

◆ Spare Parts

Considering the importance of the system in which the FSDrive-MV1S is used, it is recommended that spare parts be prepared in advance for all possible measures for maintenance management. *Table 8.4* lists the recommended spare parts. Confirm the following items and contact your Yaskawa representatives when ordering the spare parts.

Inverter: Model, capacity, and Yaskawa order number

Spare parts: Part name, model, and quantity

Table 8.4 List of Recommended Spare Parts

Related to Boards

Part Name		Model	Remarks
Cell control board (CCB)		Varies depending on the Inverter capacity. (Refer to <i>Table 8.6</i> .)	
Controller	CPU board	JEBC-61301-INV	Control board to be mounted on the modulator board
	Modulator board	JEBC-61302-INV	Medium-voltage Inverter control module
	Current detection resistance board	JEBC-61902-x	x depends on the Inverter capacity. (Refer to <i>Table 8.5</i> .)
	Optical fiber interface board	JEBC-61601	Used only for 6 kV class Inverter
Isolation board		JEBC-61701	Input/Output voltage detection analog insulation board.
RS232/RS485 converter board		JEBC-61602	RS485/RS232 converter board mounted on the Digital Operator panel
5-V power supply board		JEBC-61901	5-V three-phase outputs
±15-V power supply		Marketed product	MMB50A-6-CN (manufactured by COSEL)
24-V power supply		Marketed product	R10A-24-CN (manufactured by COSEL)

Main Circuit

Part Name	Model	Model
Power Cell	Varies depending on the Inverter capacity. (Refer to <i>Table 8.6</i> .)	

Operation Circuit

Part Name	Model	Model
Molded-case circuit breaker	Marketed product	–
Contactors	Marketed product	–
Thermal relay	Marketed product	–

Others

Part Name	Model	Model
Digital Operator	JVOP-160	–
Optical fiber cable	WRMZ-1295	–
Cooling fan for Inverter	Marketed product	EF-35DTB1, EF-40DTB1, EF-40ETB, EF-45ETB, or EF-50FTB (manufactured by Mitsubishi Electric Corporation)
EWS cable (3 m)	JZCP-751904	–

Table 8.5 Current Detection Resistor Boards

Model	Resistance	Applicable Inverter Capacity
JEBC-61902-1	47 Ω	3 kV class-285 kVA 6 kV class-570 kVA
JEBC-61902-2	30 Ω	3 kV class-400 kVA 6 kV class-800 kVA
JEBC-61902-4	22 Ω	3 kV class-570 kVA, 1500 kVA 6 kV class-1150 kVA, 3000 kVA
JEBC-61902-5	15 Ω	3 kV class-800 kVA, 1900 kVA, 2300 kVA 6 kV class-1600 kVA, 3800 kVA, 4600 kVA
JEBC-61902-7	68 Ω	3 kV class-200 kVA 6 kV class-400 kVA
JEBC-61902-8	10 Ω	3 kV class-1150 kVA, 3000 kVA 6 kV class-2300 kVA, 5300 kVA, 6000 kVA

Table 8.6 Power Cells

Power Cell Rating	Power Cell Model	Cell Control Board (CCB) Model	Applicable Inverter Capacity
35A	7910250-1001X	7910161-4020X	3 kV class-200 kVA, 6 kV class-400 kVA
50A	7910250-1001X	7910161-4020X	3 kV class-285 kVA, 6 kV class-570 kVA
70A	7910250-1002X	7910161-4020X	3 kV class-400 kVA, 6 kV class-800 kVA
100A	7910250-1003X	7910161-4020X	3 kV class-570 kVA, 6 kV class-1150 kVA
140A	7910250-1004X	7910161-4020X	3 kV class-800 kVA, 6 kV class-1600 kVA
200A	7910250-1015X	7910161-4021X	3 kV class-1150 kVA, 6 kV class-2300 kVA
260A	7910250-1016X	7910161-4021X	3 kV class-1500 kVA, 6 kV class-3000 kVA
400A	7910250-1017X	7910161-4021X	3 kV class-1900 kVA, 2300 kVA 6 kV class-3800 kVA, 4600 kVA
520A	7910250-1018X	7910161-4021X	3 kV class-3000 kVA 6 kV class-5300 kVA, 6000 kVA

Table 8.7 Power Cells Compatible with Previous Panels*

Power Cell Rating	Power Cell Unit Model*	Applicable Inverter Capacity
35A	7910250-1021X	3 kV class-200 kVA, 6 kV class-400 kVA
50A	7910250-1021X	3 kV class-285 kVA, 6 kV class-570 kVA
70A	7910250-1022X	3 kV class-400 kVA, 6 kV class-800 kVA
100A	7910250-1023X	3 kV class-570 kVA, 6 kV class-1150 kVA
140A	7910250-1024X	3 kV class-800 kVA, 6 kV class-1600 kVA

* Previous panels for the FSDrive-MV1S were constructed with three Power Cells in one integral frame.