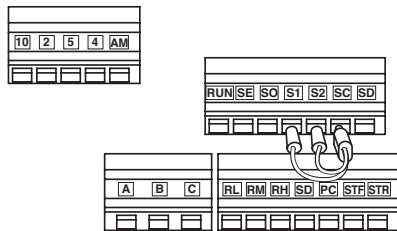
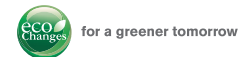


Wiring of Control Circuit Standard control circuit terminal layout



Terminal	Description
10	5VDC power supply (10mA max.)
2	Frequency setting analog input: 0 to 5VDC (or 0 to 10VDC)
5	Frequency setting analog input common
4	Frequency setting analog input: 4 to 20mA (0 to 5VDC or 0 to 10VDC)
AM	Analog output (0 to 10VDC)
RUN	Open collector digital output (default: inverter running)
SE	Open collector digital output common
SO	Safety stop digital inputs
S1	
S2	
SC	
SD	Common for contact input, external transistor and 24VDC power supply
A	Form C relay output: Normally open
B	Form C relay output: Normally closed
C	Form C relay output common
RL	Digital input (default: Low speed preset)
RM	Digital input (default: Mid speed preset)
RH	Digital input (default: High speed preset)
SD	Common for contact input, external transistor and 24VDC power supply
PC	24VDC power supply (100mA max.)
STF	Forward rotation start
STR	Reverse rotation start



FR-D700 SERIES INVERTERS

Pocket Reference Guide



MITSUBISHI ELECTRIC AUTOMATION, INC.

500 Corporate Woods Parkway, Vernon Hills, IL 60061
Ph 847.478.2100 • Fx 847.478.2253

us.MitsubishiElectric.com/fa/en

March, 2017 • ©2017, Mitsubishi Electric Automation, Inc.
Specifications subject to change without notice. • All rights reserved

L-VH-04045



FR-S500E – FR-D700 Conversion Chart

FR-S500E Model Number	FR-D700 Model Number
240 Volt	
FR-S520E-0.1K-NA	FR-D720-008-NA
FR-S520E-0.2K-NA	FR-D720-014-NA
FR-S520E-0.4K-NA	FR-D720-025-NA
FR-S520E-0.75K-NA	FR-D720-042-NA
FR-S520E-1.5K-NA	FR-D720-070-NA
FR-S520E-2.2K-NA	FR-D720-100-NA
FR-S520E-3.7K-NA	FR-D720-165-NA
480 Volt	
FR-S540E-0.4K-NA	FR-D740-012-NA
FR-S540E-0.75K-NA	FR-D740-022-NA
FR-S540E-1.5K-NA	FR-D740-036-NA
FR-S540E-2.2K-NA	FR-D740-050-NA
FR-S540E-3.7K-NA	FR-D740-080-NA
115 Volt	
FR-S510WE-0.1K-NA	FR-D710W-008-NA
FR-S510WE-0.2K-NA	FR-D710W-014-NA
FR-S510WE-0.4K-NA	FR-D710W-025-NA
FR-S510WE-0.75K-NA	FR-D710W-042-NA

FR-D700 Series utilizes the same mounting holes as FR-S500E & FR-S500 Series.
FR-S500 and FR-S500E Series are physically the same.



115V Selection Chart

100–115VAC 1-Phase Input & 200–230V 3-Phase Output			
Model Number	Output Amps	HP	Frame Size
FR-D710W-008-NA	0.8	1/8	A
FR-D710W-014-NA	1.4	1/4	AA
FR-D710W-025-NA	2.5	1/2	D
FR-D710W-042-NA	4.2	1	GG

240V Selection Chart

200–240VAC 3-Phase Input & Output			
Model Number	Output Amps	HP	Frame Size
FR-D720-008-NA	0.8	1/8	A
FR-D720-014-NA	1.4	1/4	A
FR-D720-025-NA	2.5	1/2	B
FR-D720-042-NA	4.2	1	C
FR-D720-070-NA	7	2	G
FR-D720-100-NA	10	3	G
FR-D720-165-NA	16.5	5	J
FR-D720-238-NA	23.8	7 1/2	M
FR-D720-318-NA	31.8	10	M

200–240VAC 1-Phase Input & 3-Phase Output			
Model Number	Output Amps	HP	Frame Size
FR-D720S-008-NA	0.8	1/8	A
FR-D720S-014-NA	1.4	1/4	A
FR-D720S-025-NA	2.5	1/2	D
FR-D720S-042-NA	4.2	1	E
FR-D720S-070-NA	7	2	H
FR-D720S-100-NA	10	3	K

480V Selection Chart

380–480VAC 3-Phase Input & Output			
Model Number	Output Amps	HP	Frame Size
FR-D740-012-NA	1.2	1/2	F
FR-D740-022-NA	2.2	1	F
FR-D740-036-NA	3.6	2	G
FR-D740-050-NA	5	3	H
FR-D740-080-NA	8	5	I
FR-D740-120-NA	12	7 1/2	L
FR-D740-160-NA	16	10	L

Dimensions – 240V and 480V Class

Frame Size	Dimensions – inches (mm)			Weight lbs (kg)
	Height	Width	Depth	
A	5.0 (128)	2.7 (68)	3.2 (80.5)	1.1 (0.5)
AA			4.4 (110.5)	1.3 (0.6)
B			4.5 (112.5)	1.8 (0.8)
C			5.3 (132.5)	2.2 (1.0)
D			5.6 (142.5)	2.0 (0.9)
E			6.5 (162.5)	2.5 (1.1)
F		4.3 (108)	5.1 (129.5)	2.9 (1.3)
G			5.4 (135.5)	3.1 (1.4)
GG			5.9 (149.5)	3.1 (1.4)
H			6.2 (155.5)	3.3 (1.5)
I		6.6 (165.5)	3.3 (1.5)	
J		6.7 (170)	5.6 (142.5)	4.0 (1.8)
K	5.9 (150)	5.5 (140)	5.7 (145)	4.4 (2.0)
L		8.7 (220)	6.1 (155)	7.3 (3.3)
M				8.0 (3.6)

External Options

Model Number	Description
FR-PU07	Alpha-numeric Multi-language Keypad
FR-PA07	Panel Mount Basic Keypad
FR-CB20□	Remote Cable for Connecting Keypad
SC-FRPC	Serial Communications Cable
FR-ABR-□□K	External Brake Resistor
FR-CONFIGURATOR	Programming and Diagnostic Software
FR-PU07-BB	Battery Back-up Version of FR-PU07
D700-PT1	Adapter Unit Required for FR-PU07BB
FR-RJ45-HUB4	Serial Network Hub - 2 Stations
FR-RJ45-HUB10	Serial Network Hub - 8 Stations
FR-RJ45-TR	Terminating Resistor for FR-RJ45-HUB

Notes:

- = 1, 3 or 5 meter length cable
- = kW