MITSUBISHI ELECTRIC EUROPE B.V.

Industrial Automation
Mitsubishi-Electric-Platz 1 40882 Ratingen Deutschland
Telefon +49 (0) 2102 486-0 Fax +49 (0) 2102 486-1120
https://emea.mitsubishielectric.com/fa

MATERIAL FACT SHEET

596016 FR-E820S-0050EPC-60

General Data

Product Hierarchy	IAK24801
	INVERTER
	FR-E820
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/000000000000596016

FA-Inverter: Inverter

Series	FR-E800 SERIES
Type	FR-E800-ETH INVERTER
Minimum Rated Voltage (V)	200
Min. Permissible Voltage (V)	170
Maximum Rated Voltage (V)	240
Max. Permissible Voltage (V)	264
Current Type	AC
Phases	1
Rated Output Current ND (A)	5
Rated Motor Capacity ND (kW)	0,75
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 (%)	30
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	ETHERCAT
Leakage Current (mA)	1,2
Power Loss LD (W)	-
Power Loss ND (W)	49
Standby Power Consumption (W)	-
Protection Class	IP20

Product Dimensions & Weight

Width (mm)	108
Height (mm)	128
Depth (mm)	135
Weight (kg)	1,3

Logistic Dimensions & Gross Weight

Length (cm)	21,0
Width (cm)	13,0
Height (cm)	20,0
Gross Weight (kg)	1,471
Volume (cdm)	5,460

Stock Data

Planned Delivery Time (Days)	156

Life Cycle

Sales Start	09.05.2022
Predecessor	No Predecessor

Additional Product Information

Battery included	NO

Export Data

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

Environmental

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-E820S-0050EPC-60&doc-lang=en
Certificates URL Indicator	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blt8050dd1408c11cc2&q=FR-E820S-0050EPC-60&doc-lang=en
CAD URL Indicator	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blt26ecc97a31a841c1&q=FR-E820S-0050EPC-60&doc-lang=en
Network configuration file URL	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blte8cf990c7c524b4e&q=FR-E820S-0050EPC-60&doc-lang=en

Product Packaging

Cardboard (g)	213
Other paper (g)	0
Aluminum (g)	0
Steel (g)	0
Styrofoam (g)	0
Other plastic (g)	0
Wood (g)	0
Glass (g)	0
Others (g)	0

Spare parts

Material	Description	Quantity	Unit
606267	FR-E840-0.4K-7.5KEPA-60 PCB TERMINAL	1	PC
611139	FR-E800-(SC)EPA(B) UNIT DU	1	PC
611140	FR-E800-3,7K CBL CA	1	PC
591470	FR-A870 CABLE ALL BKO-CA1972H01	1	PC
611143	FR-E840-0040-0095 COVER FAN	1	PC

Compatible products

Material	Description / Price List Text / Classification
46602	FR-ABR-0.75K External High-Duty Brake Resistor; 0,75kW; 230V; 100 Ohm; 10%ED Class 100100407: FA-Inverter: Brake Option

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 2,5 Cable for connecting Inverter and Programming panel; 2,5m 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
134970	FR-BAL-S-B-0,75K Input Reactor; 1 ph.; 230 V; for 0,75 K Class 100100406: FA-Inverter: Choke
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
202426	FR-BU2-H7.5K Brake Unit without Brake Resistor for all Inverters with DC-Bus Terminals; 400V Class 100100407: FA-Inverter: Brake Option
209735	FFR-SI-4.5A-SS1 Sinusfilter for 200/230/400V Inverters;max. 4,5A;FT=4-16kHz;(W*H*D) 125*180*75mm Class 100100404: FA-Inverter: Filter
209755	FFR-DT-10A-SS1 du/dt Filter for 400V Inverters; max. 10A; FT=2-16kHz; (W*H*D) 100*120*65mm 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
238358	FFR-HEL-0.75K-E DC Link choke for 200V Inverter; 0,75kW; 9,7mH; 3,6A Class 100100406: FA-Inverter: Choke
254684	NF32-SV 3P 10A Circuit breaker 3pole. In = 10A; Icu = Ics = 2,5kA at AC 440V Class 100100901: FA-MCCB: Moulded-Case Circuit Breaker
254685	NF32-SV 3P 15A Circuit breaker 3pole. In = 15A; Icu = Ics = 2,5kA at AC 440V Class 100100901: FA-MCCB: Moulded-Case Circuit Breaker
254743	NF63-SV 3P 10A Circuit breaker 3pole. In = 10A; Icu = Ics = 7,5kA at AC 440V Class 100100901: FA-MCCB: Moulded-Case Circuit Breaker
254744	NF63-SV 3P 15A Circuit breaker 3pole. In = 15A; Icu = Ics = 7,5kA at AC 440V Class 100100901: FA-MCCB: Moulded-Case Circuit Breaker
275503	FR Configurator-M+FR-Configurator2 FR-Configurator for 700 series; multi l + FR-Configurator2 for 800 series Class 100101203: FA-Software: Software Inverter
279143	S-T10 AC200V 1A Magnetic contactor. 4kW; 1NO; Us = AC 200V, 50Hz Class 100101001: FA-MC: Magnetic Contactor
279200	S-T10 AC200V 1B Magnetic contactor. 4kW; 1NC; Us = AC 200V, 50Hz Class 100101001: FA-MC: Magnetic Contactor
288438	MMP-T32LF 18A Motor prot. switch. 7,9kW; Ir=12,0 ~ 18,0A; Icu AC 400V=15kA Class 100101101: FA-MMS: Manual Motor Starter
312349	FFR-CS-080-20A-SF1 Radio Noise Filter for FR-E820S-0050-0080/FR-D720S/FR-CS82S; C1: 20m, C2: 50m Class 100100404: FA-Inverter: Filter
312352	FFR-CS-080-20A-SF1-LL Radio Noise Filter for FR-E820S-0050-0080/FR-D720S; C1: 10m Class 100100404: FA-Inverter: Filter

Material	Description / Price List Text / Classification
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
679098	EM-AMF 0.75KW 165V 100HZ PM Motor; 0.75kW; Flange type; 3000r/min Class 100100410: FA-Inverter: Motor
679099	EM-AMFW 0.75KW 165V 100HZ PM Motor; 0.75kW; Flange type; IP65; 3000r/min Class 100100410: FA-Inverter: Motor
679100	EM-AMFB 0.75KW 165V 100HZ PM Motor; 0.75kW; Flange type; With brake; 3000r/min Class 100100410: FA-Inverter: Motor
679101	EM-AMFBW 0.75KW 165V 100HZ PM Motor; 0.75kW; Flange type; With brake; IP65; 3000r/min Class 100100410: FA-Inverter: Motor
679102	EM-AMFK 0.75KW 165V 100HZ PM Motor; 0.75kW; Flange type; With key; 3000r/min Class 100100410: FA-Inverter: Motor
679103	EM-AMFKW 0.75KW 165V 100HZ PM Motor; 0.75kW; Flange type; With key; IP65; 3000r/min Class 100100410: FA-Inverter: Motor
679104	EM-AMFBK 0.75KW 165V 100HZ PM Motor; 0.75kW; Flange type; With brake; With key; 3000r/min Class 100100410: FA-Inverter: Motor
679105	EM-AMFBKW 0.75KW 165V 100HZ PM Motor; 0.75kW; Flange type; With brake; With key; IP65; 3000r/min Class 100100410: FA-Inverter: Motor
703068	EM-AMFT 0.75KW 165V 100HZ PM Motor; 0.75kW; Flange type; Terminal Block; 3000r/min Class 100100410: FA-Inverter: Motor
703069	EM-AMFBT 0.75KW 165V 100HZ PM Motor; 0.75kW; Flange type; Terminal Block; With brake; 3000r/min Class 100100410: FA-Inverter: Motor
703070	EM-AMFKT 0.75KW 165V 100HZ PM Motor; 0.75kW; Flange type; Terminal Block; With key; 3000r/min Class 100100410: FA-Inverter: Motor
703071	EM-AMFBKT 0.75KW 165V 100HZ PM Motor; 0.75kW; Flange type; Terminal Block; With brake; With key; 3000r/min Class 100100410: FA-Inverter: Motor