

Title (en)
HIGH PERFORMANCE HEAT PUMP UNIT

Title (de)
HOCHLEISTUNGSFÄHIGE WÄRMEPUMPENEINHEIT

Title (fr)
UNITÉ DE POMPE À CHALEUR À HAUTES PERFORMANCES

Publication
EP 2800934 B1 20190918 (EN)

Application
EP 12818603 A 20121212

Priority
• IT TO20111133 A 20111212
• IB 2012057220 W 20121212

Abstract (en)
[origin: WO2013088357A1] A heat pump unit (1) comprises at least one main circuit (2) adapted to perform a main heat pump cycle with a respective operating fluid, which comprises: a main condenser (S4) adapted to perform the condensation of the operating fluid of the main heat pump cycle and intended to be connected to an external circuit of a first thermal user plant (10) in a heating operating mode of said heat pump unit (1); a first heat exchanger (S3), connected downstream of the main condenser (S4) and upstream of expansion means (L2) of said the main circuit (2), adapted to perform an undercooling of the operating fluid of the main heat pump cycle after the condensation of the same in the main condenser (S4), and a main evaporator (S8) adapted to perform the evaporation of the operating fluid of the main heat pump cycle and intended to be connected to an external circuit of a heat sink (20) in a heating operating mode of said heat pump unit (1). The first heat exchanger (S3) is selectively connectable to the external circuit of the first thermal user plant (10) so as to be in series with the main condenser (S4) in said external circuit.

IPC 8 full level
F24D 11/02 (2006.01); **F24D 17/02** (2006.01)

CPC (source: EP US)
F24D 11/02 (2013.01 - EP US); **F24D 17/02** (2013.01 - EP US); **F25B 30/00** (2013.01 - US); **F24D 2200/12** (2013.01 - EP US)

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Cited by
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