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Use of Artificial Neural Network approach for depicting mass flow rate of R134a /LPG refrigerant through straight and helical coiled adiabatic capillary tubes of vapor compression refrigeration system

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Highlights

- Experimental mass flow rate of R134a/LPG through straight and coil adiabatic capillary tubes were presented.
- Mass flow rate through coil adiabatic capillary tubes are found lower than straight adiabatic capillary tubes.
- Dimensionless correlation and ANN models for prediction of refrigerant mass flowrate were developed.
- Statistical performance analysis of both models was measured.
- ANN model statistical analysis showed better prediction efficiency.

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