

## 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.

**-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
<i>FL</i>	Operation frequency of operation panel	Hz	0.1/0.01	<i>LL-UL</i>	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
<i>RUH</i>	-	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
<i>RUF</i>	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
<i>RU1</i>	0000	Automatic acceleration/ deceleration	-	-	0: Disabled (manual setting) 1: Automatic 2: Automatic (only at acceleration)	0		5.3
<i>RU2</i>	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	Communication No.	Function	Unit	Minimum setting unit Panel/Communication	Adjustment range	Default setting	User setting	Reference
<i>CND</i>	0003	Command mode selection	-	-	0: Terminal board 1: Panel keypad (including remote keypad) 2: RS485 communication	1		3 5.5 7.3
<i>FND</i>	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
<i>FNSL</i>	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 ( <i>F<sub>n</sub></i> set value is displayed.) 20 to 22: -	0		3.4
<i>FN</i>	0006	Meter adjustment gain	-	-	-	-		
<i>Fr</i>	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
<i>ACC</i>	0009	Acceleration time 1	S	0.1/0.1	0.0-3000	10.0		5.3
<i>DEC</i>	0010	Deceleration time 1	S	0.1/0.1	0.0-3000	10.0		
<i>FH</i>	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		
<i>UL</i>	0012	Upper limit frequency	Hz	0.1/0.01	0.5- <i>FH</i>	*1		5.9		
<i>LL</i>	0013	Lower limit frequency	Hz	0.1/0.01	0.0- <i>UL</i>	0.0				
<i>uL</i>	0014	Base frequency 1	Hz	0.1/0.01	20.0-400.0	*1		5.10		
<i>uLv</i>	0409	Base frequency voltage 1	V	1/0.1	50-330	*1		5.10 6.12.5		
<i>Pt</i>	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		
<i>ub</i>	0016	Torque boost value 1	%	0.1/0.1	0.0-30.0	*2		5.12		
<i>tHr</i>	0600	Motor electronic-thermal protection level 1	% (A)	1/1	10-100	100		3.5 6.16.1		
<i>OLn</i>	0017	Electronic-thermal protection characteristic selection	-	-	Set	Standard motor	OL protect	OL stall	0	3.5
					0		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								
<i>sr1</i>	0018	Preset-speed operation frequency 1	Hz	0.1/0.01	<i>LL-UL</i>	0.0		3.6		
<i>sr2</i>	0019	Preset-speed operation frequency 2	Hz	0.1/0.01	<i>LL-UL</i>	0.0				
<i>sr3</i>	0020	Preset-speed operation frequency 3	Hz	0.1/0.01	<i>LL-UL</i>	0.0				
<i>sr4</i>	0021	Preset-speed operation frequency 4	Hz	0.1/0.01	<i>LL-UL</i>	0.0				
<i>sr5</i>	0022	Preset-speed operation frequency 5	Hz	0.1/0.01	<i>LL-UL</i>	0.0				
<i>sr6</i>	0023	Preset-speed operation frequency 6	Hz	0.1/0.01	<i>LL-UL</i>	0.0				
<i>sr7</i>	0024	Preset-speed operation frequency 7	Hz	0.1/0.01	<i>LL-UL</i>	0.0				

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Title	Communication No.	Function	Unit	Minimum setting unit Panel/Communication	Adjustment range	Default setting	User setting	Reference
<i>TYPE</i>	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
<i>SEL</i>	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
<i>PSEL</i>	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
<i>F1--</i>	-	Extended parameter starting at 100	-	-	-	-	-	4.2.2
<i>F2--</i>	-	Extended parameter starting at 200	-	-	-	-	-	
<i>F3--</i>	-	Extended parameter starting at 300	-	-	-	-	-	
<i>F4--</i>	-	Extended parameter starting at 400	-	-	-	-	-	
<i>F5--</i>	-	Extended parameter starting at 500	-	-	-	-	-	
<i>F6--</i>	-	Extended parameter starting at 600	-	-	-	-	-	
<i>F7--</i>	-	Extended parameter starting at 700	-	-	-	-	-	
<i>F8--</i>	-	Extended parameter starting at 800	-	-	-	-	-	
<i>Gr.U</i>	-	Automatic edit function	-	-	-	-	-	

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

The region is set to 1 to 4 when parameter *SEL* is read. To re-select a region, set "0" to start up the setup menu.

**3 Extended parameters**

• Input/output parameters

Title	Communication No.	Function	Unit	Minimum setting unit Panel/Communication	Adjustment range	Default setting	User setting	Reference
<i>F 100</i>	0100	Low-speed signal output frequency	Hz	0.1/0.01	0.0- <i>FH</i>	0.0		6.1.1
<i>F 101</i>	0101	Speed reach setting frequency	Hz	0.1/0.01	0.0- <i>FH</i>	0.0		6.1.3
<i>F 102</i>	0102	Speed reach detection band	Hz	0.1/0.01	0.0- <i>FH</i>	2.5		6.1.2 6.1.3
<i>F 105</i>	0105	Priority selection (Both F and R are ON)	-	-	0: Reverse 1: Slowdown Stop	1		6.2.1
<i>F 108</i>	0108	Always active function selection 1	-	-	0-123	0 (No function)		6.3.2
<i>F 109</i>	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
<i>F 110</i>	0110	Always active function selection 2	-	-	0-123	6 (ST)		6.3.2
<i>F 111</i>	0111	Input terminal selection 1A (F)	-	-	0-201	2 (F)		6.3.3 6.5.1
<i>F 112</i>	0112	Input terminal selection 2A (R)	-	-	0-201	4 (R)		7.2.1
<i>F 113</i>	0113	Input terminal selection 3A (S1)	-	-	0-201	10 (SS1)		
<i>F 114</i>	0114	Input terminal selection 4A (S2)	-	-	0-201	12 (SS2)		
<i>F 115</i>	0115	Input terminal selection 5 (VI)	-	-	8-55	14 (SS3)		
<i>F 127</i>	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	Communication No.	Function	Unit	Minimum setting unit Panel/Communication	Adjustment range	Default setting	User setting	Reference
<i>F 130</i>	0130	Output terminal selection 1A (OUT)	-	-	0-255	4 (LOW)		6.3.4 7.2.2
<i>F 132</i>	0132	Output terminal selection 2(FL)	-	-	0-255	10 (FL)		
<i>F 137</i>	0137	Output terminal selection 1B (OUT)	-	-	0-255	255 (always ON)		
<i>F 139</i>	0139	Output terminal logic selection (OUT)	-	-	0: <i>F 130</i> and <i>F 137</i> 1: <i>F 130</i> or <i>F 137</i>	0		6.3.4 7.2.2
<i>F 144</i>	0144	Factory specific coefficient 1A	-	-	-	-		*1
<i>F 151</i>	0151	Input terminal selection 1B (F)	-	-	0-201	0		6.3.3 6.5.1 7.2.1
<i>F 152</i>	0152	Input terminal selection 2B (R)	-	-	0-201	0		
<i>F 153</i>	0153	Input terminal selection 3B (S1)	-	-	0-201	0		
<i>F 154</i>	0154	Input terminal selection 4B (S2)	-	-	0-201	0		
<i>F 155</i>	0155	Input terminal selection 1C (F)	-	-	0-201	0		
<i>F 156</i>	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
<i>F 170</i>	0170	Base frequency 2	Hz	0.1/0.01	20.0-400.0	* 1		6.4.1
<i>F 171</i>	0170	Base frequency voltage 2	Hz	1/0.1	50-330	* 1		
<i>F 172</i>	0172	Torque boost value 2	%	0.1/0.1	0.0-30.0	* 2		
<i>F 173</i>	0173	Motor electronic-thermal protection level 2	% (A)	1/1	10-100	100		5.13 6.4.1 6.16.1
<i>F 185</i>	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
<i>F 201</i>	0201	VI Setting of Input point 1	%	1/1	0-100	0		6.5.2 7.3
<i>F 202</i>	0202	Frequency VI input point 1	Hz	0.1/0.01	0.0-400.0	0.0		
<i>F 203</i>	0203	Setting of VI input point 2	%	1/1	0-100	100		
<i>F 204</i>	0204	Frequency of VI input point 2	Hz	0.1/0.01	0.0-400.0	*1		
<i>F 209</i>	0209	Analog input filter	ms	1/1	4-1000	64		
<i>F 240</i>	0240	Starting frequency setting	Hz	0.1/0.01	0.1-10.0	0.5		6.6.1
<i>F 241</i>	0241	Operation starting frequency	Hz	0.1/0.01	0.0- <i>F H</i>	0.0		6.6.2
<i>F 242</i>	0242	Operation starting frequency hysteresis	Hz	0.1/0.01	0.0- <i>F H</i>	0.0		
<i>F 249</i>	0249	Factory specific coefficient 2A	-	-	-	-		*3
<i>F 250</i>	0250	DC braking starting frequency	Hz	0.1/0.01	0.0- <i>F H</i>	0.0		6.7.1

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Do not change these parameters.



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

• Operation mode parameters

Title	Communication No.	Function	Unit	Minimum setting unit Panel/Communication	Adjustment range	Default setting	User setting	Reference
<i>F300</i>	0300	PWM carrier frequency	kHz	1/1	2 - 16	12		6.11
<i>F301</i>	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
<i>F302</i>	0302	Regenerative power ride-through control (Deceleration stop)	-	-	0: Disabled 1: Automatic setting 2: Slowdown stop	0		6.12.2
<i>F303</i>	0303	Retry selection (number of times)	Times	1/1	0: Disabled 1-10	0		6.12.3
<i>F305</i>	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
<i>F307</i>	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
<i>F311</i>	0311	Reverse-run prohibition	-	-	0: Forward/reverse run permitted 1: Reverse run prohibited 2: Forward run prohibited	0		6.12.6
<i>F312</i>	0312	Random mode	-	-	0: Disabled 1: Automatic setting	0		6.11
<i>F316</i>	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
<i>F359</i>	0359	PID control waiting time	s	1/1	0-2400	0		6.13
<i>F360</i>	0360	PID control	-	-	0: Disabled, 1: Enabled	0		
<i>F362</i>	0362	Proportional gain	-	0.01/0.01	0.01-100.0	0.30		
<i>F363</i>	0363	Integral gain	-	0.01/0.01	0.01-100.0	0.20		
<i>F366</i>	0366	Differential gain	-	0.01/0.01	0.00-2.55	0.00		
<i>F380</i>	0380	PID forward/reverse characteristics selection	-	-	0: Forward 1: Reverse	0		
<i>F391</i>	0391	Auto-stop hysteresis in case of lower-limit frequency continuous operation	Hz	0.1/0.01	0.0- <u>UL</u>	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
<i>F400</i>	0400	Auto-tuning	-	-	0: Auto-tuning disabled 1: Initialization of <i>F402</i> (reset to 0) 2: Auto-tuning enabled (after execution: 0)	0		6.14
<i>F401</i>	0401	Slip frequency gain	%	1/1	0-150	50		
<i>F402</i>	0402	Automatic torque boost value	%	0.1/0.1	0.0-30.0	* 1		
<i>F405</i>	0405	Motor rated capacity	kW	0.01/0.01	0.01-5.50	* 1		
<i>F412</i>	0412	Motor specific coefficient 1	-	-	-	-		* 3
<i>F415</i>	0415	Motor rated current	A	0.1/0.1	0.1-30.0	* 1		6.14
<i>F416</i>	0416	Motor no-load current	%	1/1	10-90	* 1		
<i>F417</i>	0417	Rated motor speed	min <sup>-1</sup>	1/1	100-32000	* 2		

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\*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.

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	-	-	-	-		

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

• 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	-	-	-	-		

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• 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- $\overline{UL}$	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°C 2: 11-20°C 3: 21-30°C 4: 31-40°C 5: 41-50°C 6: 51-60°C	3		6.16.14

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

• Output parameters

Title	Communication No.	Function	Unit	Minimum setting unit Panel/Communication	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 1 mA) 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	Communication No.	Function	Unit	Minimum setting unit Panel/Communication	Adjustment range	Default setting	User setting	Reference
F700	0700	Parameter write protection selection	-	-	0: Permitted 1: Panel and extension panel inhibited 2: 1+RS485communications inhibited	0		6.18.1
F701	0701	Current/voltage unit selection	-	-	0:% 1:A (ampere)/V (volt)	0		6.18.2
F702	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
F707	0707	Free step 1 (1-step rotation of setting dial)	Hz	0.01/0.01	0.00: Disabled 0.01-FH	0.00		6.18.4
F710	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: Arbitrary display according to communications	0		6.18.5 8.2.1
F711	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)	2		8.2.1 8.3.2
F712	0712	Status monitor 2	-	-	4: Output voltage (command value)(%/V) 5: Input power(kW) 6: Output power(kW) 7: Torque(%) 8: Torque current(%/A) 9 to 11:-	1		
F713	0713	Status monitor 3	-	-	12: Frequency setting value (after compensation) 13 to 22:- 23: PID feedback value (Hz/free unit) 24 to 26:- 27: Drive load factor (%)	3		
F714	0714	Status monitor 4	-	-		4		
F715	0715	Status monitor 5	-	-		27		
F716	0716	Status monitor 6	-	-		0		
F720	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(F <sub>L</sub> )	-	-	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	ENOD/ FNOD 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	Communication No.	Function	Unit	Minimum setting unit Panel/Communication	Adjustment range	Default setting	User setting	Reference
F 758	0758	Easy setting mode parameter 8	-	-	0-999 (Set by communication number)	999		4.5
F 759	0759	Easy setting mode parameter 9	-	-		999		
F 760	0760	Easy setting mode parameter 10	-	-		999		
F 761	0761	Easy setting mode parameter 11	-	-		999		
F 762	0762	Easy setting mode parameter 12	-	-		999		
F 763	0763	Easy setting mode parameter 13	-	-		999		
F 764	0764	Easy setting mode parameter 14	-	-		999		
F 765	0765	Easy setting mode parameter 15	-	-		999		
F 766	0766	Easy setting mode parameter 16	-	-		999		
F 767	0767	Easy setting mode parameter 17	-	-		999		
F 768	0768	Easy setting mode parameter 18	-	-		999		
F 769	0769	Easy setting mode parameter 19	-	-		999		
F 770	0770	Easy setting mode parameter 20	-	-		999		
F 771	0771	Easy setting mode parameter 21	-	-		999		
F 772	0772	Easy setting mode parameter 22	-	-		999		
F 773	0773	Easy setting mode parameter 23	-	-		999		
F 774	0774	Easy setting mode parameter 24	-	-		999		

Title	Communication No.	Function	Unit	Minimum setting unit Panel/Communication	Adjustment range	Default setting	User setting	Reference
<i>F799</i>	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
<i>F800</i>	0800	Baud rate	-	-	3: 9600bps 4: 19200bps 5: 38400bps	4		6.19
<i>F801</i>	0801	Parity	-	-	0: NON (No parity) 1: EVEN (Even parity) 2: ODD (Odd parity)	1		
<i>F802</i>	0802	Inverter number	-	1/1	0-247	0		
<i>F803</i>	0803	Communication time-out time	s	1/1	0: (disabled) 1-100	0		
<i>F804</i>	0804	Communication time-out action	-	-	0:Alam only 1:Trip(Coast stop) 2:Trip(Slowdown stop)	0		
<i>F808</i>	0808	Communication time-out detection condition	-	-	0:Always 1:When <i>F804</i> or <i>C804</i> communication is selected 2:1+during operation	1		
<i>F829</i>	0829	Selection of communication protocol	-	-	0: Toshiba inverter protocol 1: Modbus RTU protocol	0		
<i>F870</i>	0870	Block write data 1	-	-	0: No selection 1: Command information	0		
<i>F871</i>	0871	Block write data 2	-	-	2: - 3: Frequency setting 4: Output data on the terminal board 5: Analog output for communications	0		
<i>F875</i>	0875	Block read data 1	-	-	0: No selection 1: Status information	0		
<i>F876</i>	0876	Block read data 2	-	-	2: Output frequency 3: Output current	0		
<i>F877</i>	0877	Block read data 3	-	-	4: Output voltage 5: Alarm information	0		
<i>F878</i>	0878	Block read data 4	-	-	6: PID feedback value 7: Input terminal board monitor	0		
<i>F879</i>	0879	Block read data 5	-	-	8: Output terminal board monitor 9: VI terminal board monitor	0		
<i>F880</i>	0880	Free notes	-	1/1	0-65535	0		6.20

- Default settings by inverter rating

Inverter type	Torque boost value	Automatic Torque boost value	Motor rated current	Motor rated current	Motor no-load current
	<i>ub/F 172</i> (%)	<i>F402</i> (%)	<i>F405</i> (kW)	<i>F415</i> (A)	<i>F416</i> (%)
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	Frequency	Base frequency voltage	Sink/source switching	Supply voltage correction (output voltage limitation)	Motor rated speed
		<i>FH</i> (Hz)	<i>UL/UL/ F 170/F204</i> (Hz)	<i>uLv/F 171</i> (V)	<i>F 127</i>	<i>F 307</i>	<i>F417</i> (min <sup>-1</sup> )
<i>JP</i>	Japan	80.0	60.0	200	0 (Sink)	3	1710
<i>USA</i>	North America	60.0	60.0	230	0 (Sink)	3	1710
<i>ASIA</i>	Asia	50.0	50.0	230	0 (Sink)	2	1410
<i>EU</i>	Europe	50.0	50.0	230	100 (Source)	2	1410