

Title (en)
COMPRESSOR WITH CAPACITY VARIATION SWITCHING MECHANISM

Title (de)
VERDICHTER MIT SCHALTMECHANISMUS ZUR VERÄNDERUNG DER FÖRDERMENGE

Title (fr)
COMPRESSEUR AVEC MÉCANISME DE COMMUTATION DE VARIATION DE CAPACITÉ

Publication
EP 3336359 B1 20230719 (EN)

Application
EP 16834490 A 20160601

Priority
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• CN 2016084328 W 20160601

Abstract (en)
[origin: EP3336359A1] Disclosed is a compressor, including a crankshaft (10), and a first cylinder (20), a second cylinder (30) and a third cylinder (40) arranged sequentially in an axial direction of the crankshaft (10). The first cylinder (20) is a high-pressure cylinder, and the second cylinder (30) and the third cylinder (40) are low-pressure cylinders. The compressor also includes a capacity variation switching mechanism (50) for controlling unloading or loading of the third cylinder (40). The compressor has a full operation mode and a partial operation mode. When the compressor is in the full operation mode, the capacity variation switching mechanism (50) loads the third cylinder (40) under the action of the discharge pressure of the compressor, and when the compressor is in the partial operation mode, the capacity variation switching mechanism (50) unloads the third cylinder (40) under the action of the inlet pressure of the compressor. Also disclosed is a heat exchange system including the compressor. By means of the capacity variation switching mechanism (50) provided in the compressor, at least one cylinder is allowed to be put into use or unloaded under the action of the capacity variation switching mechanism (50), thus enabling a capacity variation switching function of the compressor to meet operational requirements of different operating conditions and to improve the heating capacity of the compressor under different working conditions.

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