MITSUBISHI ELECTRIC Inverter Sales and Service

No. 726ED

Discontinuation of the FR-E700 Series General-Purpose Inverters

Thank you for your continued patronage of Mitsubishi Electric drive control products, FA products, and power distribution control products.

In December 2019, we released the FR-E800 series inverters with compatibility as successors to the FR-E700 series inverters. Due to this, we are discontinuing the production of FR-E700 series inverters according to the following schedule.

We ask for your understanding in this matter.

1. Models to be Discontinued

- FR-E700 series (273 models in total)
- Related options (22 models in total)

2. Schedule

Production continues on orders received by the last day of October 2023.

Made-by-order production starts on April 1, 2023 in advance of the discontinuation.

Requests for repair service will be accepted by the last day of October 2030.

Note) Repairs are subject to the supply of service parts and may not be possible even within the repair service period.

3. Products Affected

(1) FR-E700 series

1) Three-phase 200 V

Model						
FR-E720-0.1K	FR-E720-0.1KSC	FR-E720-008-NA	FR-E720-008SC-NA			
FR-E720-0.2K	FR-E720-0.2KSC	FR-E720-015-NA	FR-E720-015SC-NA			
FR-E720-0.4K	FR-E720-0.4KSC	FR-E720-030-NA	FR-E720-030SC-NA			
FR-E720-0.75K	FR-E720-0.75KSC	FR-E720-050-NA	FR-E720-050SC-NA			
FR-E720-1.5K	FR-E720-1.5KSC	FR-E720-080-NA	FR-E720-080SC-NA			
FR-E720-2.2K	FR-E720-2.2KSC	FR-E720-110-NA	FR-E720-110SC-NA			
FR-E720-3.7K	FR-E720-3.7KSC	FR-E720-175-NA	FR-E720-175SC-NA			
FR-E720-5.5K	FR-E720-5.5KSC	FR-E720-240-NA	FR-E720-240SC-NA			
FR-E720-7.5K	FR-E720-7.5KSC	FR-E720-330-NA	FR-E720-330SC-NA			
FR-E720-11K	FR-E720-11KSC	FR-E720-470-NA	FR-E720-470SC-NA			
FR-E720-15K	FR-E720-15KSC	FR-E720-600-NA	FR-E720-600SC-NA			
	M	odel				
FR-E720-0.1K-NE	FR-E720-008SC-NNE	FR-E720-0.1KSC-TM	FR-E720-0.1K-EA			
FR-E720-0.2K-NE	FR-E720-015SC-NNE	FR-E720-0.2KSC-TM	FR-E720-0.2K-EA			
FR-E720-0.4K-NE	FR-E720-030SC-NNE	FR-E720-0.4KSC-TM	FR-E720-0.4K-EA			
FR-E720-0.75K-NE	FR-E720-050SC-NNE	FR-E720-0.75KSC-TM	FR-E720-0.75K-EA			
FR-E720-1.5K-NE	FR-E720-080SC-NNE	FR-E720-1.5KSC-TM	FR-E720-1.5K-EA			
FR-E720-2.2K-NE	FR-E720-110SC-NNE	FR-E720-2.2KSC-TM	FR-E720-2.2K-EA			
FR-E720-3.7K-NE	FR-E720-175SC-NNE	FR-E720-3.7KSC-TM	FR-E720-3.7K-EA			
FR-E720-5.5K-NE	FR-E720-240SC-NNE	FR-E720-5.5KSC-TM	FR-E720-5.5K-EA			
FR-E720-7.5K-NE	FR-E720-330SC-NNE	FR-E720-7.5KSC-TM	FR-E720-7.5K-EA			
FR-E720-11K-NE	FR-E720-470SC-NNE	FR-E720-11KSC-TM	FR-E720-11K-EA			
FR-E720-15K-NE	FR-E720-600SC-NNE	FR-E720-15KSC-TM	FR-E720-15K-EA			

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Date	2022
of	Revis
issue	2024

Title

2) Three-phase 400 V

2) Three-phase 400 V		Model	
FR-E740-0.4K	FR-E740-0.4KSC	FR-E740-016-NA	FR-E740-016SC-NA
FR-E740-0.75K	FR-E740-0.4KSC	FR-E740-026-NA	FR-E740-026SC-NA
FR-E740-0.75K	FR-E740-0.75KSC	FR-E740-020-NA	FR-E740-020SC-NA
FR-E740-1.3K		FR-E740-040-NA	
	FR-E740-2.2KSC		FR-E740-060SC-NA
FR-E740-3.7K	FR-E740-3.7KSC	FR-E740-095-NA	FR-E740-095SC-NA
FR-E740-5.5K	FR-E740-5.5KSC	FR-E740-120-NA	FR-E740-120SC-NA
FR-E740-7.5K	FR-E740-7.5KSC	FR-E740-170-NA	FR-E740-170SC-NA
FR-E740-11K	FR-E740-11KSC	FR-E740-230-NA	FR-E740-230SC-NA
FR-E740-15K	FR-E740-15KSC	FR-E740-300-NA Model	FR-E740-300SC-NA
ED 5740 040 50			
FR-E740-016-EC	FR-E740-016SC-EC	FR-E740-0.4K-CHT	-
FR-E740-026-EC	FR-E740-026SC-EC	FR-E740-0.75K-CHT	-
FR-E740-040-EC	FR-E740-040SC-EC	FR-E740-1.5K-CHT	-
FR-E740-060-EC	FR-E740-060SC-EC	FR-E740-2.2K-CHT	-
FR-E740-095-EC	FR-E740-095SC-EC	FR-E740-3.7K-CHT	-
FR-E740-120-EC	FR-E740-120SC-EC	FR-E740-5.5K-CHT	-
FR-E740-170-EC	FR-E740-170SC-EC	FR-E740-7.5K-CHT	-
FR-E740-230-EC	FR-E740-230SC-EC	FR-E740-11K-CHT	-
FR-E740-300-EC	FR-E740-300SC-EC	FR-E740-15K-CHT	-
		Model	
FR-E740-0.4K-NE	FR-E740-016SC-NNE	FR-E740-016SC-ENE	FR-E740-0.4K-CNE
FR-E740-0.75K-NE	FR-E740-026SC-NNE	FR-E740-026SC-ENE	FR-E740-0.75K-CNE
FR-E740-1.5K-NE	FR-E740-040SC-NNE	FR-E740-040SC-ENE	FR-E740-1.5K-CNE
FR-E740-2.2K-NE	FR-E740-060SC-NNE	FR-E740-060SC-ENE	FR-E740-2.2K-CNE
FR-E740-3.7K-NE	FR-E740-095SC-NNE	FR-E740-095SC-ENE	FR-E740-3.7K-CNE
FR-E740-5.5K-NE	FR-E740-120SC-NNE	FR-E740-120SC-ENE	FR-E740-5.5K-CNE
FR-E740-7.5K-NE	FR-E740-170SC-NNE	FR-E740-170SC-ENE	FR-E740-7.5K-CNE
FR-E740-11K-NE	FR-E740-230SC-NNE	FR-E740-230SC-ENE	FR-E740-11K-CNE
FR-E740-15K-NE	FR-E740-300SC-NNE	FR-E740-300SC-ENE	FR-E740-15K-CNE
		Model	
FR-E740-0.4KSC-TM	FR-E740-0.4K-EA	-	-
FR-E740-0.75KSC-TM	FR-E740-0.75K-EA	-	-
FR-E740-1.5KSC-TM	FR-E740-1.5K-EA	-	-
FR-E740-2.2KSC-TM	FR-E740-2.2K-EA	-	-
FR-E740-3.7KSC-TM	FR-E740-3.7K-EA	-	-
FR-E740-5.5KSC-TM	FR-E740-5.5K-EA	-	-
FR-E740-7.5KSC-TM	FR-E740-7.5K-EA	-	-
FR-E740-11KSC-TM	FR-E740-11K-EA	-	-
FR-E740-15KSC-TM	FR-E740-15K-EA	-	-

3) Single-phase 200 V

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Model						
FR-E720S-0.1K	FR-E720S-0.1KSC	FR-E720S-008-NA	FR-E720S-008-EC			
FR-E720S-0.2K	FR-E720S-0.2KSC	FR-E720S-015-NA	FR-E720S-015-EC			
FR-E720S-0.4K	FR-E720S-0.4KSC	FR-E720S-030-NA	FR-E720S-030-EC			
FR-E720S-0.75K	FR-E720S-0.75KSC	FR-E720S-050-NA	FR-E720S-050-EC			
FR-E720S-1.5K	FR-E720S-1.5KSC	FR-E720S-080-NA	FR-E720S-080-EC			
FR-E720S-2.2K	FR-E720S-2.2KSC	FR-E720S-110-NA	FR-E720S-110-EC			
		Model				
FR-E720S-008SC-EC	FR-E720S-0.1K-CHT	FR-E720S-0.1K-NE	-			
FR-E720S-015SC-EC	FR-E720S-0.2K-CHT	FR-E720S-0.2K-NE	-			
FR-E720S-030SC-EC	FR-E720S-0.4K-CHT	FR-E720S-0.4K-NE	-			
FR-E720S-050SC-EC	FR-E720S-0.75K-CHT	FR-E720S-0.75K-NE	-			
FR-E720S-080SC-EC	FR-E720S-1.5K-CHT	FR-E720S-1.5K-NE	-			
FR-E720S-110SC-EC	FR-E720S-2.2K-CHT	FR-E720S-2.2K-NE	-			

Model						
FR-E720S-008SC-ENE	FR-E720S-0.1K-CNE	FR-E720S-0.1K-EA	-			
FR-E720S-015SC-ENE	FR-E720S-0.2K-CNE	FR-E720S-0.2K-EA	-			
FR-E720S-030SC-ENE	FR-E720S-0.4K-CNE	FR-E720S-0.4K-EA	-			
FR-E720S-050SC-ENE	FR-E720S-0.75K-CNE	FR-E720S-0.75K-EA	-			
FR-E720S-080SC-ENE	FR-E720S-1.5K-CNE	FR-E720S-1.5K-EA	-			
FR-E720S-110SC-ENE	FR-E720S-2.2K-CNE	FR-E720S-2.2K-EA	-			

4) Single-phase 100 V

Model						
FR-E710W-0.1K	FR-E710W-008-NA	-	-			
FR-E710W-0.2K	FR-E710W-015-NA	-	-			
FR-E710W-0.4K	FR-E710W-030-NA	-	-			
FR-E710W-0.75K	FR-E710W-050-NA	-	-			

(2) Related options

Model					
	FR-A7AX E kit				
Plug-in option (enhanced control function,	FR-A7AY E kit				
extension input/output)	FR-A7AR E kit				
	FR-A7AX E kit cover				
Plug-in option E kit cover (enhanced control	FR-A7AY E kit cover				
function, extension input/output)	FR-A7AR E kit cover				
	FR-A7A E kit cover SC				
Plug-in option (for communication)	FR-A7ND E kit				
	FR-A7NP E kit				
	FR-A7NL E kit				
	FR-A7NC E kit cover				
	FR-A7ND E kit cover				
	FR-A7NP E kit cover				
Plug-in option E kit cover(for communication)	FR-A7NL E kit cover				
riug-in option E kit cover(ioi communication)	FR-A7NC E kit cover SC				
	FR-A7ND E kit cover SC				
	FR-A7NP E kit cover SC				
	FR-A7NL E kit cover SC				
	FR-E7CV01				
FR-E700 series	FR-E7CV02				
totally-enclosed structure attachment	FR-E7CV03				
	FR-E7CV04				

4. Successor Models

Classification	Voltage class	Discontinued model (FR-E700)	Successor model (FR-E800)
	Three-phase 200 V	FR-E720-[]K	FR-E820-[]K-1
	Three-phase 400 V	FR-E740-[]K	FR-E840-[]K-1
	Single-phase 200 V	FR-E720S-[]K	FR-E820S-[]K-1
	Single-phase 100 V	FR-E710W-[]K	FR-E810W-[]K-1
	Three-phase 200 V	FR-E720-[][][]-NA	FR-E820-[][][][]-5-60
	Three-phase 400 V	FR-E740-[][][]-NA	FR-E840-[][][][]-5-60
Standard control	Single-phase 200 V	FR-E720S-[][][]-NA	FR-E820S-[][][][]-5-60
circuit terminal model	Single-phase 100 V	FR-E710W-[][][]-NA	FR-E810W-[][][][]-5-60
Circuit terminai modei	Three-phase 400 V	FR-E740-[][][]-EC	FR-E840-[][][][-4-60
	Single-phase 200 V	FR-E720S-[][][]-EC	FR-E820S-[][][][-4-60
	Three-phase 400 V	FR-E740-[]K-CHT	FR-E840-[][][][]-4-60
	Single-phase 200 V	FR-E720S-[]K-CHT	FR-E820S-[][][][-4-60
	Three-phase 200 V	FR-E720-[]K-EA	FR-E820-[][][][]-5-60
	Three-phase 400 V	FR-E740-[]K-EA	FR-E840-[][][][]-5-60
	Single-phase 200 V	FR-E720S-[]K-EA	FR-E820S-[][][][]-5-60
	Three-phase 200 V	FR-E720-[]KSC	FR-E820-[]K-1
	Three-phase 400 V	FR-E740-[]KSC	FR-E840-[]K-1
	Single-phase 200 V	FR-E720S-[]KSC	FR-E820S-[]K-1
Safety stop function	Single-phase 100 V	FR-E710W-[]KSC	FR-E810W-[]K-1
model	Three-phase 200 V	FR-E720-[][][]SC-NA	FR-E820-[][][][]-5-60
	Three-phase 400 V	FR-E740-[][][]SC-NA	FR-E840-[][][][]-5-60
	Three-phase 400 V	FR-E740-[][][]SC-EC	FR-E840-[][][][]-4-60
	Single-phase 200 V	FR-E720S-[][][]SC-EC	FR-E820S-[][][][-4-60
	Three-phase 200 V	FR-E720-[]K-NE	FR-E820-[]KEPA
	Three-phase 400 V	FR-E740-[]K-NE	FR-E840-[]KEPA
	Single-phase 200 V	FR-E720S-[]K-NE	FR-E820S-[]KEPA
Ethernet	Three-phase 200 V	FR-E720-[][][]SC-NNE	FR-E820-[]KEPA
communication	Three-phase 400 V	FR-E740-[][][]SC-NNE	FR-E840-[]KEPA
function model	Three-phase 400 V	FR-E740-[][][]SC-ENE	FR-E840-[]KEPB
	Single-phase 200 V	FR-E720S-[][][]SC-ENE	FR-E820S-[]KEPB
	Three-phase 400 V	FR-E740-[]K-CNE	FR-E840-[]KEPB
	Single-phase 200 V	FR-E720S-[]K-CNE	FR-E820S-[]KEPB
Dedicated EtherCAT	Three-phase 200 V	FR-E720-[]KSC-TM	FR-E820-[]KEPC
communication model	Three-phase 400 V	FR-E740-[]KSC-TM	FR-E840-[]KEPC

For precautions for replacement, refer to "5. Precautions for Replacement".

5. Precautions for Replacement

(1) For all models			
Item	FR-E700	FR-E800	Supplemental information
	Available	Available	Depending on the operating conditions and load conditions, overload may occur
Torque boost (Pr.0)			at start even when the torque boost value
Torque boost (F1.0)			is the same as that set in FR-E700.
			Adjust the torque boost value.
	Pr.37 is used to change the	Pr.53 is used to change the	- Adjust the torque poost value.
	display to the frequency /	display to the frequency /	
	machine speed. The Pr.37	machine speed. The Pr.37	
Speed display (Pr.37)	setting value is used for	setting value is used only for	
	machine speed conversion	machine speed conversion	
	formula.	formula.	
	SF-JRCA (thermal: constant-	SF-JRCA (thermal: constant-	-
Applied motor (Pr.71)	torque) setting value: "1"	torque) setting value: "10"	
Offline auto tuning	Setting Pr.96 = "21" enables	Setting Pr.96 = "11" enables	-
(Pr.96) (V/F control	offline auto tuning for V/F	offline auto tuning for V/F	
(frequency search for the	control.	control.	
automatic restart after			
instantaneous power			
failure))			
	Available	Not available	Adjusting slip compensation under
Comonal mumana			Advanced magnetic flux vector control
General-purpose			can adjust the motor speed fluctuation
magnetic flux vector control (Pr.800)			when the load torque is applied as is the
Control (F1.800)			case under General-purpose magnetic
			flux vector control.
S-PM geared motor	Available	Not available	To drive an S-PM geared motor, use the
o i w goarda motor			FR-E700-EX or FR-D700-G inverter.
	Available	Not available	FR-PA07 is available.
			Use the setting dial as a potentiometer by
FR-PA02			setting Pr.161 Frequency setting/key lock
			operation selection = "1" (setting dial
			potentiometer).
Terminal response	8.3 ms on average	6.9 ms on average	Adjust the setting of Pr.699 Input terminal
'		T	filter as required.
	When terminal FG is not used	Terminal FG is not provided.	However, separate earthing (grounding)
	for earthing (grounding),	As the installed option	is available when the SLD (drain) wire
Earthing (grounding) of	separate earthing (grounding)	structurally uses the inverter	with shield stripped is not connected to
the communication	is available (the	earth (ground) terminal,	the one-touch CC-Link communication
option	programmable controller and	separate earthing (grounding)	connector plug and instead the SLD
	the inverter are earthed	is unavailable.	(shielded) wire is connected near the
LONWORKS	(grounded) separately).	Not available	connector.
	Available	Not available	-
communication			

(2) Standard control circuit terminal model

(2) Standard co	entrol circuit terminal mode	ei				
Item	FR-E700 standard control of terminal model (FR-E700-[]K, FR-E700-[][][-NA, FR-E700-[]K-CHT, FR-E700-[]K-EA)	erminal model FR-E700-[]K, -E700-[][]]-NA, -E700-[][]]-EC, -E700-[]K-CHT,		FR-E800 standard model (FR-E800-[]K-1, FR-E800-[]]]]]-4-60, FR-E800-[]]]]]-5-60)		Supplemental information
Outline dimension	•	width (mm) Height (mm) 170 → 140 - 150 → 128			-	
Installation size		Changed installation size (mm) Intercompatibility attachment Width: 158 → 128 FR-E8AT03 Width: 128 → 96 FR-E7AT02		patibility ment 03		
Control circuit terminals	Screw type terminal type FR-E700-[]K (FM type) FR-E700-[]K (FM type) FR-E700-[]K-EA (AM type) FR-E700-[]K-EA (AM type) FR-E700-[]K-EA (AM type) FR-E700-[]K-EA (AM type) AM B I RIMBERS BO PC SITE SITE SIG SO AM B I RIMBERS BO PC SITE SITE SIG SO AM B I RIMBERS BO PC SITE SITE SIG SO	Height: 138 → 118 FR-E8 Spring clamp term • FR-E800-[]K-1 (FM ty 10 10 10 10 10 10 10 1		00-[]K-1 (FM type)	I type)	For the FR-E800 series, terminal PC is not available as jumpers are connected to the terminal. Remove the jumpers, then connect two cables to terminal PC using a crimp terminal for two cables as shown in the following figure. S1 S2 PC External transistor common When a screw type terminal type is replaced, the recommended crimp terminal differs.

(3) Safety stop function mode

(3) Safety stop fu	unction model					
Item	FR-E700 safety stop function model (FR-E700-[]KSC, FR-E700-[][[]SC-NA, FR-E700-[][]]SC-EC)		FR-E800 standard model (FR-E800-[]K-1, FR-E800-[]][][-4-60, FR-E800-[]][][-5-60)		·I	Supplemental information
Outline dimension	The outline dimension is compatible. The product width and height are different between the FR-E800 and FR-E700 inverters for some capacity models.				-	
Installation size	The installation size is compatil FR-E800 inverters are downsiz the FR-E700 inverters. Intercompatibility attachment is Voltage/capacity 3-phase 200 V, 3.7K 3-phase 400 V, 0.4K to 1.5K 1-phase 200 V, 2.2K	ed, their insta	ged on size n) → 128 → 96		\neg	-
Control circuit terminals	Spring clamp terminal type FR-E700-[]KSC (FM type) FR-E700-[][[]SC-NA (AM type) FR-E700-[][]SC-NA (AM type) FR-E700-[][]SC-EC (AM type)	· FE	R-E800-[][[][]] R-E800-[][[][]] R-E800-[][[][][] R-E800-[][[][][][] R-E800-[][[][][][] R-E800-[][[][][][][] R-E800-[][[][][][][] R-E800-[][[][][][][][] R-E800-[][[][][][][][][] R-E800-[][[][][][][][][][][][][][][][][][][]	-5-60 (AM type)		For the FR-E800 series, terminal PC is not available as jumpers are connected to the terminal. Remove the jumpers, then connect two cables to terminal PC using a crimp terminal for two cables as shown in the following figure. S1 S2 PC External transistor common

	ommunication function mod				
Item	function model (FR-E700-[]K-NE, FR-E700-[][]]SC-NNE FR-E700-[][]]SC-ENE FR-E700-[]K-CNE)	:,	(F	800 Ethernet model R-E800-[]KEPA, R-E800-[]KEPB)	Supplemental information
Outline dimension	The outline dimension is compatibetween the FR-E800 and FR-EVoltage/capacity 3-phase 200 V, 3.7K 3-phase 400 V, 0.4K to 1.5K 1-phase 200 V, 2.2K	•	for some	· ·	- t
Installation size	The installation size is compatible FR-E800 inverters are downsized FR-E700 inverters. Intercompatibility attachment is a Voltage/capacity 3-phase 200 V, 3.7K 3-phase 400 V, 0.4K to 1.5K 1-phase 200 V, 2.2K	d, their install	ged on size $\rightarrow 128$ $\rightarrow 96$		-
Control circuit terminals	Screw type terminal type FR-E700-IJK-NE FR-E700-IJK-CNE FR-E700-IJK-CNE A B C Spring clamp terminal type FR-E700-IJIJSC-NNE FR-E700-IJIJSC-NNE FR-E700-IJIJSC-ENE		Spring cla	amp terminal type SI SZ PC DOD DH SD I JUL I LOFF J LOFF	For the FR-E800 series, terminal PC is not available as jumpers are connected to the terminal. Remove the jumpers, then connect two cables to terminal PC using a crimp terminal for two cables as shown in the following figure. External transistor common When a screw type terminal type is replaced, the recommended crimp terminal differs.
Terminals FM and AM	FR-E700-[]K-NE: Terminal FM or FR-E700-[]K-CNE: Terminal AM FR-E700-[][][]SC-NNE: Terminal FR-E700-]][][]SC-ENE: Terminal	only. AM only.	Not avail	able	-
FR-PU07 and	Available		Not avail	able (Available in	-

(5) Dedicated EtherCAT communication model

(5) Dedicated EtherCAT communication model				
Item	FR-E700 Dedicated EtherCAT communication model (FR-E700-[]KSC-TM)	FR-E800 Ethernet model (FR-E800-[]KEPC)		Supplemental information
Outline dimension	The outline dimension is compa different between the FR-E800 a models. Voltage/capacity 3-phase 200 V, 3.7K 3-phase 400 V, 0.4K to 1.5K	and FR-E700 inverte	_	
Installation size	The installation size is compatib E800 inverters are downsized, to FR-E700 inverters. Intercompatibility attachment is Voltage/capacity 3-phase 200 V, 3.7K 3-phase 400 V, 0.4K to 1.5K	heir installation size	•	he
Control circuit terminals	Spring clamp terminal type +24 SD S1 S2 PC Y0 SE	Spring clamp terminal type		For the FR-E800 series, terminal PC is not available as jumpers are connected to the terminal. Remove the jumpers, then connect two cables to terminal PC using a crimp terminal for two cables as shown in the following figure. S1 S2 PC External transistor common