

CT210 Rotary Cutting Machine Frequency Inverter

Table1: functions parameters table

Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
F00 basic function group						
F00.00	Motor control mode	0: open loop vector control 0(SM) 1: open loop vector control 1(AM) 2: V/F control (AM, SM) Note: AM, asynchronous motor SM, synchronous motor	0~2	1	☆	0.
F00.01	Run command channel	0: keypad run command channel (LED off) 1: terminal running command channel (LED flickering) 2: Communication command channel (LED on)	0~2	0	○	1.
F00.02	Communication run command channel selection	0: 485 communication channel 1: PROFIBUS/CANopen communication 2: Ethernet communication 3: reserved Note: 1, 2, 3 are extended functions, you need to install a communication expansion card to use	0~3	0	○	2.
F00.03	Main frequency source X	0: keypad digit (F00.10) 1: keypad potentiometer AI0 2: analog input AI1 3: analog input AI2 4: analog input AI3 5: HDI pulse input 6: simple PLC 7: multi-step speed 8: process PID output 9: 485 communication 10: PROFIBUS/CANopen communication 11: Ethernet communication	0~11	0	○	3.
F00.04	Auxiliary frequency source Y	0: keypad digit (F00.10) 1: keypad potentiometer AI0 2: analog input AI1 3: analog input AI2 4: analog input AI3 5: HDI pulse input 6: simple PLC 7: multi-step speed 8: process PID output 9: 485 communication 10: PROFIBUS/CANopen communication 11: Ethernet communication	0~11	2	○	4.
F00.05	Reference object of Y frequency source	0: relative to the max. frequency 1: relative to frequency source X	0~1	0	○	5.
F00.06	Frequency combination reference operation	0: X 1: Y 2: X+Y 3: X-Y 4: Max (X, Y) 5: Min (X, Y)	0~5	0	○	6.
F00.07	Max. frequency	F00.08~600.00Hz	10.00~600.00	150.00Hz	☆	7.
F00.08	Upper limit frequency	F00.09~F00.07 (Max. frequency)	F00.09~F00.07	150.00Hz	☆	8.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
F00.09	Lower limit frequency	0.00Hz~F00.08 (upper limit of running frequency)	0.00~F00.08	0.00Hz	☆	9.
F00.10	Keypad frequency setting	0.00Hz~F00.07 (Max. frequency)	0.00~F00.03	50.00Hz	○	10.
F00.11	ACC time 1	0.0~3000.0s	ACC time 1	Depend on model	○	11.
F00.12	DEC time 1	0.0~3000.0s	DEC time 1	Depend on model	○	12.
F00.13	Run direction	0: default 1: reverse 2: prohibit reverse	Run direction	0	○	13.
F00.14	Carrier frequency	1.0~15.0kHz	Carrier frequency	Depend on model	○	14.
F00.15	AVR function	0: invalid 1: valid	AVR function	1	○	15.
F00.16	PWM mode	0x00~0x21 LED single digit: PWM mode 0: PWM mode 1, three-phase modulation and two-phase modulation PWM optimization 1 1: PWM mode 2, three-phase modulation LED ten digit: PWM low speed carrier limitation 0: low speed carrier limiting mode 1 1: low speed carrier limiting mode 2 2: Low speed carrier is unlimited	00~21	01	☆	16.
F00.17	Inverter type	0: G 1: P	0~1	0	☆	17.
F00.18	reserved					18.
F00.19	reserved					19.
F02 Group Motor parameters						
F01.00	Rated power of asynchronous motor 1	0.1~3000.0kW	0~1	0	☆	20.
F01.01	Rated frequency of asynchronous motor 1	0.01Hz~F00.07 (Max. frequency)	0.1~3000.0	Depend on model	☆	21.
F01.02	Rated speed of asynchronous motor 1	1~36000RPM	0.01~F00.07	50.00Hz	☆	22.
F01.03	Rated power of asynchronous motor 1	0.1~3000.0kW	1~36000	Depend on model	☆	23.
F01.04	Rated voltage of asynchronous motor 1	0~1200V	0~1200	Depend on model	☆	24.
F01.05	Rated current of asynchronous motor 1	0.8~6000.0A	0.8~6000.0	Depend on model	☆	25.
F01.06	Stator resistance of asynchronous motor 1	0.001~65.535Ω	0.001~65.535	Depend on model	○	26.
F01.07	Rotor resistance of asynchronous motor 1	0.001~65.535Ω	0.001~65.535	Depend on model	○	27.
F01.08	Inductance of asynchronous motor 1	0.1~6553.5mH	0.1~6553.5	Depend on model	○	28.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
F01.09	Mutual inductance of asynchronous motor 1	0.1~6553.5mH	0.1~6553.5	Depend on model	○	29.
F01.10	Non-load current of asynchronous motor 1	0.1~6553.5A	0.1~6553.5	Depend on model	○	30.
F01.11	Weak magnetic coefficient 1 of asynchronous motor 1	0.0~100.0%	0.0~100.0	80.0%	○	31.
F01.12	Weak magnetic coefficient 2 of asynchronous motor 1	0.0~100.0%	0.0~100.0	68.0%	○	32.
F01.13	Weak magnetic coefficient 3 of asynchronous motor 1	0.0~100.0%	0.0~100.0	57.0%	○	33.
F01.14	Weak magnetic coefficient 4 of asynchronous motor 1	0.0~100.0%	0.0~100.0	40.0%	○	34.
F01.15	Rated power of synchronous motor 1	0.1~3000.0kw	0.1~3000.0	Depend on model	☆	35.
F01.16	Rated frequency of synchronous motor 1	0.01Hz~F00.07 (Max. frequency)	0.01~F00.07	50.00Hz	☆	36.
F01.17	Pole pairs of synchronous motor 1	1~50	1~50	2	☆	37.
F01.18	Rated voltage of synchronous motor 1	0~1200V	0~1200	Depend on model	☆	38.
F01.19	Rated current of synchronous motor 1	0.8~6000.0A	0.8~6000.0	Depend on model	☆	39.
F01.20	Stator resistance of synchronous motor 1	0.001~65.535Ω	0.001~65.535	Depend on model	○	40.
F01.21	Direct axis inductance of synchronous motor 1	0.01~655.35mH	0.01~655.35	Depend on model	○	41.
F01.22	Quadrature axis inductance of synchronous motor 1	0.1~6553.5mH	0.01~655.35	Depend on model	○	42.
F01.23	Back electromotive force constant of synchronous motor 1	0~10000	0~10000	300	○	43.
F01.24	Magnetic pole position identifies current of synchronous motor 1 (reserved)	0%~50%(rated current)	0000~FFFF	0	●	44.
F01.25	Motor parameters autotuning	0: no actuation 1: dynamic autotuning 2: static autotuning1 3: static autotuning2	0~50	10%	●	45.
F01.26	Magnetic pole position identifies current of synchronous motor 1 (reserved)	0%~50%(rated current)	0~3	0	☆	46.
F01.27	Motor overload protection	0:no protection 1: general motor (with low speed compensation) 2: variable frequency motor (without low speed compensation)	0~2	2	☆	47.
F01.28	The coefficient of Motor overload protection	20.0%~120.0%	20.0~120.0	100.0%	○	48.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
F01.29	The correction coefficient of motor power	0.00~3.00	0.00~3.00	1.00	○	49.
F01.30	Motor 1 parameter display	0: Display parameters according to motor type 1: Display all parameters	0~1	0	○	50.
F01.31	Reserved					51.
F01.32	Reserved					52.
F02 Group start and stop control						
F02.00	Start mode	0: direct starting 1: start after DC braking 2: start after rotating speed tracking	0~2	0	☆	53.
F02.01	Start delay time	0.0~60.0s	0.0~60.0	0.0s	○	54.
F02.02	Starting frequency	0.00~50.00Hz	0.00~50.00	0.50Hz	☆	55.
F02.03	Hold time of starting frequency	0.0~50.0s	0.0~50.0	0.0s	☆	56.
F02.04	DC braking current before start	0.0~100.0% (rated current)	0.0~100.0	0.0%	☆	57.
F02.05	DC braking time before start	0.0~50.00s	0.00~50.00	0.00s	☆	58.
F02.06	ACC and DEC mode	0: linear type 1: S curve (reserved)	0~1	0	☆	59.
F02.07	The ratio at the beginning of the S curve	0.0~50.0%(acceleration time and deceleration time)	0.0~50.0	25%	☆	60.
F02.08	The ratio at the end of the S curve	0.0~50.0%(acceleration time and deceleration time)	0.0~50.0	25	☆	61.
F02.09	Terminal characteristic selection after power on	0: run command is invalid 1: run command is valid	0~1	0	○	62.
F02.10	Restart after power off	0: no actuation 1: actuation	0~1	0	○	63.
F02.11	Waiting time for restart	0.0~3000.0s	0.0~3000.0	1.0s	○	64.
F02.12	Stop mode	0: decelerate to stop 1: coast to stop	0~1	0	○	65.
F02.13	Dead time of FWD/REV	0.0~3000.0s	0.0~3000.0	0.0s	○	66.
F02.14	Switching mode of FWD/REV	0: Zero-crossing switching 1: Over-start frequency switching 2: After stopping the frequency and delaying and then switching	0~2	0	☆	67.
F02.15	Starting frequency before stop DC braking	0.00~F00.07 (Max. frequency)	0.00~F00.07	0.00Hz	○	68.
F02.16	Waiting time before stop DC braking	0.0~50.00s	0.00~50.00	0.00s	○	69.
F02.17	Stop DC braking current	0.0~100.0%((inverter rated current)	0.0~100.0	0.0%	○	70.
F02.18	Stop DC braking time	0.0~50.0s	0.00~50.00	0.00s	○	71.
F02.19	Frequency for deceleration to stop	0.00~100.00Hz	0.00~100.00	0.50 Hz	☆	72.
F02.20	Delay time of stop frequency	0.0~100.0s	0.0~100.0	0.0s	○	73.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
F02.21	Stop frequency detection method	0: Detection by frequency setting value(No stop delay) 1: Detection by speed feedback value (Only effective for vector control)	0~1	1	☆	74.
F02.22	Filtering of speed feedback detection	0.0~100.0s (Only effective for F02.21=1)	0.00~100.00	0.50s	☆	75.
F02.23	0Hz output	0: No voltage output 1: Voltage output 2: Stop DC braking current output	0~2	0	○	76.
F02.24	Actuation when running frequency is less than lower limit frequency	0: run at lower limit frequency 1: stop 2: stand-by	0~2	0	☆	77.
F02.25	Delay time of dormancy wake up	0.0~3000.0s(valid when F02.24=2)	0.0~3000.0	0.0s	○	78.
F02.26	Reserved					79.
F02.27	Reserved					80.
F03 Group V/F control						
F03.00	V/F curve of motor 1	0: straight line V/F curve 1: multi-dots V/F curve 2: 1.4 th power low torque V/F curve 3: 1.8 th power low torque V/F curve 4: 2.0 th power low torque V/F curve 5: V/F separation	0~5	0	☆	81.
F03.01	Torque compensation of motor 1	0.0% (automatic), 0.1%~10.0%	0.0~10.0	0.0%	○	82.
F03.02	Torque compensation cut-off of motor 1	0.0%~50.0% (relative to motor rated frequency)	0.0~50.0	20.0%	○	83.
F03.03	V/F frequency 1 of motor 1	0.00Hz~F03.05	0.00~F03.05	0.00Hz	○	84.
F03.04	V/F voltage 1 of motor 1	0.0%~110.0% (motor rated voltage)	0.0~110.0	00.0%	○	85.
F03.05	V/F frequency 2 of motor 1	F03.03~F03.07	F03.03~ F03.07	00.00Hz	○	86.
F03.06	V/F voltage 2 of motor 1	0.0%~110.0% (motor rated voltage)	0.0~110.0	00.0%	○	87.
F03.07	V/F frequency 3 of motor 1	F03.05~F01.02 (motor rated frequency)	F03.05~ 电机1额定频率	00.00Hz	○	88.
F03.08	V/F voltage 3 of motor 1	0.0%~110.0% (motor rated voltage)	0.0~110.0	00.0%	○	89.
F03.09	Slip compensation gain of motor 1	0.0~200.0%	0.0~200.0	100.0%	○	90.
F03.10	Low frequency surge suppression factor of motor 1	0.0~10.0	0~10.0	1.0	○	91.
F03.11	High frequency surge suppression factor of motor 1	0.0~10.0	0~10.0	1.0	○	92.
F03.12	Frequency threshold of surge suppression of motor 1	0.00Hz~F00.07 (Max. frequency)	0.00Hz~F00.07	30.00 Hz	○	93.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
F03.13	V/F curve of motor 2	0: straight line V/F curve 1: multi-dots V/F curve 2: 1.4 th power low torque V/F curve 3: 1.8 th power low torque V/F curve 4: 2.0 th power low torque V/F curve 5: V/F separation	0~5	0	☆	94.
F03.14	Torque compensation of motor 2	0.0% (automatic), 0.1%~10.0%	0.0~10.0	0.0%	○	95.
F03.15	Torque compensation cut-off of motor 2	0.0%~50.0% (relative to motor rated frequency)	0.0~50.0	20.0%	○	96.
F03.16	V/F frequency 1 of motor 2	0.00Hz~F03.18	0.00~F03.18	0.00Hz	○	97.
F03.17	V/F voltage 1 of motor 2	0.0%~110.0% (motor rated voltage)	0.0~110.0	00.0%	○	98.
F03.18	V/F frequency 2 of motor 2	F03.16~F03.20	F03.16~ F03.20	00.00Hz	○	99.
F03.19	V/F voltage 2 of motor 2	0.0%~110.0% (motor rated voltage)	0.0~110.0	00.0%	○	100.
F03.20	V/F frequency 3 of motor 2	F03.18~F14.02 (motor rated frequency)	F03.18~ F14.02	00.00Hz	○	101.
F03.21	V/F voltage 3 of motor 2	0.0%~110.0% (motor rated voltage)	0.0~110.0	00.0%	○	102.
F03.22	Slip compensation gain of motor 2	0.0~200.0%	0.0~200.0	100.0%	○	103.
F03.23	Low frequency surge suppression factor of motor 2	0.0~100.0	0~100	10	○	104.
F03.24	High frequency surge suppression factor of motor2	0.0~100.0	0~100	10	○	105.
F03.25	Frequency threshold of surge suppression of motor 2	0.00Hz~F00.07 (Max. frequency)	0.00Hz~F00.07	30.00 Hz	○	106.
F03.33	Weak magnetic coefficient of motor	1.00~1.30	1.00~1.30	1.00	○	107.
F03.34	Motor energy saving operation	0: invalid 1: valid	0~1	0	☆	108.
F03.27	Voltage source channel of V/F separation	0: original voltage(F03.28) 1: keypad potentiometer AI0 2: analog input AI1 3: analog input AI2 4: analog input AI3 5: HDI pulse input 6: simple PLC 7: multi-step speed 8: process PID output 9: 485 communication 10: PROFIBUS/CANopen communication 11: Ethernet communication	0~10	0	○	109.
F03.28	local voltage	0.0%~100.0%	0.0~100.0	100.0%	○	110.
F03.29	voltage acceleration time	0.0~3000.0s	0.0~3000.0	5.0s	○	111.
F03.30	Voltage deceleration time	0.0~3000.0s	0.0~3000.0	5.0s	○	112.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
F03.31	Max voltage	F04.32~100.0%(motor rated voltage)	0.0~100.0	100.0%	☆	113.
F03.32	Min voltage	0.0%~F04.31(motor rated voltage)	0.0~100.0	0.0%	☆	114.
F03.34	Reserved				●	115.
F03.35	Reserved				●	116.
F04 Group Vector control						
F04.00	ASR Low speed proportional gain 1	0~200.0	0~200.0	25.0	○	117.
F04.01	ASR Low speed integral time 1	0.00~10.00s	0.000~10.000	0.160s	○	118.
F04.02	Low speed switching frequency	0.00Hz~F04.05	0.00~F04.05	5.00Hz	○	119.
F04.03	High speed proportional gain 2	0~200	0~200.0	25.0	○	120.
F04.04	High speed integral time 2	0.00~10.00s	0.000~10.000	0.160s	○	121.
F04.05	High speed switching frequency	F04.02~F00.07 (Max. frequency)	F04.02~F00.07	10.00Hz	○	122.
F04.06	ASR output filter times	0~8 times	0~8	0	○	123.
F04.07	VC slip compensation factor (electrical)	50%~200%	50~200	100%	○	124.
F04.08	VC slip compensation factor (power generation)	50%~200%	50~200	100%	○	125.
F04.09	Proportionality coefficient of electric current loop KP	0~65535	0~65535	1000	○	126.
F04.10	Integral coefficient of current loop KI	0~65535	0~65535	1000	○	127.
F04.11	Pre-exciting time	0.000~10.000s	0.000~10.000s	0.300s	○	128.
F04.12	Weak magnetic coefficient of constant power area	0.1~2.0	0.1~2.0	0.3	○	129.
F04.13	Min. weak magnetic point of Constant power area	10%~100%	10~100	20%	○	130.
F04.14	Max. voltage coefficient	0.0~120.0%	0.0~120.0	100.0%	☆	131.
F04.15	Weak magnetic proportional gain	0~8000	0~8000	1000	○	132.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
F04.16	Torque setting	0: Torque control is invalid 1: Keypad (F04.12) 2:A10 setting (100% is to 3times of morot current) 3:A11 (100% is to 3times of morot current) 4:A12 (100% is to 3times of morot current) 5:A13 (100% is to 3times of morot current) 6: Pulse frequency HDI (100% is to 3times of morot current) 7: Multi-step torque (100% is to 3times of morot current) 8: MODBUS communication (100% is to 3times of morot current) 9: PROFIBUS/CANopen (100% is to 3times of morot current)communication 10: Ethernet communication (100% is to 3times of morot current) 11: Reserved	0~11	0	<input type="radio"/>	133.
F04.17	Keypad torque	-300%~300%(inverter rated current)	-300.0~300.0	50.0%	<input type="radio"/>	134.
F04.18	Torque filtering time	0.000~10.000s	0.000~10.000s	0.010s	<input type="radio"/>	135.
F04.19	Corotation upper limit frequency setting	0: Keypad(F04.16) 1: Panel A10 (100% is to max frequency) 2: A11 (100% is to 3times of morot current) 3: A12 (100% is to 3times of morot current) 4: A13 (100% is to 3times of morot current) 5: Pulse frequency HDI (100% is to 3times of morot current) 6: Multi-step torque (100% is to 3times of morot current) 7: MODBUS communication (100% is to 3times of morot current) 8: PROFIBUS/CANopen communication 9: Ethernet communication 10: Reserved	0~10	0	<input type="radio"/>	136.
F04.20	Inversion upper limit frequency setting	0: Keypad(F04.17) 1: A10 2: A11 3: A12 4: A13 5: Pulse frequency HDI 6: Multi-step torque 7: MODBUS communication 8: PROFIBUS/CANopen communication 9: Ethernet communication 10: Reserved (2~9:100% corresponds to the Max. frequency)	0~10	0	<input type="radio"/>	137.
F04.21	Corotation upper limit frequency setting value	0.00Hz~F00.07	0.00~F00.07	50.00 Hz	<input type="radio"/>	138.
F04.22	Inversion upper limit frequency setting value	0.00Hz~F00.07	0.00~F00.07	50.00Hz	<input type="radio"/>	139.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
F04.23	Max. electric torque setting	0: Keypad(F04.25) 1: AI0 2: AI1 3: AI2 4: AI3 5: Pulse frequency HDI 6: MODBUS communication 7: PROFIBUS/CANopen communication 8: Ethernet communication 9: Reserved (1~8:100% corresponds to 3 times of motor current)	0~9	0	○	140.
F04.24	Max. breaking torque setting	0: Keypad(F04.26) 1: AI0 2: AI1 3: AI2 4: AI3 5: Pulse frequency HDI 6: MODBUS communication 7: PROFIBUS/CANopen communication 8: Ethernet communication 9: Reserved (1~8:100% corresponds to 3 times of motor current)	0~9	0	○	141.
F04.25	Max. electric torque setting value	0.0~300.00% (inverter rated current)	0.0~300.0	180.0%	○	142.
F04.26	Max. breaking torque setting value	0.0~300.00% (inverter rated current)	0.0~300.0	180.0%	○	143.
F04.27	Vector control frequency	0: actual value 1: set value	0~1	0	○	144.
F04.28	Static friction compensating torque	0.0~100%	0.0~100.0	0.0%	○	145.
F04.29	Kinetic friction compensating torque	0.0~100%	0.0~100.0	0.0%	○	146.
F04.30	Reserved				●	147.
F04.31	Reserved				●	148.
F05 Group HMI interface						
F05.00	Chinese and English language	0: Chinese 1: English (reserved)	0~1	0	☆	149.
F05.01	Parameter initialization	0: no actuation 1: restore default value 2: clear fault records	0~2	0	☆	150.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
F05.02	Parameter copy	0:No operation 1:Upload local function parameters to the keyboard 2:Keyboard function parameters are downloaded to the unit (including motor parameters) 3:Keyboard function parameters are downloaded to the unit (excluding F01, F14 motor parameters) 4:Keyboard function parameters are downloaded to the unit (only F01, F14 motor parameters are included) Note: After the execution of 1~4 operations is completed, the parameters will automatically return to 0. The upload and download functions do not include the F29 group manufacturer function parameters.	0~4	0	☆	151.
F05.03	User password	0~65535	0~65535	0	○	152.
F05.04	Functions of MF key	0: No function 1: jogging running 2: left-shift key to switch display state 3: FWD/REV switch 4: clear UP/DOWN setting 5: freewheel stop 6: Command switching by sequence 7: Quick debug mode (debug not as factory setting)	0~7	1	☆	153.
F05.05	Start/stop command switching sequence	0:keyboard control→terminal control→communication control 1: keyboard control→terminal control 3: keyboard control→communication control 4: terminal control→communication control	0~3	0	○	154.
F05.06	Stop function of STOP/RERST key	0: only valid for keypad control 1: valid for keypad and terminal control at the same time 2: valid for keypad and communication control at the same time 3: valid for all control modes	0~3	0	○	155.
F05.07	Displayed parameters 1 when running	0x0000~0xFFFF BIT0: running frequency (Hz on) BIT1: set frequency (Hz flickers) BIT2: bus voltage (V on) BIT3: output voltage (V on) BIT4: output current (A on) BIT5: rotating speed BIT6: output power (% on) BIT7: output torque (% on) BIT8: PID reference (%flickers) BIT9: PID feedback (% on) BIT10: input terminal status BIT11: output terminal status BIT12: torque setting (% on) BIT13: pulse meter value BIT14: count value BIT15: PLC and current stage of multi-step speed	0~FFFF	0x03FF	○	156.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
F05.08	Displayed parameters 2 when running	0x0000~0xFFFF BIT0:AI1(V on) BIT 1:AI2(V on) BIT 2:AI3(V on) BIT 3: high-speed Pulse HDI frequency BIT4: motor overload percentage (% on) BIT5: inverter overload percentage (% on) BIT6:frequency Ramps (Hz on) BIT7:linear speed BIT8:Ac incoming current BIT9: upper limiting frequency (Hz on) BIT10~15: reserved	0000~FFFF	0x0000		157.
F05.09	Displayed parameters at stop	0x0000~0xFFFF BIT0: set frequency (Hz flickers) BIT1: bus voltage (V on) BIT2: input terminal status BIT3: output terminal status BIT4: PID reference (% flickers) BIT5: PID feedback (% on) BIT6: torque setting (% on) BIT7: AI1 (V on) BIT8: AI2 (V on) BIT9: AI3 (V on) BIT10: high-speed Pulse HDI frequency BIT11: PLC and current stage of multi-step speed BIT12: pulse meter value BIT13: count value BIT14: upper limiting frequency(Hz on) BIT15: reserved	0000~FFFF	0x00FF	○	158.
F05.10	High-value of cumulative power consumption	0~59999° (k)	0~59999	0°	○	159.
F05.11	Low-value of cumulative power consumption	0.0~999.9° (k)	0~999.9	0.0°	○	160.
F05.12	Frequency display correction	0.01~10.00 Display frequency=operating frequency*F07.08	0.01~10.00	1.00	○	161.
F05.13	Rotating speed display correction	0.1~999.9% Rotating speed =60* display operating frequency * F07.09/ motor log	0.1~999.9%	100.0%	○	162.
F05.14	Linear speed display correction	0.1~999.9% Linear speed=rotating speed*F07.10	0.1~999.9%	1.0%	○	163.
F05.15	Rectification bridge temperature	-20.0~100.0℃			●	164.
F05.16	Converting module temperature	-20.0~100.0℃			●	165.
F05.17	Software version	1.00~655.35			●	166.
F05.18	Accumulative running time	0~65535h			●	167.
F05.19	High-value of power consumption	0~65535° (*1000)			●	168.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
F05.20	Low-value of power consumption	0.0~999.9°			●	169.
F05.21	Inverter type	0:G type 1:P type			●	170.
F05.22	Inverter rated power	0.4~3000.0kW			●	171.
F05.23	Inverter rated voltage	50~1200V			●	172.
F05.24	Inverter rated current	0.1~6000.0A			●	173.
F05.25	Factory bar code 1	0x0000~0xFFFF			●	174.
F05.26	Factory bar code 2	0x0000~0xFFFF			●	175.
F05.27	Factory bar code 3	0x0000~0xFFFF			●	176.
F05.28	Factory bar code 4	0x0000~0xFFFF			●	177.
F05.29	Factory bar code 3	0x0000~0xFFFF			●	178.
F05.30	Factory bar code 4	0x0000~0xFFFF			●	179.
F05.31	Reserved				●	180.
F05.32	Reserved				●	181.
F06 Group Input terminals						
F06.00	HDI1、HDI2 input mode	0: HDI1 is high-speed pulse input 1: HDI1 is switch input 2: HDI1、HDI2 is QEP input(reserved)	0~1	0	☆	182.
F06.01	Functions of DI1 terminal	0: invalid 1: forward running 2: reverse running	0~63	42	☆	183.
F06.02	Functions of DI2 terminal	3: three-wire running 4: forward jogging 5: reverse jogging 6: coast to stop	0~63	43	☆	184.
F06.03	Functions of DI3 terminal	7: fault reset 8: run pause 9: external fault input	0~63	44	☆	185.
F06.04	Functions of DI4 terminal	10: Increasing frequency setting (UP) 11: Decreasing frequency setting (DOWN)	0~63	45	☆	186.
F06.05	Functions of DI5 terminal	12: increment or decrement clear 13: X setting and Y setting switching 14: (X+Y) setting and X setting switching	0~63	46	☆	187.
F06.06	Functions of DI6 terminal	15: (X+Y) setting and Y setting switching 16: multi-step speed terminal 1 17: multi-step speed terminal 2	0~63	51	☆	188.
F06.07	Functions of DI7 terminal	18: multi-step speed terminal 3 19: multi-step speed terminal 4 20: multi-step speed pause	0~63	6	☆	189.
F06.08	Functions of DI9 terminal	21: ACC/DEC time selection 1 22: ACC/DEC time selection 2 23: simple PLC stop reset 24: simple PLC pause	0~63	47	☆	190.
F06.09	Functions of DI9 terminal	25: PID control pause 26: wobble pause (at the current frequency)	0~63	52	☆	191.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
F06.10	Functions of HDI terminal	27: wobble reset (return to center frequency) 28: counter reset 29: torque control disabled 30: ACC/DEC disabled 31: Counter triggered 32: length reset 33: UP/DOWN setting cleared temporarily 34: DC braking stop 35: Switch motor 1 to motor 2 36: keyboard control 37: terminal control 38: communication control 39: pre-excitation command 40: resetting the power consumption 41: keep power consumption 42: start (pulse valid) 43: stop (pulse valid) 44: fast FWD knife (switch valid) 45: fast REV knife (switch valid) 46: dot reset 47: wooden thickness switch 48: wooden length switch 49: FWD knife limit 50: REV knife limit 51: cutting stop 52: big wooden auto study 53~63: reserved	0~63	0	☆	192.
F06.11	DI terminal switch input	0x0000~0x3FF	0x000~0x3FF	0x040	○	193.
F06.12	DI terminal filter time	0.000~1.000s	0.000~1.000	0.002s	○	194.
F06.13	Virtual terminal enabled selection	0x0000~0x3FF(0:disable,1:enable) BIT0: virtual terminal DI1 BIT1: virtual terminal DI2 BIT2: virtual terminal DI3 BIT3: virtual terminal DI4 BIT4: virtual terminal DI5 BIT5: virtual terminal DI6 BIT6: virtual terminal DI7 BIT7: virtual terminal DI8 BIT8: virtual terminal DI9 BIT9: virtual terminal HDI1	0x000~0x3FF	0x000	☆	195.
F06.14	Terminal control running mode	0: two-wire control mode 1 1: two-wire control mode 2 2: three-wire control mode 1 3: three-wire control mode 2	0~3	0	☆	196.
F06.15	DI1 turn-on delay time	0.000~50.000s	0.000~50.000	0.000s	○	197.
F06.16	DI1 turn-off delay time	0.000~50.000s	0.000~50.000	0.000s	○	198.
F06.17	DI2 turn-on delay time	0.000~50.000s	0.000~50.000	0.000s	○	199.
F06.18	DI2 turn-off delay time	0.000~50.000s	0.000~50.000	0.000s	○	200.
F06.19	DI3 turn-on delay time	0.000~50.000s	0.000~50.000	0.000s	○	201.
F06.20	DI3 turn-off delay time	0.000~50.000s	0.000~50.000	0.000s	○	202.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
F06.21	DI4 turn-on delay time	0.000~50.000s	0.000~50.000	0.000s	<input type="radio"/>	203.
F06.22	DI4 turn-off delay time	0.000~50.000s	0.000~50.000	0.000s	<input type="radio"/>	204.
F06.23	DI5 turn-on delay time	0.000~50.000s	0.000~50.000	0.050s	<input type="radio"/>	205.
F06.24	DI5 turn-off delay time	0.000~50.000s	0.000~50.000	0.000s	<input type="radio"/>	206.
F06.25	DI6 turn-on delay time	0.000~50.000s	0.000~50.000	0.000s	<input type="radio"/>	207.
F06.26	DI6 turn-off delay time	0.000~50.000s	0.000~50.000	0.000s	<input type="radio"/>	208.
F06.27	DI7 turn-on delay time	0.000~50.000s	0.000~50.000	0.000s	<input type="radio"/>	209.
F06.28	DI7 turn-off delay time	0.000~50.000s	0.000~50.000	0.000s	<input type="radio"/>	210.
F06.29	DI8 turn-on delay time	0.000~50.000s	0.000~50.000	0.000s	<input type="radio"/>	211.
F06.30	DI8 turn-off delay time	0.000~50.000s	0.000~50.000	0.000s	<input type="radio"/>	212.
F06.31	DI9 turn-on delay time	0.000~50.000s	0.000~50.000	0.000s	<input type="radio"/>	213.
F06.32	DI9 turn-off delay time	0.000~50.000s	0.000~50.000	0.000s	<input type="radio"/>	214.
F06.33	HDI1 turn-on delay time	0.000~50.000s	0.000~50.000	0.000s	<input type="radio"/>	215.
F06.34	HDI1 turn-off delay time	0.000~50.000s	0.000~50.000	0.000s	<input type="radio"/>	216.
F06.35	Keypad potentiometer AI0 lower limit	0.00V~F06.37	0.00~F06.37	0.00V	<input type="radio"/>	217.
F06.36	Corresponding setting of keypad potentiometer AI0 lower limit	-100.0%~100.0%	-100.0~100.0	0.0%	<input type="radio"/>	218.
F06.37	Keypad potentiometer AI0 upper limit	F06.35~10.00V	F06.35~10.00	10.00V	<input type="radio"/>	219.
F06.38	Corresponding setting of keypad potentiometer AI0 upper limit	-100.0%~100.0%	-100.0~100.0	100.0%	<input type="radio"/>	220.
F06.39	Keypad potentiometer AI0 filter time	0.00s~10.00s	0.000~10.000	0.100s	<input type="radio"/>	221.
F06.40	AI1 lower limit	0.00V~F06.42	0.00~F06.42	0.00V	<input type="radio"/>	222.
F06.41	Corresponding setting of AI1 lower limit	-100.0%~100.0%	-100.0~100.0	0.0%	<input type="radio"/>	223.
F06.42	AI1 upper limit	F06.40~10.00V	F06.40~10.00	10.00V	<input type="radio"/>	224.
F06.43	Corresponding setting of AI1 upper limit	-100.0%~100.0%	-100.0~100.0	100.0%	<input type="radio"/>	225.
F06.44	AI1 input filter time	0.00s~10.00s	0.000~10.000	0.100s	<input type="radio"/>	226.
F06.45	AI2 lower limit	0.00V~F06.47	0.00V~F06.47	0.00V	<input type="radio"/>	227.
F06.46	Corresponding setting of AI2 lower limit	-100.0%~100.0%	-100.0~100.0	0.0%	<input type="radio"/>	228.
F06.47	AI2 upper limit	F06.45~10.00V	F06.45~10.00	10.00V	<input type="radio"/>	229.
F06.48	Corresponding setting of AI2 upper limit	-100.0%~100.0%	-100.0~100.0	100.0%	<input type="radio"/>	230.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
F06.49	AI2 input filter time	0.00s~10.00s	0.000~10.000	0.100s	○	231.
F06.50	AI3 lower limit	-10.00V~F06.52	-10.00~F06.52	-10.00V	○	232.
F06.51	Corresponding setting of AI3 lower limit	-100.0%~100.0%	-100.0~100.0	-100.0%	○	233.
F06.52	AI3 median limit	F06.50~F06.54	F06.50~F06.54	0.00V	○	234.
F06.53	Corresponding setting of AI3 median limit	-100.0%~100.0%	-100.0~100.0	0.0%	○	235.
F06.54	AI3 upper limit	F06.52~10.00V	F06.52~10.00	10.00V	○	236.
F06.55	Corresponding setting of AI3 upper limit	-100.0%~100.0%	-100.0~100.0	100.0%	○	237.
F06.56	AI3 input filter time	0.00s~10.00s	0.000~10.000	0.100s	○	238.
F06.57	HDI1 high speed pulse input function selection	0: frequency setting input 1: counter input 2: length counter value input	0~2	0	☆	239.
F06.58	HDI lower limit frequency	0.00kHz~F06.60	0.000 KHz ~ F06.60	0.000KHz	○	240.
F06.59	Corresponding setting of HDI lower limit frequency	-100.0%~100.0%	-100.0~100.0	0.0%	○	241.
F06.60	HDI upper limit frequency	F06.58~50.00kHz	F06.58 ~50.000KHz	50.000KHz	○	242.
F06.61	Corresponding setting of HDI upper limit frequency	-100.0%~100.0%	-100.0~100.0	100.0%	○	243.
F06.62	HDI frequency input filter time	0.00s~10.00s	0.000~10.000	0.010s	○	244.
F07 Group Output terminals						
F07.00	HDO output mode	0: pulse output 1: open collector output	0~1	1	☆	245.
F07.01	DO collector output	0: no output 1: running	0~30	0	○	246.
F07.02	HDO open collector output	2: forward running 3: reverse running	0~30	0	○	247.
F07.03	Relay T1 output	4: jogging 5: fault output	0~30	1	○	248.
F07.04	Relay T2 output	6: frequency level detection FDT1 output 7: frequency level detection FDT2 output 8: frequency arrival 9: zero speed running 10: upper limit frequency arrival 11: lower limit frequency arrival 12: ready to run 13: pre-exciting 14: overload pre-alarm 15: underload pre-alarm 16: simple PLC stage completed 17: simple PLC cycle completed 18: set count value arrival 19: specified count value arrival 20: external fault availability 21: length arrival 22: running time arrival	0~30	5	○	249.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
		23: MODBUS communication virtual terminal output 24: PROFIBUS/CANopen communication virtual terminal output 25: Ethernet communication virtual terminal output 26: DC bus voltage setup completed 27: drive roller output 28: knife output 29: wood core output 30: plate treatment 31-35: reserved				
F07.05	Switch polarity selection of output terminal	0x00~0x1FF	0x00~0x1FF	0	<input type="radio"/>	250.
F07.06	DO turn-on delay time	0.000~50.000s	0.000~50.000	0.000s	<input type="radio"/>	251.
F07.07	DO turn-off delay time	0.000~50.000s	0.000~50.000	0.000s	<input type="radio"/>	252.
F07.08	HDO turn-on delay time	0.000~50.000s(only F06.00=1 works)	0.000~50.000	0.000s	<input type="radio"/>	253.
F07.09	HDO turn-off delay time	0.000~50.000s(only F06.00=1 works)	0.000~50.000	0.000s	<input type="radio"/>	254.
F07.10	Relay T1 turn-on delay time	0.000~50.000s	0.000~50.000	0.000s	<input type="radio"/>	255.
F07.11	Relay T1 turn-off delay time	0.000~50.000s	0.000~50.000	0.000s	<input type="radio"/>	256.
F07.12	Relay T2 turn-on delay time	0.000~50.000s	0.00~50.00	0.000s	<input type="radio"/>	257.
F07.13	Relay T2 turn-off delay time	0.000~50.000s	0.00~50.00	0.000s	<input type="radio"/>	258.
F07.14	AO1 output	0: running frequency	0~30	0	<input type="radio"/>	259.
F07.15	AO2 output	1: setting frequency 2: ramp reference	0~30	0	<input type="radio"/>	260.
F07.16	HDO open collector high-speed pulse output	3: rotating speed 4: output current (relative to the inverter) 5: output current (relative to the motor) 6: output voltage 7: output power 8: set torque 9: output torque 10: AI1 11: AI2 12: AI3 13: pulse frequency HDI 14: MODBUS communication setting value 1 15: MODBUS communication setting value 2 16: PROFIBUS/CANopen communication setting value 1 17: PROFIBUS/CANopen communication setting value 2 18: Ethernet communication setting value 1 19: Ethernet communication setting	0~30	0	<input type="radio"/>	261.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
		value 2 20: reserved 21: reserved 22: torque current (relative to the inverter) 23: frequency ramps(signed) 24: knife frequency 25: drive roller frequency 26~30: reserved				
F07.17	Corresponding setting of AO1 output lower limit	-100.0%~F07.19	-100.0~F07.19	0.0%	○	262.
F07.18	AO1 lower limit	0.00V~10.00V	0.00~10.00	0.00V	○	263.
F07.19	Corresponding setting of AO1 output upper limit	F07.17~100.0%	F07.17~100.0	100.0%	○	264.
F07.20	AO1 upper limit	0.00V~10.00V	0.00~10.00	10.00V	○	265.
F07.21	AO1 input filter time	0.000s~10.000s	0.000~10.000	0.000s	○	266.
F07.22	Corresponding setting of AO2 output lower limit	-100.0%~F07.24	-100.0~F07.24	0.0%	○	267.
F07.23	AO2 lower limit	0.00V~10.00V	0.00~10.00	0.00V	○	268.
F07.24	Corresponding setting of AO2 output upper limit	F07.22~100.0%	F07.22~100.0	100.0%	○	269.
F07.25	AO2 upper limit	0.00V~10.00V	0.00~10.00	10.00V	○	270.
F07.26	AO2 input filter time	0.000s~10.000s	0.000~10.000	0.000s	○	271.
F07.27	Corresponding setting 3 of HDO output lower limit	-100.0%~F07.29	-100.0%~F07.29	0.00%	○	272.
F07.28	HDO output lower limit	0.00kHz~50.00kHz	0.00~50.00	0.0kHz	○	273.
F07.29	Corresponding setting 3 of HDO output upper limit	F07.27~100.00%	F07.27~100.0	100.0%	○	274.
F07.30	HDO output upper limit	0.00~50.00kHz	0.00~50.00	50.00kHz	○	275.
F07.31	HDO output filter time	0.000s~10.000s	0.000~10.000	0.000s	○	276.
F08 Group Fault and protection						
F08.00	Phase loss protection selection	0x00~0x11 LED ones 0: Input phase loss protection disabled 1: Input phase loss protection enabled LED tens 0:output phase loss protection disabled 1: output phase loss protection enabled	00~11	11	○	277.
F08.01	Frequency reduction function selection when power off suddenly	0: disabled 1: enabled	0~1	0	○	278.
F08.02	Frequency drop rate when sudden power off	0.00~F00.07Hz/s (max frequency)	0.00Hz~F00.03	10.00Hz/s	○	279.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
F08.03	Overvoltage stall protection	0: disabled 1: enabled	0~1	1	○	280.
F08.04	Overvoltage protection voltage	stall 120 ~ 150%(standard bus voltage 380V) 120 ~ 150%(standard bus voltage 220V)	120~150%	140% 120%	○	281.
F08.05	Current-limiting selection	0x00~0x11 Ones: Overcurrent stall actuation selection 0: disabled 1: enabled Tens: hardware current-limiting overload protection 0: disabled 1: enabled	00~11	01	☆	282.
F08.06	Automatic current limiting level	50.0~200.0%	50.0~200.0	G型机: 160.0% F型机: 120.0%	☆	283.
F08.07	frequency drop rate during current limiting	0.00~50.00Hz/s	0.00~50.00	10.00Hz/s	☆	284.
F08.08	Inverter or motor overload/underload per-alarm	0x000~0x131 LED ones: 0: motor overload/underload per-alarm (relative to the rated current of the motor) 1: inverter overload/underload per-alarm(relative to the rated current of the inverter) LED tens: 0: inverter overload/underload warning is valid in running, continue to run 1: inverter continues running after underload alarm, and stop running after overload failure 2: inverter continues running after overload alarm, and stop running after underload failure 3: inverter stop running after underload /overload failure LED hundreds 0: detection 1: detection in constant speed running	000~131	0x000	○	285.
F08.09	Overload warning point	F08.11~200%	F08.11~200	G 型 机 : 150% P 型 机 : 120%	○	286.
F08.10	Overload warning detection time	0.1~3000.0s	0.1~3000.0	1.0s	○	287.
F08.11	Underload warning point	0%~F08.09	0~F08.09	50%	○	288.
F08.12	Underload warning detection time	0.1~3000.0s	0.1~3000.0	1.0s	○	289.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
F08.13	Fault output terminal actuation selection	0x00~0x11 LED ones: 0: Action when under-voltage fault 1: no action when under-voltage fault LED tens: 0: Action during automatic reset 1: no action during automatic reset	00~11	0x00	<input type="radio"/>	290.
F08.14	Speed deviation detection range	0.0~50.0%	0.0~50.0	10.0%	<input type="radio"/>	291.
F08.15	Speed deviation detection time	0.0~10.0s (speed deviation protection is not applied when 0.0)	0.0~10.0	0.5s	<input type="radio"/>	292.
F08.16	Number of automatic reset	0~10	0~10	5	<input type="radio"/>	293.
F08.17	Interval time of automatic reset	0.1~3000.0s	0.1~3000.0	1.0s	<input type="radio"/>	294.
F08.18	Current fault type	0: no detection 1: inverter unit U phase protection (E.oUT1) 2: inverter unit V phase protection (E.oUT2) 3: inverter unit W phase protection (E.oUT3) 4: ACC overcurrent (E.oC1) 5: DEC overcurrent (E.oC2) 6: constant speed overcurrent (E.oC3) 7: ACC overvoltage (E.oU1) 8: DEC overvoltage (E.oU2) 9: constant speed overvoltage (E.oU3)			<input checked="" type="radio"/>	295.
F08.19	Previous fault type	10: bus undervoltage fault (E.Lv) 11: motor overload (E.oL1) 12: inverter overload (E.oL2) 13: input side phase loss (E.iLF) 14: output side phase loss (E.oLF) 15: rectifier module overheating (E.oH1) 16: inverting module overheat fault (E.oH2) 17: external fault (E.EF) 18: 485 communication fault(E.485) 19: current detection fault (E.ITE) 20: autotuning fault (E.AUT)			<input checked="" type="radio"/>	296.
F08.20	Previous 2 fault type	21: EFPROM operating fault (E.EER)			<input checked="" type="radio"/>	297.
F08.21	Previous 3 fault type	22: PID feedback disconnection fault (E.PdIS)			<input checked="" type="radio"/>	298.
F08.22	Previous 4 fault type	23: braking unit fault (E.bC) 24: run time arrival (E.END)			<input checked="" type="radio"/>	299.
F08.23	Previous 5 fault type	25: Electronic overload (E.oL3) 26: Keypad communication error (E.FCE) 27: Parameter upload error (E.UFE) 28: Parameter download error(E.DNE) 29: Profibus communication fault (E.DP)			<input checked="" type="radio"/>	300.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
		30: Ethernet communication fault (E.NET) 31: CANopen communication fault (E.CAN) 32: Short circuit to ground fault 1 (E.EAH1) 33: Short circuit to ground fault 2 (E.EAH2) 34: Speed deviation fault(E.dEU) 35: Imbalance fault (E.STo) 36: Underload fault (E.LL)				
F08.24	Frequency at current fault			0.00Hz	●	301.
F08.25	Frequency Ramps at current fault			0.00Hz	●	302.
F08.26	Output voltage at current fault			0V	●	303.
F08.27	Output current at current fault			0.0A	●	304.
F08.28	Busbar voltage at current fault			0.0V	●	305.
F08.29	Maximum temperature at current fault			0.0°C	●	306.
F08.30	Input terminal status at current fault			0	●	307.
F08.31	Output terminal status at current fault			0	●	308.
F08.32	Operating frequency at previous fault			0.00Hz	●	309.
F08.33	Frequency Ramps at previous fault			0.00Hz	●	310.
F08.34	Output voltage at previous fault			0V	●	311.
F08.35	Output current at previous fault			0.0A	●	312.
F08.36	Busbar voltage at previous fault			0.0V	●	313.
F08.37	Maximum temperature at previous fault			0.0°C	●	314.
F08.38	Input terminal status at previous fault			0	●	315.
F08.39	Output terminal status at previous fault			0	●	316.
F08.40	Operating frequency at previous 2 fault			0.00Hz	●	317.
F08.41	Frequency Ramps at previous 2 fault			0.00Hz	●	318.
F08.42	Output voltage at previous 2 fault			0V	●	319.
F08.43	Output current at previous 2 fault			0.0A	●	320.

CT210 Rotary Cutting Machine Frequency Inverter Functions

Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
F08.44	Busbar voltage at previous 2 fault			0.0V	●	321.
F08.45	Maximum temperature at previous 2 fault			0.0℃	●	322.
F08.46	Input terminal status at previous 2 fault			0	●	323.
F08.47	Output terminal status at previous 2 fault			0	●	324.
F11 Group Multi-step speed and PLC						
F11.00	Multi-step speed 0	-100.0~100.0%	-100.0~100.0	0.0%	○	325.
F11.01	Multi-step speed 1	-100.0~100.0%	-100.0~100.0	0.0%	○	326.
F11.02	Multi-step speed 2	-100.0~100.0%	-100.0~100.0	0.0%	○	327.
F11.03	Multi-step speed 3	-100.0~100.0%	-100.0~100.0	0.0%	○	328.
F11.04	Multi-step speed 4	-100.0~100.0%	-100.0~100.0	0.0%	○	329.
F11.05	Multi-step speed 5	-100.0~100.0%	-100.0~100.0	0.0%	○	330.
F11.06	Multi-step speed 6	-100.0~100.0%	-100.0~100.0	0.0%	○	331.
F11.07	Multi-step speed 7	-100.0~100.0%	-100.0~100.0	0.0%	○	332.
F11.08	Multi-step speed 8	-100.0~100.0%	-100.0~100.0	0.0%	○	333.
F11.09	Multi-step speed 9	-100.0~100.0%	-100.0~100.0	0.0%	○	334.
F11.10	Multi-step speed 10	-100.0~100.0%	-100.0~100.0	0.0%	○	335.
F11.11	Multi-step speed 11	-100.0~100.0%	-100.0~100.0	0.0%	○	336.
F11.12	Multi-step speed 12	-100.0~100.0%	-100.0~100.0	0.0%	○	337.
F11.13	Multi-step speed 13	-100.0~100.0%	-100.0~100.0	0.0%	○	338.
F11.14	Multi-step speed 14	-100.0~100.0%	-100.0~100.0	0.0%	○	339.
F11.15	Multi-step speed 15	-100.0~100.0%	-100.0~100.0	0.0%	○	340.
F12 Group 485 communication						
F12.00	Local address	0 is the broadcast address, 1 ~ 247 are slave addresses	1~247	1	○	341.
F12.01	Baud rate	0: 1200bps 1: 2400bps 2: 4800bps 3: 9600bps 4: 19200bps 5: 38400bps 6: 57600 bps 7: 115200bps	0~7	4	○	342.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
F12.02	Data check	0: no check (N, 8,1) for RTU 1: even check (E, 8,1) for RTU 2: odd check (O, 8,1) for RTU 3: no check (N, 8,2) for RTU 4: even check (E, 8,2) for RTU 5: odd check (O, 8,2) for RTU	0~5	1	<input type="radio"/>	343.
F12.03	Response delay	0~200ms	0~200	5	<input type="radio"/>	344.
F12.04	Communication timeout detection time	0.0 (invalid), 0.1~60.0s	0.0~60.0	0.0s	<input type="radio"/>	345.
F12.05	Communication timeout error handling	0: alarm and freewheel stop 1: no alarm and continue running 2: no alarm and stop according to stop mode (only in communication mode) 3: no alarm and stop according to stop mode (for all control modes)	0~3	0	<input type="radio"/>	346.
F12.06	Communication processing actuation selection	LED ones 0: command with response 1: command without response LED tens 0: communication encryption disabled 1: communication encryption enabled	00~11	0x00	<input type="radio"/>	347.
F12.07	Reserved				<input checked="" type="radio"/>	348.
F12.08	Reserved				<input checked="" type="radio"/>	349.
F13 Group Auxiliary function						
F13.00	ACC time 2	0.0~3000.0s	0.0~3000.0	Depend on model	<input type="radio"/>	350.
F13.01	DEC time 2	0.0~3000.0s	0.0~3000.0	Depend on model	<input type="radio"/>	351.
F13.02	ACC time 3	0.0~3000.0s	0.0~3000.0	Depend on model	<input type="radio"/>	352.
F13.03	DEC time 3	0.0~3000.0s	0.0~3000.0	Depend on model	<input type="radio"/>	353.
F13.04	ACC time 4	0.0~3000.0s	0.0~3000.0	Depend on model	<input type="radio"/>	354.
F13.05	DEC time 4	0.0~3000.0s	0.0~3000.0	Depend on model	<input type="radio"/>	355.
F13.06	Jogging frequency	0.00~F00.07 (Max. frequency)	0.00~F00.07	5.00Hz	<input type="radio"/>	356.
F13.07	Jogging running ACC time	0.0~3000.0s	0.0~3000.0	Depend on model	<input type="radio"/>	357.
F13.08	Jogging running DEC time	0.0~3000.0s	0.0~3000.0	Depend on models	<input type="radio"/>	358.
F13.09	Droop control	-50.00~50.00Hz	0.00~50.00	0.00Hz	<input type="radio"/>	359.
F13.10	FDT1 frequency horizontal test value	0.00~F00.07 (Max. frequency)	0.00~ F00.07	50.00Hz	<input type="radio"/>	360.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
F13.11	FDT1 detection value	0.0~100.0% (FDT 1 level)	0.0~100.0	5.0%	○	361.
F13.12	FDT2 frequency horizontal test value	0.00~F00.07 (Max. frequency)	0.00~F00.07	50.00Hz	○	362.
F13.13	FDT2 detection value	0.0~100.0% (FDT 2 level)	0.0~100.0	5.0%	○	363.
F13.14	Frequency arrival detection value	0.00~F00.07 (Max. frequency)	0.0~F00.03	0.00Hz	○	364.
F13.15	Dynamic braking enable	0: disable 1: enable	0~1	1	○	365.
F13.16	Dynamic braking initial voltage	200.0~2000.0V	200.0~2000.0	220V voltage: 380.0V 380V voltage: 700.0V 660V voltage: 1120.0V	○	366.
F13.17	Running mode of cooling fan	0: normal running mode 1: keep running after power on	0~1	0	○	367.
F13.18	Overmodulation function	0x00~0x11 LED ones 0: invalid 1: valid LED tens 0: overmodulation mode 1 1: overmodulation mode 2	00~11	01	☆	368.
F13.19	Keyboard number control setting	0x000~0x1223 LED ones: frequency control selection 0: ^/V button adjustment is valid 1: ^/V button adjustment is invalid LED tens: frequency control selection 0: Only valid for F00.06=0 or F00.07=0 1: all frequency modes are valid: 2: When multi-step speed has priority, multi-speed invalid LED hundreds: Action selection during shutdown 0: valid 1: valid during operation, cleared after shutdown 2: valid during operation, cleared after receiving a stop command LED kilobit: integrating function of ^/V button 0: valid 1: invalid	000~1223	0x0000	○	369.
F13.20	Integral time of ^/V button adjustment	0.01~10.00s	0.01~10.00	0.10s	○	370.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
F13.21	UP/DOWN terminal control setting	0x00~0x221 LED ones: frequency control selection 0: valid 1: Invalid LED tens: frequency control selection 0: only valid for F00.06=0 or F00.07=0 1: all frequency modes are valid: 2: When multi-step speed priority, multi-speed invalid LED hundreds: Action selection during shutdown 0: valid 1: valid during operation, cleared after shutdown 2: valid during operation, cleared after receiving a stop command	00~221	0x000	○	371.
F13.22	UP terminal frequency increment rate	0.01~50.00Hz/s	0.01~50.00	0.50Hz/s	○	372.
F13.23	DOWN terminal frequency increment rate	0.01~50.00Hz/s	0.01~50.00	0.50Hz/s	○	373.
F13.24	Frequency setting clearing scheme when power is off	0x00~0x111 LED ones: digital adjustment frequency action selection when power off 0: stored 1: reset LED tens: MODBUS setting frequency action selection when power off 0: stored 1: reset LED hundreds: other communication setting frequency action selection when power off 0: stored 1: reset	0x000~0x111	0x000	○	374.
F13.25	Automatic frequency reduction selection when voltage drops	0: valid 1: invalid	0~1	0	○	375.
F13.26	Magnetic flux braking coefficient	0: invalid 100~150: The larger the coefficient, the greater the braking strength	0~150	0	○	376.
F13.27	Inverter input power factor	0.00~1.00	0.00~1.00	0.56	○	377.
F13.28	Current running time setting	0~35535min	0min		○	378.
F13.29	Motor 1 and motor 2 switch selection	0x00~0x14 LED ones: switch mode selection 0:by terminal 1:by MODBUS communication 2:by PROFIBUS/CANopen communication 3:by Ethernet communication 4: reserved LED tens: switch mode selection during operation 0: prohibited 1: allowed	0x00~0x14	0x00	☆	379.
F13.30	Reserved				●	380.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
F13.31	Reserved				●	381.
F13.32	Reserved				●	382.
F14 Group Motor 2 parameters						
F14.00	Motor 2 type selection	0: asynchronous motor (AM) 1: synchronous motor (SM)	0~1	0	☆	383.
F14.01	AM 2 rated power	0.1~3000.0kW	0.1~3000.0	Depend on model	☆	384.
F14.02	AM 2 rated frequency	0.01Hz~F00.07(maximum frequency)	0.01~F00.07	50.00Hz	☆	385.
F14.03	AM 2 rated rotary speed	1~36000RPM	1~36000	Depend on model	☆	386.
F14.04	AM 2 rated voltage	0~1200V	0~1200	Depend on model	☆	387.
F14.05	AM 2 rated current	0.8~6000.0A	0.8~6000.0	Depend on model	☆	388.
F14.06	AM 2 stator resistance	0.001~65.535 Ω	0.001~65.535	Depend on model	○	389.
F14.07	AM 2 rotor resistance	0.001~65.535 Ω	0.001~65.535	Depend on model	○	390.
F14.08	AM 2 leakage inductance	0.1~6553.5mH	0.1~6553.5	Depend on model	○	391.
F14.09	AM 2 mutual inductance	0.1~6553.5mH	0.1~6553.5	Depend on model	○	392.
F14.10	AM 2 no-load current	0.1~6553.5A	0.1~6553.5	Depend on model	○	393.
F14.11	AM 2 weak magnetic coefficient 1	0.0~100.0%	0.0~100.0	80.0%	○	394.
F14.12	AM 2 weak magnetic coefficient 2	0.0~100.0%	0.0~100.0	68.0%	○	395.
F14.13	AM 2 weak magnetic coefficient 3	0.0~100.0%	0.0~100.0	57.0%	○	396.
F14.14	AM 2 weak magnetic coefficient 4	0.0~100.0%	0.0~100.0	40.0%	○	397.
F14.15	SM 2 rated power	0.1~3000.0kW	0.1~3000.0	Depend on model	☆	398.
F14.16	SM 2 rated frequency	0.01Hz~F00.07(maximum frequency)	0.01~F00.07	50.00Hz	☆	399.
F14.17	SM 2 number of pole-pairs	1~50	1~50	2	☆	400.
F14.18	SM 2 nominal voltage	0~1200V	0~1200	Depend on model	☆	401.
F14.19	SM 2 rated current	0.8~6000.0A	0.8~6000.0	Depend on model	☆	402.
F14.20	SM 2 stator resistance	0.001~65.535 Ω	0.001~65.535	Depend on model	○	403.
F14.21	SM 2 d-axis inductance	0.01~655.35mH	0.01~655.35	Depend on model	○	404.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
F14.22	SM 2 q-axis inductance	0.01~655.35mH	0.01~655.35	Depend on model	○	405.
F14.23	SM 2 back electromotive force constant	0~10000V	0~10000	300	○	406.
F14.24	SM 2 initial magnetic pole position(reserved)	0~0xFFFF	0~FFFFH	0x0000	●	407.
F14.25	SM 2 magnetic pole position identification current(reserved)	0%~50%(motor rated current)	0~50	10%	●	408.
F14.26	Motor 2 overload protection selection	0:no protection 1: normal motor (with low speed compensation) 2: variable frequency motor (without low speed compensation)	0~2	2	☆	409.
F14.27	Motor 2 overload protection factor	20.0%~120.0%	20.0~120.0	100.0%	○	410.
F14.28	Motor 2 power correction selection	0.00~3.00	0.00~3.00	1.00	○	411.
F14.29	Motor 2 parameter display selection	0: display by motor type 1: display all	0~1	0	○	412.
F15 Group Status monitoring						
F15.00	Frequency target value	0.00Hz~F00.07	0.00~F00.07	0.00Hz	●	413.
F15.01	Current frequency output	0.00Hz~F00.07	0.00~F00.07	0.00Hz	●	414.
F15.02	Slope frequency	0.00Hz~F00.07	0.00~F00.07	0.00Hz	●	415.
F15.03	Busbar voltage	0.0~2000.0V	0.0~2000.0	0V	●	416.
F15.04	Power output	-300.0~300.0%(relative to the rated power of the motor)	-300.0~300.0	0.0%	●	417.
F15.05	Output voltage	0~1200V	0~1200	0V	●	418.
F15.06	Output current	0.0~3000.0A	0.0~3000.0	0.0A	●	419.
F15.07	Motor speed	0~65535RPM	0~65535	0 RFM	●	420.
F15.08	Output torque percentage	-250.0~250.0%	-250.0~250.0	0.0%	●	421.
F15.09	Torque current	-3000.0~3000.0A	3000.0~3000.0	0.0A	●	422.
F15.10	Excitation current	-3000.0~3000.0A	3000.0~3000.0	0.0A	●	423.
F15.11	Estimated motor frequency value	0.00~ F00.07	0.00~600.00	0.00Hz	●	424.
F15.12	DI terminal state	0x000~0x3FF	0000~00FF	0	●	425.
F15.13	Output terminal state	0x0~0xF	0000~000F	0	●	426.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
F15.14	Digital control frequency	0.00Hz~F00.03	0.00~10.00	0.00V	●	427.
F15.15	Torque ration	-300.0%~300.0%(motor rated current)	-300.0~300.0	0.0%	●	428.
F15.16	Linear velocity	0~65535	0~65535	0	●	429.
F15.17	Length value	0~65535	0~65535	0	●	430.
F15.18	Count value	0~65535	0~65535	0	●	431.
F15.19	AI0 input voltage	0.00~10.00V	0.00~10.00	0.00V	●	432.
F15.20	AI1 input voltage	0.00~10.00V	0.00~10.00	0.00V	●	433.
F15.21	AI2 input voltage	0.00~10.00V	0.00~10.00	0.00V	●	434.
F15.22	AI3 input voltage	-10.00~10.00V	-10.00~10.00V	0.00V	●	435.
F15.23	HDI1 input frequency	0.000~50.000kHz	0.000~50.000	0.000 kHz	●	436.
F15.24	PID set value	-100.0~100.0%	-100.0~100.0	0.0%	●	437.
F15.25	PID feedback value	-100.0~100.0%	-100.0~100.0	0.0%	●	438.
F15.26	PID output value	-100.00~100.00%	-100.00~100.0	0.00%	●	439.
F15.27	Simple PLC and current segment number	0~15	0~15	0	●	440.
F15.28	Running time	0~65535min	0~65535	0h	●	441.
F15.29	Motor power factor	-1.00~1.00	-1.00~1.00	0.0	●	442.
F15.30	Excitation current given value	-3000.0~3000.0A	-3000.0~3000.0	0.0A	●	443.
F15.31	Torque current given value	-3000.0~3000.0A	-3000.0~3000.0	0.0A	●	444.
F15.32	AC incoming current	0.0~5000.0A	0.0~5000.0	0.0A	●	445.
F15.33	Output torque	-3000.0Nm~3000.0Nm	-3000.0~3000.0	0.0Nm	●	446.
F15.34	Motor overload meter value	0~100(100 shows OL1 failure)	0~100	0	●	447.
F15.35	Parameter download error function code	0.00~99.99	0.00~99.99	0.00	●	448.
F15.36	ASR controller output	-300.0%~300.0%(motor rated current) -300.0~300.0	-300.0~300.0	0.0%	●	449.
F15.37	SM magnetic pole Angle	0.0~360.0	0.0~360.0	0.0	●	450.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
F15.38	SM phase compensation	-180.0~180.0	-180.0~180.0	0.0	●	451.
F15.39	SM high frequency superimposed current	0.0%~200.0%(motor rated current)	0.0~200.0	0.0	●	452.
F15.40	Flux linkage	0.0%~200.0%	0.0~200.0	0.0%	●	453.
F15.41	Reserved				●	454.
F15.42	Reserved				●	455.
F15.43	Reserved				●	456.
F15.44	Reserved				●	457.
F15.45	Reserved				●	458.
F21 Group Rotary Cutting Machine Special Functions						
F21.00	Selection of rotary cutting machine enabling	0: disable 1: enable	0~1	1	☆	459.
F21.01	Diver roller and rotary cutting start selection	0: drive roller and rotary cutting start same-time 1: drive roller start firstly, rotary cutting start after	0~1	1	○	460.
F21.02	Drive roller speed	0.01~655.35	0.01~655.35	110.76	○	461.
F21.03	Drive roller diameter	0.1~5000.0mm	0.1~5000.0	99.0mm	○	462.
F21.04	Drive roller distance	0.1~5000.0mm	0.1~5000.0	100.0mm	○	463.
F21.05	Cutting thickness 0	0.01~100.00mm	0.01~100.00	1.50mm	○	464.
F21.06	Cutting thickness 1	0.01~100.00mm	0.01~100.00	1.80mm	○	465.
F21.07	Final cutting length compensation	-1000~1000mm	-1000~1000	0mm	○	466.
F21.08	Thickness compensation	-50.00~50.00mm	-50.00~50.00	0.00mm	○	467.
F21.09	Feed pitch	0.01~99.00mm	0.01~99.00	10.00mm	○	468.
F21.10	Wood core setting	0.1~1000.0mm	0.1~1000.0	30.0mm	○	469.
F21.11	Mouth opening setting	0.1~6000.0mm	0.1~6000.0	300.0mm	○	470.
F21.12	Wooden cutting length 0	1~65535mm	1~65535	600mm	○	471.
F21.13	Wooden cutting length 1	1~65535mm	1~65535	800mm	○	472.
F21.14	Wooden cutting length coefficient	0.01~600.00%	0.01~600.00	100.00%	○	473.
F21.15	Origin reset displacement point	0.1~6553.5mm	0.1~6553.5	100.0mm	○	474.
F21.16	Detection of displacement compensation	-100.0~100.0mm	-100.0~100.0	0.0mm	○	475.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
F21.17	Current displacement point of knife table (for detecting origin)	0.1~6553.5mm	0.1~6553.5	100.0mm	<input type="radio"/>	476.
F21.18	Knife rotary cutting mode selection	0: start-stop mode 1: continue cutting mode	0~1	1	<input type="radio"/>	477.
F21.19	Fast FWD frequency	0.00 Hz~P00.03(max frequency)	0.00~P00.03	50.00Hz	<input type="radio"/>	478.
F21.20	Fast REV frequency	0.00 Hz~P00.03(max frequency)	0.00~P00.03	50.00Hz	<input type="radio"/>	479.
F21.21	Feed transmission ratio	0.01~100.00	0.01~100.00	14.68	<input type="radio"/>	480.
F21.22	Encoder pulse	1 ~50000	1 ~50000	600	<input type="radio"/>	481.
F21.23	Delay of stop and restart of drive roller after knife withdrawal	0.0~1000.0S	0.0~1000.0	3.0S	<input type="radio"/>	482.
F21.24	Knife withdrawal roller start hold	0.0~1000.0S	0.0~1000.0	200.0S	<input type="radio"/>	483.
F21.25	Knife table current displacement accumulation	0: positive characteristic 1: negative characteristic	0~1	0	<input type="radio"/>	484.
F21.26	Automatic knife withdrawal frequency	0.00 Hz~P00.03(max frequency)	0.00~P00.03	50.00Hz	<input type="radio"/>	485.
F21.27	Self learning selection of dot and wood	0: Disable 1: Dot self learning (use together with start command) 2: wood self learning	0~2	0	<input type="radio"/>	486.
F21.28	Lack material time	0.0~1000.0S	0.0~1000.0	0.0S	<input type="radio"/>	487.
F21.29	Setting origin wood diameter arrive while knife withdrawal, pulse signal output	0.1mm~P21.11	0.1~P21.11	130mm	<input type="radio"/>	488.
F21.30	Pulse signal output holding time	0.00~10.00s	0.00~10.00	2.00s	<input type="radio"/>	489.
F21.31	First cutting delay calculation	0~65535ms	0~65535	500ms	<input type="radio"/>	490.
F21.32	Cutting head compensation	0.00~50.00mm	0.00~50.00	0.00mm	<input type="radio"/>	491.
F21.33	Cutting head compensation time	0~65535ms	0~65535	0ms	<input type="radio"/>	492.
F21.34	Final cutting compensation thickness	-50.00~50.00mm	-50.00~50.00	0.00mm	<input type="radio"/>	493.
F21.35	Final cutting compensation length	0~5000mm	0~5000	30mm	<input type="radio"/>	494.
F21.36	Thickness increment and decrement	0.00~10.00mm	0.00~10.00mm	0.01mm	<input type="radio"/>	495.
F21.37	Cutter transmission ratio	0.01~100.00	0.01~100.00	10.00	<input type="radio"/>	496.
F21.38	Cutter frequency setting	P21.18=0 is valid, 1 is invalid 0.00~400.00hz	0.00~400.00	50.00	<input type="radio"/>	497.
F21.39	Min wood core limit	0.1~1000.0mm	0.1~1000.0	25.0mm	<input type="radio"/>	498.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
F21.40	Min limit position enable	0: disable 1: enable	0~1	0	<input type="radio"/>	499.
F21.41	Encoder use setting	0x00~0x11 LED 0 digit: 0: encoder install on motor (closed-loop or V/F both ok) 1: encoder install on roller screw LED 00 digit: 0: original wood diameter reset 1: Dot reset	0x00~0x11	0x01	<input type="radio"/>	500.
F21.42	Final trimming cutting enable	Bit0: 0: disable 1: enable Bit1: 0 : enable while fast FWD/REV 1: disable while trimming cutting	0~3	0	<input type="radio"/>	501.
F21.43	Delay 1	0.0~10000ms	0~10000	500ms	<input type="radio"/>	502.
F21.44	Delay 2 (drive roller re-start)	0.0~10000ms	0~10000	1000ms	<input type="radio"/>	503.
F21.45	Delay 3 (cut wood core)	0.0~10000ms	0~10000	1500ms	<input type="radio"/>	504.
F21.46	Delay 4 (knife)	0.0~10000ms	0~10000	1500ms	<input type="radio"/>	505.
F21.47	Tail length compensation	-300~300mm	-300~300	0mm	<input type="radio"/>	506.
F21.48	Tail compensation start wood core	0~1000.0mm	0~1000.0	50.0mm	<input type="radio"/>	507.
F21.49	Knife selection	0: Automatic 1: manual	0~1	0	<input type="radio"/>	508.
F21.50	Delay 5 (press wood delay)	0~10000ms	0~10000	000ms	<input type="radio"/>	509.
F21.51	Return mode while finishing rotary cutting	0: Continue return 1: Return one time 2: Automatic rotary cutting	0~1	0	<input type="radio"/>	510.
F21.52	Single cutting stop month	0~1000.0mm	0~1000.0	150.0mm	<input type="radio"/>	511.
F21.53	Final piece thickness compensation	0~10	0~10	3	<input type="radio"/>	512.
F21.54	Final piece length compensation U/D change rate	0~200mm	0~200	5mm	<input type="radio"/>	513.
F21.55	Length U/D change rate	0~200mm	0~200	5mm	<input type="radio"/>	514.
F21.56	Continue cutting study time	0~65535ms	0~65535	650ms	<input type="radio"/>	515.
F21.57	Wood core increment for drive roller stop in advance	0~50.0mm	0~50.0	0.0mm	<input type="radio"/>	516.
F21.58	Drive roller DEC diameter	0~1500.0mm	0~1000.0	45.0mm	<input type="radio"/>	517.
F21.59	Drive roller normal frequency	0.00~150.00Hz	0.00~100.00	50.00Hz	<input type="radio"/>	518.
F21.60	Drive roller DEC frequency	0.00~150.00Hz	0.00~100.00	40.00Hz	<input type="radio"/>	519.
F21.61	Torque give filter time	0.000~10.000s	0.000~10.000s	0.100s	<input type="radio"/>	520.
F21.62	Drive roller frequency control	0: disable 1: enable	0~1	0	<input type="radio"/>	521.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
F21.63	Drive roller close loop detection speed	0: open loop 1: close loop HDI detection speed	0~1	0	<input type="radio"/>	522.
F21.64	Final piece treatment	0: no treatment 1: with treatment	0~1	1	<input type="radio"/>	523.
F21.65	Wood actual length input	0~65535mm	1~65535	0mm	<input type="radio"/>	524.
F21.66	Final piece actual length input	0~2000mm	1~2000	0mm	<input type="radio"/>	525.
F21.67	Rotary cutting wood actual thickness input	0~100.00mm	0~100.00	0mm	<input type="radio"/>	526.
F21.68	Wood core increment for knife stop in advance	0~50.0mm	0~50.0	10.0mm	<input type="radio"/>	527.
F21.69	Knife scan treatment	0: dynamic cycle 1: static cycle	0~1	1	<input type="radio"/>	528.
						529.
						530.
F22 Group Rotary Cutting Machine Monitor Functions						
F22.00	Log diameter display	0.1~5000.0mm	0.1~5000.0	500.0mm	<input checked="" type="radio"/>	531.
F22.01	Current rotary cutting thickness display	0.01~100.00mm	0.01~100.00	5.00mm	<input checked="" type="radio"/>	532.
F22.02	Knife table current displacement point display	0.1~6553.5mm	0.1~6553.5	100.0mm	<input checked="" type="radio"/>	533.
F22.03	rotary cutting output frequency	0.00~P0.03	0.00~P0.03	0.00Hz	<input checked="" type="radio"/>	534.
F22.04	Current wood cutting length	1~65535mm	0.1~65535mm	500mm	<input checked="" type="radio"/>	535.
F22.05	Single piece wood cutting time	0~65535	0~65535	0	<input checked="" type="radio"/>	536.
F22.06	Actual using cycle	0~65535	0~65535	0	<input checked="" type="radio"/>	537.
F22.07	Counting length (piece)	0.0~1000.0	0.0~1000.0	0	<input checked="" type="radio"/>	538.
F22.08	Current original wood diameter while counting whole cutting length	0.1~1000.0mm	0.1~1000.0	0.0mm	<input checked="" type="radio"/>	539.
F22.09	Actual length (piece)	0.0~1000.0	0.0~1000.0	0	<input checked="" type="radio"/>	540.
F22.10	Self study counting total rotary cutting time	0~65535	0~65535	0	<input checked="" type="radio"/>	541.
F22.11	Actual total rotary cutting time	0~65535	0~65535	0	<input checked="" type="radio"/>	542.
F22.12	Knife output frequency	0~655.35	0~655.35	0	<input checked="" type="radio"/>	543.
F22.13	Error between actual time and meter	0~65535	0~65535	0	<input checked="" type="radio"/>	544.
F22.14	Actual monitor knife cycle	0~65535	0~65535	0	<input checked="" type="radio"/>	545.
F22.19	Piece display	0~65535	0~65535	0	<input checked="" type="radio"/>	546.

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Function code	Name	Detailed instruction of parameters	Setting range	Default value	Modify	No.
F22.20	Wood quantity display	0~65535	0~65535	0	●	547.
F28 Group Factory Parameters Return						
F28.00	Factory passport	0~65535	0~65535	*****	●	548.
F28.01	Reserved	0~1	0~1	0	●	549.
F28.02	Inverter model	0~33	0~33	Depend on model	☆	550.
F28.03	Inverter rated power	0.4~3000.0kW	0.4~3000.0	Depend on model	●	551.
F28.04	Inverter rated voltage	0~1200V	0~1200V	Depend on model	☆	552.
F28.05	Inverter rated current	0.0~6000.0A	0.0~1000.0	Depend on model	●	553.
F28.06	Dead area time	2.0us~15.0us	2.0~15.0	Depend on model	☆	554.
F28.07	Software over voltage point	0.0V~2500.0V	0.0~2500.0	Depend on model	☆	555.
F28.08	Software under voltage point	0.0V~2000.0V	0.0~2000.0	Depend on model	☆	556.
F28.09	Software over current point	10.0%~250.0%	10.0~250.0	220.0%	☆	557.
F28.10	Voltage correction factor	10.0%~250.0%	10.0~250.0	100.0%	☆	558.
F28.11	Current correction factor	10.0%~250.0%	10.0~250.0	100.0%	☆	559.
F28.12	Factory time setting	0~65535h	0~65535	0h	○	560.