

Title (en)

Valve block for controlling the oil supply of a screw compressor.

Title (de)

Ventilblock für das Steuern der Ölzufuhr eines Schraubenverdichters.

Title (fr)

Bloc de soupape pour contrôler l'alimentation en huile d'un compresseur à vis.

Publication

EP 0067949 A2 19821229 (DE)

Application

EP 82103912 A 19820506

Priority

DE 3122361 A 19810605

Abstract (en)

1. Valve block, which is flangeable to the housing of a screw compressor, for the control of the oil supply with a respective bore disposed in the connecting flange (1) for the oil entry (2) and for the oil exit (3), which bores communicate with corresponding bores in the housing of the screw compressor, with a channel for the oil conduction and extending between the bore for the oil entry (2) and the bore for the oil exit (3), with a shut-off slide valve (11), which is arranged in the path of the channel in a valve bore of the valve block and which is loadable by control air through at least one further channel (4), which extends in the valve block and likewise opens in the connecting flange (1), and with a further flange (7), which possesses a respective outlet and inlet opening interrupting the channel for the oil conduction and onto which an oil filter (8) is placeable, characterised by the combination of the following features : the channel for the oil conduction extends by way of a dirt collector (5) arranged in the valve block, a thermostatically actuatable three-way slide valve (6), which according to temperature conducts the channel further either by way of the one path (=>) or the other path (->), is arranged in the course of the channel in a further valve bore (18), the one path (=>) leads directly to the shut-off slide valve (11) and, in the case of the open setting of the same, to the bore (3) for the oil exit, the other path (->) leads to an outer connection (9), with which a further outer connection (10) for the re-entry is associated, wherein an oil cooler is connectable between both these connections, a connecting bore (12) for a differential pressure measuring device (13) is disposed in the valve block and connected through a first measuring channel (14) with the channel leading to the outlet opening (26) for the oil filter (8) and through a second measuring channel (15) with the channel leading to the inlet opening (28) from the oil filter (8).

Abstract (de)

Ventilblock für das Steuern der Ölzufuhr für einen Schraubenverdichter. Der Ventilblock ist an das Gehäuse des Schraubenverdichters anflanschbar, wobei je eine Bohrung für den Öleintritt (2), für den Ölaustritt (3) und für das Führen von Steuerdruck (4) im Flansch des Ventilblocks mit entsprechenden Öffnungen im Gehäuse des Schraubenverdichters kommunizieren. Der Ventilblock vereint die folgenden Funktionen: Vorreinigen des Öls mittels Schmutzfänger (5), Absperren (11) der Ölzufuhr bei fehlendem Steuerdruck, Umleiten des Ölkreislaufs über einen Ölkühler (9, 10) bei Erreichen einer bestimmten Temperatur, Filterung des Öls mittels eines am Ventilblock anflanschbaren Ölfilters (8) und Überwachen des Differenzdruckes (13) am Ölfilter.

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F04C 29/02

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CPC (source: EP)

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Cited by

CN1083537C; CN113027766A; DE19800825A1; DE4234391B4; DE102011014961A1; GB2164095A; EP0174782A3; US4648815A; DE10153459A1; DE10153459C2; DE10153459B9; EP1308625A3; US6719546B2

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