



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://mitsubishi-electric-eshop.mee.com/mee/FA_IA/EUR/en/p/000000000000587771

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)	156
------------------------------	-----

Life Cycle

Sales Start	12.01.2021
Predecessor	No Predecessor

Additional Product Information

Battery included	NO
------------------	----

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	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-E840-0440EPA-60&doc-lang=en
Certificates URL Indicator	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blt8050dd1408c11cc2&q=FR-E840-0440EPA-60&doc-lang=en
CAD URL Indicator	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blt26ecc97a31a841c1&q=FR-E840-0440EPA-60&doc-lang=en
Network configuration file URL	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blte8cf990c7c524b4e&q=FR-E840-0440EPA-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)	7,0
Wood (g)	0

Glass (g)	0
Others (g)	0

Spare parts

Material	Description	Quantity	Unit
606265	FR-E820-KEPA/EPA PCB CPU	1	PC
606267	FR-E820(S)/E840/E860 PCB TERMINAL	1	PC
611164	FR-E820-0240-0330 FAN	2	PC
611139	FR-E800-(SC)EPA(B) parameter unit	1	PC
591470	FR-A870 CABLE ALL BKO-CA1972H01	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
87247	FR-BAL-B-22K Input Reactor 3ph; 400 V; for 22kW Class 100100406: FA-Inverter: Choke
130832	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
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
191579	FR-ABR-H22K External High-Duty Brake Resistor; 400V; 22kW; 52 Ohm; 6%ED Class 100100407: FA-Inverter: Brake Option
202428	FR-BU2-H30K Brake Unit without Brake Resistor for all Inverters with DC-Bus Terminals; 400V Class 100100407: FA-Inverter: Brake 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
221540	USB-CAB-5M USB 2.0 connection cabel, plug USB A to plug USB B (mini), 5m Class 100100303: FA-HMI: Cable
254840	NF125-SV 3P 75A Circuit breaker 3pole. In = 75A; Icu = Ics = 25kA at AC 440V Class 100100901: FA-MCCB: Moulded-Case Circuit Breaker
254842	NF125-SV 3P 100A Circuit breaker 3pole. In = 100A; Icu = Ics = 25kA at AC 440V Class 100100901: FA-MCCB: Moulded-Case Circuit Breaker
254915	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
265625	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
275503	FR Configurator-M+FR-Configurator2 FR-Configurator for 700 series; multi I + FR-Configurator2 for 800 series Class 100101203: FA-Software: Software Inverter
283572	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
298657	S-T35 AC200V Magnetic contactor. 18,5kW; 2NO + 2NC; Us = AC 200V, 50Hz Class 100101001: FA-MC: Magnetic Contactor
298658	S-T35 AC24V Magnetic contactor. 18,5kW; 2NO + 2NC; Us = AC 24V, 50Hz Class 100101001: FA-MC: Magnetic Contactor
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
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