Vishay Custom Magnetics

3-Inverter Assembly for the Power Electronics Lab



FEATURES

- Three completely independent 3-phase PWM inverters for full simultaneous control of up to three machines
- 42 V DC-bus voltage to reduce electrical hazards
- Integrated 3-phase power hybrid ICs to provide compact, high-performance AC motor drives
- Digital PWM input channels for real-time digital control
- Complete digital / analog interface with the DSP-based DS1104 controller
- Over-voltage and independent over-current fault protection for each inverter

DESCRIPTION

Vishay is a proud provider of the hardware for the Power Electronics Lab, based on the approach in the textbook Power Electronics: Converters, Applications and Design.

As an integral component of the Electric Drives Lab, the 3-inverter PCA (printed circuit assembly) provides three 3-phase PWM inverters. It is used to perform a variety of experiments involving various AC/DC machines, motors, and rectifier systems in the Power Electronics Lab, based on the approach in the textbook Power Electronics: Converters, Applications and Design, written by Ned Mohan, Tore M. Undeland, and William P. Robbins; and the Electric Drives Lab, based on the approach in the textbook Electric Machines and Drives: A First Course by Ned Mohan.

This product is commonly used with Vishay product number 75771: 37-Pin DSUB Cable and 87784: 8-Pin Encoder Cable. Both cables are also used in Power Electronics Lab experiments.