

Appendix C

LVD Installation Instructions

For more information about the Low Voltage Directive (LVD), see 73/23/EEC and 93/68/EEC, published by the European Economic Community (EEC).

Environmental Conditions

Pollution Degree: The ZETA6xxx is designed for pollution degree 2.

Installation Category: The ZETA6xxx is designed for installation category II.

Electrical

Connecting & Disconnecting Power Mains

The ZETA6xxx's protective earth connection is provided through its make-first/break-last earth terminal on the power mains connector. You must reliably earth the ZETA6xxx's protective earth connection.

Using an Isolation Transformer

The ZETA6xxx's mains voltage is limited to 120 VAC (240VAC for ZETA6104-240) nominal. If your mains voltage is higher, use an isolation transformer located between the power mains and the ZETA6xxx. Your isolation transformer should be insulated to ~2300V rms.

Do not interrupt the protective earth conductor between the source mains and the isolation transformer's secondary. The core of the isolation transformer and the drive's protective conductor terminal must *both* be connected to the mains protective earth conductor.

CAUTION — Do not use an autotransformer.

Adding Line Fuses

Line fuses need to be added to protect the transformer and associated wiring. If the live wire cannot be readily identified, fuse both phase conductors. The value of fuse required is given by: $(1.5 \times VA) / (\text{supply volts})$ [amps]

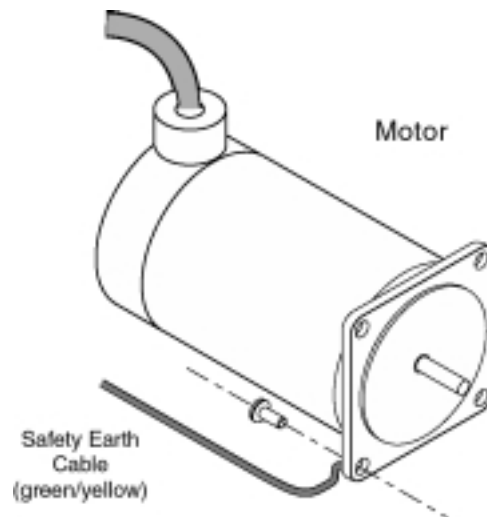
Fuse types should be anti-surge HBC.

WARNING — Safety Ground (Earth Ground) should **never** be fused.

Providing a Protective Earth Connection for Motors

You must provide a connection from the motor to a reliable protective earth contact point. This connection provides a protective earth for the motor, and is in addition to the earth connection provided by the drain wire in the motor's power cable. The motor's protective earth connection is important for safety reasons, and must not be omitted.

Make connections according to the diagram and instructions below:



1. Use a spade lug in combination with a star washer and mounting bolt to make good contact with the bare metal surface of the motor's mounting flange.
2. Use a green and yellow striped wire to make the connection between the motor and earth. Wire gauge must be no thinner than the current carrying wire in the motor's power cable.
3. Resistance between the motor and earth must be no greater than 0.1Ω . Use thicker gauge wire if the resistance is too high.

Mechanical

Installing in an Enclosure: The ZETA6xxx must be installed within an enclosure. The enclosure's interior must not be accessible to the operator. The enclosure should be opened only by skilled or trained service personnel.

Servicing the ZETA6xxx

Changing Firmware: Only skilled or trained personnel should change firmware.

Changing Batteries: The ZETA6xxx contains a replaceable lithium battery, of type Duracell DL2450, or Sanyo CR2450, or equivalent. Only skilled or trained personnel should change batteries. Dispose of batteries in accordance with local regulations.

Do Not Replace Fuses: The ZETA6xxx has no fuses designed to be replaced by the user. Fuse failure indicates that other components have also failed. Fuses and other components should only be replaced by Compumotor or its designated repair facilities.

Thermal Safety









The Motor May Be HOT: The motor may reach high temperatures during normal operations, and may remain hot after power is removed.

Sonic Pressure

High Sound Level: The sound level from some large frame step motors (NEMA 34, NEMA 42, and larger) may exceed 85 dBA. Actual sound level is application dependent, and varies with motor loads and mounting conditions. Measure the sound level in your application; if it exceeds 85 dBA, install the motor in an enclosure to provide sound baffling, or provide ear protection for personnel.

Table of Graphic Symbols & Warnings

The following symbols may appear in this manual, and may be affixed to the products discussed in this manual.

Symbol	Description
	Earth Terminal
	Protective Conductor Terminal
	Frame or Chassis Terminal
	Equipotentiality
	Caution, Risk of Electric Shock
	Caution, Refer to Accompanying Text
	Hot Surface
	Recycle Battery