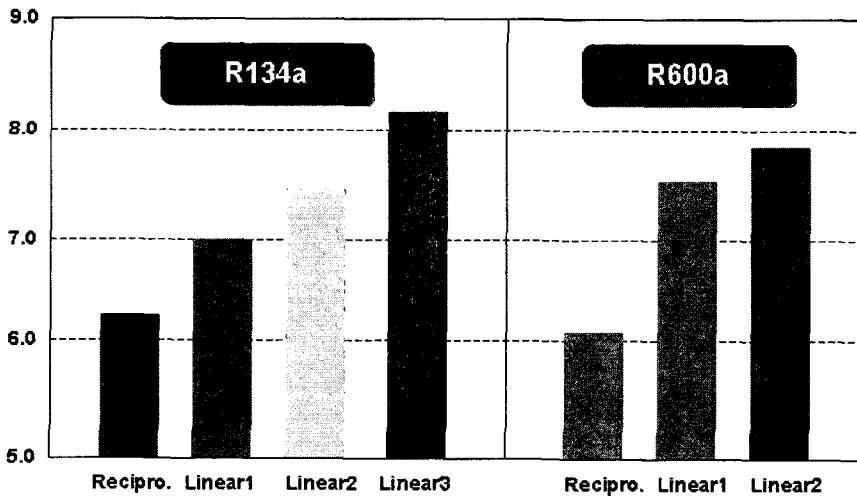


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Compressor Efficiency

EER (Including Drive Loss, 38/26 °C Condition)

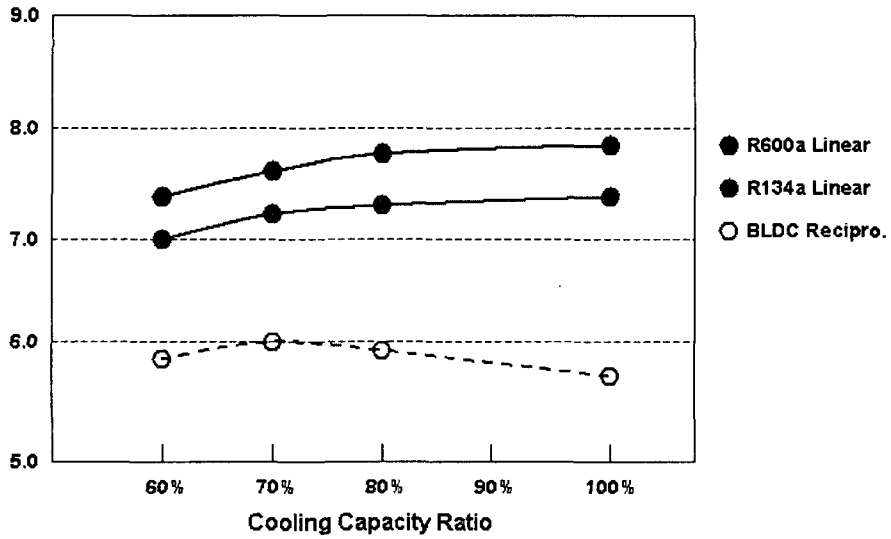


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Characteristics of Capacity Control

EER (Including Drive Loss, 38/-26°C Condition)

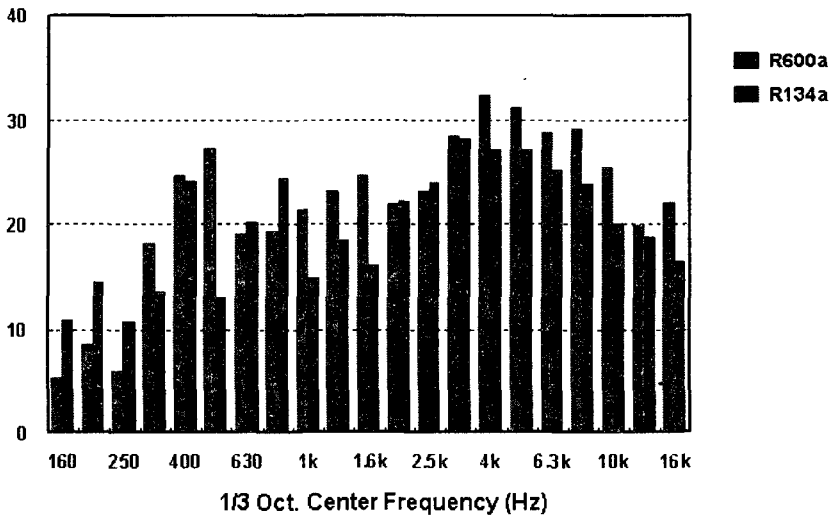


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Noise Characteristics

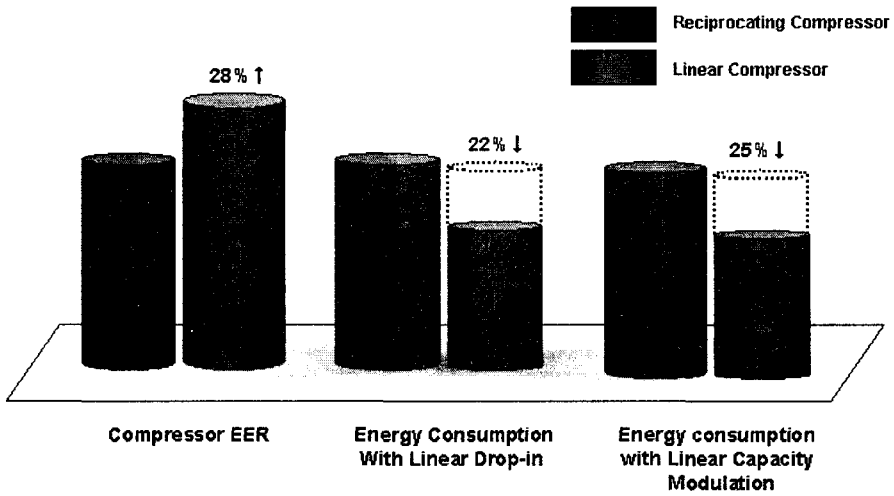
SPL(dBA)



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Energy Saving with R600a Linear Compressor

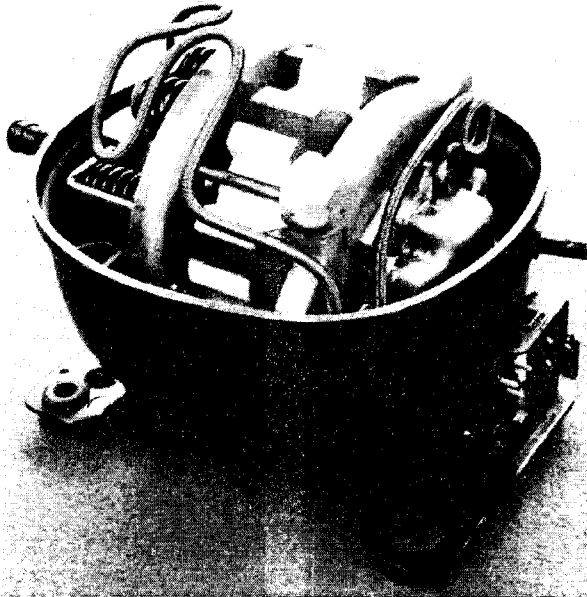


* Tested with refrigerator & freezer for European market in 2002

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Linear Compressor for R600a



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