



MICRO B NET

AC BRUSHLESS SERVODRIVE



MICRO B NET® (MCBNet)

Stand alone brushless servodrive for AC sinusoidal servomotors up to 7.5 Nm encoder 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, easy to install and use
- ✓ On-board power supply with integrated EMI line filter and inrush circuit
- ✓ Optically isolated between power and signals
- ✓ Integrated regen circuit (external power resistor)
- ✓ Ventilation on-board when required
- ✓ Encoder emulation resolution divided by 1 - 2 - 4 - 8
- ✓ Digital LED display indicating operating status
- ✓ Fully protected against:
 - external short circuit (motor polarity)
 - over/under voltage (supply)
 - over temperature, hall signal absence
- ✓ Wide load inductance range (0.2 - 30 mH)
- ✓ Extractable screw connectors
- ✓ Digital input/output opto isolated

OPTIONS

- ✓ Single Phase power supply
- ✓ Encoder emulation opto isolated

SPECIFICATIONS

- ✓ Switching frequency: 16 (KHz)
- ✓ Ambient temperature:
 - operating at rated data 0 ÷ 40°C (no derating)
 - rated and peak current derating 40 ÷ 55°C (3%/°C)
 - maximum operating 55°C max
 - storage -20 ÷ 55°C
- ✓ Humidity (W/OUT condensation): 85% max (operating & storage)
- ✓ Altitude A.M.S.L.:
 - operating at rated data 1000 m
 - rated and peak current derating 1000 ÷ 2500 m (1.5%/100m)
- ✓ Input reference (differential): ±10V
- ✓ Motor current monitor: ±6V (At peak current)
- ✓ Enable signals: +10 ÷ 30 Vdc
- ✓ Auxiliary external supply voltage: +24 Vdc (±10%) 150 mA
- ✓ Enclosure protection: IP20
- ✓ Storage duration: 1 year max*



DESCRIPTION

The MCBNet® 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, 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
 - Ssax 1000: 0.35÷... Nm
 - Ssax 2000: 0.35÷7.5 Nm
- ✓ GERABOXES
 - Rex 100: 5 flange sizes
 - R ratios 1/3 ÷ 1/216
- ✓ TRANSFORMERS
 - TM/TT: 3ph 100 ÷8000 Va

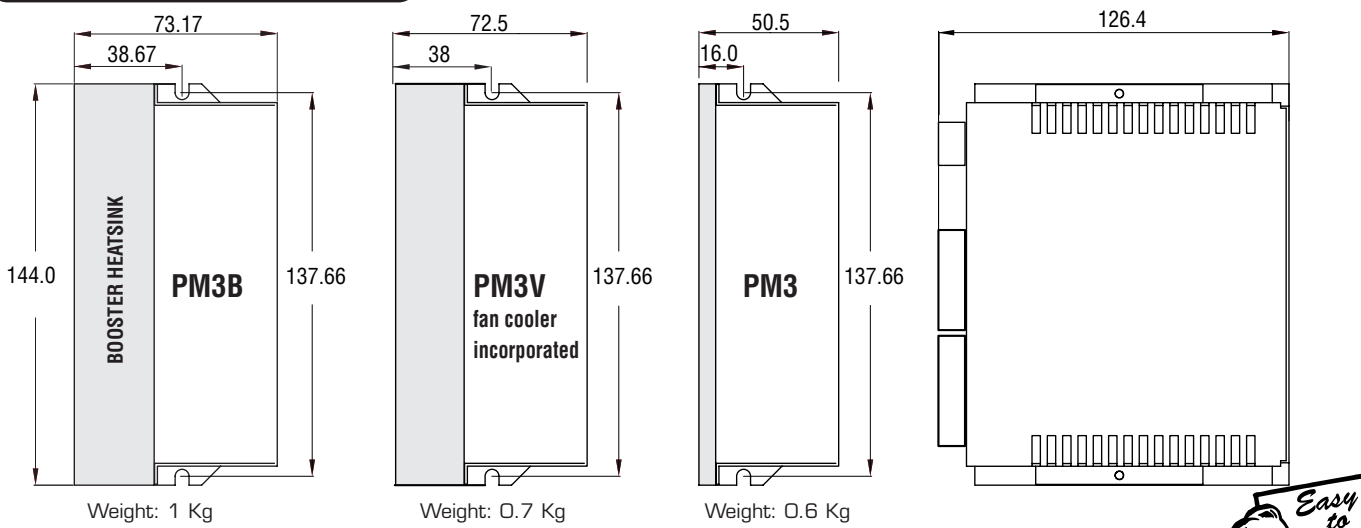
*: After 1 year storage duration the internal electronic power capacitors must be re-formed. Contact Axor's technical department for details

MODEL	MCB NET ° ⚡				
SIZE	1/2	2/4	4/8	6/12	8/16
Case	PM3	PM3	PM3	PM3B	PM3V
Rated Current (Arms)	1	2	4	6	8
Peak Current (Arms) x 2 sec.	2	4	8	12	16
F2 Power Supply Line Fuses (T-type=time-lag)	2 A / 250 V	3 A / 250 V	5 A / 250 V	8 A / 250 V	10 A / 250 V
Power Supply (3PH)	3 x 110 Vac (-10%) ÷ 230 Vac (+10%) 50/60 Hz (single-ph as optional feature)				

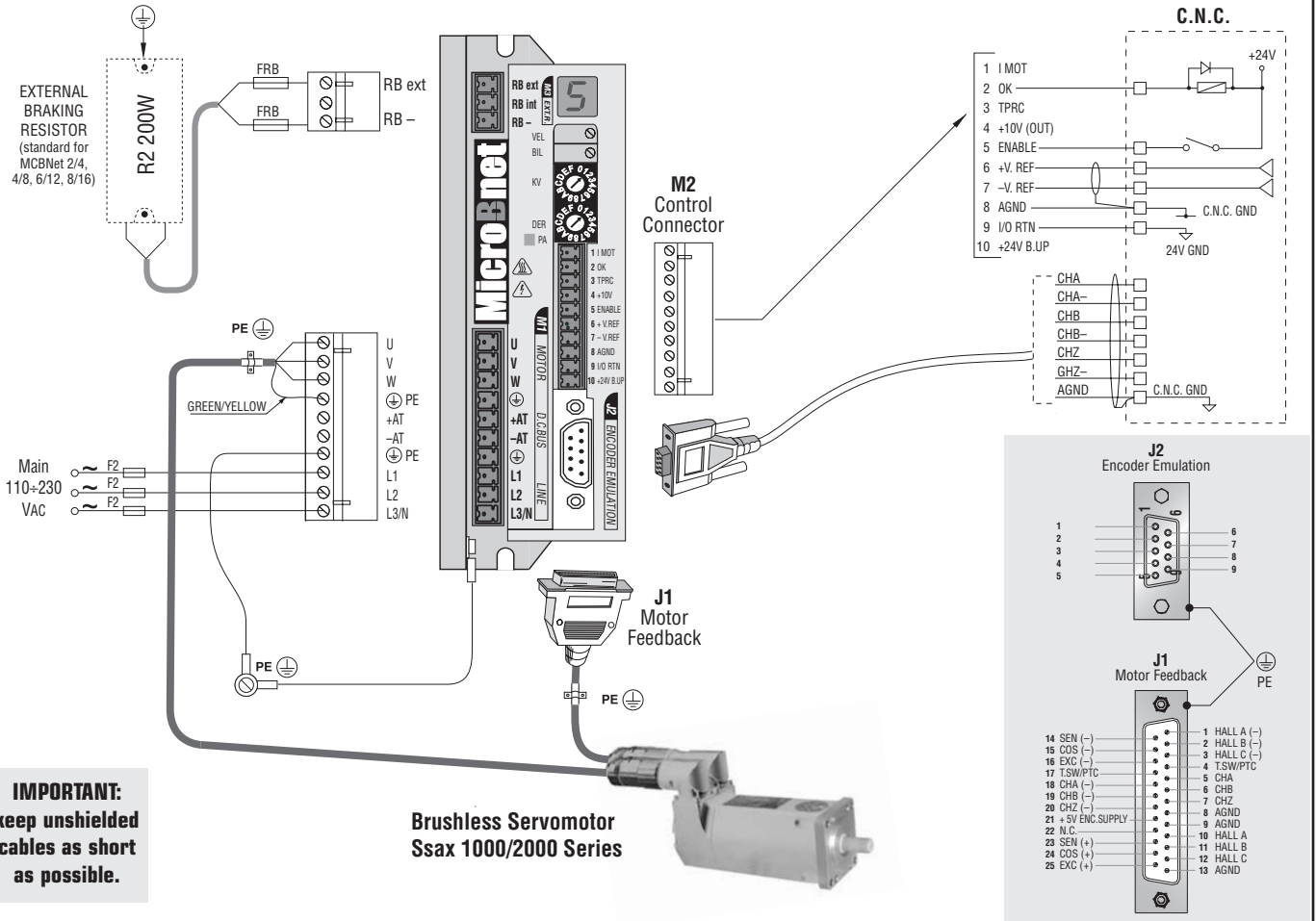
°⚡ : Optocoupled

Drawings are not to scale (see quotations)

MECHANICAL DIMENSIONS



CONNECTION DIAGRAM



ORDERING CODE

Example:

MCB NET - 8/16 T - R2 - S - A - 1000 / EC - RD - IS

NAME: Line of Ac brushless servodrive

SIZE: 1/2 - 2/4 - 4/8 - 6/12 - 8/16

POWER SUPPLY MODE:
T = three phase (standard)
M = single phase (optional)

DUMPING SIZE:
RX = 7W internal standard resistor (for MCBNet 1/2 size only)
R2 = 200W external resistors (for MCBNet 2/4 to 8/16 size)
R4 = 400W external resistors (optional)

PROTECTION:
S = Standard
T = Tropicalized

TYPE:
A = Analog

AXOR:
adjustment identification number

ADDITIONAL FEATURES:
IS = Encoder emulation opto isolated (optional)

CONTROL MODE:
RD = Differential reference
IO = Demand current

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