

Quick Reference Guide

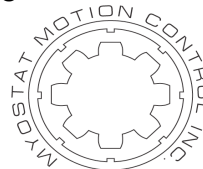
Version 1.03

CM1 - RT3.12

K parameters



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K #	Description	Unit	Values
K14	Power up delay	ms	0-32000
K20	Uart0 baud rate	Kbits/s	0:38.4, 1:9.6, 2:19.2, 3:57.6 10:13->modbus 10:38.4, 11:9.6 12:19.2 13:57.6
K21	Semi/full closed loop	0.1 deg	0: Full closed loop 1-36: vector angle
K22	Time delay for semi closed loop	msec	min: 10 max: 1000
K23	Event status		0:Polling only 1: All alarm and motor status codes 2:Input status 4: Output status 8: Disable echo 16: Enable warnings and messages 32: Merge event - "Mx"
K24	Quadrature output interval (see K34)	pulses	min: 10 max: 32767
K25	Time delay for slow signal response	0.1 sec	min: 1 max:9
K26	Invert input signal		0: True 1: False
K27	Input function at logical high Syntax: K27=N ₄ N ₃ N ₂ N ₁ N ₄ - Input 4 digit N ₃ - Input 3 digit N ₂ - Input 2 digit N ₁ - Input 1 digit E.g. K27=2347		0: No Action 1: General Use 2: Origin Sensor 3: Manual Feed CW 4: Manual Feed CCW 5: Output Index signal not Inposition Signal 6: CW limit Switch and origin switch 7: Emergency Stop 8: Full Stop 9: CCW Limit and origin switch
K28	Input function at the rising edge of Quick Response Signal Syntax: Same as K27		0:No Action 1:Alarm reset/Pause 2:Motor Free 3:Reset Counter 4:Execute Next Step 5:Execute Previous Step 6:Execute Bank 1 7:Go Origin 8:Jog CW (Execute Bank 2 when K36=2) 9:Jog CCW/Execute Bank 3 when K36=2)
K29	Input function at the falling edge of Quick Response Signal		Same Functions as K28 except 2: Enable Motor
K30	Input function at target voltage level of Slow Response Signal		Same Functions as K27
K31	Input function at the rising edge of Slow Response Signal		Same Functions as K28
K32	Input function at the falling edge of Slow Response Signal		Same Functions as K28 except 2: Enable Motor
K33	Output Logic		0:Normally open 1: Normally closed
K34	Output function Syntax K34=N ₂ N ₁ N ₂ - Output 2 digit N ₁ - Output 1 digit E.g. K34=82		0:Command 1:Inposition 2:Alarm 3:CML O1/F1 4:CML O2/F2 5:Analog Output 6:merge motion 7:Quadrature phase output 8: Motor Free 9: Torque Limit reached - Push Mode Only
K35	Analog output function		0: Target position 1: Target position magnified by 8 2: Current Position 3: Current Position magnified by 8 4: Position Error 5: Position Error magnified by 8 6: Current Velocity/16 7: Current Velocity /2 8:1 q Real 9: Iq*8
K36	Pulse interface		0:CW/CCW 1:Step/Direction C type - 2: enables bank 2 and 3 execution

K #	Description	Unit	Values
K37	Resolution and speed unit	Speed unit: 100pps Speed unit: 10pps Speed unit: 1pps	0:200, 1:400, 2:500, 3:1000, 4:2000, 5:2500, 6:5000, 7:10000, 8:25000, 10:50000, 40:300, 42:600, 43:800, 44:1200, 45:1500, 46:3000, 47:4000, 48:6000, 49:8000, 50:12000 20:200, 21:400, 22:500, 23:1000, 24:2000, 25:2500, 26:5000, 27:10000, 28:25000,, 30: 50000 60:300, 62:600, 63:800, 64:1200, 65:1500, 66:3000, 67:4000, 68:6000, 69:8000, 70:12000 100: 50000
K38	Analog interface		0:Speed Control 1:Position Control
K39	Voltage filter gain	5[rad/sec]	Min:0 Max:1028
K40	Max speed for analog control (K64)	rpm	max speed at 4.8V
K41	Travel Range for analog control (K64)	Pulses	Min: -32767 Max: 32767
K42	Go origin speed	100pps	Min:1 Max: 5000
K43	Go origin/manual feed acceleration	kp*2	Min: 1 Max: 5000
K44	Deceleration ratio	%	Min: 10 Max: 500
K45	Origin direction		0: CW 1: CCW 2: CW with reverse coordintes 3: CCW with reverse coordinates
K46	Origin search method		0:Stopper 1:Stopper(start search on powerup) 2:Origin Switch 3:Origin Switch (start search on powerup) 16: same as 0 but powerup disabled 17: same as 1 but powerup disabled 18: same as 2 but powerup disabled 19: same as 3 but powerup disabled
K47	Origin Stopper Voltage Level	%	Min:10 Max:100
K48	Offset distance between machine origin and mechanical origin	100 pulses	Min: -32767 Max: 32767
K49	Manual feed speed	100pps	Min:1 Max:5000
K50	Manual Jog travel distance	Pulses	Min: 1 Max: 100
K51	Creeping speed	100pps	Min: 1 Max:1000
K52	Digital/Serial IO 1 and 2		0:Auto detect 1: Force Serial port 2:Force Digital port Note: IO1 cannot be forced to digital
K54	Quadrature output offset	pulses	Min: 0 Max: 32767

K #	Description	Unit	Values
K55	Inposition tolerance	Pulses	Min: 1 Max: 1000
K56	Position error overflow alarm level	Kpulses	Min: 1 Max: 32767
K57	Overload alarm time delay	msec	Min:100 Max:10000
K58	Software Limit (+)	100 pulses	Min: 0 (off) Max: 32767
K59	Software Limit (-)	100 pulses	Min: -32767 Max: 0 (off)
K60	Pushmode current level	%	Min: 10 Max: 80 NOTE: pushmode % is based on 80% of full torque
K61	Push time	msec	Min: 1 Max: 30001 (infinite push)
K62	RS-485 Node ID Modbus Station ID		0: RS-232 mode 1-256: RS-485 ID -1--256: RS-485 Node ID, no auto report function NOTE: set K65 first when using motor as Modbus master
K63	External encoder input		0:None 1:Phase A only 2:Phase A and B 3: Enable "Fx" and "Cx" variables
K64	Analog input function		0:None, 1:S0, 2:P0, 3:S13, 4: P24 5:S14, 6:P25, 7:Speed 0-Set speed 8:Position Multiplier 9:Analog control only (K38) NOTE: see documentation on logic banks for complete control with analog input
K65	Slave motor Baud Rate Set master motor only Modbus baudrate Set last motor onlu	Kbits/s	0:38.4, 1:9.6 2:19.2, 3:57.6 4:76.8, 5:129 6:173, 7:515 10:38.4, 11:9.6, 12:19.2, 13:57.6 14:76.8, 15:129, 16:173, 17:515
K66	Data Streaming		0: None. 1: Send back speed target 2: Send back real position 3: Send back real speed 4: Send back real current Iq 5: Position Real 6: Velocity Real
K67	Data Streaming sample timing	msec	0-3000
K68	S curve Function		0:S Curve with fixed timing 1:S Curve without timing
K69	S Curve Gain		0-1024
K70	Send carriage return		0: No line feed after carriage return 1: Line feed afer carriage return
K71	Temperature limit	Deg C	Min: 0 Max: 150
K72	Regeneration voltage return level	0.1V	Min: 0 Max: 391
K73	Merge motion output signal length	msec	Min: 1 Max: 1000
K74	External Torque feedback P-Gain		Min: 0 Max: 1000
K75	External Torque feedback I-Gain		Min: 0 Max: 500
K77	External Torque feedback mean value	4.88mV	Min: 0 Max: 1024
K78	External Torque feedback Gain		Min:-1024 Max: 1024
K85	Logic bank number to start on powerup		Min: 0 (no bank) Max: 30
K86	Coordinated motion - Synchronize motors		0: Off 1: On
K87	Logic bank scan period	msec	Min: 1 Max: 32767
K88	External encoder resolution		Min: 0 Max: 50000
K89	Modbus input register address		Min: 0 Max: 65535
K90	Modbus output register address		Min: 0 Max: 65535

