TOSVERT VF-nC3

Parameter List
for CPU version 104/106

VF-nC3 Parameter List

Setting Date	
Customer	
End user	
Application	
Application No/Serial No	
Inverter's Type-Form	
Quantity	
Inverter's Serial No	
Motor's capacity	

If user's setting value is same as shipping value, entry column is blank.
You can confirm software version by the additional code on the nameplate and packing label
Additional code for V104: (2), V106: (3)

-Terminal stand use state

	Terminal Name	Use state
Main terminal block	PA/+	
	PC/-	
	PO	
	R/L1	
	S/L2	
	T/L3	
	U/T1	
	V/T2	
	W/T3	
	E/G	
Control terminal block	FLA	
	FLB	
	FLC	
	CC	
	VI	
	P5	
	FM	
	F	
	R	
	S1	
	S2	
	CC	
	OUT	
	NO	
	P24	

1   User parameters

Title	Function	Unit	Minimum setting unit Panel/Communication	Adjustment range	Default setting	User setting	Reference
FC	Operation frequency of operation panel	Hz	0.1/0.01	*LL -UL*	0.0		3.2.2

2   Basic parameters

• Four automatic functions or basic parameters

Title	Communication No.	Function	Unit	Minimum setting unit Panel/Communication	Adjustment range	Default setting	User setting	Reference
AUH	-	History function	-	-	Displays parameters in groups of five in the reverse order to that in which their settings were changed. * (Possible to edit)	-		4.3 5.1
AUF	0093	Guidance function	-	-	0: - 1: - 2: Preset speed guidance 3: Analog signal operation guidance 4: Motor 1/2 switching operation guidance 5: Motor constant setting guidance	0		4.3 5.2
AU1	0000	Automatic acceleration/ deceleration	-	-	0: Disabled (manual setting) 1: Automatic 2: Automatic (only at acceleration)	0		5.3
AU2	0001	Torque boost setting macro function	-	-	0: Disabled 1: Automatic torque boost + auto-tuning 2: Vector control + auto-tuning 3: Energy saving + auto-tuning	0		5.4

• Basic parameters

Title	Communi cationNo.	Function	Unit	Minimum setting unit Panel/Com munication	Adjustment range	Default setting	User setting	Reference
$C\Pi Od$	0003	Command mode selection	-	-	0: Terminal board 1: Panel keypad (including remote keypad) 2: RS485 communication	1		3 5.5 7.3

$F\Pi Od$	0004	Frequency setting mode selection	-	-	0: Terminal board VI
					1: Setting dial 1
					   (press in center to save)
					2: Setting dial 2
					   (save even if power is off)
					3: RS485 communication
					4: -
					5: UP/DOWN from external
					   logic input
						2		3
								5.5
								6.5.1
								7.3

$F\Pi SL$	0005	Meter selection	-	-	0:Output frequency
					1:Output current
					2:Frequency reference
					3:Input voltage (DC detection)
					4:Output voltage
					   (command value)
					5 to 11: -
					12:Frequency setting value 1
					   (after compensation)
					13:VI input value
					14:-
					15:Fixed output 1
					   (output current 100%
					   equivalent)
					16:Fixed output 2
					   (output current 50%
					   equivalent)
					17:Fixed output 3
					   (other than the output current)
					18:RS-485 communications
					   data
					19:For adjustments
					   ($F\Pi$ set value is displayed.)
					20 to 22: -
						0		3.4

$F\Pi$	0006	Meter adjustment gain	-	-	-	-		

Fr	0008	Forward/reverse run selection (panel keypad)	-	-	0: Forward run
					1: Reverse run
					2: Forward run (F/R switching
					   on remote keypad)
					3: Reverse run(F/R switching on
					   remote keypad)
						0		5.7

ACC	0009	Acceleration time 1	S	0.1/0.1	0.0-3000	10.0		5.3
dEC	0010	Deceleration time 1	S	0.1/0.1	0.0-3000	10.0		
FH	0011	Maximum frequency	Hz	0.1/0.01	30.0-400.0	*1		5.8

*1: Depends upon the setup menu settings, See the table of last page

Title	Communication No.	Function	Unit	Minimum setting unit Panel/Communication	Adjustment range				Default setting	User setting	Reference
_UL_	0012	Upper limit frequency	Hz	0.1/0.01	0.5-_FH_				*1		5.9
_LL_	0013	Lower limit frequency	Hz	0.1/0.01	0.0-_UL_				0.0		
_uL_	0014	Base frequency 1	Hz	0.1/0.01	20.0-400.0				*1		5.10
uLu	0409	Base frequency voltage 1	V	1/0.1	50-330				*1		5.10 6.12.5
_Pt_	0015	V/F control mode selection	-	-	0: V/F constant 1: Variable torque 2: Automatic torque boost control 3: Vector control 4: Energy-saving				0		5.11
_ub_	0016	Torque boost value 1	%	0.1/0.1	0.0-30.0				* 2		5.12
tHr	0600	Motor electronic-thermal protection level 1	% (A)	1/1	10-100				100		3.5 6.16.1
OLN	0017	Electronic-thermal protection characteristic selection	-	-	Set		OL protect	OL stall	0		3.5
					0	Standard motor	on	off			
					1		on	on			
					2		off	off			
					3		off	on			
					4	VF motor	on	off			
					5		on	on			
					6		off	off			
					7		off	on			
_5r 1_	0018	Preset-speed operation frequency 1	Hz	0.1/0.01	_LL_-_UL_				0.0		3.6
_5r2_	0019	Preset-speed operation frequency 2	Hz	0.1/0.01	_LL_-_UL_				0.0		
_5r3_	0020	Preset-speed operation frequency 3	Hz	0.1/0.01	_LL_-_UL_				0.0		
_5r4_	0021	Preset-speed operation frequency 4	Hz	0.1/0.01	_LL_-_UL_				0.0		
_5r5_	0022	Preset-speed operation frequency 5	Hz	0.1/0.01	_LL_-_UL_				0.0		
_5r6_	0023	Preset-speed operation frequency 6	Hz	0.1/0.01	_LL_-_UL_				0.0		
_5r 7_	0024	Preset-speed operation frequency 7	Hz	0.1/0.01	_LL_-_UL_				0.0		

*1: Depends upon the setup menu settings. See the table of last page.
*2: Parameter values vary depending on the capacity. See the table of last page.

Title	Communi cation No.	Function	Unit	Minimum setting unit Panel/Com munication	Adjustment range	Default setting	User setting	Reference

tYP	0007	Default setting	-	-	0:-
					1:50Hz default setting
					2:60Hz default setting
					3:Default setting(Initialization)
					4:Trip record clear
					5:Cumulative operation time
					  clear
					6:Initialization of type information
					7:Save user setting parameters
					8:Load user setting parameters
					9:Cumulative fan operation time
					  record clears
					10 to 12: -
					13:Default setting 2
					  (Complete initialization)
						0		4.3
								4.3.2

SEt	009	Checking the region setting	-	-	0:Start setup menu 1:Japan(read only) 2:North America(read only) 3:Asia (read only) 4:Europe (read only)	*1		4.4
$PSEL$	0050	Registered parameters display selection	-	-	0:Standard setting mode at power on 1:Easy setting mode at power on 2:Easy setting mode only	0		4.5
$F1--$	-	Extended parameter starting at 100	-	-	-	-	-	4.2.2
$F2--$	-	Extended parameter starting at 200	-	-	-	-	-	
$F3--$	-	Extended parameter starting at 300	-	-	-	-	-	
$F4--$	-	Extended parameter starting at 400	-	-	-	-	-	
$F5--$	-	Extended parameter starting at 500	-	-	-	-	-	
$F6--$	-	Extended parameter starting at 600	-	-	-	-	-	
$F7--$	-	Extended parameter starting at 700	-	-	-	-	-	
$F8--$	-	Extended parameter starting at 800	-	-	-	-	-	
$Gr.U$	-	Automatic edit function	-	-	-	-	-	4.3.1

*1:Depends upon the setup menu settings. See the table of last page.
The region is set to 1 to 4 when parameter SEt is read. To re-select a region, set "0" to start up the setup menu.

3   Extended parameters

• Input/output parameters

Title	Communi cation No.	Function	Unit	Minimum setting unit Panel/Com munication	Adjustment range	Default setting	User setting	Reference
F 100	0100	Low-speed signal output frequency	Hz	0.1/0.01	0.0-FH	0.0		6.1.1
F 101	0101	Speed reach setting frequency	Hz	0.1/0.01	0.0-FH	0.0		6.1.3
F 102	0102	Speed reach detection band	Hz	0.1/0.01	0.0-FH	2.5		6.1.2 6.1.3
F 105	0105	Priority selection (Both F and R are ON)	-	-	0: Reverse 1: Slowdown Stop	1		6.2.1
F 108	0108	Always active function selection 1	-	-	0-123	0 (No function)		6.3.2
F 109	0109	Analog/logic input Selection (VI terminal)	-	-	0: Voltage signal input (0-10V) 1: Current signal input (4-20mA) 2: Logic input 3: Voltage signal input (0-5V)	0		6.2.2 6.3.3 6.5.2 7.2.1 7.3
F 110	0110	Always active function selection 2	-	-	0-123	6 (ST)		6.3.2
F 111	0111	Input terminal selection 1A (F)	-	-	0-201	2 (F)		6.3.3 6.5.1 7.2.1
F 112	0112	Input terminal selection 2A (R)	-	-	0-201	4 (R)		
F 113	0113	Input terminal selection 3A (S1)	-	-	0-201	10 (SS1)		
F 114	0114	Input terminal selection4A (S2)	-	-	0-201	12 (SS2)		
F 115	0115	Input terminal selection 5 (VI)	-	-	8-55	14 (SS3)		
F 127	0127	Sink/source switching	-	-	0: Sink, 100: Source 1-99, 101-255: invalid	*1		6.3.1

* 1: Depends upon the setup menu settings. See the table of last page.

Title	Communicaton No.	Function	Unit	Minimum setting unit Panel/Communication	Adjustment range	Default setting	User setting	Reference
F 130	0130	Output terminal selection 1A (OUT)	-	-	0-255	4 (LOW)		6.3.4 7.2.2
F 132	0132	Output terminal selection 2 (FL)	-	-	0-255	10 (FL)		
F 137	0137	Output terminal selection 1B (OUT)	-	-	0-255	255 (always ON)		
F 139	0139	Output terminal logic selection (OUT)	-	-	0: F 130 and F 137 1: F 130 or F 137	0		6.3.4 7.2.2
F 144	0144	Factory specific coefficient 1A	-	-	-	-		*1
F 151	0151	Input terminal selection 1B (F)	-	-	0-201	0		6.3.3 6.5.1 7.2.1
F 152	0152	Input terminal selection 2B (R)	-	-	0-201	0		
F 153	0153	Input terminal selection 3B (S1)	-	-	0-201	0		
F 154	0154	Input terminal selection 4B (S2)	-	-	0-201	0		
F 155	0155	Input terminal selection 1C (F)	-	-	0-201	0		
F 156	0156	Input terminal selection 2C (R)	-	-	0-201	0		

*1: Factory specific coefficients are parameters exclusively for manufacturer settings. Do not change these parameters.

• Basic parameter 2

Title	Communication No.	Function	Unit	Minimum setting unit Panel/Communication	Adjustment range	Default setting	User setting	Reference
F 170	0170	Base frequency 2	Hz	0.1/0.01	20.0-400.0	* 1		6.4.1
F 171	0170	Base frequency voltage 2	Hz	1/0.1	50-330	* 1		
F 172	0172	Torque boost value 2	%	0.1/0.1	0.0-30.0	* 2		
F 173	0173	Motor electronic -thermal protection level 2	% (A)	1/1	10-100	100		5.13 6.4.1 6.16.1
F 185	0185	Stall prevention level 2	% (A)	1/1	10-199 200 (disabled)	150		6.4.1 6.19.2

• Frequency parameters

Title	Communication No.	Function	Unit	Minimum setting unit Panel/Communication	Adjustment range	Default setting	User setting	Reference
F 201	0201	VI Setting of Input point 1	%	1/1	0-100	0		6.5.2 7.3
F 202	0202	Frequency VI input point 1	Hz	0.1/0.01	0.0-400.0	0.0		
F 203	0203	Setting of VI input point 2	%	1/1	0-100	100		
F 204	0204	Frequency of VI input point 2	Hz	0.1/0.01	0.0-400.0	*1		
F 209	0209	Analog input filter	ms	1/1	4-1000	64		
F 240	0240	Starting frequency setting	Hz	0.1/0.01	0.1-10.0	0.5		6.6.1
F 241	0241	Operation starting frequency	Hz	0.1/0.01	0.0-F H	0.0		6.6.2
F 242	0242	Operation starting frequency hysteresis	Hz	0.1/0.01	0.0-F H	0.0		
F 249	0249	Factory specific coefficient 2A	-	-	-	-		*3
F 250	0250	DC braking starting frequency	Hz	0.1/0.01	0.0-F H	0.0		6.7.1

*1 : Depends upon the setup menu settings. See the table of last page.
*2 : Parameter values vary depending on the capacity. See the table of last page.
*3 : Factory specific coefficients are parameters exclusively for manufacturer settings.
   Do not change these parameters.

Title	Communication No.	Function	Unit	Minimum setting unit Panel/Communication	Adjustment range	Default setting	User setting	Reference
$F251$	0251	DC braking current	% (A)	1/1	0-100	50		6.7.1
$F252$	0252	DC braking time	s	0.1/0.1	0.0-25.5	1.0		
$F256$	0256	Time limit for lower-limit Frequency operation	s	0.1/0.1	0:Disabled 0.1-600.0	0.0		6.81
$F264$	0264	External logic Input-UP response time	s	0.1/0.1	0.0-10.0	0.1		6.5.3
$F265$	0265	External logic input-UP frequency steps	Hz	0.1/0.01	0.0-FH	0.1		
$F266$	0266	External logic Input-DOWN response time	s	0.1/0.01	0.0-10.0	0.1		
$F267$	0267	External logic Input-DOWN frequency steps	Hz	0.1/0.1	0.0-FH	0.1		
$F268$	0268	Initial value of UP/DOWN frequency	Hz	0.1/0.01	LL - UL	0.0		
$F269$	0269	Change of the initial value of UP/DOWN frequency	-	-	0: Not changed 1: Setting of $F268$ changed when power is turned off	1		
$F270$	0270	Jump frequency	Hz	0.1/0.01	0.0-FH	0.0		6.9
$F271$	0271	Jumping width	Hz	0.1/0.01	0.0-30.0	0.0		
$F287$	0287	Preset-speed frequency 8	Hz	0.1/0.01	LL-UL	0.0		3.6 6.10
$F288$	0288	Preset-speed frequency 9	Hz	0.1/0.01	LL-UL	0.0		
$F289$	0289	Preset-speed frequency 10	Hz	0.1/0.01	LL-UL	0.0		
$F290$	0290	Preset-speed frequency 11	Hz	0.1/0.01	LL-UL	0.0		
$F291$	0291	Preset-speed frequency 12	Hz	0.1/0.01	LL-UL	0.0		
$F292$	0292	Preset-speed frequency 13	Hz	0.1/0.01	LL-UL	0.0		
$F293$	0293	Preset-speed frequency 14	Hz	0.1/0.01	LL-UL	0.0		
$F294$	0294	Preset-speed frequency 1	Hz	0.1/0.01	LL-UL	0.0		

• Operation mode parameters

Title	Communi cation No.	Function	Unit	Minimum setting unit Panel/Com munication	Adjustment range	Default setting	User setting	Reference
F 300	0300	PWM carrier frequency	kHz	1/1	2 - 16	12		6.11
F 301	0301	Auto-restart control selection	-	-	0: Disabled 1: At auto-restart after momentary stop 2: At ST terminal off and on 3: 1+2 4: At start-up	0		6.12.1
F 302	0302	Regenerative power ride-through control (Deceleration stop)	-	-	0: Disabled 1: Automatic setting 2: Slowdown stop	0		6.12.2
F 303	0303	Retry selection (number of times)	Times	1/1	0: Disabled 1-10	0		6.12.3
F 305	0305	Overvoltage limit operation (Slowdown stop mode selection)	-	-	0: Automatic setting 1: Disabled 2: Enabled (Quick deceleration) 3: Enabled (Dynamic quick deceleration)	2		6.12.4
F 307	0307	Supply voltage correction (limitation of output voltage)	-	-	0: Supply voltage uncorrected, output voltage limited 1: Supply voltage corrected, output voltage limited 2: Supply voltage uncorrected, output voltage unlimited 3: Supply voltage corrected, output voltage unlimited	* 1		6.12.5
F 311	0311	Reverse-run prohibition	-	-	0:Forward/reverse run permitted 1:Reverse run prohibited 2:Forward run prohibited	0		6.12.6
F 312	0312	Random mode	-	-	0:Disabled 1:Automatic setting	0		6.11
F 316	0316	Carrier frequency control mode selection	-	-	0: Carrier frequency without reduction 1: Carrier frequency with automatic reduction	1		6.11

*1 : Default values vary depending on the capacity. See the table of last page.

Title	Communication No.	Function	Unit	Minimum setting unit Panel/Communication	Adjustment range	Default setting	User setting	Reference
F359	0359	PID control waiting time	s	1/1	0-2400	0		6.13
F360	0360	PID control	-	-	0: Disabled, 1: Enabled	0		
F362	0362	Proportional gain	-	0.01/0.01	0.01-100.0	0.30		
F363	0363	Integral gain	-	0.01/0.01	0.01-100.0	0.20		
F366	0366	Differential gain	-	0.01/0.01	0.00-2.55	0.00		
F380	0380	PID forward/ reverse characteristics selection	-	-	0: Forward 1: Reverse	0		
F391	0391	Auto-stop hysteresis in case of lower-limit frequency continuous operation	Hz	0.1/0.01	0.0-_UL_	0.2		6.8.1

• Torque boost parameters

Title	Communication No.	Function	Unit	Minimum setting unit Panel/Communication	Adjustment range	Default setting	User setting	Reference
F400	0400	Auto-tuning	-	-	0: Auto-tuning disabled 1: Initialization of F402 (reset to 0) 2: Auto-tuning enabled (after execution: 0)	0		6.14
F401	0401	Slip frequency gain	%	1/1	0-150	50		
F402	0402	Automatic torque boost value	%	0.1/0.1	0.0(0.1)*4-30.0	* 1		
F405	0405	Motor rated capacity	kW	0.01/0.01	0.01-5.50	* 1		
F412	0412	Motor specific coefficient 1	-	-	-	-		* 3
F415	0415	Motor rated current	A	0.1/0.1	0.1-30.0	* 1		6.14
F416	0416	Motor no-load current	%	1/1	10-90	* 1		
F417	0417	Rated motor speed	min⁻¹	1/1	100-32000	* 2		

*1: Parameter values vary depending on the capacity. See the table of last page.
*2: Depends upon the setup menu settings. See the table of last page.
*3: Motor specific coefficient 1 to 9 are parameters exclusively for manufacturer settings.
   do not change these parameter.

*4:V106 the settings range from 0.1 to 30.0(%)

Title	Communication No.	Function	Unit	Minimum setting unit Panel/Communication	Adjustment range	Default setting	User setting	Reference
F458	0458	Motor specific coefficient 2	-	-	-	-		* 1
F459	0459	Load inertia moment ratio	Times	0.1/0.1	0.1-100.0	1.0		6.14
F460	0460	Motor specific coefficient 3	-	-	-	-		* 1
F461	0461	Motor specific coefficient 4	-	-	-	-		
F462	0462	Motor specific coefficient 5	-	-	-	-		
F467	0467	Motor specific coefficient 6	-	-	-	-		

- Input/output parameters2

Title	Communication No.	Function	Unit	Minimum setting unit Panel/Communication	Adjustment range	Default setting	User setting	Reference
F470	0470	VI input bias	-	1/1	0-255	128		6.5.4
F471	0471	VI input gain	-	1/1	0-255	128		

- Torque boost parameters2

Title	Communication No.	Function	Unit	Minimum setting unit Panel/Communication	Adjustment range	Default setting	User setting	Reference
F480	0480	Motor specific coefficient 7	-	-	-	-		* 1
F485	0485	Motor specific coefficient 8	-	-	-	-		
F495	0495	Motor specific coefficient 9	-	-	-	-		

*1 : Motor specific coefficient 1 to 9 are parameters exclusively for manufacturer settings. Do not change these parameter.

• Acceleration/deceleration time parameters

Title	Communication No.	Function	Unit	Minimum setting unit Panel/Communication	Adjustment range	Default setting	User setting	Reference
F500	0500	Acceleration time 2	s	0.1/0.1	0.0-3000	10.0		6.15
F501	0501	Deceleration time 2	s	0.1/0.1	0.0-3000	10.0		
F502	0502	Acceleration/ deceleration 1 pattern	-	-	0: Linear 1: S-pattern 1 2: S-pattern 2	0		
F503	0503	Acceleration/ deceleration 2 pattern	-	-		0		
F505	0505	Acceleration/ deceleration 1 and 2 switching frequency	Hz	0.1/0.01	0.0(disabled) 0.1-UL	0.0		

• Protection parameters

Title	Communication No.	Function	Unit	Minimum setting unit Panel/Communication	Adjustment range	Default setting	User setting	Reference
F601	0601	Stall prevention level 1	% (A)	1/1	10-199, 200 (disabled)	150		6.16.2
F602	0602	Inverter trip retention selection	-	-	0:Cleared with the power off 1:Retained with the power off	0		6.16.3
F603	0603	Emergency stop selection	-	-	0:Coast stop 1:Slowdown stop 2:Emergency DC braking	0		6.16.4
F605	0605	Output phase failure detection selection	-	-	0:Disabled 1:At start-up(only one time after power on) 2:At start-up(each time)	0		6.16.5
F607	0607	Motor150%-overload detection time	s	1/1	10-2400	300		3.5 6.16.1
F608	0608	Input phase failure detection selection	-	-	0: Disabled, 1: Enabled	1		6.16.6
F609	0609	Small current detection hysteresis	%	1/1	1-20	10		6.16.7
F610	0610	Small current trip/alarm selection	-	-	0: Alarm only 1: Tripping	0		
F611	0611	Small current detection current	% (A)	1/1	0-150	0		
F612	0612	Small current detection time	s	1/1	0-255	0		

Title	Communication No.	Function	Unit	Minimum setting unit Panel/Communication	Adjustment range	Default setting	User setting	Reference
F613	0613	Detection of output short-circuit at start-up	-	-	0: Each time(standard pulse) 1: Only one time after power on(standard pulse) 2: Each time(short-time pulse) 3: Only one time after power on(short pulse)	0		6.16.8
F615	0615	Over-torque trip/alarm selection	-	-	0: Alarm only 1: Tripping	0		6.16.9
F616	0616	Over-torque detection level	%	1/1	0(disabled) 1-200	150		
F618	0618	Over-torque detection time	s	0.1/0.1	0.0-10.0	0.5		
F619	0619	Over-torque detection hysteresis	%	1/1	0-100	10		
F620	0620	cooling fan ON/OFF control	-	-	0:ON/OFF control 1:Always ON	0		6.16.10
F621	0621	Cumulative operation time alarm setting	100 Time	0.1/0.1 (=10 hours)	0.0-999.9	610		6.16.11

F627	0627	Under-voltage trip/alarm selection	-	-	0: Alarm only
					  (detection level below 64%)
					1: Tripping
					  (detection level below 64%)
					2: Alarm only
					  (detection level below 50%,
					  or AC reactor required)
						0		6.16.12

F631	0631	Factory specific coefficient 6A	-	-	-	-		* 1
F632	0632	Electronic thermal memory	-	-	0:Deselect 1:Enabled	0		5.13 6.16.1
F633	0633	VI analog input break detection level	%	1/1	0: Disabled, 1-100	0		6.16.13
F634	0634	Annual average ambient temperature (parts replacement alarms)	-	-	1: -10 to +10℃ 2: 11-20℃ 3: 21-30℃ 4: 31-40℃ 5: 41-50℃ 6: 51-60℃	3		6.16.14

*1: Factory specific coefficients are parameters exclusively for manufacturer settings.
   Do not change these parameters.

• Output parameters

Title	Communi cation No.	Function	Unit	Minimum setting unit Panel/Com munication	Adjustment range	Default setting	User setting	Reference
F669	0669	Logic output/pulse train output selection (OUT-NO)	-	-	0: Logic output 1: Pulse train output	0		6.17.1
F676	0676	Pulse train output function selection (OUT-NO)	-	-	0:Output frequency 1:Output current 2:Frequency reference 3:Input voltage (DC detection) 4:Output voltage (command value) 5-11:- 12:Frequency setting value (after compensation) 13:VI Input value 14:- 15:Fixed output 1 (output current: 100% equivalent) 16:Fixed output 2 (output current: 50% equivalent) 17: Fixed output 3 (other than the output current) 18:Communication data 19 to 22	0		6.17.1
F677	0677	Maximum numbers of pulse train	kpps	0.01/0.01	0.5-1.60	0.8		
F678	0678	Factory Specific coefficient 6B	-	-	-	-		* 1
F681	0681	Analog output signal selection	-	-	0:Meter option (0 to 1mA) 1:Current (0 to 20 mA) output 2:Voltage (0 to 10V) output	0		6.17.2
F684	0864	Factory specific coefficient 6C	-	-	-	-		* 1
F691	0691	Inclination characteristic of analog output	-	-	0: Negative inclination (downward slope) 1: Positive inclination (upward slope)	1		6.17.2
F692	0692	Analog output bias	%	0.1/0.1	-1.0－+100.0	0		
F693	0693	Factory specific coefficient 6D	-	-	-			* 1

*1: Factory specific coefficients are parameters exclusively for manufacturer settings. Do not change these parameters

• Operation panel parameters

Title	Communi cation No.	Function	Unit	Minimum setting unit Panel/Com munication	Adjustment range	Default setting	User setting	Reference
F 700	0700	Parameter write protection selection	-	-	0: Permitted 1: Panel and extension panel inhibited 2:1+RS485communications inhibited	0		6.18 .1
F 701	0701	Current/voltage unit selection	-	-	0:% 1:A (ampere)/V (volt)	0		6.18.2
F 702	0702	Free unit display scale	Times	0.01/0.01	0.00: Disabled (display of frequency) 0.01-200.0	0.00		6.18.3
F 707	0707	Free step 1 (1-step rotation of setting dial)	Hz	0.01/0.01	0.00: Disabled 0.01-F H	0.00		6.18.4
F 710	0710	Initial panel display selection	-	-	0:Operation frequency (Hz/free unit) 1:Output current(%/A) 2:Frequency setting value (Hz/free unit) 3 to 17:- 18:Arbitary display according to communications	0		6.18.5 8.2.1
F 711	0711	Status monitor 1	-	-	0:Operation frequency (Hz/free unit) 1:Output current (%/A) 2:Frequency setting Value (Hz/free unit) 3:Input voltage (DC detection) (%/V) 4:Output voltage (Command value) (%/V) 5:Input power (kW) 6:Output power (kW) 7:Torque (%) 8:Torque current (%/A) 9 to 11:- 12:Frequency setting value (After compensation) 13 to 22:- 23:PID feedback value (Hz/free unit) 24 to 26:- 27:Drive load factor (%)	2		8.2.1 8.3.2
F 712	0712	Status monitor 2	-	-		1		
F 713	0713	Status monitor 3	-	-		3		
F 714	0714	Status monitor 4	-	-		4		
F 715	0715	Status monitor 5	-	-		27		
F 716	0716	Status monitor 6	-	-		0		
F 720	0720	Initial remote keypad display selection	-	-	0:Operation frequency (Hz/free unit) 1:Output current (%/A) 2:Frequency setting value (Hz/free unit) 3 to 17:- 18:Arbitrary display according to communications	0		6.18.5 8.2.1

Title	Communication No.	Function	Unit	Minimum setting unit Panel/Communication	Adjustment range	Default setting	User setting	Reference
$F\,730$	0730	Panel frequency setting prohibition(FC)	-	-	0: Permitted 1: Prohibited	0		6.18.1
$F\,732$	0732	Local/remote operation prohibition for remote keypad	-	-	0:Permitted 1:Prohibited	1		
$F\,733$	0733	Panel operation prohibition (RUN/STOP keys)	-	-	0: Permitted 1: Prohibited	0		
$F\,734$	0734	Prohibition of panel emergency stop operation	-	-	0: Permitted 1: Prohibited	0		
$F\,735$	0735	Prohibition of panel reset operation	-	-	0: Permitted 1: Prohibited	0		
$F\,736$	0736	$C\Pi O d/F\Pi O d$ change prohibition during operation	-	-	0: Permitted 1: Prohibited	1		
$F\,738$	0738	Password setting($F\,700$)	-	-	0:No password set 1-9998,9999:password set	0		
$F\,739$	0739	Password examination	-	-	0:No password set 1-9998,9999:Password set	0		
$F\,746$	0746	Factory specific coefficient 7A	-	-	-	-		* 1
$F\,751$	0751	Easy setting mode parameter 1	-	-	0-999 (Set by communication number)	3		4.5
$F\,752$	0752	Easy setting mode parameter 2	-	-		4		
$F\,753$	0753	Easy setting mode parameter 3	-	-		9		
$F\,754$	0754	Easy setting mode parameter 4	-	-		10		
$F\,755$	0755	Easy setting mode parameter 5	-	-		600		
$F\,756$	0756	Easy setting mode parameter 6	-	-		6		
$F\,757$	0757	Easy setting mode parameter 7	-	-		999		

*1: Factory specific coefficients are parameters exclusively for manufacturer settings. Do not change these parameters.

Title	Commu nication No.	Function	Unit	Minimum setting unit Panel/Com munication	Adjustment range	Default setting	User setting	Reference
F758	0758	Easy setting mode parameter 8	-	-	0-999 (Set by communication number)	999		4.5
F759	0759	Easy setting mode parameter 9	-	-		999		
F760	0760	Easy setting mode parameter 10	-	-		999		
F761	0761	Easy setting mode parameter 11	-	-		999		
F762	0762	Easy setting mode parameter 12	-	-		999		
F763	0763	Easy setting mode parameter 13	-	-		999		
F764	0764	Easy setting mode parameter 14	-	-		999		
F765	0765	Easy setting mode parameter 15	-	-		999		
F766	0766	Easy setting mode parameter 16	-	-		999		
F767	0767	Easy setting mode parameter 17	-	-		999		
F768	0768	Easy setting mode parameter 18	-	-		999		
F769	0769	Easy setting mode parameter 19	-	-		999		
F770	0770	Easy setting mode parameter 20	-	-		999		
F771	0771	Easy setting mode parameter 21	-	-		999		
F772	0772	Easy setting mode parameter 22	-	-		999		
F773	0773	Easy setting mode parameter 23	-	-		999		
F774	0774	Easy setting mode parameter 24	-	-		999		

Title	Communication No.	Function	Unit	Minimum setting unit Panel/Communication	Adjustment range	Default setting	User setting	Reference
F799	0799	Factory specific coefficient 7B	-	-	-	-		* 1

*1: Factory specific coefficients are parameters exclusively for manufacturer settings. Do not change these parameters.

- Communication parameters

Title	Communication No.	Function	Unit	Minimum setting unit Panel/Communication	Adjustment range	Default setting	User setting	Reference
F800	0800	Baud rate	-	-	3: 9600bps 4: 19200bps 5: 38400bps	4		6.19
F801	0801	Parity	-	-	0: NON (No parity) 1: EVEN (Even parity) 2: ODD (Odd parity)	1		
F802	0802	Inverter number	-	1/1	0-247	0		
F803	0803	Communication time-out time	s	1/1	0: (disabled) 1-100	0		
F804	0804	Communication time-out action	-	-	0:Alam only 1:Trip(Coast stop) 2:Trip(Slowdown stop)	0		
F808	0808	Communication time-out detection condition	-	-	0:Always 1:When $FMOd$ or $CMOd$ communication is selected 2:1+during operation	1		
F829	0829	Selection of communication protocol	-	-	0: Toshiba inverter protocol 1: Modbus RTU protocol	0		
F870	0870	Block write data 1	-	-	0: No selection 1: Command information	0		
F871	0871	Block write data 2	-	-	2: - 3: Frequency setting 4: Output data on the terminal board 5: Analog output for communications	0		
F875	0875	Block read data 1	-	-	0: No selection 1: Status information	0		
F876	0876	Block read data 2	-	-	2: Output frequency 3: Output current	0		
F877	0877	Block read data 3	-	-	4: Output voltage 5: Alarm information	0		
F878	0878	Block read data 4	-	-	6: PID feedback value 7: Input terminal board monitor	0		
F879	0879	Block read data 5	-	-	8: Output terminal board monitor 9: VI terminal board monitor	0		
F880	0880	Free notes	-	1/1	0-65535	0		6.20

- Default settings by inverter rating

Inverter type	Torque boost value ⨪b/F172 (%)	Automatic Torque boost value F402 (%))	Motor rated current F405 (kW)	Motor rated current F415 (A)	Motor no-load current F416 (%)
VFnC3S-1001P	6.0	10.3	0.10	0.6	75
VFnC3S-1002P	6.0	8.3	0.20	1.2	70
VFnC3S-1004P	6.0	6.2	0.40	2.0	65
VFnC3S-1007P	6.0	5.8	0.75	3.4	60
VFnC3S-2001PL	6.0	10.3	0.10	0.6	75
VFnC3S-2002PL	6.0	8.3	0.20	1.2	70
VFnC3S-2004PL	6.0	6.2	0.40	2.0	65
VFnC3S-2007PL	6.0	5.8	0.75	3.4	60
VFnC3S-2015PL	6.0	4.3	1.50	6.2	55
VFnC3S-2022PL	5.0	4.1	2.20	8.9	52
VFnC3-2001P	6.0	10.3	0.10	0.6	75
VFnC3-2002P	6.0	8.3	0.20	1.2	70
VFnC3-2004P	6.0	6.2	0.40	2.0	65
VFnC3-2007P	6.0	5.8	0.75	3.4	60
VFnC3-2015P	6.0	4.3	1.50	6.2	55
VFnC3-2022P	5.0	4.1	2.20	8.9	52
VFnC3-2037P	5.0	3.4	4.00	14.8	48

Default settings by setup menu

Setting	Main regions	Max. frequency FH (Hz)	Frequency UL/⨪L/ F170/F204 (Hz)	Base frequency voltage ⨪L⨪/F171 (V)	Sink/source switching F127	Supply voltage correction (output voltage limitation) F307	Motor rated speed F417 (min⁻¹)
JP	Japan	80.0	60.0	200	0 (Sink)	3	1710
USA	North America	60.0	60.0	230	0 (Sink)	3	1710
ASIA	Asia	50.0	50.0	230	0 (Sink)	2	1410
EU	Europe	50.0	50.0	230	100 (Source)	2	1410