

Parameter Settings Report (Program)

12/12/2021 7:52:39 AM

Program (Drive Selected / Connected):

Drive Type / Model: GA500 CIPR-GA50*B012****

Software: 01016

Project: 1440GT

User:

Information

Parameter	Value	Information	Default Setting
A1 Initialization			
*A1-01 Access Level Selection... [M]	3	Expert Level	2
A1-02 Control Method Selection	2	Open Loop Vector	2
A1-03 Initialize Parameters	0	No Initialization	0
A1-04 Password	0		0
A1-05 Password Setting	0		0
A1-06 Application Preset	0	General-purpose	0
A1-07 DriveWorksEZ Function Selection	0	DWEZ Disabled	0
A1-11 Firmware Update Lock	0	Disabled	0
A1-12 Bluetooth ID	0		0
A2 User Parameters			
A2-01 User Parameter 1	A1-02	Control Method Selection	A1-02
A2-02 User Parameter 2	b1-01	Frequency Reference Selection 1	b1-01
A2-03 User Parameter 3	b1-02	Run Command Selection 1	b1-02
A2-04 User Parameter 4	b1-03	Stopping Method Selection	b1-03
A2-05 User Parameter 5	C1-01	Acceleration Time 1	C1-01
A2-06 User Parameter 6	C1-02	Deceleration Time 1	C1-02
A2-07 User Parameter 7	C6-01	Normal / Heavy Duty Selection	C6-01
A2-08 User Parameter 8	C6-02	Carrier Frequency Selection	C6-02
A2-09 User Parameter 9	d1-01	Reference 1	d1-01
A2-10 User Parameter 10	d1-02	Reference 2	d1-02
A2-11 User Parameter 11	d1-03	Reference 3	d1-03
A2-12 User Parameter 12	d1-04	Reference 4	d1-04
A2-13 User Parameter 13	d1-17	Jog Reference	d1-17
A2-14 User Parameter 14	E1-01	Input AC Supply Voltage	E1-01
A2-15 User Parameter 15	E1-03	V/f Pattern Selection	E1-03
A2-16 User Parameter 16	E1-04	Maximum Output Frequency	E1-04
A2-17 User Parameter 17	E1-05	Maximum Output Voltage	E1-05
A2-18 User Parameter 18	E1-06	Base Frequency	E1-06
A2-19 User Parameter 19	E1-09	Minimum Output Frequency	E1-09
A2-20 User Parameter 20	E1-13	Base Voltage	E1-13
A2-21 User Parameter 21	E2-01	Motor Rated Current (FLA)	E2-01
A2-22 User Parameter 22	E2-04	Motor Pole Count	E2-04
A2-23 User Parameter 23	E2-11	Motor Rated Power	E2-11

Parameter	Value	Information	Default Setting
A2-24 User Parameter 24	H4-02	Terminal AM Analog Output Gain	H4-02
A2-25 User Parameter 25	L1-01	Motor Overload (oL1) Protection	L1-01
A2-26 User Parameter 26	L3-04	Stall Prevention during Decel	L3-04
A2-27 User Parameter 27	-----		-----
A2-28 User Parameter 28	-----		-----
A2-29 User Parameter 29	-----		-----
A2-30 User Parameter 30	-----		-----
A2-31 User Parameter 31	-----		-----
A2-32 User Parameter 32	-----		-----
A2-33 User Parameter Auto Selection	0	Disabled: Manual Entry Required	0
<u>b1 Operation Mode Selection</u>			
b1-01 Frequency Reference Selection 1	1	Analog Input	1
b1-02 Run Command Selection 1	1	Digital Input	1
b1-03 Stopping Method Selection	0	Ramp to Stop	0
b1-04 Reverse Operation Selection	0	Reverse Enabled	0
b1-06 Digital Input Reading	1	Double Scan	1
b1-07 LOCAL/REMOTE Run Selection	0	Disregard Existing RUN Command	0
b1-08 Run Command Select in PRG Mode	0	Disregard RUN while Programming	0
b1-09 LOCAL/REMOTE Select during RUN	0	Disabled	0
b1-14 Phase Order Selection	0	Standard	0
b1-15 Frequency Reference Selection 2	0	Keypad	0
b1-16 Run Command Selection 2	0	Keypad	0
b1-17 Run Command at Power Up	0	Disregard Existing RUN Command	0
b1-35 Digital Input Deadband Time	0.0 ms		0.0 ms
<u>b2 DC Inj / Short Ckt Braking</u>			
b2-01 DC Injection/Zero SpeedThreshold	0.5 Hz		0.5 Hz
b2-02 DC Injection Braking Current	50 %		50 %
b2-03 DC Inject Braking Time at Start	0.00 sec		0.00 sec
b2-04 DC Inject Braking Time at Stop	0.50 sec		0.50 sec
b2-08 Magnetic Flux Compensation Value	0 %		0 %
<u>b3 Speed Search</u>			
b3-01 Speed Search at Start Selection	0	Disabled	0
b3-02 SpeedSearch Deactivation Current	100 %		100 %
*b3-03 Speed Search Deceleration Time... [M]	0.1 sec		2.0 sec
*b3-05 Speed Search Delay Time... [M]	0.1 sec		0.2 sec
b3-06 Speed Estimation Current Level 1	0.5		0.5
b3-07 Speed Estimation Current Level 2	1.0		1.0
b3-08 Speed Estimation ACR P Gain	0.50		0.50
b3-09 Speed Estimation ACR I Time	2.0 ms		2.0 ms
b3-10 Speed Estimation Detection Gain	1.05		1.05
b3-14 Bi-directional Speed Search	0	Disabled	0
b3-17 Speed Est Retry Current Level	150 %		150 %
b3-18 Speed Est Retry Detection Time	0.10 sec		0.10 sec
b3-19 Speed Search Restart Attempts	3		3
b3-24 Speed Search Method Selection	2	Current Detection 2	2
b3-25 Speed Search Wait Time	0.5 sec		0.5 sec
b3-26 Direction Determination Level	1000		1000
b3-31 Spd Search Current Reference Lvl	1.50		1.50
b3-32 Spd Search Current Complete Lvl	1.20		1.20
b3-33 Speed Search during Uv Selection	1	Enabled	1
b3-39 Regen Judgment Lv of Spd Search	15 %		15 %
b3-56 InverseRotationSearch WaitTime	0.5 sec		0.5 sec
<u>b4 Timer Function</u>			

Parameter	Value	Information	Default Setting
b4-01 Timer Function ON-Delay Time	0.0 sec		0.0 sec
b4-02 Timer Function OFF-Delay Time	0.0 sec		0.0 sec
b4-03 Terminal MA,MB,MC ON-Delay Time	0 ms		0 ms
b4-04 Terminal MA,MB,MC OFF-Delay Time	0 ms		0 ms
b4-05 Terminal P1 ON-Delay Time	0 ms		0 ms
b4-06 Terminal P1 OFF-Delay Time	0 ms		0 ms
b4-07 Terminal P2 ON-Delay Time	0 ms		0 ms
b4-08 Terminal P2 OFF-Delay Time	0 ms		0 ms
b5 PID Control			
b5-01 PID Mode Setting	0	Disabled	0
b5-02 Proportional Gain (P)	1.00		1.00
b5-03 Integral Time (I)	1.0 sec		1.0 sec
b5-04 Integral Limit	100.0 %		100.0 %
b5-05 Derivative Time (D)	0.00 sec		0.00 sec
b5-06 PID Output Limit	100.0 %		100.0 %
b5-07 PID Offset Adjustment	0.0 %		0.0 %
b5-08 PID Primary Delay Time Constant	0.00 sec		0.00 sec
b5-09 PID Output Level Selection	0	Normal Output (Direct Acting)	0
b5-10 PID Output Gain Setting	1.00		1.00
b5-11 PID Output Reverse Selection	0	Lower Limit is Zero	0
b5-12 Feedback Loss Detection Select	0	Digital Out Only, Always Detect	0
b5-13 PID Feedback Loss Detection Lvl	0 %		0 %
b5-14 PID Feedback Loss Detection Time	1.0 sec		1.0 sec
b5-15 PID Sleep Function Start Level	0.0 Hz		0.0 Hz
b5-16 PID Sleep Delay Time	0.0 sec		0.0 sec
b5-17 PID Accel/Decel Time	0.0 sec		0.0 sec
b5-18 b5-19 PID Setpoint Selection	0	Disabled	0
b5-19 PID Setpoint Value	0.00 %		0.00 %
b5-20 PID Unit Selection	1	0.01% units	1
b5-34 PID Output Lower Limit Level	0.0 %		0.0 %
b5-35 PID Input Limit Level	1000.0 %		1000.0 %
b5-36 PID High Feedback Detection Lvl	100 %		100 %
b5-37 PID High Feedback Detection Time	1.0 sec		1.0 sec
b5-40 Frequency Reference Monitor @PID	0	U1-01 Includes PID Output	0
b5-47 PID Trim Mode Output Reverse Sel	1	Negative Output Accepted	1
b5-53 PID Integrator Ramp Limit	0.0 Hz		0.0 Hz
b5-55 PID Feedback Monitor Selection	0	Not Used	0
b5-56 PID Feedback Monitor Gain	1.00		1.00
b5-57 PID Feedback Monitor Bias	0.00		0.00
b5-58 PID Setpoint 2	0.00 %		0.00 %
b5-59 PID Setpoint 3	0.00 %		0.00 %
b5-60 PID Setpoint 4	0.00 %		0.00 %
b5-61 PID Trim Mode Lower Limit Sel	0	Disabled	0
b5-62 PID Trim Mode Lower Limit Value	0.00 %		0.00 %
b5-63 PID Differential FB Monitor Sel	0	Not Used	0
b5-64 PID Differential FB Monitor Gain	1.00		1.00
b5-65 PID Differential FB Monitor Bias	0.00		0.00
b5-66 PID Feedback Monitor Level	0	Absolute	0
b5-67 PID Differential FB Monitor Lvl	0	Absolute	0
b5-89 Sleep Method Selection	0	Standard	0
b5-90 EZ Sleep Unit	0	0.1Hz units	0
b5-91 EZ Sleep Minimum Speed	0.0 Hz		0.0 Hz
b5-92 EZ Sleep Level	0.0 Hz		0.0 Hz

Parameter	Value	Information	Default Setting
b5-93 EZ Sleep Time	5.0 sec		5.0 sec
b5-94 EZ Sleep Wake-up Level	0.00 %		0.00 %
b5-95 EZ Sleep Wake-up Mode	0	Absolute	0
b5-96 EZ Sleep Wake-up Time	1.0 sec		1.0 sec
<u>b6 Dwell Function</u>			
b6-01 Dwell Reference at Start	0.0 Hz		0.0 Hz
b6-02 Dwell Time at Start	0.0 sec		0.0 sec
b6-03 Dwell Reference at Stop	0.0 Hz		0.0 Hz
b6-04 Dwell Time at Stop	0.0 sec		0.0 sec
<u>b8 Energy Saving</u>			
b8-01 Energy Saving Control Selection	0	Disabled	0
b8-02 Energy Saving Gain	0.7		0.7
b8-03 Energy Saving Filter Time	0.50 sec		0.50 sec
<u>C1 Accel & Decel Time</u>			
*C1-01 Acceleration Time 1... [M]	4.00 sec		10.00 sec
*C1-02 Deceleration Time 1... [M]	1.00 sec		10.00 sec
*C1-03 Acceleration Time 2... [M]	4.00 sec		10.00 sec
*C1-04 Deceleration Time 2... [M]	1.80 sec		10.00 sec
C1-05 Acceleration Time 3	10.00 sec		10.00 sec
C1-06 Deceleration Time 3	10.00 sec		10.00 sec
C1-07 Acceleration Time 4	10.00 sec		10.00 sec
C1-08 Deceleration Time 4	10.00 sec		10.00 sec
*C1-09 Fast Stop Time... [M]	0.90 sec		10.00 sec
*C1-10 Accel/Decel Time Setting Units... [M]	0	0.01 s (0.00 to 600.00 s)	1
C1-11 Accel/Decel Time Switchover Freq	0.0 Hz		0.0 Hz
C1-14 Accel/Decel Rate Frequency	0.0 Hz		0.0 Hz
<u>C2 S-Curve Characteristics</u>			
C2-01 S-Curve Time @ Start of Accel	0.20 sec		0.20 sec
C2-02 S-Curve Time @ End of Accel	0.20 sec		0.20 sec
*C2-03 S-Curve Time @ Start of Decel... [M]	0.00 sec		0.20 sec
C2-04 S-Curve Time @ End of Decel	0.00 sec		0.00 sec
<u>C3 Slip Compensation</u>			
C3-01 Slip Compensation Gain	1.0		1.0
C3-02 Slip Compensation Delay Time	200 ms		200 ms
C3-03 Slip Compensation Limit	200 %		200 %
C3-04 Slip Compensation at Regen	0	Disabled	0
C3-05 Output Voltage Limit Selection	0	Disabled	0
C3-16 Vout Modulation Limit Start Lvl	90.0 %		90.0 %
C3-17 Vout Modulation Limit Max Level	100.0 %		100.0 %
C3-18 Output Voltage Limit Level	90.0 %		90.0 %
<u>C4 Torque Compensation</u>			
C4-01 Torque Compensation Gain	1.00		1.00
C4-02 Torque Compensation Delay Time	20 ms		20 ms
C4-03 Torque Compensation @ FWD Start	0.0 %		0.0 %
C4-04 Torque Compensation @ REV Start	0.0 %		0.0 %
C4-05 Torque Compensation Time	10 ms		10 ms
C4-06 Motor 2 Torque Comp Delay Time	150 ms		150 ms
<u>C5 Auto Speed Regulator (ASR)</u>			
C5-29 Speed Control Response	1	High Performance 1	1
<u>C6 Duty & Carrier Frequency</u>			
C6-01 Normal / Heavy Duty Selection	1	Normal Duty Rating	1
C6-02 Carrier Frequency Selection	07	Swing PWM1 (Audible Sound 1)	07
C6-09 Carrier Freq at Rotational Tune	0	5kHz	0

Parameter	Value	Information	Default Setting
<u>d1 Frequency Reference</u>			
d1-01 Reference 1	0.00 Hz		0.00 Hz
d1-02 Reference 2	0.00 Hz		0.00 Hz
d1-03 Reference 3	0.00 Hz		0.00 Hz
d1-04 Reference 4	0.00 Hz		0.00 Hz
d1-05 Reference 5	0.00 Hz		0.00 Hz
d1-06 Reference 6	0.00 Hz		0.00 Hz
d1-07 Reference 7	0.00 Hz		0.00 Hz
d1-08 Reference 8	0.00 Hz		0.00 Hz
d1-09 Reference 9	0.00 Hz		0.00 Hz
d1-10 Reference 10	0.00 Hz		0.00 Hz
d1-11 Reference 11	0.00 Hz		0.00 Hz
d1-12 Reference 12	0.00 Hz		0.00 Hz
d1-13 Reference 13	0.00 Hz		0.00 Hz
d1-14 Reference 14	0.00 Hz		0.00 Hz
d1-15 Reference 15	0.00 Hz		0.00 Hz
d1-16 Reference 16	0.00 Hz		0.00 Hz
d1-17 Jog Reference	6.00 Hz		6.00 Hz
<u>d2 Reference Limits</u>			
d2-01 Frequency Reference Upper Limit	100.0 %		100.0 %
*d2-02 Frequency Reference Lower Limit... [M]	7.5 %		0.0 %
d2-03 Analog Frequency Ref Lower Limit	0.0 %		0.0 %
<u>d3 Jump Frequency</u>			
d3-01 Jump Frequency 1	0.0 Hz		0.0 Hz
d3-02 Jump Frequency 2	0.0 Hz		0.0 Hz
d3-03 Jump Frequency 3	0.0 Hz		0.0 Hz
d3-04 Jump Frequency Width	1.0 Hz		1.0 Hz
<u>d4 Frequency Ref Up/Down & Hold</u>			
d4-01 Freq Reference Hold Selection	0	Disabled	0
d4-03 Up/Down 2 Bias Step Frequency	0.00 Hz		0.00 Hz
d4-04 Up/Down 2 Ramp Selection	0	Use Selected Accel/Decel Time	0
d4-05 Up/Down 2 Bias Mode Selection	0	Hold when Neither Up/Down Closed	0
d4-06 Frequency Ref Bias (Up/Down 2)	0.0 %		0.0 %
d4-07 Analog Freq Ref Fluctuate Limit	1.0 %		1.0 %
d4-08 Up/Down 2 Bias Upper Limit	100.0 %		100.0 %
d4-09 Up/Down 2 Bias Lower Limit	0.0 %		0.0 %
d4-10 Up/Down Freq Lower Limit Select	0	Greater of d2-02 or Analog	0
<u>d6 Field Weakening /Forcing</u>			
d6-03 Field Forcing Selection	0	Disabled	0
d6-06 Field Forcing Limit	400 %		400 %
<u>d7 Offset Frequency</u>			
d7-01 Offset Frequency 1	0.0 %		0.0 %
d7-02 Offset Frequency 2	0.0 %		0.0 %
d7-03 Offset Frequency 3	0.0 %		0.0 %
<u>E1 V/f Pattern for Motor 1</u>			
E1-01 Input AC Supply Voltage	240 VAC		240 VAC
E1-03 V/f Pattern Selection	0F	Custom	0F
*E1-04 Maximum Output Frequency... [M]	100.0 Hz		60.0 Hz
E1-05 Maximum Output Voltage	230.0 VAC		230.0 VAC
E1-06 Base Frequency	60.0 Hz		60.0 Hz
E1-07 Mid Point A Frequency	3.0 Hz		3.0 Hz
E1-08 Mid Point A Voltage	13.8 VAC		13.8 VAC
E1-09 Minimum Output Frequency	0.5 Hz		0.5 Hz

Parameter	Value	Information	Default Setting
E1-10 Minimum Output Voltage	2.9 VAC		2.9 VAC
E1-11 Mid Point B Frequency	0.0 Hz		0.0 Hz
E1-12 Mid Point B Voltage	0.0 VAC		0.0 VAC
E1-13 Base Voltage	0.0 VAC		0.0 VAC
<u>E2 Motor Parameters</u>			
*E2-01 Motor Rated Current (FLA)... [M]	8.20 A		11.40 A
E2-02 Motor Rated Slip	2.700 Hz		2.700 Hz
E2-03 Motor No-Load Current	3.70 A		3.70 A
E2-04 Motor Pole Count	4		4
E2-05 Motor Line-to-Line Resistance	1.034 Ω		1.034 Ω
E2-06 Motor Leakage Inductance	19.0 %		19.0 %
E2-07 Motor Saturation Coefficient 1	0.50		0.50
E2-08 Motor Saturation Coefficient 2	0.75		0.75
E2-09 Motor Mechanical Loss	0.0 %		0.0 %
E2-11 Motor Rated Power	3.00 HP		3.00 HP
<u>F6 Communication Options</u>			
F6-01 Communication Error Selection	1	Coast to Stop	1
F6-02 Comm External Fault (EF0) Detect	0	Always Detected	0
F6-03 Comm External Fault (EF0) Select	1	Coast to Stop	1
F6-04 bUS Error Detection Time	2.0 sec		2.0 sec
F6-06 Torque Limit by Comm. Option	0	Disabled	0
F6-07 Multi-Step Ref @ NetRef/ComRef	1	Enable Multi-Step References	1
F6-08 Comm Parameter Reset @Initialize	0	No Reset - Parameters Retained	0
F6-10 CC-Link Node Address	0		0
F6-11 CC-Link Communication Speed	0	156 kbps	0
F6-14 BUS Error Auto Reset	0	Disabled	0
F6-15 Comm. Option Parameters Reload	0	Reload at Next Power Cycle	0
F6-16 Gateway Mode	0	Disabled	0
F6-20 MECHATROLINK Station Address	21		21
F6-21 MECHATROLINK Frame Size	0	32byte (M-2) / 64byte (M-3)	0
F6-22 MECHATROLINK Link Speed	0	10 Mbps	0
F6-23 MECHATROLINK Monitor Select (E)	0000		0000
F6-24 MECHATROLINK Monitor Select (F)	0000		0000
F6-25 MECHATROLINK Watchdog Error Sel	1	Coast to Stop	1
F6-26 MECHATROLINK Allowable No of Err	2		2
F6-30 PROFIBUS-DP Node Address	0		0
F6-31 PROFIBUS-DP Clear Mode Selection	0	Reset	0
F6-32 PROFIBUS-DP Data Format Select	0	PPO Type	0
F6-35 CANopen Node ID Selection	0		0
F6-36 CANopen Communication Speed	6	500 kbps	6
F6-50 DeviceNet MAC Address	64		64
F6-51 DeviceNet Baud Rate	4	Detect Automatically	4
F6-52 DeviceNet PCA Setting	21		21
F6-53 DeviceNet PPA Setting	71		71
F6-54 DeviceNet Idle Fault Detection	0	Enabled	0
F6-56 DeviceNet Speed Scaling	0		0
F6-57 DeviceNet Current Scaling	0		0
F6-58 DeviceNet Torque Scaling	0		0
F6-59 DeviceNet Power Scaling	0		0
F6-60 DeviceNet Voltage Scaling	0		0
F6-61 DeviceNet Time Scaling	0		0
F6-62 DeviceNet Heartbeat Interval	0		0
F6-64 Dynamic Out Assembly 109 Param1	0000		0000

Parameter	Value	Information	Default Setting
F6-65 Dynamic Out Assembly 109 Param2	0000		0000
F6-66 Dynamic Out Assembly 109 Param3	0000		0000
F6-67 Dynamic Out Assembly 109 Param4	0000		0000
F6-68 Dynamic In Assembly 159 Param 1	0000		0000
F6-69 Dynamic In Assembly 159 Param 2	0000		0000
F6-70 Dynamic In Assembly 159 Param 3	0000		0000
F6-71 Dynamic In Assembly 159 Param 4	0000		0000
F6-72 PowerLink Node Address	0		0
<u>F7 Ethernet Options</u>			
F7-01 IP Address 1	192		192
F7-02 IP Address 2	168		168
F7-03 IP Address 3	1		1
F7-04 IP Address 4	20		20
F7-05 Subnet Mask 1	255		255
F7-06 Subnet Mask 2	255		255
F7-07 Subnet Mask 3	255		255
F7-08 Subnet Mask 4	0		0
F7-09 Gateway Address 1	192		192
F7-10 Gateway Address 2	168		168
F7-11 Gateway Address 3	1		1
F7-12 Gateway Address 4	1		1
F7-13 Address Mode at Startup	2	DHCP	2
F7-14 Duplex Mode Selection	1	Auto/Auto	1
F7-15 Communication Speed Selection	10	10/10 Mbps	10
F7-16 Timeout Value	0.0 sec		0.0 sec
F7-17 EtherNet/IP Speed Scaling Factor	0		0
F7-18 EtherNet/IP Current Scale Factor	0		0
F7-19 EtherNet/IP Torque Scale Factor	0		0
F7-20 EtherNet/IP Power Scaling Factor	0		0
F7-21 EtherNet/IP Voltage Scale Factor	0		0
F7-22 EtherNet/IP Time Scaling	0		0
F7-23 Dynamic Out Param 1 for CommCard	0000		0000
F7-24 Dynamic Out Param 2 for CommCard	0000		0000
F7-25 Dynamic Out Param 3 for CommCard	0000		0000
F7-26 Dynamic Out Param 4 for CommCard	0000		0000
F7-27 Dynamic Out Param 5 for CommCard	0000		0000
F7-28 Dynamic Out Param 6 for CommCard	0000		0000
F7-29 Dynamic Out Param 7 for CommCard	0000		0000
F7-30 Dynamic Out Param 8 for CommCard	0000		0000
F7-31 Dynamic Out Param 9 for CommCard	0000		0000
F7-32 Dynamic Out Param 10 for ComCard	0000		0000
F7-33 Dynamic In Param 1 for CommCard	0000		0000
F7-34 Dynamic In Param 2 for CommCard	0000		0000
F7-35 Dynamic In Param 3 for CommCard	0000		0000
F7-36 Dynamic In Param 4 for CommCard	0000		0000
F7-37 Dynamic In Param 5 for CommCard	0000		0000
F7-38 Dynamic In Param 6 for CommCard	0000		0000
F7-39 Dynamic In Param 7 for CommCard	0000		0000
F7-40 Dynamic In Param 8 for CommCard	0000		0000
F7-41 Dynamic In Param 9 for CommCard	0000		0000
F7-42 Dynamic In Param 10 for CommCard	0000		0000
F7-60 PZD1 Write (Control Word)	0000		0000
F7-61 PZD2 Write (Frequency Reference)	0000		0000

Parameter	Value	Information	Default Setting
F7-62 PZD3 Write	0000		0000
F7-63 PZD4 Write	0000		0000
F7-64 PZD5 Write	0000		0000
F7-65 PZD6 Write	0000		0000
F7-66 PZD7 Write	0000		0000
F7-67 PZD8 Write	0000		0000
F7-68 PZD9 Write	0000		0000
F7-69 PZD10 Write	0000		0000
F7-70 PZD1 Read (Status Word)	0000		0000
F7-71 PZD2 Read (Output Frequency)	0000		0000
F7-72 PZD3 Read	0000		0000
F7-73 PZD4 Read	0000		0000
F7-74 PZD5 Read	0000		0000
F7-75 PZD6 Read	0000		0000
F7-76 PZD7 Read	0000		0000
F7-77 PZD8 Read	0000		0000
F7-78 PZD9 Read	0000		0000
F7-79 PZD10 Read	0000		0000
H1 Digital Inputs			
H1-01 Terminal S1 Function Selection	0040	Forward RUN (2-Wire)	0040
H1-02 Terminal S2 Function Selection	0041	Reverse RUN (2-Wire)	0041
*H1-03 Terminal S3 Function Selection... [M]	0012	Forward Jog	0024
*H1-04 Terminal S4 Function Selection... [M]	0013	Reverse Jog	0014
*H1-05 Terminal S5 Function Selection... [M]	0007	Accel/Decel Time Selection 1	0003
*H1-06 Terminal S6 Function Selection... [M]	0008	Baseblock Command (N.O.)	0004
*H1-07 Terminal S7 Function Selection... [M]	0015	Fast Stop (N.O.)	0006
H1-21 Terminal S1 Function Select 2	000F	Not Used	000F
H1-22 Terminal S2 Function Select 2	000F	Not Used	000F
H1-23 Terminal S3 Function Select 2	000F	Not Used	000F
H1-24 Terminal S4 Function Select 2	000F	Not Used	000F
H1-25 Terminal S5 Function Select 2	000F	Not Used	000F
H1-26 Terminal S6 Function Select 2	000F	Not Used	000F
H1-27 Terminal S7 Function Select 2	000F	Not Used	000F
H1-40 Mbus Reg 15C0h bit0 Input Func	000F	Not Used	000F
H1-41 Mbus Reg 15C0h bit1 Input Func	000F	Not Used	000F
H1-42 Mbus Reg 15C0h bit2 Input Func	000F	Not Used	000F
H2 Digital Outputs			
H2-01 Term MA,MB,MC Function Selection	000E	Fault	000E
H2-02 Term P1 Function Selection	0000	During Run	0000
H2-03 Term P2 Function Selection	0002	Speed Agree 1	0002
H2-06 Watt Hour Output Unit Selection	0	0.1 kWh units	0
H2-07 Modbus Register 1 Address Select	0001		0001
H2-08 Modbus Register 1 Bit Select	0000		0000
H2-09 Modbus Register 2 Address Select	0001		0001
H2-10 Modbus Register 2 Bit Select	0000		0000
H2-20 Comparator 1 Monitor Selection	102	Output Frequency	102
H2-21 Comparator 1 Lower Limit	0.0 %		0.0 %
H2-22 Comparator 1 Upper Limit	0.0 %		0.0 %
H2-23 Comparator 1 Hysteresis	0.0 %		0.0 %
H2-24 Comparator 1 On-Delay Time	0.0 sec		0.0 sec
H2-25 Comparator 1 Off-Delay Time	0.0 sec		0.0 sec
H2-26 Comparator 2 Monitor Selection	103	Output Current	103
H2-27 Comparator 2 Lower Limit	0.0 %		0.0 %

Parameter	Value	Information	Default Setting
H2-28 Comparator 2 Upper Limit	0.0 %		0.0 %
H2-29 Comparator 2 Hysteresis	0.0 %		0.0 %
H2-30 Comparator 2 On-Delay Time	0.0 sec		0.0 sec
H2-31 Comparator 2 Off-Delay Time	0.0 sec		0.0 sec
H2-32 Comparator 1 Filter Time	0.0 sec		0.0 sec
H2-33 Comparator1 Protection Selection	4	Digital Output Only	4
H2-34 Comparator 2 Filter Time	0.0 sec		0.0 sec
H2-35 Comparator2 Protection Selection	4	Digital Output Only	4
H2-36 Comparator 1 Ineffective Time	0.0 sec		0.0 sec
H2-37 Comparator 2 Ineffective Time	0.0 sec		0.0 sec
H2-40 Mbus Reg 15E0h bit0 Output Func	000F	Not Used	000F
H2-41 Mbus Reg 15E0h bit1 Output Func	000F	Not Used	000F
H2-42 Mbus Reg 15E0h bit2 Output Func	000F	Not Used	000F
H2-60 Term MA,MB,MC Secondary Function	0F	Not Used	0F
H2-61 Term MA,MB,MC Logical Operation	0	A=B=1	0
H2-62 Term MA,MB,MC Minimum ON Time	0.1 sec		0.1 sec
H2-63 Terminal P1 Secondary Function	0F	Not Used	0F
H2-64 Terminal P1 Logical Operation	0	A=B=1	0
H2-65 Terminal P1 Minimum ON Time	0.1 sec		0.1 sec
H2-66 Terminal P2 Secondary Function	0F	Not Used	0F
H2-67 Terminal P2 Logical Operation	0	A=B=1	0
H2-68 Terminal P2 Minimum ON Time	0.1 sec		0.1 sec
<u>H3 Analog Inputs</u>			
H3-01 Terminal A1 Signal Level Select	0	0 to 10V (With Limit)	0
H3-02 Terminal A1 Function Selection	00	Frequency Reference	00
H3-03 Terminal A1 Gain Setting	100.0 %		100.0 %
*H3-04 Terminal A1 Bias Setting... [M]	20.0 %		0.0 %
H3-09 Terminal A2 Signal Level Select	2	4 to 20 mA	2
H3-10 Terminal A2 Function Selection	00	Frequency Reference	00
H3-11 Terminal A2 Gain Setting	100.0 %		100.0 %
H3-12 Terminal A2 Bias Setting	0.0 %		0.0 %
H3-13 Analog Input FilterTime Constant	0.03 sec		0.03 sec
H3-14 Analog Input Terminal Enable Sel	7	Terminals A1 and A2	7
H3-16 Terminal A1 Offset	0		0
H3-17 Terminal A2 Offset	0		0
H3-40 Mbus Reg 15C1h Input Function	0F	Not Used	0F
H3-41 Mbus Reg 15C2h Input Function	0F	Not Used	0F
H3-42 Mbus Reg 15C3h Input Function	0F	Not Used	0F
H3-43 Mbus Reg Inputs FilterTime Const	0.00 sec		0.00 sec
<u>H4 Analog Outputs</u>			
H4-01 Terminal AM Analog Output Select	102	Output Frequency	102
H4-02 Terminal AM Analog Output Gain	100.0 %		100.0 %
H4-03 Terminal AM Analog Output Bias	0.0 %		0.0 %
H4-07 Terminal AM Signal Level Select	0	0 to 10 Vdc	0
H4-20 Analog Power Monitor 100% Level	0.00 kW		0.00 kW
<u>H5 Modbus Communication</u>			
H5-01 Drive Node Address	1F		1F
H5-02 Communication Speed Selection	3	9600 bps	3
H5-03 Communication Parity Selection	0	No parity	0
H5-04 Communication Error Stop Method	3	Alarm Only	3
H5-05 Comm Fault Detection Selection	1	Enabled	1
H5-06 Drive Transmit Wait Time	5 ms		5 ms
H5-09 CE Detection Time	2.0 sec		2.0 sec

Parameter	Value	Information	Default Setting
H5-10 Modbus Register 0025H Unit Sel	0	0.1 V units	0
H5-11 Comm ENTER Command Mode	1	ENTER Command Not Required	1
H5-12 Run Command Method Selection	0	FWD/Stop, REV/Stop	0
H5-17 ENTER command response @CPU BUSY	0	Ignore Command(No ROM/RAM Write)	0
H5-18 Motor Speed Filter over Comms	0 ms		0 ms
H5-20 Communication Parameters Reload	0	Reload at Next Power Cycle	0
H5-22 Speed Search from MODBUS	0	Disabled	0
H5-25 Function 5A Register 1 Selection	0044		0044
H5-26 Function 5A Register 2 Selection	0045		0045
H5-27 Function 5A Register 3 Selection	0042		0042
H5-28 Function 5A Register 4 Selection	0049		0049
<u>H6 Pulse Train Input/Output</u>			
H6-01 Terminal RP Pulse Train Function	0	Frequency Reference	0
H6-02 Terminal RP Frequency Scaling	1440 Hz		1440 Hz
H6-03 Terminal RP Function Gain	100.0 %		100.0 %
H6-04 Terminal RP Function Bias	0.0 %		0.0 %
H6-05 Terminal RP Filter Time	0.10 sec		0.10 sec
H6-06 Terminal MP Monitor Selection	102	Output Frequency	102
H6-07 Terminal MP Frequency Scaling	1440 Hz		1440 Hz
H6-08 Terminal RP Minimum Frequency	0.5 Hz		0.5 Hz
<u>H7 Virtual Inputs / Outputs</u>			
H7-00 Virtual MFIO selection	00	Disabled	00
H7-01 Virtual Multi-Function Input 1	000F	Not Used	000F
H7-02 Virtual Multi-Function Input 2	000F	Not Used	000F
H7-03 Virtual Multi-Function Input 3	000F	Not Used	000F
H7-04 Virtual Multi-Function Input 4	000F	Not Used	000F
H7-10 Virtual Multi-Function Output 1	000F	Not Used	000F
H7-11 Virtual Output 1 Delay Time	0.1 sec		0.1 sec
H7-12 Virtual Multi-Function Output 2	000F	Not Used	000F
H7-13 Virtual Output 2 Delay Time	0.1 sec		0.1 sec
H7-14 Virtual Multi-Function Output 3	000F	Not Used	000F
H7-15 Virtual Output 3 Delay Time	0.1 sec		0.1 sec
H7-16 Virtual Multi-Function Output 4	000F	Not Used	000F
H7-17 Virtual Output 4 Delay Time	0.1 sec		0.1 sec
H7-30 Virtual Analog Input Selection	0F	Not Used	0F
H7-31 Virtual Analog Input Gain	100.0 %		100.0 %
H7-32 Virtual Analog Input Bias	0.0 %		0.0 %
H7-40 Virtual Analog Out Signal Select	0	0 to 100 % (Absolute Value)	0
H7-41 Virtual Analog Output Function	102	Output Frequency	102
H7-42 Virtual Analog Output FilterTime	0.00 sec		0.00 sec
<u>L1 Motor Protection</u>			
L1-01 Motor Overload (oL1) Protection	2	Constant Torque 10:1 Speed Range	2
L1-02 Motor Overload Protection Time	1.0 min		1.0 min
L1-03 Motor Thermistor oH Alarm Select	3	Alarm Only	3
L1-04 Motor Thermistor oH Fault Select	1	Coast to Stop	1
L1-05 Motor Thermistor Filter Time	0.20 sec		0.20 sec
L1-08 oL1 Current Level	0.00 A		0.00 A
L1-13 Motor Overload Memory Selection	1	Enabled	1
<u>L2 Power Loss Ride Through</u>			
L2-01 Power Loss Ride Through Select	0	Disabled	0
L2-02 Power Loss Ride Through Time	0.5 sec		0.5 sec
L2-03 Minimum Baseblock Time	0.5 sec		0.5 sec
L2-04 Powerloss V/f Recovery Ramp Time	0.3 sec		0.3 sec

Parameter	Value	Information	Default Setting
L2-05 Undervoltage Detection Lvl (Uv1)	160 VDC		160 VDC
L2-06 Kinetic Energy Backup Decel Time	0.0 sec		0.0 sec
L2-07 Kinetic Energy Backup Accel Time	0.0 sec		0.0 sec
L2-08 Frequency Gain at KEB Start	100 %		100 %
L2-09 KEB Minimum Frequency Level	20 %		20 %
L2-10 Minimum KEB Time	50 ms		50 ms
L2-11 KEB DC Bus Voltage Setpoint	260 VDC		260 VDC
L2-29 Kinetic Energy Backup Method	0	Single Drive KEB Ride-Thru 1	0
L2-30 KEB Zero Speed Operation	0	Baseblock	0
L2-31 KEB Start Voltage Offset Level	0 VDC		0 VDC
<u>L3 Stall Prevention</u>			
L3-01 Stall Prevention during Accel	1	Enabled	1
L3-02 Stall Prevent Level during Accel	120 %		120 %
L3-03 Stall Prevent Limit during Accel	50 %		50 %
*L3-04 Stall Prevention during Decel... [M]	3	General Purpose w/ DB resistor	1
L3-11 Overvoltage Suppression Select	0	Disabled	0
L3-17 DC Bus Regulation Level	375 VDC		375 VDC
L3-20 DC Bus Voltage Adjustment Gain	0.30		0.30
L3-21 OVSUPPRESSION Accel/Decel P Gain	1.00		1.00
L3-24 Motor Accel Time @ Rated Torque	0.145 sec		0.145 sec
L3-25 Load Inertia Ratio	1.0		1.0
L3-26 Additional DC Bus Capacitors	0 uF		0 uF
L3-35 Speed Agree Width for Auto Decel	0.00 Hz		0.00 Hz
L3-36 Current Suppression Gain@Accel	20.0		20.0
L3-37 Current Limit P Gain @ Accel	5 ms		5 ms
L3-38 Current Limit I Time @ Accel	10.0		10.0
L3-39 Current Limit Filter Time @Accel	100.0 ms		100.0 ms
L3-40 Current Limit S-Curve @ Acc/Dec	0	Disabled	0
<u>L4 Speed Detection</u>			
L4-01 Speed Agree Detection Level	0.0 Hz		0.0 Hz
L4-02 Speed Agree Detection Width	2.0 Hz		2.0 Hz
L4-03 Speed Agree Detection Level(+/-)	0.0 Hz		0.0 Hz
L4-04 Speed Agree Detection Width(+/-)	2.0 Hz		2.0 Hz
L4-05 Fref Loss Detection Selection	0	Stop	0
L4-06 Frequency Reference @Loss of Ref	80.0 %		80.0 %
L4-07 Speed Agree Detection Selection	0	No Detection during Baseblock	0
L4-08 Speed Agree Source Selection	0	Softstarter Output (Reference)	0
<u>L5 Fault Restart</u>			
L5-01 Number of Auto-Restart Attempts	0		0
L5-02 Fault Contact at Restart Select	0	Active Only when Not Restarting	0
L5-04 Interval Method Restart Time	10.0 sec		10.0 sec
L5-05 Auto-Restart Method	0	Continuous/Immediate Attempts	0
L5-07 Fault Reset Enable Select Grp1	1111	Enabled(oL1/oL2/oL3/oL4)	1111
L5-08 Fault Reset Enable Select Grp2	1111	Enabled(Uv1/ov/oH1/GF)	1111
<u>L6 Torque Detection</u>			
L6-01 Torque Detection Selection 1	0	Disabled	0
L6-02 Torque Detection Level 1	150 %		150 %
L6-03 Torque Detection Time 1	0.1 sec		0.1 sec
L6-04 Torque Detection Selection 2	0	Disabled	0
L6-05 Torque Detection Level 2	150 %		150 %
L6-06 Torque Detection Time 2	0.1 sec		0.1 sec
L6-07 Torque Detection Filter Time	0 ms		0 ms
L6-08 Mechanical Fatigue Detect Select	0	Disabled	0

Parameter	Value	Information	Default Setting
L6-09 Mech Fatigue Detect Speed Level	110.0 %		110.0 %
L6-10 Mech Fatigue Detect Delay Time	0.1 sec		0.1 sec
L6-11 Mech Fatigue Hold Off Time	0		0
<u>L7 Torque Limit</u>			
*L7-01 Forward Torque Limit... [M]	150 %		200 %
*L7-02 Reverse Torque Limit... [M]	150 %		200 %
L7-03 Forward Regenerative Trq Limit	200 %		200 %
L7-04 Reverse Regenerative Trq Limit	200 %		200 %
L7-06 Torque Limit Integral Time	200 ms		200 ms
L7-07 Torque Limit during Accel/Decel	0	Proportional only	0
L7-16 Torque Limit Process at Start	1	Enabled	1
<u>L8 Drive Protection</u>			
L8-01 3% ERF DB Resistor Protection	0	Disabled	0
L8-02 Overheat Alarm Level	110 °C		110 °C
L8-03 Overheat Pre-Alarm Selection	3	Alarm Only	3
L8-05 Input Phase Loss Protection Sel	0	Disabled	0
L8-07 Output Phase Loss Protection Sel	1	Fault when one phase is lost	1
L8-09 Output Ground Fault Detection	0	Disabled	0
L8-10 Heatsink Fan Operation Selection	0	During Run, w/ L8-11 Off-Delay	0
L8-11 Heatsink Fan Off-Delay Time	60 sec		60 sec
L8-12 Ambient Temperature Setting	40 °C		40 °C
L8-15 Drive oL2 @ Low Speed Protection	1	Enabled (Reduced oL2 Level)	1
L8-18 Software Current Limit Selection	0	Disabled	0
L8-19 Freq Reduction @ oH Pre-Alarm	0.8		0.8
L8-35 Installation Method Selection	0	IP20/OpenChassis Enc/Finless	0
L8-40 Carrier Freq Reduction Off-Delay	0.50 sec		0.50 sec
L8-41 High Current Alarm Selection	0	Disabled	0
L8-55 Internal DB TransistorProtection	1	Protection Enabled	1
<u>n2 Auto Freq Regulator (AFR)</u>			
n2-01 Automatic Freq Regulator Gain	1.00		1.00
n2-02 Automatic Freq Regulator Time 1	50 ms		50 ms
n2-03 Automatic Freq Regulator Time 2	750 ms		750 ms
<u>n3 HighSlip/OverexciteBraking</u>			
n3-13 OverexcitationBraking (OEB) Gain	1.10		1.10
n3-14 OEB High Frequency Injection	0		0
n3-21 HSB Current Suppression Level	100 %		100 %
n3-23 Overexcitation Braking Operation	0	Disabled	0
<u>n6 Online Tuning</u>			
n6-01 Online Tuning Selection	0	Disabled	0
n6-05 Online Tuning Gain	1.0		1.0
<u>o1 Keypad Display</u>			
o1-01 User Monitor Selection	106	Output Voltage Ref	106
o1-02 Monitor Selection at Power-up	1	Frequency Reference (U1-01)	1
o1-03 Frequency Display Unit Selection	0	0.01 Hz	0
o1-05 LCD Contrast Adjustment	5		5
o1-24 Custom Monitor 1	101	Frequency Reference	101
o1-25 Custom Monitor 2	102	Output Frequency	102
o1-26 Custom Monitor 3	103	Output Current	103
o1-27 Custom Monitor 4	0	Not Used	0
o1-28 Custom Monitor 5	0	Not Used	0
o1-29 Custom Monitor 6	0	Not Used	0
o1-30 Custom Monitor 7	0	Not Used	0
o1-31 Custom Monitor 8	0	Not Used	0

Parameter	Value	Information	Default Setting
o1-32 Custom Monitor 9	0	Not Used	0
o1-33 Custom Monitor 10	0	Not Used	0
o1-34 Custom Monitor 11	0	Not Used	0
o1-35 Custom Monitor 12	0	Not Used	0
o1-36 LCD Backlight Brightness	5		5
o1-37 LCD Backlight ON/OFF Selection	1	ON	1
o1-38 LCD Backlight Off-Delay	60 sec		60 sec
o1-39 Show Initial Setup Screen	1	Yes	1
o1-40 Home Screen Display Selection	0	Custom Monitor	0
o1-41 1st Monitor Area Selection	0	+/- Area (- o1-42 <input type="checkbox"/> o1-42)	0
o1-42 1st Monitor Area Setting	100.0 %		100.0 %
o1-43 2nd Monitor Area Selection	0	+/- Area (- o1-44 <input type="checkbox"/> o1-44)	0
o1-44 2nd Monitor Area Setting	100.0 %		100.0 %
o1-45 3rd Monitor Area Selection	0	+/- Area (- o1-46 <input type="checkbox"/> o1-46)	0
o1-46 3rd Monitor Area Setting	100.0 %		100.0 %
o1-47 Trend Plot 1 Scale Minimum Value	-100.0 %		-100.0 %
o1-48 Trend Plot 1 Scale Maximum Value	100.0 %		100.0 %
o1-49 Trend Plot 2 Scale Minimum Value	-100.0 %		-100.0 %
o1-50 Trend Plot 2 Scale Maximum Value	100.0 %		100.0 %
o1-51 Trend Plot Time Scale Setting	300 sec		300 sec
o1-55 Analog Gauge Area Selection	1	+ Area (0 <input type="checkbox"/> o1-56)	1
o1-56 Analog Gauge Area Setting	100.0 %		100.0 %
o1-58 Motor power unit selection	1	HP	1
<u>o2 Keypad Operation</u>			
o2-01 LO/RE Key Function Selection	1	Enabled	1
o2-02 STOP Key Function Selection	1	Enabled	1
o2-04 Drive Model (KVA) Selection	35	B012	35
o2-05 Home Mode Freq Ref Entry Mode	0	ENTER Key Required	0
o2-06 Keypad Disconnect Detection	1	Enabled	1
o2-07 Keypad RUN Direction @ Power-up	0	Forward	0
*o2-09 Region Code... [M]	1	American spec	0
o2-19 Parameter Write during Uv	0	Disabled	0
o2-23 External 24V Powerloss Detection	0	Disabled	0
o2-26 Alarm display at ext. 24V power	1	Enabled	1
o2-27 bCE Detection Selection	1	Coast to Stop	1
<u>o3 Copy Keypad Function</u>			
o3-02 Copy Allowed Selection	0	Disabled	0
o3-04 Select Backup/Restore Location	0	Memory Location 1	0
o3-05 Select Items to Backup/Restore	0	Standard Parameters	0
o3-06 Auto Parameter Backup Selection	1	Enabled	1
o3-07 Auto Parameter Backup Interval	1	Every 30 minutes	1
<u>o4 Maintenance Monitors</u>			
o4-22 Time Format	1	12 Hour Clock	1
o4-23 Date Format	2	MM/DD/YYYY	2
o4-24 bAT Detection Selection	0	Disable	0
<u>o5 Log Function</u>			
o5-01 Log Start/Stop Selection	0	OFF	0
o5-02 Log Sampling Interval	100 ms		100 ms
o5-03 Log Monitor Data 1	101	Frequency Reference	101
o5-04 Log Monitor Data 2	102	Output Frequency	102
o5-05 Log Monitor Data 3	103	Output Current	103
o5-06 Log Monitor Data 4	107	DC Bus Voltage	107
o5-07 Log Monitor Data 5	108	Output Power	108

Parameter	Value	Information	Default Setting
o5-08 Log Monitor Data 6	105	Motor Speed	105
o5-09 Log Monitor Data 7	110	Input Terminal Status	110
o5-10 Log Monitor Data 8	112	Drive Status	112
o5-11 Log Monitor Data 9	0	Not Used	0
o5-12 Log Monitor Data 10	0	Not Used	0