

ABSTRACT**TURBOCOMPRESSOR AND REFRIGERATING MACHINE**

The invention is aimed at making a space necessary for installing an adjusting mechanism for a diffuser small to thereby miniaturize a turbocompressor as well as a refrigerating machine where this turbocompressor is a constituent element.

A compressor incorporating a diffuser 34 adopts an adjusting mechanism comprising; a diffuser ring 37 forming one wall 34a, arranged so as to be a concentric circle with the surroundings of a second stage impeller 17b and supported on a casing 25, and which can be rotated in the circumferential direction and which can be moved in an axial direction of the second stage impeller 17b, with a groove 37a formed on an outer peripheral face at an incline to the axial direction of the second stage impeller 17b; a protrusion 40 provided on the casing 25 and fitted into the groove 37a; a shaft 38 axially supported on the diffuser ring 37; and a drive section 39 for driving the shaft 38 in a lengthwise direction.

Figure 1