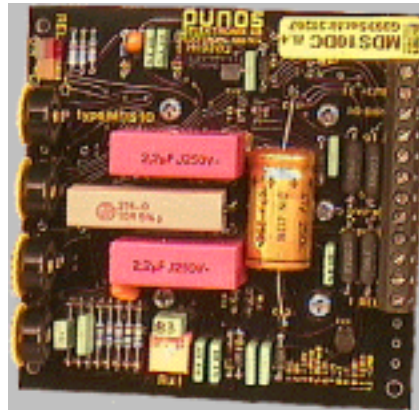# Motor Speed Controller

8A 60V 500W 4Q

Basic Model
MDS 10 DC

Features

- **Tacho or armature feedback**
- **Fast and precise**
- **FET output transistors for lowest losses**
- **PWM drive for maximum efficiency**
- **Thermal Design allowes for heat conduction through mounting surface or via finned heat sink**

Quick reference data

• **Supply voltage**	**10-60V=**
• **Max output voltage**	**6V below supply**
• **Imax motor cont.**	**8A**
• **Imax motor dyn**	**12A, opt.**
• **Reference inputs**	**Pot. 4k7-100kΩ**
• **Ambient temp.**	**0-40°C**

MDS is a 4- quadrant motor speed controller designed to be used as a servoamplifier either in a DC-tacho generator stabilized speed loop which can function by itself or as an inner loop in a position control system.

In simple applications the DC-tachometer feedback can be substituted by armature EMF feedback.

The MDS is designed for use with most types of PM-DC-motors with maximum voltage of 48V and continuos current to 8A. To obtain dynamic properties the drive can be trimmed to each application through changing some resistors and capacitors on the PC-board.
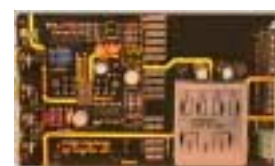
Here are some related examples from our product line.

JMD 1 DZ
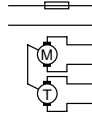
MDL 2 DB

ISO 2 AB

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MDS is a series of servoamplifiers designed for high performance DC servo motors in the power range up to 0,5 kW. MDS is available in three physical designs, a compact version measuring only 100 x 100 x 80 mm, an euroboard version to be used in standard 19" racks and an encapsulated version.
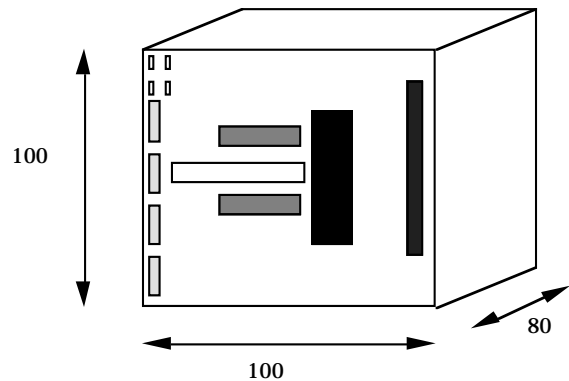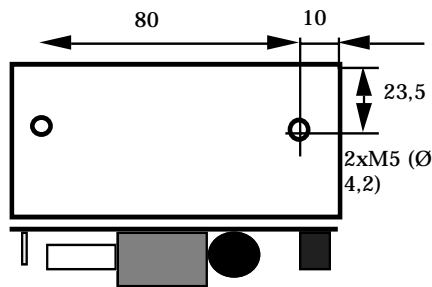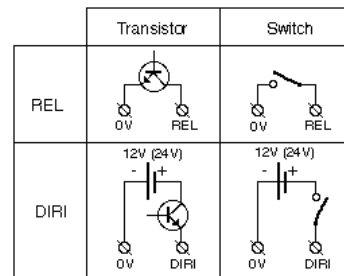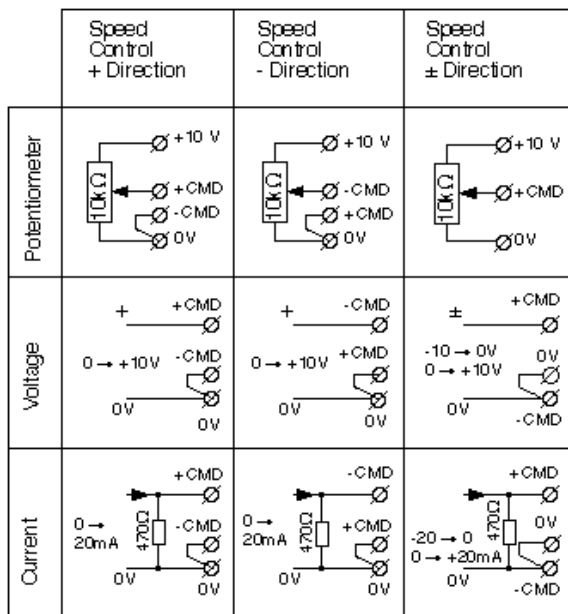
The MDS amplifiers are protected against over and under voltage and shorts between outputs. Adjustable components are mounted on solder turrets for ease of substitution.

List of connections:

TB (DC)	Euro	Abbr	Function	Comment
1	z16	Rel.		
2	d6	0Vref.		
3	z8	+10V	+10V output	for external potentiometer
4	z4	+PWR	+Power supply input	
5	d26	0VPWR	-Power supply input	
6	z24	M+	+Motor output	
7	d22	M-	-Motor output	
8	z20	T+	Tacho feedback input	Use of tacho is optional.
9	d18	T-	Tacho feedback input	0V reference
10	d14	Diri.		
11	z12	+CMD	speed input	
12	d10	-CMD	speed input	0V reference

Note that 0VPWR and the 0V reference are separate and may not be linked.

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