

Title (en)
CONNECTOR, MATING CONNECTOR, AND CONNECTOR ASSEMBLY

Title (de)
VERBINDER, GEGENVERBINDER UND VERBINDERANORDNUNG

Title (fr)
CONNECTEUR, CONNECTEUR HOMOLOGUE ET ENSEMBLE CONNECTEUR

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Abstract (en)
A connector, a mating connector and a connector assembly are disclosed. A connector comprises a first shielding shell (100), three first insulators (200) and three first terminals (300). The first shielding shell (100) comprises a first outer wall and two first partition walls (140). The two first partition walls (140) separate an internal space enclosed by the first outer wall into three first insertion cavities (101) electromagnetically separated from each other. The three first insulators (200) are respectively inserted into three first insertion cavities (101) of the first shielding shell (100). The three first terminals (300) are respectively inserted into the three first insulators (200) for electrical connection with three-phase windings (U, V, W) of a permanent magnet motor (M). In the above-mentioned exemplary embodiments according to the present invention, three insertion cavities separated from each other are formed in the shielding shell, and the three terminals are respectively accommodated in the three insertion cavities, so that mutual interference or even short circuit between the three terminals can be avoided, and the arc can be prevented from flowing through the connector, ensuring the safety of the permanent magnet motor and related electrical equipment connected to the terminals.

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Citation (search report)

- [XYI] EP 3211725 A1 20170830 - MULTI-HOLDING AG [CH]
- [X] US 7854629 B1 20101221 - ALBERS THOMAS [DE], et al
- [X] US 2020335915 A1 20201022 - DUBE FRANCOIS [CA], et al
- [X] CN 207426217 U 20180529 - SHENZHEN WOER NEW ENERGY ELECTRICAL TECH CO LTD, et al
- [Y] WO 2019193352 A1 20191010 - HYPERTAC S A [FR], et al
- [A] WO 2016062652 A1 20160428 - MULTI HOLDING AG [CH]
- [A] CN 207490235 U 20180612 - NANJING KANGNI TECH INDUSTRY CO LTD

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