



MATERIAL FACT SHEET

587789 FR-E840-0440-4-60

General Data

Product Hierarchy	IAK24802
	INVERTER
	FR-E840
Ext. Material Group	10 STANDARD ITEM
ABC Indicator	B (Limited Availability from Stock)

e-shop: https://mitsubishi-electric-eshop.mee.com/mee/FA_IA/EUR/en/p/000000000000587789

FA-Inverter: Inverter

Series	FR-E800 SERIES
Type	FR-E800 RS485 INVERTER
Minimum Rated Voltage (V)	380
Min. Permissible Voltage (V)	323
Maximum Rated Voltage (V)	480
Max. Permissible Voltage (V)	528
Current Type	AC
Phases	3
Rated Output Current LD (A)	60
Rated Output Current ND (A)	44
Rated Motor Capacity LD (kW)	30
Rated Motor Capacity ND (kW)	22
Frequency Range (Hz)	0,2–590
Control Method	MAGNETIC FLUX VECTOR CONTROL
Control Method (2)	PM SENSORLESS VECTOR CONTROL
Control Method (3)	REAL SENSORLESS VECTOR CONTROL
Control Method (4)	V/F CONTROL
Motor Type	INDUCTION MOTOR, PM MOTOR
Brake Chopper ED (%)	100
Integrated EMC Filter	NO
Safe Torque Off (STO)	YES
Regenerative (4Q)	NO
Integrated DC Choke	NO
Display	BUILT-IN
Display Type	4 DIGITS LED
PLC Function	YES
Program Memory	2K
Program Memory Unit	STEPS
Integrated Digital Inputs	7
Digital Outputs (Transistor)	2
Digital Outputs (Relay)	1
Integrated Analogue Inputs	2
Integrated Analogue Outputs	1
IO Type of Terminal Block	SPRING CLAMP
Expandable	YES
RS-485	1
USB	1 (MINI B)
Ethernet Port	NO
Built-In Network	MODBUS-RTU
Leakage Current (mA)	1,2
Power Loss LD (W)	589
Power Loss ND (W)	401
Standby Power Consumption (W)	-
Protection Class	IP20

Product Dimensions & Weight

Width (mm)	220
Height (mm)	350

Depth (mm)	190
Weight (kg)	11

Logistic Dimensions & Gross Weight

Length (cm)	46,0
Width (cm)	31,0
Height (cm)	29,0
Gross Weight (kg)	12,131
Volume (cdm)	41,354

Stock Data

Planned Delivery Time (Days)	79
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Life Cycle

Sales Start	12.01.2021
Predecessor	No Predecessor

Additional Product Information

Battery included	NO
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Export Data

Commodity Code	85044095
Legal Control (Dual Use List)	Not Listed
Country of Origin	China (CN)
Preference Status (Supplier Declaration)	Non EU

Environmental

REACH Limit Exceeded	YES
REACH Substance CAS Number	108-78-1
REACH Substance CAS Number (2)	119313-12-1
REACH Substance CAS Number (3)	540-97-6
REACH Substance CAS Number (4)	541-02-6
REACH Substance CAS Number (5)	71868-10-5
REACH Substance CAS Number (6)	7439-92-1
REACH Substance CAS Number (7)	80-05-7
REACH Substance CAS Number (8)	556-67-2
Dangerous Goods Class	NO
Dangerous Goods Identifier	NO
RoHS Compliance	COMPLIANT
WEEE	B2B

Conformity

CE	COMPLIANT
UL/cUL	COMPLIANT
EAC	COMPLIANT
UKCA	COMPLIANT

Documentation & Media Data

Manual URL Indicator	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=bltdae25c2bd5f2ff94&q=FR-E840-0440-4-60&doc-lang=en
Certificates URL Indicator	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blt8050dd1408c11cc2&q=FR-E840-0440-4-60&doc-lang=en
CAD URL Indicator	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blt26ecc97a31a841c1&q=FR-E840-0440-4-60&doc-lang=en
Network configuration file URL	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blte8cf990c7c524b4e&q=FR-E840-0440-4-60&doc-lang=en

Product Packaging

Cardboard (g)	1950
Other paper (g)	0
Aluminum (g)	0
Steel (g)	0
Styrofoam (g)	0
Other plastic (g)	7
Wood (g)	0
Glass (g)	0
Others (g)	0

Spare parts

Material	Description	Quantity	Unit
600706	FR-E820/E840/E860 PCB CPU	1	PC
611134	FR-E840-4(5)-60 PCB TA	1	PC
611164	FR-E820-0240-0330 FAN	2	PC
611138	FR-E800 parameter unit	1	PC
591470	FR-A870 CABLE ALL BKO-CA1972H01	1	PC
693915	FR-E840-0440-60 PCB MA	1	PC

Compatible products

Material	Description / Price List Text / Classification
70727	FR-A5 CBL 1 Cable for connecting Inverter and Programming panel; 1m Class 100100405: FA-Inverter: Cable
70728	FR-A5 CBL 3 Cable for connecting Inverter and Programming panel; 3m Class 100100405: FA-Inverter: Cable
70729	FR-A5 CBL 5 Cable for connecting Inverter and Programming panel; 5m Class 100100405: FA-Inverter: Cable
130832	FR-UDA02 DIN-Rail Adaptor for FR-D720S-1,5k; FR-D740-0,4k-3,7k Class 100100403: FA-Inverter: External Option
166134	FR-PU07 Programming panel with LCD-Display for all units of FR-700 series Class 100100403: FA-Inverter: External Option
167612	FR-RJ45-HUB10 Distribution Module for RJ45; 10 way Class 100100403: FA-Inverter: External Option
167613	FR-RJ45-HUB4 Distribution Module for RJ45; 4 way Class 100100403: FA-Inverter: External Option
167614	FR-RJ45-TR Terminal Resistor Plug RJ45 Class 100100403: FA-Inverter: External Option
202428	FR-BU2-H30K Brake Unit without Brake Resistor for all Inverters with DC-Bus Terminals; 400V Class 100100407: FA-Inverter: Brake Option
209052	FR-PU07BB-L Programming Panel with Copy Function; batterypowered; all FR-700 units; w/o bat. Class 100100403: FA-Inverter: External Option
209740	FFR-SI-48A-SS1 Sinusfilter for 200/400V Inverters; max. 48A; FT=4-16kHz; (W*H*D) 240*290*210mm Class 100100404: FA-Inverter: Filter
209757	FFR-DT-47A-SS1 du/dt Filter for 400V Inverters; max. 47A; FT=2-16kHz; (W*H*D) 155*195*110mm Class 100100404: FA-Inverter: Filter
214795	FR-PA07 Simple Parameter Unit for mounting on enclosure surface; for all FR-E700 Class 100100403: FA-Inverter: External Option
221540	USB-CAB-5M USB 2.0 connection cabel, plug USB A to plug USB B (mini), 5m Class 100100303: FA-HMI: Cable
274525	FR-LU08 Clear text LCD Parameter unit for all units of 800 Series Class 100100403: FA-Inverter: External Option
275503	FR Configurator-M+FR-Configurator2 FR-Configurator for 700 series; multi I + FR-Configurator2 for 800 series Class 100101203: FA-Software: Software Inverter
296613	FR-LU08-01 Clear text LCD Parameter unit for all units of 800 Series (IP55) Class 100100403: FA-Inverter: External Option
506377	FR-A8AX-60 E-KIT 16-Bit-Digital-Input; BCD/Binary-Code; 24V DC; 5mA; Coated; E-KIT for FR-E800 Class 100100402: FA-Inverter: Internal Option
506378	FR-A8AY-60 E-KIT Digital-/Analog Output; Output load: 24V DC; 0,1A; Coated; E-KIT for FR-E800 Class 100100402: FA-Inverter: Internal Option
506379	FR-A8AR-60 E-KIT Relay output; 3 additional output relays; Coated; E-KIT for FR-E800 Class 100100402: FA-Inverter: Internal Option

Material	Description / Price List Text / Classification
506380	FR-A8NP-60 E-KIT Profibus Network connection; Coated; E-KIT for FR-E800 Class 100100402: FA-Inverter: Internal Option
506381	FR-A8ND-60 E-KIT DeviceNet Network connection; Coated; E-KIT for FR-E800 Class 100100402: FA-Inverter: Internal Option
506412	FR-A8NC-60 E-KIT CC-Link Network connection; Coated; E-KIT for FR-E800 Class 100100402: FA-Inverter: Internal Option
573101	FR-A8AP-60 E-KIT Incremental Encoder Feedback; E-KIT for FR-E800; Coated Class 100100402: FA-Inverter: Internal Option
593979	FFR-E-MSH-440-75A-SF1 Radio Noise Filter for FR-E840-380/440; C1 20m, C2 100m Class 100100404: FA-Inverter: Filter