

Title (en)

Compression heat pump or compression cooling machine and control method therefor

Title (de)

Kompressionswärmepumpe oder Kompressionskältemaschine und Regelungsverfahren dafür

Title (fr)

Pompe de chaleur à compression ou machine de refroidissement à compression et sa méthode de régulation

Publication

EP 0866291 A1 19980923 (DE)

Application

EP 98104767 A 19980317

Priority

AT 46797 A 19970318

Abstract (en)

A compression heat pump or compression cold energy machine has a coolant circuit which comprises an evaporator(1), a compressor (2), a condenser (3) and a controllable expansion valve (4). It is controlled by a control device (8) which is connected to a temperature sensor (9) located in the region between the compressor and the condenser and to a second sensor (10). The second sensor determines a value which represents a direct measurement for the condensation temperature in the condenser. The second sensor is a pressure sensor and is located in the high pressure region of the coolant circuit between the compressor and the expansion valve. The condenser of the compression heat pump is designed as a heat exchanger to transmit heat given up from the coolant to a heating medium of a heating circuit (7).

Abstract (de)

Kompressionswärmepumpe oder Kompressionskältemaschine mit einem Kältemittelkreislauf, der einen Verdampfer (1), einen Verdichter (2), einen Kondensator (3) und ein regelbares Expansionsventil (4) umfaßt, welches von einer Regeleinrichtung (8) angesteuert wird, die mit einem im Bereich (12) zwischen Verdichter (2) und Kondensator (3) angeordneten Temperaturfühler (9) und einem zweiten Fühler (10) verbunden ist, wobei der zweite Fühler (10) einen Wert erfaßt, der ein direktes Maß für die Kondensationstemperatur im Kondensator (3) darstellt. <IMAGE>

IPC 1-7

F25B 41/06; **F24F 11/00**

IPC 8 full level

F24F 11/00 (2006.01); **F25B 30/02** (2006.01); **F25B 41/06** (2006.01)

CPC (source: EP US)

F25B 30/02 (2013.01 - EP US); **F25B 41/33** (2021.01 - EP US); **F25B 2341/063** (2013.01 - EP); **F25B 2700/195** (2013.01 - EP); **F25B 2700/21152** (2013.01 - EP); **F25B 2700/21161** (2013.01 - EP); **F25B 2700/21163** (2013.01 - EP)

Citation (applicant)

- DE 4303533 A1 19940811 - STIEBEL ELTRON GMBH & CO KG [DE]
- WO 9624016 A1 19960808 - HEATCRAFT [US]

Citation (search report)

- [XA] US 5224354 A 19930706 - ITO TAKESHI [JP], et al
- [A] EP 0325163 A1 19890726 - LINDE AG [DE]
- [A] EP 0762064 A1 19970312 - WEIDER FRITZ ING [AT]

Cited by

CN1311205C; EP1148307A3; CN1329695C; EP1134518A3; DE102013004786A1; US6948326B2; US6430949B2; WO2004097308A1; DE102020122713A1

Designated contracting state (EPC)

AT CH DE FR IT LI

DOCDB simple family (publication)

EP 0866291 A1 19980923; **EP 0866291 B1 20020814**; AT E222344 T1 20020815; DE 59805146 D1 20020919

DOCDB simple family (application)

EP 98104767 A 19980317; AT 98104767 T 19980317; DE 59805146 T 19980317