VFA7/VFP7 Parameter List (Ver311,312)

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.

-Connected option

Option's name (Type-Form)

Notice:
This parameter list is created by Ver312 parameter.
Ver311 doesn't have F396, F397, F398, F455, F456, F633.
Ver307 doesn't have several parameter and function.

-Terminal stand use state

	Terminal Name	Use state
Main terminal block	PA	
	PB	
	PC	
	P0	
	R/L1	
	S/L2	
	T/L3	
	U/T1	
	V/T2	
	W/T3	
	R0（R46, 41 *1）	
	S0	
	R20 *1	
	S20 *1	
	PR1 *2	
	PB1 *2	
	PA1 *2	
	E/G	
Control terminal block	F	
	R	
	ST	
	RES	
	S1	
	S2	
	S3	
	S4	
	CC	
	PP	
	RR	
	VI	
	II	
	RX	
	FM	
	AM	
	FP	
	CC	
	P24	
	OUT1	
	OUT2	
	FLA	
	FLB	
	FLC	
Switch	For SINK/SOURCE changing	SINK / SOURCE

*1: only 400V input class, over 37kW

*2: only up to 3.7kW

1. Basic parameters (1/2)

Title	Communication No.	Function	Adjustment range	Minimum setup unit	Default setting	Write during running	User Setting	Reference section
AU1	0000	Automatic acceleration/deceleration	0: Manual acceleration/deceleration 1: Automatic acceleration/deceleration	—	0	Disabled		5.1
AU2	0001	Automatic V/f mode setting	0:—(0 is always displayed.) 1: Automatic torque boost + auto-tuning 2: Sensorless vector control (speed) + auto-tuning 3: Automatic energy-saving + auto-tuning	—	0	Disabled		5.2
CMOd	0003	Operation command mode selection	0: Terminal block enabled 1: Operating panel enabled 2: Common serial communication option enabled 3: Serial communication RS485 enabled 4: Communication add-on cassette option enabled	—	0	Disabled		5.3
FMOd	0004	Speed setting mode selection	1: VI (voltage input)/II (current input) 2: RR (volume/voltage input) 3: RX (voltage input) 4: RX2 (voltage input) (optional) 5: Operating panel input 6: Binary/BCD input(optional) 7: Common serial communication option(FA01) 8: Serial communication RS485(FA05) 9: Communication add-on cassette option(FA07) 10: Up-down frequency 11: Pulse input #1 (optional)	—	2	Disabled		5.3
FMSL	0005	FM terminal meter selection	0～32	—	0	Enabled		5.4
FM	0006	FM terminal meter adjustment	—	—	—	Enabled		5.4
tYP	0007	Standard setting mode selection	0:— 1: 50Hz standard setting 2: 60Hz standard setting 3: Factory default setting 4: Trip clear 5: Clearing accumulating operation time 6: Initialization of type form information 7: Memorization of user-defined parameters 8: Reset of user-defined parameters	—	0	Disabled		5.5

1. Basic parameters (2/2)

Title	Communication No.	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
Fr	0008	Forward/reverse selection (At panel control only)	0: Forward, 1: Reverse	—	0	Enabled		5.6
ACC	0009	Acceleration time #1	0.1(F508)～6000 [s]	0.01/0.01*	Dif. Capa	Enabled		5.1.2
dEC	0010	Deceleration time #1	0.1(F508)～6000 [s]	0.01/0.01*	Dif. Capa	Enabled		5.1.2
FH	0011	Maximum frequency	30.0～400.0 [Hz]	0.01/0.01	80	Disabled		5.7
UL	0012	Upper limit frequency	0.0～FH [Hz]	0.01/0.01	80	Enabled		5.8
LL	0013	Lower limit frequency	0.0～UL [Hz]	0.01/0.01	0.0	Enabled		5.8
uL	0014	Base frequency #1	25.0 ～400.0 [Hz]	0.01/0.01	60	Enabled		5.9
Pt	0015	Motor control mode selection	0: Constant torque 1: Variable torque mode 2: Automatic torque boost 3: Sensorless vector control (speed) 4: Automatic torque boost + automatic energy-saving 5: Sensorless vector control (speed) + automatic energy-saving 6: V/f 5-points setting 7:Sensorless vector control (speed/torque switching) 8: PG feedback vector control (speed/torque switching) 9: PG feedback vector control (speed/position switching)	—	0	Disabled		5.10
ub	0016	Manual torque boost	0～30%	0.1/0.01	Dif. Capa	Enabled		5.12
OLN	0017	Selection of electronic thermal protection characteristics	Setting / Type / Overload protection / Overload stall: 0 / Standard motor / protect / not stall 1 / Standard motor / protect / stall 2 / Standard motor / not protect / not stall 3 / Standard motor / not protect / stall 4 / VF motor (special motor) / protect / not stall 5 / VF motor (special motor) / protect / stall 6 / VF motor (special motor) / not protect / not stall 7 / VF motor (special motor) / not protect / stall	—	0	Disabled		5.13
Sr1	0018	Preset-speed #1	LL～UL [Hz]	0.01/0.01	0.0	Enabled		5.14
Sr2	0019	Preset-speed #2	LL～UL [Hz]	0.01/0.01	0.0	Enabled		
Sr3	0020	Preset-speed #3	LL～UL [Hz]	0.01/0.01	0.0	Enabled		
Sr4	0021	Preset-speed #4	LL～UL [Hz]	0.01/0.01	0.0	Enabled		
Sr5	0022	Preset-speed #5	LL～UL [Hz]	0.01/0.01	0.0	Enabled		
Sr6	0023	Preset-speed #6	LL～UL [Hz]	0.01/0.01	0.0	Enabled		
Sr7	0024	Preset-speed #7	LL～UL [Hz]	0.01/0.01	0.0	Enabled		
F1-- ～ F9--	—	Extended parameter	Setting of extended parameters listed on the following pages	—	—	—		4.1.2
Gr.U	—	Automatic edit function	To search parameters different from default value	—	—	—		4.1.3

2. Extended parameters

[1] Frequency signal

Title	Communication No.	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F100	0100	Low-speed signal output frequency	0.0～UL [Hz]	0.01/0.01	0.0	Enabled		6.1.1
F101	0101	Speed reach setting frequency	0.0～UL [Hz]	0.01/0.01	0.0	Enabled		6.1.2
F102	0102	Speed reach detection band	0.0～UL [Hz]	0.01/0.01	2.5	Enabled		6.1.2

[2] Input signal selection

Title	Communication No.	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F103	0103	ST (standby) signal selection	0: Standard, 1: Always ON, 2: Interlock with F/R terminal	—	0	Disabled		6.2.1
F105	0105	Priority selection (both F-CC, R-CC are ON)	0: Reverse, 1: Stop	—	0	Disabled		6.2.2
F106	0106	Priority setting of input terminal	0: Disabled, 1: Enabled	—	0	Disabled		6.2.3
F107	0107	Binary/BCD signal selection (Expansion TB option unit)	0: None 1: 12-bit binary input 2: 16-bit binary input 3: 3-digit BCD input 4: 4-digit BCD input 5: Reverse 12-bit binary input 6: Reverse 16-bit binary input 7: Reverse 3-digit BCD input 8: Reverse 4-digit BCD input	—	0	Disabled		※
F108	0108	Up-down frequency	0～7	1/1	0	Disabled		※

[3] Terminal function selection (1/2)

Title	Communication No.	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F110	0110	Always active function selection	0～135	—	0	Disabled		6.3.1
F111	0111	Input terminal selection #1 (F)	0～135	—	2(F)	Disabled		7.2.1
F112	0112	Input terminal selection #2 (R)	0～135	—	4(R)	Disabled		7.2.1
F113	0113	Input terminal selection #3 (ST)	0～135	—	6(ST)	Disabled		7.2.1
F114	0114	Input terminal selection #4 (RES)	0～135	—	8(RES)	Disabled		7.2.1
F115	0115	Input terminal selection #5 (S1)	0～135	—	10(S1)	Disabled		7.2.1
F116	0116	Input terminal selection #6 (S2)	0～135	—	12(S2)	Disabled		7.2.1
F117	0117	Input terminal selection #7 (S3)	0～135	—	14(S3)	Disabled		7.2.1
F118	0118	Input terminal selection #8 (S4)	0～135	—	16(S4)	Disabled		7.2.1
F119	0119	Input terminal selection #9	0～135	—	0	Disabled		7.2.1
F120	0120	Input terminal selection #10	0～135	—	0	Disabled		7.2.1

※(Reference section): Refer to the inverter's individual manual.

[3] Terminal function selection (2/2)

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F121	0121	Input terminal selection #11	0～135	—	0	Disabled		7.2.1
F122	0122	Input terminal selection #12	0～135	—	0	Disabled		7.2.1
F123	0123	Input terminal selection #13	0～135	—	0	Disabled		7.2.1
F124	0124	Input terminal selection #14	0～135	—	0	Disabled		7.2.1
F125	0125	Input terminal selection #15	0～135	—	0	Disabled		7.2.1
F126	0126	Input terminal selection #16	0～135	—	0	Disabled		7.2.1
F130	0130	Output terminal selection #1 (OUT1)	0～119	—	4(LOW)	Disabled		7.2.2
F131	0131	Output terminal selection #2 (OUT2)	0～119	—	6(RCH)	Disabled		7.2.2
F132	0132	Output terminal selection #3 (FL)	0～119	—	10(FL)	Disabled		7.2.2
F133	0133	Output terminal selection #4	0～119	—	0	Disabled		7.2.2
F134	0134	Output terminal selection #5	0～119	—	2	Disabled		7.2.2
F135	0135	Output terminal selection #6	0～119	—	8	Disabled		7.2.2
F136	0136	Output terminal selection #7	0～119	—	14	Disabled		7.2.2

[4] Terminal response time setup

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F140	0140	Input terminal #1 response time(F)	2 to 200 [ms] (in steps of 2.5 [ms])	(*1)	8	Disabled		7.2.3
F141	0141	Input terminal #2 response time(R)	2 to 200 [ms] (in steps of 2.5 [ms])	(*1)	8	Disabled		7.2.3
F142	0142	Input terminal #3 response time(ST)	2 to 200 [ms] (in steps of 2.5 [ms])	(*1)	8	Disabled		7.2.3
F143	0143	Input terminal #4 response time(RES)	2 to 200 [ms] (in steps of 2.5 [ms])	(*1)	8	Disabled		7.2.3
F144	0144	Input terminal #5-#8 response time	2 to 200 [ms] (in steps of 2.5 [ms])	(*1)	8	Disabled		7.2.3
F145	0145	Input terminal #9-#16 response time	2 to 200 [ms] (in steps of 2.5 [ms])	(*1)	8	Disabled		7.2.3
F150	0150	Output terminal #1 delay time (OUT1)	2 to 200 [ms] (in steps of 2.5 [ms])	(*1)	2	Disabled		7.2.3
F151	0151	Output terminal #2 delay time (OUT2)		(*1)	2	Disabled		7.2.3
F152	0152	Output terminal #3 delay time (FL)		(*1)	2	Disabled		7.2.3
F153	0153	Output terminal #4 delay time		(*1)	2	Disabled		7.2.3
F154	0154	Output terminal #5 delay time		(*1)	2	Disabled		7.2.3
F155	0155	Output terminal #6 delay time		(*1)	2	Disabled		7.2.3
F156	0156	Output terminal #7 delay time		(*1)	2	Disabled		7.2.3
F160	0160	Output terminal #1 holding time (OUT1)	2 to 200 [ms] (in steps of 2.5 [ms])	(*1)	2	Disabled		7.2.3
F161	0161	Output terminal #2 holding time (OUT2)		(*1)	2	Disabled		7.2.3
F162	0162	Output terminal #3 holding time (FL)		(*1)	2	Disabled		7.2.3
F163	0163	Output terminal #4 holding time		(*1)	2	Disabled		7.2.3
F164	0164	Output terminal #5 holding time		(*1)	2	Disabled		7.2.3
F165	0165	Output terminal #6 holding time		(*1)	2	Disabled		7.2.3
F166	0166	Output terminal #7 holding time		(*1)	2	Disabled		7.2.3

(*1)The minimum setting unit is 2.5 [ms]. Please input a value which is a multiple of 2.5 and ommitted below the decimal point.

[5] Basic parameters #2

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F170	0170	Base frequency #2	25.0～400.0 [Hz]	0.01/0.01	60.0	Enabled		6.4.1
F171	0171	Base frequency voltage #2	0.0～600.0 [V]	0.1/0.1	Dif. Capa	Enabled		6.4.1
F172	0172	Manual torque boost #2	0.0～30.0 [%]	0.1/0.01	Dif. Capa	Enabled		6.4.1
F173	0173	Motor overload protection level #2	10～100 [%]	1/0.01	100.0	Enabled		6.4.1
F174	0174	Base frequency #3	25.0～400.0 [Hz]	0.01/0.01	60.0	Enabled		6.4.1
F175	0175	Base frequency voltage #3	0.0～600.0 [V]	0.1/0.1	Dif. Capa	Enabled		6.4.1
F176	0176	Manual torque boost #3	0.0～30.0 [%]	0.1/0.01	Dif. Capa	Enabled		6.4.1
F177	0177	Motor overload protection level #3	10～100 [%]	1/0.01	100	Enabled		6.4.1
F178	0178	Base frequency #4	25.0～400.0 [Hz]	0.01/0.01	60.0	Enabled		6.4.1
F179	0179	Base frequency voltage #4	0.0～600.0 [V]	0.1/0.1	Dif. Capa	Enabled		6.4.1
F180	0180	Manual torque boost #4	0.0～30.0 [%]	0.1/0.01	Dif. Capa	Enabled		6.4.1
F181	0181	Motor overload protection level #4	10～100 [%]	1/0.01	100	Enabled		6.4.1
F182	0182	Motor switching mode selection	0: standard, 1: customized	-	0	Disabled		※
F183	0183	V/f adjustment coefficient	0～255	1/1	32	Enabled		※

[6] V/f 5-point setting

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F190	0190	V/f 5-point setting VF1 frequency	0～400 [Hz]	1/1	0	Disabled		6.5
F191	0191	V/f 5-point setting VF1 voltage	0～100 [%]	0.1/0.01	0.0	Disabled		6.5
F192	0192	V/f 5-point setting VF2 frequency	0～400 [Hz]	1/1	0	Disabled		6.5
F193	0193	V/f 5-point setting VF2 voltage	0～100 [%]	0.1/0.01	0.0	Disabled		6.5
F194	0194	V/f 5-point setting VF3 frequency	0～400 [Hz]	1/1	0	Disabled		6.5
F195	0195	V/f 5-point setting VF3 voltage	0～100 [%]	0.1/0.01	0.0	Disabled		6.5
F196	0196	V/f 5-point setting VF4 frequency	0～400 [Hz]	1/1	0	Disabled		6.5
F197	0197	V/f 5-point setting VF4 voltage	0～100 [%]	0.1/0.01	0.0	Disabled		6.5
F198	0198	V/f 5-point setting VF5 frequency	0～400 [Hz]	1/1	0	Disabled		6.5
F199	0199	V/f 5-point setting VF5 voltage	0～100 [%]	0.1/0.01	0.0	Disabled		6.5

※(Reference section): Refer to the inverter's individual manual.

[7] Speed/torque reference gain/bias setup (1/2)

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F200	0200	Reference priority selection	0: FNOd 1: F207 2: FNOd priority (*1) 3: F207 priority (*2) 4: FNOd/F207 switching	—	0	Enabled		6.6.1
F201	0201	VI/II reference point #1	0～100 [%]	1/0.01	20.0	Enabled		7.3.2
F202	0202	VI/II reference point #1 frequency	0.0～FH [Hz]	0.01/0.01	0. 0	Enabled		7.3.2
F203	0203	VI/II reference point #2	0～100 [%]	1/0.01	100	Enabled		7.3.2
F204	0204	VI/II reference point #2 frequency	0.0～FH [Hz]	0.01/0.01	80.0	Enabled		7.3.2
F205	0205	VI/II reference point #1 rate	-250～250 [%] (For torque control, etc.)	1/0.01	0	Enabled		6.21.1
F206	0206	VI/II reference point #2 rate	-250～250 [%] (For torque control, etc.)	1/0.01	100	Enabled		6.21.1
F207	0207	Speed setting mode selection #2	Same as FNOd (1 to 11)	—	1	Enabled		6.61
F208	0208	FNOd/F207 switching frequency	0.1～FH [Hz]	0.01/0.01	1.0	Enabled		6.6.1
F209	0209	Analog input filter	0(Disabled) to 3(Max. filter capacity)	—	0	Enabled		7.2.4
F210	0210	RR reference point #1	0～100 [%]	1/0.01	0	Enabled		7.3.1
F211	0211	RR reference point #1 frequency	0.0～FH [Hz]	0.01/0.01	0.0	Enabled		7.3.1
F212	0212	RR reference point #2	0～100 [%]	1/0.01	100	Enabled		7.3.1
F213	0213	RR reference point #2 frequency	0.0～FH [Hz]	0.01/0.01	80.0	Enabled		7.3.1
F214	0214	RR reference point #1 rate	0～250 [%] (For torque control, etc.)	1/0.01	0	Enabled		6.21.1
F215	0215	RR reference point #2 rate	0～250 [%] (For torque control, etc.)	1/0.01	100	Enabled		6.21.1
F216	0216	RX reference point #1	-100～100 [%]	1/0.01	0	Enabled		7.3.3
F217	0217	RX reference point #1 frequency	-FH～FH [Hz] (*3)	0.01/0.01	0.0	Enabled		7.3.3
F218	0218	RX reference point #2	-100～100 [%]	1/0.01	100	Enabled		7.3.3
F219	0219	RX reference point #2 frequency	-FH～FH [Hz] (*3)	0.01/0.01	80.0	Enabled		7.3.3
F220	0220	RX reference point #1 rate	0～250 [%] (For torque control, etc.)	1/0.01	0	Enabled		6.21.1
F221	0221	RX reference point #2 rate	0～250 [%] (For torque control, etc.)	1/0.01	100	Enabled		6.21.1
F222	0222	RX2 reference point #1	-100～100 [%]	1/0.01	0	Enabled		※
F223	0223	RX2 reference point #1 frequency	-FH～FH [Hz] (*3)	0.01/0.01	0.0	Enabled		※
F224	0224	RX2 reference point #2	-100～100 [%]	1/0.01	100	Enabled		※
F225	0225	RX2 reference point #2 frequency	-FH～FH [Hz] (*3)	0.01/0.01	80.0	Enabled		※
F226	0226	RX2 reference point #1 rate	-250～250 [%] (For torque control, etc.)	1/0.01	0	Enabled		※
F227	0227	RX2 reference point #2 rate	-250～250 [%] (For torque control, etc.)	1/0.01	100	Enabled		※

(*1): When setup frequency(signal set up by FNOd)is F208 or more, signal set up by FNOd is accepted, When setup frequency is lower than F208, the inverter runs under the signal of F207.
(*2): When setup frequency(signal set up by F207)is F208 or more, signal set up by F207 is accepted, When setup frequency is lower than F208, the inverter runs under the signal of FNOd.
(*3): Adjustment range is -327.68～327.67 [Hz] in case of 16-bit access.
※(Reference section): Refer to the inverter's individual manual.

[7] Speed/torque reference gain/bias setup (2/2)

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F228	0228	BIN reference point #1	-100～100 [%]	1/0.01	0	Enabled		※
F229	0229	BIN reference point #1 frequency	-FH～FH [Hz] (*1)	0.01/0.01	0.0	Enabled		※
F230	0230	BIN reference point #2	-100～100 [%]	1/0.01	100	Enabled		※
F231	0231	BIN reference point #2 frequency	-FH～FH [Hz] (*1)	0.01/0.01	80.0	Enabled		※
F232	0232	BIN reference point #1 rate	-250～250 [%] (For torque control, etc.)	1/0.01	0	Enabled		※
F233	0233	BIN reference point #2 rate	-250～250 [%] (For torque control, etc.)	1/0.01	100	Enabled		※
F234	0234	Pulse reference point #1	-100～100 [%]	1/0.01	0	Enabled		※
F235	0235	Pulse reference point #1 frequency	-FH～FH [Hz] (*1)	0.01/0.01	0.0	Enabled		※
F236	0236	Pulse reference point #2	-100～100 [%]	1/0.01	100	Enabled		※
F237	0237	Pulse reference point #2 frequency	-FH～FH [Hz] (*1)	0.01/0.01	80.0	Enabled		※

(*1): Adjustment range is -327.68～327.67 [Hz] in case of 16-bit access.

[8] Operation frequency

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F240	0240	Start-up frequency	0.0～10.0 [Hz]	0.01/0.01	0.1	Enabled		6.7.1
F241	0241	Run frequency	0.0～FH [Hz]	0.01/0.01	0.0	Enabled		6.7.2
F242	0242	Run frequency hysteresis	0.0～30.0 [Hz]	0.01/0.01	0.0	Enabled		6.7.2
F243	0243	Stop frequency	0.0～30.0 [Hz]	0.01/0.01	0.0	Enabled		6.7.1
F244	0244	0 Hz dead band frequency	0.0～5.0 [Hz]	0.01/0.01	0.0	Enabled		6.7.3

[9] DC injection braking

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F250	0250	DC injection braking start frequency	0.0～120.0 [Hz]	0.01/0.01	0.0	Enabled		6.8.1
F251	0251	DC injection braking current	0.0～100.0 [%]	0.1/0.01	50.0	Enabled		6.8.1
F252	0252	DC injection braking time	0.0～10.0 [s]	0.1/0.01	1.0	Enabled		6.8.1
F253	0253	Forward/reverse DC braking priority control	0: OFF, 1: ON	—	0	Enabled		6.8.1
F254	0254	Motor shaft fixing control	0: Disabled, 1: Enabled	—	0	Enabled		6.8.2
F255	0255	Zero-speed stop mode selection	0: Standard(DC injection breaking), 1: 0Hz command	—	0	Disabled		6.8.3

[10] Jogging operation

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F260	0260	Jog run frequency	0.0～20.0 [Hz]	0.01/0.01	0.0	Enabled		6.9
F261	0261	Jog stop control	0: Deceleration stop 1: Coast stop 2: DC injection braking stop	—	0	Enabled		6.9

※(Reference section): Refer to the inverter's individual manual.

[11] Jumper frequency

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F270	0270	Jump frequency #1	0.0～FH [Hz]	0.01/0.01	0.0	Enabled		6.10
F271	0271	Jump frequency band #1	0.0～30.0 [Hz]	0.01/0.01	0.0	Enabled		6.10
F272	0272	Jump frequency #2	0.0～FH [Hz]	0.01/0.01	0.0	Enabled		6.10
F273	0273	Jump frequency band #2	0.0～30.0 [Hz]	0.01/0.01	0.0	Enabled		6.10
F274	0274	Jump frequency #3	0.0～FH [Hz]	0.01/0.01	0.0	Enabled		6.10
F275	0275	Jump frequency band #3	0.0～30.0 [Hz]	0.01/0.01	0.0	Enabled		6.10
F276	0276	Object of jump frequency process	0: Process amount, 1: Output frequency	—	1	Enabled		6.10

[12] Preset speed operation frequency (8- to 15-stage speed)

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F287	0287	Preset-speed #8	LL～UL [Hz]	0.01/0.01	0.0	Enabled		5.14
F288	0288	Preset-speed #9	LL～UL [Hz]	0.01/0.01	0.0	Enabled		5.14
F289	0289	Preset-speed #10	LL～UL [Hz]	0.01/0.01	0.0	Enabled		5.14
F290	0290	Preset-speed #11	LL～UL [Hz]	0.01/0.01	0.0	Enabled		5.14
F291	0291	Preset-speed #12	LL～UL [Hz]	0.01/0.01	0.0	Enabled		5.14
F292	0292	Preset-speed #13	LL～UL [Hz]	0.01/0.01	0.0	Enabled		5.14
F293	0293	Preset-speed #14	LL～UL [Hz]	0.01/0.01	0.0	Enabled		5.14
F294	0294	Preset-speed #15	LL～UL [Hz]	0.01/0.01	0.0	Enabled		5.14

[13] PWM carrier frequency

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F300	0300	PWM carrier frequency	0.5～15.0(8.0, 5.0) [kHz] (*1)	0.1/0.001	Dif. Capa	Disabled		6.12

(*1)Upper limits differ by applicable motor capacity. For details, refer to 6.12.
Carrier frequency is automatically limited to less than 10kHz when operation frequency is more than 130Hz.

[14] Tripless intensification setup (1/2)

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F301	0301	Auto-restart	0: Disabled, 1: Enabled(at power failure), 2: Enabled(at ST ON/OFF), 3: Enabled(1+2)	—	0	Enabled		6.13.1
F302	0302	Regenerative power ride-through control / Deceleration stop	0: OFF, 1: ON, 2:ON(Deceleration stop)	—	0	Enabled		6.13.2
F303	0303	Retry selection	0: Disabled, 1 to 10 times	—	0	Enabled		6.13.3
F304	0304	Dynamic braking mode selection	0: Disabled, 1: Enabled/overload detection enabled	—	Dif. Capa	Enabled		6.13.4
F305	0305	Over-voltage stall protection	0: Enabled, 1: Disabled, 2: Enabled (Forced quick deceleration)	—	0	Enabled		6.13.5
F306	0306	Base frequency voltage #1 (output voltage adjustment)	0.0～600.0 [V]	0.1/0.1	Dif. Capa	Enabled		6.13.6

[14] Tripless intensification setup (2/2)

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F307	0307	Base frequency voltage (Voltage compensation)	0: without voltage compensation (limitless output voltage) 1: with voltage compensation (limitless output voltage) 2: without voltage compensation (limited output voltage) 3: with voltage compensation (limited output voltage)	—	1	Disabled		6.13.6
F308	0308	Dynamic braking resistance	1.0～1000 [Ω]	0.1/0.1	Dif. Capa	Disabled		6.13.4
F309	0309	Dynamic braking resistor capacity	0.01～600.0 [kW]	0.01/0.01	Dif. Capa	Disabled		6.13.4
F310	0310	Ride-through time / Deceleration time	0.0～320.0 [s]	0.1/0.01	2.0	Enabled		6.13.2
F311	0311	Reverse-run prohibition	0: Permitted, 1: Reverse run prohibited,2: Forward run prohibited, 3: Direction designated by command permitted	—	0	Disabled		6.13.7
F312	0312	Auto-restart adjustment #1	0.50～2.50	0.01/0.01	Dif. Capa	Enabled		6.13.1
F313	0313	Auto-restart adjustment #2	0.50～2.50	0.01/0.01	Dif. Capa	Enabled		6.13.1
F314	0314	Auto-restart mode	0～4	1/1	Dif. Capa	Disabled		6.13.1
F315	0315	Auto-restart adjustment #3	0～9	1/1	1	Disabled		6.13.1

[15] Drooping control

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F320	0320	Drooping gain	0～100 [%] (Enabled if Pt = 7, 8 or 9)	1/0.01	0	Enabled		6.14
F321	0321	Speed at drooping gain 0%	0.0～320.0 [Hz] (Enabled if Pt = 7, 8 or 9)	0.01/0.01	60.0	Enabled		6.14
F322	0322	Speed at drooping gain F320	0.0～320.0 [Hz] (Enabled if Pt = 7, 8 or 9)	0.01/0.01	60.0	Enabled		6.14
F323	0323	Drooping insensitive torque band	0～100 [%] (Enabled if Pt = 7, 8 or 9)	1/0.1	10	Enabled		6.14
F324	0324	Output filter for drooping	0.1～200.0 [rad/s] (Enabled if Pt = 7, 8 or 9)	0.1/0.1	100.0	Enabled		6.14
F325	0325	Load inertia (Acc/Dec torque)	0～1000	0.1/0.1	1.0	Enabled		※
F326	0326	Load torque filter (Acc/Dec torque)	0.0～199.9, 200.0:without filter	0.1/0.1	200.0	Enabled		※
F327	0327	Drooping reference selection	0: Standard, 1: Acc/dec torque removal 2: Internal torque standard 3: Acc/dec torque removal (internal torque standard)	—	0	Enabled		※

[16] Functions for lift (1/2)

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F330	0330	Light-load high-speed operation	0～5	—	0	Disabled		※
F331	0331	Light-load high-speed operation switching lower limit frequency	30.0～UL [Hz]	0.01/0.01	40.0	Enabled		※
F332	0332	Light-load high-speed operation load waiting time	0.0～10.0 [s]	0.1/0.1	1.0	Enabled		※
F333	0333	Light-load high-speed operation load detection time	0.0～10.0 [s]	0.1/0.1	1.0	Enabled		※
F334	0334	Light-load high-speed operation heavy load detection time	0.0～10.0 [s]	0.1/0.1	5.0	Enabled		※
F335	0335	Switching load torque current during forward run	0～250 [%]	1	50	Enabled		※
F336	0336	Heavy load torque during acceleration in forward direction	0～250 [%]	1	150(120)	Enabled		※
F337	0337	Heavy load torque during fixed speed in forward direction	0～250 [%]	1	100	Enabled		※
F338	0338	Switching load torque current during reverse run	0～250 [%]	1	50	Enabled		※
F339	0339	Heavy load torque during acceleration in reverse direction	0～250 [%]	1	150	Enabled		※

※(Reference section): Refer to the inverter's individual manual.

[16] Functions for lift (2/2)

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F340	0340	Heavy load torque during fixed speed in reverse direction	0～250 [%]	1	100	Enabled		※
F341	0341	Automatic light-load high-speed operation frequency	30.0～UL [Hz]	0.01/0.01	80.0	Enabled		※

[17] Commercial/inverter switching function

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F354	0354	Output signal selection of commercial power/inverter switching	0: OFF, 1: Automatic switching in case of trip 2: Commercial power switching frequency setting enabled 3: Both (1+2)	—	0	Disabled		6.16
F355	0355	Commercial power/inverter switching frequency	0～FH [Hz]	0.01/0.01	60.0	Enabled		6.16
F356	0356	Inverter side switching waiting time	Model dependent～10.00 [s]	0.01/0.01	Dif. Capa	Enabled		6.16
F357	0357	Commercial power side switching waiting time	0.37～10.00 [s]	0.01/0.01	0.62	Enabled		6.16
F358	0358	Commercial power switching frequency holding time	0.1～10.0 [s]	0.1/0.01	2.0	Enabled		6.16

[18] PID control

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F360	0360	Signal selection of PID control	0: PID control disabled, 1: VI/II, 2: RR, 3: RX, 4: RX2	—	0	Enabled		※
F361	0361	Delay filter	0～255	—	0	Enabled		※
F362	0362	Proportional (P) gain	0.01～100.0	0.01/0.01	0.1	Enabled		※
F363	0363	Integral (I) gain	0.01～100.0	0.01/0.01	0.1	Enabled		※
F364	0364	PID deviation upper limit	0～50 [%]	1/0.01	50	Enabled		※
F365	0365	PID deviation lower limit	0～50 [%]	1/0.01	50	Enabled		※
F366	0366	Differential (D) gain	0.00～2.55	0.01/0.01	0	Enabled		※

[19] Speed feedback/positioning control

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F367	0367	Number of PG input pulses	1～9999	1/1	500	Disabled		※
F368	0368	Number of PG input phases	1: Single-phase input, 2: Two-phase input	—	2	Disabled		※
F369	0369	PG disconnection detection	0: Disabled, 1: Enabled	—	0	Disabled		※
F370	0370	Electronic gear	100 to 4000 pulses/rotation	1/1	1000	Disabled		※
F371	0371	Position loop gain	0.0～100.0	0.1/0.01	4.0	Enabled		※
F372	0372	Positioning completion range	1～4000	1/1	100	Enabled		※
F373	0373	Frequency limit at position control	1～8000 [Hz/s], 8001: disabled	1/1	800	Disabled		※

※(Reference section): Refer to the inverter's individual manual.

[20] Vector control

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F374	0374	Current control proportional gain	100.0～1000	0.1/0.1	209.1	Disabled		※
F375	0375	Current control integral gain	100.0～1250	0.1/0.1	Dif. Capa	Disabled		※
F376	0376	Speed loop proportional gain	3.2～1000	0.1/0.1	Dif. Capa	Enabled		※
F377	0377	Speed loop integral gain	0.1～200. 0 [rad/s]	0.1/0.1	Dif. Capa	Enabled		※
F378	0378	Motor counter data selection	0～5	—	0	Disabled		※
F379	0379	Speed loop parameter ratio	0.01～10.00 [s]	0.01/0.01	1.00	Disabled		※

[21] Preset-speed operation mode

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F380	0380	Preset-speed operation mode	0: Non-mode preset speed 1: Preset speed by mode	—	0	Disabled		5.14
F381	0381	Preset-speed #1 control mode	0: Forward run +1: Reverse run +2: Selection of acc/dec switching #1 +4: Selection of acc/dec switching #2 +8: Selection of V/f switching #1 +16: Selection of V/f switching #2 +32: Selection of torque limit switching #1 +64: Selection of torque limit switching #2	—	0	Disabled		5.14
F382	0382	Preset-speed #2 control mode	Ditto	—	0	Disabled		5.14
F383	0383	Preset-speed #3 control mode	Ditto	—	0	Disabled		5.14
F384	0384	Preset-speed #4 control mode	Ditto	—	0	Disabled		5.14
F385	0385	Preset-speed #5 control mode	Ditto	—	0	Disabled		5.14
F386	0386	Preset-speed #6 control mode	Ditto	—	0	Disabled		5.14
F387	0387	Preset-speed #7 control mode	Ditto	—	0	Disabled		5.14
F388	0388	Preset-speed #8 control mode	Ditto	—	0	Disabled		5.14
F389	0389	Preset-speed #9 control mode	Ditto	—	0	Disabled		5.14
F390	0390	Preset-speed #10 control mode	Ditto	—	0	Disabled		5.14
F391	0391	Preset-speed #11control mode	Ditto	—	0	Disabled		5.14
F392	0392	Preset-speed #12 control mode	Ditto	—	0	Disabled		5.14
F393	0393	Preset-speed #13 control mode	Ditto	—	0	Disabled		5.14
F394	0394	Preset-speed #14 control mode	Ditto	—	0	Disabled		5.14
F395	0395	Preset-speed #15 control mode	Ditto	—	0	Disabled		5.14
F396	0396	Torque reference filter #2	10.0～199.9, 200.0(No filters) *1	1/0.1	200.0	Enabled		6.21.2
F397	0397	Speed loop proportional gain #2	3.2～1000 *1	0.1/0.1	Dif. Capa	Enabled		※
F398	0398	Speed loop integral gain #2	10.0～200. 0 [rad/s] *1	0.1/0.1	Dif. Capa	Enabled		※

※(Reference section): Refer to the inverter's individual manual.

*1: Ver311 doesn't have these function.

[22] Motor constant

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F400	0400	Auto-tuning	0:Without auto-tuning (internal table) 1:Motor constant initialization (0 after execution) 2:Automatic tuning execution (0 after execution)	—	0	Disabled		6.20
F401	0401	Slip frequency gain	0.00～2.55	0.01/0.01	0.60	Enabled		6.20
F402	0402	Motor constant #1 (primary resistance)	0.00～100000 [mΩ] (*1)	0.01/0.01*	Dif. Capa	Disabled		6.20
F403	0403	Motor constant #2 (secondary resistance)	0.00～100000 [mΩ] (*1)	0.01/0.01*	Dif. Capa	Disabled		6.20
F404	0404	Motor constant #3 (exciting inductance)	0.0～6500 [mH]	0.1/0.1	Dif. Capa	Disabled		6.20
F405	0405	Motor constant #4 (load inertia moment)	0.0～100.0	0.1/0.1	1.0	Enabled		6.20
F410	0410	Motor constant #5 (leak inductance)	0.00～650. 0 [mH]	0.01/0.01	Dif. Capa	Disabled		6.20
F411	0411	Number of motor poles	2, 4, 6, 8, 10, 12, 14, 16	1/1	4	Disabled		6.20
F412	0412	Rated capacity of motor	0.10～[Model Dependent]	0.01/0.01	Dif. Capa	Disabled		6.20
F413	0413	Motor type	0: Toshiba standard motor #1 1: Toshiba VF motor 2: Toshiba V3 motor 3: Toshiba standard motor #2 4: Other motors	—	0	Disabled		6.20
F414	0414	Auto-tuning prohibition	0: Prohibited 1: Valid for sensorless vector 2: Valid for vector with PG	—	1	Disabled		6.20

[23] Torque control

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running		Reference section
F420	0420	Torque reference selection	1: VI/II, 2: RR, 3: RX, 4: RX2(optional), 5: Panel input, 6: Binary/BCD input(optional), 7: Common serial communication option, 8: Serial communication RS485, 9: Communication add-on cassette option	—	3	Enabled		6.21.1
F421	0421	Torque reference filter	10.0～199.9, 200.0(without filter)	0.1/0.1	200.0	Enabled		6.21.2
F422	0422	Selection of synchronized torque bias input	0: Invalid, 1 to 9 (Same as F420)	—	0	Enabled		6.21.4
F423	0423	Selection of tension torque bias input	0: Invalid, 1 to 9 (Same as F420)	—	0	Enabled		6.21.4
F424	0424	Load sharing gain input selection	0: Invalid, 1 to 9 (Same as F420)	—	0	Enabled		6.21.4
F425	0425	Forward speed limit input selection	0: Invalid, 1: VI/II, 2: RR, 3: RX, 4: RX2(optional), 5: F426	—	0	Enabled		6.21.3
F426	0426	Forward speed limit input level	0.0～UL [Hz]	0.01/0.01	80.0	Enabled		6.21.3
F427	0427	Reverse speed limit input selection	0: Invalid, 1: VI/II, 2: RR, 3: RX, 4: RX2(optional), 5: F428	—	0	Enabled		6.21.3
F428	0428	Reverse speed limit input level	0.0～UL [Hz]	0.01/0.01	80.0	Enabled		6.21.3
F429	0429	Torque reference mode selection	0: Fixed direction, 1:F/R permitted	—	0	Disabled		3.3.2
F430	0430	Speed limit (torque=0) reference	0: Invalid, 1: VI/II, 2: RR, 3: RX, 4: RX2(optional), 5: F431	—	0	Enabled		6.21.3
F431	0431	Speed limit(torque=0) level	0.0～FH [Hz]	0.01/0.01	0.0	Enabled		6.21.3
F432	0432	Speed limit(torque=0) band	0.0～FH [Hz]	0.01/0.01	0.0	Enabled		6.21.3
F433	0433	Speed limit(torque=0) recovery time	0.00～2.50	0.01/0.01	0.20	Disabled		6.21.3

When adjustment value is 10Ω(10000mΩ) or more, 1000(in case of 10000mΩ) and E 1 blink alternately.
When adjustment value is 100Ω(10000mΩ), 1000 and E 2 blink alternately.

[24] Torque limit

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F440	0440	Selection of power running torque limit #1	1 :VI/II, 2: RR, 3: RX, 4: RX2, 5: F441	—	5	Enabled		6.22
F441	0441	Power running torque limit #1	0～249.9 [%], 250: Invalid	0.1/0.01	250.0	Enabled		6.22
F442	0442	Selection of regenerative torque limit #1	1 :VI/II, 2: RR, 3: RX, 4: RX2, 5: F443	—	5	Enabled		6.22
F443	0443	Regenerative torque limit #1	0～249.9 [%], 250: Invalid	0.1/0.01	250.0	Enabled		6.22
F444	0444	Power running torque limit #2	0～249.9 [%], 250: Invalid	0.1/0.01	250.0	Enabled		6.22
F445	0445	Regenerative torque limit #2	0～249.9 [%], 250: Invalid	0.1/0.01	250.0	Enabled		6.22
F446	0446	Power running torque limit #3	0～249.9 [%], 250: Invalid	0.1/0.01	250.0	Enabled		6.22
F447	0447	Regenerative torque limit #3	0～249.9 [%], 250: Invalid	0.1/0.01	250.0	Enabled		6.22
F448	0448	Power running torque limit #4	0～249.9 [%], 250: Invalid	0.1/0.01	250.0	Enabled		6.22
F449	0449	Regenerative torque limit #4	0～249.9 [%], 250: Invalid	0.1/0.01	250.0	Enabled		6.22
F450	0450	Torque limit mode (polarity)	0: Power-running/regenerative torque limit 1: Positive/negative torque limit	—	0	Disabled		6.22
F451	0451	Torque limit mode	0: Standard, 1: without speed cooperation	—	0	Enabled		※
F452	0452	Continuous stall trip detection time during power running	0.0～1.0 [s]	0.1/0.01	0.0	Enabled		—
F453	0453	Stall prevention during regeneration	0: Stall 1: Stall is prevented	—	0	Enabled		—

[25] Speed/torque reference gain/bias setup #2(1/2)

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F454	0454	Current differential gain	0.00～327.6	0.01/0.01	123.0	Enabled		—
F455	0455	High-speed magnetic field control gain	1.64～327.6 *1	0.01/0.01	16.38	Enabled		—
F456	0456	High-speed magnetic field rate-of-change limitation gain	1.64～327.6 *1	0.01/0.01	163.8	Enabled		—
F470	0470	VI/II reference bias	0～255	1/1	99	Enabled		—
F471	0471	VI/II reference gain	0～255	1/1	156	Enabled		—
F472	0472	RR reference bias	0～255	1/1	100	Enabled		—
F473	0473	RR reference gain	0～255	1/1	164	Enabled		—
F474	0474	RX reference bias	0～255	1/1	—	Enabled		—
F475	0475	RX reference gain	0～255	1/1	—	Enabled		—
F476	0476	RX2 reference bias	0～255	1/1	—	Enabled		—
F477	0477	RX2 reference gain	0～255	1/1	—	Enabled		—
F480	0480	Exciting strengthening coefficient	0～255	1/1	64	Enabled		—
F481	0481	Over-excitation cooperation	0: Enabled, 1: Applied by F480 setting	—	0	Enabled		—
F482	0482	Modulation rate control margin (current control)	80.0～300.0 [%]	0.1/0.01	90.0	Enabled		—

*1: Ver312 only.

[25] Speed/torque reference gain/bias setup #2(2/2)

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F483	0483	Modulation rate control margin (voltage control)	80.0～300.0 [%]	0.1/0.01	105.0	Enabled		–
F484	0484	Modulation rate control margin (V/f control)	80.0～300.0 [%]	0.1/0.01	105.0	Enabled		–
F485	0485	Stall cooperation gain at field weakening zone	0～255	1/1	128	Enabled		–
F486	0486	Exciting starting rate	1.64～327.6	0.01/0.01	163.8	Enabled		–
F487	0487	Compensation coefficient for iron loss	0～255	1/1	10	Enabled		–
F488	0488	Voltage compensation coefficient for dead time	0.00～327.6	0.01/0.01	Dif. Capa	Enabled		–
F489	0489	Dead time compensation	0: Enabled, 1: Disabled	–	0	Enabled		–
F490	0490	Dead time compensation (bias time)	-3.27～3.27	0.01/0.001	0.00	Enabled		–
F491	0491	Current / voltage control switching frequency	10.0～60.0 [Hz]	0.1/0.01	40.0	Enabled		–

[26] Secondary acceleration/deceleration

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F500	0500	Acceleration time #2	0.1(F508)～6000 [s]	0.01/0.01*	Dif. Capa	Enabled		6.23.2
F501	0501	Deceleration time #2	0.1(F508)～6000 [s]	0.01/0.01*	Dif. Capa	Enabled		6.23.2
F502	0502	Acceleration/deceleration pattern #1	0: Linear, 1: S-pattern #1, 2: S-pattern #2	–	0	Enabled		6.23.1
F503	0503	Acceleration/deceleration pattern #2	0: Linear, 1: S-pattern #1, 2: S-pattern #2	–	0	Enabled		6.23.2
F504	0504	Acceleration/deceleration #1,2,3,4 selection	1: Acceleration/deceleration #1 2: Acceleration/deceleration #2 3: Acceleration/deceleration #3 4: Acceleration/deceleration #4	–	1	Enabled		6.23.2
F505	0505	Acc/dec switching frequency #1	0.0～FH [Hz]	0.01/0.01	0.0	Enabled		6.23.2
F506	0506	S-pattern lower-limit adjustment amount	0～50 [%]	1/0.01	25	Enabled		6.23.1
F507	0507	S-pattern upper-limit adjustment amount	0～50 [%]	1/0.01	25	Enabled		
F508	0508	Acc/dec time lower limit	0.01～10.00 [s]	0.01/0.01*	0.10	Enabled		6.23.3
F510	0510	Acceleration time #3	0.1(F508)～6000 [s]	0.01/0.01*	Dif. Capa	Enabled		6.23.2
F511	0511	Deceleration time #3	0.1(F508)～6000 [s]	0.01/0.01*	Dif. Capa	Enabled		6.23.2
F512	0512	Acceleration/deceleration pattern #3	0: Linear, 1: S-pattern #1, 2: S-pattern #2	–	0	Enabled		6.23.2
F513	0513	Acc/dec switching frequency #2	0.0～FH [Hz]	0.01/0.01	0.0	Enabled		6.23.2
F514	0514	Acceleration time #4	0.1(F508)～6000 [s]	0.01/0.01*	Dif. Capa	Enabled		6.23.2
F515	0515	Deceleration time #4	0.1(F508)～6000 [s]	0.01/0.01*	Dif. Capa	Enabled		6.23.2
F516	0516	Acceleration/deceleration pattern #4	0: Linear, 1: S-pattern #1, 2: S-pattern #2	–	0	Enabled		6.23.2
F517	0517	Acc/dec switching frequency #3	0.0～FH [Hz]	0.01/0.01	0.0	Enabled		6.23.2

※(Reference section): Refer to the inverter's individual manual.

[27] Pattern run (1/2)

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F520	0520	Pattern run selection	0: Disabled, 1: Enabled	—	0	Disabled		6.24
F521	0521	Pattern run mode	0: Patterned operation canceled during stop 1: Patterned operation continued during stop	—	0	Disabled		6.24
F530	0530	Cycle number of pattern group #1	1～254, 255:∞	1/1	1	Disabled		6.24
F531	0531	Pattern group #1 selection #1	0: Skip, 1 to 15	—	1	Disabled		6.24
F532	0532	Pattern group #1 selection #2	0: Skip, 1 to 15	—	2	Disabled		6.24
F533	0533	Pattern group #1 selection #3	0: Skip, 1 to 15	—	3	Disabled		6.24
F534	0534	Pattern group #1 selection #4	0: Skip, 1 to 15	—	4	Disabled		6.24
F535	0535	Pattern group #1 selection #5	0: Skip, 1 to 15	—	5	Disabled		6.24
F536	0536	Pattern group #1 selection #6	0: Skip, 1 to 15	—	6	Disabled		6.24
F537	0537	Pattern group #1 selection #7	0: Skip, 1 to 15	—	7	Disabled		6.24
F538	0538	Pattern group #1 selection #8	0: Skip, 1 to 15	—	8	Disabled		6.24
F540	0540	Cycle number of pattern group #2	1～254, 255:∞	1/1	1	Disabled		6.24
F541	0541	Pattern group #2 selection #1	0: Skip, 1 to 15	—	9	Disabled		6.24
F542	0542	Pattern group #2 selection #2	0: Skip, 1 to 15	—	10	Disabled		6.24
F543	0543	Pattern group #2 selection #3	0: Skip, 1 to 15	—	11	Disabled		6.24
F544	0544	Pattern group #2 selection #4	0: Skip, 1 to 15	—	12	Disabled		6.24
F545	0545	Pattern group #2 selection #5	0: Skip, 1 to 15	—	13	Disabled		6.24
F546	0546	Pattern group #2 selection #6	0: Skip, 1 to 15	—	14	Disabled		6.24
F547	0547	Pattern group #2 selection #7	0: Skip, 1 to 15	—	15	Disabled		6.24
F548	0548	Pattern group #2 selection #8	0: Skip, 1 to 15	—	0	Disabled		6.24
F550	0550	Cycle number of pattern group #3	1～254, 255:∞	1/1	1	Disabled		6.24
F551	0551	Pattern group #3 selection #1	0: Skip, 1 to 15	—	1	Disabled		6.24
F552	0552	Pattern group #3 selection #2	0: Skip, 1 to 15	—	2	Disabled		6.24
F553	0553	Pattern group #3 selection #3	0: Skip, 1 to 15	—	3	Disabled		6.24
F554	0554	Pattern group #3 selection #4	0: Skip, 1 to 15	—	4	Disabled		6.24
F555	0555	Pattern group #3 selection #5	0: Skip, 1 to 15	—	5	Disabled		6.24
F556	0556	Pattern group #3 selection #6	0: Skip, 1 to 15	—	6	Disabled		6.24
F557	0557	Pattern group #3 selection #7	0: Skip, 1 to 15	—	7	Disabled		6.24
F558	0558	Pattern group #3 selection #8	0: Skip, 1 to 15	—	8	Disabled		6.24
F560	0560	Cycle number of pattern group #4	1～254, 255:∞	1/1	1	Disabled		6.24
F561	0561	Pattern group #4 selection #1	0: Skip, 1 to 15	—	9	Disabled		6.24
F562	0562	Pattern group #4 selection #2	0: Skip, 1 to 15	—	10	Disabled		6.24
F563	0563	Pattern group #4 selection #3	0: Skip, 1 to 15	—	11	Disabled		6.24
F564	0564	Pattern group #4 selection #4	0: Skip, 1 to 15	—	12	Disabled		6.24
F565	0565	Pattern group #4 selection #5	0: Skip, 1 to 15	—	13	Disabled		6.24
F566	0566	Pattern group #4 selection #6	0: Skip, 1 to 15	—	14	Disabled		6.24
F567	0567	Pattern group #4 selection #7	0: Skip, 1 to 15	—	15	Disabled		6.24
F568	0568	Pattern group #4 selection #8	0: Skip, 1 to 15	—	0	Disabled		6.24

[27] Pattern run (2/2)

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F570	0570	Preset-speed #1 operation continuation mode	0: Operation time in second after start of operation 1: Operation time in minute after start of operation 2: Operation time in second after attainment of frequency 3: Operation time in minute after attainment of frequency 4: Infinite (continued until stop command is entered) 5: Continue until next step command	—	0	Disabled		6.24
F571	0571	Preset-speed #2 operation continuation mode	Ditto	—	0	Disabled		6.24
F572	0572	Preset-speed #3 operation continuation mode	Ditto	—	0	Disabled		6.24
F573	0573	Preset-speed #4 operation continuation mode	Ditto	—	0	Disabled		6.24
F574	0574	Preset-speed #5 operation continuation mode	Ditto	—	0	Disabled		6.24
F575	0575	Preset-speed #6 operation continuation mode	Ditto	—	0	Disabled		6.24
F576	0576	Preset-speed #7 operation continuation mode	Ditto	—	0	Disabled		6.24
F577	0577	Preset-speed #8 operation continuation mode	Ditto	—	0	Disabled		6.24
F578	0578	Preset-speed #9 operation continuation mode	Ditto	—	0	Disabled		6.24
F579	0579	Preset-speed #10 operation continuation mode	Ditto	—	0	Disabled		6.24
F580	0580	Preset-speed #11 operation continuation mode	Ditto	—	0	Disabled		6.24
F581	0581	Preset-speed #12 operation continuation mode	Ditto	—	0	Disabled		6.24
F582	0582	Preset-speed #13 operation continuation mode	Ditto	—	0	Disabled		6.24
F583	0583	Preset-speed #14 operation continuation mode	Ditto	—	0	Disabled		6.24
F584	0584	Preset-speed #15 operation continuation mode	Ditto	—	0	Disabled		6.24
F585	0585	Preset-speed #1 operation time	1～8000 [s] / [min] (The unit depends on F570)	1/1	5	Enabled		6.24
F586	0586	Preset-speed #2 operation time	Ditto	1/1	5	Enabled		6.24
F587	0587	Preset-speed #3 operation time	Ditto	1/1	5	Enabled		6.24
F588	0588	Preset-speed #4 operation time	Ditto	1/1	5	Enabled		6.24
F589	0589	Preset-speed #5 operation time	Ditto	1/1	5	Enabled		6.24
F590	0590	Preset-speed #6 operation time	Ditto	1/1	5	Enabled		6.24
F591	0591	Preset-speed #7 operation time	Ditto	1/1	5	Enabled		6.24
F592	0592	Preset-speed #8 operation time	Ditto	1/1	5	Enabled		6.24
F593	0593	Preset-speed #9 operation time	Ditto	1/1	5	Enabled		6.24
F594	0594	Preset-speed #10 operation time	Ditto	1/1	5	Enabled		6.24
F595	0595	Preset-speed #11 operation time	Ditto	1/1	5	Enabled		6.24
F596	0596	Preset-speed #12 operation time	Ditto	1/1	5	Enabled		6.24
F597	0597	Preset-speed #13 operation time	Ditto	1/1	5	Enabled		6.24
F598	0598	Preset-speed #14 operation time	Ditto	1/1	5	Enabled		6.24
F599	0599	Preset-speed #15 operation time	Ditto	1/1	5	Enabled		6.24

[28] Protection functions

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F600	0600	Motor overload protection level #1	10～100 [%]	1/0.01	100	Enabled		5.13
F601	0601	Stall prevention level	0～199 [%], 200: Disabled	1/0.01	150	Enabled		6.25.2
F602	0602	Selection of inverter trip holding	0: Cleared if power is turned off 1: Held even if power is turned off	—	0	Disabled		6.25.3
F603	0603	Emergency stop	0: Coast stop 1: Deceleration stop 2: Emergency DC injection braking stop 3: Coast stop without FL output 4: Deceleration stop without FL output 5: Emergency DC injection braking without FL output	—	0	Disabled		6.25.4
F604	0604	Emergency DC injection braking control time	0.0～10.0 [s]	0.1/0.01	0.1	Enabled		6.25.4
F605	0605	Output phase failure detection	0: Disabled, 1: Enabled	—	0	Disabled		※
F606	0606	Overload reduction start-up frequency	0.0～30.0 [Hz]	0.01/0.01	6.0	Enabled		5.13
F607	0607	Motor 150%-overload time limit	10～2400 [s]	1/1	600	Enabled		5.13
F608	0608	Relay injection timing for rush-current suppression	0.3～2.5 [s]	0.1/0.01	0.3	Disabled		※
F609	0609	Mode of rush-current suppression relay	0: Standard, 1: in relation to ST	—	0	Disabled		※
F610	0610	Low current trip	0: Disabled, 1: Enabled	—	0	Disabled		6.25.7
F611	0611	Low current detection level	0～100 [%]	1/0.01	0	Enabled		6.25.7
F612	0612	Low current detection time	0～255 [s]	1/1	0	Enabled		6.25.7
F613	0613	Detection of output short-circuit during start-up	0: Standard 1: Only one time at power injection or at first start after reset	—	0	Disabled		6.25.8
F614	0614	Adjustment of detection pulse for output short-circuit during start-up	1～100 [μs]	1/1	50	Disabled		6.25.8
F615	0615	Over-torque trip	0: Disabled, 1: Enabled	—	0	Enabled		6.25.9
F616	0616	Over-torque detection level during power running	0～250 [%]	1/0.01	150(120)	Enabled		6.25.9
F617	0617	Over-torque detection level during regeneration	0～250 [%]	1/0.01	150(120)	Enabled		6.25.9
F618	0618	Over-torque detection time	0.0～100.0 [s]	0.1/0.01	0.5	Enabled		6.25.9
F620	0620	Cooling fan control mode	0: Automatic, 1: Always ON	—	0	Enabled		6.2510
F621	0621	Cumulative operation time alarm setting	0.1～999.9 [×100h]	0.1/0.1	175.0	Enabled		6.25.11
F622	0622	Abnormal speed detection filter	0.01～100.0 [s] (*1)	0.01/0.01	10.00	Enabled		※
F623	0623	Over-speed detection frequency range	0: Disabled, 0.1～30.0 [Hz]	0.01/0.01	0.0	Enabled		※
F624	0624	Speed drop detection frequency range	0: Disabled, 0.1～30.0 [Hz]	0.01/0.01	0.0	Enabled		※
F625	0625	Over-voltage stall protection level (high response)	50～250 [%]	1/0.01	135	Enabled		6.13.5
F626	0626	Over-voltage stall protection level	50～250 [%]	1/0.01	130	Enabled		6.13.5
F627	0627	Under-voltage trip mode	0: Disabled, 1: Enabled	—	0	Disabled		6.25.13
F628	0628	Under-voltage detection time	0.00～10.00 [s]	0.01/0.01	0.03	Disabled		6.25.14
F629	0629	Under-voltage stall level	50～100 [%]	1/0.01	75	Enabled		6.25.15
F630	0630	System-supporting sequence(B-timer)	0.0: Invalid, 0.1～10.0 [s]	0.1/0.01	0.0	Enabled		※
F631	0631	Position deviation limit	0.1～6553	0.1/0.1	16	Disabled		※
F632	0632	Brake release inhibition time after run	0.00: Setting of F612 is valid, 0.01～2.50 [s]	0.01/0.01	0.00	Disabled		※
F633	0633	The trip selection at the VI/II low-level input	0～100 *2	1/1	0.00	Enabled		※

(*1): Set a time longer than the acceleration/deceleration time.
※(Reference section): Refer to the inverter's individual manual.
(*2): Ver312 only

[29] Special analog input

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F650	0650	Acceleration/deceleration base frequency adjustment	0: Invalid，1: VI/II，2: RR	—	0	Enabled		6.26
F651	0651	Upper-limit frequency adjustment	0: Invalid，1: VI/II，2: RR	—	0	Enabled		6.26
F652	0652	Acceleration time adjustment	0: Invalid，1: VI/II，2: RR	—	0	Enabled		6.26
F653	0653	Deceleration time adjustment	0: Invalid，1: VI/II，2: RR	—	0	Enabled		6.26
F654	0654	Manual torque boost adjustment	0: Invalid，1: VI/II，2: RR	—	0	Enabled		6.26

[30] Over-ride

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F660	0660	Over-ride addition input selection	0: Disabled 1: VI (voltage input)/II (current input) 2: RR (volume/voltage input) 3: RX (voltage input) 4: RX2 (voltage input) (optional) 5: Operating panel input 6: Binary/BCD input 7: Common serial communication option(FA01) 8: Serial communication RS485(FA05) 9: Communication add-on cassette option(FA07) 10: Up-down frequency 11: Pulse input #1 (optional)	—	0	Enabled		6.27
F661	0661	Over-ride multiplication input selection	0: Disabled,1: VI/II,2: RR,3: RX,4: RX2,5: F729	—	0	Enabled		6.27

[31] Meter output (1/2)

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F670	0670	AM terminal meter selection	0～32	—	2(output current)	Enabled		5.4
F671	0671	AM terminal meter adjustment	—	—	—	Enabled		5.4
F672	0672	Optional analog terminal #1 meter selection	0～32	—	4	Enabled		※
F673	0673	Optional analog terminal #1 meter adjustment	—	—	—	Enabled		※
F674	0674	Optional analog terminal #2 meter selection	0～32	—	5	Enabled		※
F675	0675	Optional analog terminal #2 meter adjustment	—	—	—	Enabled		※
F676	0676	FP terminal meter selection	0～32	—	0	Enabled		6.28.3
F677	0677	FP terminal meter adjustment	1.00～43.20	0.01/0.001	3.84	Enabled		6.28.3
F678	0678	Optional analog terminal #1 meter offset	-10.0～60.0	0.1/0.1	0.0	Enabled		※
F679	0679	Optional analog terminal #2 meter offset	-10.0～60.0	0.1/0.1	0.0	Enabled		※
F680	0680	Optional analog terminal sign selection	0～3	—	0	Enabled		※

※(Reference section): Refer to the inverter's individual manual.

[31] Meter output (2/2)

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F690 ～ F697	0690 ～ 0697	AM/FM output parameter for adjustment	—	—	—	—		—

[32] Control panel parameters

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F700	0700	Prohibition of parameter setting	0: Allowed，1: Prohibited	—	0	Enabled		6.29.1
F701	0701	Current/voltage display mode	0: [%], 1: [A] or [V]	—	0	Enabled		6.29.2
F702	0702	Frequency free unit magnification	0.00: OFF, 0.01～200.0	0.01/0.01	0.00	Enabled		6.29.3
F703	0703	Decimal place number of frequency	0: 1 [Hz], 1: 0.1 [Hz], 2: 0.01 [Hz]	—	1	Enabled		6.29.4
F704	0704	Decimal place number of acc/dec time	0: 1[s], 1: 0.1[s], 2: 0.01[s]	—	1	Enabled		6.29.4
F709	0709	Prohibition of user parameter initialization at type form initialization	0: Allowed 1: Prohibited	—	0	Enabled		—
F710	0710	Monitor display mode setting	0～29	—	0	Enabled		8.1
F711	0711	Status monitor #1 display mode	0～29	—	1	Enabled		8.1
F712	0712	Status monitor #2 display mode	0～29	—	2	Enabled		8.1
F713	0713	Status monitor #3 display mode	0～29	—	3	Enabled		8.1
F714	0714	Status monitor #4 display mode	0～29	—	4	Enabled		8.1
F720	0720	Selection of panel V/f1, 2, 3 or 4	1: V/f #1, 2: V/f #2, 3: V/f #3, 4: V/f #4	—	1	Enabled		6.29.6
F721	0721	Panel stop pattern	0: Deceleration stop，1: Coast stop	—	0	Disabled		6.29.7
F722	0722	Panel reset function	0: Disabled, 1: Enabled	—	1	Disabled		6.29.8
F723	0723	Panel torque limit	1～4	—	1	Enabled		6.29.9
F724	0724	Panel PID control OFF	0: ON, 1: OFF	—	0	Enabled		6.29.10
F725	0725	Panel torque reference	0～250 [%]	1/0.01	0	Enabled		6.29.11
F726	0726	Panel synchronized torque bias	-250～250 [%]	1/0.01	0	Enabled		6.21.4
F727	0727	Panel tension torque bias	-250～250 [%]	1/0.01	0	Enabled		6.21.4
F728	0728	Panel load sharing gain	0～250 [%]	1/0.01	100	Enabled		6.21.4
F729	0729	Panel over-ride multiplication gain	-100～100 [%]	1/0.01	0	Enabled		6.29.13
F730	0730	Panel operation prohibition	0: All key operations prohibited +1: Panel frequency setting enabled +2: Parameter reading/writing enabled +4: Monitor display operation enabled +8: Panel drive operation enabled (+16: no function) +32: Emergency stop operation enabled 63: Default mode (all key operation enabled)	—	63	Disabled		6.29.14

[33] Communication function(1/2)

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F800	0800	Communication rate (common serial)	0: 1200, 1: 2400, 2:4800, 3: 9600	—	3	Enabled		6.30
F801	0801	Parity (common serial/RS485)	0: No parity, 1: Even parity, 2: Odd parity	—	1	Enabled		6.30
F802	0802	Inverter number(common)(*1)	0～255	1/1	0	Enabled		6.30
F803	0803	Communication time-out (common serial/RS485)	0: OFF, 1～100 [s]	1/1	0	Enabled		6.30
F804	0804	Communication time-out action (common serial /RS485)	0～8	—	8	Enabled		6.30
F805	0805	Communication waiting time (common serial)	0.00: Normal, 0.01～2.00 [s]	0.01/0.01	0.00	Enabled		6.30
F806	0806	Inter-drive communication (common serial)	0: Normal, 1: Frequency reference, 2: Output frequency, 3: Torque reference, 4: Output torque	—	0	Enabled		6.30
F810	0810	Frequency point selection	0: Invalid, 1: Common serial, 2: RS485, 3: Communication add-on cassette option	—	0	Enabled		6.30
F811	0811	Point #1 setting	0～100 [%]	1/0.01	0	Enabled		6.30
F812	0812	Point #1 frequency	0.0～FH [Hz]	0.01/0.01	0.0	Enabled		6.30
F813	0813	Point #2 setting	0～100 [%]	1/0.01	100	Enabled		6.30
F814	0814	Point #2 frequency	0.0～FH [Hz]	0.01/0.01	80.0	Enabled		6.30
F820	0820	Communication rate (RS485)	0: 1200, 1: 2400, 2: 4800, 3: 9600, 4: 19200, 5: 38400	—	3	Enabled		6.30
F821	0821	RS485 wiring system	0: 2-line system, 1: 4-line system	—	1	Enabled		6.30
F825	0825	RS485 communication waiting time	0.00: Normal, 0.01～2.00 [s]	0.01/0.01	0.00	Enabled		6.30
F826	0826	Inter-drive communication (RS-485)	0: Normal, 1: Frequency reference, 2: Output frequency, 3: Torque reference, 4: Output torque	—	0	Enabled		6.30
F830	0830	Data type	0, 1	1/1	0	Enabled		※
F831	0831	Input reference setting #1	0～16	1/1	0	Enabled		※
F832	0832	Input reference setting #2	0～16	1/1	0	Enabled		※
F833	0833	Input reference setting #3	0～16	1/1	0	Enabled		※
F834	0834	Input reference setting #4	0～16	1/1	0	Enabled		※
F835	0835	Input reference setting #5	0～16	1/1	0	Enabled		※
F836	0836	Input reference setting #6	0～16	1/1	0	Enabled		※
F841	0841	Monitor output setting #1	0～16	1/1	0	Enabled		※
F842	0842	Monitor output setting #2	0～16	1/1	0	Enabled		※
F843	0843	Monitor output setting #3	0～16	1/1	0	Enabled		※
F844	0844	Monitor output setting #4	0～16	1/1	0	Enabled		※
F845	0845	Monitor output setting #5	0～16	1/1	0	Enabled		※
F846	0846	Monitor output setting #6	0～16	1/1	0	Enabled		※
F850	0850	Mode at communication error	0～4	1/1	0	Enabled		※
F851	0851	Communication error detection time	0～1000	1/1	200	Enabled		※
F860	0860	Receiving address	0～1023	1/1	0	Enabled		※
F861	0861	Transmitting address	0～1023	1/1	0	Enabled		※

(*1): To be only monitoring available when using S20 option.
(*2): Parameters F800, F801, F820, F821, and F826 can be reflected at resetting (power OFF → ON).
※(Reference section): Refer to the inverter's individual manual.

[33] Communication function(2/2)

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F862	0862	Inter-drive communication(speed reference) opposite station number	0～64	1/1	0	Enabled		※
F863	0863	Inter-drive communication(speed reference) opposite station address	0～1023	1/1	0	Enabled		※
F865	0865	Inter-drive communication(torque reference) opposite station number	0～64	1/1	0	Enabled		※
F866	0866	Inter-drive communication(torque reference) opposite station address	0～1023	1/1	0	Enabled		※
F868	0868	S20 fault detection station number	0～64	1/1	0	Enabled		※
F869	0869	Station mode selection	0～4	1/1	0	Enabled		※
F890 ～ F894	8090 ～ 0894	Parameters for options	Depend on options	1/1	0	Disabled		※
F899	0899	Reset function	0, 1	—	0	Disabled		※

[34] Reservation area

Title	Communication No	Function	Adjustment range	Min. unit (panel/ communication)	Default setting	Write during running	User Setting	Reference section
F900	0900	Reservation area #1	0	—	0	—		—
F901	0901	Reservation area #2	0	—	0	—		—
F902	0902	Reservation area #3	0	—	0	—		—
F903	0903	Reservation area #4	0	—	0	—		—
F904	0904	Reservation area #5	0	—	0	—		—

: These titles are displayed but unusable. Only the standard default value is displayed.
※(reference section): Refer to the designated section of the inverter's individual manual.