

Integral motor-drive concept for water circulation pumps

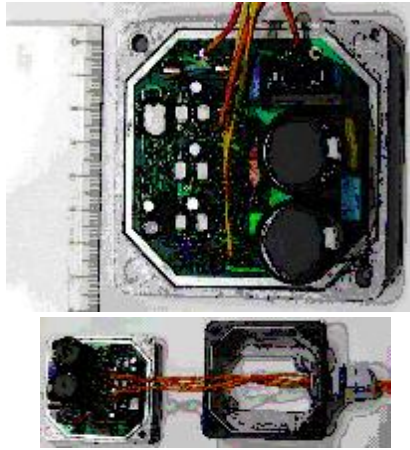
Customer:

OEM, variable speed water circulation pumps

Product description:

Miniaturized, motor-integrated, RISC-processor controlled IGBT-based single phase 220V AC supplied drive for 3-phase 200/370W induction motors driving water circulation pumps, servo valves and HVAC loads.

WPD family of miniaturized inverters is dedicated to low power (200/370W) 3-phase induction motors and designed to be integrated within the motor/pump body or the connection box. The WPD family makes use of the latest RISC processor technology; recent high frequency IGBT developments, a proprietary power converter topology and control algorithm focused on the passive components minimization. In such a way, a complete frequency inverter with a minimum of necessary command and communication channels is designed in a very small size. The WPD family of drives is mounted on standard 200W and 370W induction motors; electronic circuits residing under the aluminum cover of motor connection box.



Involvement:

Complete hardware and software design, manufacturing of prototypes. Power section concept & design, design of power and control hardware, design of the RISC processor control & communication software, norms issues.