



DRIVE + POWER

Ultra compact multiaxis servosystem for brushless motors. Power supply direct from the mains 230-400 V_{AC}. Driving torque ranges up to 11 Nm



DRIVE MODEL	MKD 300					MKD 600				
SIZE	2/4	4/8	6/12	8/16	1.5/3	2.5/5	3.5/7	5/10	7/14	
Rated Current (Arms)	2	4	6	8	1.5	2.5	3.5	5	7	
Peak Current x 5" (Arms)	4	8	12	16	3	5	7	10	14	
Case	A	A	A-B	A-V ☹	A	A	A-B	A-V ☹	A-V ☹	
Control Brake Supply	24 V _{DC} (±5%) - 1 A _{DC} max (from insulating transformer)									
Backup Logic Supply	24 V _{DC} (±10%) - 0.25 A _{DC} (from specific MACK POWER Supply)									
Power Supply	310 ÷ 385 V _{DC}					530 ÷ 650 V _{DC}				
	COUPLING WITH SPECIFIC POWER SUPPLY					COUPLING WITH SPECIFIC POWER SUPPLY				

POWER MODEL	MKP 300 M *	MKP 300 T	MKP 600 T
SIZE	3.0 (3000w)	4.5 (4500w)	4.5 (4500w)
Power In (V _{rms})	1 x 230V (±10%)	3 x 230V (±10%)	3 x 400 V (±10%)
(50/60 Hz - grounded system only) (Arms)	8 A	12 A	7 A
Power Out (V _{DC})	310 ÷ 385 V	310 ÷ 385 V	530 ÷ 650 V
(at full-load) (A _{DC})	10 A / 20 A _{PK} x 5"	15 A / 30 A _{PK} x 5"	8.5 A / 17 A _{PK} x 5"
Backup In (from insulating transformer)	24 V _{DC} (±10%) - 2.5 A _{DC} max		
F1: Power In Line Fuses (T-type=time-lag)	12 A / 250 V	16 A / 250 V	8 A / 500 V
Case	B		

* : Single phase does not allow you to obtain the rated performances (torque and speed of motor). Contact Axor's technical department for details.

STANDARD FEATURES

- ➔ Several drives powered by a single supply unit
- ➔ EMC line filter, in-rush and regen circuits on board
- ➔ USB single access for setting and monitoring all drives
- ➔ Single hybrid cable for motors connection
- ➔ Speeder-One® software interface
- ➔ Optical isolation between power stage and signals
- ➔ Operating frequency 8 KHz
- ➔ Current / velocity loop bandwidth 2 KHz / 200 Hz
- ➔ RD0 Diff. analog reference (std)
- ➔ SE Serial Encoder feedback (std)
- ➔ ¹Ambient temp. - operating at rated data: 0 ÷ 40°C (no derating)
- rated and peak current derating: 40 ÷ 55°C (2.5% / °C)
- maximum operating: 55°C max
- storage: -20 ÷ 55°C
- ➔ ¹Humidity: 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)
- ➔ Enclosure: IP20
- ➔ Storage duration: 1 year max ²

OPTIONS

- ➔ CD0 Cclock and Direction control mode
- ➔ CB0 CAN Bus control mode
- ➔ ETC Ether CAT control mode
- ➔ AE Absolute Multiturn Encoder feedback
- ➔ EC Commutation Encoder feedback
- ➔ HBD Motr holding brake drive circuit
- ➔ STO Safe Torque Off safety function
- ➔ M5 I/O Additional function connector
- ➔ M4 Emulated Encoder connector
- ➔ R02 / R05 / R10 increased dumping to 160W / 500W / 1000W

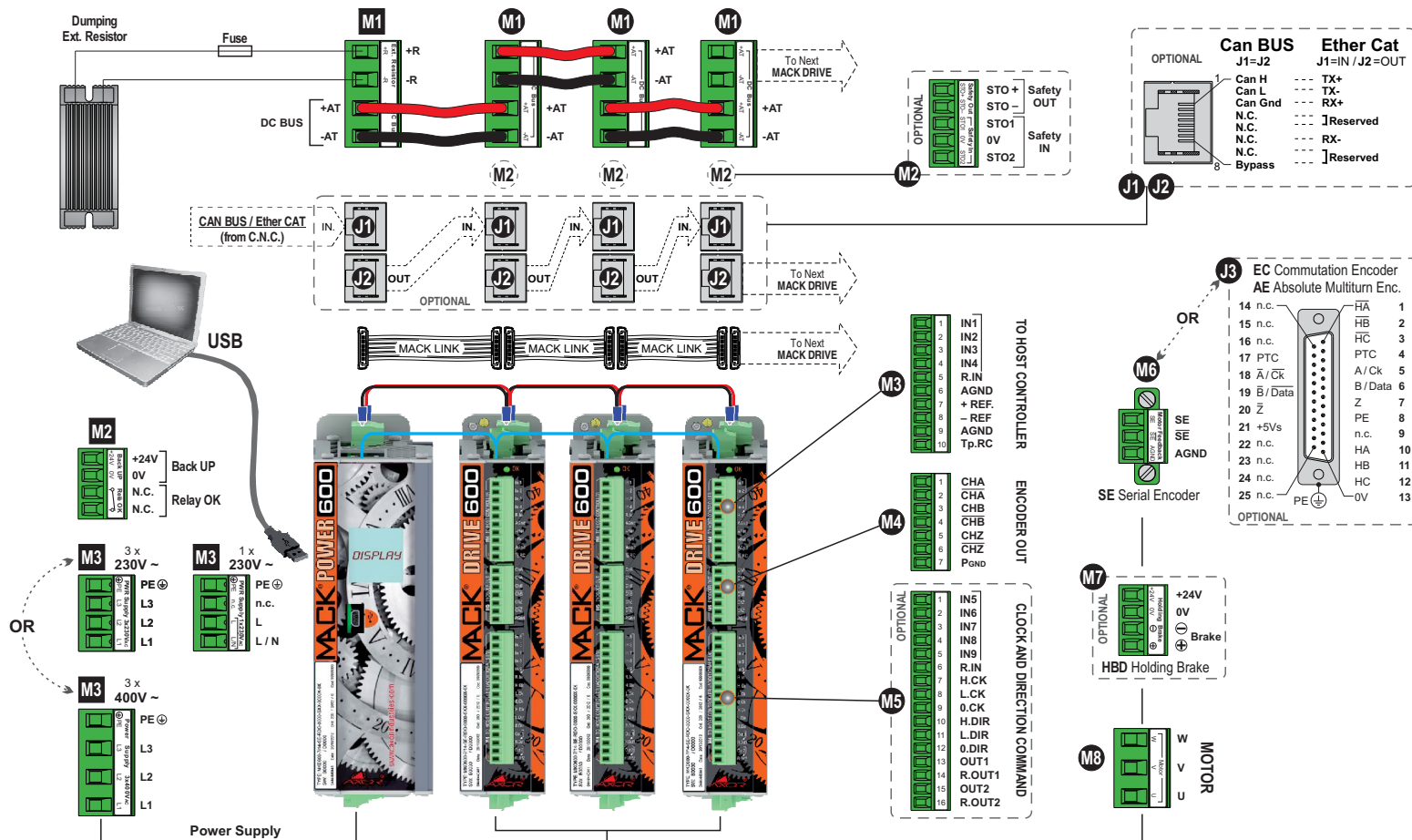
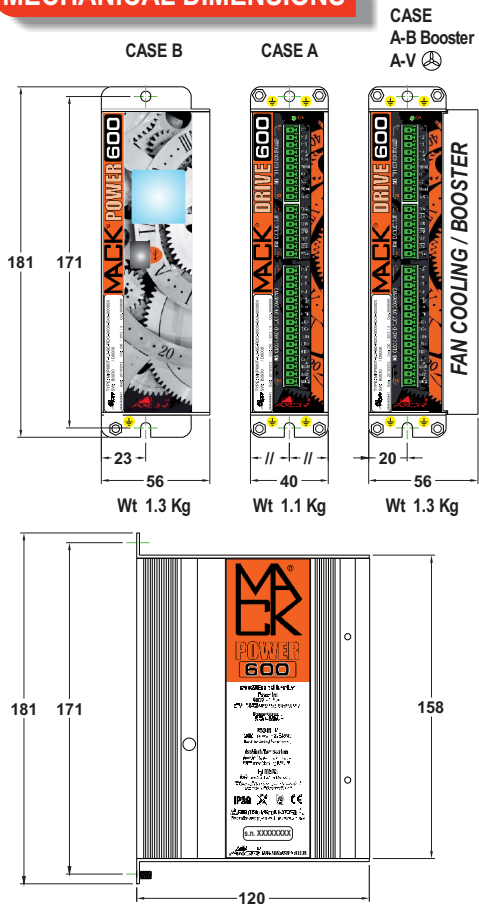
APPLICATION

- ➔ Printing Machines
- ➔ Textile Machines
- ➔ Coding Machines
- ➔ Conveyors
- ➔ Machine Tools
- ➔ Wood Working Machines
- ➔ Battery operated Equipment
- ➔ Upgrade replacement for stepper systems
- ➔ Packaging Machines
- ➔ Sewing Machines
- ➔ Jewellery Machines
- ➔ Actuators
- ➔ Door operators
- ➔ Antenna positioners
- ➔ CNC controlled axis

EtherCAT



MECHANICAL DIMENSIONS



MACK® DRIVE

HARDWARE CODE

MKD 600 - 7/14 SE - RD0 - 0 0 0 0 - Sxxx

NAME: Drive line
 MODEL: 300 or 600
 SIZE: (see table on reverse)
FEEDBACK:
 SE = Serial Encoder (std)
 AE = Absolute Multiturn Encoder (opt)
 EC = Commutation Encoder (opt)
CONTROL MODE:
 RD0 = Diff. analog reference (std)
 CDO = Clock and Direction (opt)
 CBO = CAN Bus (opt)
 ETC = Ether CAT (opt)

ADDITIONAL FEATURES
 HBD Holding Brake Drive:
 0 = Not present (std)
 1 = Present (opt)
 STO Safe Torque Off:
 0 = Not present (std)
 1 = Present (opt)
M5 Additional I/O:
 0 = Not present (std)
 1 = Present (opt), (std for CDO)
M4 Emulated Encoder:
 0 = Not present (std)
 1 = Present (opt), (std for RD0)

Specific Number Presence (opt)

SOFTWARE CODE

(X000/X000/X000)

FW: SW:
SETTING FILE:

MACK® POWER

HARDWARE CODE

MKP 600T - 4.5 - R01 - 0 0 0 - Sxxx

NAME: Power supply
 MODEL: Power In
 300M = 1x230 V_{AC}
 300T = 3x230 V_{AC}
 600T = 3x400 V_{AC}
 SIZE: Power Out
 3.0 = 3000 Wrms (for MKM 300M)
 4.5 = 4500 Wrms (for MKM 300T-600T)
DUMPING SIZE: Ext. Resistors
 R01 = 100 W 39 Ω (for MKP600)
 R02 = 160 W 33 Ω (for MKP600)
 160 W 22 Ω (for MKP300)
 R05 = 500 W (opt)
 R10 = 1000 W (opt)

ADDITIONAL FEATURES
 CBO CAN Bus:
 0 = Not present (std)
 1 = Present (opt)
NOT USE:
 0 = (std)

Specific Number Presence (opt)

SETTING FILE: