



MACK TRON 2

MKT2 B 42

INTEGRATED BRUSHLESS SERVOMOTOR



CANopen

Modbus-RTU - RS485

48

VDC

0,18/0,5 pk

Nm

P.N.: D.S. / 19.05.25 / MKT2 B 42 / 00

MODEL		MKT2 B 42
SIZE		L
M1	Torque at 100Rpm (TA=40°C)	0,18 Nm
Mpk	Peak Torque	0,5 Nm
Power Supply		*48 Vdc
Battery Supply (for absolute multiturn encoder)		3.6 ÷ 5 Vdc - 10µA
WINDING CODE		F42
Nn	Rated Speed at 48VDC Power Supply	6000 Rpm
J	Rotor Inertia Kg ^m ·10 ⁻⁴	0.038
W	weight kg	0.5
Max radial force in middle shaft at 6000Rpm		N 46

* 24Vdc Power Supply permitted with speed derating: contact Axor for details.

STANDARD FEATURES

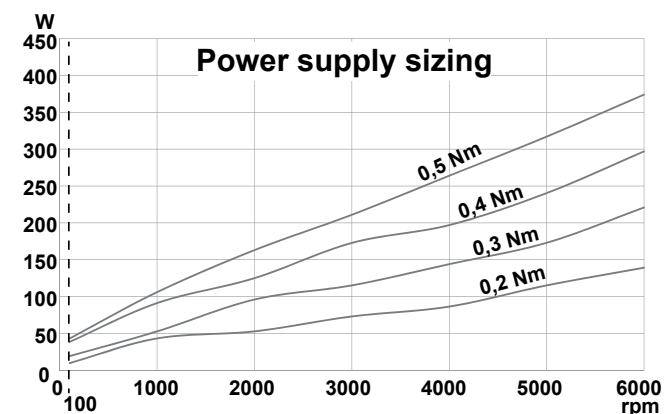
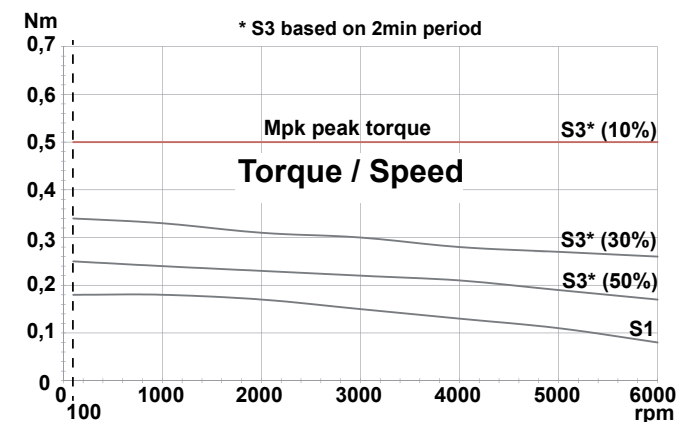
- ♦ Motor with 8 poles sinusoidal B.E.M.F. and waveform current
- ♦ EI1 Single-turn absolute Encoder feedback (14 bit)
- ♦ CB Can BUS control mode (opto-isolated)
- ♦ Device status notification with bicolor LED
- ♦ Speeder-One.2® software interface
- ♦ Modbus RTU RS485 for setting, monitoring and positioning
- ♦ Ambient temp.¹: - operating at rated data: 0°C / + 40°C (no derating)
- storage - 20 °C / + 55°C
- ♦ Ambient Humidity¹: - operating & storage 85% RH max
- ♦ Altitude (a.m.s.l.): - operating & storage 1000m
- ♦ Protection rating:..... IP54
- ♦ Storage time:..... 1 year²

¹ Free from condensation

² After one year storage the electrolytic capacitors must be reformed. Contact AXOR for details.

OPTIONS

- ♦ EA1 Multi-turn absolute Encoder (14+12 bit)
- ♦ BACKUP Backup Supply 24 Vdc
- ♦ LS limit switch input
- ♦ IP65 Class Protection



PERFORMANCES AND TEST CONDITIONS:

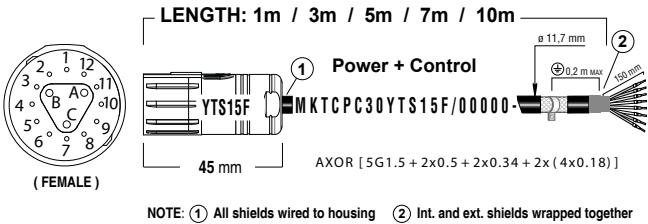
- 1) Ambient temperature Ta 40°C
- 2) Power supply 48Vdc
- 3) 10m of MKTC cable
- 4) Motor thermally insulated.

CABLE SPEC.

- ♦ Mobile usage for chain tracks, flame / oil resistance
- ♦ External sheating: Vinylflex - PVC
- ♦ Cycles: 5 million
- ♦ Minimum bending radius: 60mm static - 120mm dynamic
- ♦ Operating temperature: -20°C / +80°C (dynamic)
- ♦ Trail speed: 300m / min. max - Acceleration: 20m / sec²
- ♦ UL RoHS CE DIN VDE

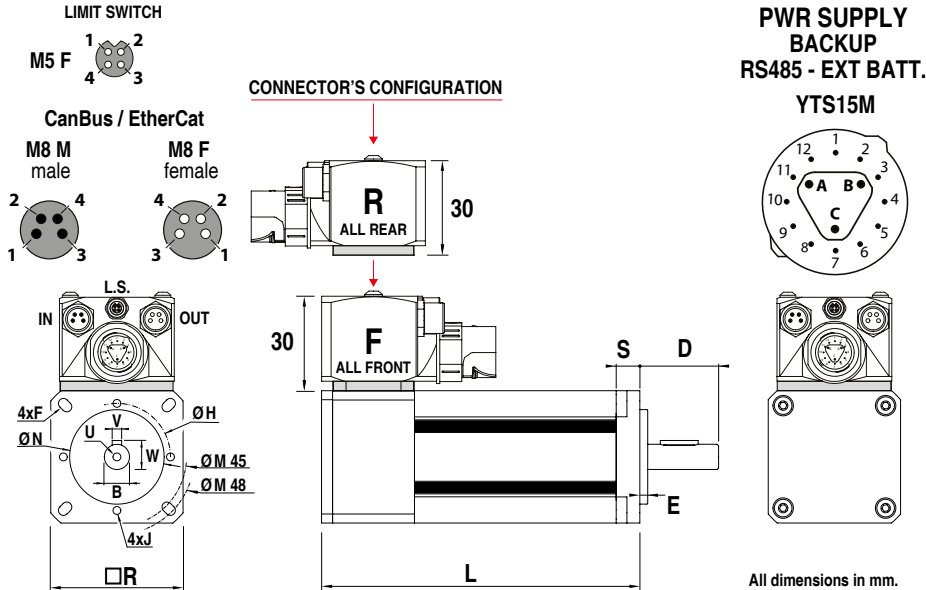


TYPE	L	B	D	V _{h9}	W	U	N	M	F	E	S	H	J	R
	mm													
MKT2 B 42 L	101	8 _{h7}	25	3 _x 12	9.2	M3 _x 6	30 _{h6}	45 _÷ 48	3.2	2.5	7.5	34	M3 _x 7	42 _□

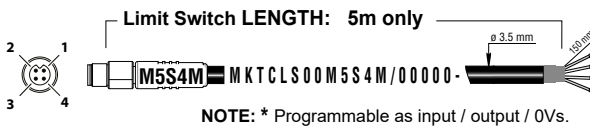


YT	DATA	WIRE	SIZE (mm²)
A	+ Power	Brown-Red	1.5
C	- Power	Blue-Black	1.5
B	RESERVED	Gray-Black	1.5
1	+ Backup	Red	0.5
2	- Backup	Black	0.5
3	+V Ext. Battery *)	Brown	0.18
4	- V Ext. Battery *)	Violet	0.18
5	DATA + RS485	White	0.18
6	DATA - RS485	Blue	0.18
7	RESERVED	White-Red	0.34
8	RESERVED	Yellow	0.18
9	RESERVED	Green	0.18
10	RESERVED	Pink	0.18
11	RESERVED	Gray	0.18
12	RESERVED	White-Black	0.34
N.C.	N.C.	Gray-Red	1.5
HOUSING	PE	Green-Yellow	1.5

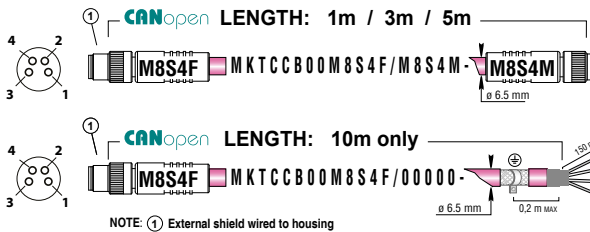
*) For EA1 multi-turn absolute encoder feedback only



PWR SUPPLY
BACKUP
RS485 - EXT BATT.
YTS15M



M5	DATA	WIRE	SIZE (mm²)
1	+Vs OUT	Brown	0.14
2	IN.2	White	0.14
3 *	IN.3 / OUT.1	Blue	0.14
4	IN.1	Black	0.14



M8	DATA	WIRE	SIZE (AWG)
1	Can H	Brown	22
2	GND	Green	22
3	-	Yellow	22
4	Can L	White	22
Housing	Ext. Shield	-	-

MACKTRON

MKT2 B 42L F42 - 0 D 0 X 0 E1 CB 0 0 R 1 X

HW CODE

SW CODE

Sxxx (X000 / X000)

PWR SUPPLY:
B = 48 VDC
SIZE: 42 L
WINDING CODE: see table
MOUNTING FLANGE: 0 = standard
HOLES: D = B5 thru (std) C = B14 threaded (opt)
SHAFT DIAMETER: 0 = standard
SHAFT KEY: X = with key (std), W = w/out key (opt)
NOT USED: 0

GEARBOX:
X = w/out (std), H = with (opt)
SPEC FW CONF. FILE
IP CLASS: 1 = 54(std), 2 = 65(opt)
CONNECTOR'S CONFIG.: R = all Rear, F = all Front
LS Limit Switch : 0 = w/out (std), 1 = with (opt)
BACKUP : 0 = w/out (std), 1 = with (opt)
CONTROL MODE: CB = CAN Bus
FEEDBACK: E11 = Single-turn absolute Enc. 14 bit (std)
EA1 = Multi-turn absolute Enc. 14+12 bit (opt)

MACKTRON CABLE

MKTC PC30

ORDERING CODE

YTS15F / 00000 - 030 Sxxx

CABLE LINE

TYPE (mobile):
LS00 = Limit Switch
CB00 = CanBus
PC30 = Pwr + Control

ASSEMBLY MACKTRON SIDE:

YTS15F = Straight 15p Female
M5S4M = M5 Straight 4p Male
M8S4F = M8 Straight 4p Female

ASSEMBLY OTHER SIDE:

00000 = Flying leads (no connector)
M8S4M = M8 Straight 4p Male

SPEC

LENGTH:
010 = 1m
030 = 3m
050 = 5m
070 = 7m
100 = 10m

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