

Title (en)

Device for inducing turbulence in refrigerant systems

Title (de)

Vorrichtung zur Turbulenzerzeugung in Kühlmittelsystemen

Title (fr)

Dispositif introduisant une turbulence dans des systèmes réfrigérants

Publication

EP 1122503 A1 20010808 (EN)

Application

EP 01101196 A 20010124

Priority

US 49469500 A 20000131

Abstract (en)

A refrigerant expansion device outlet port includes a generally annular body defining a flow path between an inlet and an outlet, with a mixing device interposed between the inlet and outlet to promote turbulent mixing of refrigerant as it passes through the port. In one embodiment, the mixing device is a screen inserted between the inlet and the outlet, preferably adjacent the outlet. In a second embodiment, the mixing device is provided as a set of concentric axially spaced annular shoulders formed on an inner circumference of the flow path between the inlet and outlet. In a third embodiment, the flow path includes a series of rifling grooves on an inner circumferential surface of the flow path for inducing turbulent flow. In a fourth embodiment, the flow path is formed from radially offset or mismatching inlet and outlet flow paths. <IMAGE>

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IPC 8 full level

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