

2.2 EI-9001 CONSTANT LIST (1)

Function	Con-stant No.	Name (Digital Operator Display)	Setting Range	Setting Unit	Factory Setting	Remarks	Change During Operation (O:Enabled X:Disabled)	#3 Constant Access Level				
								V / f	V / f with PG	Open Loop Vector	Flux Vector	
Initialize	Initialize	A1-00	Language selection for digital operator display (Select Language)	0, 1	1	1 *1	0 : English 1 : Japanese	O	Q	Q	Q	Q
		A1-01	Constant access level (Access Level)	0~4	1	2	0 : Exclusive for monitor 1 : User program 2 : Quick-start(Q) 3 : Basic (B) 4 : Advanced (A)	O	Q	Q	Q	Q
		A1-02	Control method selection (Control Method)	0~3	1	2 *1	0 : V/f Control 1 : V/f with PG feedback 2 : Open loop vector 3 : Flux vector	X	Q	Q	Q	Q
		A1-03	Initialize (Init Parameters)	0000~9999	1	0000	1110 : User Initialize 2220 : 2-Wire Initialize 3330 : 3-Wire Initialize	X	Q	Q	Q	Q
		A1-04	Password 1 (Enter Password)	0000~9999	1	0000		X	Q	Q	Q	Q
		A1-05	Password 2 (Select Password)	0000~9999	1	0000		X	Q	Q	Q	Q
	User Constants	A2-01 A2-32	User setting constant (User Param 1 to 32)	-	-	-		X	A	A	A	A
application	Sequence	B1-01	Reference selection (Reference Source)	0~3	1	1	0 : Digital operator 1 : Terminal 2 : Serial communication 3 : Option PCB	X	Q	Q	Q	Q
		B1-02	Operation method selection (Run Source)	0~3	1	1	0 : Digital operator 1 : Terminal 2 : Serial communication 3 : Option PCB	X	Q	Q	Q	Q
		B1-03	Stopping method selection (Stopping Method)	0~3 *3	1	0	0 : Ramp to stop 1 : Coast to stop 2 : DC injection to stop 3 : Coast with timer	X	Q	Q	Q	Q
		B1-04	Prohibition of reverse operation (Reverse Oper)	0, 1	1	0	0 : Reverse enabled 1 : Reverse disabled	X	B	B	B	B
		B1-05	Operation selection for setting of E1-09 or less (Zero-Speed Oper)	0~3	1	0	0 : Run at frequency reference 1 : STOP 2 : Run at min. frequency 3 : Run at zero speed	X	X	X	X	A
		B1-06	Read sequence input twice (Cnt1 Input Scan)	0, 1	1	1	0 : 2ms - 2 Scans 1 : 5ms - 2 Scans	X	A	A	A	A
	DC Braking	B2-01	Zero speed level (DC injection braking starting frequency) (DCInj Start Freq)	0.0~10.0	0.1Hz	0.5		X	B	B	B	B
		B2-02	DC injection braking current (DCInj Current)	0~100	1%	50		X	B	B	B	X
		B2-03	DC injection braking time at start (DCInj Time #Start)	0.00~10.00	0.01sec	0.00		X	B	B	B	B
		B2-04	DC injection braking time at stop (DCInj Time #Stop)	0.00~10.00	0.01sec	0.50		X	B	B	B	B

- * 1 Not initialized. (Domestic standard specifications : A1-01=1, A1-02=2)
- * 2 Setting range is only 0 and 1 when the control method is set to flux vector control (A1-03=3)
- * 3 Constant access levels
Setting / reading enabled at Q : Quick-start(A1-01=2), B : Basic(A1-01=3), A : Advanced(A1-01=4).
X : Setting / reading disabled

EI-9001 CONSTANT LIST (2)

Function	Constant No.	Name (Digital Operator Display)	Setting Range	Setting Unit	Factory Setting	Remarks	Change During Operation (O: Enabled X: Disabled)	*3 Constant Access Level				
								V / f	V / f with PG	Open Loop Vector	Flux Vector	
Application	Speed search	B3-01	Speed search selection at start (SpdSrch at Start)	0, 1	1	0 *	0 : Disabled 1 : Enabled * : Changing the control method (A1-02) changes the set value automatically. (Refer to page 25.)	X	A	A	A	A
		B3-02	Speed search operating current (SpdSrch Current)	0~200	1%	150		X	A	X	A	X
		B3-03	Speed search deceleration time (SpdSrch Dec Time)	0.1~10.0	0.1sec	2.0		X	A	X	A	X
	Delay Timers	B4-01	Timer function ON-delay time (Delay-ON Timer)	0.0~300.0	0.1sec	0.0		X	A	A	A	A
		B4-02	Timer function OFF-delay time (Delay-OFF Timer)	0.0~300.0	0.1sec	0.0		X	A	A	A	A
	PID Control	B5-01	PID control mode selection (PID Mode)	0, 1, 2	1	0	0 : Disabled 1 : Enabled (D=Feedback) 2 : Enabled (D=Feed-Forward)	X	A	A	A	A
		B5-02	Proportional gain (P) (PID Gain)	0.00~10.00	0.01	1.00		X	A	A	A	A
		B5-03	Integral (I) time (PID I Time)	0.0~360.0	0.1sec	1.0		X	A	A	A	A
		B5-04	Integral (I) limit (PID I Limit)	0.0~100.0	0.1%	100.0		X	A	A	A	A
		B5-05	Differential (D) time (PID D Time)	0.00~10.00	0.01sec	0.00		X	A	A	A	A
		B5-06	PID limit (PID Limit)	0.0~100.0	0.1%	100.0		X	A	A	A	A
		B5-07	PID offset adjustment (PID Offset)	-100.0~100.0	0.1%	0.0		X	A	A	A	A
		B5-08	PID primary delay time constant (PID Delay Time)	0.00~10.00	0.01sec	0.00		X	A	A	A	A
	Reference Hold	B6-01	Dwell frequency at start (Dwell Ref @ Start)	0.0~400.0	0.1Hz	0.0		X	A	A	A	A
		B6-02	Dwell time at start (Dwell Time @ Start)	0.0~10.0	0.1sec	0.0		X	A	A	A	A
		B6-03	Dwell frequency at stop (Dwell Ref @ Stop)	0.0~400.0	0.1Hz	0.0		X	A	A	A	A
		B6-04	Dwell time at stop (Dwell Time @ Stop)	0.0~10.0	0.1sec	0.0		X	A	A	A	A
	Droop Control	B7-01	Droop control gain (Droop gain)	0.00~1.00	0.01	0.00		X	X	X	X	A
		B7-02	Droop control delay time (Droop Delay Time)	0.00~1.00	0.01sec	0.00		X	X	X	X	A
	Energy Saving	B8-01	Energy-saving gain (Energy Save Gain)	0~100	1%	80		X	A	A	X	X
		B8-02	Energy-saving frequency (Energy Save Freq)	0.0~400.0	0.1Hz	0.0		X	A	A	X	X
	Zero Servo	B9-01	Zero-servo gain (Zero Servo Gain)	0~100	1	5		X	X	X	X	A
		B9-02	Zero-servo completion width (Zero Servo Count)	0~16383	1	10		X	X	X	X	A

EI-9001 CONSTANT LIST (3)

Function	Constant No.	Name (Digital Operator Display)	Setting Range	Setting Unit	Factory Setting	Remarks	Change During Operation (○ Enabled × Disabled)	#3 Constant Access Level					
								V / f	V / f with PG	Open Loop Vector	Flux Vector		
Accel / Decel	C1-01	Acceleration time 1 (Accel Time 1)	Depending on C1-10	Depending on C1-10	10.0		○	Q	Q	Q	Q		
	C1-02	Deceleration time 1 (Decel Time 1)			10.0		○	Q	Q	Q	Q		
	C1-03	Acceleration time 2 (Accel Time 2)			10.0		○	B	B	B	B		
	C1-04	Deceleration time 2 (Decel Time 2)			10.0		○	B	B	B	B		
	C1-05	Acceleration time 3 (Accel Time 3)			10.0		×	A	A	A	A		
	C1-06	Deceleration time 3 (Decel Time 3)			0.00~500.00 or 0.1 sec	0.01 sec or 0.1 sec	10.0		×	A	A	A	A
	C1-07	Acceleration time 4 (Accel Time 4)			10.0		×	A	A	A	A	A	
	C1-08	Deceleration time 4 (Decel Time 4)			0.0~6000.0		10.0		×	A	A	A	A
	C1-09	Emergency stop time (Fast Stop Time)			10.0		○	B	B	B	B	B	
	C1-10	Accel / decel time setting unit (Acc / Dec Units)			0.1	1	1	0 : 0.01 Seconds 1 : 0.1 Seconds	×	A	A	A	A
	C1-11	Accel / decel time switching frequency (Acc / Dec SW Freq)			0.0~400.0	0.1Hz	0.00		×	A	A	A	A
Tuning S-Curve ACC / Dec	C2-01	S-curve characteristic time at acceleration start (SCrv Acc@ Start)	0.00~2.50	0.01sec	0.20		×	A	A	A	A		
	C2-02	S-curve characteristic time at acceleration end (SCrv Acc@ End)	0.00~2.50	0.01sec	0.20		×	A	A	A	A		
	C2-03	S-curve characteristic time at deceleration start (SCrv Dec@ Start)	0.00~2.50	0.01sec	0.20		×	A	A	A	A		
	C2-04	S-curve characteristic time at deceleration end (SCrv Dec@ End)	0.00~2.50	0.01sec	0.00		×	A	A	A	A		
Motor-Slip Compensation	C3-01	Slip compensation gain (Slip Comp Gain)	0.0~2.5	0.1	1.0 *	*: Changing the control method (A1-02) changes the set value automatically. (Refer to page 25.)	○	B	×	B	B		
	C3-02	Slip compensation primary delay time (Slip Comp Time)	0~10000	1ms	200 *	*: Changing the control method (A1-02) changes the set value automatically. (Refer to page 25.)	×	A	×	A	×		
	C3-03	Slip compensation limit (Slip Comp Limit)	0~250	1%	200		×	A	×	A	×		
	C3-04	Slip compensation selection during regeneration (Slip Comp Regen)	0.1	1	0	0 : Disabled 1 : Enabled	×	A	A	A	×		
Torque Compensation	C4-01	Torque compensation gain (Torq comp Gain)	0.00~2.50	0.01	1.00		○	B	B	B	×		
	C4-02	Torque compensation time constant (Torq Comp Time)	0~10000	1ms	20 *	*: Changing the control method (A1-02) changes the set value automatically. (Refer to page 25.)	×	A	A	A	×		
Constant No.	C5-01	ASR proportional (P) gain 1 (ASR P Gain 1)	0.00~300.00	0.01	20.00 *	*: Changing the control method (A1-02) changes the set value automatically. (Refer to page 25.)	○	×	B	×	B		
	C5-02	ASR integral (I) time 1 (ASR I Time 1)	0.000~10.000	0.001 sec	0.500 *	*: Changing the control method (A1-02) changes the set value automatically. (Refer to page 25.)	○	×	B	×	B		
	C5-03	ASR proportional (P) gain 2 (ASR P Gain 2)	0.00~300.00	0.01	20.00 *	*: Changing the control method (A1-02) changes the set value automatically. (Refer to page 25.)	○	×	B	×	B		
	C5-04	ASR integral (I) time 2 (AR I Time 2)	0.000~10.000	0.001 sec	0.500 *	*: Changing the control method (A1-02) changes the set value automatically. (Refer to page 25.)	○	×	B	×	B		

EI-9001 CONSTANT LIST (4)

Function	Constant No.	Name (Digital Operator Display)	Setting Range	Setting Unit	Factory Setting	Remarks	Change During Operation (○ Enabled × Disabled)	#3 Constant Access Level				
								V / f	V / f with PG	Open Loop Vector	Flux Vector	
Tuning	ASR	C5-05	ASR limit (ASR Limit)	0.0~ 20.0	0.1%	5.0		×	×	A	×	×
		C5-06	ASR primary delay time (ASR Delay Time)	0.000 ~ 0.500	0.001sec	0.004		×	×	×	×	A
		C5-07	ASR switching frequency (ASR Gain SW Freq)	0.0~ 400.0	0.1Hz	0.0		×	×	×	×	A
	Carrier Frequency	C6-01	Carrier frequency upper limit (Carrier Freq Max)	0.4~ 15.0**	0.1KHz	15.0 **	When vector control (A1-02=2 or 3) is selected, the setting range of C6-01 and 02 is 2.0 to 15.0. ** : Setting range and factory setting differ depending on the inverter capacity. (Refer to page 26 or 27.)	×	B	B	B	B
		C6-02	Carrier frequency lower limit (Carrier Freq Min)	0.4~ 15.0**	0.1KHz	15.0 **		×	A	A	×	×
		C6-03	Carrier frequency proportional gain (Carrier Freq Gain)	00~99 **	1	00 **		×	A	A	×	×
	Hunting Prevention	C7-01	Hunting prevention selection (Hunt Prev Select)	0.1	1	1	0 : Disabled 1 : Enabled	×	A	A	×	×
		C7-02	Hunting prevention gain (Hunt Prev Gain)	0.00~ 2.50	0.01	1.00		×	A	A	×	×
	Factory Tuning	C8-08	AFR gain (AFR Gain)	0.00~ 10.00	0.01	1.00		×	×	×	A	×
Reference	Preset Reference	D1-01	Frequency reference 1 (Reference 1)	0.0~ 400.0	0.1Hz	0.0		○	Q	Q	Q	Q
		D1-02	Frequency reference 2 (Reference 2)	0.0~ 400.0	0.1Hz	0.0		○	Q	Q	Q	Q
		D1-03	Frequency reference 3 (Reference 3)	0.0~ 400.0	0.1Hz	0.0		○	Q	Q	Q	Q
		D1-04	Frequency reference 4 (Reference 4)	0.0~ 400.0	0.1Hz	0.0		○	Q	Q	Q	Q
		D1-05	Frequency reference 5 (Reference 5)	0.0~ 400.0	0.1Hz	0.0		○	B	B	B	B
		D1-06	Frequency reference 6 (Reference 6)	0.0~ 400.0	0.1Hz	0.0		○	B	B	B	B
		D1-07	Frequency reference 7 (Reference 7)	0.0~ 400.0	0.1Hz	0.0		○	B	B	B	B
		D1-08	Frequency reference 8 (Reference 8)	0.0~ 400.0	0.1Hz	0.0		○	B	B	B	B
		D1-09	Jog frequency reference (Jog Reference)	0.0~ 400.0	0.1Hz	6.0		○	Q	Q	Q	Q
	Reference Limit	D2-01	Frequency reference upper limit (Ref Upper Limit)	0.0~ 110.0	0.1%	100.0		×	B	B	B	B
		D2-02	Frequency reference lower limit (Ref Lower Limit)	0.0~ 100.0	0.1%	0.0		×	B	B	B	B

EI-9001 CONSTANT LIST (5)

Function	Constant No.	Name (Digital Operator Display)	Setting Range	Setting Unit	Factory Setting	Remarks	Change During Operation (○ Enabled × Disabled)	*3 Constant Access Level					
								V / f	V / f with PG	Open Loop Vector	Flux Vector		
Reference	Jump frequencies	D3-01	Jump frequency 1 (Jump freq 1)	0.0~ 400.0	0.1Hz	0.0		×	B	B	B	B	
		D3-02	Jump frequency 2 (Jump freq 2)	0.0~ 400.0	0.1Hz	0.0		×	B	B	B	B	
		D3-03	Jump frequency 3 (Jump freq 3)	0.0~ 400.0	0.1Hz	0.0		×	B	B	B	B	
		D3-04	Jump frequency width (Jump Bandwidth)	0.0~ 20.0	0.1Hz	1.0		×	B	B	B	B	
	Sequence	D4-01	Frequency reference hold function selection (MOP Ref Memory)	0.1	1	0	0 : Disabled 1 : Enabled	×	A	A	A	A	
		D4-02	+/- Speed limits (Trim Control Lvl)	0~100	1%	25		×	A	A	A	A	
	Torque Control	D5-01	Torque control selection (Torq Control Sel)	0.1	1	0	0 : Speed control 1 : Torque control	×	×	×	×	A	
		D5-02	Torque reference delay time (Torque Ref Filter)	0~ 1000	1msec	0		×	×	×	×	A	
		D5-03	Speed limit selection (Speed Limit Sel)	1.2	1	1	1 : Analog input (terminals 13, 14) 2 : Program setting	×	×	×	×	A	
		D5-04	Speed limit (Speed Lmt Value)	-120 ~ +120	1%	0		×	×	×	×	A	
		D5-05	Speed limit bias (Speed Lmt Bias)	0~120	1%	10		×	×	×	×	A	
		D5-06	Speed/torque control switching timer (Ref Hold Time)	0~ 1000	1msec	0		×	×	×	×	A	
	Motor	V / f Pattern	E1-01	Input voltage setting (Input Voltage)	155~ 255 *1	1V	200 *1		×	Q	Q	Q	Q
			E1-02	Motor selection (Motor Selection)	0.1	1	0	0: Standard motor 1: Inverter motor	×	Q	Q	Q	Q
E1-03			V / f pattern selection (V/F Selection)	00~OF	1	OF	00 to OE : 15 preset V/f patterns OF : Custom V/f patterns	×	Q	Q	×	×	
E1-04			Max output frequency (Max frequency)	50.0~ 400.0	0.1Hz	60.0		×	Q	Q	Q	Q	
E1-05			Max. voltage (Max Voltage)	0.0~ 255.0 *1	0.1V	200.0 *1		×	Q	Q	Q	Q	
E1-06			Max. voltage frequency (Base Frequency)	0.0~ 400.0	0.1Hz	60.0		×	Q	Q	Q	Q	
E1-07			Mid. output frequency (Mid Frequency A)	0.0~ 400.0	0.1Hz	3.0 *	*: Changing the control method (A1-02) changes the set value automatically. (Refer to page 25.)	×	Q	Q	A		
E1-08			Mid. output frequency voltage (Mid voltage A)	0.0~ 255.0 *1	0.1V	11.0 *1 *	*: Changing the control method (A1-02) changes the set value automatically. (Refer to page 25.)	×	Q	Q	A		
E1-09			Min. output frequency (Min Frequency)	0.0~ 400.0	0.1Hz	0.5 *	*: Changing the control method (A1-02) changes the set value automatically. (Refer to page 25.)	×	Q	Q	Q	A	
E1-10			Min. output frequency voltage (Min Voltage)	0.0~ 255.0 *1	0.1V	2.0 *1 *	*: Changing the control method (A1-02) changes the set value automatically. (Refer to page 25.)	×	Q	Q	A		

*1: Set value for 220V class. For 440V class, the value is twice as that of 220V class.

EI-9001 CONSTANT LIST (6)

Function	Constant No.	Name (Digital Operator Display)	Setting Range	Setting Unit	Factory Setting	Remarks	Change During Operation (○: Enabled ×: Disabled)	#3 Constant Access Level				
								V / f	V / f with PG	Open Loop Vector	Flux Vector	
Motor	Motor setup	E2-01	Motor rated current (Motor Rated FLA)	0.01~1500.0	0.1A *1	1.90 **	*1 : Setting unit is 0.01A for models of 7.5kW or below.	×	Q	Q	Q	Q
		E2-02	Motor rated slip (Motor Rated slip)	0.00~20.00	0.01Hz	2.90 **	** : Factory setting differs depending on inverter capacity. (Refer to page 26 or 27.)	×	A	A	Q	Q
		E2-03	Motor no-load current (No-Load Current)	0.00~1500.0	0.01A	1.20 **		×	A	A	Q	Q
		E2-04	Number of motor poles (Number of Poles)	2~48	1pole	4		×	×	Q	×	Q
		E2-05	Motor line-to-line resistance (Term Resistance)	0.000~85.000	0.001Ω	9.842 **		×	A	A	A	A
		E2-06	Motor leak inductance (Leak Inductance)	0.0~30.0	0.1%	18.2 **		×	×	×	A	A
		E2-07	Motor iron-core saturation coefficient 1 (Saturation comp 1)	0.00~0.50	0.01	0.50		×	×	×	A	A
		E2-08	Motor iron-core saturation coefficient 2 (Saturation comp 2)	0.00~0.75	0.01	0.75		×	×	×	A	A
		E2-09	Motor mechanical loss (Mechanical Loss)	0.0~10.0	0.1%	0.0		×	×	×	×	A
	Motor 2 Control Method	E3-01	Motor 2 control method selection (Control Method)	0~3	1	2	0 : V/f control 1 : V/f with PG feedback 2 : Open loop vector 3 : Flux vector	×	A	A	A	A
	V / f Pattern 2	E4-01	Motor 2 max. output frequency (V/F2 Max Freq)	50.0~400.0	0.1Hz	60.0		×	A	A	A	A
		E4-02	Motor 2 max. voltage (V/F2 Max Voltage)	0.0~255.0	0.1V	200.0 *2		×	A	A	A	A
		E4-03	Motor 2 max. voltage frequency (V/F2 Base Freq)	0.0~400.0	0.1Hz	60.0		×	A	A	A	A
		E4-04	Motor 2 mid. output frequency 1 (V/F2 Mid Freq)	0.0~400.0	0.1Hz	3.0 *	*: Changing the control method (A1-02) changes the set value automatically. (Refer to page 25.)	×	A	A	A	
		E4-05	Motor 2 mid. output frequency voltage 1 (V/F2 Mid Voltage)	0.0~255.0	0.1V	10.0 *2 *	*: Changing the control method (A1-02) changes the set value automatically. (Refer to page 25.)	×	A	A	A	
		E4-06	Motor 2 min. output frequency (V/F2 Min Freq)	0.0~400.0	0.1Hz	0.5 *	*: Changing the control method (A1-02) changes the set value automatically. (Refer to page 25.)	×	A	A	A	
		E4-07	Motor 2 min. output frequency voltage (V/F2 Min Voltage)	0.0~255.0	0.1V	1.7 *2 *	*: Changing the control method (A1-02) changes the set value automatically. (Refer to page 25.)	×	A	A	A	
	Motor 2 Setup	E5-01	Motor 2 rated current (Motor 2 rated FLA)	0.00~1500.0	0.1A *1	1.90 **	*1 : Setting unit is 0.01A for models of 7.5kW or below.	×	A	A	A	A
		E5-02	Motor 2 rated slip (Motor 2 Slip Freq)	0.00~20.00	0.01Hz	2.90 **	** : Factory setting differs depending on inverter capacity.	×	A	A	A	A
		E5-03	Motor 2 no-load current (Motor 2 No-load I)	0.00~1500.0	0.01A	1.20 **		×	A	A	A	A
		E5-04	Motor 2 number of poles (Motor 2 # Poles)	2~48	1pole	4		×	×	A	×	A
		E5-05	Motor 2 line-to-line resistor (Motor 2 term Ohms)	0.000~85.000	0.001Ω	9.842 **		×	A	A	A	A
		E5-06	Motor 2 leak inductance (Motor 2 Leak)	0.0~30.0	0.1%	18.2 **		×	×	×	A	A

*2 : Set value for 220V class. For 440V class, the value is twice as that of 220V class.

EI-9001 CONSTANT LIST (7)

Function	Constant No.	Name (Digital Operator Display)	Setting Range	Setting Unit	Factory Setting	Remarks	Change During Operation (O: Enabled X: Disabled)	#3 Constant Access Level				
								V / f	V / f with PG	Open Loop Vector	Flux Vector	
Options	PG OptionSetup	F1-01	PG constant (PG Pulses/Rev)	0~60000	1	600		X	X	Q	X	Q
		F1-02	Operation selection at PG open circuit (PG Fdbk Loss Sel)	0~3	1	1	0: Ramp to stop 2: Fast-stop 1: Coast to stop 3: Alarm only	X	X	B	X	B
		F1-03	Operation selection at overspeed (PG Overspeed Sel)	0~3	1	1	0: Ramp to stop 2: Fast-stop 1: Coast to stop 3: Alarm only	X	X	B	X	B
		F1-04	Operation selection at deviation (PG Deviation Sel)	0~3	1	3	0: Ramp to stop 2: Fast-stop 1: Coast to stop 3: Alarm only	X	X	B	X	B
		F1-05	PG rotation (PG Rotation Sel)	0,1	1	0	0: Counter-clockwise 1: Clockwise	X	X	B	X	B
		F1-06	PG division rate (PG pulse monitor) (PG Output Ratio)	1~132	1	1	Effective only with control circuit board PG-B2	X	X	B	X	B
		F1-07	Integral value during accel/decel enable/disable (PG Ramp PI/I Sel)	0,1	1	0	0: Disabled 1: Enabled	X	X	B	X	X
		F1-08	Overspeed detection level (PG Overspd Level)	0~120	1%	115		X	X	A	X	A
		F1-09	Overspeed detection delay time (PG Overspd Time)	0.0~2.0	0.1sec	0.0*	*: Changing the control method (AI-02) changes the set value automatically. (Refer to page 25.)	X	X	A	X	A
		F1-10	Excessive speed deviation detection level (PG Deviate Level)	0~50	1%	10		X	X	A	X	A
		F1-11	Excessive speed deviation detection delay time (PG Deviate Time)	0.0~10.0	0.1sec	0.5		X	X	A	X	A
		F1-12	Number of PG gear teeth 1 (PG# Gear Teeth 1)	0~1000	1	0		X	X	A	X	X
		F1-13	Number of PG gear teeth 2 (PG# Gear Teeth 2)	0~1000	1	0		X	X	A	X	X
	AI	F2-01	Bi-polar or uni-polar input selection (AI-14 Input Sel)	0,1	1	0	0: 3-channel individual 1: 3-channel addition	X	B	B	B	X
	DI	F3-01	Digital input option (DI Input)	0~7	1	0	0: BCD 1% 1: BCD 0.1% 2: BCD 0.01% 3: BCD 1Hz 4: BCD 0.1Hz 5: BCD 0.01Hz 6: BCD (50G) 0.01Hz 7: BN 0.01Hz 8: Binary	X	B	B	B	B
	AO-08 · 12	F4-01	Channel 1 monitor selection (AO Ch1 Select)	1~31	1	2		X	B	B	B	B
F4-02		Channel 1 gain (AO Ch1 Gain)	0.00~2.50	0.01	1.00		O	B	B	B	B	
F4-03		Channel 2 monitor selection (AO Ch2 Select)	1~31	1	3		X	B	B	B	B	
F4-04		Channel 2 gain (AO Ch2 Gain)	0.00~2.50	0.01	0.50		O	B	B	B	B	
	DO-02	F5-01	Channel 1 output selection (DO-02 Ch1 Select)	00~FF	1	0		X	B	B	B	B
F5-02		Channel 2 output selection (DO-02 Ch2 Select)	00~FF	1	1		X	B	B	B	B	
	DO-08	F6-01	Output mode selection (DO-08 Selection)	0,1	1	0	0: 8-channel individual 1: Binary output	X	B	B	B	B
	PO-36	F7-01	Frequency multiple selection (PO-36F Selection)	0~4	1	1	0: 1×Output frequency 1: 6×Output frequency 2: 10×Output frequency 3: 12×Output frequency 4: 36×Output frequency	X	B	B	B	B

EI-9001 CONSTANT LIST (8)

Function	Constant No.	Name (Digital Operator Display)	Setting Range	Setting Unit	Factory Setting	Remarks	Change During Operation (O: Enabled X: Disabled)	*3 Constant Access Level			
								V / f	V / f with PG	Open Loop Vector	Flux Vector
Terminal	Digital Inputs	H1-01 Multi-function input (terminal 3) (Terminal 3 Sel)	00~FF	1	24		X	B	B	B	B
		H1-02 Multi-function input (terminal 4) (Terminal 4 Sel)	00~FF	1	14		X	B	B	B	B
		H1-03 Multi-function input (terminal 5) (Terminal 5 Sel)	00~FF	1	3(0) *1		X	B	B	B	B
		H1-04 Multi-function input (terminal 6) (Terminal 6 Sel)	00~FF	1	4(3) *1		X	B	B	B	B
		H1-05 Multi-function input (terminal 7) (Terminal 7 Sel)	00~FF	1	6(4) *1		X	B	B	B	B
		H1-06 Multi-function input (terminal 8) (Terminal 8 Sel)	00~FF	1	8(6) *1		X	B	B	B	B
	Digital Outputs	H2-01 Multi-function input (terminal 9-10) (Terminal 9 Sel)	00~FF	1	0		X	B	B	B	B
		H2-02 Multi-function input (terminal 25-27) (Terminal 25 Sel)	00~FF	1	1		X	B	B	B	B
		H2-03 Multi-function input (terminal 26-27) (Terminal 26 Sel)	00~FF	1	2		X	B	B	B	B
	Analog Inputs	H3-01 Signal level selection (terminal 13) (Term 13 Signal)	0.1	1	0	0 : 0 to 10 VDC 1 : -10 to +10VDC	X	B	B	B	B
		H3-02 Gain (terminal 13) (Terminal 13 Gain)	0.0~1000.0	0.1%	100.0		O	B	B	B	B
		H3-03 Bias (terminal 13) (Terminal 13 Bias)	-100.0~+100.0	0.1%	0.0		O	B	B	B	B
		H3-04 Signal level selection (terminal 16) (Term 16 Signal)	0.1	1	0	0 : 0 to 10 VDC 1 : -10 to +10VDC	X	B	B	B	B
		H3-05 Multi-function analog input (terminal 16) (Terminal 16 Sel)	0~1F	1	0		X	B	B	B	B
		H3-06 Gain (terminal 16) (Terminal 16 Gain)	0.0~1000.0	0.1%	100.0		O	B	B	B	B
		H3-07 Bias (terminal 16) (Terminal 16 Bias)	-100.0~+100.0	0.1%	0.0		O	B	B	B	B
		H3-08 Signal level selection (terminal 14) (Term 14 Signal)	0, 1, 2	1	2	0 : 0 to 10 VDC 1 : -10 to +10VDC 2 : 4 to 20mA	X	A	A	A	A
		H3-09 Multi-function analog input (terminal 14) (Terminal 14 Sel)	0~1F	1	1F		X	A	A	A	A
H3-10 Gain (terminal 14) (Terminal 14 Gain)		0.0~1000.0	0.1%	100.0		O	A	A	A	A	
H3-11 Bias (terminal 14) (Terminal 14 Bias)		-100.0~+100.0	0.1%	0.0		O	A	A	A	A	
H3-12 Analog input filter time constant (Filter Avg Time)		0.00~2.00	0.01sec	0.00		X	A	A	A	A	
Analog Outputs	H4-01 Monitor selection (terminal 21) (Terminal 21 Sel)	1~31	1	2		X	B	B	B	B	
	H4-02 Gain (terminal 21) (Terminal 21 Gain)	0.00~2.50	0.01	1.00		O	B	B	B	B	
	H4-03 Bias (terminal 21) (Terminal 21 Bias)	-10.0~+10.0	0.0%	0.0		O	B	B	B	B	

*1: Factory settings in the parentheses are values obtained at 3-wire initialization.

EI-9001 CONSTANT LIST (9)

Function	Constant No.	Name (Digital Operator Display)	Setting Range	Setting Unit	Factory Setting	Remarks	Change During Operation (O: Enabled X: Disabled)	*3 Constant Access Level				
								V / f	V / f with PG	Open Loop Vector	Flux Vector	
Terminal	Analog Outputs	H4-04	Monitor selection (terminal 23) (Terminal 23 Sel)	1~31	1	3		x	B	B	B	B
		H4-05	Gain (terminal 23) (Terminal 23 Gain)	0.00~ 2.50	0.01	0.50		O	B	B	B	B
		H4-08	Bias (terminal 23) (Terminal 23 Bias)	-10.0 ~ +10.0	0.1%	0.0		O	B	B	B	B
		H4-07	Analog output signal level selection (AO Level Select)	0, 1	1	0	0 : 0 to 10VDC 1 : -10 to +10VDC	x	B	B	B	B
	Serial Communication Setup	H5-01	Station address (Serial Comm ADR)	0~1F	1	1F		x	A	A	A	A
		H5-02	Communication speed selection (Serial Baud Rate)	0~3	1	3	0 : 1200 baud 2 : 4800 baud 1 : 2400 baud 3 : 9600 baud	x	A	A	A	A
		H5-03	Communication parity selection (Serial Com Sel)	0, 1, 2	1	0	0 : No parity 2 : Odd parity 1 : Even parity	x	A	A	A	A
		H5-04	Stopping method after communication error (Serial Fault Sel)	0~3	1	3	0 : Ramp to stop 2 : Fast-stop 1 : Coast to stop 3 : Alarm only	x	A	A	A	A
Protection	Motor Overload	L1-01	Motor protection selection (MOL Fault select)	0, 1	1	1	0 : Disabled 1 : Enabled	x	B	B	B	B
		L1-02	Motor protection time constant (MOL Time Const)	0.1~ 5.0	0.1min	1.0		x	B	B	B	B
	Power Loss Ridethru	L2-01	Momentary power loss detection (PwrL Selection)	0, 1, 2	1	0	0 : Disabled 1 : Power loss ridethru 2 : CPU power active	x	B	B	B	B
		L2-02	Momentary power loss ridethru time (PwrL Ridethru t)	0.0~ 2.0	0.1sec	0.7 **	** : Factory setting differs depending on inverter capacity. (Refer to page 26 or 27.)	x	B	B	B	B
		L2-03	Min. baseblock time (PwrL Baseblock t)	0.0~ 5.0	0.1sec	0.5 **	** : Factory setting differs depending on inverter capacity. (Refer to page 26 or 27.)	x	B	B	B	B
		L2-04	Voltage recovery time (PwrL V/F Ramp t)	0.0~ 2.0	0.1sec	0.3		x	A	A	A	A
		L2-05	Undervoltage detection level (PUV Det Level)	150~ 210	1V	190 *1	*1 : Set value for 220V class. For 440V class, the value is twice as that of 220V class.	x	A	A	A	A
	Stall Prevention	L3-01	Stall prevention selection during accel (StallP Accel Sel)	0, 1, 2	1	1	0 : Disabled 2 : Intelligent 1 : General-purpose	x	B	B	B	x
		L3-02	Stall prevention level during accel (StallP Accel Lvl)	0~200	1%	150		x	B	B	B	x
		L3-03	Stall prevention limit during accel (StallP CHP Lvl)	0~100	1%	100 *	* : Changing the control method (A1-02) changes the set value automatically. (Refer to page 25.)	x	A	A	A	x
		L3-04	Stall prevention selection during decel (StallP Decel Sel)	0, 1, 2	1	1	0 : Disabled 2 : Intelligent 1 : General-purpose *2	x	B	B	B	B
		L3-05	Stall prevention selection during running (StallP Run Sel)	0, 1, 2	1	1	0 : Disabled 1 : Decel time 1 2 : Decel time 2	x	B	B	x	x
L3-06		Stall prevention level during running (StallP Run Level)	30~ 200	1%	180		x	B	B	x	x	

*2 : When vector control (A1-02 = 2 or 3) is selected, set value 2 (intelligent) cannot be set.

EI-9001 CONSTANT LIST (10)

Function	Constant No.	Name (Digital Operator Display)	Setting Range	Setting Unit	Factory Setting	Remarks	Change During Operation (O: Enabled x: Disabled)	*3 Constant Access Level			
								V / f	V / f with PG	Open Loop Vector	Flux Vector
Reference Detection	L4-01	Speed agree detection level (Spd Agree Level)	0.0~400.0	0.1Hz	0.0		x	B	B	B	B
	L4-02	Speed agree detection width (Spd Agree Width)	0.0~20.0	0.1Hz	2.0		x	B	B	B	B
	L4-03	Speed agree detection level (+/-) (Spd Agree Lvl +/-)	0.0~±400.0	0.1Hz	0.0		x	A	A	A	A
	L4-04	Speed agree detection width(+/-) (Spd Agree Wdth +/-)	0.0~20.0	0.1Hz	2.0		x	A	A	A	A
	L4-05	Operation when frequency reference is missing (Ref Loss Sel)	0,1	1	0	0: Stop 1: Run at 80% of frequency reference	x	A	A	A	A
Fault Restart	L5-01	Number of auto restart attempts (Num of Restarts)	0~10	1time	0		x	B	B	B	B
	L5-02	Auto restart operation selection (Restart Sel)	0,1	1	0	0: No fault retry 1: Fault retry active	x	B	B	B	B
Protection Torque Detection	L6-01	Torque detection selection 1 (Torq Det 1 Sel)	0~4	1	0	0: Disabled 1: Detected during speed agree, and operation continues after detection 2: Detected during running, and operation continues after detection 3: Detected during speed agree, and inverter output is shut OFF 4: Detected during running, and inverter output is shut OFF	x	B	B	B	B
	L6-02	Torque detection level 1 (Torq Det 1 Lvl)	0~300	1%	150		x	B	B	B	B
	L6-03	Torque detection time 1 (Torq Det 1 Time)	0.0~10.0	0.1sec	0.1		x	B	B	B	B
	L6-04	Torque detection selection 2 (Torq Det 2 Sel)	0~4	1	0	0: Disabled 1: Detected during speed agree, and operation continues after detection 2: Detected during running, and operation continues after detection 3: Detected during speed agree, and inverter output is shut OFF 4: Detected during running, and inverter output is shut OFF	x	A	A	A	A
	L6-05	Torque detection level 2 (Torq Det 2 Lvl)	0~300	1%	150		x	A	A	A	A
	L6-06	Torque detection selection 2 (Torq Det 2 Time)	0.0~10.0	0.1sec	0.1		x	A	A	A	A
	Torque Limit	L7-01	Forward torque limit (Torq Limit Fwd)	0~300	1%	200		x	x	x	B
L7-02		Reverse torque limit (Torq Limit Rev)	0~300	1%	200		x	x	x	B	B
L7-03		Forward regenerative torque limit (Torq Lmt Fwd Rgn)	0~300	1%	200		x	x	x	B	B
L7-04		Reverse regenerative torque limit (Torq Lmt Rev Rgn)	0~300	1%	200		x	x	x	B	B
Hardware Protection	L8-01	Protect selection for internal DC resistor (DB Resistor Prot)	0,1	1	0	0: Not Provided 1: Provided	x	B	B	B	B
	L8-02	Over Heat pre-alarm level (OH Pre-Alarm Lvl)	50~110	1deg	95		x	A	A	A	A