

Abstract

Provided in the present application is an integrated auxiliary converter with high power density. The integrated auxiliary converter includes two converter modules disposed in the same case, wherein a plurality of functional modules in each converter module are overall of a linear layout structure distributed in one direction, and the two converter modules are laid out in the case in a mirrored manner; and the functional modules corresponding to an input end and an output end of a circuit structure of each converter module are located at two ends of the corresponding linear layout structure respectively, and side walls of two opposite sides of the case corresponding to two ends of each linear layout structure are provided with an input line connecting structure and an output line connecting structure respectively. On the basis of the technical solution of the present application, an overall size of the two converter modules integrated as a whole is matched with a width of a train body and adapted to side-face beam structures of a train, such that requirements of mounting, light weight and power density are met. In addition, an overall linear and mirrored layout structure is used, and thus the structure is completely simplified and unified; moreover, the consistency of a routing direction is realized, which facilitates routing of the whole train.

Fig. 1