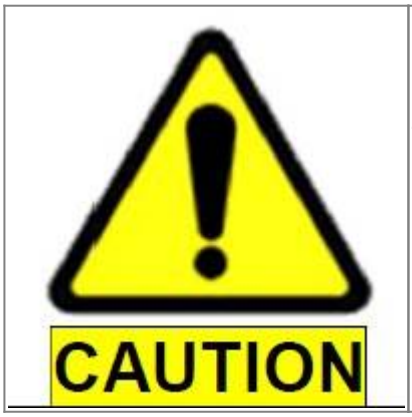
Installation

Preliminary notes

The MBD amplifier must be put into operation as an integrated component of a machine or equipment. The following guidelines are intended to help a qualified person through the installation and wiring of the amplifier.

Safety guidelines

	This manual is intended solely for person with technical knowledge in the handling of elements sensitive to electrostatic discharge (for transportation); person with adequate technical training and extensive knowledge on electrical engineering and amplifier technology (for the operation and use).

Caution: the misuse of the product can cause damage to persons or property. Absolutely and strictly observed:
The technical data and indications of link conditions;
- As prescribed by the manual;
- The relevant safety and accident prevention regulations for the prevention of accidents and residual risks

The installer must know and observe the following standards:
IEC 364 and CENELEC HD 384 or DIN VDE 0100,
IEC report 664 or DIN VDE 0110;
The national accident prevention regulations or BGV A2

The user must produce a risk analysis for the machine and must implement appropriate measures to ensure that unforeseen movements cannot cause injury or damage to persons or property.
The servo amplifiers contain electrostatically sensitive components which may be damaged by incautious handling, it is necessary to discharge any static electricity from body before touching the servo amplifier and avoid contact with highly insulating materials (plastic materials, synthetic fabrics, etc.).
Servo amplifiers may have hot surfaces during operation, it is necessary to protect the user from accidental contact.
The electrical contacts of the servo amplifiers must never be loose under tension. This could lead to failure the electronic system. The appropriate contacts of the product must always be grounded in accordance with the instructions of this manual.
Access to the servo amplifier can only take place after at least 5 minutes after its disconnection. Isolate the converter from the main supply before you access it (by removing the fuses or

disconnecting the main power switch). For this operation place the converter on an external plane from the original installation place.
All control and power may be live, even though the motor is not rotating.

The MBD is equipped with a series of electrical protections that will turn them down in faults presence, in this case the motor is not controlled, ie it can stop or rotate for an inertia and for a time determined by the type of machine. Safeguard the device from excessive mechanical vibration.
Dissect always via remote control switch or remote-control switch all power supply phases of the product.
In the case of 3-phase power supply interrupt L1, L2 and L3; in the case of single phase power supply interrupt L2 and N

Environmental conditions

Ensure a range of the operating temperature, at rated current, from 0 ° C to +45 ° C (without derating).
From +45 ° C to +55 ° C the output current and the nominal peak of the must be derated of 2.5% / ° C.
From 1000m to 2500m above sea level the output current of the system must be derated of 1.5% for every 100m.
Ensure a level of humidity between 10% and 95%, non-condensing.
Make sure that there is sufficient forced or natural ventilation within the control cabinet
Ensure around the converter a space of at least 15mm from each side.
In case of installation in a cabinet, periodically check and clean its external sides and its fan to avoid dust or dirt which may prejudice the correct dissipation.
Ensure that the grounding of the device is performed to perfection.

Wiring

The ground symbol that lies in the wiring diagrams indicates that you must provide an electrically conductive connection as robust as possible (large surface area) between the circuit indicated and grounding bar or metal plate mounting in the cabinet. This connection is designed to allow the dispersion of high frequency noise and must not be confused with the symbol (PE, Protection Earth) shown in the diagrams of this manual as a protection connection (according to European Standard EN60204).

CONNECTOR C1		
PIN	PIN	DESCRIZIONE
	Ground	
2	PE Protection Earth	Ground of auxiliary supply