

VFnC1 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	
	P5	
	VI/S3	
	FM/OUT	
	F	
	R	
	S1	
	S2	
	CC	
	P15	

User parameter

Title	Function	Adjustment range	Default	User setting
<i>FC</i>	Operation frequency of operation panel	<i>LL-UL</i>	0.0	

Basic parameter

Title	Function	Adjustment range	Default	User setting
<i>RUH</i>	History function	-	-	
<i>RUF</i>	Wizard function	0: - 1: Basic setting wizard 2: Preset speed operation wizard 3: Analog signal operation wizard 4: Motor 1/2 switching operation wizard 5: Torque up wizard *1	0	
<i>CNDd</i>	Command mode selection	0: Terminal block 1: Operation panel	1	
<i>FNDd</i>	Frequency setting mode selection	0: Terminal block 1: Operation panel 2: Internal potentiometer 3: Serial communication 4: Terminal block/Internal potentiometer switching	2	
<i>FNSL</i>	FM/OUT terminal functions selection	-1: Open collector output 0: Output frequency 1: Output current 2: Set frequency 3: For adjustment (current fixed at 100%) 4: For adjustment (current fixed at 50%) 5: For adjustment (output of max. frequency) 6: For adjustment (display of gain)	0	
<i>FN</i>	Meter adjustment	-	-	-
<i>LYP</i>	Standard setting mode selection	0: - 1: Set at 50Hz 2: Set at 60Hz 3: Default setting 4: Trip clear 5: Cumulative operation time clear	0	
<i>Fr</i>	Forward/reverse selection (Operation panel)	0: Forward run 1: Reverse run	0	
<i>ACC</i>	Acceleration time 1	0.1-3000(s)	10.0	
<i>dEC</i>	Deceleration time 1	0.1-3000(s)	10.0	
<i>FH</i>	Maximum frequency	30.0-200(Hz)	*2	
<i>UL</i>	Upper limit frequency	0.5- <i>FH</i> (Hz)	*2	
<i>LL</i>	Lower limit frequency	0.0- <i>UL</i> (Hz)	0.0	
<i>uL</i>	Base frequency 1	25-200(Hz)	*2	
<i>Pt</i>	V/F control mode selection	0: V/f 3: Sensorless vector control	0	

*1: This parameter is valid only for VFNC1(S)-***P*-W type.

*2: The value is changed according to the set-up parameter condition.

(VFNC1 (S)-***P*-W type)

FH:80, UL:80, VL:60, F127:0, F170:60, F171:200, F204:80, F409:200, F417:1710 for VFNC1 (S)-***P* type.

<i>ub</i>	Torque boost 1	0.0-30.0(%)				diff. from capacity	
<i>tHr</i>	Motor thermal protection level 1	30.0-100(%)				100	
<i>OLn</i>	Electric thermal protection characteristics	Setting value	motor type	OL protection	OL stall function	0	
		0	Standard motor	Enable	Disable		
		1		Enable	Enable		
		2		Disable	Disable		
		3		Disable	Enable		
		4	VF motor	Enable	Disable		
		5		Enable	Enable		
		6		Disable	Disable		
7	Disable	Enable					
<i>sr1</i>	Preset speed operation frequencies 1	<i>LL-UL</i> (Hz)				0.0	
<i>sr2</i>	Preset speed operation frequencies 2	<i>LL-UL</i> (Hz)				0.0	
<i>sr3</i>	Preset speed operation frequencies 3	<i>LL-UL</i> (Hz)				0.0	
<i>sr4</i>	Preset speed operation frequencies 4	<i>LL-UL</i> (Hz)				0.0	
<i>sr5</i>	Preset speed operation frequencies 5	<i>LL-UL</i> (Hz)				0.0	
<i>sr6</i>	Preset speed operation frequencies 6	<i>LL-UL</i> (Hz)				0.0	
<i>sr7</i>	Preset speed operation frequencies 7	<i>LL-UL</i> (Hz)				0.0	

Extended parameters

Input parameters				
<i>F 100</i>	Low speed signal output frequency	0.6- <i>FH</i> (Hz)	0.6	
<i>F 101</i>	Speed-reach setting frequency	0.0- <i>FH</i> (Hz)	0.0	
<i>F 109</i>	Analog input/logic input function setting	0: Voltage signal input (0-5V or 10V) 1: Current signal input (0-20mA) 2: Contact input	0	
<i>F 110</i>	Always active function selection(ST)	0-40, 54-57(ST)	1	
<i>F 111</i>	Input terminal selection 1 (F)	0-40, 54-57(F)	2	
<i>F 112</i>	Input terminal selection 2 (R)	0-40, 54-57(R)	3	
<i>F 113</i>	Input terminal selection 3 (S1)	0-40, 54-57(SS1)	6	
<i>F 114</i>	Input terminal selection 4 (S2)	0-40, 54-57(SS2)	7	
<i>F 115</i>	Input terminal selection 5 (VI/S3)	5-17(SS3)	8	
<i>F 127</i>	Sink/Source selection	0: Sink, 100: Source	*2	
<i>F 130</i>	Output terminal selection 1 (OUT/FM)	0-13(Low)	4	
<i>F 132</i>	Output terminal selection 3 (FL)	0-13(FL)	10	
<i>F 170</i>	Base frequency 2	25-200(Hz)	60.0	
<i>F 171</i>	Base frequency voltage 2	50-500(V)	200	
<i>F 172</i>	Torque boost 2	0.0-30.0(%)	Diff. from capacity	
<i>F 173</i>	Motor thermal protection level 2	30-100(%)	100	

*2: The value is changed according to the set-up parameter condition.
(VFNC1 (S)-***P*-W type)

FH:80, UL80, VL:60, F127:0, F170:60, F171:200, F204:80, F409:200, F417:1710 for VFNC1 (S)-***P* type.

Frequency parameter				
<i>F201</i>	VI/S3 reference point 1 setting	0-100(%)	0	
<i>F202</i>	VI/S3 reference point 1 frequency	0.0-200.0(Hz)	0.0	
<i>F203</i>	VI/S3 reference point 2 setting	0-100(%)	100	
<i>F204</i>	VI/S3 reference point 2 frequency	0.0-200.0(Hz)	*2	
<i>F240</i>	Starting frequency setting	0.5-10(Hz)	0.5	
<i>F241</i>	Operation starting frequency	0.0- <i>FH</i> (Hz)	0.0	
<i>F242</i>	Operation starting frequency hysteresis	0.0- <i>FH</i> (Hz)	0.0	
<i>F250</i>	DC braking starting frequency	0.0- <i>FH</i> (Hz)	0.0	
<i>F251</i>	DC braking current	0-100(%)	50	
<i>F252</i>	DC braking time	0.0-20(s)	1.0	
<i>F270</i>	Jump frequency 1	0.0- <i>FH</i> (Hz)	0.0	
<i>F271</i>	Jumping width	0.0-30.0(Hz)	0.0	
<i>F287</i>	Preset speed operation frequencies 8	<i>LL-UL</i> (Hz)	0.0	
<i>F288</i>	Preset speed operation frequencies 9	<i>LL-UL</i> (Hz)	0.0	
<i>F289</i>	Preset speed operation frequencies 10	<i>LL-UL</i> (Hz)	0.0	
<i>F290</i>	Preset speed operation frequencies 11	<i>LL-UL</i> (Hz)	0.0	
<i>F291</i>	Preset speed operation frequencies 12	<i>LL-UL</i> (Hz)	0.0	
<i>F292</i>	Preset speed operation frequencies 13	<i>LL-UL</i> (Hz)	0.0	
<i>F293</i>	Preset speed operation frequencies 14	<i>LL-UL</i> (Hz)	0.0	
<i>F294</i>	Preset speed operation frequencies 15	<i>LL-UL</i> (Hz)	0.0	

*2: The value is changed according to the set-up parameter condition.

(VFNC1 (S)-***P*-W type)

FH:80, UL80, VL:60, F127:0, F170:60, F171:200, F204:80, F409:200, F417:1710 for VFNC1 (S)-***P* type.

Operation mode parameters				
<i>F300</i>	PWM carrier frequency	0: 2kHz 1: 2kHz (Random mode) 2: 4kHz 3: 4kHz (Random mode) 4: 8kHz (Auto-reduction mode) 5: 12kHz (Auto-reduction mode) 6: 16kHz (Auto-reduction mode)	5 *3	
<i>F301</i>	Auto-restart control selection	0: disabled 1: At auto-restart after momentary stop 2: When turning ST-CC on or off 3: At auto-restart after momentary stop or when turning ST-CC on or off	0	
<i>F302</i>	Regenerative power ride-through control	0: Disabled 1: Enabled 2: Deceleration stop	0	
<i>F303</i>	Retry selection	0: OFF 1~10	0	
<i>F305</i>	Over voltage limit operation	0: Enabled 1: Disabled 2: Disabled (forced shortened deceleration)	0	
<i>F360</i>	PI control	0: Disabled, 1: Enabled	0	
<i>F362</i>	Proportional gain	0.01-100.0	0.30	
<i>F363</i>	Integral gain	0.01-100.0	0.20	

Torque boost parameters				
<i>F401</i>	Slip frequency gain	0-150(%)	50	
<i>F409</i>	Base frequency voltage 1	50-500(V)	*2	
<i>F415</i>	Motor rated current	0.1-50.0(A)	Diff. from capacity	
<i>F416</i>	Motor no-load current	30-80(%)	Diff. from capacity	
<i>F417</i>	Motor rated speed	100-12000min ⁻¹	*2	
<i>F418</i>	Speed control gain	0-100(%)	40	
<i>F419</i>	Speed control stable coefficient	0-100(%)	20	

Acceleration/deceleration time parameters				
<i>F500</i>	Acceleration time 2	0.1-3000(s)	10.0	
<i>F501</i>	Deceleration time 2	0.1-3000(s)	10.0	
<i>F505</i>	Acceleration/deceleration 1 and 2 switching frequency	0.0-UL (Hz)	0.0	

*2: The value is changed according to the set-up parameter condition.

(VFNC1 (S)-****P*-W type)

FH:80, UL80, VL:60, F127:0, F170:60, F171:200, F204:80, F409:200, F417:1710 for VFNC1 (S)-****P* type.

*3: 2 (4kHz) for VFNC1 (S)-****PL-* type

Protection parameters				
<i>F601</i>	Stall prevention level	30-199(%), 200: Disabled	150	
<i>F602</i>	Inverter trip retention selection	0: Not retained, 1 :Retained	0	
<i>F603</i>	External input trip stop mode selection	0: Coast stop 1: Slowdown stop 2: Emergency DC braking	0	
<i>F605</i>	Output phase failure detection mode selection	0: Disabled 1: Selected (Output open-phase is checked when operation is started for the first time after power is turned on.) 2: Selected (Output open-phase is checked each time operation is started.)	0	
<i>F607</i>	Motor 150%-overload time limit	10-800(s)	300	
<i>F608</i>	Input phase failure detection mode selection	0: Disabled, 1: Enabled	1	
<i>F616</i>	Over-torque alarm level	0-200(%)	150	
<i>F618</i>	Over-torque detection time	0.0-10.0(s)	0.5	
<i>F627</i>	Under voltage trip selection	0: Disabled 1: Enabled (64% or less: Trip, FL relay activated) 2: Disabled (50% or less: Trip, FL relay not activated)	0	
<i>F633</i>	Analog input disconnection detection	0: Disabled 1-100(%)	0	

Operation panel parameters				
<i>F700</i>	Prohibition of change parameter setting	0: Permitted(<i>Cn0d</i> . <i>Fn0d</i> cannot be changed during operation.) 1: Prohibited 2: Permitted(<i>Cn0d</i> . <i>Fn0d</i> also can be changed during operation.) 3: Prohibited(except for panel frequency setting.) 4: 0 & panel emergency stop prohibited. 5: 1 & panel emergency stop prohibited. 6: 2 & panel emergency stop prohibited. 7: 3 & panel emergency stop prohibited.	0	
<i>F701</i>	Unit selection	0: %, Hz 1: % →A/V 2: Free unit selection enabled (<i>F702</i>) 3: %→A/V, Free unit selection enabled(<i>F702</i>)	0	
<i>F702</i>	Frequency unit magnification	0.01-200	1.00	
<i>F710</i>	Selection of monitor display selection	0: Operation frequency (Hz/free unit) 1: Frequency command (Hz/free unit) 2: Output current (%/A)	0	

Communication parameters				
<i>F800</i>	Communication baud rate	0: 1200bps 1: 2400bps 2: 4800bps 3: 9600bps 4: 19200bps	3	
<i>F801</i>	Parity	0: NON(non-parity) 1: EVEN(even parity) 2: ODD(odd parity)	1	
<i>F802</i>	Inverter number	0-99	0	
<i>F803</i>	Communication error trip time	0: Disabled 1-100(s)	0	
<i>F880</i>	Free notes	0-65535	0	