

**CURTIS AC Motor Controller Parameter List**  
**Model: 1230-2402**

Menu	Value	Min	Max	Unit	Read Access	Write Access
<b>Vehicle</b>						
<b>Rates</b>						
M1 Accel Rate	2	0.1	5	Seconds	User	User
M2 Accel Rate	2	0.1	5	Seconds	User	User
M1 Decel Rate	2	0.1	10	Seconds	User	User
M2 Decel Rate	2	0.1	10	Seconds	User	User
M1 Brake Rate	1	0.1	5	Seconds	User	User
M2 Brake Rate	1	0.1	5	Seconds	User	User
Fast Stop Rate	0.5	0.1	5	Seconds	OEM	OEM
Accel Release Rate	0	0	1	Seconds	OEM	OEM
<b>Speeds</b>						
M1 Min Speed	10	0	50	%	User	User
M2 Min Speed	10	0	50	%	User	User
M1 Max Speed	50	10	100	%	User	User
M2 Max Speed	100	10	100	%	User	User
Speed Limit Type	0	0	3		OEM	OEM
<b>Multi Mode</b>						
Mode Select Type	0	0	3		OEM	OEM
Coast Decel Rate	2	0.1	20	Seconds	User	User
Anti Tiedown	Off	Off	On		OEM	OEM
<b>Throttle</b>						
Throttle Type	3	1	5		OEM	OEM
Throttle Deadband	10	0	30	%	OEM	OEM
Throttle Max	90	40	100	%	User	User
Throttle Map	50	5	90	%	User	User
Pot Low Check	Off	Off	On		OEM	OEM
<b>Sequencing</b>						
Interlock Normally Open	On	Off	On		OEM	OEM
Sequencing Delay	0	0	3	Seconds	OEM	OEM
SRO	0	0	3		OEM	OEM
HPD	2	0	2		OEM	OEM
Main Contactor Interlock Type	0	0	1		OEM	OEM
Main Contactor Open Delay	0	0	60	Seconds	OEM	OEM
Main Contactor Check	On	Off	On		OEM	OEM
<b>Brake</b>						
Brake Fault Check	On	Off	On		OEM	OEM
Brake Delay	1	0	10	Seconds	OEM	OEM
Brake Hold Voltage	60	0	100	%	OEM	OEM
Brake Driver Type	0	0	3		OEM	OEM
Anti Rollback Time	100	0	1000	ms	OEM	OEM
<b>Emergency Reverse</b>						
Wiring Check	Off	Off	On		OEM	OEM
Speed	50	10	100	%	OEM	OEM
Direction Interlock	On	Off	On		OEM	OEM
Time Limit	0	0	10	Seconds	OEM	OEM
Accel Rate	1	0.1	5	Seconds	OEM	OEM
Switch Normally Closed	Off	Off	On		OEM	OEM

Motor						
Min Motor Voltage	0.4	0	6	Volt	OEM	OEM
Nominal Motor Voltage	15	7	30	Volt	OEM	OEM
Nominal Motor Frequency	144	20	400	Hz	OEM	OEM
Max Motor Speed	4000	1000	10000	rpm	OEM	OEM
Current Limit	200	100	250	Ampere	OEM	OEM
Current Limit PGain	25	0	100	%	OEM	OEM
Current Limit IGain	10	0	100	%	OEM	OEM
Number of Motor Poles	4	2	8		OEM	OEM
Encoder Pulses per Rev.	32	32	128		OEM	OEM
Swap Encoder Direction	Off	Off	On		OEM	OEM
Failsafe Delay	5	2	20	Seconds	OEM	OEM
Control						
P Gain	0.1	0	1		OEM	OEM
I Gain	0.1	0	1.5		OEM	OEM
Accel Slip	5	1	10	Hz	OEM	OEM
Regen Slip	4	1	10	Hz	OEM	OEM
Slip Boost	4	0	10		OEM	OEM
Pull-Out Slip	10	5	50	Hz	OEM	OEM
Accel Slip Voltage	3	0	10	Volt	OEM	OEM
Accel Comp	1	0	5		OEM	OEM
Regen Slip Voltage	0.3	0	5	Volt	OEM	OEM
Regen Comp	5	0	5		OEM	OEM
Regen Voltage Offset	0.2	0	5	Volt	OEM	OEM
System						
Battery						
Full Battery Voltage	2.04	1.74	2.08	Volt	OEM	OEM
Empty Battery Voltage	1.73	0.9	2.03	Volt	OEM	OEM
BDI Reset Battery Voltage	2.09	2.05	3	Volt	OEM	OEM
Battery Recharge Level	30	20	50	%	OEM	OEM
Low Voltage Level	1.5	1.33	2	Volt	OEM	OEM
Hourmeter						
Enable Total Service Hours	Off	Off	On		OEM	OEM
Enable Drive Service Hours	Off	Off	On		OEM	OEM
Adjust Hours	0	0	999999	Hours	OEM	OEM
Set Total Hours	Off	Off	On		OEM	OEM
Set Drive Hours	Off	Off	On		OEM	OEM
Total Service Hours	5000	100	5000	Hours	OEM	OEM
Drive Service Hours	5000	100	5000	Hours	OEM	OEM
Total Disable Hours	10	0	500	Hours	OEM	OEM
Drive Disable Hours	10	0	500	Hours	OEM	OEM
Drive Disable Speed	20	0	100	%	OEM	OEM
Service Total Expired	Off	Off	On		Service	Service
Service Drive Expired	Off	Off	On		Service	Service
Power Save Delay	0	0	240	Minutes	OEM	OEM
Inhibit Input Type	0	0	2		OEM	OEM
Fault Code	On	Off	On		OEM	OEM