

Information for Replacement of FR-A500(L) Series with FR-A800 Series

Size, connection, parameters, options concerning replacement are stated on the following pages.

1. REPLACING INVERTER

The FR-A800 series has two specifications types: FM type and CA type.

When replacing the FR-A500(L) series of the Japanese specifications, select the FM type (FR-A8□0-□□K-1).

2. SIZE

When the FR-A500(L) series is replaced with the FR-A800 series, some FR-A800 series models have different installation size from that of the corresponding FR-A500(L) series models.

Refer to the applicable outline dimension and drill new mounting holes, or use the installation interchange attachment shown in the table below.

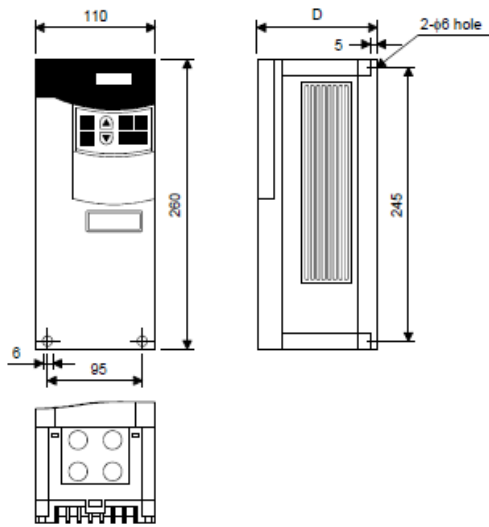
[Inverter alone]

Existing inverter	Replacing inverter	Installation size / installation interchange attachment
FR-A520-0.4K	FR-A820-0.4K	Same
FR-A520-0.75K	FR-A820-0.75K	Same
FR-A520-1.5K	FR-A820-1.5K	Same
FR-A520-2.2K	FR-A820-2.2K	Same
FR-A520-3.7K	FR-A820-3.7K	Same
FR-A520-5.5K	FR-A820-5.5K	Same
FR-A520-7.5K	FR-A820-7.5K	Same
FR-A520-11K	FR-A820-11K	Same
FR-A520-15K	FR-A820-15K	Same
FR-A520-18.5K	FR-A820-18.5K	Same
FR-A520-22K	FR-A820-22K	Same
FR-A520-30K	FR-A820-30K	Same
FR-A520-37K	FR-A820-37K	Same
FR-A520-45K	FR-A820-45K	Same
FR-A520-55K	FR-A820-55K	Same
FR-A520L-75K	FR-A820-75K	Same
FR-A520L-90K	FR-A820-90K	Same
FR-A540-0.4K	FR-A840-0.4K	Same
FR-A540-0.75K	FR-A840-0.75K	Same
FR-A540-1.5K	FR-A840-1.5K	Same
FR-A540-2.2K	FR-A840-2.2K	Same
FR-A540-3.7K	FR-A840-3.7K	Same
FR-A540-5.5K	FR-A840-5.5K	Same
FR-A540-7.5K	FR-A840-7.5K	Same
FR-A540-11K	FR-A840-11K	FR-AAT24*
FR-A540-15K	FR-A840-15K	FR-AAT24*
FR-A540-18.5K	FR-A840-18.5K	Same
FR-A540-22K	FR-A840-22K	Same
FR-A540-30K	FR-A840-30K	Same
FR-A540-37K	FR-A840-37K	Same
FR-A540-45K	FR-A840-45K	Same
FR-A540-55K	FR-A840-55K	Same
FR-A540L-75K	FR-A840-75K	Different size
FR-A540L-90K	FR-A840-90K	Different size
FR-A540L-110K	FR-A840-110K	Different size
FR-A540L-132K	FR-A840-132K	Different size
FR-A540L-160K	FR-A840-160K	Same
FR-A540L-220K	FR-A840-220K	Same
FR-A540L-280K	FR-A840-280K	Different size

*: Use screws with the proper lengths for installation.

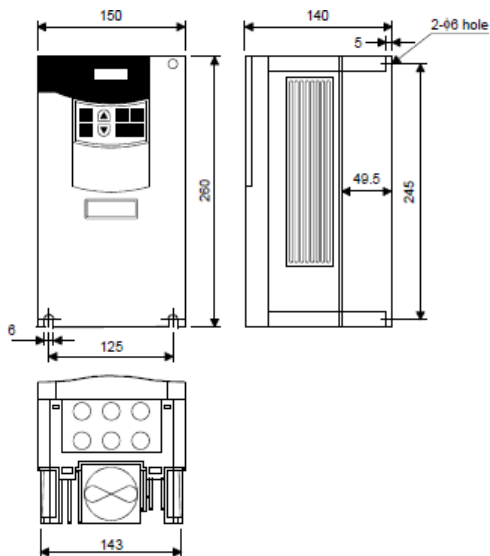
Outline dimension drawings (Unit: mm)

■ FR-A520-0.4K, 0.75K

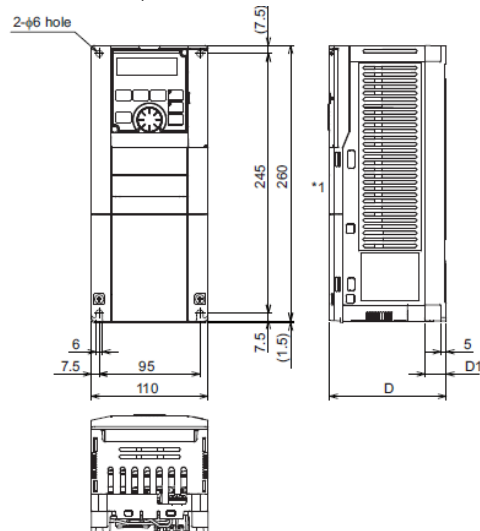


Inverter model	D
FR-A520-0.4K	110
FR-A520-0.75K	125

■ FR-A520-1.5K, 2.2K, 3.7K

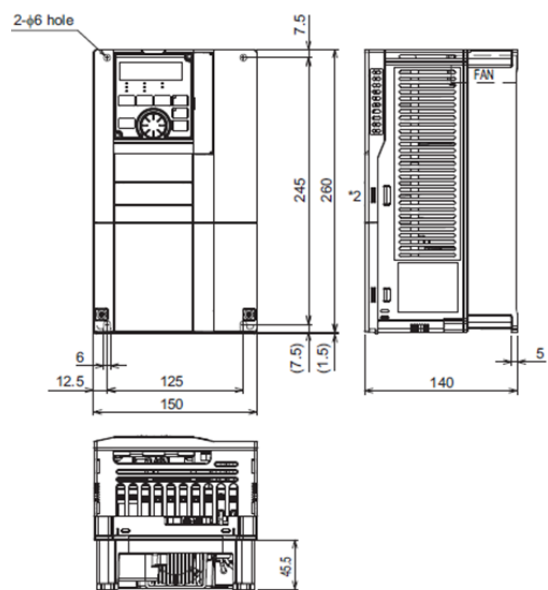


■ FR-A820-0.4K, 0.75K

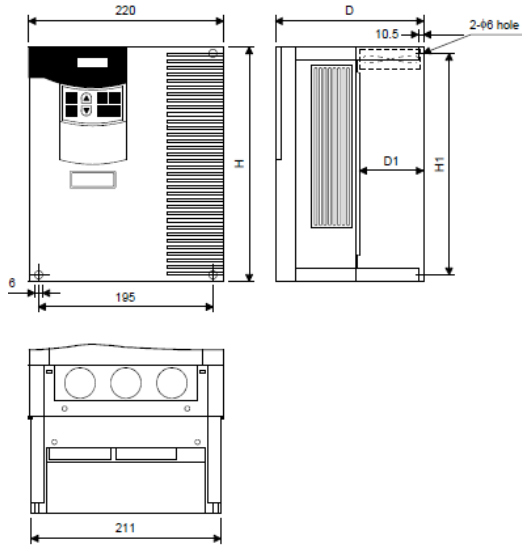


Inverter model	D	D1
FR-A820-0.4K	110	20
FR-A820-0.75K	125	35

■ FR-A820-1.5K, 2.2K, 3.7K

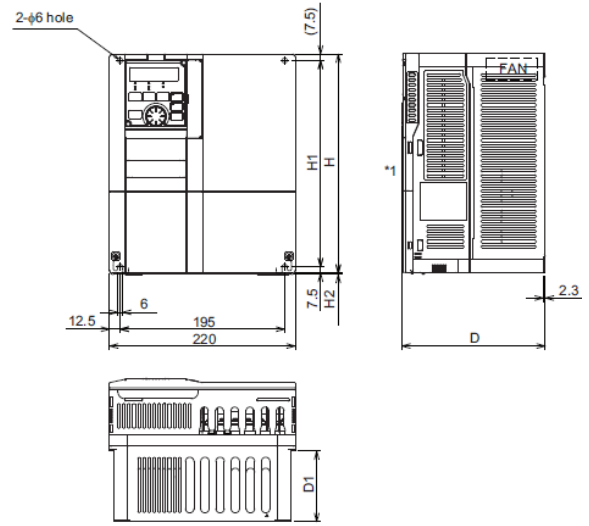


■ FR-A520-5.5K, 7.5K, 11K



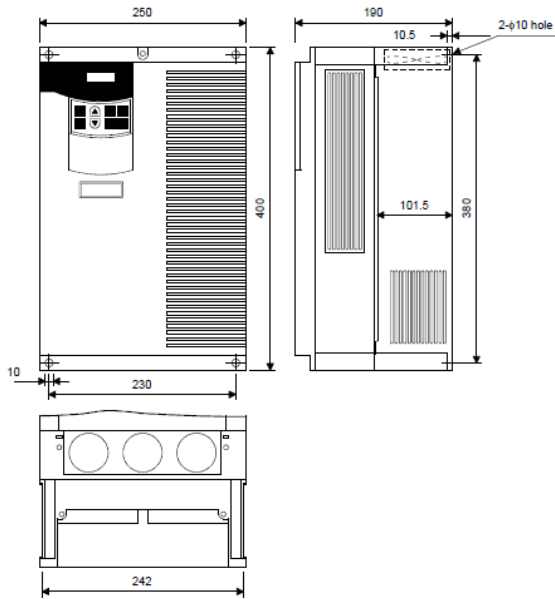
Inverter model	H	H1	D	D1
FR-A520-5.5K, 7.5K	260	245	170	84
FR-A520-11K	300	285	190	101.5

■ FR-A820-5.5K, 7.5K, 11K

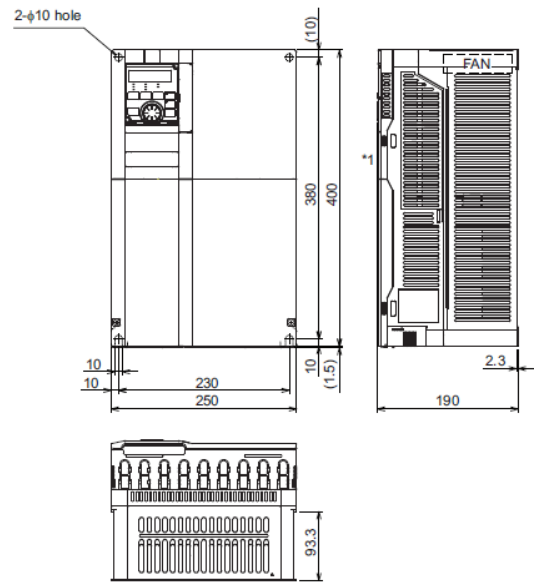


Inverter model	H	H1	H2	D	D1
FR-A820-5.5K, 7.5K	260	245	1.5	170	84
FR-A820-11K	300	285	3	190	101.5

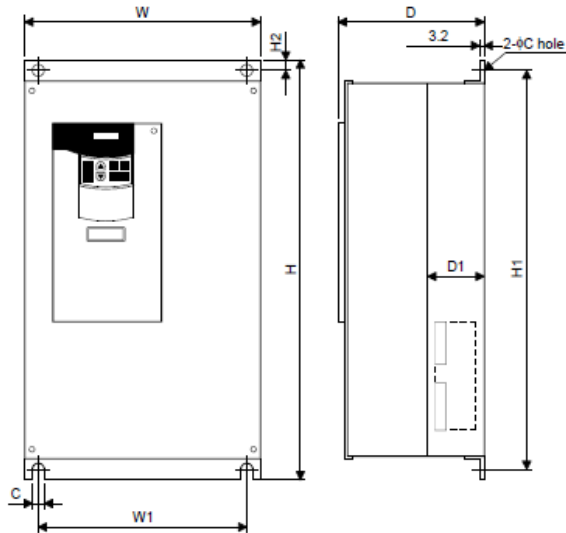
■ FR-A520-15K, 18.5K, 22K



■ FR-A820-15K, 18.5K, 22K



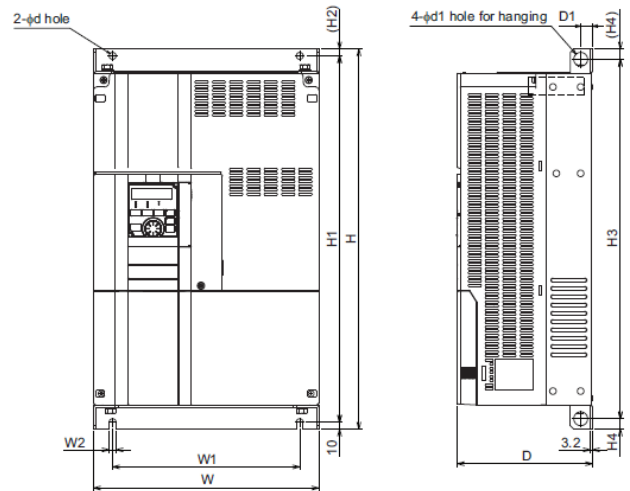
■ FR-A520-30K, 37K, 45K, 55K



Inverter model	W	W1	W2	H	H1	H2
FR-A520-30K	340	270	320	550	530	10
FR-A520-37K, 45K	450	380	430	550	525	15
FR-A520-55K	480	410	460	700	675	15

Inverter model	D	D1	C
FR-A520-30K	195	71.5	10
FR-A520-37K, 45K	250	154	12
FR-A520-55K	250	154	12

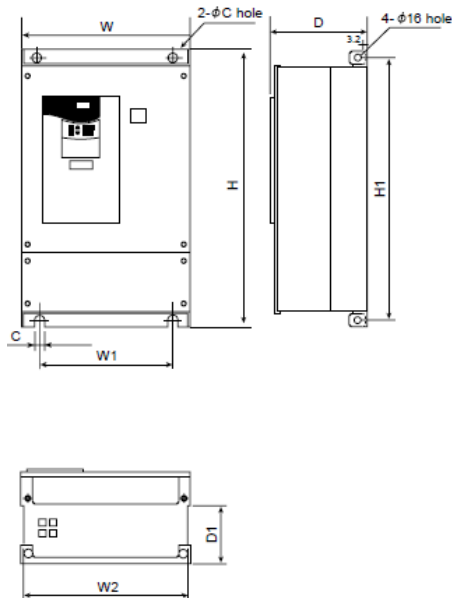
■ FR-A820-30K, 37K, 45K, 55K, 75K, 90K



Inverter model	W	W1	W2	H	H1	H2
FR-A820-30K	325	270	10	550	530	10
FR-A820-37K, 45K	435	380	12	550	525	15
FR-A820-55K	465	410	12	700	675	15
FR-A820-75K, 90K	465	400	12	740	715	15

Inverter model	H3	H4	d	d1	D	D1
FR-A820-30K	520	15	10	20	195	17
FR-A820-37K, 45K	514	18	12	25	250	24
FR-A820-55K	664	18	12	25	250	22
FR-A820-75K, 90K	704	18	12	24	360	22

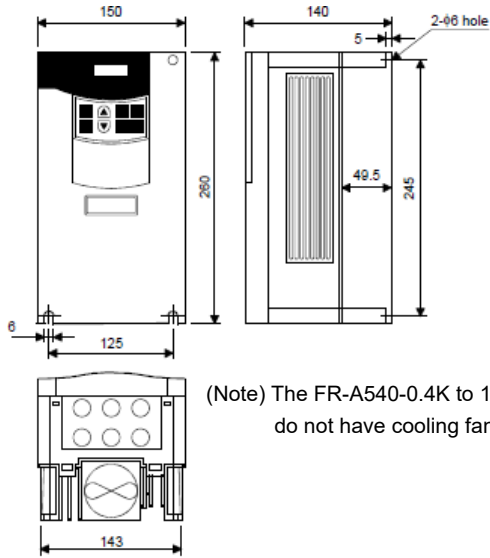
■ FR-A520L-75K, 90K



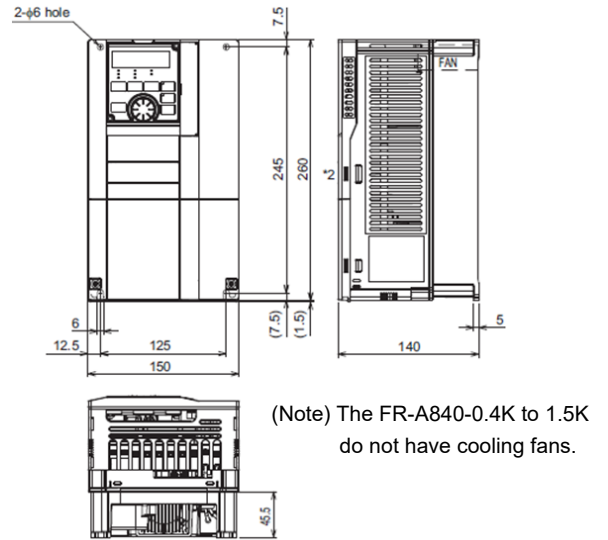
Inverter model	W	W1	W2	H	H1	D
FR-A520L-75K, 90K	480	400	456	740	714	360

Inverter model	D1	C
FR-A520L-75K, 90K	160	10

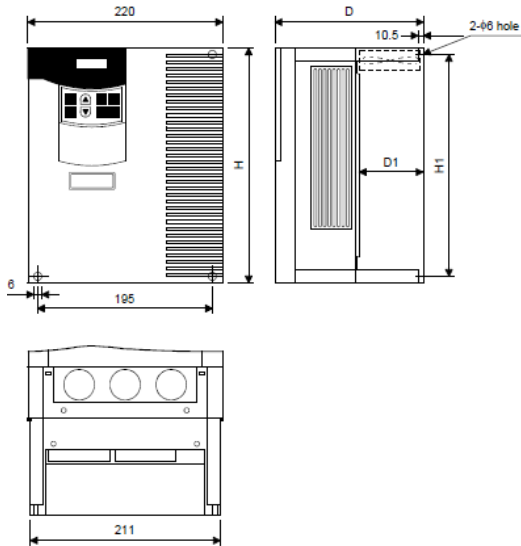
■ FR-A540-0.4K, 0.75K, 1.5K, 2.2K, 3.7K



■ FR-A840-0.4K, 0.75K, 1.5K, 2.2K, 3.7K

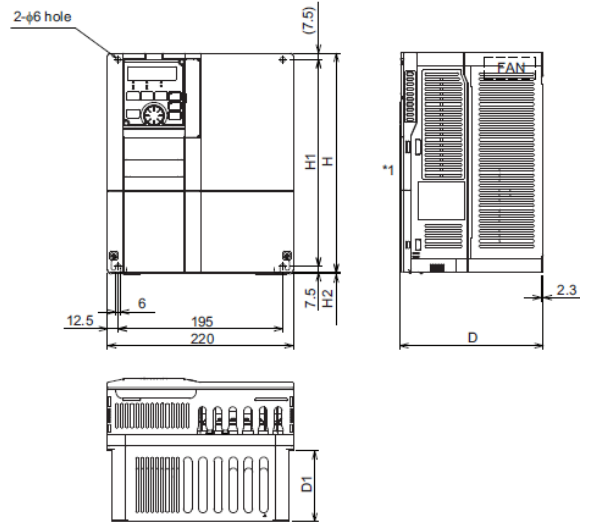


■ FR-A540-5.5K, 7.5K



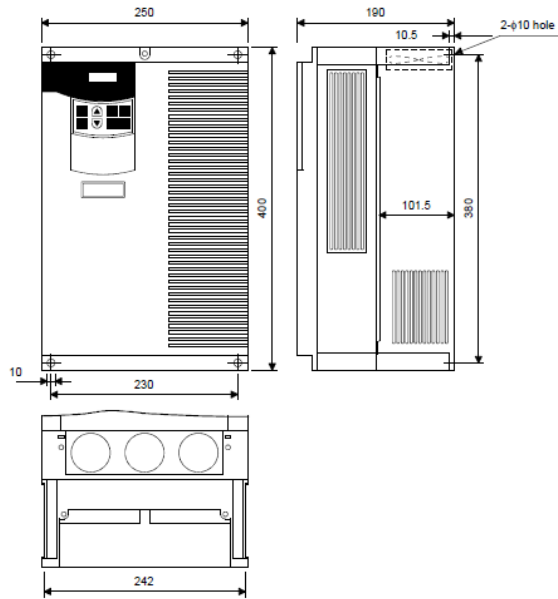
Inverter model	H	H1	D	D1
FR-A540-5.5K, 7.5K	260	245	170	84

■ FR-A840-5.5K, 7.5K

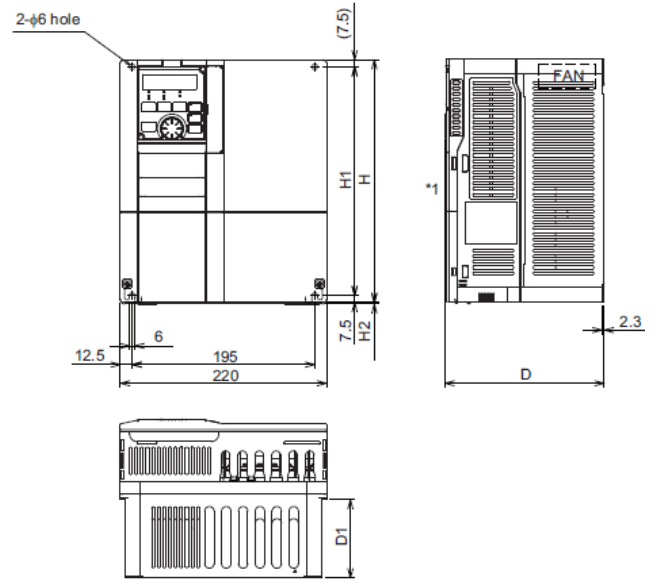


Inverter model	H	H1	H2	D	D1
FR-A840-5.5K, 7.5K	260	245	1.5	170	84

■ FR-A540-11K, 15K, 18.5K, 22K

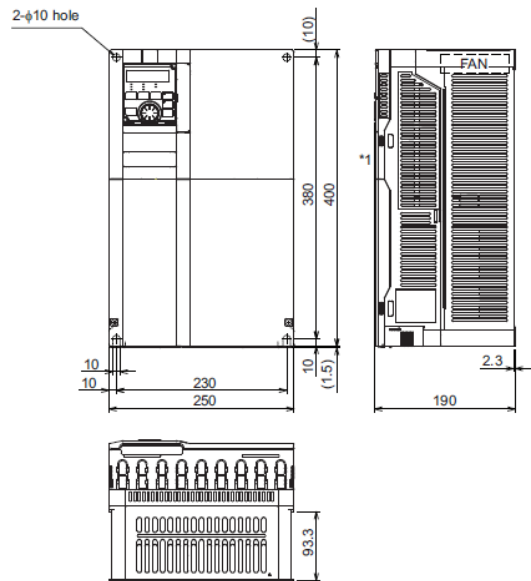


■ FR-A840-11K, 15K

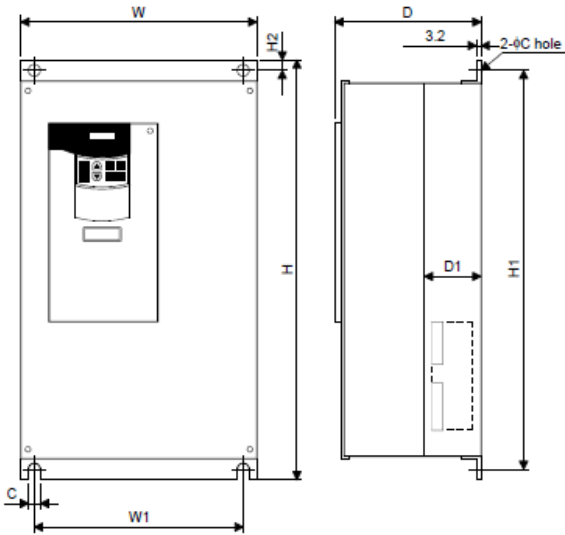


Inverter model	H	H1	H2	D	D1
FR-A840-11K, 15K	300	285	3	190	101.5

■ FR-A840-18.5K, 22K



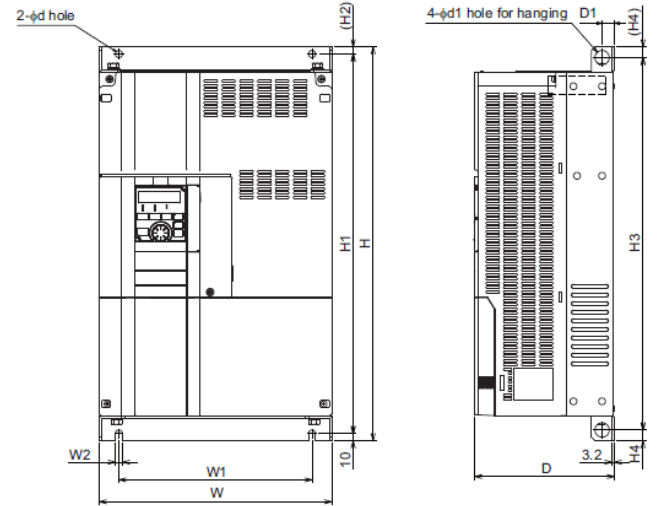
■ FR-A540-30K, 37K, 45K, 55K



Inverter model	W	W1	W2	H	H1	H2
FR-A540-30K	340	270	320	550	530	10
FR-A540-37K, 45K, 55K	450	380	430	550	525	15

Inverter model	D	D1	C
FR-A540-30K	195	71.5	10
FR-A540-37K, 45K, 55K	250	154	12

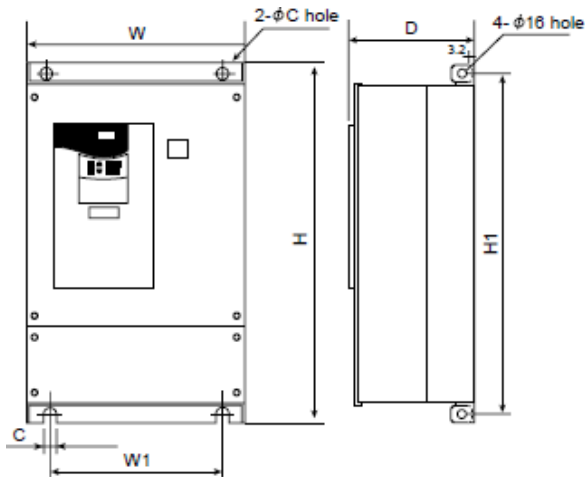
■ FR-A840-30K, 37K, 45K, 55K, 75K, 90K



Inverter model	W	W1	W2	H	H1	H2
FR-A840-30K	325	270	10	550	530	10
FR-A840-37K, 45K, 55K	435	380	12	550	525	15
FR-A840-75K, 90K	465	400	12	620	595	15

Inverter model	H3	H4	d	d1	D	D1
FR-A840-30K	520	15	10	20	195	17
FR-A840-37K, 45K, 55K	514	18	12	25	250	24
FR-A840-75K, 90K	584	18	12	24	300	22

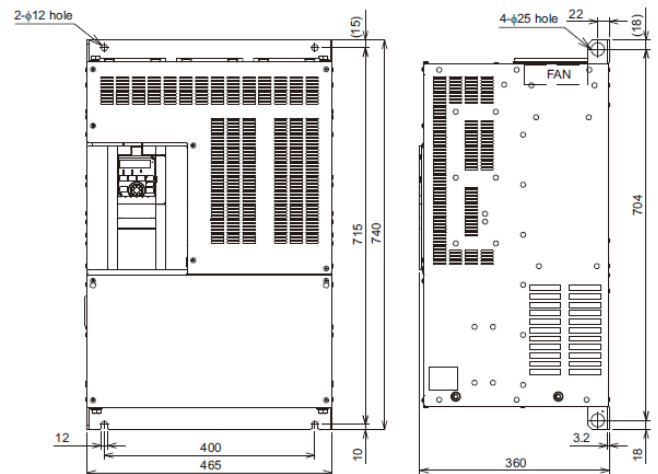
■ FR-A540L-75K, 90K, 110K



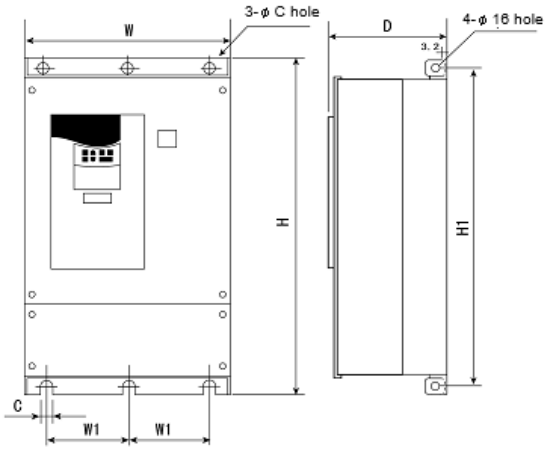
Inverter model	W	W1	W2	H	H1
FR-A540L-75K, 90K, 110K	480	400	456	740	714

Inverter model	D	D1	C
FR-A540L-75K, 90K, 110K	360	160	10

■ FR-A840-110K



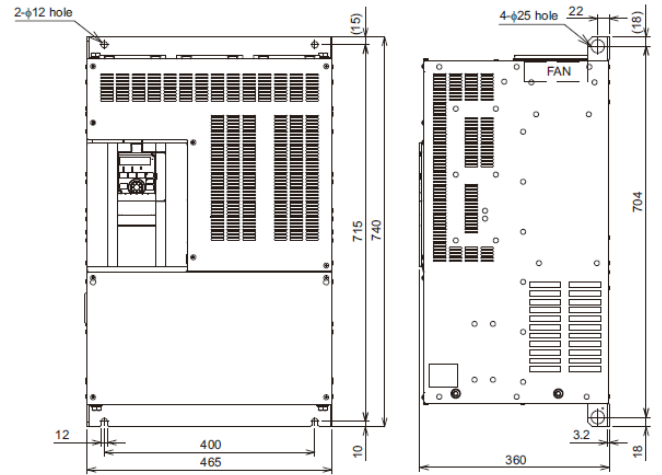
■ FR-A540L-132K, 160K, 220K, 280K



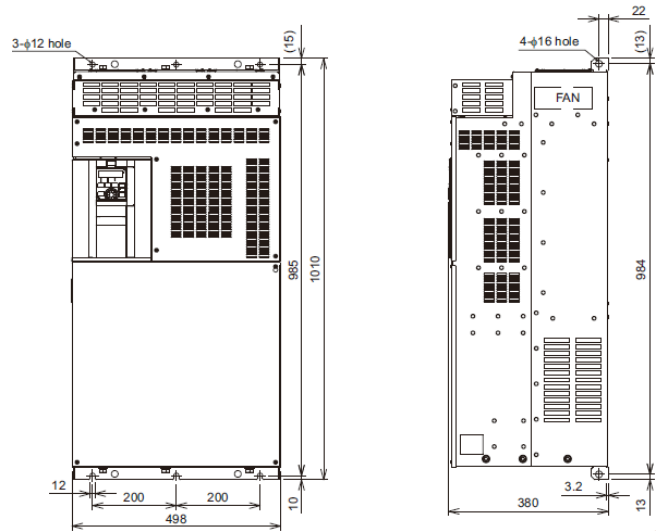
Inverter model	W	W1	W2	H	H1
FR-A540L-132K, 160K	498	200	474	1010	984
FR-A540L-220K	680	300	656	1010	984
FR-A540L-280K	790	315	766	1330	1300

Inverter model	D	D1	C
FR-A540L-132K, 160K	380	185	10
FR-A540L-220K	380	185	10
FR-A540L-280K	440	196	12

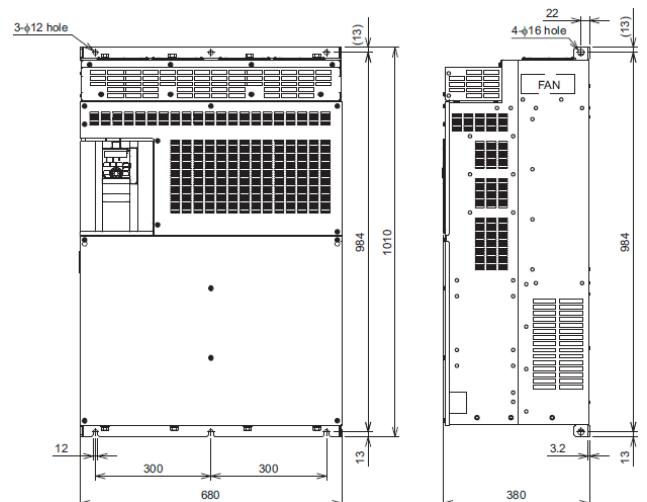
■ FR-A840-132K



■ FR-A840-160K, 185K



■ FR-A840-220K, 250K, 280K



3. WIRING

The wiring of the new inverters can follow the one of the existing inverters as the terminal names between them are almost the same.

Type		A500(L) terminal name	A800 compatible terminal name
Main circuit		R, S, T	R/L1, S/L2, T/L3
		U, V, W	U, V, W
		R1, S1	R1/L11, S1/L21
		P/+, PR	P/+, PR P3, PR*1
		P/+, N/-	P/+, N/- P3, N/*2
		P/+, P1	P/+, P1
		PR, PX ⊕	PR, PX ⊕
Control circuit / input signal	Contact	STF	STF
		STR	STR
		STOP	STP (STOP)
		RH	RH
		RM	RM
		RL	RL
		JOG	JOG
		RT	RT
		AU	AU
		CS	CS
		MRS	MRS
		RES	RES
		SD	SD
PC	PC		
Analog	Frequency setting	10E	10E
		10	10
		2	2
		4	4
		1	1
Control circuit output signal	Relay	A, B, C	A1, B1, C1
		RUN	RUN
	Open collector	SU	SU
		OL	OL
		IPF	IPF
		FU	FU
	Pulse	SE	SE
		FM	FM
Analog	AM	AM	
Communication	RS-485	PU connector	PU connector

*1) For the FR-A820-15K to 22K and the FR-A840-18.5K to 55K, connect the brake resistor between P3 and PR.

*2) For the FR-A820-15K to 22K and the FR-A840-18.5K to 55K, connect the brake unit between P3 and N/-.

Main circuit terminal layout

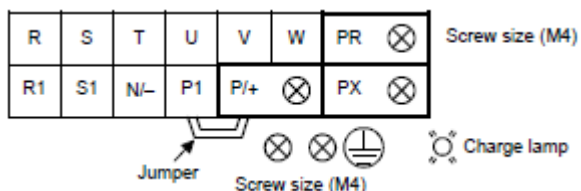
The following shows the main circuit terminal layouts of the FR-A500(L) series and the FR-A800 series. The main circuit terminal layout and the position of the earth (ground) terminal may differ depending on the capacity. Check the terminal names and positions before performing wiring.

When the cable used for the FR-A500 series is too short for the FR-A800 series, prepare the longer one.

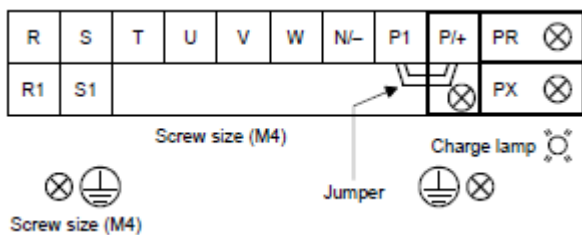
The terminal screw size may differ depending on the capacity. Check the terminal screw size before performing wiring.

[200 V class]

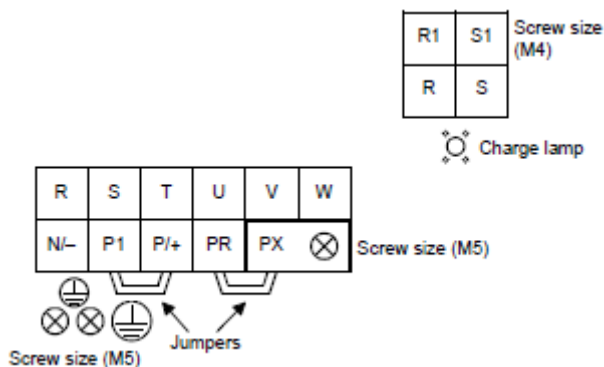
■ FR-A520-0.4K, 0.75K



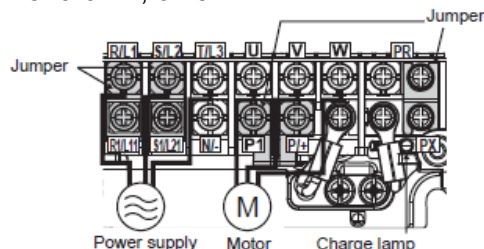
■ FR-A520-1.5K, 2.2K, 3.7K



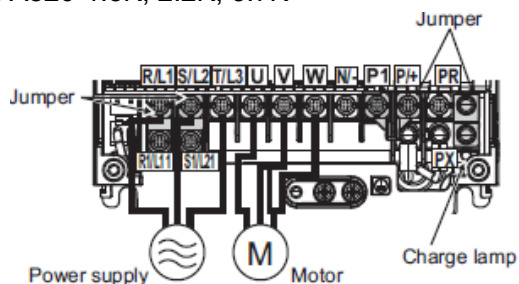
■ FR-A520-5.5K, 7.5K



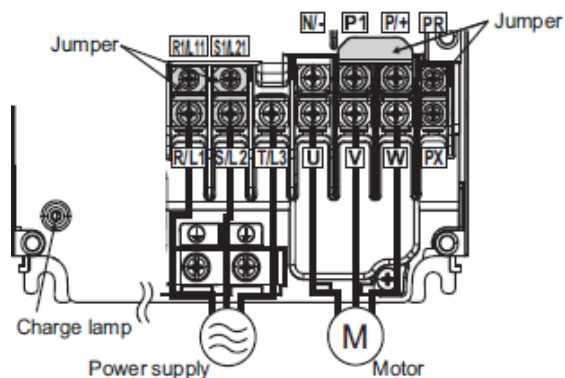
■ FR-A820-0.4K, 0.75K



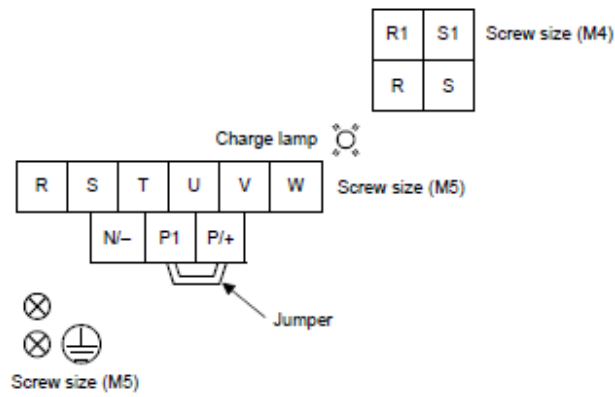
■ FR-A820-1.5K, 2.2K, 3.7K



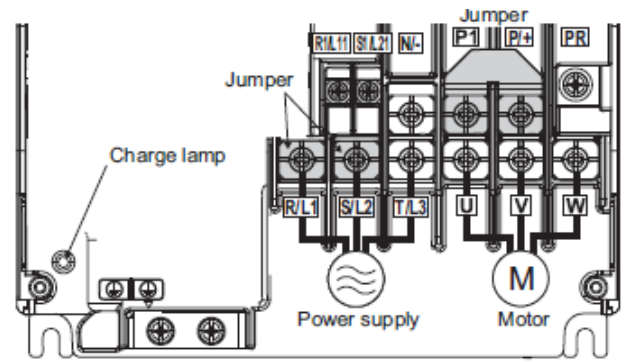
■ FR-A820-5.5K, 7.5K



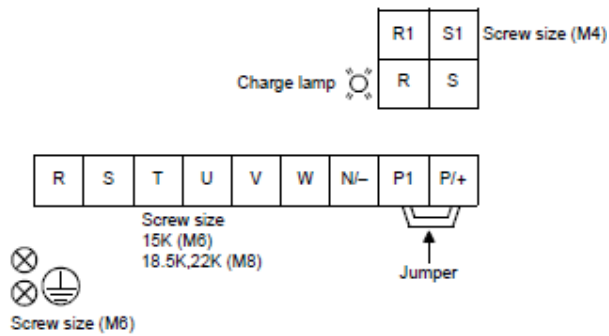
■ FR-A520-11K



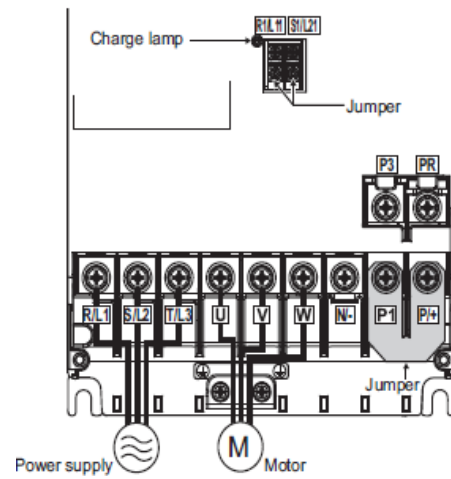
■ FR-A820-11K



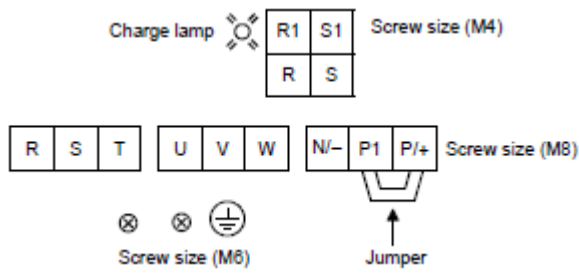
■ FR-A520-15K, 18.5K, 22K



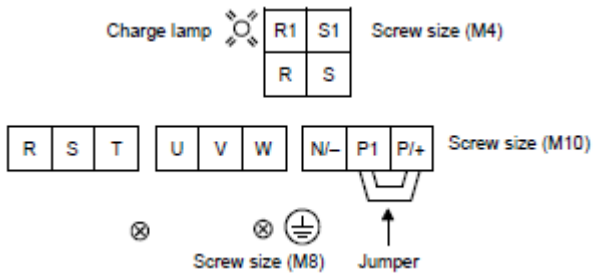
■ FR-A820-15K, 18.5K, 22K



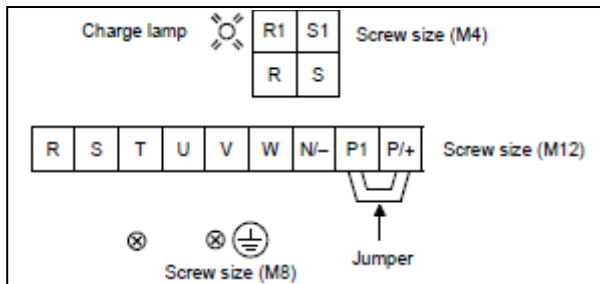
■ FR-A520-30K



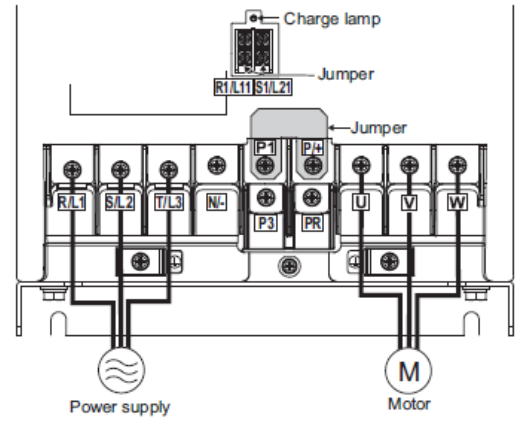
■ FR-A520-37K, 45K



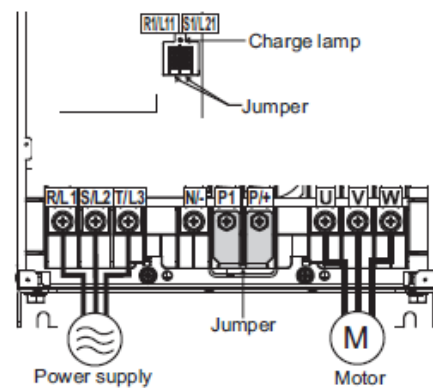
■ FR-A520-55K



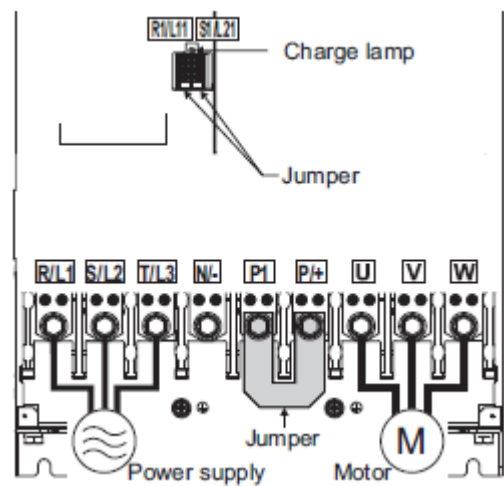
■ FR-A820-30K



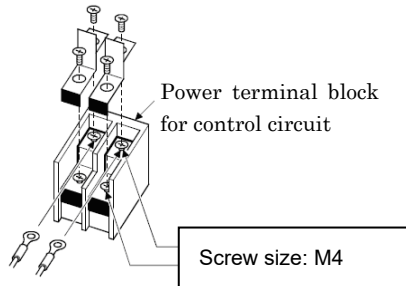
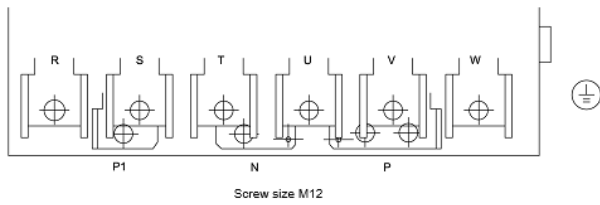
■ FR-A820-37K, 45K



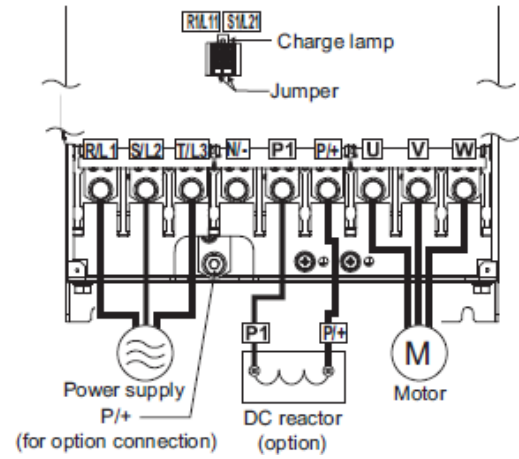
■ FR-A820-55K



■ FR-A520L-75K, 90K

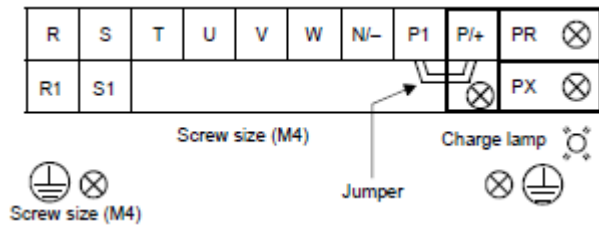


■ FR-A820-75K, 90K

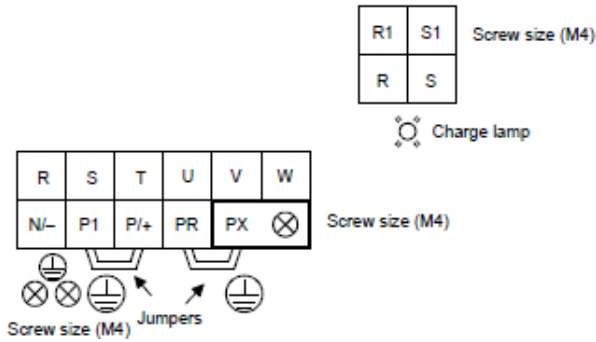


[400 V class]

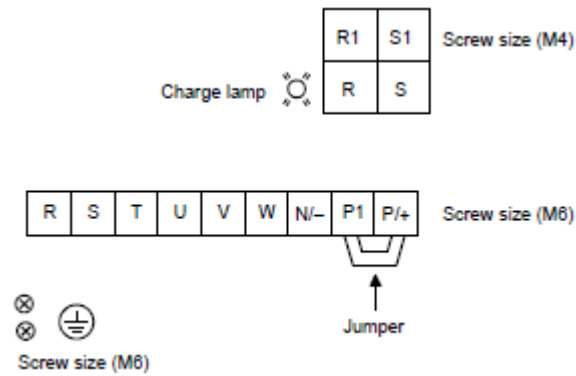
■ FR-A540-0.4K, 0.75K, 1.5K, 2.2K, 3.7K



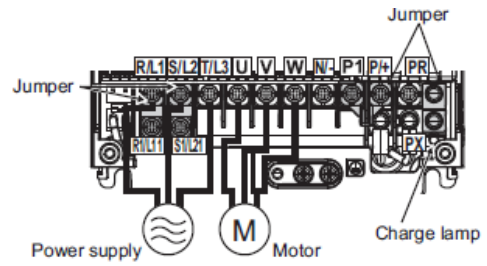
■ FR-A540-5.5K, 7.5K



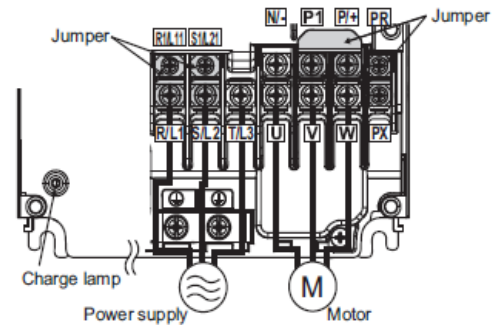
■ FR-A540-11K, 15K, 18.5K, 22K



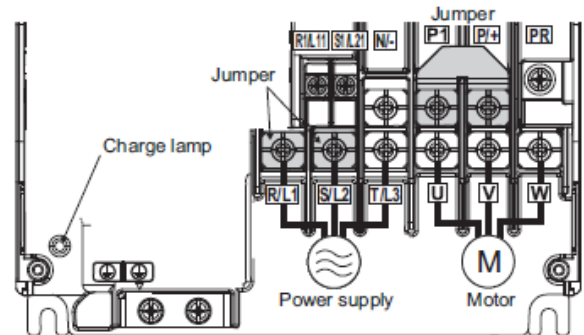
■ FR-A840-0.4K, 0.75K, 1.5K, 2.2K, 3.7K



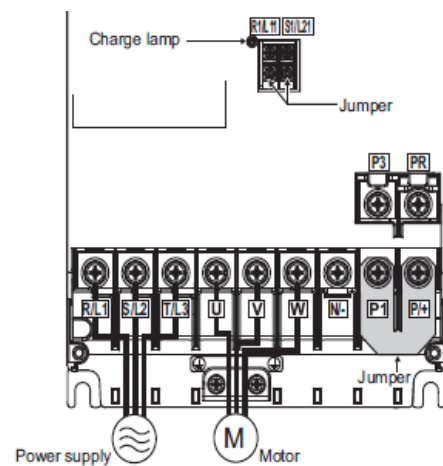
■ FR-A840-5.5K, 7.5K



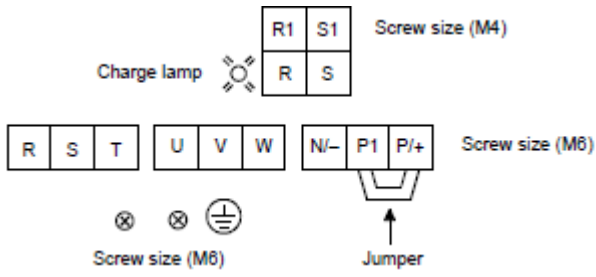
■ FR-A840-11K, 15K



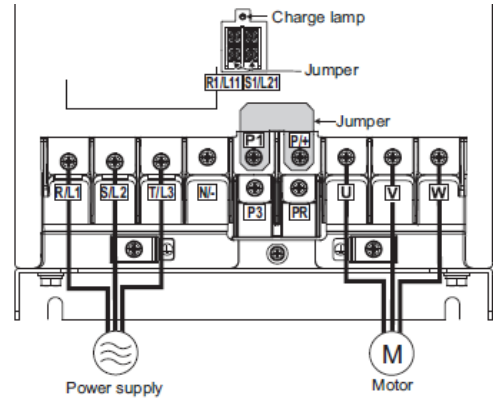
■ FR-A840-18.5K, 22K



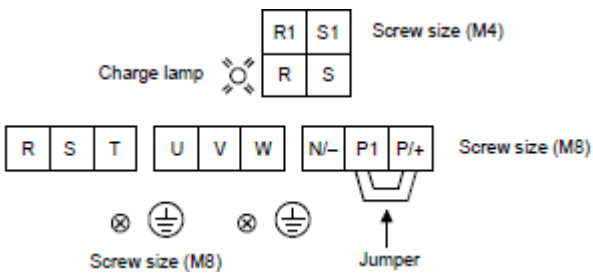
■ FR-A540-30K



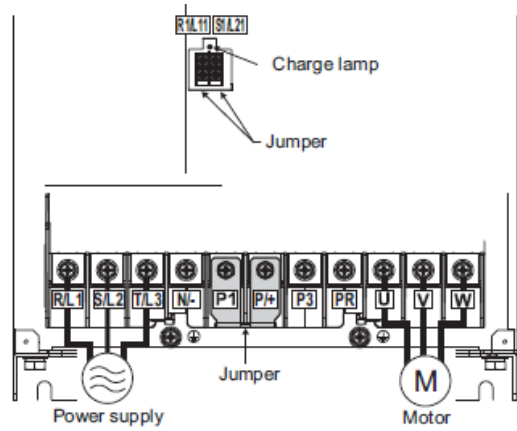
■ FR-A840-30K



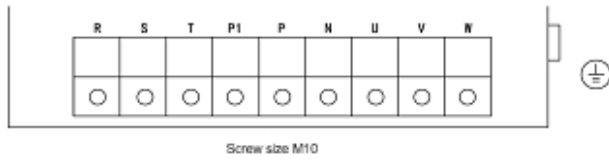
■ FR-A540-37K, 45K, 55K



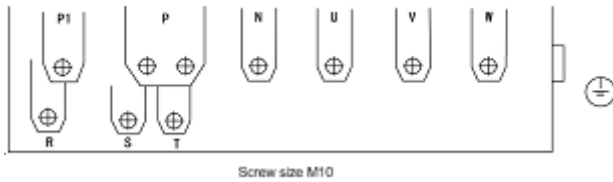
■ FR-A840-37K, 45K, 55K



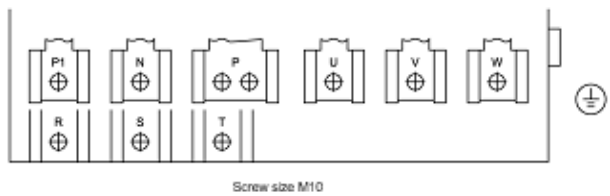
■ FR-A540L-75K, 90K (Type-01)



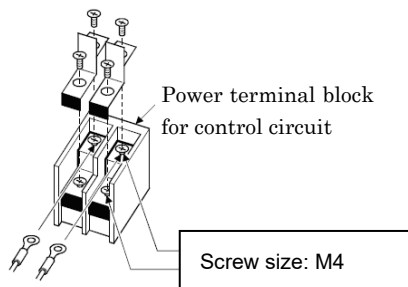
■ FR-A540L-110K (Type-01)



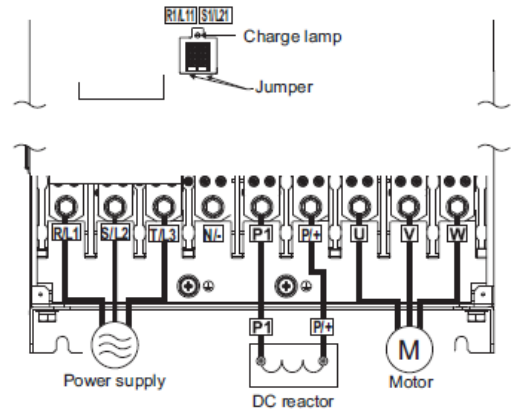
■ FR-A540L-75K, 90K, 110K (No type indication)



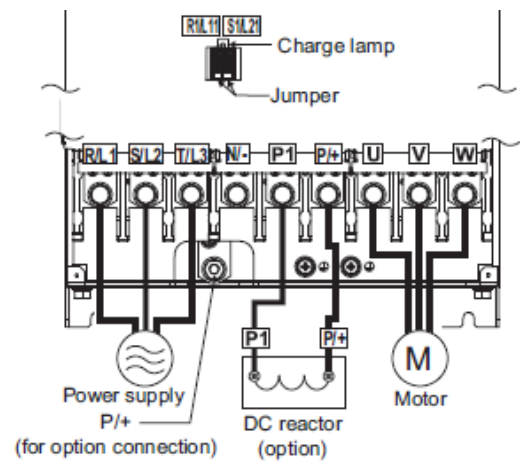
FR-A540L-75K, 90K, 110K Power terminal block for control circuit (R1, S1)
(used for both Type-01 inverters and inverters without type indication)



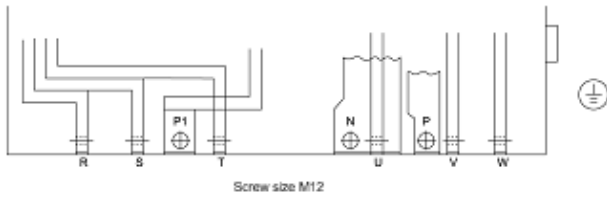
■ FR-A840-75K, 90K



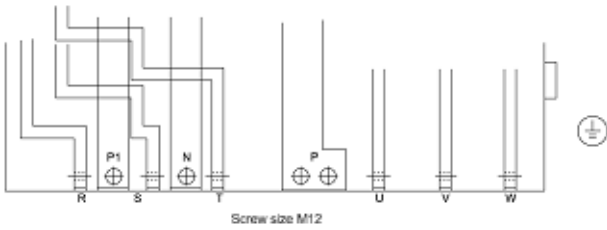
■ FR-A840-110K, 132K, 160K, 185K



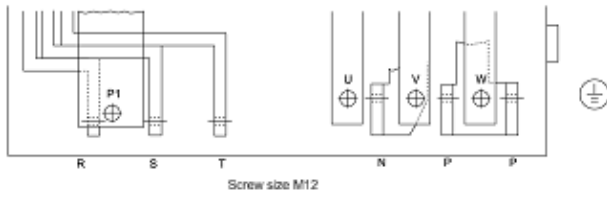
■ FR-A540L-132K, 160K



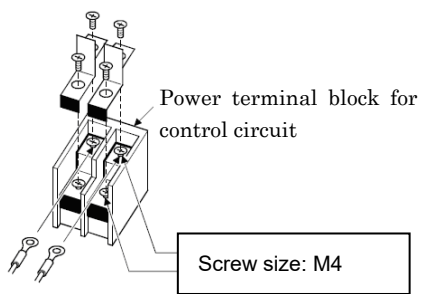
■ FR-A540L-220K



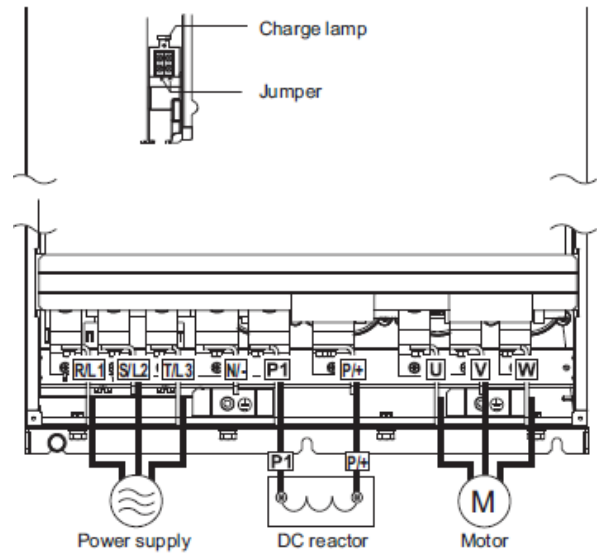
■ FR-A540L-280K



FR-A540L-132K, 160K, 220K, 280K Power terminal block for control circuit (R1, S1)



■ FR-A840-220K, 250K, 280K

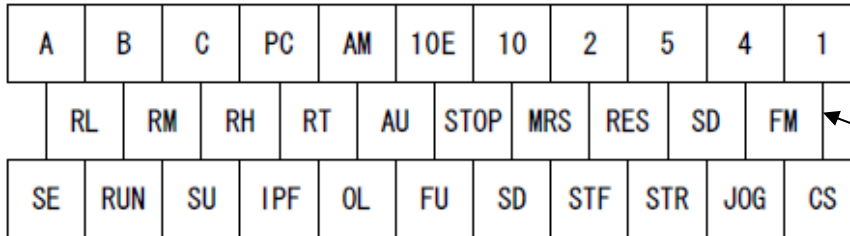


Control circuit terminal layout

The following shows the control circuit terminal layouts of the FR-A500(L) series and the FR-A800 series.

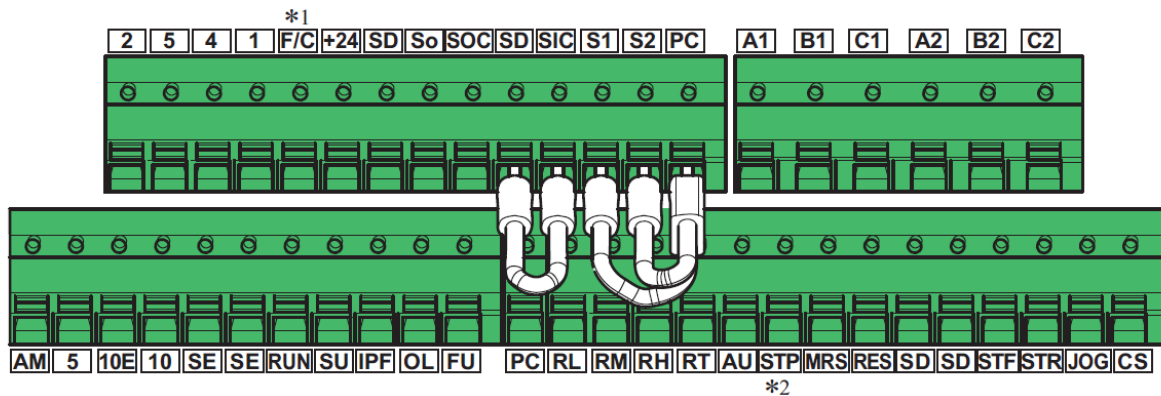
The control circuit terminal layout differs between the FR-A500(L) and the FR-A800 series. Check the terminal names and positions before performing wiring.

■ Control circuit terminal layout of the FR-A500(L) series



Terminal screw size: M3.5
Tightening torque: 1.2 N·m

■ Control circuit terminal layout of the FR-A800 series



*1) This terminal operates as terminal FM for the FM type inverter and as terminal CA for the CA type inverter.

*2) Represents terminal STOP.

The control circuit terminal block intercompatibility attachment (FR-A8TAT) can be used for installing control circuit terminal blocks of the FR-A500(L) series. However, some restrictions apply for the installation. Refer to the FR-A8TAT Instruction Manual.

◆ Wiring method

- Power supply connection

For the control circuit wiring, strip off the sheath of a cable, and use it with a blade terminal. For a single wire, strip off the sheath of the wire and apply directly.

Insert the blade terminal or the single wire into a socket of the terminal.

(1) Strip off the sheath for the below length. If the length of the sheath peeled is too long, a short circuit may occur with neighboring wires. If the length is too short, wires might come off.

Wire the stripped cable after twisting it to prevent it from becoming loose. In addition, do not solder it.

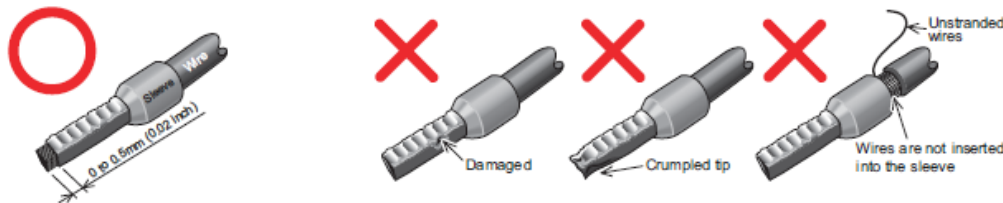
Cable stripping size



(2) Crimp the blade terminal.

Insert wires to a blade terminal, and check that the wires come out for about 0 to 0.5 mm from a sleeve.

Check the condition of the blade terminal after crimping. Do not use a blade terminal of which the crimping is inappropriate, or the face is damaged.



- Blade terminals commercially available (as of February 2012)
Phoenix Contact Co., Ltd.

Cable gauge (mm ²)	Blade terminal model			Crimping tool name
	With insulation sleeve	Without insulation sleeve	For UL wire*1	
0.3	AI 0,5-10WH	—	—	CRIMPFOX 6
0.5	AI 0,5-10WH	—	AI 0,5-10WH-GB	
0.75	AI 0,75-10GY	A 0,75-10	AI 0,75-10GY-GB	
1	AI 1-10RD	A 1-10	AI 1-10RD/1000GB	
1.25, 1.5	AI 1,5-10BK	A 1,5-10	AI 1,5-10BK/1000GB*2	
0.75 (for two wires)	AI-TWIN 2 × 0,75-10GY	—	—	

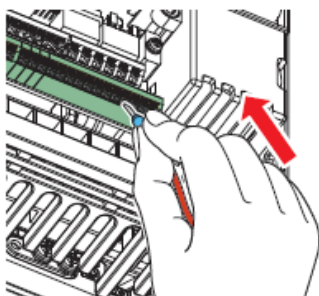
*1 A blade terminal with an insulation sleeve compatible with the MTW wire which has a thick wire insulation.

*2 Applicable for the terminal A1, B1, C1, A2, B2, C2.

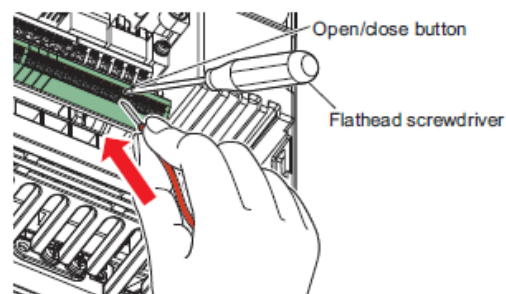
NICHIFU Co., Ltd.

Cable gauge (mm ²)	Blade terminal product number	Insulation product number	Crimping tool product number
0.3 to 0.75	BT 0.75-11	VC 0.75	NH 69

(3) Insert the wires into a socket.



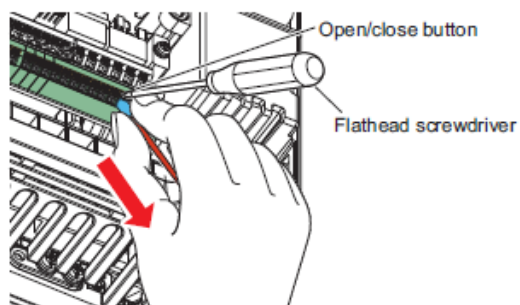
When using a single wire or stranded wires without a blade terminal, push the open/close button all the way down with a flathead screwdriver, and insert the wire.



NOTE

- When using stranded wires without a blade terminal, twist enough to avoid short circuit with a nearby terminals or wires.
- Place the flathead screwdriver vertical to the open/close button. In case the blade tip slips, it may cause an inverter damage or injury.

- Wire removal
Pull the wire while pushing the open/close button all the way down firmly with a flathead screwdriver.



NOTE

- Pulling out the wire forcefully without pushing the open/close button all the way down may damage the terminal block.
 - Use a small flathead screwdriver (tip thickness: 0.4 mm/tip width: 2.5 mm).
If a flathead screwdriver with a narrow tip is used, terminal block may be damaged.
- Commercially available products (as of February 2012)

Name	Model	Manufacturer
Driver	SZF 0-0,4 × 2,5	Phoenix Contact Co., Ltd.

- Place the flathead screwdriver vertical to the open/close button. In case the blade tip slips, it may cause an inverter damage or injury.

4. PARAMETER

4.1. Parameter List

List of FR-A800 series parameters compatible with the FR-A500 series

The following table shows the parameter settings required when replacing FR-A500 series inverters with FR-A800 series inverters.

When an FR-A500 series parameter is set to a value other than the initial value, set the corresponding FR-A800 series parameter according to the following table.

When an FR-A500 series parameter is set to an initial value, it is usually not necessary to change the corresponding FR-A800 series parameter setting.

The parameters with Δ are used for adjustment. Set them as required.

The parameter replacement following the table below does not guarantee the inverter characteristics or performance.

The parameter number of the parameters differs from that of the FR-A500 series inverter.

Setting \odot : Set the FR-A500 parameter as it is.

Δ : Change the FR-A500 parameter and set.

\times : Adjust or set the FR-A800 parameter.

FR-A500 parameter list				FR-A800 compatible parameter				Parameter setting	
Pr.	Name	Setting range	Initial value	Pr.	Name	Setting range	Initial value	Setting	Remarks
0	Torque boost (manual)	0% to 30%	0.75K or lower: 6% 1.5K to 3.7K: 4% 5.5K to 7.5K: 3% 11K or higher: 2%	0	Torque boost (manual)	0% to 30%	0.75K or lower: 6% 1.5K to 3.7K: 4% 5.5K to 7.5K: 3% 11K to 55K: 2% 75K or higher: 1%	Δ	
1	Maximum frequency	0 to 120 Hz	120 Hz	1	Maximum frequency	0 to 120 Hz	55K or lower: 120 Hz 75K or higher: 60 Hz	\odot	
2	Minimum frequency	0 to 120 Hz	0 Hz	2	Minimum frequency	0 to 120 Hz	0 Hz	\odot	
3	Base frequency	0 to 400 Hz	60 Hz	3	Base frequency	0 to 590 Hz	60 Hz	\odot	
4	Multi-speed setting (high speed)	0 to 400 Hz	60 Hz	4	Multi-speed setting (high speed)	0 to 590 Hz	60 Hz	\odot	
5	Multi-speed setting (middle speed)	0 to 400 Hz	30 Hz	5	Multi-speed setting (middle speed)	0 to 590 Hz	30 Hz	\odot	
6	Multi-speed setting (low speed)	0 to 400 Hz	10 Hz	6	Multi-speed setting (low speed)	0 to 590 Hz	10 Hz	\odot	
7	Acceleration time	0 to 3600 s/ 0 to 360 s	7.5K or lower: 5 s 11K or higher: 15 s	7	Acceleration time	0 to 3600 s	7.5K or lower: 5 s 11K or higher: 15 s	\odot	Changing Pr.21 after setting this parameter will change the set value.
8	Deceleration time	0 to 3600 s/ 0 to 360 s	7.5K or lower: 5 s 11K or higher: 15 s	8	Deceleration time	0 to 3600 s	7.5K or lower: 5 s 11K or higher: 15 s	\odot	Changing Pr.21 after setting this parameter will change the set value.
9	Electronic thermal O/L relay	0 to 500 A	Rated output current	9	Electronic thermal O/L relay	55K or lower: 0 to 500 A 75K or higher: 0 to 3600 A	Rated output current	\odot	Set the rated motor current.
10	DC injection brake operation frequency	0 to 120 Hz, 9999	3 Hz	10	DC injection brake operation frequency	0 to 120 Hz, 9999	3 Hz	\odot	
11	DC injection brake operation time	0 to 10 s, 8888	0.5 s	11	DC injection brake operation time	0 to 10 s, 8888	0.5 s	\odot	
12	DC injection brake voltage	0% to 30%	7.5K or lower: 4% 11K or higher: 2%	12	DC injection brake operation voltage	0% to 30%	7.5K or lower: 4% 11K to 55K: 2% 75K or higher: 1%	Δ	
13	Starting frequency	0 to 60 Hz	0.5 Hz	13	Starting frequency	0 to 60 Hz	0.5 Hz	\odot	
14	Load pattern selection	0 to 5	0	14	Load pattern selection	0 to 5, 12 to 15	0	\odot	
15	Jog frequency	0 to 400 Hz	5 Hz	15	Jog frequency	0 to 590 Hz	5 Hz	\odot	
16	Jog acceleration/deceleration time	0 to 3600 s/ 0 to 360 s	0.5 s	16	Jog acceleration/deceleration time	0 to 3600 s	0.5 s	\odot	Changing Pr.21 after setting this parameter will change the set value.
17	MRS input selection	0, 2	0	17	MRS input selection	0, 2, 4	0	\odot	
18	High-speed maximum frequency	120 to 400 Hz	120 Hz	18	High speed maximum frequency	0 to 590 Hz	55K or lower: 120 Hz 75K or higher: 60 Hz	\odot	
19	Base frequency voltage	0 to 1000 V, 8888, 9999	9999	19	Base frequency voltage	0 to 1000 V, 8888, 9999	9999	\odot	

FR-A500 parameter list				FR-A800 compatible parameter				Parameter setting	
Pr.	Name	Setting range	Initial value	Pr.	Name	Setting range	Initial value	Setting	Remarks
20	Acceleration/deceleration reference frequency	1 to 400 Hz	60 Hz	20	Acceleration/deceleration reference frequency	1 to 590 Hz	60 Hz	⊙	
21	Acceleration/deceleration time increments	0, 1	0	21	Acceleration/deceleration time increments	0, 1	0	⊙	
22	Stall prevention operation level	0% to 200%, 9999	150%	22	Stall prevention operation level	0% to 400%	150%*	△	When the FR-A500 setting is other than "9999", set the same value for the FR-A800. When the FR-A500 setting is "9999", set Pr.810 = "1" and Pr.868 = "4" for the FR-A800.
				810	Torque limit input method selection	0, 1	0	×	
				868	Terminal 1 function assignment	0 to 6, 9999	0	×	
23	Stall prevention operation level compensation factor at double speed	0% to 200%, 9999	9999	23	Stall prevention operation level compensation factor at double speed	0% to 200%, 9999	9999	⊙	
24	Multi-speed setting (speed 4)	0 to 400 Hz, 9999	9999	24	Multi-speed setting (speed 4)	0 to 590 Hz, 9999	9999	⊙	
25	Multi-speed setting (speed 5)	0 to 400 Hz, 9999	9999	25	Multi-speed setting (speed 5)	0 to 590 Hz, 9999	9999	⊙	
26	Multi-speed setting (speed 6)	0 to 400 Hz, 9999	9999	26	Multi-speed setting (speed 6)	0 to 590 Hz, 9999	9999	⊙	
27	Multi-speed setting (speed 7)	0 to 400 Hz, 9999	9999	27	Multi-speed setting (speed 7)	0 to 590 Hz, 9999	9999	⊙	
28	Multi-speed input compensation	0, 1	0	28	Multi-speed input compensation selection	0, 1	0	⊙	
29	Acceleration/deceleration pattern	0, 1, 2, 3	0	29	Acceleration/deceleration pattern selection	0 to 6	0	⊙	
30	Regenerative function selection	0, 1, 2	0	30	Regenerative function selection	0 to 2, 10, 11, 20, 21, 100 to 102, 110, 111, 120, 121	0	⊙	
31	Frequency jump 1A	0 to 400 Hz, 9999	9999	31	Frequency jump 1A	0 to 590 Hz, 9999	9999	⊙	
32	Frequency jump 1B	0 to 400 Hz, 9999	9999	32	Frequency jump 1B	0 to 590 Hz, 9999	9999	⊙	
33	Frequency jump 2A	0 to 400 Hz, 9999	9999	33	Frequency jump 2A	0 to 590 Hz, 9999	9999	⊙	
34	Frequency jump 2B	0 to 400 Hz, 9999	9999	34	Frequency jump 2B	0 to 590 Hz, 9999	9999	⊙	
35	Frequency jump 3A	0 to 400 Hz, 9999	9999	35	Frequency jump 3A	0 to 590 Hz, 9999	9999	⊙	
36	Frequency jump 3B	0 to 400 Hz, 9999	9999	36	Frequency jump 3B	0 to 590 Hz, 9999	9999	⊙	
37	Speed display	0, 1 to 9998	0	37	Speed display	0, 1 to 9998	0	⊙	When the machine speed display is selected in the parameter frequency setting, select the frequency display to change the setting. After the setting, select the machine speed display again.
41	Up-to-frequency sensitivity	0% to 100%	10%	41	Up-to-frequency sensitivity	0% to 100%	10%	⊙	
42	Output frequency detection	0 to 400 Hz	6 Hz	42	Output frequency detection	0 to 590 Hz	6 Hz	⊙	

* When 150% is set for the inverter rated current after the change, set as follows: $150\% \times (\text{A500 rated current}) / (\text{A800 rated current})$.

FR-A500 parameter list				FR-A800 compatible parameter				Parameter setting	
Pr.	Name	Setting range	Initial value	Pr.	Name	Setting range	Initial value	Setting	Remarks
43	Output frequency detection for reverse rotation	0 to 400 Hz, 9999	9999	43	Output frequency detection for reverse rotation	0 to 590 Hz, 9999	9999	⊙	
44	Second acceleration/deceleration time	0 to 3600 s/ 0 to 360 s	5 s	44	Second acceleration/deceleration time	0 to 3600 s	5 s	⊙	Changing Pr.21 after setting this parameter will change the set value.
45	Second deceleration time	0 to 3600 s/ 0 to 360 s, 9999	9999	45	Second deceleration time	0 to 3600 s, 9999	9999	⊙	Changing Pr.21 after setting this parameter will change the set value.
46	Second torque boost	0% to 30%, 9999	9999	46	Second torque boost	0% to 30%, 9999	9999	⊙	
47	Second V/F (base frequency)	0 to 400 Hz, 9999	9999	47	Second V/F (base frequency)	0 to 590 Hz, 9999	9999	⊙	
48	Second stall prevention operation current	0% to 200%	150%	48	Second stall prevention operation level	0% to 400%	150%*	⊙	
49	Second stall prevention operation frequency	0 to 400 Hz, 9999	0	49	Second stall prevention operation frequency	0 to 590 Hz, 9999	0	⊙	
50	Second output frequency detection	0 to 400 Hz	30 Hz	50	Second output frequency detection	0 to 590 Hz	30 Hz	⊙	
52	DU/PU main display data selection	0 to 20, 22, 23, 24, 25, 100	0	52	Operation panel main monitor selection	0, 5 to 14, 17 to 20, 22 to 35, 38, 40 to 45, 50 to 57, 61, 62, 64, 67, 87 to 98, 100	0	⊙	
53	PU level display data selection	0 to 3, 5 to 14, 17, 18	1	—				×	This parameter is not available for the FR-A800.
54	FM terminal function selection	1 to 3, 5 to 14, 17, 18, 21	1	54	FM/CA terminal function selection	1 to 3, 5 to 14, 17, 18, 21, 24, 32 to 34, 50, 52, 53, 61, 62, 67, 70 87 to 90, 92, 93, 95, 97, 98	1	⊙	
55	Frequency monitoring reference	0 to 400 Hz	60 Hz	55	Frequency monitoring reference	0 to 590 Hz	60 Hz	⊙	
56	Current monitoring reference	0 to 500 A	Rated output current	56	Current monitoring reference	55K or lower: 0 to 500 A 75K or higher: 0 to 3600 A	Rated output current	⊙	
57	Restart coasting time	0, 0.1 to 5 s, 9999	9999	57	Restart coasting time	0, 0.1 to 30 s, 9999	9999	⊙	If the CS signal is not assigned to any input terminal, the restart operation is enabled at all times by setting Pr.57 in the FR-A800.
58	Restart cushion time	0 to 60 s	1.0 s	58	Restart cushion time	0 to 60 s	1.0 s	⊙	
59	Remote setting function selection	0, 1, 2	0	59	Remote setting function selection	0 to 3, 11 to 13	0	⊙	
60	Intelligent mode selection	0 to 8	0	60	Energy saving control selection	0, 4, 9	0	△	When the FR-A500 setting is "0 or 4", set the same value. When the setting is other than "0 or 4", use Pr.292 for setting the value.
				292	Automatic acceleration/deceleration	0, 1, 3, 5 to 8, 11	0	△	When the FR-A500 setting is "1, 3, 5, 6, 7 or 8", set the same value. When the setting is "2", set Pr.292 = "1", Pr.62 = 180%, and Pr.63 = 180% for the FR-A800.
61	Reference I for intelligent mode	0 to 500 A, 9999	9999	61	Reference current	55K or lower: 0 to 500 A, 9999 75K or higher: 0 to 3600 A, 9999	9999	⊙	When the FR-A500 setting is "9999" and the current ratings are different between the FR-A500 and the FR-A800, set the rated current value of the FR-A500 for the FR-A800.
62	Ref. I for intelligent mode accel.	0% to 200%, 9999	9999	62	Reference current value at acceleration	0% to 400%, 9999	9999	⊙	
63	Ref. I for intelligent mode decel.	0% to 200%, 9999	9999	63	Reference current value at deceleration	0% to 400%, 9999	9999	⊙	
64	Starting frequency for elevator mode	0 to 10 Hz, 9999	9999	64	Starting frequency for elevator mode	0 to 10 Hz, 9999	9999	⊙	
65	Retry selection	0 to 5	0	65	Retry selection	0 to 5	0	⊙	

FR-A500 parameter list				FR-A800 compatible parameter				Parameter setting	
Pr.	Name	Setting range	Initial value	Pr.	Name	Setting range	Initial value	Setting	Remarks
66	Stall prevention operation level reduction starting frequency	0 to 400 Hz	60 Hz	66	Stall prevention operation reduction starting frequency	0 to 590 Hz	60 Hz	⊙	
67	Number of retries at alarm occurrence	0 to 10, 101 to 110	0	67	Number of retries at fault occurrence	0 to 10, 101 to 110	0	⊙	
68	Retry waiting time	0 to 10 s	1 s	68	Retry waiting time	0.1 to 600 s	1 s	⊙	
69	Retry count display erasure	0	0	69	Retry count display erase	0	0	⊙	
70	Special regenerative brake duty	0.4K to 1.5K: 0% to 15% 2.2K to 7.5K: 0% to 30% 11K or higher: 0%	0%	70	Special regenerative brake duty	0% to 100%	0%	⊙	
71	Applied motor	0 to 8, 13 to 18, 20, 23, 24	0	71	Applied motor	0 to 6, 13 to 16, 20, 23, 24, 30, 33, 34, 40, 43, 44, 50, 53, 54, 70, 73, 74, 330, 333, 334, 8090, 8093, 8094, 9090, 9093, 9094	0	△	FR-A500 → FR-A800 The values in parentheses are for when Pr.96 of the FR-A500 is set to "3 or 103". 7 → 5 (3) 8 → 6 (3) 17 → 15 (13) 18 → 16 (13)
72	PWM frequency selection	0 to 15	2	72	PWM frequency selection	55K or lower: 0 to 15 75K or higher: 0 to 6, 25	2	⊙	
73	0-5V/0-10V selection	0 to 5, 10 to 15	1	73	Analog input selection	0 to 7, 10 to 17	1	⊙	
74	Filter time constant	0 to 8	1	74	Input filter time constant	0 to 8	1	⊙	
75	Reset selection/disconnected PU detection/PU stop selection	0 to 3, 14 to 17	14	75	Reset selection/disconnected PU detection/PU stop selection	55K or lower: 0 to 3, 14 to 17 75K or higher: 0 to 3, 14 to 17, 100 to 103, 114 to 117	14	⊙	
76	Alarm code output selection	0, 1, 2, 3	0	76	Fault code output selection	0, 1, 2	0	△	For the FR-A800, Pr.76 cannot be set to "3" because the program operation function was deleted.
77	Parameter write disable selection	0, 1, 2	0	77	Parameter write selection	0, 1, 2	0	⊙	
78	Reverse rotation prevention selection	0, 1, 2	0	78	Reverse rotation prevention selection	0, 1, 2	0	⊙	
79	Operation mode selection	0 to 8	0	79	Operation mode selection	0 to 4, 6, 7	0	△	For the FR-A800, Pr.79 cannot be set to "5" because the program operation function was deleted. When the FR-A500 setting is "8", set "0" for the FR-A800 and assign the X16 signal to the control input terminal.
80	Motor capacity	0.4 to 55 kW, 9999	9999	80	Motor capacity	55K or lower: 0.4 to 55 kW, 9999 75K or higher: 0 to 3600 kW, 9999	9999	⊙	
81	Number of motor poles	2, 4, 6, 12, 14, 16, 9999	9999	81	Number of motor poles	2, 4, 6, 8, 10, 12, 9999	9999	△	The setting values "2 to 6" and "9999" can be set as is, but "12 to 16" must be set after subtracting 10.
(82)	Motor excitation current	0 to ****, 9999	9999	82	Motor excitation current	55K or lower: 0 to 500 A, 9999 75K or higher: 0 to 3600 A, 9999	9999	△	The value can be read when Pr.77 = "801" for the FR-A500. To use this parameter of the FR-A800, set Pr.71 = "4 or 14" or perform auto tuning again.
83	Rated motor voltage	0 to 1000 V	200 V class: 200 V 400 V class: 400 V	83	Rated motor voltage	0 to 1000 V	200 V class: 200 V 400 V class: 400 V	⊙	
84	Rated motor frequency	50 to 120 Hz	60 Hz	84	Rated motor frequency	10 to 400 Hz, 9999	9999	⊙	
89	Speed control gain	0% to 200%	100%	89	Speed control gain	0% to 200%, 9999	9999	⊙	The value can be read when Pr.77 = "801" for the FR-A500.

FR-A500 parameter list				FR-A800 compatible parameter				Parameter setting	
Pr.	Name	Setting range	Initial value	Pr.	Name	Setting range	Initial value	Setting	Remarks
(90)	Motor constant R1	0 to ****, 9999	9999	90	Motor constant R1	55K or lower: 0 to 50 Ω, 9999 75K or higher: 0 to 400 mΩ, 9999	9999	△	The value can be read when Pr.77 = "801" for the FR-A500. To use this parameter of the FR-A800, set Pr.71 = "4 or 14" or perform auto tuning again.
(91)	Motor constant R2	0 to ****, 9999	9999	91	Motor constant R2	55K or lower: 0 to 50 Ω, 9999 75K or higher: 0 to 400 mΩ, 9999	9999	△	The value can be read when Pr.77 = "801" for the FR-A500. To use this parameter of the FR-A800, set Pr.71 = "4 or 14" or perform auto tuning again.
(92)	Motor constant L1	0 to ****, 9999	9999	92	Motor constant L1	55K or lower: 0 to 50 Ω (0 to 1000 mH), 9999 75K or higher: 0 to 3600 mΩ (0 to 400 mH), 9999	9999	△	The value can be read when Pr.77 = "801" for the FR-A500. To use this parameter of the FR-A800, set Pr.71 = "4 or 14" or perform auto tuning again. For the 75K or higher and Pr.71 = "5, 6, 15, or 16", set after rounding up two decimal places.
(93)	Motor constant L2	0 to ****, 9999	9999	93	Motor constant L2	55K or lower: 0 to 50 Ω (0 to 1000 mH), 9999 75K or higher: 0 to 3600 mΩ (0 to 400 mH), 9999	9999	△	The value can be read when Pr.77 = "801" for the FR-A500. To use this parameter of the FR-A800, set Pr.71 = "4 or 14" or perform auto tuning again. For the 75K or higher and Pr.71 = "5, 6, 15, or 16", set after rounding up two decimal places.
(94)	Motor constant X	0 to ****, 9999	9999	94	Motor constant X	0% to 100%, 9999	9999	△	The value can be read when Pr.77 = "801" for the FR-A500. To use this parameter of the FR-A800, set Pr.71 = "4 or 14" or perform auto tuning again.
95	Online auto tuning selection	0, 1	0	95	Online auto tuning selection	0 to 2	0	⊙	
96	Auto tuning setting/status	0, 1, 101	0	96	Auto tuning setting/status	0, 1, 11, 101	0	△	If auto tuning has been performed, perform tuning again as required.
100	V/F1 (first frequency)	0 to 400 Hz, 9999	9999	100	V/F1 (first frequency)	0 to 590 Hz, 9999	9999	⊙	
101	V/F1 (first frequency voltage)	0 to 1000 V	0	101	V/F1 (first frequency voltage)	0 to 1000 V	0 V	⊙	
102	V/F2 (second frequency)	0 to 400 Hz, 9999	9999	102	V/F2 (second frequency)	0 to 590 Hz, 9999	9999	⊙	
103	V/F2 (second frequency voltage)	0 to 1000 V	0	103	V/F2 (second frequency voltage)	0 to 1000 V	0 V	⊙	
104	V/F3 (third frequency)	0 to 400 Hz, 9999	9999	104	V/F3 (third frequency)	0 to 590 Hz, 9999	9999	⊙	
105	V/F3 (third frequency voltage)	0 to 1000 V	0	105	V/F3 (third frequency voltage)	0 to 1000 V	0 V	⊙	
106	V/F4 (fourth frequency)	0 to 400 Hz, 9999	9999	106	V/F4 (fourth frequency)	0 to 590 Hz, 9999	9999	⊙	
107	V/F4 (fourth frequency voltage)	0 to 1000 V	0	107	V/F4 (fourth frequency voltage)	0 to 1000 V	0 V	⊙	
108	V/F5 (fifth frequency)	0 to 400 Hz, 9999	9999	108	V/F5 (fifth frequency)	0 to 590 Hz, 9999	9999	⊙	
109	V/F5 (fifth frequency voltage)	0 to 1000 V	0	109	V/F5 (fifth frequency voltage)	0 to 1000 V	0 V	⊙	
110	Third acceleration/deceleration time	0 to 3600 s/ 0 to 360 s, 9999	9999	110	Third acceleration/deceleration time	0 to 3600 s, 9999	9999	⊙	Changing Pr.21 after setting this parameter will change the set value.
111	Third deceleration time	0 to 3600 s/ 0 to 360 s, 9999	9999	111	Third deceleration time	0 to 3600 s, 9999	9999	⊙	Changing Pr.21 after setting this parameter will change the set value.
112	Third torque boost	0% to 30%, 9999	9999	112	Third torque boost	0% to 30%, 9999	9999	⊙	
113	Third V/F (base frequency)	0 to 400 Hz, 9999	9999	113	Third V/F (base frequency)	0 to 590 Hz, 9999	9999	⊙	
114	Third stall prevention operation current	0% to 200%	150%	114	Third stall prevention operation level	0% to 400%	150%*	⊙	
115	Third stall prevention operation frequency	0 to 400 Hz	0	115	Third stall prevention operation frequency	0 to 590 Hz	0	⊙	
116	Third output frequency detection	0 to 400 Hz, 9999	9999	116	Third output frequency detection	0 to 590 Hz	60 Hz	△	When the FR-A500 setting is "9999", use the initial setting for the FR-A800.
117	Communication station number	0 to 31	0	117	PU communication station number	0 to 31	0	⊙	
118	Communication speed	48, 96, 192	192	118	PU communication speed	48, 96, 192, 384, 576, 768, 1152	192	⊙	
119	Stop bit length / data length	0, 1, 10, 11	1	119	PU communication stop bit length	0, 1, 10, 11	1	⊙	
120	Parity check presence/absence	0, 1, 2	2	120	PU communication parity check	0, 1, 2	2	⊙	
121	Number of communication retries	0 to 10, 9999	1	121	PU communication retry count	0 to 10, 9999	1	⊙	
122	Communication check time interval	0, 0.1 to 999.8 s, 9999	0	122	PU communication check time interval	0, 0.1 to 999.8 s, 9999	9999	△	The initial value for the FR-A800 has been changed.

* When 150% is set for the inverter rated current after the change, set as follows: $150\% \times (\text{A500 rated current}) / (\text{A800 rated current})$.

FR-A500 parameter list				FR-A800 compatible parameter				Parameter setting	
Pr.	Name	Setting range	Initial value	Pr.	Name	Setting range	Initial value	Setting	Remarks
123	Waiting time setting	0 to 150 ms, 9999	9999	123	PU communication waiting time setting	0 to 150 ms, 9999	9999	⊙	
124	CR, LF presence/absence selection	0, 1, 2	1	124	PU communication CR/LF selection	0, 1, 2	1	⊙	
128	PID action selection	10, 11, 20, 21	10	128	PID action selection	0, 10, 11, 20, 21, 40 to 43, 50, 51, 60, 61, 70, 71, 80, 81, 90, 91, 100, 101, 1000, 1001, 1010, 1011, 2000, 2001, 2010, 2011	0	△	When "14" (X14 signal) is not set in any parameter from Pr.180 to Pr.186, or when PID control is not used even if "14" (X14 signal) is set in any parameter from Pr.180 to Pr.186 in the FR-A800, set "0" in Pr.128 in the FR-A800. When the X14 signal is not assigned to any input terminal, just set a value in Pr.128 to enable PID control in the FR-A800.
129	PID proportional band	0.1% to 1000%, 9999	100%	129	PID proportional band	0.1% to 1000%, 9999	100%	⊙	
130	PID integral time	0.1 to 3600 s, 9999	1 s	130	PID integral time	0.1 to 3600 s, 9999	1 s	⊙	
131	Upper limit	0% to 100%, 9999	9999	131	PID upper limit	0% to 100%, 9999	9999	⊙	
132	Lower limit	0% to 100%, 9999	9999	132	PID lower limit	0% to 100%, 9999	9999	⊙	
133	PID action set point for PU operation	0% to 100%	0%	133	PID action set point	0% to 100%, 9999	9999	△	To use the value input via terminal 2 as a set point for the FR-A800 inverters, set "9999". When the value other than "9999" is set, the set value will be also used as a set point during operations other than the PU operation.
134	PID differential time	0.01 to 10.00 s, 9999	9999	134	PID differential time	0.01 to 10.00 s, 9999	9999	⊙	
135	Commercial power supply-inverter switch-over sequence output terminal selection	0, 1	0	135	Electronic bypass sequence selection	0, 1	0	⊙	
136	MC switchover interlock time	0 to 100.0 s	1.0 s	136	MC switchover interlock time	0 to 100.0 s	1.0 s	⊙	
137	Start waiting time	0 to 100.0 s	0.5 s	137	Start waiting time	0 to 100.0 s	0.5 s	⊙	
138	Commercial power supply-inverter switch-over selection at alarm occurrence	0, 1	0	138	Bypass selection at a fault	0, 1	0	⊙	
139	Automatic inverter-commercial power supply switch-over frequency	0 to 60.00 Hz, 9999	9999	139	Automatic switchover frequency from inverter to bypass operation	0 to 60.00 Hz, 9999	9999	⊙	
140	Backlash acceleration stopping frequency	0 to 400 Hz	1 Hz	140	Backlash acceleration stopping frequency	0 to 590 Hz	1 Hz	⊙	The setting is valid when Pr.29 = "3".
141	Backlash acceleration stopping time	0 to 360 s	0.5 s	141	Backlash acceleration stopping time	0 to 360 s	0.5 s	⊙	The setting is valid when Pr.29 = "3".
142	Backlash deceleration stopping frequency	0 to 400 Hz	1 Hz	142	Backlash deceleration stopping frequency	0 to 590 Hz	1 Hz	⊙	The setting is valid when Pr.29 = "3".
143	Backlash deceleration stopping time	0 to 360 s	0.5 s	143	Backlash deceleration stopping time	0 to 360 s	0.5 s	⊙	The setting is valid when Pr.29 = "3".
144	Speed setting switch-over	0, 2, 4, 6, 8, 10, 102, 104, 106, 108, 110	4	144	Speed setting switchover	0, 2, 4, 6, 8, 10, 102, 104, 106, 108, 110, 112	4	⊙	
148	Stall prevention operation level at 0V input	0% to 200%	150%	148	Stall prevention level at 0 V input	0% to 400%	150%*	⊙	
149	Stall prevention operation level at 10V input	0% to 200%	200%	149	Stall prevention level at 10 V input	0% to 400%	200%*	⊙	
150	Output current detection level	0% to 200%	150%	150	Output current detection level	0% to 400%	150%*	⊙	
151	Output current detection period	0 to 10 s	0	151	Output current detection signal delay time	0 to 10 s	0	⊙	
152	Zero current detection level	0% to 200%	5.0%	152	Zero current detection level	0% to 400%	5%*	⊙	
153	Zero current detection period	0 to 1 s	0.5 s	153	Zero current detection time	0 to 10 s	0.5 s	⊙	
154	Voltage reduction selection during stall prevention operation	0, 1	1	154	Voltage reduction selection during stall prevention operation	0, 1, 10, 11	1	⊙	
155	RT signal activated condition	0, 10	0	155	RT signal function validity condition selection	0, 10	0	⊙	
156	Stall prevention operation selection	0 to 31, 100, 101	0	156	Stall prevention operation selection	0 to 31, 100, 101	0	⊙	
157	OL signal waiting time	0 to 25 s, 9999	0	157	OL signal output timer	0 to 25 s, 9999	0 s	⊙	
158	AM terminal function selection	1 to 3, 5 to 14, 17, 18, 21	1	158	AM terminal function selection	1 to 3, 5 to 14, 17, 18, 21, 24, 32 to 34, 50, 52 to 54, 61, 62, 67, 70, 87 to 90, 91 to 98	1	⊙	

* When 150% is set for the inverter rated current after the change, set as follows: $150\% \times (\text{A500 rated current}) / (\text{A800 rated current})$.

FR-A500 parameter list				FR-A800 compatible parameter				Parameter setting	
Pr.	Name	Setting range	Initial value	Pr.	Name	Setting range	Initial value	Setting	Remarks
160	User group read selection	0, 1, 10, 11	0	160	User group read selection	0, 1, 9999	0	△	The user group 2 was deleted for the FR-A800.
162	Automatic restart after instantaneous power failure selection	0, 1	0	162	Automatic restart after instantaneous power failure selection	0 to 3, 10 to 13	0	⊙	
163	First cushion time for restart	0 to 20 s	0 s	163	First cushion time for restart	0 to 20 s	0 s	⊙	
164	First cushion voltage for restart	0% to 100%	0%	164	First cushion voltage for restart	0% to 100%	0%	⊙	
165	Restart stall prevention operation level	0% to 200%	150%	165	Stall prevention operation level for restart	0% to 400%	150%*	⊙	
170	Watt-hour meter clear	0	0	170	Watt-hour meter clear	0, 10, 9999	9999	×	Setting not required
171	Actual operation hour meter clear	0	0	171	Operation hour meter clear	0, 9999	9999	×	Setting not required
173	User group 1 registration	0 to 999	0	173	User group registration	0 to 1999, 9999	9999	×	Set the parameter as required.
174	User group 1 deletion	0 to 999, 9999	0	174	User group clear	0 to 1999, 9999	9999	×	
175	User group 2 registration	0 to 999	0	—				×	Not available for the FR-A800
176	User group 2 deletion	0 to 999, 9999	0	—				×	Not available for the FR-A800
180	RL terminal function selection	0 to 99, 9999	0	180	RL terminal function selection	0 to 20, 22 to 28, 37, 42 to 48, 50, 51, 62, 64 to 74, 76 to 80, 87, 92 to 96, 9999	0	⊙	
181	RM terminal function selection	0 to 99, 9999	1	181	RM terminal function selection		1	⊙	
182	RH terminal function selection	0 to 99, 9999	2	182	RH terminal function selection		2	⊙	
183	RT terminal function selection	0 to 99, 9999	3	183	RT terminal function selection		3	⊙	
184	AU terminal function selection	0 to 99, 9999	4	184	AU terminal function selection		4	⊙	
185	JOG terminal function selection	0 to 99, 9999	5	185	JOG terminal function selection		5	⊙	
186	CS terminal function selection	0 to 99, 9999	6	186	CS terminal function selection		6	⊙	
190	RUN terminal function selection	0 to 199, 9999	0	190	RUN terminal function selection		0 to 8, 10 to 20, 22, 25 to 28, 30 to 36, 38 to 54, 56, 57, 60, 61, 63, 64, 67, 68, 70, 79, 84, 85, 90 to 99, 100 to 108, 110 to 116, 120, 122, 125 to 128, 130 to 136, 138 to 154, 156, 157, 160, 161, 163, 164, 167, 168, 170, 179, 184, 185, 190 to 199, 200 to 208, 300 to 308, 9999	0	⊙
191	SU terminal function selection	0 to 199, 9999	1	191	SU terminal function selection	1		⊙	
192	IPF terminal function selection	0 to 199, 9999	2	192	IPF terminal function selection	2		⊙	
193	OL terminal function selection	0 to 199, 9999	3	193	OL terminal function selection	3		⊙	
194	FU terminal function selection	0 to 199, 9999	4	194	FU terminal function selection	4		⊙	
195	A, B, C terminal function selection	0 to 199, 9999	99	195	ABC1 terminal function selection	99	⊙		
199	User's initial value setting	0 to 999, 9999	0	—				×	Not available for the FR-A800
200	Programmed operation minute/second selection	0 to 3	0	—				×	Not available for the FR-A800
201 to 210	Program set 1, 1 to 10	0 to 2 0 to 400 Hz, 9999 0 to 99.59	0 9999 0	—				×	Not available for the FR-A800
211 to 220	Program set 2, 11 to 20	0 to 2 0 to 400 Hz, 9999 0 to 99.59	0 9999 0	—				×	Not available for the FR-A800
221 to 230	Program set 3, 21 to 30	0 to 2 0 to 400 Hz, 9999 0 to 99.59	0 9999 0	—				×	Not available for the FR-A800
231	Timer setting	0 to 99.59	0	—				×	Not available for the FR-A800

* When 150% is set for the inverter rated current after the change, set as follows: $150\% \times (\text{A500 rated current}) / (\text{A800 rated current})$.

FR-A500 parameter list				FR-A800 compatible parameter				Parameter setting	
Pr.	Name	Setting range	Initial value	Pr.	Name	Setting range	Initial value	Setting	Remarks
232	Multi-speed setting (speed 8)	0 to 400 Hz, 9999	9999	232	Multi-speed setting (speed 8)	0 to 590 Hz, 9999	9999	⊙	
233	Multi-speed setting (speed 9)	0 to 400 Hz, 9999	9999	233	Multi-speed setting (speed 9)	0 to 590 Hz, 9999	9999	⊙	
234	Multi-speed setting (speed 10)	0 to 400 Hz, 9999	9999	234	Multi-speed setting (speed 10)	0 to 590 Hz, 9999	9999	⊙	
235	Multi-speed setting (speed 11)	0 to 400 Hz, 9999	9999	235	Multi-speed setting (speed 11)	0 to 590 Hz, 9999	9999	⊙	
236	Multi-speed setting (speed 12)	0 to 400 Hz, 9999	9999	236	Multi-speed setting (speed 12)	0 to 590 Hz, 9999	9999	⊙	
237	Multi-speed setting (speed 13)	0 to 400 Hz, 9999	9999	237	Multi-speed setting (speed 13)	0 to 590 Hz, 9999	9999	⊙	
238	Multi-speed setting (speed 14)	0 to 400 Hz, 9999	9999	238	Multi-speed setting (speed 14)	0 to 590 Hz, 9999	9999	⊙	
239	Multi-speed setting (speed 15)	0 to 400 Hz, 9999	9999	239	Multi-speed setting (speed 15)	0 to 590 Hz, 9999	9999	⊙	
240	Soft-PWM setting	0, 1, 10, 11	1	240	Soft-PWM operation setting	0, 1	1	△	The FR-A800 settings corresponding to the FR-A500 settings are as follows. 0, 10 → 0. 1, 11 → 1.
244	Cooling fan operation selection	0, 1	0	244	Cooling fan operation selection	0, 1, 101 to 105	1	△	The initial value for the FR-A800 has been changed.
250	Stop selection	0 to 100 s, 9999	9999	250	Stop selection	0 to 100 s, 1000 to 1100 s, 8888, 9999	9999	⊙	
251	Output phase failure protection selection	0, 1	1	251	Output phase loss protection selection	0, 1	1	⊙	
252	Override bias	0% to 200%	50%	252	Override bias	0% to 200%	50%	⊙	
253	Override gain	0% to 200%	150%	253	Override gain	0% to 200%	150%	⊙	
261	Power failure stop selection	0, 1	0	261	Power failure stop selection	0, 1, 2, 11, 12, 21, 22	0	⊙	
262	Subtracted frequency at deceleration start	0 to 20 Hz	3 Hz	262	Subtracted frequency at deceleration start	0 to 20 Hz	3 Hz	⊙	
263	Subtraction starting frequency	0 to 120 Hz, 9999	60 Hz	263	Subtraction starting frequency	0 to 590 Hz, 9999	60 Hz	⊙	
264	Power-failure deceleration time 1	0 to 3600 s/ 0 to 360 s	5 s	264	Power-failure deceleration time 1	0 to 3600 s	5 s	⊙	Changing Pr.21 after setting this parameter will change the set value.
265	Power-failure deceleration time 2	0 to 3600 s/ 0 to 360 s, 9999	9999	265	Power-failure deceleration time 2	0 to 3600 s, 9999	9999	⊙	Changing Pr.21 after setting this parameter will change the set value.
266	Power failure deceleration time switchover frequency	0 to 400 Hz	60 Hz	266	Power failure deceleration time switchover frequency	0 to 590 Hz	60 Hz	⊙	
270	Stop-on contact/load torque high-speed frequency control selection	0, 1, 2, 3	0	270	Stop-on contact/load torque high-speed frequency control selection	0, 1, 2, 3, 11, 13	0	⊙	
271	High-speed setting maximum current	0% to 200%	50%	271	High-speed setting maximum current	0% to 400%	50%*	⊙	
272	Mid-speed setting minimum current	0% to 200%	100%	272	Middle-speed setting minimum current	0% to 400%	100%*	⊙	
273	Current averaging range	0 to 400 Hz, 9999	9999	273	Current averaging range	0 to 590 Hz, 9999	9999	⊙	
274	Current averaging filter constant	1 to 4000	16	274	Current averaging filter time constant	1 to 4000	16	⊙	
275	Stop-on contact exciting current low-speed multiplying factor	0% to 1000%, 9999	9999	275	Stop-on contact excitation current low-speed multiplying factor	50% to 300%, 9999	9999	⊙	
276	Stop-on-contact PWM carrier frequency	0 to 15, 9999	9999	276	PWM carrier frequency at stop-on contact	55K or lower: 0 to 9, 9999 75K or higher: 0 to 4, 9999	9999	△	When "9" or more value is set for the FR-A500, set "9" for the FR-A800.
278	Brake opening frequency	0 to 30 Hz	3 Hz	278	Brake opening frequency	0 to 30 Hz	3 Hz	⊙	
279	Brake opening current	0% to 200%	130%	279	Brake opening current	0% to 400%	130%*	⊙	
280	Brake opening current detection time	0 to 2 s	0.3 s	280	Brake opening current detection time	0 to 2 s	0.3 s	⊙	
281	Brake operation time at start	0 to 5 s	0.3 s	281	Brake operation time at start	0 to 5 s	0.3 s	⊙	
282	Brake operation frequency	0 to 30 Hz	6 Hz	282	Brake operation frequency	0 to 30 Hz	6 Hz	⊙	
283	Brake operation time at stop	0 to 5 s	0.3 s	283	Brake operation time at stop	0 to 5 s	0.3 s	⊙	

* When 150% is set for the inverter rated current after the change, set as follows: $150\% \times (\text{A500 rated current}) / (\text{A800 rated current})$.

FR-A500 parameter list				FR-A800 compatible parameter				Parameter setting	
Pr.	Name	Setting range	Initial value	Pr.	Name	Setting range	Initial value	Setting	Remarks
284	Deceleration detection function selection	0, 1	0	284	Deceleration detection function selection	0, 1	0	⊙	
285	Overspeed detection frequency	0 to 30 Hz, 9999	9999	285	Overspeed detection frequency (Speed deviation excess detection frequency)	0 to 30 Hz, 9999	9999	⊙	
286	Droop gain	0% to 100%	0%	286	Droop gain	0% to 100%	0%	⊙	
287	Droop filter constant	0.00 to 1.00 s	0.3 s	287	Droop filter time constant	0 to 1 s	0.3 s	⊙	
342	E2PROM write selection	0, 1	0	342	Communication EEPROM write selection	0, 1	0	⊙	
503	Capacitor life timer	—	—	503	Maintenance timer 1	0 (1 to 9998)	0	×	Setting not required
504	Capacitor life alarm output set time	0 to 9998, (9999)	876	504	Maintenance timer 1 warning output set time	0 to 9998, 9999	9999	△	When "9999" is set for the FR-A800, the function is disabled. When "9999" is set for the FR-A500, set "876" for the FR-A800.
611	Restart acceleration time	0 to 3600 s, 9999	5.0 s	611	Acceleration time at a restart	0 to 3600 s, 9999	9999	⊙	
900	FM terminal calibration	—	—	C0 (900)	FM/CA terminal calibration	—	—	×	Calibrate the parameter as required.
901	AM terminal calibration	—	—	C1 (901)	AM terminal calibration	—	—	×	Calibrate the parameter as required.
902	Frequency setting voltage bias	0 to 60 Hz: 0 to 10 V	0 Hz: 0 V	C2 (902)	Terminal 2 frequency setting bias frequency	0 to 590 Hz	0 Hz	△	Set the parameter as required. For the details, refer to section "5.12.5 Frequency setting voltage (current) bias and gain" and "5.12.6 Bias and gain for torque (magnetic flux) and set voltage (current)" of the Instruction Manual (Detailed).
				C3 (902)	Terminal 2 frequency setting bias	0% to 300%	0%	△	
903	Frequency setting voltage gain	1 to 400 Hz: 0 to 10 V	60 Hz: 5 V	125 (903)	Terminal 2 frequency setting gain frequency	0 to 590 Hz	60 Hz	△	
				C4 (903)	Terminal 2 frequency setting gain	0% to 300%	100%	△	
904	Frequency setting current bias	0 to 60 Hz: 0 to 20 mA	0 Hz: 4 mA	C5 (904)	Terminal 4 frequency setting bias frequency	0 to 590 Hz	0 Hz	△	
				C6 (904)	Terminal 4 frequency setting bias	0% to 300%	20%	△	
905	Frequency setting current gain	1 to 400 Hz: 0 to 20 mA	60 Hz: 20 mA	126 (905)	Terminal 4 frequency setting gain frequency	0 to 590 Hz	60 Hz	△	
				C7 (905)	Terminal 4 frequency setting gain	0% to 300%	100%	△	
990	PU buzzer control	0, 1	1	990	PU buzzer control	0, 1	1	⊙	

4. 2. Compatibility of the Terminal Response Speed

The response of the input/output terminals of the FR-A800 series is improved compared to the FR-A500 series. Operation timing of the device may differ depending on the usage.

In this case, set Pr.289 (Inverter output terminal filter) and Pr.699 (Input terminal filter) to adjust the terminal response time.

Set 15 to 20 ms in Pr.289 and Pr.699 and adjust according to the system.

5. OPTION

5. 1. Option

The following table shows which FR-A500(L) series options are compatible with the FR-A800 series inverters and their corresponding A800 series options.

Name		Option model	
		FR-A500(L)	FR-A800
Plug-in type	12-bit digital input	FR-A5AX	FR-A8AX The priority for the frequency setting differs between the FR-A500 and the FR-A800. For the details, refer to the Instruction Manual.
	Digital output, additional analog output	FR-A5AY	FR-A8AY
	Relay output	FR-A5AR	FR-A8AR
	Orientation / encoder / pulse train input	FR-A5AP, T-PLG50, T-PLG51	FR-A8AP (The pulse train input is a built-in function of the inverter.)
	Computer link	FR-A5NR	Built-in function of the inverter (RS-485 terminals, two relay output terminals)
	Profibus-DP	FR-A5NP	FR-A8NP
	Device Net	FR-A5ND	FR-A8ND
	CC-Link	FR-A5NC	FR-A8NC
Stand-alone type	Parameter unit	FR-PU04	Not compatible Use FR-PU07.
	Parameter unit connection cable	FR-CB201, 203, 205	Compatible Prepare FR-ADP for installing the operation panel on the enclosure surface.
	Intercompatibility attachment	FR-AAT, FR-A5AT	Compatible
	Panel through attachment	FR-A5CN, MT-A5CN	FR-A8CN1□□, FR-A8CN□□ Enclosure cut dimensions are compatible except for some capacities. The depths inside and outside the enclosure differ. For details, refer to the Instruction Manual of the FR-A8CN1□□ or the FR-A8CN□□.
	EMC Directive compliant noise filter	SF	Built-in function of the inverter (EN 61800-3 2nd Environment compatible)
	Surge voltage suppression filter	FR-ASF-H	Compatible
	Power factor improving DC reactor	FR-BEL-(H)	Compatible If replacing the reactor, use FR-HEL-(H).
	Power factor improving AC reactor	FR-BAL-(H), MT-BAL-(H)	Compatible If replacing the reactor, use FR-HAL-(H).
	Radio noise filter	FR-BIF-(H)	Compatible
	Line noise filter	FR-BSF01, FR-BLF	Compatible
	BU type brake unit	BU1500 to 15K, H7.5K to 30K	Compatible
	Brake unit	FR-BU-(H), FR-BU2-(H)	Compatible MT-BU5 is not compatible.
	Resistor unit	FR-BR-(H), MT-BR5-(H)	Compatible
	FR-RC type power regeneration converter	FR-RC-(H), MT-RC-(H)	Compatible*
	FR-CV type power regeneration common converter	FR-CV-(H)7.5K(-AT) to 55K	Compatible
	Stand-alone reactor dedicated for the FR-CV	FR-CVL-(H)7.5K to 55K	Compatible
	FR-HC type high power factor converter	FR-HC-(H), MT-HC-(H), FR-HC2-(H)	Compatible
Sine wave filter	Reactor	MT-BSL-(H)	Compatible
	Capacitor	MT-BSC-(H)	Compatible

Name		Option model	
		FR-A500(L)	FR-A800
Manual Controller/Speed Controller	Manual controller	FR-AX	Compatible
	DC tach. follower	FR-AL	Compatible
	Three speed selector	FR-AT	Compatible
	Motorized speed setter	FR-FK	Compatible
	Ratio setter	FR-FH	Compatible
	Speed detector	FR-FP	Compatible
	Master controller	FR-FG	Compatible
	Soft starter	FR-FC	Compatible
	Deviation detector	FR-FD	Compatible
	Preamplifier	FR-FA	Compatible
	Others	Pilot generator	QVAH-10
Deviation sensor		YVGC-500W-NS	Compatible
Frequency setting potentiometer		WA2W 1 k Ω	Compatible
Frequency meter		YM206NRI 1 mA	Compatible
Calibration resistor		RV24YN 10 k Ω	Compatible

* When FR-RC-(H) or MT-RC-(H) is used, use FR-BAL-(H) or MT-BAL-(H).

When the panel through attachment is used, the enclosure cut dimensions are compatible with those of the FR-A500 series (except for some capacities).

[When used with the panel through attachment]

Existing inverter		Replacing inverter		Enclosure cut dimensions
Inverter model	Panel through attachment model	Inverter model	Panel through attachment model	
FR-A520-0.4K	—	FR-A820-0.4K	—	—
FR-A520-0.75K	—	FR-A820-0.75K	—	—
FR-A520-1.5K	FR-A5CN01	FR-A820-1.5K	FR-A8CN101	Same
FR-A520-2.2K	FR-A5CN01	FR-A820-2.2K	FR-A8CN101	Same
FR-A520-3.7K	FR-A5CN01	FR-A820-3.7K	FR-A8CN101	Same
FR-A520-5.5K	FR-A5CN02	FR-A820-5.5K	FR-A8CN02	Same
FR-A520-7.5K	FR-A5CN02	FR-A820-7.5K	FR-A8CN02	Same
FR-A520-11K	FR-A5CN03	FR-A820-11K	FR-A8CN03	Same
FR-A520-15K	FR-A5CN04	FR-A820-15K	FR-A8CN04	Same
FR-A520-18.5K	FR-A5CN04	FR-A820-18.5K	FR-A8CN04	Same
FR-A520-22K	FR-A5CN04	FR-A820-22K	FR-A8CN04	Same
FR-A520-30K	FR-A5CN05	FR-A820-30K	FR-A8CN05	Same
FR-A520-37K	FR-A5CN06	FR-A820-37K	FR-A8CN06	Same
FR-A520-45K	FR-A5CN06	FR-A820-45K	FR-A8CN06	Same
FR-A520-55K	FR-A5CN07	FR-A820-55K	FR-A8CN103	Same
FR-A520L-75K	MT-A5CN02	FR-A820-75K	FR-A8CN104	Minor modification required
FR-A520L-90K	MT-A5CN02	FR-A820-90K	FR-A8CN104	Minor modification required
FR-A540-0.4K	FR-A5CN01	FR-A840-0.4K	FR-A8CN101	Same
FR-A540-0.75K	FR-A5CN01	FR-A840-0.75K	FR-A8CN101	Same
FR-A540-1.5K	FR-A5CN01	FR-A840-1.5K	FR-A8CN101	Same
FR-A540-2.2K	FR-A5CN01	FR-A840-2.2K	FR-A8CN101	Same
FR-A540-3.7K	FR-A5CN01	FR-A840-3.7K	FR-A8CN101	Same
FR-A540-5.5K	FR-A5CN02	FR-A840-5.5K	FR-A8CN02	Same
FR-A540-7.5K	FR-A5CN02	FR-A840-7.5K	FR-A8CN02	Same
FR-A540-11K	FR-A5CN04	FR-A840-11K	FR-A8CN102	Same
FR-A540-15K	FR-A5CN04	FR-A840-15K	FR-A8CN102	Same
FR-A540-18.5K	FR-A5CN04	FR-A840-18.5K	FR-A8CN04	Same
FR-A540-22K	FR-A5CN04	FR-A840-22K	FR-A8CN04	Same
FR-A540-30K	FR-A5CN05	FR-A840-30K	FR-A8CN05	Same
FR-A540-37K	FR-A5CN06	FR-A840-37K	FR-A8CN06	Same
FR-A540-45K	FR-A5CN06	FR-A840-45K	FR-A8CN06	Same
FR-A540-55K	FR-A5CN06	FR-A840-55K	FR-A8CN06	Same
FR-A540L-75K	MT-A5CN02	FR-A840-75K	FR-A8CN105	Minor modification required
FR-A540L-90K	MT-A5CN02	FR-A840-90K	FR-A8CN105	Minor modification required
FR-A540L-110K	MT-A5CN02	FR-A840-110K	FR-A8CN104	Minor modification required
FR-A540L-132K	MT-A5CN03	FR-A840-132K	FR-A8CN106	Same
FR-A540L-160K	MT-A5CN03	FR-A840-160K	FR-A8CN107	Same
FR-A540L-220K	MT-A5CN04	FR-A840-220K	FR-A8CN108	Same
FR-A540L-280K	MT-A5CN05	FR-A840-280K	FR-A8CN109	Same

5. 2. Replacement When the FR-A5NC Is Used

The FR-A5NC (CC-Link communication option) used with the FR-A500(L) series cannot be used with the FR-A800 series. For the CC-Link communication with the FR-A800 series, use the FR-A8NC.

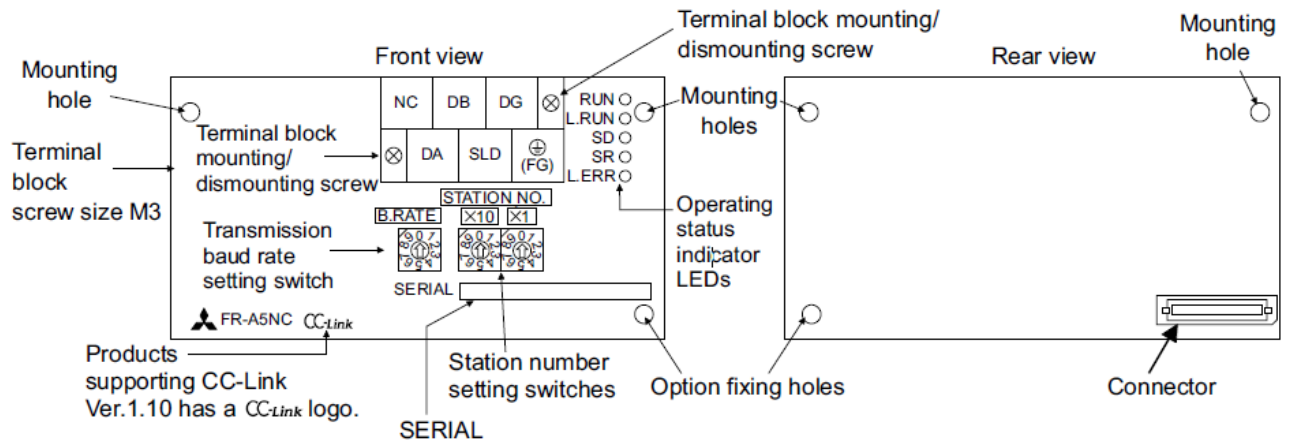
(1) Shape and installation method

The following table shows the differences in the shape and installation method.

Item	FR-A5NC	FR-A8NC	Remarks
Shape	Inverter plug-in option type, terminal block connection	Inverter plug-in option type, terminal block connection	Although the connection method is the same, the circuit board of the option has a different shape.
Connection terminal block	6-terminal terminal block (M3 × 6 mm screws)	A6CON-L5P Insertion wiring	The shape of the terminal block and wiring method differ. A terminal block is not enclosed.
Installation procedure	Installed to the slot 3 * After installing the front cover, install the terminal block.	Connected to the option connector 1. * After performing wiring to the terminal block, install the front cover.	
Terminating resistor	Terminating resistor supplied with the programmable controller	Terminating resistor selection switch	
Connection cable*1	CC-Link dedicated cable	CC-Link dedicated cable	

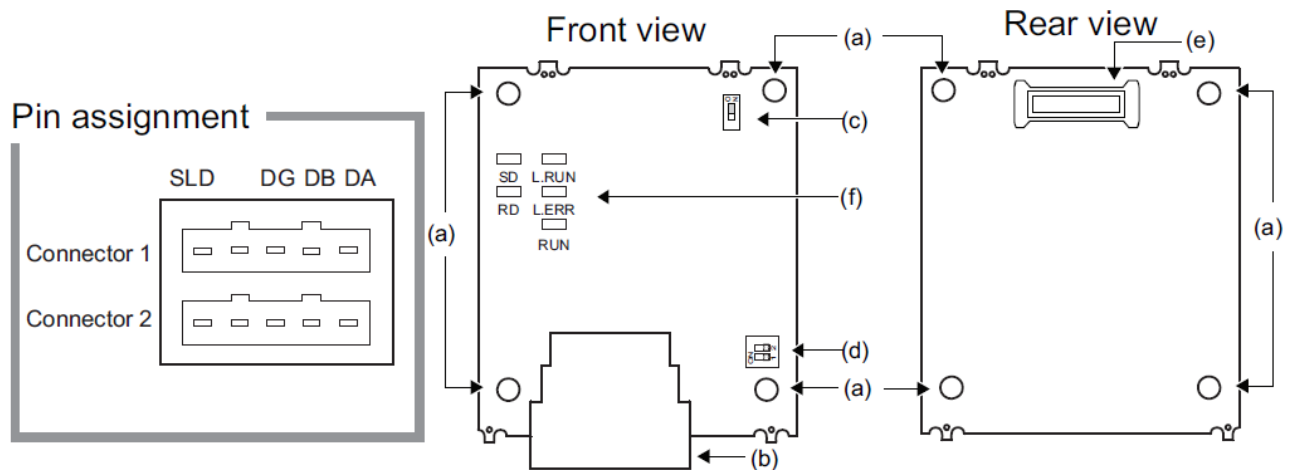
*1 Attention must be paid to the connection cable length.

[Shape of the FR-A5NC]



* For the FR-A8NC, the station number and the transmission baud rate are set in the inverter parameters. Read the values set with the station number switch and the transmission baud rate switch of the FR-A5NC, and take a note of them.

[Shape of the FR-A8NC]

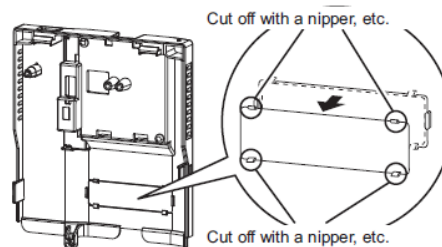


Symbol	Name	Description
a	Mounting hole	Fixes the option to the inverter with screws, or installs spacers.
b	CC-Link communication one-touch connector	CC-Link communication can be performed with the CC-Link communication connector.
c	Switch for manufacturer setting	Switch for manufacturer setting. Do not change the initial setting (OFF).
d	Terminating resistor selection switch	Select the resistor value of the terminating resistor.
e	Connector	Connected to the option connector of the inverter.

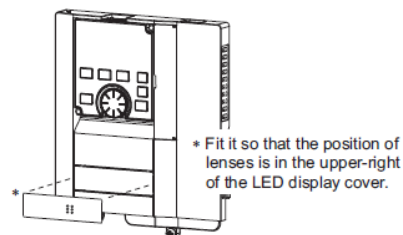
[Installation procedure of the FR-A8NC]

◆ Installation of the communication option LED display cover

- (1) Remove the inverter front cover. (Refer to Chapter 2 of the Instruction Manual (Detailed) of the inverter for details on how to remove the front cover.)
Mount the cover for displaying the operation status indication LED for the communication option on the inverter front cover.
- (2) Cut off hooks on the rear of the inverter front cover with nipper, etc. and open a window for fitting the LED display cover.



- (3) Fit the communication option LED display cover to the front of the inverter front cover and push it into until fixed with hooks.

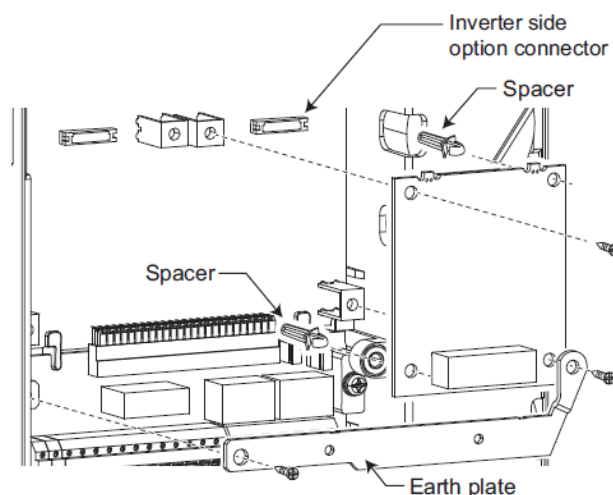


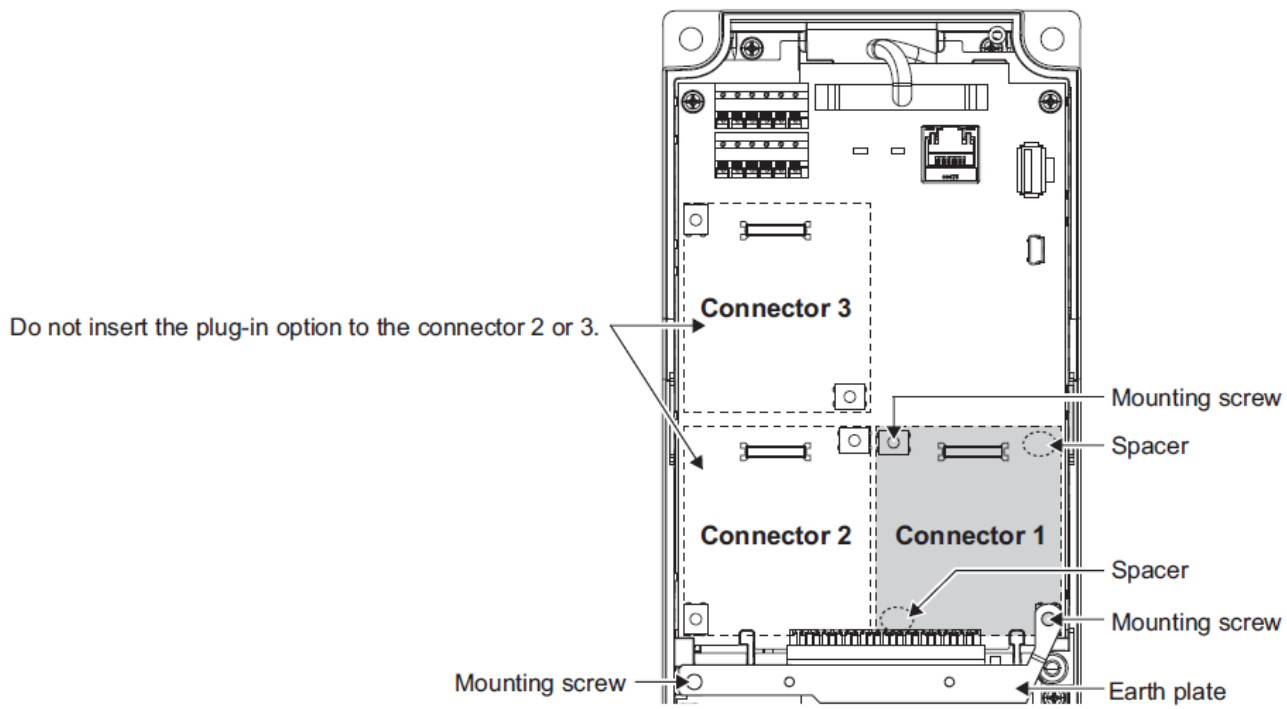
NOTE

- The protective structure (JEM1030) changes to the open type (IP00).

◆ Installing the option

- (1) For the two mounting holes (as shown in the next page) that will not be tightened with mounting screws, insert spacers.
- (2) Fit the connector of the plug-in option to the guide of the connector on the inverter unit side, and insert the plug-in option as far as it goes. (Insert it to the inverter option connector 1.)
- (3) Fit the one location on the left of the earth plate (as shown in the next page) securely to the inverter unit by screwing in the supplied mounting screw. (tightening torque 0.33 N·m to 0.40 N·m)
- (4) Fit the one location on the left of the plug-in option securely to the inverter unit and the right of the plug-in option to the inverter unit together with the earth plate by screwing in the supplied mounting screws. (tightening torque 0.33 N·m to 0.40 N·m) If the screw holes do not line up, the connector may not be inserted deep enough. Check the connector.





Insertion positions for screws and spacers

[Connection cable of the FR-A8NC]

In the CC-Link system, use CC-Link dedicated cables.

If the cable used is other than the CC-Link dedicated cable, the performance of the CC-Link system is not guaranteed.

For the specifications of the CC-Link dedicated cable, refer to the website of the CC-Link Partner Association.

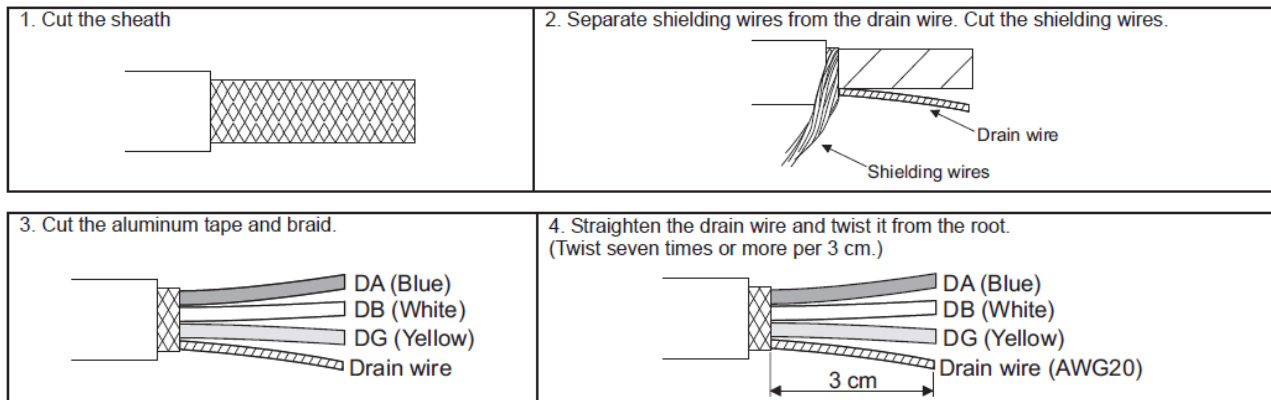
- Website of the CC-Link Partner Association <http://www.cc-link.org/>
- One-touch communication connector plug (as of July 2013)

Refer to the following table for the plug required to fabricate a cable on your own.

Model	Manufacturer
A6CON-L5P	Mitsubishi Electric Corporation
35505-6000-B0M GF	Sumitomo 3M Limited

(1) Cable-end treatment

Apply the following treatment to the CC-Link dedicated cable that is inserted to a one-touch communication connector plug.

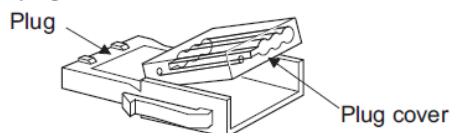


NOTE

- Where possible, round the cable tip that is cut off with a tool such as nippers. If the cable is not rounded, it may get caught in the middle of a plug, without fully entering into the plug.
- If required, apply an insulation treatment to the shielding wire area where it is not covered by the one-touch communication connector plug.

(2) Plug cover check

Check that a plug cover is snapped into a plug

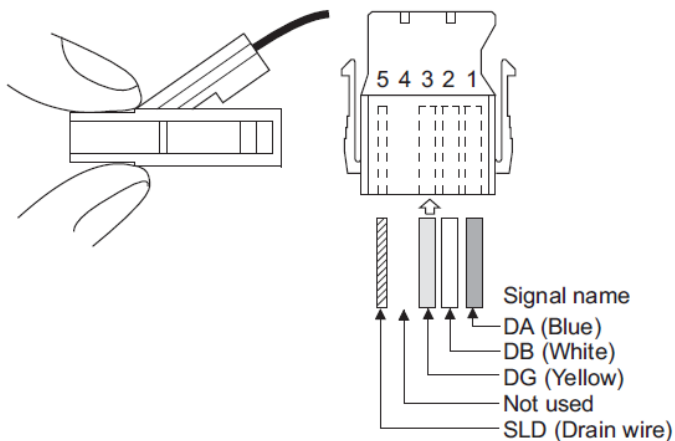


NOTE

- Do not push the plug cover onto the plug before inserting a cable. Once crimped, the plug cover cannot be reused.

(3) Cable insertion

Lift up the tail of the plug cover, and fully insert a cable. Insert different signal wires to the one-touch communication connector plug as shown in the right figure.

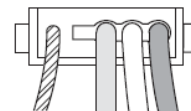


NOTE

- Insert the cable fully. Failure to do so may cause a crimping failure.
- A cable sometimes comes out of the head of the cover. In that case, pull the cable a little so that the cable stays under the plug cover.

(4) Crimping the plug cover

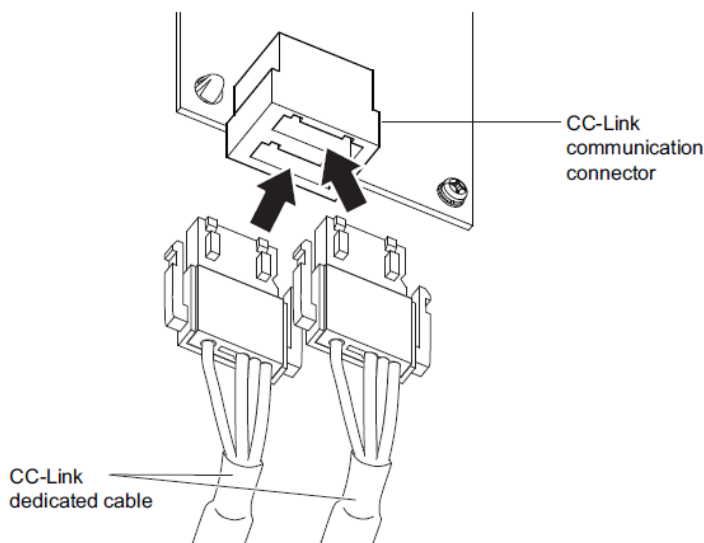
Push the plug cover onto the plug with a tool such as pliers. After crimping, check that the plug cover is securely snapped into the plug as shown in the right figure.



NOTE

- Misaligned latches between the plug cover and the plug may keep the cover lifted. The plug cover is not sufficiently crimped in this condition. Push the plug cover until it snaps into the plug.

Connect the CC-Link dedicated cable to the CC-Link communication connector.







NOTE

- When wiring cables to the inverter's RS-485 terminals while a plug-in option is mounted, take caution not to let the cables touch the circuit board of the option or of the inverter. Otherwise, electromagnetic noises may cause malfunctions.

[Setting of the terminating resistor selection switch of the FR-A8NC]

For the inverter (FR-A8NC) of the end station, configure the terminating resistor selection switch setting in advance.

The following table shows the specifications of the terminating resistor selection switch.

Setting	1	2	Description
	OFF	OFF	Without terminating resistor (initial setting)
	ON	OFF	Do not use.
	OFF	ON	130 Ω (resistance value with the CC-Link Ver. 1.00 dedicated high performance cable)
	ON	ON	110 Ω

Note that some parameter numbers and setting values differ. Refer to the following table to set the parameters.

List of FR-A8NC parameters compatible with the FR-A5NC

The following table shows the parameter settings of the FR-A800 series inverter required when replacing FR-A5NC with FR-A8NC.
 When an FR-A500 series parameter is set to a value other than the initial value, set the corresponding FR-A800 parameter according to the following table.
 When an FR-A500 series parameter is set to an initial value, it is usually not necessary to change the corresponding FR-A800 parameter setting.

The parameter number of the parameters differs from that of the FR-A500 series inverter.

Setting ◎: Set the FR-A500 parameter as it is.

△: Change the FR-A500 parameter and set.

×: Adjust or set the FR-A800 parameter.

FR-A500 parameter list				FR-A800 compatible parameter				Parameter setting	
Pr.	Name	Setting range	Initial value	Pr.	Name	Setting range	Initial value	Setting	Remarks
338	Operation command right	0, 1	0	338	Communication operation command source	0, 1	0	×	For the FR-A800 series, the command source is different from that of the FR-A500 series for terminal MRS, terminal RES, and terminal 1.
339	Speed command right	0, 1	0	339	Communication speed command source	0, 1, 2	0		
340	Link startup mode selection	0 to 2, 10, 12, 20, 22	0	340	Communication startup mode selection	0, 1, 2, 10, 12	0	×	The setting values "20 and 22" cannot be used with the FR-A800. The operation differs by the combination of the X66 signal, Pr.79 and Pr.340.
349	Error reset selection in the CC-Link communication	0, 1	0	349	Communication reset selection	0, 1	0	◎	
500	Communication error recognition waiting time	0 to 999.8 s	0 s	500	Communication error execution waiting time	0 to 999.8 s	0 s	◎	
501	Communication error occurrence count display	0	0	501	Communication error occurrence count display	0	0	◎	
502	Communication error-time stop mode selection	0 to 2	0	502	Stop mode selection at communication error	0 to 3	0	◎	
				542	Communication station number (CC-Link)	1 to 64	1	×	The station number is set with the station number setting switch for FR-A500. Use the Pr.542 setting for FR-A800.
				543	Baud rate selection (CC-Link)	0 to 4	0	×	The baud rate is set with the transmission baud rate setting switch for FR-A500. Use the Pr.543 setting for FR-A800. 0: 156 kbps 1: 625 kbps 2: 2.5 Mbps 3: 5 Mbps 4: 10 Mbps