

Title (en)
CYLINDER HEAD ASSEMBLY

Title (de)
ZYLINDERKOPFANORDNUNG

Title (fr)
ENSEMBLE CULASSE

Publication
EP 4170163 A1 20230426 (EN)

Application
EP 22203371 A 20221024

Priority
EP 21204543 A 20211025

Abstract (en)

The invention relates to a cylinder head assembly (500) for an encapsulated refrigerant compressor (1) comprising- a valve plate (530) having a suction opening (531) and a discharge opening (532);- a suction valve spring (520) being mounted to a suction side (530a) of the valve plate (530);- a discharge valve spring (540) being mounted to a discharge side (530b) of the valve plate(530);- a suction muffler (600) having a suction connector head (640) which is connecting an outlet section (606) of the suction muffler (600) with the suction opening (531) and the suction valve spring (520);- a discharge muffler (700) having a discharge connector head (730) which is connecting an inlet section (704) of the discharge muffler (700) with the discharge valve spring (540) and the discharge opening (532);- a mounting assembly (580) for fixing the cylinder head assembly (500) to a cylinder housing (310) of the refrigerant compressor (1);- a first sealing element (550) which is located between the discharge connector head (640) as well as the suction connector head (730) and the discharge side (530b) of the valve plate (530).In order to ensure a simple and safe installation the suction valve spring (520) is welded onto the suction side (530a) of the valve plate (530) and the discharge valve spring (540) is welded onto the discharge side (530b) of the valve plate (530).

IPC 8 full level
F04B 35/04 (2006.01); **F04B 39/00** (2006.01); **F04B 39/12** (2006.01); **F04B 53/10** (2006.01)

CPC (source: EP)
F04B 35/04 (2013.01); **F04B 39/0044** (2013.01); **F04B 39/0061** (2013.01); **F04B 39/121** (2013.01); **F04B 39/125** (2013.01);
F04B 53/1037 (2013.01); **F04B 53/1047** (2013.01); **F04B 53/1087** (2013.01)

Citation (search report)

- [Y] EP 3514386 A1 20190724 - LG ELECTRONICS INC [KR]
- [Y] CN 111287945 A 20200616 - ANHUI MEIZHI COMPRESSOR CO LTD
- [A] KR 20080022248 A 20080311 - SAMSUNG KWANGJU ELECTRONICS CO [KR]
- [A] CN 110805543 A 20200218 - WANBAO GROUP COMPRESSOR CO LTD
- [A] US 5328338 A 19940712 - HIRANO YUTAKA [JP], et al
- [A] CN 102678514 A 20120919 - JIAXIPERA COMPRESSOR CO LTD

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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
EP 4170163 A1 20230426; CN 216812062 U 20220624

DOCDB simple family (application)
EP 22203371 A 20221024; CN 202220244287 U 20220126