Information for Replacement of FR-U100 Series with FR-D700 Series

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

1. Size

When the FR-U100 series is replaced with the FR-D700 series, some FR-D700 series models have different installation size from that of the corresponding FR-U100 series models.

For more information about the product size, refer to the outline dimension drawings.

Specification	Existing inverter	Replacing inverter	Installation size
Standard type / Multifunction PU-operated type Three-phase 200V IP20	FR-U120-0.1K(-P)	FR-D720-0.1K	Same
	FR-U120-0.2K(-P)	FR-D720-0.2K	Same
	FR-U120-0.4K(-P)	FR-D720-0.4 K	Same
	FR-U120-0.75K(-P)	FR-D720-0.75K	Same
	FR-U120-1.5K(-P)	FR-D720-1.5K	Same
Standard type Three-phase 200V IP40*1	FR-U120-0.1K-C	FR-D720-0.1K	Same
	FR-U120-0.2K-C	FR-D720-0.2K	Same
	FR-U120-0.4K-C	FR-D720-0.4 K	Same
	FR-U120-0.75K-C	FR-D720-0.75K	Same
	FR-U120-1.5K-C	FR-D720-1.5K	Same
Standard type / Standard low-noise type Single-phase 200V IP20	FR-U120S-(N)0.1K	FR-D720S-0.1K	Same
	FR-U120S-(N)0.2K	FR-D720S-0.2K	Same
	FR-U120S-(N)0.4K	FR-D720S-0.4K	Same
	FR-U120S-(N)0.75K	FR-D720S-0.75K	Not compatible
Standard type / Standard low-noise type Single-phase 100V IP20	FR-U110W-(N)0.1K	FR-D710W-0.1K	Same
	FR-U110W-(N)0.2K	FR-D710W-0.2K	Same
	FR-U110W-(N)0.4K	FR-D710W-0.4K	Same
Multifunction type Three-phase 200V IP20	FR-U120-0.1K-F	FR-D720-0.1K	Same
	FR-U120-0.2K-F	FR-D720-0.2K	Same
	FR-U120-0.4K-F	FR-D720-0.4 K	Same
	FR-U120-0.75K-F	FR-D720-0.75K	Same
	FR-U120-1.5K-F	FR-D720-1.5K	Same
Multifunction type Three-phase 200V IP40*1	FR-U120-0.1K-FC	FR-D720-0.1K	Same
	FR-U120-0.2K-FC	FR-D720-0.2K	Same
	FR-U120-0.4K-FC	FR-D720-0.4 K	Same
	FR-U120-0.75K-FC	FR-D720-0.75K	Same
	FR-U120-1.5K-FC	FR-D720-1.5K	Same
Multifunction type / Multifunction low-noise type Single-phase 200V IP20	FR-U120S-(N)0.1K-F	FR-D720S-0.1K	Same
	FR-U120S-(N)0.2K-F	FR-D720S-0.2K	Same
	FR-U120S-(N)0.4K-F	FR-D720S-0.4K	Same
	FR-U120S-(N)0.75K-F	FR-D720S-0.75K	Not compatible
Multifunction type / Multifunction low-noise type Single-phase 100V IP20	FR-U110W-(N)0.1K-F	FR-D710W-0.1K	Same
	FR-U110W-(N)0.2K-F	FR-D710W-0.2K	Same
	FR-U110W-(N)0.4K-F	FR-D710W-0.4K	Same
Multifunction low-noise type Three-phase 200V IP20	FR-U120-N0.1K-F	FR-D720-0.1K	Same
	FR-U120-N0.2K-F	FR-D720-0.2K	Same
	FR-U120-N0.4K-F	FR-D720-0.4 K	Same
	FR-U120-N0.75K-F	FR-D720-0.75K	Not compatible
	FR-U120-N1.5K-F	FR-D720-1.5K	Same

*1 When the protective structure of the existing inverter is IP40, consider the use of the IP20-rated inverter after replacement.

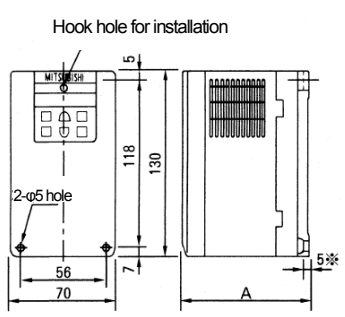
If the IP40-rated inverter is indispensable, consider the use of the FR-E700 inverter and the FR-E7CV[] option unit although the sizes are different.

Outline dimension drawings (Unit: mm)

Standard type, three-phase 200V, IP20

Multifunction type, three-phase 200V, IP20

■ FR-U120-0.1K to 0.75K(F)

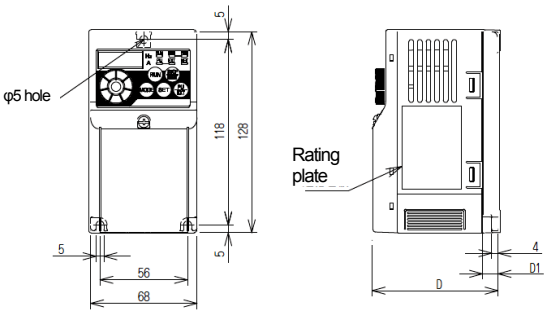


Hook hole dimensions

Capacity	A
0.1K	81
0.2K	86
0.4K	101
0.75K	121

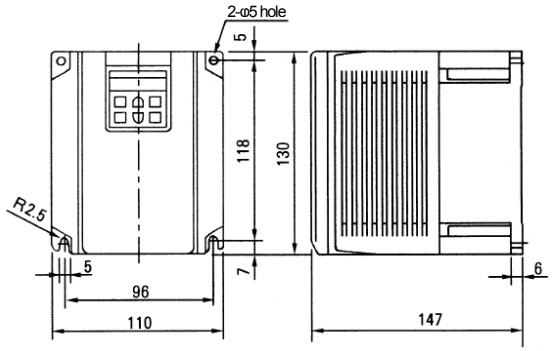
* 4.5 for 0.1K

■ FR-D720-0.1K to 0.75K

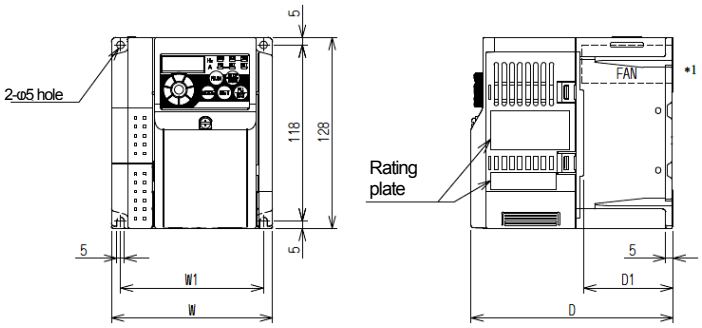


Inverter Model	D	D1
FR-D720-0.1K, 0.2K	80.5	10
FR-D720-0.4K	112.5	42
FR-D720-0.75K	132.5	62

■ FR-U120-1.5K(F)



■ FR-D720-1.5K

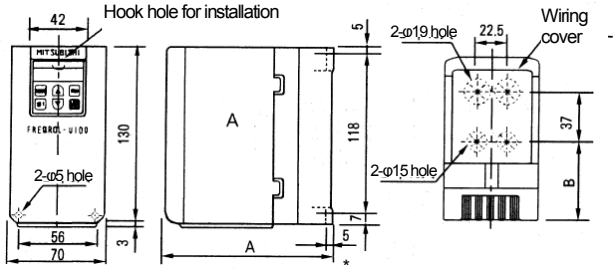


Inverter Model	W	W1	D	D1
FR-D720-1.5K	108	96	135.5	60

Standard type, three-phase 200V, IP40

Multifunction type, three-phase 200V, IP40

■ FR-U120-0.1K to 0.75K-(F)C



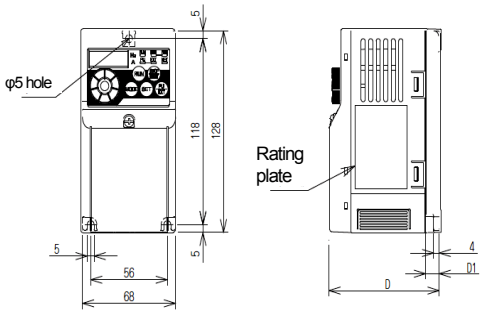
Capacity	A	B
0.1K	101	38
0.2K	106	43
0.4K	121	58
0.75K	141	78

* 4.5 for FR-U120-0.1K

Hook hole dimensions

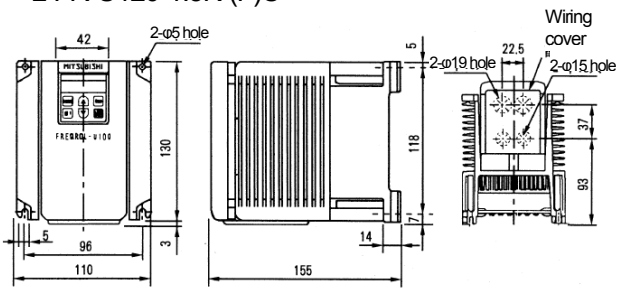
■ FR-D720-0.1K to 0.75K

*1 Consider the use of the IP20-rated inverter.



Inverter Model	D	D1
FR-D720-0.1K, 0.2K	80.5	10
FR-D720-0.4K	112.5	42
FR-D720-0.75K	132.5	62

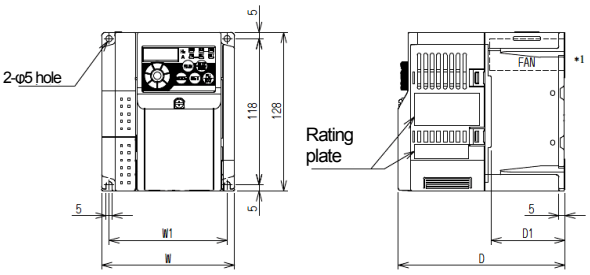
■ FR-U120-1.5K-(F)C



(Note) 1.5K has a fan.

■ FR-D720-1.5K

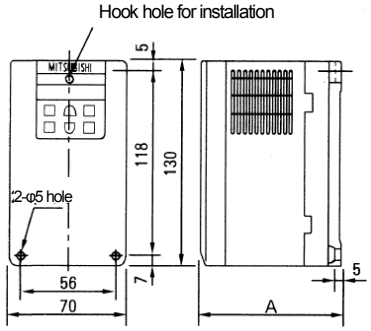
*1 Consider the use of the IP20-rated inverter.



Inverter Model	W	W1	D	D1
FR-D720-1.5K	108	96	135.5	60

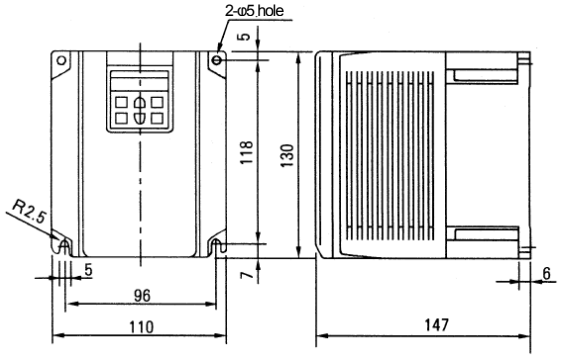
Standard type / Standard low-noise type, single-phase 200V, IP20
Multifunction type / Multifunction low-noise type, single-phase 200V, IP20

■ FR-U120S-(N)0.1K to 0.4K(-F)

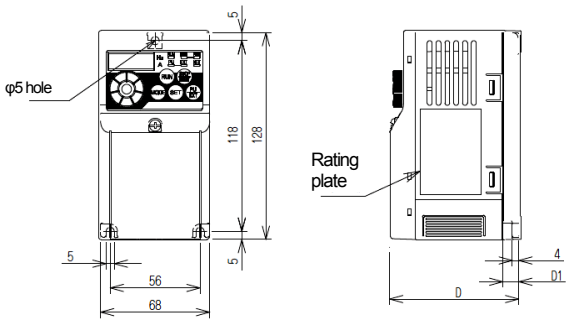


Capacity	A
0.1K	86
0.2K	101
0.4K	141

■ FR-U120S-(N)0.75K(-F)



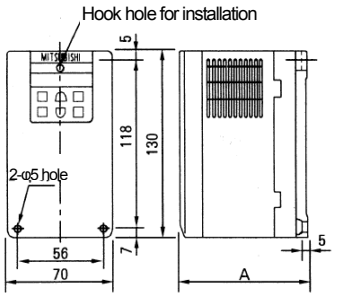
■ FR-D720S-0.1K to 0.75K



Inverter Model	D	D1
FR-D720S-0.1K, 0.2K	80.5	10
FR-D720S-0.4K	142.5	42
FR-D720S-0.75K	162.5	62

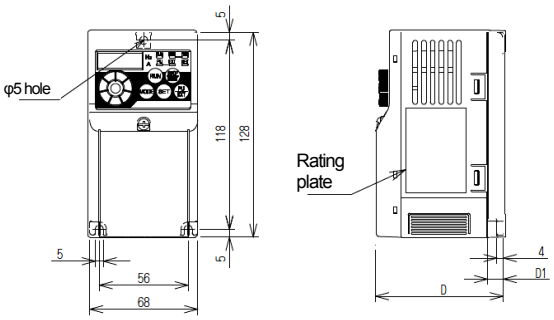
Standard type / Standard low-noise type, single-phase 100V, IP20
Multifunction type / Multifunction low-noise type, single-phase 100V, IP20

■ FR-U110W-(N)0.1K to 0.4K(-F)



Capacity	A
0.1K	86
0.2K	121
0.4K	141

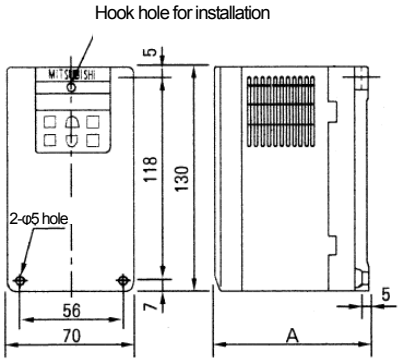
■ FR-D710W-0.1K to 0.4K



Inverter Model	D	D1
FR-D710W-0.1K	80.5	10
FR-D710W-0.2K	110.5	10
FR-D710W-0.4K	142.5	42

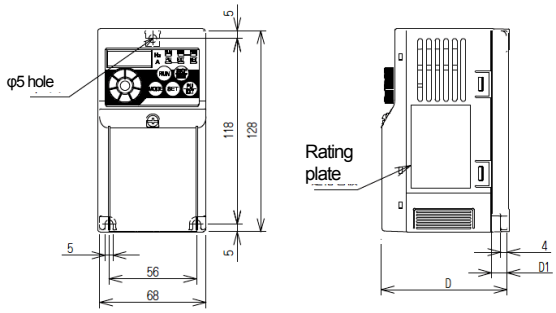
Multifunction low-noise type, three-phase 200V, IP20

■ FR-U120-N0.1K to 0.4K-F



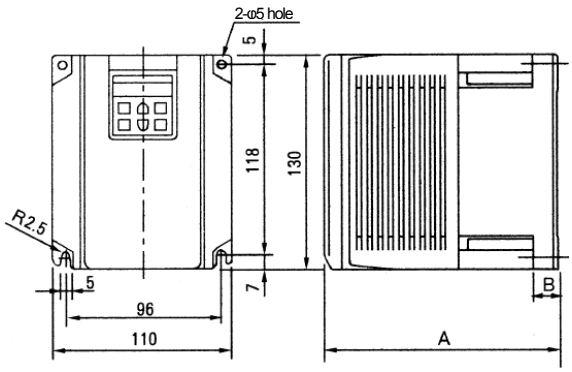
Capacity	A
0.1K	86
0.2K	101
0.4K	121

■ FR-D720-0.1K to 1.5K



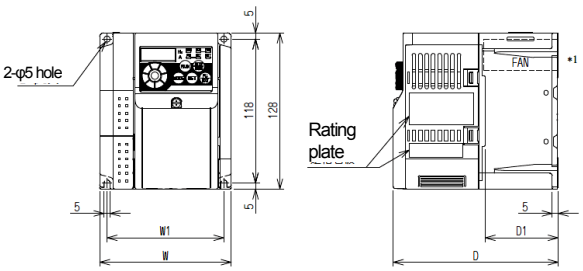
Inverter Model	D	D1
FR-D720-0.1K, 0.2K	80.5	10
FR-D720-0.4K	112.5	42
FR-D720-0.75K	132.5	62

■ FR-U120-N0.75K to 1.5K-F



Capacity	A	B
0.75K	147	6
1.5K	155	14

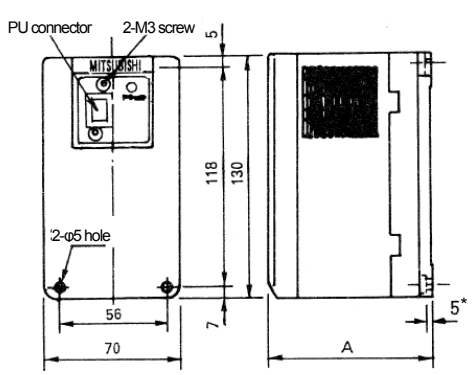
(Note) 1.5K has a fan.



Inverter Model	W	W1	D	D1
FR-D720-1.5K	108	96	135.5	60

Multifunction PU-operated type, three-phase 200V, IP20

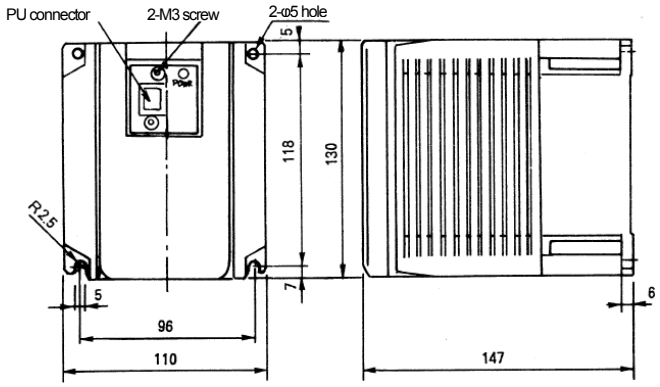
■ FR-U120-0.1K to 0.75K-P



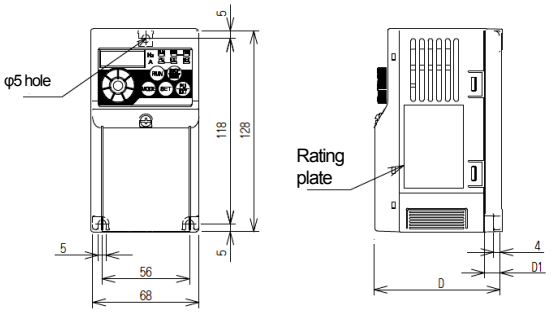
Capacity	A
0.1K	81
0.2K	86
0.4K	101
0.75K	121

* 4.5 for 0.1K

■ FR-U120-1.5K-P

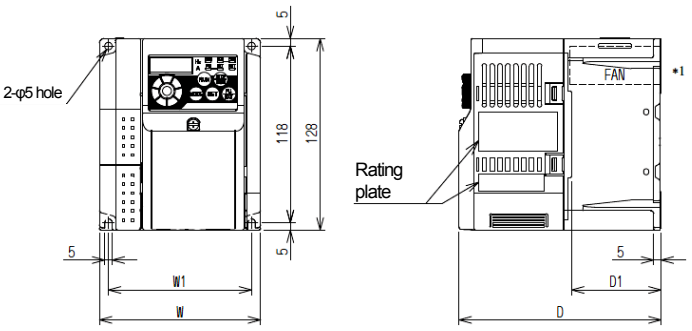


■ FR-D720-0.1K to 0.75K



Inverter Model	D	D1
FR-D720-0.1K, 0.2K	80.5	10
FR-D720-0.4K	112.5	42
FR-D720-0.75K	132.5	62

■ FR-D720-1.5K



Inverter Model	W	W1	D	D1
FR-D720-1.5K	108	96	135.5	60

2. Connection

Terminal names are not the same. Ensure that correct terminals are connected.

Type		FR-U100 terminal name	FR-D700 terminal name	
Main circuit		R, S, T (three-phase) R, S (single-phase)	R/L1, S/L2, T/L3 (three-phase) R/L1, S/L2 (single-phase)	
		U, V, W	U, V, W	
			P/+, PR	
			P/+, N/-	
			P/+, P1	
		⏚	⏚	
Control circuit input signal	Relay	STF	STF	
		STR	STR	
		X1	RH	Multifunction type only
		X2	RM	
		X3	RL	
		SD	SD	Isolated from terminal 5 for the FR-D700. Not isolated from terminal 5 for the FR-U100.
		PC	PC	Multifunction type only
			S1	
			S2	
			SC	
Analog	Frequency setting	10	10	
		2	2	
			4	
		5	5	Isolated from terminal SD for the FR-D700. Not isolated from terminal SD for the FR-U100.
Control circuit output signal	Relay	A, B, C	A, B, C	Standard type: B, C
	Open collector	RUN/SU/FU	RUN	Multifunction type only
		SD	SE	Terminal SE for the FR-D700. Isolated from terminal SD.
	Analog	FM	FM	Multifunction type only
		SD	SD	
PU	Parameter unit	Connector	PU connector	Multifunction PU type only FR-PU03 and FR-DU01 cannot be used. Use FR-PU07 or FR-PA07. Change the connection cable from FR-CBL[] to FR-CB20[].
Operation setting		Key pad	Operation panel	

Main circuit terminal layout and connection example

The following shows the main circuit terminal layouts of the FR-U100 and FR-D700.
The shape and layout of main circuit terminals differ between the two series. Check the terminal names and positions before performing wiring.

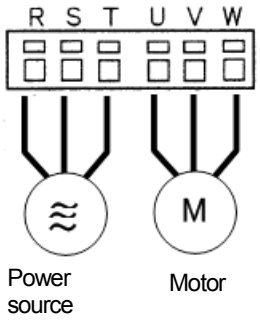
■ FR-U100

Insertion type

Three-phase 200V

FR-U120-(N)[]K-(C)(F)(FC)(P)

Main circuit terminal block

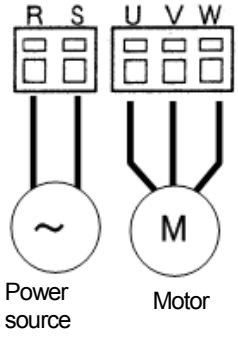


Single-phase 100/200V

FR-U120S-(N)[]K-(F)

FR-U110W-(N)[]K-(F)

Main circuit terminal block

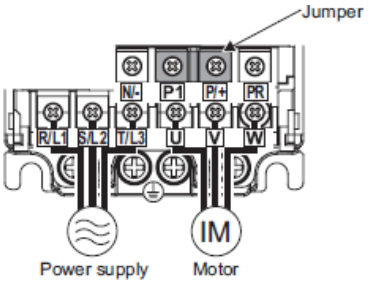


■ FR-D700

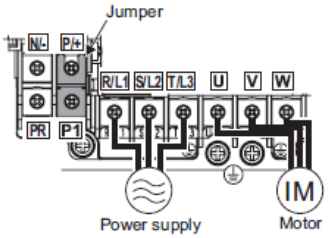
Screw type
(Crimp terminals can be used.)

Three-phase 200V

FR-D720-0.1K to 0.75K

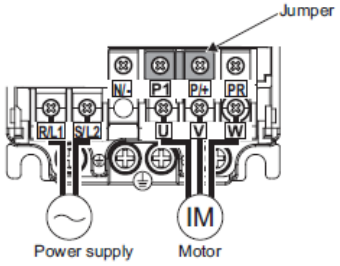


FR-D720-1.5K

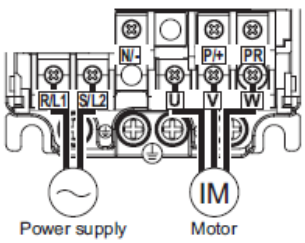


Single-phase 100/200V

FR-D720S-0.1K to 0.75K



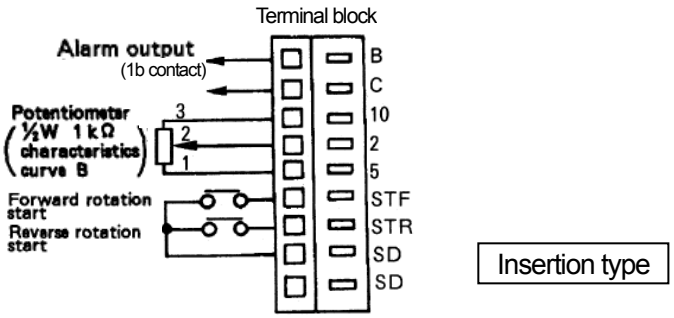
FR-D710W-0.1K to 0.4K



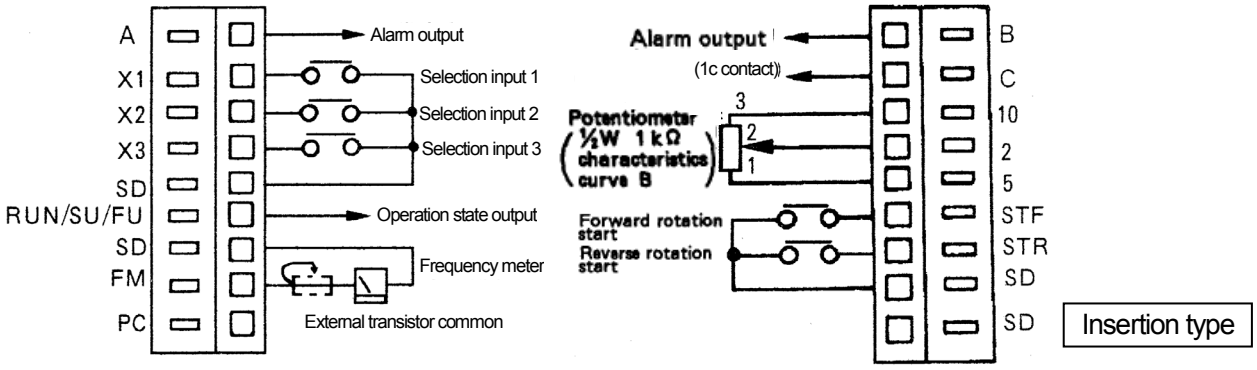
Control circuit terminal layout

The following shows the control circuit terminal layouts of the FR-U100 and FR-D700.
The shape and layout of control circuit terminals differ between the two series. Check the terminal names and positions before performing wiring.

■ FR-U100 standard type: Control circuit terminal layout and connection example

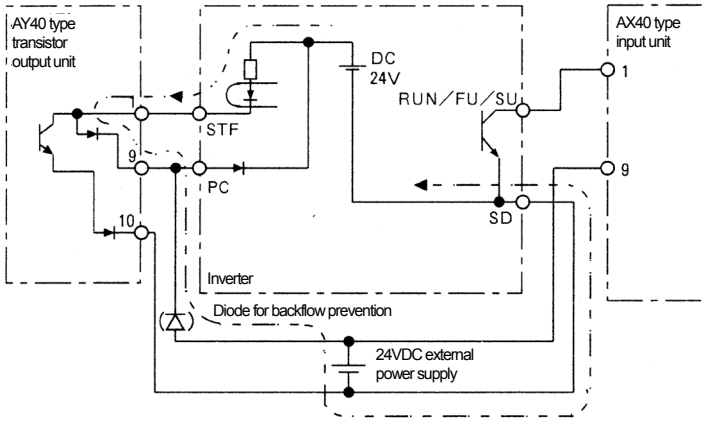


■ FR-U100 multifunction type: Control circuit terminal layout and connection example



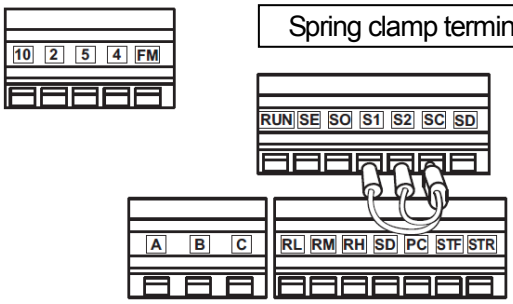
Recommended wire size: 0.3 to 0.75mm^2 Wire strip length: 8 to 10mm

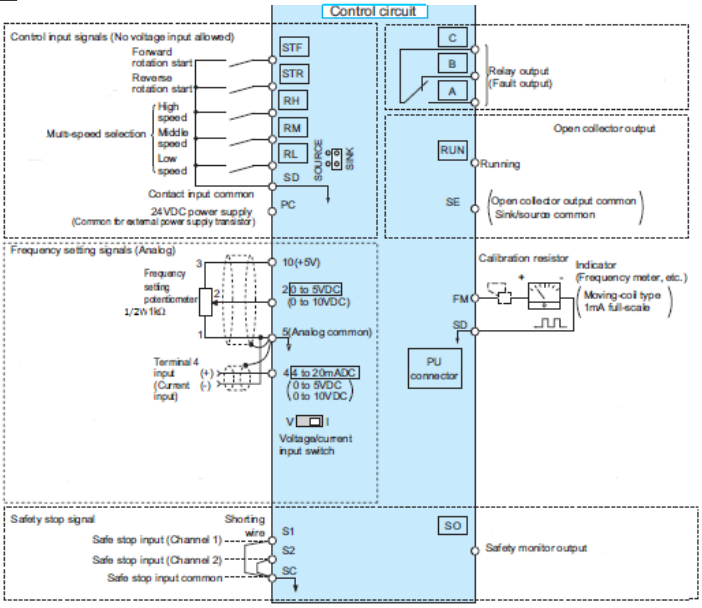
Example of connection with a programmable controller



When an output module of the programmable controller is connected to the input terminal of the inverter and an input module to the output terminal while terminal PC is used, take either of the following actions to prevent the backflow current as is the case where terminal PC is not used.
(1) Insert a diode to prevent the backflow current.
(2) Use an all-point isolated type output module. (e.g. AY40A)
(3) Use a separate power source for the output module and the input module of the programmable controller.

■ FR-D700: Control circuit terminal layout and connection example

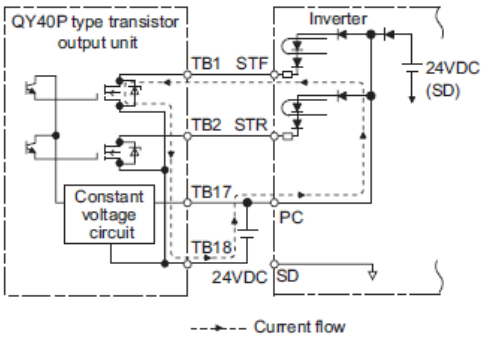




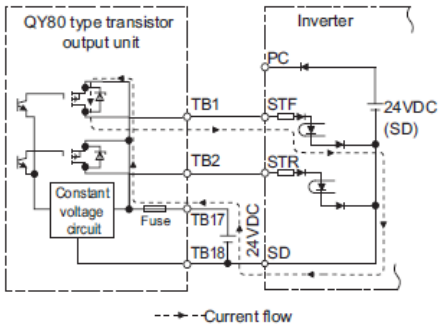
Recommended wire size: 0.3 to 0.75mm^2
Wire strip length: 10mm

Example of connection with a programmable controller

Sink logic



Source logic



When crimp terminals are used for control wiring of the FR-U100 series, note that recommended crimp terminals are different for the FR-D700 series.
If the recommended crimp terminals are not applicable, consider the following.
- Change the wire strip length to 10mm and use bare wire instead of crimp terminals.

For details, refer to the Instruction Manual.

3. Parameters

The following table shows the parameter settings required when replacing FR-U100 series inverters with FR-D700 series inverters.
A double circle in "Setting" of "Description about parameter setting" shows that the setting of FR-U100 remains the same in FR-D700.
A triangle shows that the parameter setting is different. Refer to the Instruction Manual to change the parameter setting.
A dash shows that the parameter is not taken over. Set the parameter as required.
To display extended parameters, set Pr.160 = "0".

: The number or the function is different.

◎ The parameter setting remains the same.
△: Change the setting to use the parameter.
—: Adjust or set the FR-D700 parameter.

Inverter type					FR-U100 parameter list				FR-D700 parameter list				Description about parameter setting	
Standard	Standard Low noise	Multifunction	Multifunction Low noise	Multifunction PU-operated	Pr.	Name	Setting range	Initial value	Pr.	Name	Setting range	Initial value	Setting	Remarks
○	○	○	○	○	0	Torque boost	0 to 15%	6%	0	Torque boost	0 to 30%	6/4/3/2%	△	When this parameter has been used at the initial setting in the FR-U100 inverters, use it at the initial setting in the FR-D700 inverters as well. When the setting has been changed from the initial value in the FR-U100 inverters, set the value obtained by multiplying the ratio of the set value to the initial value by the initial value in the FR-D700 inverters.
○	○	○	○	○	1	Upper limit frequency	0 to 120Hz	120Hz	1	Maximum frequency	0 to 120Hz	120Hz	◎	
○	○	○	○	○	2	Lower limit frequency	0 to 60Hz	0Hz	2	Minimum frequency	0 to 120Hz	0Hz	◎	
○	○	○	○	○	3	Base frequency	50 to 120Hz	60Hz	3	Base frequency	0 to 400Hz	60Hz	◎	
		○	○	○	4	3-speed setting (high)	0 to 120Hz	60Hz	4	Multi-speed setting (high speed)	0 to 400Hz	60Hz	◎	
		○	○	○	5	3-speed setting (medium)	0 to 120Hz	30Hz	5	Multi-speed setting (middle speed)	0 to 400Hz	30Hz	◎	
		○	○	○	6	3-speed setting (low)	0 to 120Hz	10Hz	6	Multi-speed setting (low speed)	0 to 400Hz	10Hz	◎	
○	○	○	○	○	7	Acceleration time	0, 0.1 to 999s	5s	7	Acceleration time	0 to 3600s	5/10/15s	◎	
○	○	○	○	○	8	Deceleration time	0, 0.1 to 999s	5s	8	Deceleration time	0 to 3600s	5/10/15s	◎	
○	○	○	○	○	9	Electronic thermal relay	0 to 15A	Rated output current	9	Electronic thermal O/L relay	0 to 500A	Rated current	◎	
									10	DC injection brake operation frequency	0 to 120Hz	3Hz	—	Set the parameter as required.
○		○		○	10	PWM mode	0 to 15, —	3, —	72	PWM frequency selection	0 to 15	1	△	Use Pr.72 to set this function. Pr.10 = "3" -> Pr.72 = "3"
									240	Soft-PWM operation selection	0, 1	1		
									260	PWM frequency automatic switchover	0, 1	0		
○	○	○	○	○	11	DC dynamic braking operation time	0 to 10s	0.5s	11	DC injection brake operation time	0 to 10s	0.5s	◎	Use Pr.10 to set the DC injection brake operation frequency.
○	○	○	○	○	12	DC dynamic braking voltage	0 to 15%	8%	12	DC injection brake operation voltage	0 to 30%	4%	△	When Pr.12 has been used at the initial setting, use it at the initial setting for the FR-D700 as well. When the setting has been changed from the initial value in the FR-U100 inverters, set the value obtained by multiplying the ratio of the set value to the initial value by the initial value in the FR-D700 inverters.
		○	○		14	Applied motor selection	0, 10	0	71	Applied motor	0, 1, 3, 13, 23, 40, 43, 50, 53	0	△	Use Pr.71. Pr.14 = "0" -> Pr.71 = "0", Pr.14 = "10" -> Pr.71 = "1"
		○	○	○	15	JOG frequency	0 to 120Hz	5Hz	15	Jog frequency	0 to 400Hz	5Hz	◎	
		○	○	○	16	JOG acceleration/deceleration time	0, 0.1 to 999s	0.5s	16	Jog acceleration/deceleration time	0 to 3600s	0.5s	◎	

Inverter type					FR-U100 parameter list				FR-D700 parameter list				Description about parameter setting	
Standard	Standard Low noise	Multifunction	Multifunction Low noise	Multifunction PU-operated	Pr.	Name	Setting range	Initial value	Pr.	Name	Setting range	Initial value	Setting	Remarks
		○	○	○	17	External thermal relay input selection	0, 1	0	180	RL terminal function selection	0 to 5, 7, 8, 10, 12, 14, 16, 18, 24, 25, 37, 62, 65 to 67, 9999	0	△	Use Pr.180 to Pr.182. Pr.17 = "0" -> JOG, Pr.17 = "1" -> OH
									181	RM terminal function selection		1		
									182	RH terminal function selection		2		
		○	○	○	19	Base frequency voltage	0 to 500V, —	—	19	Base frequency voltage	0 to 1000V, 8888, 9999	9999	△	— -> 9999
○	○	○	○	○	20	Acceleration/deceleration reference frequency	1 to 120Hz	60Hz	20	Acceleration/deceleration reference frequency	1 to 400Hz	60Hz	◎	
○	○	○	○	○	21	Frequency setting voltage bias	0 to 60Hz	0Hz	C2 (902)	Terminal 2 frequency setting bias frequency	0 to 400Hz	0Hz	△	Refer to Pr.C2. Also refer to Pr.73 and Pr.74.
○	○	○	○	○	22	Frequency setting voltage gain	0 to 120Hz	60Hz	125 (903)	Terminal 2 frequency setting gain frequency	0 to 400Hz	60Hz	△	Refer to Pr.125. Also refer to Pr.73 and Pr.74.
○	○	○	○	○	23	Stall prevention operation level	0 to 10	5	22	Stall prevention operation level	0 to 200%	150	△	Use Pr.22. Pr.23 = "5" -> Pr.22 = "150"
		○	○	○	24	Multi-speed setting (4th speed)	0 to 120Hz, —	—	24	Multi-speed setting (speed 4)	0 to 400Hz, 9999	9999	△	— -> 9999
		○	○	○	25	Multi-speed setting (5th speed)	0 to 120Hz, —	—	25	Multi-speed setting (speed 5)	0 to 400Hz, 9999	9999	△	
		○	○	○	26	Multi-speed setting (6th speed)	0 to 120Hz, —	—	26	Multi-speed setting (speed 6)	0 to 400Hz, 9999	9999	△	
		○	○	○	27	Multi-speed setting (7th speed)	0 to 120Hz, —	—	27	Multi-speed setting (speed 7)	0 to 400Hz, 9999	9999	△	
		○	○	○	37	Speed display	0, 0.1 to 999	0	37	Speed display	0, 0.01 to 9998	0	◎	
		○	○	○	42	Up-to-frequency sensitivity	0 to 100%	10%	41	Up-to-frequency sensitivity	0 to 100%	10%	◎	Refer to Pr.41.
		○	○	○	43	Output frequency detection	1 to 120Hz	6Hz	42	Output frequency detection	0 to 400Hz	6Hz	◎	Refer to Pr.42.
		○	○	○	44	Output frequency detection for reverse rotation	0 to 120Hz, ——	—	43	Output frequency detection for reverse rotation	0 to 400Hz, 9999	9999	△	Refer to Pr.43. — -> 9999

Inverter type					FR-U100 parameter list				FR-D700 parameter list				Description about parameter setting	
Standard	Standard Low noise	Multifunction	Multifunction Low noise	Multifunction PU-operated	Pr.	Name	Setting range	Initial value	Pr.	Name	Setting range	Initial value	Setting	Remarks
		○	○	○	46	No.2 acceleration/deceleration time	0, 0.1 to 999s, —	—	44	Second acceleration/deceleration time	0 to 3600s	5/10/15s	△	Refer to Pr.44.
		○	○	○	47	No.2 deceleration time	0, 0.1 to 999s, —	—	45	Second deceleration time	0 to 3600s, 9999	9999	△	Refer to Pr.45. — -> 9999
		○	○	○	48	No.2 torque boost	0 to 15%, —	—	46	Second torque boost	0 to 30%, 9999	9999	△	Refer to Pr.46.
		○	○	○	49	No.2 V/F (Base frequency)	50 to 120Hz, —	—	47	Second V/F (base frequency)	0 to 400Hz, 9999	9999	△	Refer to Pr.47.
		○	○	○	50	Retry selection	0, 1, 2, 3	0	65	Retry selection	0 to 5	0	△	Refer to Pr.65.
		○	○	○	51	No. of retries at alarm	0, 1 to 10, 101 to 110	0	67	Number of retries at fault occurrence	0 to 10, 101 to 110	0	◎	Refer to Pr.67.
		○	○	○	52	Retry execution wait time	0 to 360s	1s	68	Retry waiting time	0.1 to 600s	1s	◎	Refer to Pr.68.
		○	○	○	53	No. of retry execution time display clear	0	0	69	Retry count display erase	0	0	◎	Refer to Pr.69.
		○	○	○	55	Frequency monitor reference	0 to 120Hz	60Hz	55	Frequency monitoring reference	0 to 400Hz	60Hz	◎	
		○	○	○	56	Current monitor reference	0 to 200%	150%	56	Current monitoring reference	0 to 500A	Inverter rated current	△	The function is different.

Inverter type					FR-U100 parameter list				FR-D700 parameter list				Description about parameter setting	
Standard	Standard Low noise	Multifunction	Multifunction Low noise	Multifunction PU-operated	Pr.	Name	Setting range	Initial value	Pr.	Name	Setting range	Initial value	Setting	Remarks
		○	○	○	59	Remote setting function selection	0, 1	0	59	Remote function selection	0, 1, 2, 3	0	△	Use Pr.59. "0" -> "1", "1" -> "2" or "3"
		○	○	○	60	Input terminal function selection	0 to 8	0	180	RL terminal function selection	0 to 5, 7, 8, 10, 12, 14, 16, 18, 24, 25, 37, 62, 65 to 67, 9999	0	△	Refer to Pr.180 to Pr.182 and Pr.59. Pr.60 = "0" -> RH, RM, RL (7-speed)
									181	RM terminal function selection		1		
									182	RH terminal function selection		2		
		○	○		61	Input terminal allocation	111 to 999, —	—						
		○	○		62	STR terminal function	0 to 10, —	—	179	STR terminal function selection		61	△	Use Pr.179. Use Pr.178 for terminal STF.
		○	○	○	70	FM output terminal function selection	0, 1	0	54	FM terminal function selection	1 to 3, 5, 8 to 12, 14, 21, 24, 52, 53, 61, 62	1	△	Use Pr.54. Pr.70 = "0" -> Output frequency Pr.70 = "1" -> Output current
	○		○		71	Tone selection	0, 1	0	240	Soft-PWM operation selection	0, 1	1	△	Refer to Pr.240.
	○		○		72	PWM carrier frequency	2.3 to 14.5kHz	7kHz	72	PWM frequency selection	0 to 15	1	△	The function is different. Adjust the parameter for the FR-D700. Pr.72 = "7" -> Pr.72 = "7"
									260	PWM frequency automatic switchover	0, 1	0		
									73	Analog input selection	0, 1, 10, 11	1	—	Set the parameter as required.
									74	Input filter time constant	0 to 8	1	—	Set the parameter as required.
○	○	○	○	○	75	STOP key function	0, 14	14	75	Reset selection/disconnected PU detection/PU stop selection	0 to 3, 14 to 17	14	△	
		○	○	○	76	Output signal selection	0, 1, 2	0	190	RUN terminal function selection	0, 1, 3, 4, 7, 8, 11 to 16, 25, 26, 46, 47, 64, 70, 80, 81, 90, 91, 93, 95, 96, 98, 99, 100, 101, 103, 104, 107, 108, 111 to 116, 125, 126, 146, 147, 164, 170, 180, 181, 190, 191, 193, 195, 196, 198, 199, 9999	0	△	Use Pr.190. Pr.76 = "0" -> RUN, Pr.76 = "1" -> SU, Pr.76 = "2" -> FU

Inverter type					FR-U100 parameter list				FR-D700 parameter list				Description about parameter setting	
Standard	Standard Low noise	Multifunction	Multifunction Low noise	Multifunction PU-operated	Pr.	Name	Setting range	Initial value	Pr.	Name	Setting range	Initial value	Setting	Remarks
○	○	○	○	○	77	Write prohibit selection	0,1	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	1, 2, 3, 4	1	79	Operation mode selection	0, 1, 2, 3, 4, 6, 7	0	△	
		○	○		80	Multi speed 8	0 to 120Hz, —	—	232	Multi-speed setting (speed 8)	0 to 400Hz, 9999	9999	△	Refer to Pr.232. Refer to Pr.233. Refer to Pr.234. Refer to Pr.235. Refer to Pr.236. Refer to Pr.237. Refer to Pr.238. Refer to Pr.239. — -> 9999
		○	○		81	Multi speed 9	0 to 120Hz, —	—	233	Multi-speed setting (speed 9)	0 to 400Hz, 9999	9999	△	
		○	○		82	Multi speed 10	0 to 120Hz, —	—	234	Multi-speed setting (speed 10)	0 to 400Hz, 9999	9999	△	
		○	○		83	Multi speed 11	0 to 120Hz, —	—	235	Multi-speed setting (speed 11)	0 to 400Hz, 9999	9999	△	
		○	○		84	Multi speed 12	0 to 120Hz, —	—	236	Multi-speed setting (speed 12)	0 to 400Hz, 9999	9999	△	
		○	○		85	Multi speed 13	0 to 120Hz, —	—	237	Multi-speed setting (speed 13)	0 to 400Hz, 9999	9999	△	
		○	○		86	Multi speed 14	0 to 120Hz, —	—	238	Multi-speed setting (speed 14)	0 to 400Hz, 9999	9999	△	
		○	○		87	Multi speed 15	0 to 120Hz, —	—	239	Multi-speed setting (speed 15)	0 to 400Hz, 9999	9999	△	
		○	○		91	Frequency jump 1A	0 to 120Hz, ——	—	31	Frequency jump 1A	0 to 400Hz, 9999	9999	△	Refer to Pr.31. Refer to Pr.32. Refer to Pr.33. Refer to Pr.34. Refer to Pr.35. Refer to Pr.36. — -> 9999
		○	○		92	Frequency jump 1B	0 to 120Hz, ——	—	32	Frequency jump 1B			△	
		○	○		93	Frequency jump 2A	0 to 120Hz, ——	—	33	Frequency jump 2A			△	
		○	○		94	Frequency jump 2B	0 to 120Hz, ——	—	34	Frequency jump 2B			△	
		○	○		95	Frequency jump 3A	0 to 120Hz, ——	—	35	Frequency jump 3A			△	
		○	○		96	Frequency jump 3B	0 to 120Hz, ——	—	36	Frequency jump 3B			△	
									160	Extended function display selection	0, 9999	9999	—	To display extended parameters, set Pr.160 = "0". Set the parameter as required.
									178	STF terminal function selection	0 to 5, 7, 8, 10, 12, 14, 16, 18, 24, 25, 37, 60, 62, 65 to 67, 9999	60	—	Set the parameter as required.

Inverter type					FR-U100 parameter list				FR-D700 parameter list				Description about parameter setting	
Standard	Standard Low noise	Multifunction	Multifunction Low noise	Multifunction PU-operated	Pr.	Name	Setting range	Initial value	Pr.	Name	Setting range	Initial value	Setting	Remarks
		○	○		C-1	Frequency meter scale calibration	—	—	C0 (900)	FM terminal calibration	—	—	△	The calibration method differs between inverters in both series. Refer to Pr.C0.
				○	900									
○	○	○	○		C-2	Frequency setting bias calibration	0 to 60Hz	0Hz	C2 (902)	Terminal 2 frequency setting bias frequency	0 to 400Hz	0Hz	△	The calibration method differs between inverters in both series. Refer to Pr.C2 and Pr.C3. Also refer to Pr.73 and Pr.74. (When current input (4 to 20 mA) is selected, use terminal 4 for input and set Pr.126, Pr.C5 (904) to Pr.C7 (905).) Set the parameter as required.
				○	902				C3 (902)	Terminal 2 frequency setting bias	0 to 300%	0%		
○	○	○	○		C-3	Frequency setting gain calibration	0 to 120Hz	60Hz	125 (903)	Terminal 2 frequency setting gain frequency	0 to 400Hz	60Hz	△	The calibration method differs between inverters in both series. Refer to Pr.125 and Pr.C4. Also refer to Pr.73 and Pr.74. (When current input (4 to 20 mA) is selected, use terminal 4 for input and set Pr.126, Pr.C5 (904) to Pr.C7 (905).) Set the parameter as required.
				○	903				C4 (903)	Terminal 2 frequency setting gain	0 to 300%	100%	△	
				○	990	PU key sound selection	0, 1	0	990	PU buzzer control	0, 1	1	△	
				○	991	PU display data selection	0, 1, 2	0	52	DU/PU main display data selection	0, 5, 8 to 12, 14, 20, 23 to 25, 52 to 55, 61, 62, 64, 100	0	△	Use Pr.52 for adjustment in the FR-D700.
				○	996	Alarm clear	—	—	Er.CL	Fault history clear	0, 1	0	△	Use the operation panel.
				○	997	Inverter reset	—	—						Consider the use of the STOP/RESET key on the operation panel.
				○	998	All parameter clear	—	—	ALLC	All parameter clear	0, 1	0	△	Use the operation panel to clear parameters. The frequency setting signal is calibrated differently.
○	○	○	○		CLr	Parameter clear	0, 1, 2	0						
				○	999	Parameter clear	—	—	Pr.CL	Parameter clear	0, 1	0	△	Use the operation panel.

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4. Option

The following table shows the comparison of options between the FR-U100 series inverters and the FR-D700 series inverters.

Name		Option	
		FR-U100	FR-D700
Stand-alone type	Power factor improving AC reactor	FR-BAL	FR-HAL
	Noise reduction output reactor	FR-BOL	Compatible
	EMC Directive compliant noise filter	SF	SF, FR-S5NFSA (single-phase 200V)
	DIN rail installation attachment	FR-UDA	FR-UDA*
	Radio noise filter	FR-BIF	Compatible
	Line noise filter	FR-BSF01	Compatible
	Parameter unit	FR-PU03	FR-PU07
	Digital operation panel	FR-DU01	FR-PA07
	Parameter unit connection cable	FR-CBL	FR-CB20
Manual Controller / Speed Controller	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

* When installation sizes are different between two series for some capacity models, change the attachment.