

### MCB NET D®

Digital Stand alone brushless servodrive 220 Vac for AC sinusoidal SUPER SAX servomotors up to 7.5 Nm encoder and resolver feedback.

Typical Applications are : Conveyors, Medical, Textile Equipment, Packaging Machinery, X-Y Stages, Automated Assembly Machinery, Robotics, Component Insertion Machines.

#### STANDARD FEATURES

- ✓ 220 VAC - 3 PH power supply with EMC line filter and IN-RUSH circuit on board
- ✓ Optical isolation between power stage and signals
- ✓ Three phase sinusoidal-four quadrant operation
- ✓ Fully programmable via RS232, Mod Bus-RTU Based (optoisolated)
- ✓ Speeder-One® software interface (windows 98/2000/XP based)
- ✓ Two motor feedback modes:
  - from resolver (2-4-6-8 poles) with encoder emulation (software)
  - from encoder (max 250 KHz) with dividable encoder emulation (software)

#### OPTIONS

- ✓ **M 220**: 220 VAC single PH power supply
- ✓ **T 110**: 110 VAC 3 PH power supply
- ✓ **M 110**: 110 VAC single PH power supply
- ✓ **CBMD**: CAN BUS - CAN V2.OB (°) + RS232 to CAN BUS multidrop  
CAN OPEN protocol implementations: DS301-V4.02 - DSP402-V2.0
- ✓ Boostered dumping resistor 200 W (external)

#### SPECIFICATIONS

- ✓ Operating frequency 10 (KHz)
- ✓ Operating temperature 0 ÷ 40 °C (at rated data)
- ✓ Storage temperature -20 ÷ 55 °C
- ✓ Humidity (w/out condensation) 85% max (operating & storage)
- ✓ Operating altitude A.M.S.L. 1000 m.(2500 m.max. Derating=22%)
- ✓ Motor current monitor ±10 Vdc (at peak current)
- ✓ Motor speed monitor ±10 Vdc (at max speed)
- ✓ Output voltage supply +14 Vdc @ 50mA
- ✓ Operating mode:
  - Analog speed (differential) ±10 Vdc (15 bit resolution)
  - Pulse/direction (for stepper motor control)
  - Torque control
  - Position control
  - Encoder follower
- ✓ 9 opto-isolated digital inputs 24 Vdc-7mA (PLC compatible)
- ✓ 2 opto-isolated digital outputs 24 Vdc-50mA max (PLC compatible)
- ✓ 2 analog outputs (programmable)
- ✓ Enclosure protection IP20
- ✓ Storage duration 1 year max\*

\*: After 1 year storage duration the internal electrolitic power capacitors must be re-formed. Contact Axor's technical department for details.

NOTE: °: Optocoupled

MODEL	MCB NET D (° Optocoupled)			
SIZE	2/4	4/8	6/12	8/16
Case	PM4	PM4	PM4B	PM4V
Rated Current (Arms)	2	4	6	8
Peak Current (Arms) x 2 sec.	4	8	12	16
F2: Supply Line Fuses (T-type=time-lag)	3 A / 250 V	5 A / 250 V	8 A / 250 V	10 A / 250 V
Power Supply (3PH)	3 x 220 Vac (+10%) 50/60 Hz (3x110 Vac ±10% as optional feature)			
Logic Supply (auxiliary for back-up only)	24 Vdc (±10% - 200mA)			



#### DESCRIPTION

The **MCBNet Digital®** amplifier, is a really compact stand alone four quadrant converter with sinusoidal wave suitable for driving Ac Brushless Servomotors. Comes complete with its own internal power supply with EMC line filter, dumping circuit and detachable plug-in terminals for easy installation. The power stage is made by power Mos-fet or IGBT.

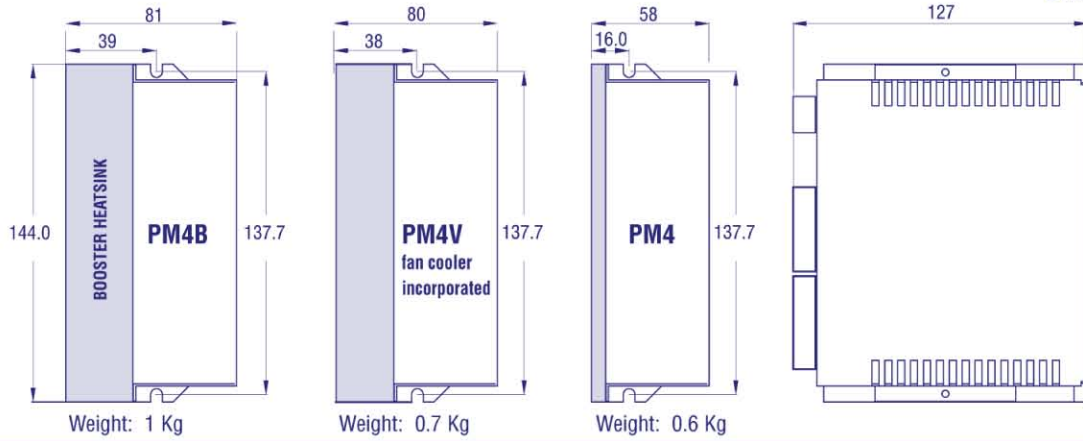
#### ACCESSORIES

(see specific data sheets for details)

- ✓ SERVOMOTORS
  - SUPER SAX: 0.35÷7.5 Nm
- ✓ MOTOR CABLES
  - CBLS: pre-assembled shielded power and feedback cables

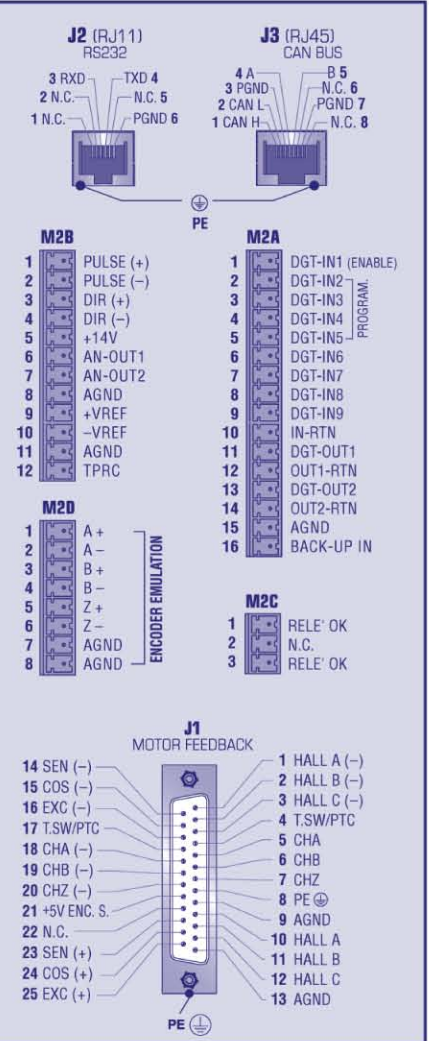
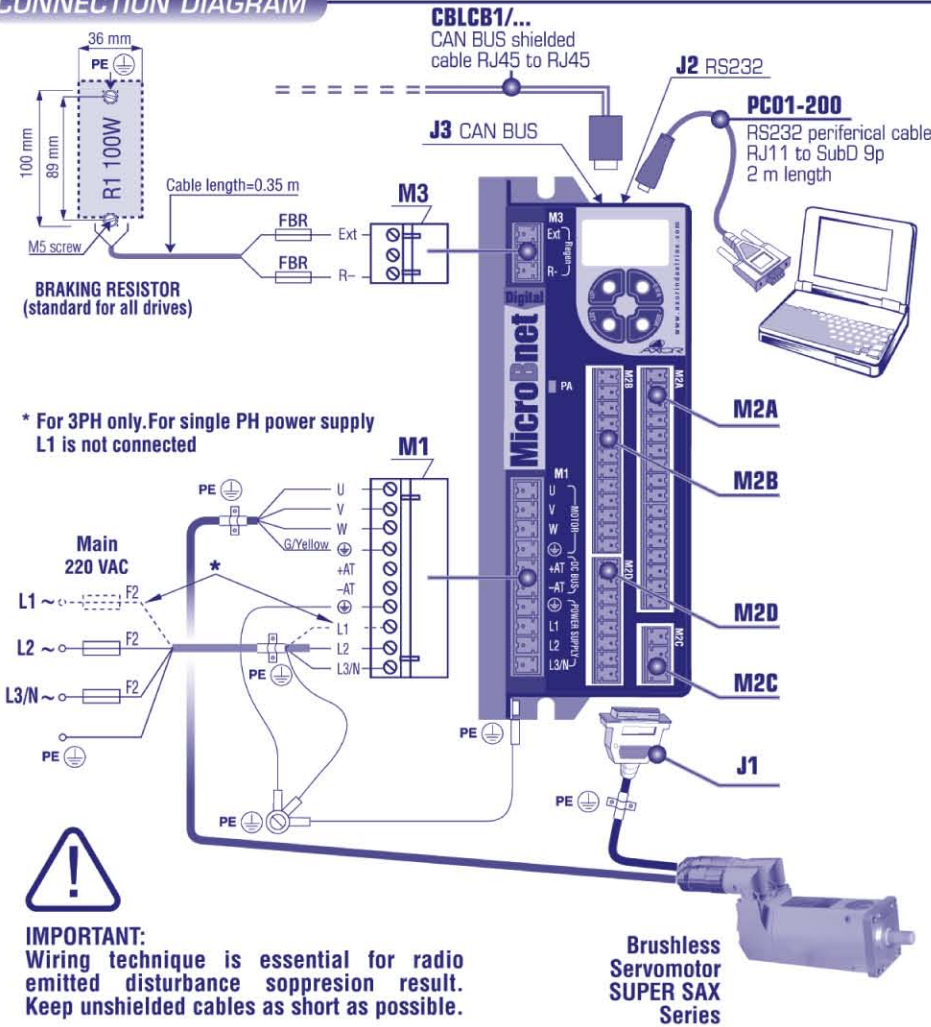
## MECHANICAL DIMENSIONS

Drawings are not to scale



Quotes in mm

## CONNECTION DIAGRAM



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## ORDERING CODE

HARDWARE				SOFTWARE	
<b>MCB NET</b>	<b>D - 8/16 - T 220 - R1 - S</b>	<b>EC</b>	<b>00X</b>	<b>Sxxx</b>	<b>0000 / 0000</b>
<b>NAME:</b> Drive's name	<b>TYPE:</b> D=digital	<b>FEEDBACK:</b> EC = Commutation encoder RO = Resolver	<b>PROTECTION:</b> S = Standard T = Tropicalized	<b>SPECIFIC NUMBER PRESENCE (opt):</b> <b>S xxx</b> 001-999= specific number	<b>FIRMWARE VERSION</b>
<b>SIZE:</b> 2/4 - 4/8 - 6/12 - 8/16	<b>POWER SUPPLY MODE:</b> T = Three phase (std) M = Single phase (opt)	<b>DUMPING SIZE:</b> R1 = 100W external resistors (std) R2 = 200W external resistors (opt)	<b>ADDITIONAL FEATURES:</b> <b>00X</b> CBMD: CAN BUS+ MULTIDROP interface 1 = Present (opt) 0 = Not present (std)	<b>Not in use AXOR's internal use</b>	<b>SETTING FILE</b>

Part number D.S./03.03/MCBNetD/05