Information for Replacement of
FR-B (A200(E) Specification) Series with
FR-B (A800 Specification) Series

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

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1. Size

When the FR-B (A200(E) specification) series inverters are replaced with the FR-B (A800 specification) series inverters, some A800 specification models have different installation size from that of the corresponding A200(E) specification models. Refer to the applicable outline dimension and drill new mounting holes, or use the installation interchange attachment shown in the following table.

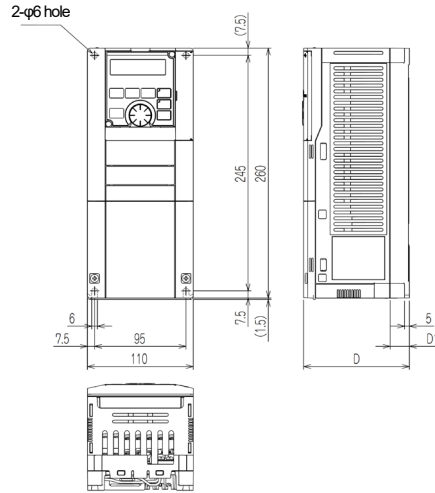|	Existing inverter (A200(E) specification model)	Replacing inverter (A800 specification model)	Installation size / installation interchange attachment
200 V class	FR-B-750	FR-B-750	FR-A5AT01
	FR-B-1500	FR-B-1500	FR-A5AT02
	FR-B-2200*	FR-B-2200	FR-A5AT02
	FR-B-3700	FR-B-3700	FR-A5AT02
	FR-B-5.5K	FR-B-5.5K	FR-A5AT03
	FR-B-7.5K	FR-B-7.5K	FR-A5AT03
	FR-B-11K	FR-B-11K	Same installation size
	FR-B-15K	FR-B-15K	Same installation size
	FR-B-22K	FR-B-22K	FR-A5AT04
	FR-B-30K	FR-B-30K	Same installation size, different outline dimensions
	FR-B-37K	FR-B-37K	Same installation size, different outline dimensions
	FR-B-45K	FR-B-45K	Same installation size, different outline dimensions
400 V class	FR-B-750*	FR-B-750	FR-A5AT02
	FR-B-1500*	FR-B-1500	FR-A5AT02
	FR-B-2200*	FR-B-2200	FR-A5AT02
	FR-B-3700	FR-B-3700	FR-A5AT02
	FR-B-7.5K	FR-B-7.5K	FR-A5AT03
	FR-B-15K	FR-B-15K	FR-AAT24
	FR-B-22K	FR-B-22K	FR-A5AT04
	FR-B-37K	FR-B-37K	Same installation size, different outline dimensions
	FR-B-55K	FR-B-55K	FR-A5AT05

* 200 V class FR-B-2200 and 400 V class FR-B-750, 1500, 2200 inverters are A200E specification models.

Outline dimension drawings (Unit: mm)
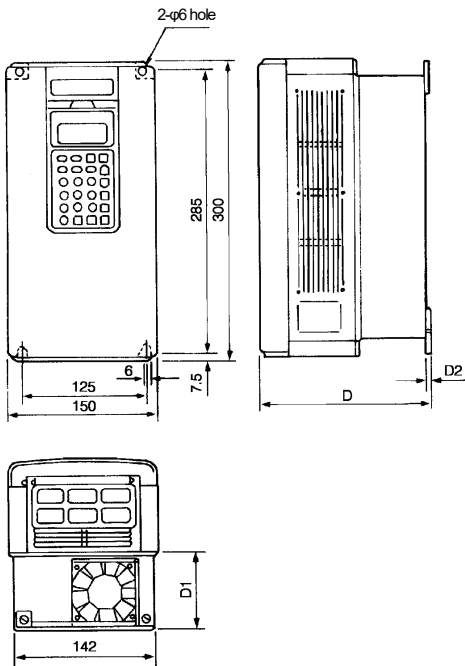FR-B[][] 200 V class inverters

■ FR-B-750 (A200(E) specification)
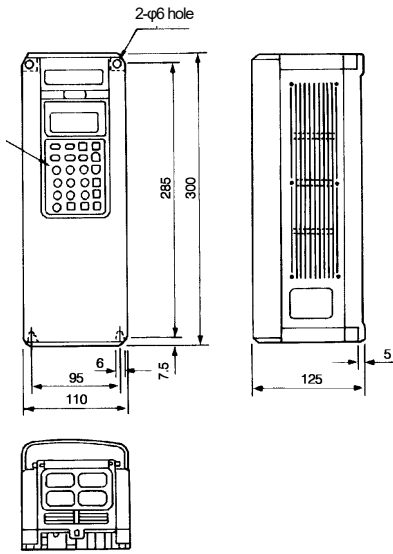
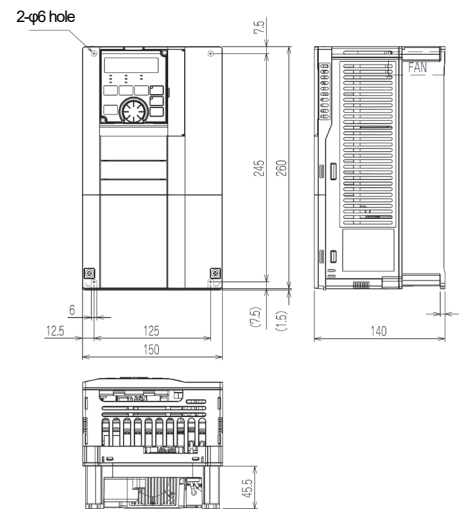■ FR-B-750 (A800 specification)

Inverter model	D1	D1
FR-B-750	125	35

■ FR-B-1500, 2200, 3700 (A200(E) specification)
  * FR-B-2200 is A200E specification model.

■ FR-B-1500, 2200, 3700 (A800 specification)

Inverter model	D	D1	D2
FR-B-1500	140	41	6
FR-B-2200	170	71	2.3
FR-B-3700	170	71	2.3

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FR-B[][] 200 V class inverters

■ FR-B-5.5K, 7.5K (A200(E) specification)

2-φ6 hole

285
300
195
6
7.5
220
190
2.3
66
210
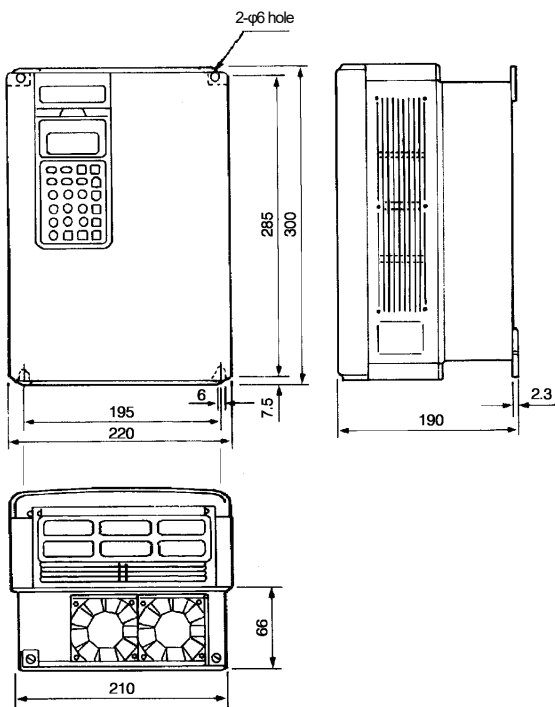
■ FR-B-5.5K, 7.5K (A800 specification)

2-φ6 hole
(7.5)
H1
H
7.5
(1.5)
12.5
6
195
220
2.3
D
D1
FAN
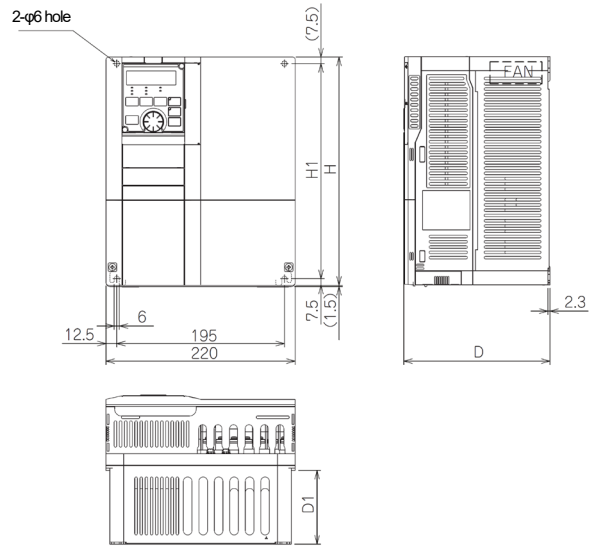
Inverter model	H	H1	H2	D	D1
FR-B-5.5K, 7.5K	260	245	1.5	170	84

■ FR-B-11K (A200(E) specification)

2-φ6 hole

285
300
195
6
7.5
220
190
2.3
66
210

■ FR-B-11K (A800 specification)

2-φ6 hole
(7.5)
H1
H
7.5
(1.5)
12.5
6
195
220
2.3
D
D1
FAN
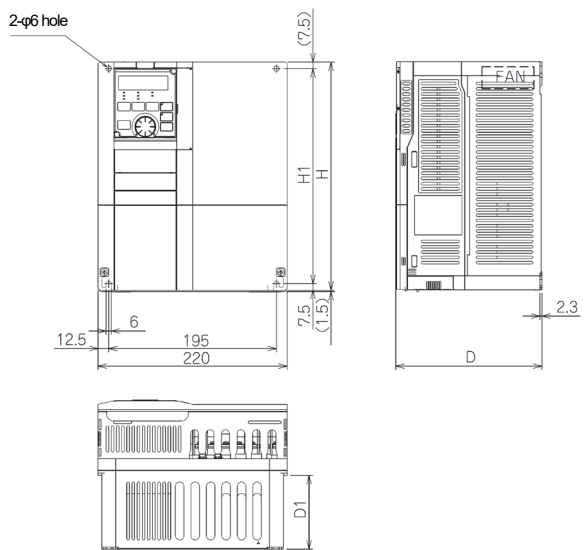
Inverter model	H	H1	H2	D	D1
FR-B-11K	300	285	3	190	101.5

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FR-B[][] 200 V class inverters

■ FR-B-15K, 22K (A200(E) specification)

2-φ10 hole

W2
W
10
10
H1
H
D
6
80
W1
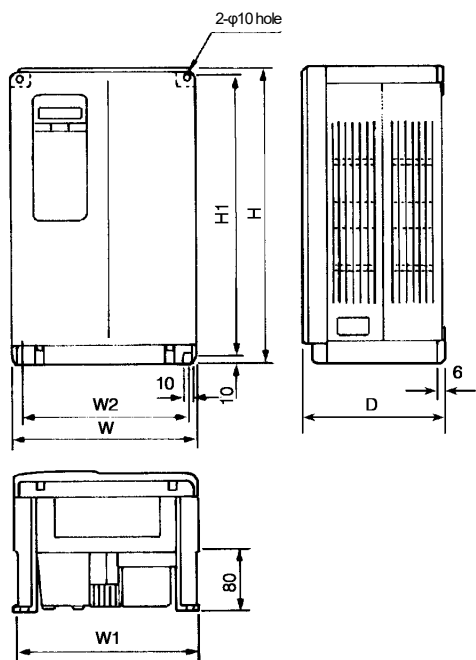
Inverter model	W	W1	W2
FR-B-15K	250	242	230
FR-B-22K	300	292	280

Inverter model	H	H1	D
FR-B-15K	400	380	190
FR-B-22K	450	430	195

■ FR-B-15K, 22K (A800 specification)

2-φ10 hole

FAN

(10)
380
400
10
(1.5)
10
10
230
250
190
2.3
93.3

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FR-B[][] 200 V class inverters

■ FR-B-30K (A200(E) specification)

2-φ10 hole

■ FR-B-30K (A800 specification)

2-φd hole

4-φd1 hole for hanging

Inverter model	W	W1	W2	H	H1	H2
FR-B-30K	325	270	10	550	530	10

Inverter model	H3	H4	d	d1	D	D1
FR-B-30K	520	15	10	20	195	17

■ FR-B-37K, 45K (A200(E) specification)

2-φ12 hole

■ FR-B-37K, 45K (A800 specification)

2-φd hole

4-φd1 hole for hanging

Inverter model	W	W1	W2	H	H1	H2
FR-B-37K, 45K	435	380	12	550	525	15

Inverter model	H3	H4	d	d1	D	D1
FR-B-37K, 45K	514	18	12	25	250	24

Outline dimension drawings (Unit: mm)
FR-B[][] 400 V class inverters

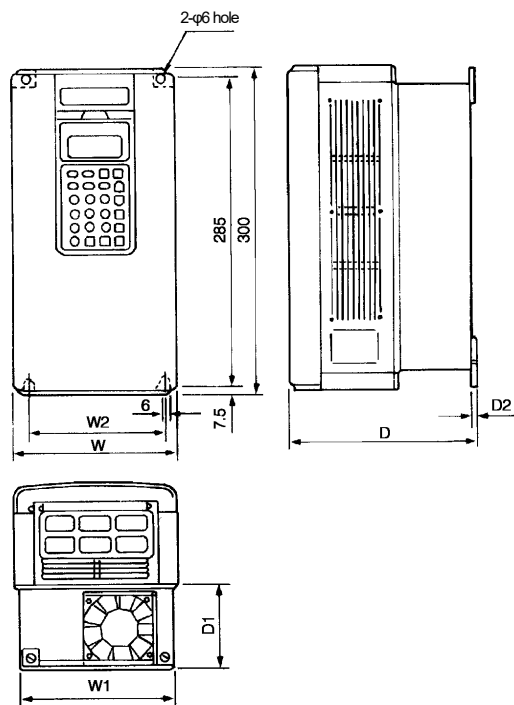■ FR-B-750, 1500, 2200, 3700 (A200(E) specification)
 * FR-B-750, 1500, 2200 are A200E specification
   models.

2-φ6 hole

■ FR-B-750, 1500, 2200, 3700 (A800 specification)

2-φ6 hole
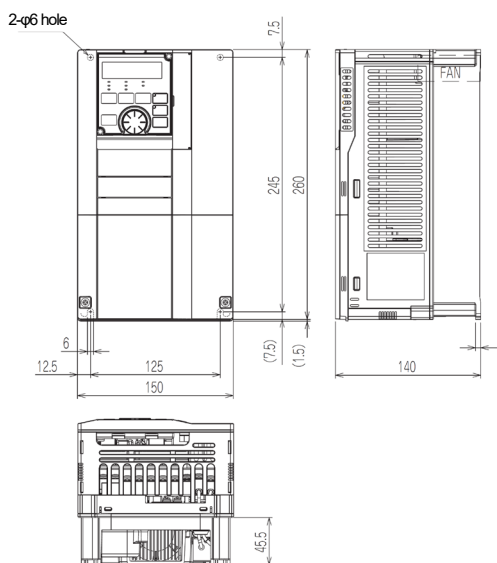
Inverter model	W	W1	W2
FR-B-750	150	142	125
FR-B-1500	150	142	125
FR-B-2200	150	142	125
FR-B-3700	150	142	125

Inverter model	D	D1	D2
FR-B-750	170	71	2.3
FR-B-1500	170	71	2.3
FR-B-2200	170	71	2.3
FR-B-3700	170	71	2.3

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FR-B[][] 400 V class inverters

■ FR-B-7.5K (A200(E) specification)
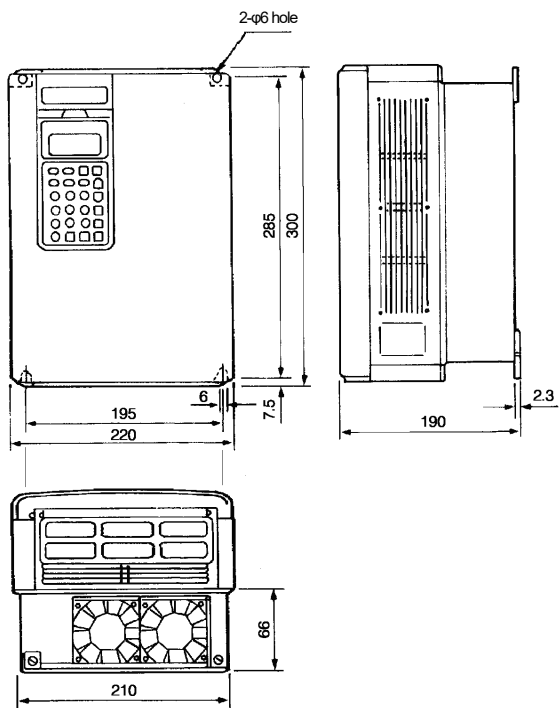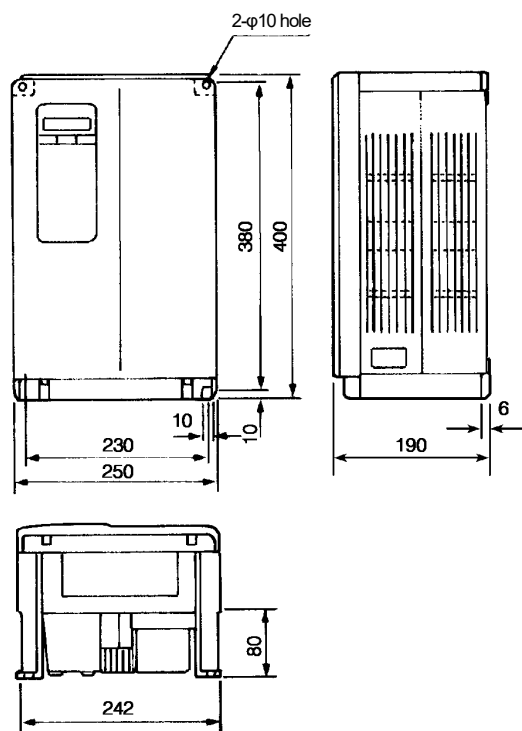
■ FR-B-7.5K (A800 specification)
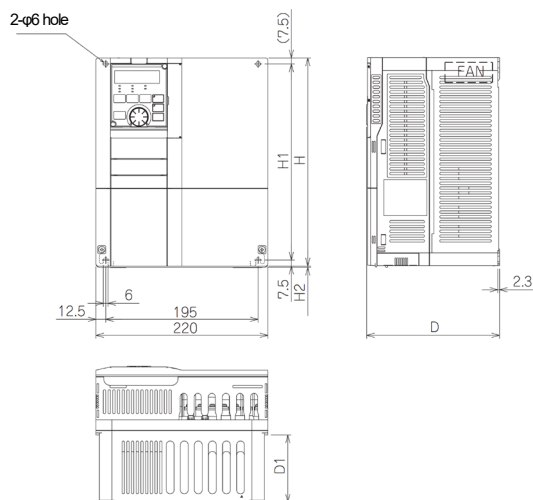
Inverter model	H	H1	H2	D	D1
FR-B-7.5K	260	245	1.5	170	84

■ FR-B-15K (A200(E) specification)

■ FR-B-15K (A800 specification)
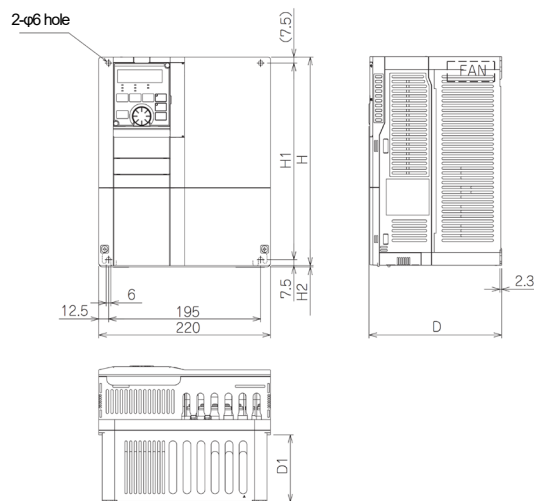
Inverter model	H	H1	H2	D	D1
FR-B-15K	300	285	3	190	101.5

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FR-B[][] 400 V class inverters

■ FR-B-22K (A200(E) specification)

■ FR-B-22K (A800 specification)
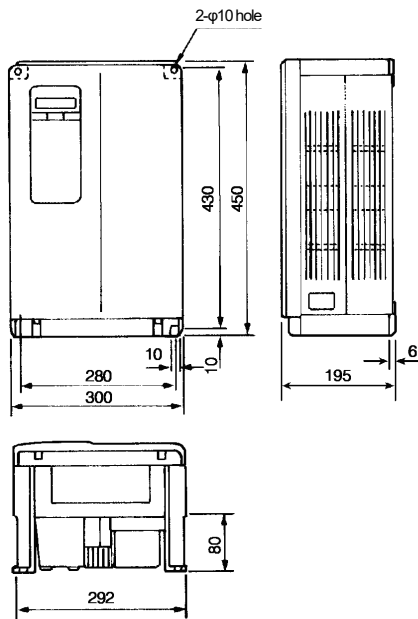
■ FR-B-37K, 55K (A200(E) specification)
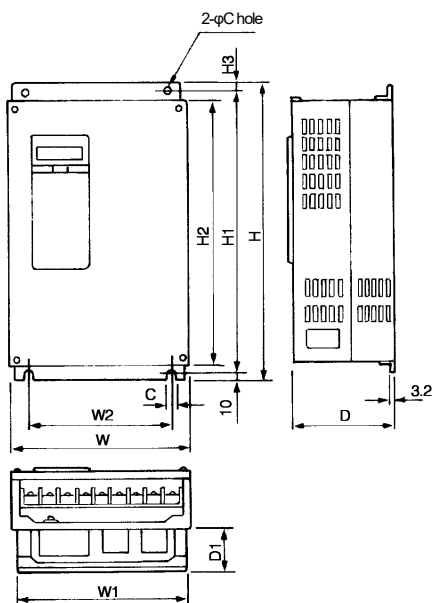
Inverter model	W	W1	W2	H	H1	H2
FR-B-37K	450	434	380	550	525	495
FR-B-55K	480	464	410	700	675	645

Inverter model	D	C	H3	D1
FR-B-37K	250	12	15	130
FR-B-55K	250	12	15	130
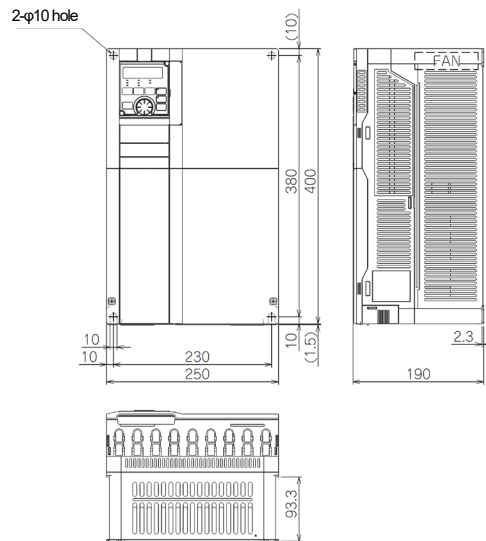
■ FR-B-37K, 55K (A800 specification)
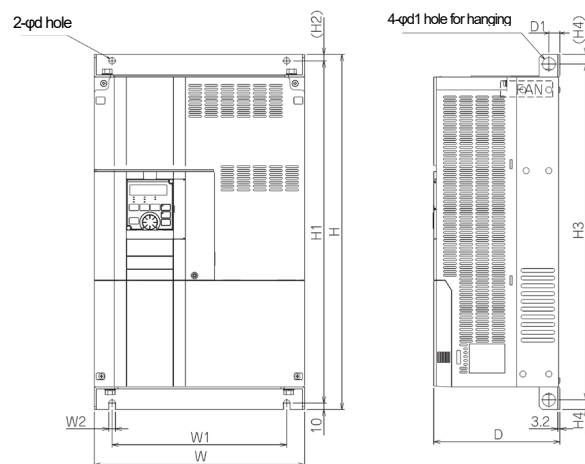
Inverter model	W	W1	W2	H	H1	H2
FR-B-37K, 55K	435	380	12	550	525	15

Inverter model	H3	H4	d	d1	D	D1
FR-B-37K, 55K	514	18	12	25	250	24

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2. 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		FR-B (A200(E) specification) terminal name	FR-B (A800 specification) 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, 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/OH	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
		5	5
Control circuit output signal	Relay	A, B, C	A1, B1, C1
	Open collector	RUN	RUN
		SU	SU
		OL	OL
		IPF	IPF
		FU	FU
		SE	SE
	Pulse	FM	F/C (FM)
	Analog	AM	AM

*1 For the 200 V class FR-B-15K to 22K and the 400 V class FR-B-22K, connect the brake resistor between P3 and PR.

Terminal screw size

[Main circuit terminals for FR-B 200 V class inverters]

FR-B (A200(E) specification)							FR-B (A800 specification)					
Capacity	R, S, T	U, V, W	P, N, P1	R1, S1	PR	⏚	Capacity	R/L1, S/L2, T/L3	U, V, W	P/+, N/-, P1	R1, S1	PR	⏚
750	M4	M4	M4	M4	M4	M4	750	M4	M4	M4	M4	M4	M4
1500	M4	M4	M4	M4	M4	M4	1500	M4	M4	M4	M4	M4	M4
2200*	M4	M4	M4	M4	M4	M4	2200	M4	M4	M4	M4	M4	M4
3700	M4	M4	M4	M4	M4	M4	3700	M4	M4	M4	M4	M4	M4
5.5K	M5	M5	M5	M4	M5	M5	5.5K	M5	M5	M5	M4	M4	M5
7.5K	M5	M5	M5	M4	M5	M5	7.5K	M5	M5	M5	M4	M4	M5
11K	M5	M5	M5	M4	—	M5	11K	M5	M5	M5	M4	M5	M5
15K	M6	M6	M6	M4	—	M6	15K	M6	M6	M6	M4	M6	M6
22K	M8	M8	M8	M4	—	M6	22K	M8	M8	M8	M4	M8	M6
30K	M8	M8	M8	M4	—	M6	30K	M8	M8	M8	M4	—	M6
37K	M10	M10	M10	M4	—	M8	37K	M10	M10	M10	M4	—	M8
45K	M10	M10	M10	M4	—	M8	45K	M10	M10	M10	M4	—	M8

* FR-B-2200 is A200E specification model.

[Main circuit terminals for FR-B 400 V class inverters]

FR-B (A200(E) specification)						FR-B (A800 specification)					
Capacity	R, S, T	U, V, W	P, N, P1	R1, S1	PR	⏚	Capacity	R/L1, S/L2, T/L3	U, V, W	P/+, N/-, P1	R1, S1	PR	⏚
750*	M4	M4	M4	M4	M4	M4	750	M4	M4	M4	M4	M4	M4
1500*	M4	M4	M4	M4	M4	M4	1500	M4	M4	M4	M4	M4	M4
2200*	M4	M4	M4	M4	M4	M4	2200	M4	M4	M4	M4	M4	M4
3700	M4	M4	M4	M4	M4	M4	3700	M4	M4	M4	M4	M4	M4
7.5K	M4	M4	M4	M4	M4	M4	7.5K	M4	M4	M4	M4	M4	M4
15K	M6	M6	M6	M4	—	M6	15K	M5	M5	M5	M4	M5	M5
22K	M6	M6	M6	M4	—	M6	22K	M6	M6	M6	M4	M6	M6
37K	M8	M8	M8	M4	—	M8	37K	M8	M8	M8	M4	—	M8
55K	M8	M8	M8	M4	—	M8	55K	M8	M8	M8	M4	—	M8

* FR-FR-B-750, 1500, 2200 are A200E specification models.

[Control circuit terminal block]

FR-B (A200(E) specification)	FR-B (A800 specification)
M3 ⊕ screw type terminal block	Insertion type

Terminal block layout

The control circuit terminal blocks of the A200(E) specification models and A800 specification models are as shown below.

The terminal block layouts are not compatible.

FR-B (A200(E) specification)

* Position of the control circuit terminal block
  The control circuit terminal block is arranged as follows:
  A200(E) specification model: Left side of the inverter as viewed from the front
  A800 specification model: Bottom of the inverter

  When replacing the inverter, wire the terminals correctly.

FR-B (A800 specification)
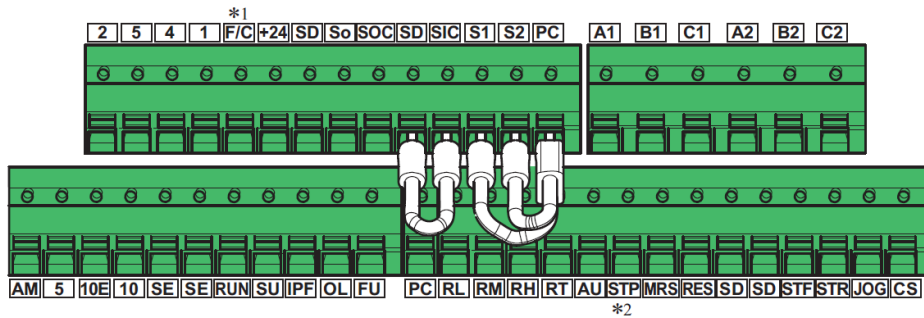
*1) This terminal operates as terminal FM.
*2) Represents the terminal STOP.

Refer to the Instruction Manual for information about the wiring method.

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3. Parameter

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

List of FR-B (A800 specification) series parameters compatible with the FR-B (A200(E) specification) series

The following table shows the parameter settings required when replacing an FR-B (A200(E) specification) series inverter by an FR-B (A800 specification) series inverter.

When an FR-B (A200(E) specification) series parameter is set to <u>a value other than the initial value</u>, set the corresponding FR-B (A800 specification) series parameter according to the following table.

When an FR-B (A200(E) specification) series parameter is set to an initial value, it is usually not necessary to change the corresponding FR-B (A800 specification) series parameter setting.

Refer to the FR-B (A800 specification) Instruction Manual to check restrictions and precautions for parameter settings.

The parameter number of the [ ] parameters differs from that of the FR-B (A200(E) specification) series inverter.

Setting
◎: Use the same setting of the A200(E) specification model.
△: Change the setting of the A200(E) specification model as needed.
×: Adjust and set the A800 specification model parameters independently.

FR-B (A200(E) specification) parameter				FR-B (A800 specification) compatible parameter				Description about parameter setting	
Pr.	Name	Setting range A200 specification	Setting range A200E specification	Initial value	Pr.	Name	Setting range	Initial value	Setting	Remarks
					0	Torque boost	0% to 30%	2% / 1.5%		Do not change the setting.
1	Maximum frequency	0 to 120 Hz / 0 to 60 Hz		60 Hz	1	Maximum frequency	0 to 120 Hz	60 Hz	◎	Set a value from 0 to 60 (Hz) in 30K or higher
2	Minimum frequency	0 to 120 Hz / 0 to 60 Hz		0 Hz	2	Minimum frequency	0 to 120 Hz	0 Hz	◎	
					3	Base frequency	0 to 590 Hz	60 Hz		Do not change the setting.
4	Multi-speed setting (high speed)	0 to 120 Hz / 0 to 60 Hz		60 Hz	4	Multi-speed setting (high speed)	0 to 590 Hz	60 Hz	◎	
5	Multi-speed setting (middle speed)	0 to 120 Hz / 0 to 60 Hz		30 Hz	5	Multi-speed setting (middle speed)	0 to 590 Hz	30 Hz	◎	
6	Multi-speed setting (low speed)	0 to 120 Hz / 0 to 60 Hz		10 Hz	6	Multi-speed setting (low speed)	0 to 590 Hz	10 Hz	◎	
7	Acceleration time	0 to 3600 s / 0 to 360 s		5 s / 15 s	7	Acceleration time	0 to 3600 s	5 s / 15 s	◎	Changing Pr.21 after setting this parameter will change the set value.
8	Deceleration time	0 to 3600 s / 0 to 360 s		5 s / 15 s	8	Deceleration time	0 to 3600 s	5 s / 15s	◎	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	0 to 500 A / 0 to 3600 A	Rated output current	◎	Set the rated motor current.
					10	DC injection brake operation frequency	0 to 120 Hz, 9999	3 Hz		Do not change the setting.
11	DC injection brake operation time	0, 0.5 s		0.5 s	11	DC injection brake operation time	0 to 10 s, 8888	0.5 s	◎	Select "0.5 s" or "0 s".
					12	DC injection brake operation voltage	0% to 30%	4% / 2%		Do not change the setting.
13	Starting frequency	0 to 60 Hz		0.5 Hz	13	Starting frequency	0 to 60 Hz	0.5 Hz	◎	
15	Jog frequency	0 to 120 Hz / 0 to 60 Hz		5 Hz	15	Jog frequency	0 to 590 Hz	5 Hz	◎	
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	◎	Changing Pr.21 after setting this parameter will change the set value.
17	External thermal O/L relay input	0 to 7		0	17	MRS input selection	0, 2, 4	0	◎	
					18	High speed maximum frequency	0 to 590 Hz	60 Hz (30 kW or higher)		Do not change the setting.
20	Acceleration/deceleration reference frequency	1 to 120 Hz / 1 to 60 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	0% to 200%,	150%	22	Stall prevention operation level	0% to 400%	150%	◎	

FR-B (A200(E) specification) parameter				FR-B (A800 specification) compatible parameter				Description about parameter setting	
Pr.	Name	Setting range	Initial value	Pr.	Name	Setting range	Initial value	Setting	Remarks
		A200 specification / A200E specification							
23	Stall prevention operation level 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 120 Hz / 0 to 60 Hz, 9999	9999	24	Multi-speed setting (speed 4)	0 to 590 Hz, 9999	9999	◎	
25	Multi-speed setting (speed 5)	0 to 120 Hz / 0 to 60 Hz, 9999	9999	25	Multi-speed setting (speed 5)	0 to 590 Hz, 9999	9999	◎	
26	Multi-speed setting (speed 6)	0 to 120 Hz / 0 to 60 Hz, 9999	9999	26	Multi-speed setting (speed 6)	0 to 590 Hz, 9999	9999	◎	
27	Multi-speed setting (speed 7)	0 to 120 Hz / 0 to 60 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 to 2, 10, 11, 20, 21, 100 to 102, 110, 111, 120, 121	0	◎	Set "0, 1, 100, or 101".
31	Frequency jump 1A	0 to 120 Hz / 0 to 60 Hz, 9999	9999	31	Frequency jump 1A	0 to 590 Hz, 9999	9999	◎	
32	Frequency jump 1B	0 to 120 Hz / 0 to 60 Hz, 9999	9999	32	Frequency jump 1B	0 to 590 Hz, 9999	9999	◎	
33	Frequency jump 2A	0 to 120 Hz / 0 to 60 Hz, 9999	9999	33	Frequency jump 2A	0 to 590 Hz, 9999	9999	◎	
34	Frequency jump 2B	0 to 120 Hz / 0 to 60 Hz, 9999	9999	34	Frequency jump 2B	0 to 590 Hz, 9999	9999	◎	
35	Frequency jump 3A	0 to 120 Hz / 0 to 60 Hz, 9999	9999	35	Frequency jump 3A	0 to 590 Hz, 9999	9999	◎	
36	Frequency jump 3B	0 to 120 Hz / 0 to 60 Hz, 9999	9999	36	Frequency jump 3B	0 to 590 Hz, 9999	9999	◎	
37	Speed display	2 to 10, 11 to 9998 / 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.
40	Output terminal assignment	0 to 9999	1234	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, 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, 168, 170, 179, 184, 185, 190 to 199, 200 to 208, 300 to 308, 9999	0	×	
				191	SU terminal function selection		1	×	
				192	IPF terminal function selection		2	×	
				193	OL terminal function selection		3	×	
				194	FU terminal function selection		4	×	
				195	ABC1 terminal function selection		99	×	
41	Up-to-frequency sensitivity	0% to 100%	10%	41	Up-to-frequency sensitivity	0% to 100%	10%	◎	
42	Output frequency detection	0 to 120 Hz / 0 to 60 Hz	6 Hz	42	Output frequency detection	0 to 590 Hz	6 Hz	◎	
43	Output frequency detection for reverse rotation	0 to 120 Hz / 0 to 60 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	◎	
45	Second deceleration time	0 to 3600 s / 0 to 360 s, 9999	9999	45	Second deceleration time	0 to 3600 s, 9999	9999	◎	
				46	Second torque boost	0% to 30%, 9999	9999		Do not change the setting.
48	Second stall prevention operation level (current)	0% to 200%	150%	48	Second stall prevention operation level	0% to 400%	150%	◎	
49	Second stall prevention operation level (frequency)	0 to 120 Hz / 0 to 60 Hz / 0 to 120 Hz / 0 to 60 Hz, 9999	0 Hz	49	Second stall prevention operation frequency	0 to 590 Hz, 9999	0 Hz	◎	

FR-B (A200(E) specification) parameter				FR-B (A800 specification) compatible parameter				Description about parameter setting	
Pr.	Name	Setting range		Initial value	Pr.	Name	Setting range	Initial value	Setting	Remarks
		A200 specification	A200E specification							
50	Second output frequency detection	0 to 120 Hz / 0 to 60 Hz		30 Hz	50	Second output frequency detection	0 to 590 Hz	30 Hz	◎	
51	Inverter LED display data selection	1 to 6, 8 to 14, 17, 18		1						This function was deleted for the A800 specification model.
52	PU main display data selection	0, 17 to 20	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	5, 6, 8 to 14, 17, 18	0 to 3, 5 to 14, 17, 18	1	—	—	—	—	×	This function was deleted for the A800 specification model.
54	FM terminal function selection	1 to 3, 5, 8 to 14, 17, 18, 21, 101 to 103, 105, 108 to 114, 117, 118, 121	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 120 Hz / 0 to 60 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	0 to 500	Rated output current	◎	
57	Restart coasting time	0 to 5 s, 9999	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 A800 specification model.
58	Restart cushion time	0 to 5 s	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 function selection	0 to 3, 11 to 13	0	◎	
					60	Energy saving control selection	0, 4, 9	0		Do not change the setting.
65	Retry selection	—	0 to 5	0	65	Retry selection	0 to 5	0	◎	Not available for A200 specification model.
66	Stall prevention operation reduction starting frequency	0 to 120 Hz / 0 to 60 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	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, 9999	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	◎	
					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		Set "0 or 1".
					72	PWM frequency selection	0 to 15	1		Do not change the setting.
73	0 to 5V, 0 to 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	0 to 3, 14 to 17	14	75	Reset selection/disconnected PU detection/PU stop selection	0 to 3, 14 to 17	14	◎	
76	Alarm code output selection	0, 1, 2, 3		0	76	Fault code output selection	0, 1, 2	0	△	"3" (output during programmed operation) cannot be set for the A800 specification model.
77	Parameter write disable selection	0, 1, 2		0	77	Parameter write selection	0, 1, 2	0	◎	

FR-B (A200(E) specification) parameter					FR-B (A800 specification) compatible parameter					Description about parameter setting	
		Setting range									
Pr.	Name	A200 specification	A200E specification	Initial value	Pr.	Name	Setting range	Initial value	Setting	Remarks	
78	Reverse rotation prevention selection	0, 1, 2		0	78	Reverse rotation prevention selection	0, 1, 2	0	◎		
79	Operation mode selection	0 to 5	0, 1, 2, 3, 4, 6, 7, 8	0	79	Operation mode selection	0, 1, 2, 3, 4, 6, 7	0	△	When "8" is set for the A200E specification model, set "0" for the A800 specification model.	
					80	Motor capacity	0.4 to 55 kW, 9999	9999		Do not change the setting.	
					81	Number of motor poles	2, 4, 6, 8, 10, 12, 9999	9999		Do not change the setting.	
					100	V/F1 (first frequency)	0 to 590 Hz, 9999	6 Hz		Do not change the setting.	
					101	V/F1 (first frequency voltage)	0 to 1000 V	30/60 V			
					102	V/F2 (second frequency)	0 to 590 Hz, 9999	50 Hz			
					103	V/F2 (second frequency voltage)	0 to 1000 V	200/400 V			
					104	V/F3 (third frequency)	0 to 590 Hz, 9999	9999			
					105	V/F3 (third frequency voltage)	0 to 1000 V	0 V			
					106	V/F4 (fourth frequency)	0 to 590 Hz, 9999	9999			
					107	V/F4 (fourth frequency voltage)	0 to 1000 V	0 V			
					108	V/F5 (fifth frequency)	0 to 590 Hz, 9999	9999			
					109	V/F5 (fifth frequency voltage)	0 to 1000 V	0 V			
					112	Third torque boost	0% to 30%, 9999	9999		Do not change the setting.	
					135	Electronic bypass sequence selection	0, 1	0		Do not change the setting.	
145	Parameter unit language switching	0, 1, 2, 3		0	145	PU display language selection	0 to 7	0	◎		
152	Zero current detection level	0% to 200.0%		5.0%	152	Zero current detection level	0% to 400%	5.0%	◎		
153	Zero current detection period	0 to 1 s		0.5 s	153	Zero current detection time	0 to 10 s	0.5 s	◎		
155	RT activated condition	0, 10		0	155	RT signal function validity condition selection	0, 10	0	◎		
156	Stall prevention operation selection	0, 100	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	◎		
158	AM terminal function selection	1 to 3, 5, 6, 8, 14, 17, 18, 21, 9999		9999	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	△		
					240	Soft-PWM setting	0, 1	0		Do not change the setting.	
					245	Rated slip	0% to 50%, 9999	9999		Do not change the setting.	
					260	PWM frequency automatic switchover	0, 1	1		Do not change the setting.	
					292	Automatic acceleration/deceleration	0, 1, 3, 5 to 8, 11	0		Do not change the setting.	
					450	Second applied motor	0, 1, 3 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, 9999	9999		Do not change the setting.	
					451	Second motor control method selection	10 to 14, 20, 110 to 114, 9999	9999		Do not change the setting.	
					660	Increased magnetic excitation deceleration operation selection	0, 1	0		Do not change the setting.	

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FR-B (A200(E) specification) parameter				FR-B (A800 specification) compatible parameter				Description about parameter setting	
Pr.	Name	Setting range		Initial value	Pr.	Name	Setting range	Initial value	Setting	Remarks
		A200 specification	A200E specification							
					673	SF-PR slip amount adjustment operation selection	2, 4, 6, 9999	9999		Do not change the setting.
900	FM terminal calibration	—		—	C0 (900)	FM/CA terminal calibration	—	—	×	The calibration method differs between inverters in both series.
901	AM terminal calibration	—		—	C1 (901)	AM terminal calibration	—	—	×	The calibration method differs between inverters in both series.
902	Frequency setting voltage bias	0 to 10 V		0 V	C2 (902)	Terminal 2 frequency setting bias frequency	0 to 590 Hz	0 Hz	×	The calibration method differs between inverters in both series.
		0 to 60 Hz		0 Hz	C3 (902)	Terminal 2 frequency setting bias	0% to 300%	0%		
903	Frequency setting voltage gain	0 to 10 V		5 V	125 (903)	Terminal 2 frequency setting gain frequency	0 to 590 Hz	60 Hz	×	The calibration method differs between inverters in both series.
		1 to 120 Hz / 1 to 60 Hz		60 Hz	C4 (903)	Terminal 2 frequency setting gain	0% to 300%	100%		
904	Frequency setting current bias	0 to 20 mA		4 mA	C5 (904)	Terminal 4 frequency setting bias frequency	0 to 590 Hz	0 Hz	×	The calibration method differs between inverters in both series.
		0 to 60 Hz		0 Hz	C6 (904)	Terminal 4 frequency setting bias	0% to 300%	20%		
905	Frequency setting current gain	0 to 20 mA		20 mA	126 (905)	Terminal 4 frequency setting gain frequency	0 to 590 Hz	60 Hz	×	The calibration method differs between inverters in both series.
		1 to 120 Hz / 1 to 60 Hz		60 Hz	C7 (905)	Terminal 4 frequency setting gain	0% to 300%	100%		
					990	PU buzzer control	0, 1	1	◎	
					998	PM parameter initialization	0, 3003, 3103, 8009, 8109, 9009, 9109	0		Do not change the setting.
					999	Automatic parameter setting	1, 2, 10, 11, 12, 13, 20, 21, 9999	9999		Do not change the setting.

4. Option

The following table shows the comparison of options between the FR-B (A200(E) specification) series inverters and the FR-B (A800 specification) series inverters.

Name		Option model		
		FR-B (A200(E) specification)		FR-B (A800 specification)
		A200 specification	A200E specification	
Plug-in type	Industrial equipment compatible function	FR-APA 12-bit digital input Additional analog output	FR-EPA 12-bit digital input Additional analog output	FR-A8AX (16 bits) FR-A8AY
	Computer link function	FR-APB Computer link (serial communication)	FR-EPB Computer link (serial communication)	Integrated in the inverter (RS-485 terminals)
	Programmable controller link function	FR-APC	FR-EPC	Not available
	Automatic control compatible function	FR-APD PI control Program operation battery backup	FR-EPD PI control Program operation battery backup	Integrated in the inverter*1 Programmed operation is not supported*2.
	I/O function	FR-APE 12-bit digital input Relay output (three terminals) Additional analog output	FR-EPE 12-bit digital input Relay output (three terminals) Additional analog output	FR-A8AX (16 bits) FR-A8AR (three terminals) or terminals A2, B2, and C2 on the inverter. FR-A8AY
	Computer link and additional output function	—	FR-EPG Computer link (serial communication) Selectable relay output (one terminal) Analog current output 24 VDC power supply	Integrated in the inverter. Terminals A2, B2, and C2 on the inverter or FR-A8AR (three terminals). FR-A8AY Terminal PC on the inverter.
	Pulse train input function	—	FR-EPH Pulse train input Selectable relay output (one terminal) Analog current output PI control	Integrated in the inverter. Terminals A2, B2, and C2 on the inverter or FR-A8AR (three terminals). FR-A8AY Integrated in the inverter*1

*1 FR-A8AP is required when the forward rotation and reverse rotation signals need to be separately output. (The signal names are changed from RLF signal to Y30 signal, and RLR signal to Y31 signal.)

*2 Automatic operation can be performed according to the time by combining the real-time clock function with the PLC function.

Name		Option model		
		FR-B (A200(E) specification)		FR-B (A800 specification)
		A200 specification	A200E specification	
Stand-alone type	Parameter unit	FR-PU02		FR-PU07 (with some restrictions)
	Parameter copy unit	FR-ARW		Integrated as standard function (FR-DU08)
	Serial communication unit	FR-CU01		RS485 communication is available as standard.
	Digital operation panel	FR-DU01		Standard equipment (FR-DU08)
	Panel through attachment	FR-ACN		FR-A8CN (For details, refer to the Instruction Manual of the FR-A8CN1[] or the FR-A8CN[].)
	Totally enclosed structure attachment	FR-ACV		Not supported
	Attachment for conduit connection	FR-AFN		Not supported
	Intercompatibility attachment	FR-AAT		FR-AAT, FR-A5AT
	Noise filter	FR-ALF-(H) VDE standard: Compliant with VDE 0871 Class A (noise terminal voltage)		Built-in function of the inverter EN 61800-3 2nd Environment compatible SF[][]
	Power factor improving DC reactor	FR-BEL-(H)		Compatible
	Power factor improving AC reactor	FR-BAL-(H)		Compatible
	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)		
	Resistor unit	FR-BR-(H)		Compatible
	FR-RC type power regeneration converter	FR-RC-(H)		Compatible
Manual controller / speed controller	Manual controller	FR-AX		Compatible
	DC tach. follower	FR-AL		Compatible
	Three speed selector	FR-AL		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		Compatible
	Deviation sensor	YVGC-500W-NS		Compatible
	Frequency setting potentiometer	WA2W 1 kΩ		Compatible
	Frequency meter	YM206NRI 1 mA		Compatible
	Calibration resistor	RV24YN 10 kΩ		Compatible

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

Revisions

Revision date	Version	Revision
Oct. 2020	*	First edition

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