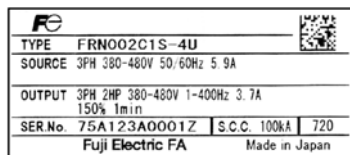


Chapter 1 BEFORE USING THE INVERTER

1.1 Acceptance Inspection

Unpack the package and check that:

- (1) An inverter and instruction manual (this manual) is contained in the package.
- (2) The inverter has not been damaged during transportation—there should be no dents or parts missing.
- (3) The inverter is the model you ordered. You can check the model name and specifications on the main nameplate. (Main and sub nameplates are attached to the inverter and are located as shown on the following page.)



(a) Main Nameplate



(b) Sub Nameplate

Figure 1.1 Nameplates

TYPE: Type of inverter

Code	Series name	FRN	002	C1S	-	4U	
FRN	FRENIC series						
Code	Nominal applied motor						
F12	1/8HP						
F25	1/4HP						
F50	1/2HP						
001	1HP						
002	2HP						
003	3HP						
005	5HP						
Code	Application range						
C	Compact						
Code	Developed inverter series						
1	1						
							Code Version/Instruction Manual
							U USA/English
							Code Power supply voltage
							2 Three-phase 230 V
							4 Three-phase 460 V
							6 Single-phase 115 V
							7 Single-phase 230 V
							Code Enclosure
							S Standard (IP20)
							E EMC filter built-in type (IP20)

SOURCE: Number of input phases (three-phase: 3PH, single-phase: 1PH), input voltage, input frequency, input current

OUTPUT: Number of output phases, rated output capacity, rated output voltage, output frequency range, rated output current, overload capacity

SER. No.: Product number

7	1	A	123	A	000	1Z	
							Serial number of production lot
							Production month
							1 to 9: January to September
							X, Y, or Z: October, November, or December
							Production year: Last digit of year

If you suspect the product is not working properly or if you have any questions about your product, contact your Fuji Electric representative.

1.2 External View and Terminal Blocks

(1) External views

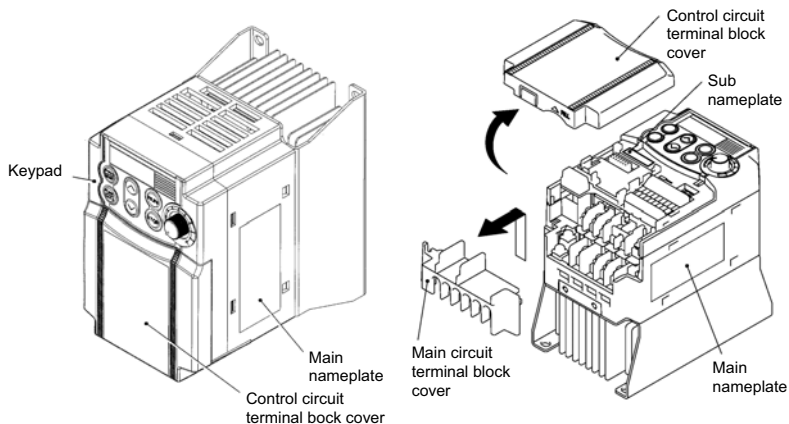
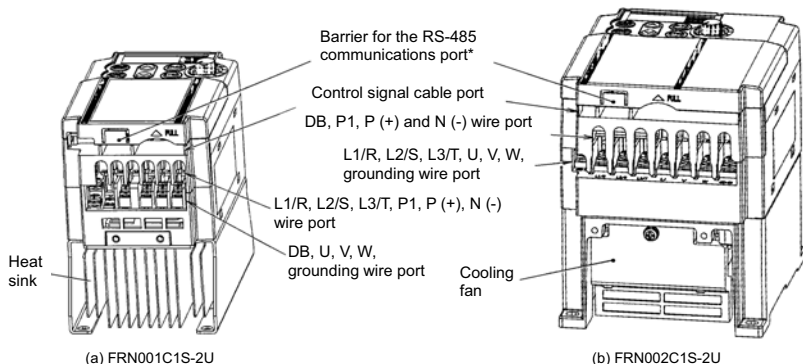


Figure 1.2 External Views of FRENIC-Mini

(2) View of terminals



(* When connecting the RS-485 communications cable, remove the control circuit terminal block cover and cut off the barrier provided in it using nippers.)

Figure 1.3 Bottom View of FRENIC-Mini

1.3 Transportation

- When carrying the inverter, always support its bottom at the front and rear sides with both hands. Do not hold covers or individual parts only. You may drop the inverter or break it.
- Avoid applying excessively strong force to the terminal block covers as they are made of plastic and are easily broken.

1.4 Storage Environment

1.4.1 Temporary storage

Store the inverter in an environment that satisfies the requirements listed in Table 1.1.

Table 1.1 Environmental Requirements for Storage and Transportation

Item	Requirements	
Storage temperature *1	-25 to +70°C(-4 to +158°F)	Locations where the inverter is not subject to abrupt changes in temperature that would result in the formation of condensation or ice.
Relative humidity	5 to 95% *2	
Atmosphere	The inverter must not be exposed to dust, direct sunlight, corrosive or flammable gases, oil mist, vapor, water drops or vibration. The atmosphere can contain only a low level of salt. (0.01 mg/cm ² or less per year)	
Atmospheric pressure	86 to 106 kPa (in storage)	
	70 to 106 kPa (during transportation)	

*1 Assuming a comparatively short storage period (e.g., during transportation or the like).

*2 Even if the humidity is within the specified requirements, avoid such places where the inverter will be subjected to sudden changes in temperature that will cause condensation to form.

Precautions for temporary storage

- (1) Do not leave the inverter directly on the floor.
- (2) If the environment does not satisfy the specified requirements, wrap the inverter in an airtight vinyl sheet or the like for storage.
- (3) If the inverter is to be stored in an environment with a high level of humidity, put a drying agent (such as silica gel) in the airtight package described in item (2).

1.4.2 Long-term storage

The long-term storage methods for the inverter vary largely according to the environment of the storage site. General storage methods are described below.

- (1) The storage site must satisfy the requirements specified for temporary storage.
However, for storage exceeding three months, the ambient temperature should be within the range from -10 to +30 °C (14 to 86°F). This is to prevent the electrolytic capacitors in the inverter from deteriorating.
- (2) The inverter must be stored in a package that is airtight to protect it from moisture. Include a drying agent inside the package to maintain the relative humidity inside the package to within 70%.
- (3) If the inverter has been installed in the equipment or control board at a construction site where it may be subjected to humidity, dust or dirt, then remove the inverter and store it in a suitable environment specified in Table 1.1.

Precautions for storage over 1 year

If the inverter will not be powered on for a long time, the property of the electrolytic capacitors may deteriorate. Power the inverters on once a year and keep them on for 30 to 60 minutes. Do not connect the inverters to motors or run the motor.