Appendix(1)

【SF-520 Series and HF-620 Series Parameter Comparison Table】

Rev 1.0

SF-520 Series Parameters Explanation of Remarks <□> column

<1>Values shown here are for 200 V class drives. Double the value when using a 400 V class drive.

<2>Default setting value is dependent on parameter C6-02, Carrier Frequency Selection.

<3>Default setting value is dependent on parameter o2-04, Drive Model Selection and C6-01, Drive Duty Selection

<4>Default setting value is 120% when C6-01 is set to 1 (ND) and 150% when C6-01 is set to 0 (HD).

◆ A Parameter（Initialization function）

SF-520 series					HF-620 series				
No-	Name	Data range	Initial Value	Note	No-	Name	Data range	Initial Value	Note
A1-01	Access Level Selection	0: Operation only 2: Advanced Access Level	2		UA-10	Display restriction selection	00: Full display / 01: Function-specific display 02: User setting display / 03: Data compare display 04: Monitor only	00	
					UA-21	2nd-motor parameter display selection	00: Hidden / 01: Display	00	
					UA-22	Option parameter display selection	00: Hidden / 01: Display	00	
A1-03	Initialize Parameters	0: No Initialization 2220: 2-Wire Initialization 3330: 3-Wire Initialization	0		Ub-01	Factory initialization selection	00(invalid)/01(trip history clear)/02(parameter initialization) 03 (trip history & parameters)/04 (reserved area)/05 (other than terminal functions) / 06 (other than communication function)/07 (other than terminal & communication function)/08 (reserved area) 10 (user settings registration)/11 (other than user settings registration)	00	
					Ub-05	Enable initialization	00: Disable / 01: Execute initialization	00	
A1-04	Password	0～9999	0		UA-01	Password for display	0000～FFFF	0000h	
A1-05	Password Setting	0～9999	0						

◆ b Parameter（Application）

SF-520 series					HF-620 series				
No-	Name	Data range	Initial Value	Note	No-	Name	Data range	Initial Value	Note
b1-01	Frequency Reference Selection	1: Terminals - Analog input terminal A1 2: MEMOBUS/Modbus communications (option) 3: Potentiometer (option)	1		AF101	Main speed command selection 1st-motor	01([VRF] terminal input)/02([IRF] terminal input)/07(parameter setting) 08(RS485 setting)/09(option)/12(pulse input)/14(reservation)/15(PID calculation)	07	
b1-02	Run Command Selection	0: Digital Operator - RUN and STOP keys on the digital operator 1: Digital input terminals 2: MEMOBUS/Modbus communications (option)	1		AA115	STOP mode selection, 1st-motor	00: [FR]/[RR] terminal / 01: 3-wire / 02: Keypad's RUN-key 03: RS485 / 04: Option	02	
b1-03	Stopping Method Selection	0: Ramp to Stop 1: Coast to Stop	0		AF101	DC braking selection 1st-motor	00: Deceleration stop 01: Free-run stop	00	
b1-04	Reverse Operation Selection	0: Reverse enabled. 1: Reverse disabled.	0		AA114	RUN direction restriction selection, 1st-motor	00: No restriction / 01: Only Forward / 02: Only Reverse	00	
b1-07	LOCAL/REMOTE Run Selection	0: External Run command has to be cycled at the new source to be activated. 1: External Run command at new source is accepted immediately.	0		Not applicable				
b1-08	Run Command Selection while in Programming Mode	0: Run command accepted only in the operation menu. 1: Run command accepted in all menus. 2: Prohibit entering Programming Mode during Run	0		Not applicable				
b1-14	Phase Order Selection	0 : Standard 1 : Switch phase order	0		Not applicable				
b1-17	Run Command at Power Up	0: Run command not issued, needs to be cycled 1: Run command issued, motor operation start	1		In the HF-620, the factory default setting is "Allow". By assigning 034 (UPS: Restart to restore power) to one of [CA-01] to [CA-09], an error [E013] can be made if the operation command is still entered when the power is turned on. For details, refer to the User's Guide.				
b2-02	DC Injection Braking Current	0～75	50%		AF105	DC braking force setting, 1st-motor	0～100(%)	50	
					AF108	DC braking force at start, 1st-motor	0～100(%)	0	
b2-03	DC Injection Braking Time/DC Excitation Time at Start	0.00～10.00	0.00s		AF109	DC braking active time at start, 1st-motor	0.00～60.00(s)	0.00	
b2-04	DC Injection Braking Time at Stop	0.00～10.00	0.00s		AF106	DC braking active time at stop, 1st-motor	0.00～60.00(s)	0.50	

◆ C Parameter（Tuning）

SF-520 series					HF-620 series				
No-	Name	Data range	Initial Value	Note	No-	Name	Data range	Initial Value	Note
C1-01	Acceleration Time 1	0.0～6000.0	10.0s		AC120	Acceleration time 1 1st-motor	0.00～3600.00(s)	10.0	
C1-02	Deceleration Time 1		10.0s		AC122	Deceleration time 1 1st-motor		10.0	
C1-03	Acceleration Time 2		10.0s		AC124	Acceleration time 2 1st-motor		10.0	
C1-04	Deceleration Time 2		10.0s		AC126	Deceleration time 2 1st-motor		10.0	
C1-09	Fast-Stop Time	0.0～6000.0	10.0s		Not applicable				
C2-01	S-Curve Characteristic at Accel Start	0.00～10.00	0.0s		AC-03	Acceleration curve selection	00: Linear acceleration / 01: S-curve acceleration 02: U-curve acceleration / 03: Reverse U-curve acceleration 04: Elevator S-curve acceleration	01	
					AC-05	Acceleration curve constant setting	1～10	2	
C2-02	S-Curve Characteristic at Accel End	0.00～10.00	0.0s		AC-08	EL-S-curve ratio at start of acceleration	0～100(%)	10	
					AC-09	EL-S-curve ratio at end of acceleration		10	
C2-03	S-Curve Characteristic at Decel Start	0.00～10.00	0.0s		AC-04	Deceleration curve selection	00: Linear Deceleration / 01: S-curve Deceleration 02: U-curve Deceleration / 03: Reverse U-curve Deceleration 04: Elevator S-curve Deceleration	01	
					AC-06	Deceleration curve constant setting	1～10	2	
C2-04	S-Curve Characteristic at Decel End	0.00～10.00	0.0s		AC-10	EL-S-curve ratio at start of deceleration	0～100(%)	10	
					AC-11	EL-S-curve ratio at end of deceleration		10	
C3-01	Slip Compensation Gain	0.0～2.5	0.0		Not applicable				
C3-02	Slip Compensation Primary Delay Time	0～10000	2000ms		Not applicable				
C4-01	Torque Compensation Gain	0.00～2.50	1.00		Normally, this setting is not necessary, but if torque is insufficient at startup, use [Hb141],[Hb142],[HC101],[HC102] to make adjustments.				
C6-01	Drive Duty Selection	0: Heavy Duty (HD) for constant torque applications. 1: Normal Duty (ND) for variable torque applications.	0		Ub-03	Load type selection	01: Light duty (LD) 02: Normal duty(ND)	02	
C6-02	Carrier Frequency Selection	1 : 2.0 kHz 2 : 5.0 kHz 3 : 8.0 kHz 4 : 10.0 kHz 5 : 12.5 kHz 6 : 15.0 kHz 7 : Swing PWM 8 to E : No setting possible F: User defined (determined by C6-03 through C6-05)	2		bb101	Carrier frequency setting, 1st-motor	ND: 2.0 to 15.0 kHz LD: 2.0 to 10.0 kHz	2.0	
					bb102	Sprinkle carrier pattern selection, 1st-motor	00(Disabled)/01(Pattern 1 Enabled)/02(Pattern 2 Enabled)/03(Pattern 3 Enabled)	00	
C6-03	Carrier Frequency Upper Limit	1.0～15.0	5kHz	<2>	Not applicable				
C6-04	Carrier Frequency Lower Limit	1.0～15.0	5	<2>	Not applicable				
C6-05	Carrier Frequency Proportional Gain	00～99	0	<2>	Not applicable				

◆ d Parameter（References）

SF-520 series					HF-620 series				
No-	Name	Data range	Initial Value	Note	No-	Name	Data range	Initial Value	Note
d1-01	Frequency Reference 1	0.00～400.00(Hz)	0.00Hz		Ab110	Multi-speed 0 setting, 1st-motor	0.00～590.00(Hz)	10.00	
d1-02	Frequency Reference 2		0.00Hz		Ab-11	Multi-speed 1 setting		20.00	
d1-03	Frequency Reference 3		0.00Hz		Ab-12	Multi-speed 2 setting		30.00	
d1-04	Frequency Reference 4		0.00Hz		Ab-13	Multi-speed 3 setting		40.00	
d1-05	Frequency Reference 5		0.00Hz		Ab-14	Multi-speed 4 setting		0.00	
d1-06	Frequency Reference 6		0.00Hz		Ab-15	Multi-speed 5 setting		0.00	
d1-07	Frequency Reference 7		0.00Hz		Ab-16	Multi-speed 6 setting		0.00	
d1-08	Frequency Reference 8		0.00Hz		Ab-17	Multi-speed 7 setting		0.00	
d1-17	Jog Frequency Reference	0.00～400.00(Hz)	5.00Hz		AG-20	Jogging frequency	0.00～10.00(Hz)	5.00	
d2-01	Frequency Reference Upper Limit	0.0～110.0(%)	100.0%		bA101	Upper frequency limit source selection, 1st-motor	00: Disable / 01: Terminal [VRF] / 02: Terminal [IRF] 07: Parameter setting / 08: RS485 / 09: Option / 12: Pulse input	00	
					bA102	Upper frequency limit 1st-motor	0.00 to Max. frequency, 1st motor (Hz)	0.00	
d2-02	Frequency Reference Lower Limit	0.0～110.0(%)	0.0%		bA103	Lower frequency limit 1st-motor	0.00 to Upper frequency limit, 1st motor (Hz)	0.00	
d3-01	Jump Frequency 1	0.0～400.0(Hz)	0.0Hz		AG101	Jump frequency 1, 1st-motor	0.00～590.00(Hz)	0.00	
d3-02	Jump Frequency 2		0.0Hz		AG103	Jump frequency 2, 1st-motor		0.00	
d3-04	Jump Frequency Width	0.0～20.0(Hz)	1.0Hz		AG102	Jump frequency width 1, 1st-motor	0.00～10.00(Hz)	0.50	
					AG104	Jump frequency width 2, 1st-motor		0.50	
d4-01	Frequency Reference Hold Function Selection	0: Disabled / 1: Enabled	0		CA-61	UP/DWN data save enable	00: Not save / 01: Save	00	

◆ E Parameter（Motor Parameters）

SF-520 series					HF-620 series				
No-	Name	Data range	Initial Value	Note	No-	Name	Data range	Initial Value	Note
E1-01	Input Voltage Setting	155～255	200V	<1>	Not applicable				
E1-03	V/f Pattern Selection	0～F	F		Not applicable				
E1-04	Maximum Output Frequency	40.0～400.0	60Hz		Hb105	Async. Motor maximum frequency setting, 1st-motor	10.00～590.00(Hz)	60.00	
E1-05	Maximum Output Voltage	0.0～255.0	200V	<1>	Hb106	Async. Motor rated voltage, 1st-motor	1～1000(V)	200/400	
E1-06	Base Frequency	0.0～E1-04	60Hz		Hb104	Async. Motor base frequency setting, 1st-motor	10.00～590.00(Hz)	60.00	
E1-07	Middle Output Frequency	0.0～E1-04	3Hz		Not applicable				
E1-08	Middle Output Frequency Voltage	0.0～255.0	13.6	<3> <1>	Not applicable				
E1-09	Minimum Output Frequency	0.0～E1-04	1.5Hz		Hb130	Minimum frequency adjustment, 1st-motor	0.00～10.00(Hz)	0.50	Initial value recommended
E1-10	Minimum Output Frequency Voltage	0.0～255.0	9.1V	<3><1>	Not applicable				
E2-01	Motor Rated Current	10 to 200% of drive rated current	*A	<3>	Hb108	Async. Motor rated current, 1st-motor	0.01～10000.00(A)	Dipends on [Hb101]～[Hb104]	
E2-02	Motor Rated Slip	0.00～20.00	*Hz	<3>	Hb112	Async. Motor constant R2, 1st-motor	0.000001～1000.000000(Ω)		
E2-03	Motor No-Load Current	0 to less than E2-01	*A	<3>	Hb116	Async. Motor constant I0, 1st-motor	0.01～10000.00(A)		
E2-05	Motor Line-to-Line Resistance	0.000～65.000	*Ω	<3>	Hb110	Sync. Motor constant R, 1st-motor	0.000001～1000.000000(Ω)		

◆H Parameters （Multi-Function Terminals）

SF-520 series					HF-620 series				
No-	Name	Data range	Initial Value	Note	No-	Name	Data range	Initial Value	Note
H1-01	Multi-Function Digital Input Terminal S1 Function Selection	1～67 Refer to page6 "SF-520 List of input terminal functions" .	40		CA-01	Input terminal [FR] function	000~110 Refer to page7 "HF-620 List of input terminal functions" .	001/FR	
H1-02	Multi-Function Digital Input Terminal S2 Function Selection		41		CA-02	Input terminal [RR] function		002/RR	
H1-03	Multi-Function Digital Input Terminal S3 Function Selection		24		CA-06	Input terminal [ES] active state		033/ES	
H1-04	Multi-Function Digital Input Terminal S4 Function Selection		14		CA-07	Input terminal [RST] active state択		028/RST	
H1-05	Multi-Function Digital Input Terminal S5 Function Selection		3		CA-03	Input terminal [DFL] active state		003/DFL	
H2-01	Terminal MA, MB and MC Function Selection (relay)	0～13D Refer to page6 "SF-520 List of output terminal functions" .	E		CC-07	Output terminal [ML] function	000 ~ 098 Refer to page7 "HF-620 List of output terminal functions" .	017	
H3-01	Terminal A1 Signal Level Selection	0：0～+10V(lower limit) 1：0～+10V(no lower limit) 2：4～20mA 3：0～20mA	0		Not applicable				For the adjustment method, refer to "9.15 Input signal" and "9.16 Output signal" in the User's Guide.
H3-03	Terminal A1 Gain Setting	-999.9 ～ 999.9	100.0%		Cb-04	[VRF] End value	0.00～100.00(%)	100.00	
					Cb-06	[VRF] End rate	[Cb-05]～100.0(%)	100.0	
					Cb-31	[VRF] Voltage/Current gain adjustment	0～200.00	100.00	
H3-04	Terminal A1 Bias Setting	-999.9 ～ 999.9	0.0%		Cb-03	[VRF] Start value	0.00～100.00(%)	0.00	
					Cb-05	[VRF] Start rate	0.0～[Cb-06](%)	0.0	
					Cb-30	[VRF] Voltage/Current bias adjustment	-100.00～100.00(%)	0.00	
H3-13	Analog Input Filter Time Constant	0.00～2.00	0.03s		Cb-01	[VRF] Filter time constant	1~500	500	
					Cb-11	[IRF] Filter time constant	1~500	500	
H4-01	Multi-Function Analog Output Terminal AM	000～413	102		Cd-05	[AMV] Output monitor selection	dA-**, db-**, dC-**, FA-**	dA-01	
H4-02	Multi-Function Analog Output Terminal AM Gain	-999.9 ～ 999.9	100.0%		Cd-34	[AMV] Gain adjustment (Voltage))	-1000.0~1000.0(%)	100.0	
H4-03	Multi-Function Analog Output Terminal AM Bias	-999.9 ～ 999.9	0.0%		Cd-33	[AMV] Bias adjustment (Voltage)	-100.0~100.0(%)	100.0	
H5-01	Drive Node Address	0～FF	1F		CF-02	RS485 communication node address	1.～247.	1	Refer to the user's guide "Chapter 11 Modbus Communication" for RS485 communication settings.
H5-02	Communication Speed Selection	0：1200 bps　1：2400 bps 2：4800 bps　3：9600 bps 4：19200 bps　5：38400 bps	3		CF-01	RS485 communication baudrate selection	03:2400bps　04:4800bps 05:9600bps　06:19200bps 07:38400bps　08:57600bps 09:76800bps　10:115200bps	05	
H5-03	Communication Parity Selection	0: No parity 1: Even parity 2: Odd parity	0		CF-03	RS485 communication parity selection	00: no parity 01: Even parity 02: Odd parity	00	
H5-04	Stopping Method After Communication Error	0: Ramp to stop 1: Coast to stop 2: Fast-stop 3: Alarm only	3		CF-05	RS485 communication error selection	00: Error 01: Trip after deceleration stop 02: Ignore 03: Free run stop 04: Deceleration stop	02	
H5-05	Communication Fault Detection Selection	0: Disabled 1: Enabled	1						
H5-06	Drive Transmit Wait Time	10～65	10ms		CF-07	RS485 communication wait time setting	0.～1000.(ms)	5	
H5-07	RTS Control Selection	0: Disabled 1: Enabled	1		Not applicable				
H5-12	Run Command Method Selection	0：FWD/STOP, REV/STOP 1：RUN/STOP, FWD/REV	0		Not applicable				
H5-13	Frequency command in communication, frequency monitor unit selection	0: 0.1 Hz/1 1: o1-03 based 2: 100%/30000 3: 0.1%/1	0		Not applicable				

◆ L Parameters （Protection Function）

SF-520 series					HF-620 series				
No-	Name	Data range	Initial Value	Note	No-	Name	Data range	Initial Value	Note
L1-01	Motor Overload Protection Selection	0: Disabled 1: Three-phase motor protection 2: Protection of inverter motor	1		bC111	Electronic thermal characteristic selection, 1st-motor	00 (reduction characteristics)/01 (constant torque characteristics)/02 (free setting) When L1-01=1,6: 00 (reduction characteristic) When L1-01=2: 01 (constant torque characteristics)	00	
L1-02	Motor Overload Protection Time	0.1 ~ 5.0	1.0min		Not applicable(In HF-620, fixed at 1min.)				
L1-08	Electrothermal Level Setting	10 to 150%	100%		bC110	Electronic thermal level setting, 1st-motor	(0.00 ～ 3.00)×Inverter rated output current	1.00×Rated output current	
L1-13	Continuous Electrothermal Operation Selection	0: Disabled 1: Enabled	1		bC-14	Electronic thermal counter memory selection at Power-off	00: Disable / 01: Enable	01	
L2-01	Momentary Power Loss Operation Selection	0: Disabled - Drive trips on (Uv1) fault when power is lost. 1: Power Loss Ride-Thru Time - Drive will restart if power returns within the Power Loss Ride-Thru Time. 2: CPU Power Active - Drive will restart if power returns as long as the CPU is working.	0		When setting L2-01=1,2 on SF-520, set bb-21 to a value other than 0. If you do not want to limit the number of returns, set 255 (infinite).				
					bb-21	Number of retries after under voltage	0 (Trip) to 16/ 255 (Unlimited)	0	
					bb-27	Enable instantaneous power failure/under-voltage error while in stop status	00 (disabled) / 01 (enabled while stopped) / 02 (disabled while stopped or decelerated)	00	
L3-01	Stall Prevention Selection during Acceleration	0: Disable / 1: Enable	1		bA122	Overload restriction 1 mode selection, 1st-motor	00 (disabled) / 01 (acceleration constant speed) / 02 (constant speed only) 03 (acceleration constant speed/speed increase during regeneration)	01	
L3-02	Stall Prevention Level during Acceleration	0～150	*%	<4>	bA123	Overload restriction 1 active level, 1st-motor	(0.20 to 2.50)×Inverter rated output current	1.50×Rated output current	
L3-04	Stall prevention function selection during deceleration (Overvoltage suppression during deceleration)	0: Disable 1: Enable 4: Over-excitation braking	0		bA140	Overvoltage suppression enable setting, 1st-motor	00(disabled)/01(DC voltage constant deceleration)	00	
					bA146	Overexcitation function selection,	00: Disable	00	
L3-05	Stall Prevention Selection during Run	0: Disabled 1: Enabled (deceleration time 1) 2: Enabled (deceleration time 2)	1		bA122	Overload restriction 1 mode selection, 1st-motor	00: disabled) / 01 acceleration constant speed / 02 constant speed only 03 acceleration constant speed / speed increase during regeneration	01	
L3-06	Stall Prevention Level during Run	30～150	*	<4>	bA123	Overload restriction 1 active level, 1st-motor	(0.20 to 2.50)×Inverter rated output current	1.50×rated output current	
L4-01	Speed Agreement Detection Level	0.0～400.0	0.0Hz		CE-10	Arrival frequency 1 value setting during acceleration	0.00～590.00(Hz)	0.00	
					CE-11	Arrival frequency 1 value setting during deceleration	0.00～590.00(Hz)	0.00	
L4-07	Frequency detection conditions	0: No detection during baseblock. 1: Detection always enabled.	0		Not applicable				
L5-01	Number of Auto Restart Attempts	0～10	0		bb-21	Number of retries after under voltage	0～16/255(infinite)	0	
					bb-22	Number of retries after overcurrent	0～5	0	
					bb-23	Number of retries after over voltage	0～5	0	
L6-01	Torque Detection Selection 1	0～4	0		Not applicable				
L6-02	Torque Detection Level 1	0～300	150%		CE102	Low current detection level 1, 1st motor	(0.00 to 2.00)×Inverter output current A	1.00×Rated output current	
					CE106	Overload warning level 1, 1st motor		1.15×Rated output current	
L6-03	Torque Detection Time 1	0.0～10.0	0.1s		Not applicable				
L8-05	Input Phase Loss Protection Selection	0: Disabled / 1: Enabled	0		bb-65	Detect ground fault selection	00: Disable / 01: Enable	00	
L8-10	Heatsink Cooling Fan Operation Selection	0: Run with time 1: Run always	0		bA-70	Cooling fan control method selection	00: Always ON 01: While inverter operates 02: Depends on temperature	3000	
L8-12	Ambient Temperature Setting	-10～50	30°C		Not applicable				
L8-18	Soft Current Limit Selection	0: Disabled 1: Enabled	0		bA120	Overcurrent suppression enable, 1st-motor	00: Disable / 01: Enable 02: Enable（with voltage reduction）	00	
L8-35	Installation Method Selection	0: IP20/IP00 Drive 1: Side-by-Side Mounting	0		Not applicable				
L8-38	Carrier Frequency Reduction	0: Disabled 1: Enabled below 6 Hz 2: Enabled for the whole speed range	1		Not applicable				

◆ n Parameters （Special Adjustments）

SF-520 series					HF-620 series				
No-	Name	Data range	Initial Value	Note	No-	Name	Data range	Initial Value	Note
n1-02	Hunting Prevention Gain Setting	0.00～2.50	1.00		Normally, it is not necessary to change the setting, but if "turbulence" or "uneven rotation" of the motor occurs, use [HA115] to make adjustments.				
n3-13	Overexcitation Deceleration Gain	1.00～1.40	1.10		Not applicable				

◆ o Parameters （Operator Related Parameters）

SF-520 series					HF-620				
No-	Name	Data range	Initial Value	Note	No-	Name	Data range	Initial Value	Note
o1-02	User Monitor Selection After Power ON	1: Frequency Reference (U1-01) 2: Forward/Reverse 3: Output Frequency (U1-02) 4: Output Current (U1-03)	1		UA-91	Initial screen selection	no / dA-01~(Excluding UA-31~UA-62)	dA-01	
o1-03	Frequency command setting/display unit	0：0.01Hz unit 1：0.01% unit	0		Not applicable				
o2-02	STOP Key Function Selection	0:Disabled / 1: Enabled	1		AA-13	STOP-key selection	00: Disable / 01: Enable 02: Enable at only trip reset	40.00	
o2-04	Inverter unit selection	0～FF	*	<12>	Not applicable				
o2-05	Frequency Reference Setting Method Selection	0: ENTER key required 1: ENTER key not required	0		Not applicable				
o2-06	Operation Selection when LED Operator is Disconnected	0:Disabled / 1: Enabled	0		UA-20	Action selection at keypad disconnection	00: Error / 01: Trip after deceleration stop 02: Ignore / 03: Free run stop 04: Deceleration stop	02	
o3-01	Copy Function Selection	0: Waiting for command / 1: Read 2: Copy / 3: Verify (verification)	0		Not applicable For parameter copy/read function using OS-44, please refer to the optional "OS-44" instruction manual.				
o3-02	Copy Allowed Selection	0: Disable / 1: Enable	0						
o4-01	Accumulated Operation Time Setting	0～9999	0		Not applicable				
o4-02	Accumulated Operation Time Selection	0: Logs power-on time 1: Logs operation time when the drive output is active	1		Not applicable				
o4-03	Cooling Fan Operation Time Setting	0～9999	0		Not applicable				
o4-05	Capacitor Maintenance Setting	0～150	0%		Not applicable				
o4-07	DC Bus Pre-Charge Relay Maintenance Setting	0～150	0%		Not applicable				
o4-09	IGBT Maintenance Setting	0～150	0%		Not applicable				
o4-11	U2, U3 (abnormal trace/history monitor) initialization selection	0: Keep. 1: Initialize.	0		Ub-01	Initialize mode selection	00: Disable / 01: Error history clear 02: Data initialize / 03: Error history clear and data initialize 05: All data except terminal configuration 06: All data except communication configuration 07: All data except terminal and communication configuration 10: User parameters / 11: All data except user parameters	00	
					Ub-05	Enable initialization	00: Disable / 01: Execute initialization	00	

<SF-520 List of input terminal functions>

Code	Function	Code	Function
0	3-Wire Sequence	10	Up Command
1	LOCAL/REMOTE Selection	11	Down Command
2	Serial Communication Reference Selection	14	Fault Reset
3	Multi-Step Speed Reference 1	15	Fast-Stop (N.O.)
4	Multi-Step Speed Reference 2	17	Fast-stop (N.C.)
5	Multi-Step Speed Reference 3	20～2F	External Fault
6	Jog Reference Selection	40	Forward Run Command (2-Wire sequence)
7	Accel/Decel Time 1	41	Reverse Run Command (2-Wire sequence)
8	Baseblock Command (N.O.)	61	External Search Command 1
9	Baseblock Command (N.C.)	62	External Search Command 2
A	Accel/Decel Ramp Hold	67	Communications Test Mode
F	Not used/Through Mode		

<SF-520 List of output terminal functions>

Code	Function	Code	Function
0	During Run	10	Minor Fault
1	Zero Speed	17	Torque Detection 1 (N.C.)
2	Speed Agree 1	1A	Reverse Direction
4	Frequency Detection 1	3C	LOCAL/REMOTE Status
5	Frequency Detection 2	3D	Speed Search
6	Drive Ready	100～102 104~108 10B,10E 110,117 11A,11E 13C,13D	H2 Parameter Functions Reversed Output Switching of 0 to 13D
7	DC Bus Undervoltage		
8	During Baseblock (N.O.)		
B	Torque Detection 1 (N.O.)		
E	Fault		
F	Not used/Through Mode		

<HF-620 List of input terminal functions>

Code	Symbol	Name	Code	Symbol	Name	Code	Symbol	Name
0	no	Not use	31	AD2	2-stage Acceleration/Deceleration	68	TBS	Torque Bias enable
1	FR	Forward rotation	32	MBS	Free run stop	69	ORT	Home search function
2	RR	Reverse rotation	33	ES	External fault	71	LAC	Acceleration/Deceleration cancellation
3	DFL	Multi speed selection 1	34	USP	Unattended start protection	72	PCLR	Clearance of position deviation
4	DFM	Multi speed selection 2	35	CS	Commercial power supply change	76	CP1	Multistage position settings selection 1
5	DFH	Multi speed selection 3	36	SFT	Soft-Lock	77	CP2	Multistage position settings selection 2
6	DHH	Multi speed selection 4	37	BOK	Answer back from Brake	78	CP3	Multistage position settings selection 3
7	SF1	Multi speed Bit-1	38	OLR	Overload restriction selection	79	CP4	Multistage position settings selection 4
8	SF2	Multi speed Bit-2	39	KHC	Accumulated input power clearance	80	ORL	Limit signal of Homing function
9	SF3	Multi speed Bit-3	40	OKHC	Accumulated output power clearance	81	ORG	Start signal of Homing function
10	SF4	Multi speed Bit-4	41	PID	Disable PID1	82	FOT	Forward Over Travel
11	SF5	Multi speed Bit-5	42	PIDC	PID1 integration reset	83	ROT	Reserve Over Travel
12	SF6	Multi speed Bit-6	43	PID2	Disable PID2	84	SPD	Speed/Position switching
13	SF7	Multi speed Bit-7	44	PIDC2	PID2 integration reset	85	PSET	Position data presetting
14	ADD	Trigger for frequency addition	51	SVC1	Multi set-point selection 1	86 ～93	-	Reserved
15	AUT	Main/Sub speed reference change	52	SVC2	Multi set-point selection 2	97	PCC	Pulse counter clearing
16	STA	3-wire start	53	SVC3	Multi set-point selection 3	98	ECOM	EzCOM activation
17	STP	3-wire stop	54	SVC4	Multi set-point selection 4	99	-	Reserved
18	F/R	3-wire forward/reverse	55	PRO	PID gain change	100	HLD	Acceleration/Deceleration disable
19	AHD	Analog command holding	56	PIO1	PID output switching 1	101	REN	RUN enable
20	UP	Remote control Speed-Up function	58	SLEP	SLEEP condition activation	102	DISP	Display lock
21	DWN	Remote control Speed-Down function	59	WAKE	WAKE condition activation	103	PLA	Pulse input A
22	UDC	Remote control Speed data clearing	60	TL	Torque limit enable	104	PLB	Pulse input B
23	F-OP	Force operation	61	TRQ1	Torque limit selection bit 1	105	EMF	Emergency-Force Drive activation
24	SET	2nd-motor control	62	TRQ2	Torque limit selection bit 2	107	COK	Contactor check signal
28	RST	Reset	63	PPI	P/PI control mode selection	108	DTR	Data trace start
29	JOG	Jogging	64	CAS	Control gain change	109	PLZ	Pulse input Z
30	DB	External DC braking	67	ATR	Permission of torque con	110	TCH	Teach-in signal

<HF-620 List of output terminal functions>

Code	Symbol	Name	Code	Symbol	Name	Code	Symbol	Name
0	no	Not use	27	THC	Electronic thermal alarm (Inverter)	56	WCVRF	Window comparator VRF
1	DRV	Running	29	WAC	Capacitor life warning	57	WCIRF	Window comparator IRF
2	UPF1	Constant-frequency reached	30	WAF	Cooling-fan life warning	62	LOG1	Logical operation result 1
3	UPF2	Set frequency overreached	31	FS	RUN command active	63	LOG2	Logical operation result 2
4	UPF3	Set frequency reached	32	OHF	Heat sink overheat warning	64	LOG3	Logical operation result 3
5	UPF4	Set frequency overreached 2	33	LOC	Low-current indication	69 ～71	-	Reserved
6	UPF5	Set frequency reached 2	34	LOC2	Low-current indication 2			
7	IRDY	Inverter ready	35	OL	Overload warning notice	76	EMFC	Emergency-Force Drive indicator
8	FRR	Forward rotation	36	OL2	Overload warning notice 2	77	EMBP	Bypass mode indicator
9	RRR	Reverse rotation	37	BRK	Brake release	78	WFT	Trace function waiting for trigger
10	FREF	Frequency reference=Keypad is selected	38	BER	Brake error	79	TRA	Trace function data logging
11	REF	Run command=Keypad is selected	39	CON	Contactor control	80	LBK	Low-battery of keypad
12	SETM	2nd control is selected	40	ZS	Zero speed detection	81	OVS	Over-Voltage power supply
16	OPO	Option output Note	41	DSE	Speed over deviation	82	ABU	Abnormal exceeded Upper limit
17	AL	Alarm	43	POK	Positioning completed	83	ABL	Abnormal fall below Lower limit
18	MJA	Major failure	44	PCMP	Pulse count compare match output	88	FSC	STO input discrepancy
19	OTQ	Over-torque	45	OD	Over deviation for PID control	93	SSE	PID soft start error
21	UV	Undervoltage	46	FBV	PID feedback comparison	94	SFM1	ST1 feedback monitor
22	TRQ	Torque limited	47	OD2	Over deviation for PID2 control	95	SFM2	ST2 feedback monitor
23	IPS	IP nonstop function is active	48	FBV2	PID2 feedback comparison	96	EDM	STO state monitor
24	RNT	Accumulated operation time over	49	NDc	Communication line disconnection	97	WAP	Power module life warning
25	ONT	Accumulated power-on time over	50	VRFDc	Analog VRF disconnection detection	98	WAIC	Inrush circuit life warning
26	THM	Electronic thermal alarm (Motor)	51	IRFDc	Analog IRF disconnection detection			

Revision history

Rev	Contents	Date
1.0	Create a new entry	2024/4/12