

Title (en)
REFRIGERANT COMPRESSOR

Title (de)
KÄLTEMITTELVERDICHTER

Title (fr)
COMPRESSEUR FRIGORIFIQUE

Publication
EP 2828527 B1 20200902 (DE)

Application
EP 13711631 A 20130319

Priority
• DE 102012102346 A 20120320
• EP 2013055652 W 20130319

Abstract (en)
[origin: WO2013139771A1] The invention relates to a refrigerant compressor comprising a common housing; a screw compressor that is provided in the common housing, said screw compressor comprising a compressor housing, which is formed as a part of the common housing and which is equipped with at least one screw rotor bore, and comprising at least one screw rotor, which is arranged in the screw rotor bore in a rotatable manner about an axis; a drive motor that is arranged in the common housing, said drive motor comprising a motor housing, which is formed as an additional part of the common housing and the motor compartment of which is equipped with a stator and a drive shaft that has a rotor and can be rotated about a motor axis; and a suction gas connection via which suctioned refrigerant enters the motor compartment prior to being compressed by the screw compressor and flows through said motor compartment. The aim of the invention is to provide a screw compressor that is optimal with respect to the cooling and support of the drive motor. This is achieved in that a bearing receiving portion is arranged in a motor compartment region that faces away from the screw rotor housing, a rotary bearing being provided in said bearing receiving portion in order to rotatably support a driveshaft end portion that faces away from the compressor housing. The suction gas connection is arranged on a motor housing end wall opposite the compressor housing, and refrigerant suctioned through the suction gas connection enters the motor compartment through said end wall and flows through the motor compartment in the direction of the motor axis.

IPC 8 full level
F04C 29/00 (2006.01); **F04C 18/16** (2006.01)

CPC (source: EP)
F04C 18/16 (2013.01); **F04C 29/005** (2013.01); **F04C 29/045** (2013.01); **F04C 2240/50** (2013.01); **F04C 2250/101** (2013.01)

Citation (examination)
• DD 210565 A3 19840613 - HALLE MASCHF VEB [DD]
• DE 10359032 A1 20050714 - BITZER KUEHLMASCHINENBAU GMBH [DE]

Cited by
CN106870374A

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
DE 102012102346 A1 20130926; EP 2828527 A1 20150128; EP 2828527 B1 20200902; WO 2013139771 A1 20130926

DOCDB simple family (application)
DE 102012102346 A 20120320; EP 13711631 A 20130319; EP 2013055652 W 20130319