



MICROSPEED

DC SERVO AMPLIFIERS



MICROSPEED® (MCS)

Complete line of DC Servo Amplifiers for use in three velocity modes: with tachogenerator feedback, armature feedback and encoder feedback.

Typical applications are :
Robotics, X-Y Tables, Medical Equipment, Textile Equipment
Conveyors, Graphic Machinery, Packaging Machinery,
Positioners, Converting Machinery, Feeders.

STANDARD FEATURES

- ✓ Ultra compact design
- ✓ Extremely favorable cost to performance ratio
- ✓ Extremely suitable for personalization
- ✓ Extremely simple installation and use
- ✓ Surface Mount Technology
- ✓ Panel mount
- ✓ Motor driving range from 0.045 to 2.7 Nm (6.4 - 386 oz.-in.)
- ✓ Single DC power supply
- ✓ Armature feedback
- ✓ Tachogenerator feedback
- ✓ Torque mode

OPTIONS

- ✓ Encoder Feedback
- ✓ PWM + DIR mode
- ✓ Positive / Negative Limit Switches

SPECIFICATIONS

- ✓ Supply voltage range: (MCS 60) 20÷82 Vdc
(MCS 110) 35÷130 Vdc
- ✓ Operating frequency 22KHz
- ✓ Operating temperature 0 ÷ 40 °C (32 ÷ 104°F)
- ✓ Input reference (differential) ±10Vdc
- ✓ Motor current monitor ±7,5V (Peak current)
- ✓ Auxiliary output supply for encoder (optional) +12V/+5V@130mA
- ✓ Enable signals +10V÷30Vdc
- ✓ Output voltage supply +10V/-10V@4mA



DESCRIPTION

The **MICROSPEED**® DC amplifiers are ultra compact modules, ideal solution for incremental motion control, velocity loop and positioning systems which require fast response, high torque at low speed, smooth speed control and high reliability. There are many different velocity modes: tachogenerator feedback, armature feedback, encoder feedback, torque mode and PWM+DIR.

ACCESSORIES

(see specific data sheets for details)

- ✓ **SERVOMOTORS**
 - Sax 100: 0.045÷2.7Nm (6.4÷386 oz.-in.)
 - Sax 350: 0.7÷1.8Nm (100÷257 oz.-in.)
 - Sax 700: 0.1÷2.1Nm (14÷300 oz.-in.)
- ✓ **GEARBOXES**
 - Rex 100: 5 flange sizes, R ratios 1/3÷1/216
- ✓ **POWER SUPPLY (stand alone)**
 - MPPlus: 63÷200 Vdc OUT, 30 Adc, 100÷800W braking power
- ✓ **TRANSFORMERS**
 - TM/TT: single/3ph 100÷8000 VA
- ✓ **NET FILTERS (for CE compliance)**
 - FRM/FRT: single/3ph, 2÷16 Arms

MODEL	MCS 60				MCS 110			
	1/2	2.5/5	6/12	10/20	1/2	2.5/5	6/12	10/20
SIZE (A)	1/2	2.5/5	6/12	10/20	1/2	2.5/5	6/12	10/20
CASE	PM1	PM1	PM1	PM1	PM1	PM1	PM1	PM1
Rated Current (Adc)	1	2.5	6	10	1	2.5	6	10
Peak Current (Adc) x 2 sec.	2	5	12	20	2	5	12	20
FDC: Supply Line Fuse (type F, M or T)*	15 A / 250 V				15 A / 250 V			
Supply (Vdc)	63 Vdc ▲				100 Vdc ▲			

*: FDC Fuse Type: F=Quick-acting

M= Medium time-lag

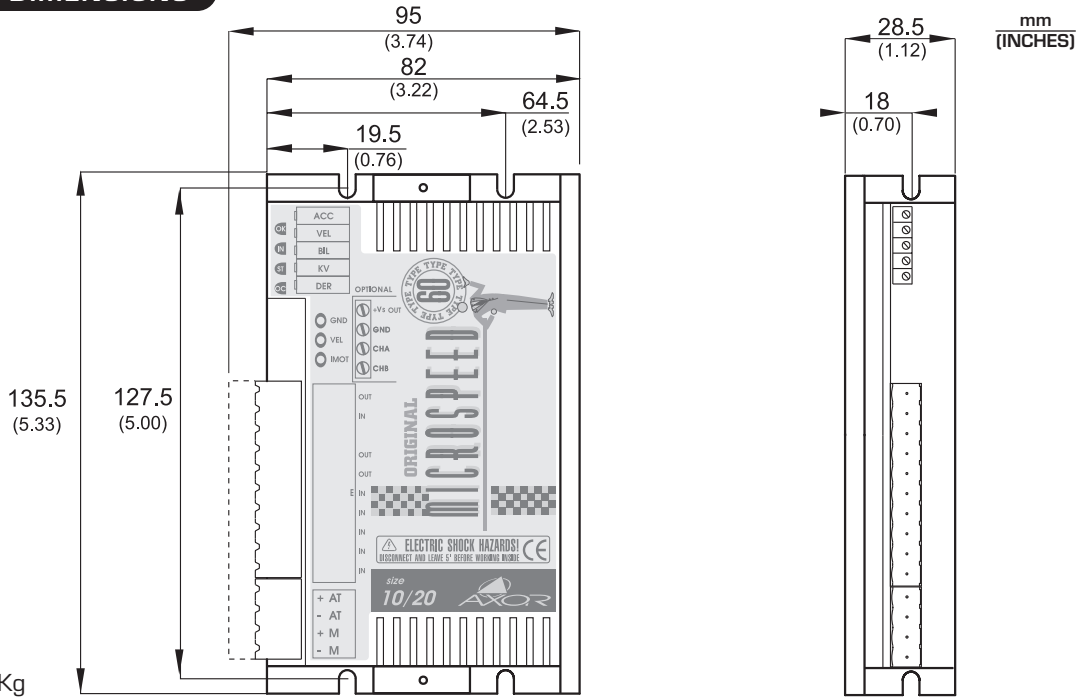
T=Time-lag

▲: Recommended DC power supply

Part number: D.S./09.00/MCS/03

Drawings are not to scale (see quotations)

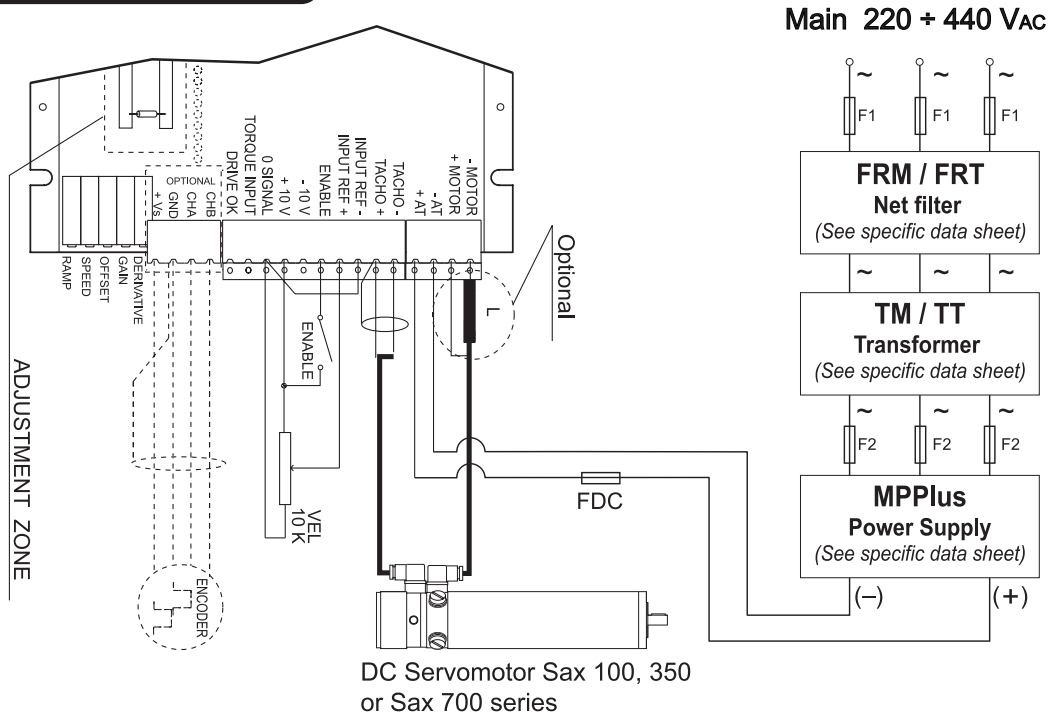
MECHANICAL DIMENSIONS



Weight: 0.35 Kg
(0.77 Lbs)

CASE PM1 (Panel Mount "1")

ELECTRICAL CONNECTIONS



DC Servomotor Sax 100, 350 or Sax 700 series

ORDERING CODE
Example:

MCS - 060 - 10 / 20 - N - S - 1000 / TO - RD - LS

NAME: Line of DC Servodrives

AMPLIFIER TYPE: 060 - 110

SIZE: 01/02 - 2.5/05 - 06/12 - 10/20

HEATSINK VERSIONS:
N = Normal
B = Booster (option)

PROTECTION:
S = Standard
T = Tropicalized

AXOR
adjustment
identification number

FEEDBACK:
TO = Tachogenerator (DC)
AO = Armature
EO = Encoder (option)

CONTROL MODE:
RD = Differential reference
IO = Demand current (torque mode)
PD = PWM+Direct (option)

ADDITIONAL FEATURES:
LS = +/-Limit switches (option)

Specifications subject to change without notice. This document has been carefully checked. However, Axor does not assume liability for errors or inaccuracies.

© COPYRIGHT 2001 AXOR INDUSTRIES. All rights reserved. Printed in Italy, 01/01



OFFICIAL-DEALER