



TECHNICAL NOTE #:	TN-VFD-COM044
EFFECTIVE DATE:	9/11/01
SUPERSEDES DATE:	N/A
ORIGINATOR:	Saftronics Inc.
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FP5/GP5 Spec. "F" Modbus Address

Modbus Address for FP5/GP5

Start/Stop 0001H

- Bit 0 Run Command
- Bit 1 Forward/Reverse run
- Bit 2 Eternal Fault
- Bit 3 Fault Reset
- Bit 4 Close Terminal S3
- Bit 5 Close Terminal S4
- Bit 6 Close Terminal S5
- Bit 7 Close Terminal S6

Frequency Reference 0002H

This is scaled on .01 hertz

Multi-function Outputs 0009H

- Bit 0 Multi-function Output 1
- Bit 1 Multi-function Output 2

Monitor Data 0020H

- Bit 0 During run
- Bit 1 During reverse
- Bit 2 Inverter operation ready
- Bit 3 Major Fault
- Bit 4 Data setting error
- Bit 5 Multi-function (MA-MC) contact output
- Bit 6 Multi-function (M1-M2) contact output

Monitor Data 0021H

- Bit 0 Overcurrent (oC), Ground fault (GF), Load short circuit (SC)
- Bit 1 Overvoltage (oV)
- Bit 2 Inverter overload (oL2)
- Bit 3 Inverter overheat (oH1, oH2)
- Bit 4 –
- Bit 5 Main circuit fault (PUF)
- Bit 6 Braking Transistor fault (rr), Braking transistor overheat fault (rH)
- Bit 7 External fault (EF0, EF3 – EF6)
- Bit 8 Hardware fault (CPFx)
- Bit 9 Motor overload (oL1, oL3)
- Bit A –
- Bit B During undervoltage
- Bit C Power loss (UV1, UV2, UV3)
- Bit D Input phase (SPI), Output phase (SPO)

Monitor Data 0022H

Bit 0 During data write-in
Bit 3 Upper/Lower limit fault
Bit 4 Matching fault

0023H Frequency reference (0.1Hz resolution)

0024H Output frequency (0.1Hz resolution)

0027H Output current (0.1A resolution)

0028H Output voltage (1V resolution)

002AH External terminal input value

0031H DC Bus Voltage (1 V resolution)

Monitor Data 002BH

Bit 0 During run
Bit 1 During zero speed
Bit 2 Frequency agreed
Bit 3 Desired frequency agree
Bit 4 Frequency detection 1
Bit 5 Frequency detection 2
Bit 6 Inverter operation ready
Bit 7 During undervoltage detection
Bit 8 During output braking
Bit 9 Frequency reference mode
Bit A Run command mode
Bit B Overtorque detection
Bit C During frequency reference missing
Bit D –
Bit E Major fault (including communication fault)
Bit F Communication fault

002DH Multi-function contact output monitor

0031H Main circuit DC voltage

Monitor Data 003DH

Bit 0 CRC error
Bit 1 Data length error
Bit 2 –
Bit 3 Parity error
Bit 4 Overrun error
Bit 5 Frame error
Bit 6 Time-over

Parameter register values

001 – Parameter Selection/Initialization (**101H**)

002 – Operation Mode Selection (**102H**)

003 – Input Voltage (**103H**)

004 – Stop Method (**104H**)

005 – Motor Rotation (**105H**)

006 – Prohibit Reverse Operation (**106H**)

007 – Local/Remote Key Function (**107H**)

008 – Stop Key Function (**108H**)

009 – Frequency reference Setting (**109H**)

010 – V/F Pattern Selection (**10AH**)

011 – Max Frequency (**10BH**)

012 – Max. Voltage (**10CH**)

013 – Base Frequency (**10DH**)

014 – Mid. Output Frequency (**10EH**)
015 – Mid. Frequency Voltage (**10FH**)
016 – Min. Output Frequency (**110H**)
017 – Min. Output Voltage (**111H**)
018 – Acceleration Time 1 (**112H**)
019 – Deceleration Time 1 (**113H**)
020 – Acceleration Time 2 (**114H**)
021 – Deceleration Time 2 (**115H**)
022 – S-curve Selection (**116H**)
023 – Display Mode (**117H**)
024 – Frequency Reference 1 (**118H**)
025 – Frequency Reference 2 (**119H**)
026 – Frequency Reference 3 (**11AH**)
027 – Frequency Reference 4 (**11BH**)
028 – Not Used (**11CH**)
029 – Not Used (**11DH**)
030 – Jog Frequency (**11EH**)
031 – Frequency Upper Limit (**11FH**)
032 – Frequency Lower Limit (**120H**)
033 – Motor Rated Current (**121H**)
034 – Motor Thermal Protection (**122H**)
035 – Stop Method Selection for OH1 (**123H**)
036 – Multi-function Input Selection 1 (**124H**)
037 – Multi-function Input Selection 2 (**125H**)
038 – Multi-function Input Selection 3 (**126H**)
039 – Multi-function Input Selection 4 (**127H**)
040 – Multi-function Input Selection 5 (**128H**)
041 – Multi-function Output Selection 1 (**129H**)
042 – Multi-Function Output Selection 2 (**12AH**)
043 – Multi-analog Input Selection (**12BH**)
044 – FI terminal input selection (**12CH**)
045 – Frequency Reference Retention (**12DH**)
046 – Operation Method for Frequency Loss Detection (**12EH**)
047 – Frequency Reference Level at Loss of Frequency (**12FH**)
048 – Terminal FV Gain (**130H**)
049 – Terminal FV Bias (**131H**)
050 – Terminal FI Gain (**132H**)
051 – Terminal FI Bias (**133H**)
052 – Multi-function analog Output – AM (**134H**)
053 – Analog Monitor Gain (**135H**)
054 – Carrier Frequency (**136H**)
055 – Momentary Power Loss Ride through (**137H**)
056 – Speed Search Level (**138H**)
057 – Min. Baseblock Time (**139H**)
058 – V/F Reduction Level during Speed Search (**13AH**)
059 – Power Loss Ride-through Time (**13BH**)
060 – Automatic Retry Attempts (**13CH**)
061 – Fault Contacts Selection during (**13DH**)
062 – Jump Frequency 1 (**13EH**)
063 – Jump Frequency 2 (**13FH**)
064 – Jump Frequency Bandwidth (**140H**)
065 – Elapsed Time Selection (**141H**)
066 – Elapsed Timer 1 (**142H**)
067 – Elapsed Timer 2 (**143H**)
068 – DC Injection Current (**144H**)
069 – DC Injection Time at stop (**145H**)

- 070 – DC Injection Time at start (146H)**
- 071 – Torque Compensation Gain (147H)**
- 072 – Stall Prevention during decel (148H)**
- 073 – Stall Prevention Level during Accel (149H)**
- 074 – Stall Prevention Level during running (14AH)**
- 075 – Frequency Agree Set Point (14BH)**
- 076 – Frequency Agree Detection Width (14CH)**
- 077 – Over/under Torque Detection Selection (14DH)**
- 078 – Over/under Torque Detection Level (14EH)**
- 079 – Over/under Torque Detection Delay Time (14FH)**
- 080 – On-delay Timer (150H)**
- 081 – Off-delay Timer (151H)**
- 082 – dB Resistor Overheat Protection (152H)**
- 083 – Input Phase Loss Detection Level (153H)**
- 084 – PID Selection (154H)**
- 085 – Feedback Calibration Gain – PID (155H)**
- 086 – Proportional gain – PID (156H)**
- 087 – Integral Time – PID (157H)**
- 088 – Derivative Time – PID (158H)**
- 089 – Limit of Integral Value – PID (159H)**
- 090 – Feedback Loss Detection Selection – PID (15AH)**
- 091 – Feedback Loss Detection Level – PID (15BH)**
- 092 – Feedback Loss Detection Delay Time – PID (15CH)**
- 093 – PID output selection (15DH)**
- 094 – Sleep Function Start Level – PID (15EH)**
- 095 – Sleep Function Delay Time – PID (15FH)**
- 096 – Energy Saving Selection (160H)**
- 097 – Energy-savings Gain (161H)**
- 098 – Energy-savings Gain (162H)**
- 099 – Energy-saving Voltage Lower limit at 6HZ (163H)**
- 100 – Time of Average kW (164H)**
- 101 – Modbus Time over Detection (165H)**
- 102 – Modbus stopping Method at Communication (166H)**
- 103 – Modbus Frequency Reference Unit (167H)**
- 104 – Modbus Slave Address (168H)**
- 105 – Modbus BPS Selection (169H)**
- 106 – Modbus Parity Selection (16AH)**
- 107 – Slip compensation Gain (16BH)**
- 108 – Motor No-load current (16CH)**
- 109 – Slip Compensation (16DH)**
- 110 – Operator Connection Fault Detection Selection (16EH)**
- 111 – Local / Remote Changeover Function Selection (16FH)**
- 112 – Low Frequency OL Start Point (170H)**
- 113 – 0HZ Continuous Operation Level (171H)**
- 114 – Not Used (172H)**
- 115 – KVA Selection (173H)**
- 116 – CT/VT Selection (174H)**