



MACK
DRIVE+POWER

— MKD —

— MKP —



CANopen

EtherCAT

Modbus

RS 485 RTU

3x400
VAC

8
ARMS

3500
W

P.N. : D.S. / 20.11.18 / MKDP / 14

DRIVE MODEL	MKD 300				MKD 600				
SIZE (A)	2/4	4/8	6/12	8/16	1.5/3	2.5/5	3.5/7	5/10	7/14
Rated Current / Peak Current x 5 sec (Arms)	2 / 4	4 / 8	6 / 12	8 / 16	1.5 / 3	2.5 / 5	3.5 / 7	5 / 10	7 / 14
Power Supply	310 ÷ 385 V _{DC} (from MKP 300)				530 ÷ 650 V _{DC} (from MKP 600)				
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} max (from specific MACK POWER Supply)								
Case	A	A	A-V⚡	A-V⚡	A	A	A-V⚡	A-V⚡	A-V⚡

POWER MODEL	MKP 300 M *	MKP 300 T	MKP 600 T
SIZE	3.0 (3000 w)	4.5 (4500 w)	4.5 (4500 w)
Power In (50/60 Hz - grounded system only) (V _{rms})	1 x 230 V _{AC} (± 10%)	3 x 230 V _{AC} (± 10%)	3 x 400 V _{AC} (± 10%)
(Arms)	8 A	12 A	7 A
Power Out (at full - load) (V _{DC})	310 - 385 V	310 - 385 V	530 - 650 V
(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 ph does not allow to obtain the rated torque and speed of motor. Contact Axor for details.

STANDARD FEATURES

- ♦ Very compact multiaxis servosystem for brushless motors
- ♦ Power supply 230 and 400 V_{AC} direct from the mains
- ♦ Driving motor ranges up to 11 Nm
- ♦ Several drives powered by a single supply unit
- ♦ Built-in EMC line filter, in-rush and regen circuits
- ♦ USB single access for setting and monitoring all drives
- ♦ SE Serial Encoder MKES1 feedback (single hybrid motor cable connections)
- ♦ Speeder-One® software interface
- ♦ RD0 differential analog ref. ± 10v (13 bit)
- ♦ Operating frequency 8KHz
- ♦ Update rate : - Current loop = 16KHz - Position & Velocity = 4KHz
- ♦ Ambient temp¹: - operating at rated data: 0 / + 40°C (no derating)
- rated and pk current derating: + 40 / + 55°C (2.5% / °C)
- maximum operating: + 55°C max
- storage: - 20 / + 55°C
- ♦ Humidity¹: 85% max (operating & storage)
- ♦ Altitude a.m.s.l. - operating at rated data: 1000 m
- rated and pk current derating: up to 2500 m (1.5% / 100m)
- ♦ Protection rating: IP20
- ♦ Storage time: 1 year²

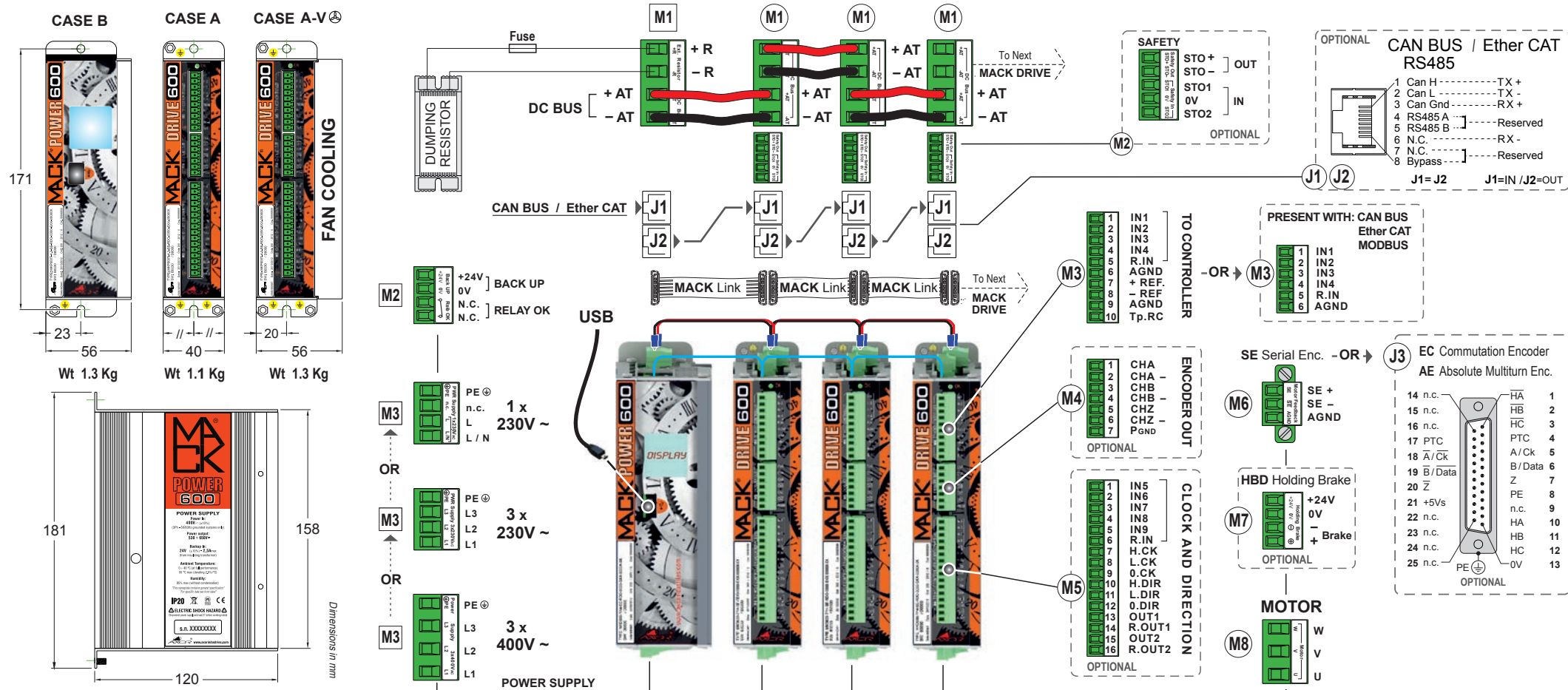
OPTIONS

- ♦ CD0 Clock and Direction control mode
- ♦ CB0 CAN Bus control mode
- ♦ ETC Ether CAT control mode
- ♦ MB0 ModBus-RTU RS 485 control mode
- ♦ AE Absolute Multiturn Encoder feedback (Endat 2.1)
- ♦ EC Commutation Encoder feedback
- ♦ HBD Motor holding brake drive circuit
- ♦ STO Safe Torque Off safety function (PL d - SIL 2)
- ♦ M5 Additional I/O connector
- ♦ M4 Emulated Encoder connector
- ♦ R02 / R05 / R10 increased dumping to 160W / 500W / 1000W

NOTE: ¹ Free from condensation ² After one year storage the electrolytic capacitors must be reformed. Contact AXOR for details.



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MACK® DRIVE			MACK® POWER		
HARDWARE CODE			HARDWARE CODE		
SW CODE			SW CODE		
MKD 600 - 7/14 SE - RD0			MKP 600T - 4.5-R01-000-Sxxx		
0 0 0 0 - Sxxx			(X000/X000/X000)		
DRIVE LINE			POWER SUPPLY		
MODEL: 300 or 600			MODEL Power In:		
SIZE: (see table on reverse)			300M = 1x230V _{AC} (for MKD 300)		
FEEDBACK:			300T = 3x230V _{AC} (for MKD 300)		
SE = Serial MKES1 Encoder (std)			600T = 3x400V _{AC} (for MKD 600)		
AE = Absolute Multiturn Encoder Endat 2.1(opt)			SIZE: Power Out		
EC = Commutation Encoder (opt)			3.0 = 3000 Wrms (for MKD 300M)		
CONTROL MODE:			4.5 = 4500 Wrms (for MKD 300T-600T)		
RD0 = Diff. analog reference (std)			DUMPING SIZE: Ext. Resistors		
CD0 = Clock and Direction (opt)			MKP300 : R02 / 300 = 160W 22 Ω (std), R05 / 300 = 500W 22 Ω (opt)		
CB0 = CAN BUS (opt)			MKP600 : R01 / 600 = 100W 39 Ω (std), R02 / 600 = 160W 33 Ω (opt)		
ETC = Ether CAT (opt)			R05 / 600 = 500W 33 Ω (opt), R10 / 600 = 1000W 33 Ω (500W 66 Ω // 500W 66 Ω)(opt)		
MB0 = RS 485 MODBUS-RTU (opt)					