MODELING AND EXPERIMENTAL PERFORMANCE EVALUATION OF PARALLEL FLOW MICROCHANNEL CONDENSERS

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ABSTRACT

This paper reports results obtained from a theoretical and experimental study of micro channels/louvered fins condensers for automotive applications. A computer model has been developed based upon three zones related to the thermodynamic states of the refrigerant in the condenser. Results from the model for refrigerant HFC-134a are compared to experimental those from an experimental bench developed for that purpose.

Keywords: Parallel Flow Condenser, Micro Channels, Automotive, Air Conditioning Systems.