

APPENDIX B

LVD Installation Instructions

IN THIS APPENDIX

- LVD Installation Instructions
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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 TQ10X Drive is designed for pollution degree 2.

Installation Category

The TQ10X Drive is designed for installation category II.

Electrical

Connecting and Disconnecting Power Mains

The TQ10X Drive's protective earth connection is provided through its make first/break last earth terminal on the power mains connector. You must reliably earth the TQ10X Drive's protective earth connection.

Attach or remove the TQ10X Drive's power plug only while input power is OFF.

Using an Isolation Transformer

The TQ10X Drive's mains voltage is limited to 120 VAC nominal. If your mains voltage is higher, use an isolation transformer located between the power mains and the TQ10X Drive. 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 main's protective earth conductor.

CAUTION

Do not use an autotransformer.

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:

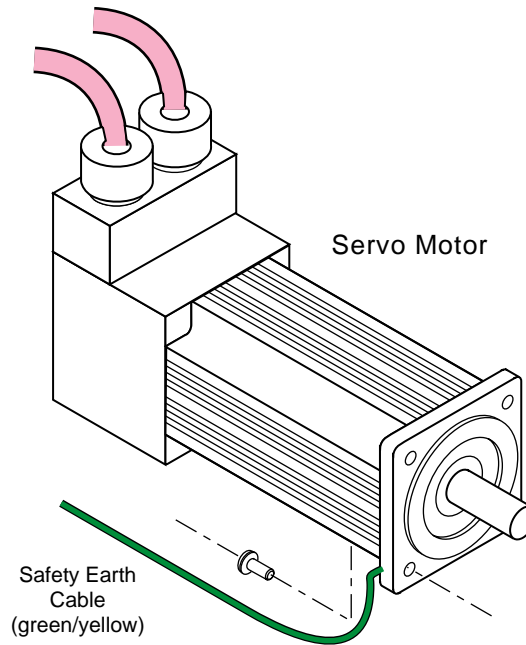
$$(1.5 \times VA)/(\text{supply volts}) \quad [\text{amps}]$$

Fuse types should be anti-surge HBC.

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 following instructions and diagram:



Providing Protective Earth Connection for Motor

- 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 0.1 ohm. Use thicker gauge wire if the resistance is too high.

Mechanical

Installing in an Enclosure

The TQ10X Drive must be installed within an enclosure. The enclosure's interior must not be accessible to the machine operator. The enclosure should be opened only by skilled or trained service personnel.

Servicing the TQ10 Drive

Changing Firmware

Only skilled or trained personnel should change firmware.

Do Not Replace Fuses

The TQ10X Drive 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.

Table of Graphic Symbols and Warnings

The following symbols may appear in this User Guide, and may be affixed to the products discussed in this user guide.

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