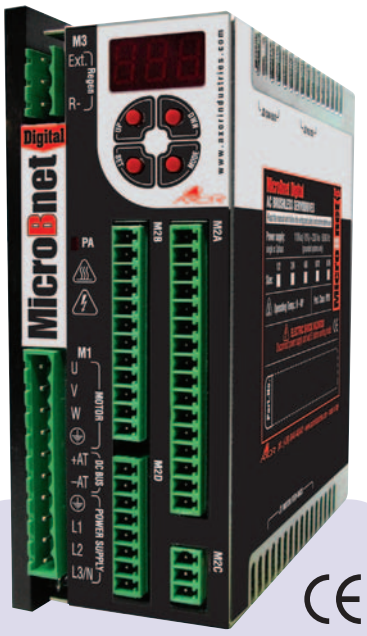
MICRO B NET Digital®

AC BRUSHLESS SERVODRIVE

MICRO B NET Digital® (MCBNetD)

Digital Stand alone brushless servodrive 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

- ✔ Cost effective, compact design, ease to install and use
- ✔ On-Board 3 PH. power supply 230 VAC with EMC line filter
- ✔ Optical isolation between power stage and signals
- ✔ Three phase sinusoidal-four quadrant operation
- ✔ Fully programmable via RS232, Mod Bus-RTU Based
- ✔ **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 divideble encoder emulation (software)

OPTIONS

- ✔ 230 VAC Single phase power supply
- ✔ 110 VAC power supply (single phase or 3-ph)
- ✔ CAN BUS - CAN V2.0B standard (°⚡ Optocoupled)
- ✔ CAN OPEN protocol implementations:
  - part of the DS301-V4.02
  - part of the DSP402-V2.0
- ✔ Multidrop interface RS232 to CAN BUS
- ✔ 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*

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)

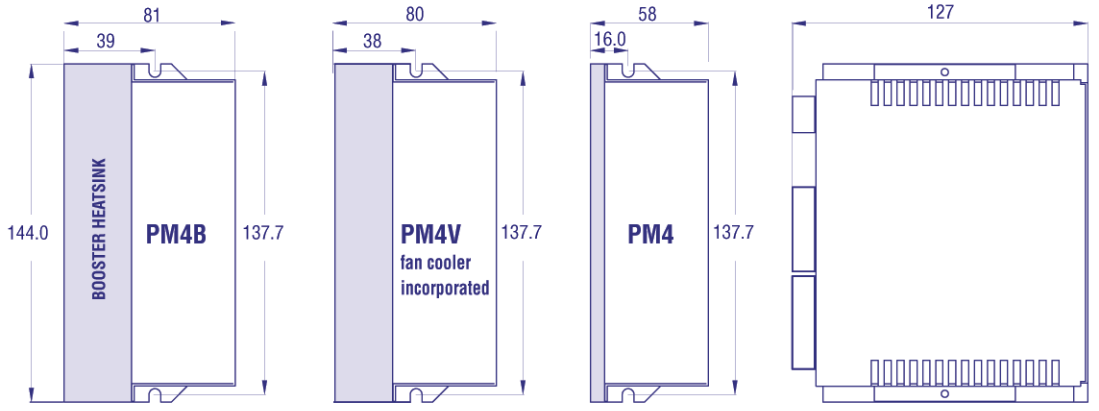
- ✔ SERVOMOTORS
  - SUPER SAX: 0.35÷7.5 Nm
- ✔ MOTOR CABLES
  - CBLS: pre-assembled shielded power and feedback cables

**: After 1 year storage duration the internal electrolitic power capacitors must be re-formed.*

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 **230 VAC** (+10%) 50/60 Hz - (single phase as optional feature)			
Logic Supply *(auxiliary for back-up only)*	**24 VDC** (±10% - 200mA)			

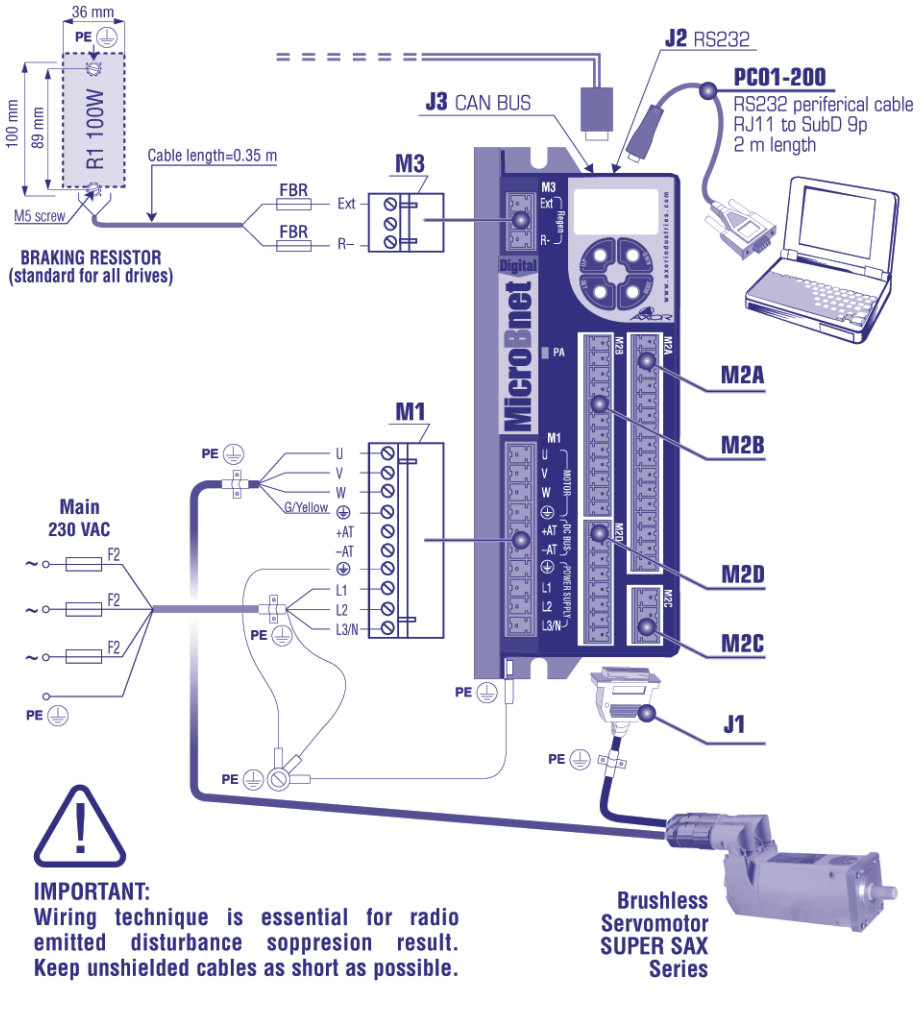
MECHANICAL DIMENSIONS

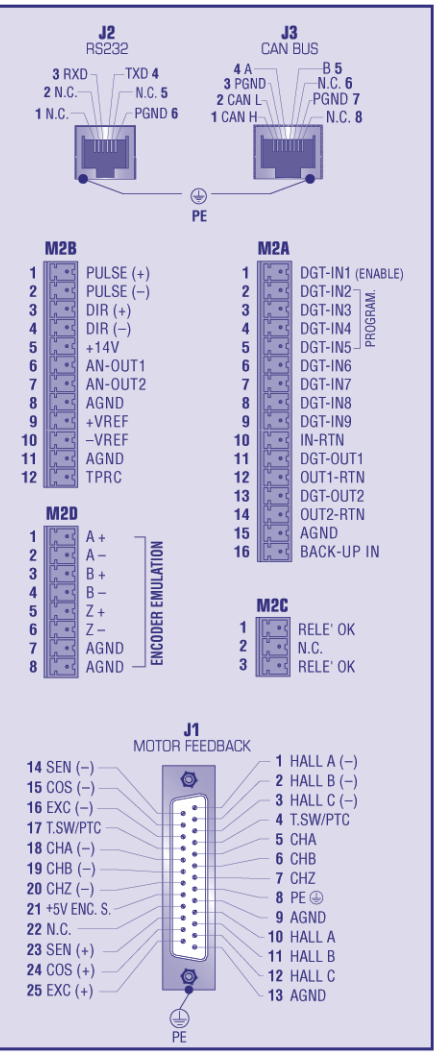
Drawings are not to scale



Quotation on mm

CONNECTION DIAGRAM





ORDERING CODE

Example:

HARDWARE													SOFTWARE	
MCB NET	-	D	- 8/16	- T	220	- R1	- S	- EC	-	00X	- XX	- Sxxx	00000	/ 00000

NAME: Drive's name

TYPE: D=digital

SIZE: 2/4 - 4/8 - 6/12 - 8/16

POWER SUPPLY MODE:
T = Three phase (std)
M = Single phase (opt)

POWER SUPPLY:
220 = 230 VAC (std)
110 = 110 VAC (opt)

DUMPING SIZE:
R1 = 100W external resistors (std)
R2 = 200W external resistors (opt)

PROTECTION:
S = Standard
T = Tropicalized

FEEDBACK:
EC = Commutation encoder
RO = Resolver
EH = Encoder+external hall

ADDITIONAL FEATURES: 0 0 X
- X: Not in use
- 0: **RS485 Interface** 1 = Present (opt) 0 = Not present (std)
- 0: **CBMD: CAN BUS+ MULTIDROP interface** 1 = Present (opt) 0 = Not present (std)

EXPANSION CARDS:
XX = Not present (std)

SPECIFIC NUMBER PRESENCE (opt):
S xxx
001÷999= specific number

FIRMWARE VERSION

SETTING FILE