

## PREFACE

Thank you for choosing TOPTEK'S TOPVERT S1 Series Drive. TOPVERT S1 Series is Sensorless current vector control high-performance Drive. They are manufactured by adopting high-quality components, material and incorporating the latest microprocessor technology available.

### Getting Started

This manual will be helpful in the installation, parameter setting, troubleshooting, and daily maintenance of the AC motor drives. To guarantee safe operation of the equipment, read the following safety guidelines before connecting power to the Drives. Keep this operating manual handy and distribute to all users for reference.



#### WARNING



Always read this manual thoroughly before using TOPVERT S1 Series Drives.



**DANGER!** AC input power must be disconnected before any maintenance.

Do not connect or disconnect wires and connectors while power is applied to the circuit. Maintenance must be performed by qualified technicians.



**CAUTION!** There are highly sensitive MOS components on the printed circuit boards. These components are especially sensitive to static electricity.

To avoid damage to these components, do not touch these components or the circuit boards with metal objects or your bare hands.



**DANGER!** A charge may still remain in the DC-link capacitor with voltages even if the power has been turned off. To avoid personal injury, please ensure that power has turned off before operating Drive and wait ten minutes for capacitors to discharge to safe voltage levels.



**CAUTION!** Ground the TOPVERT S1 using the ground terminal.

The grounding method must comply with the laws of the country where the Drive is to be installed. Refer to Basic Wiring Diagram.



**DANGER!** The Drive may be destroyed beyond repair if incorrect cables are connected to the input/output terminals. Never connect the Drive output terminals U/T1, V/T2, and W/T3 directly to the AC main circuit power supply.



**CAUTION!** The final enclosures of the Drive must comply with EN50178. (Live parts shall be arranged in enclosures or located behind barriers that meet at least the requirements of the Protective Type IP20.

The top surface of the enclosures or barrier that is easily accessible shall meet at least the requirements of the Protective Type IP40).

(TOPVERT S1 Series corresponds with this regulation.)



**CAUTION!** Heat sink may heat up over 70°C (158°F), during the operation. Do not touch the heat sink.

---