



## MATERIAL FACT SHEET

### 587771 FR-E840-0440EPA-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://emea.mitsubishielectric.com/fa/shop/material-page/00000000000587771>

#### FA-Inverter: Inverter

Series	FR-E800 SERIES
Type	FR-E800-ETH 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	2
Digital Outputs (Transistor)	0
Digital Outputs (Relay)	1
Integrated Analogue Inputs	2
Integrated Analogue Outputs	0
IO Type of Terminal Block	SPRING CLAMP
Expandable	YES
RS-485	NO
USB	1 (MINI B)
Ethernet Port	2
Built-In Network	BACNET/IP
Built-In Network (2)	CC-LINK IE FIELD BASIC
Built-In Network (3)	CC-LINK IE TSN
Built-In Network (4)	ETHERNET/IP
Built-In Network (5)	MODBUS/TCP
Leakage Current (mA)	1,2
Power Loss LD (W)	590
Power Loss ND (W)	402
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)	29,5
Gross Weight (kg)	12,105
Volume (cdm)	42,067

### Stock Data

Planned Delivery Time (Days)	175
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### Life Cycle

Sales Start	12.01.2021
Predecessor	No Predecessor

### Additional Product Information

Battery included	NO
Product Code	INV(EXCEPT VECTOR INV)

### Export Data

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

### Environmental

REACH Limit Exceeded	YES
REACH Substance CAS Number	<a href="#">108-78-1</a>
REACH Substance CAS Number (2)	<a href="#">119313-12-1</a>
REACH Substance CAS Number (3)	<a href="#">540-97-6</a>
REACH Substance CAS Number (4)	<a href="#">541-02-6</a>
REACH Substance CAS Number (5)	<a href="#">556-67-2</a>
REACH Substance CAS Number (6)	<a href="#">71868-10-5</a>
REACH Substance CAS Number (7)	<a href="#">7439-92-1</a>
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	<a href="https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=bltdae25c2bd5f2ff94&amp;q=FR-E840-0440EPA-60&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=bltdae25c2bd5f2ff94&amp;q=FR-E840-0440EPA-60&amp;doc-lang=en</a>
Certificates URL Indicator	<a href="https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blt8050dd1408c11cc2&amp;q=FR-E840-0440EPA-60&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blt8050dd1408c11cc2&amp;q=FR-E840-0440EPA-60&amp;doc-lang=en</a>
CAD URL Indicator	<a href="https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blt26ecc97a31a841c1&amp;q=FR-E840-0440EPA-60&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blt26ecc97a31a841c1&amp;q=FR-E840-0440EPA-60&amp;doc-lang=en</a>
Network configuration file URL	<a href="https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blte8cf990c7c524b4e&amp;q=FR-E840-0440EPA-60&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blte8cf990c7c524b4e&amp;q=FR-E840-0440EPA-60&amp;doc-lang=en</a>

### Product Packaging

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

Glass (g)	0
Others (g)	0

### Spare parts

Material	Description	Quantity	Unit
<a href="#">606265</a>	FR-E820-KEPA/EPA PCB CPU	1	PC
<a href="#">606267</a>	FR-E820(S)/E840/E860 PCB TERMINAL	1	PC
<a href="#">611164</a>	FR-E820-0240-0330 FAN	2	PC
<a href="#">611139</a>	FR-E800-(SC)EPA(B) parameter unit	1	PC
<a href="#">591470</a>	FR-A870 CABLE ALL BKO-CA1972H01	1	PC

### Compatible products

Material	Description / Price List Text / Classification
<a href="#">70727</a>	FR-A5 CBL 1 Cable for connecting Inverter and Programming panel; 1m Class 100100405: FA-Inverter: Cable
<a href="#">70728</a>	FR-A5 CBL 3 Cable for connecting Inverter and Programming panel; 3m Class 100100405: FA-Inverter: Cable
<a href="#">70729</a>	FR-A5 CBL 5 Cable for connecting Inverter and Programming panel; 5m Class 100100405: FA-Inverter: Cable
<a href="#">87247</a>	FR-BAL-B-22K Input Reactor 3ph; 400 V; for 22kW Class 100100406: FA-Inverter: Choke
<a href="#">130832</a>	FR-UDA02 DIN-Rail Adaptor for FR-D720S-1,5k; FR-D740-0,4k-3,7k Class 100100403: FA-Inverter: External Option
167612	FR-RJ45-HUB10 Distribution Module for RJ45; 10 way Class 100100403: FA-Inverter: External Option
<a href="#">167613</a>	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
<a href="#">191579</a>	FR-ABR-H22K External High-Duty Brake Resistor; 400V; 22kW; 52 Ohm; 6%ED Class 100100407: FA-Inverter: Brake Option
<a href="#">202428</a>	FR-BU2-H30K Brake Unit without Brake Resistor for all Inverters with DC-Bus Terminals; 400V Class 100100407: FA-Inverter: Brake Option
<a href="#">209740</a>	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
<a href="#">209757</a>	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
<a href="#">221540</a>	USB-CAB-5M USB 2.0 connection cabel, plug USB A to plug USB B (mini), 5m Class 100100303: FA-HMI: Cable
<a href="#">254840</a>	NF125-SV 3P 75A Circuit breaker 3pole. In = 75A; Icu = Ics = 25kA at AC 440V Class 100100901: FA-MCCB: Moulded-Case Circuit Breaker
<a href="#">254842</a>	NF125-SV 3P 100A Circuit breaker 3pole. In = 100A; Icu = Ics = 25kA at AC 440V Class 100100901: FA-MCCB: Moulded-Case Circuit Breaker
<a href="#">254915</a>	NF125-SGV 3P 70-100A Circuit breaker 3pole. Ir = 70 - 100A; Icu = Ics = 36kA at AC 440V Class 100100901: FA-MCCB: Moulded-Case Circuit Breaker
<a href="#">265625</a>	NV125-CV 3P 100A 2-440V 1.2.500MA JIEN C Earth-leakage Breaker 3pole; In=100A; 100/200/500mA; Icu/Ics=10/5kA at AC400V Class 100100906: FA-MCCB: Earth Leakage Circuit Breaker
<a href="#">275503</a>	FR Configurator-M+FR-Configurator2 FR-Configurator for 700 series; multi I + FR-Configurator2 for 800 series Class 100101203: FA-Software: Software Inverter
<a href="#">283572</a>	FFR-HEL-H22K-E1 DC Link choke for 400V Inverter; 22kW; 1,35mH; 40,5A Class 100100406: FA-Inverter: Choke

Material	Description / Price List Text / Classification
<a href="#">298657</a>	S-T35 AC200V Magnetic contactor. 18,5kW; 2NO + 2NC; Us = AC 200V, 50Hz Class 100101001: FA-MC: Magnetic Contactor
<a href="#">298658</a>	S-T35 AC24V Magnetic contactor. 18,5kW; 2NO + 2NC; Us = AC 24V, 50Hz Class 100101001: FA-MC: Magnetic Contactor
<a href="#">506377</a>	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
<a href="#">506378</a>	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
<a href="#">506379</a>	FR-A8AR-60 E-KIT Relay output; 3 additional output relays; Coated; E-KIT for FR-E800 Class 100100402: FA-Inverter: Internal Option
<a href="#">573101</a>	FR-A8AP-60 E-KIT Incremental Encoder Feedback; E-KIT for FR-E800; Coated Class 100100402: FA-Inverter: Internal Option
<a href="#">593979</a>	FFR-E-MSH-440-75A-SF1 Radio Noise Filter for FR-E840-380/440; C1 20m, C2 100m Class 100100404: FA-Inverter: Filter