



MATERIAL FACT SHEET

500116 FR-E840-0170-4-60

General Data

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

e-shop: https://mitsubishi-electric-eshop.mee.com/mee/FA_I/A/EUR/en/p/000000000000500116

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)	23
Rated Output Current ND (A)	17
Rated Motor Capacity LD (kW)	11
Rated Motor Capacity ND (kW)	7,5
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)	299
Power Loss ND (W)	197
Standby Power Consumption (W)	-
Protection Class	IP20

Product Dimensions & Weight

Width (mm)	220
Height (mm)	150

Depth (mm)	147
Weight (kg)	2,4

Logistic Dimensions & Gross Weight

Length (cm)	25,5
Width (cm)	22,5
Height (cm)	23,5
Gross Weight (kg)	2,811
Volume (cdm)	13,483

Stock Data

Planned Delivery Time (Days)	79
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Life Cycle

Sales Start	09.11.2020
Predecessor	240986 / FR-E740-170SC-E6

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	540-97-6
REACH Substance CAS Number (2)	541-02-6
REACH Substance CAS Number (3)	7439-92-1
REACH Substance CAS Number (4)	80-05-7
REACH Substance CAS Number (5)	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-E840-0170-4-60&doc-lang=en
Certificates URL Indicator	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blt8050dd1408c11cc2&q=FR-E840-0170-4-60&doc-lang=en
CAD URL Indicator	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blt26ecc97a31a841c1&q=FR-E840-0170-4-60&doc-lang=en
Network configuration file URL	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blte8cf990c7c524b4e&q=FR-E840-0170-4-60&doc-lang=en

Product Packaging

Cardboard (g)	500
Other paper (g)	0
Aluminum (g)	0
Steel (g)	0
Styrofoam (g)	0
Other plastic (g)	10
Wood (g)	0
Glass (g)	0
Others (g)	0

Spare parts

Material	Description	Quantity	Unit
600706	FR-E820/E840/E860 PCB CPU	1	PC
600472	FR-E840-0170-4-7.5K PCB MA	1	PC

Material	Description	Quantity	Unit
611134	FR-E840-4(5)-60 PCB TA	1	PC
611137	FR-E840-0120-0170 FAN	1	PC
611138	FR-E800 parameter unit	1	PC
611141	FR-E800-5,5K-7,5K CBL CA	1	PC
591470	FR-A870 CABLE ALL BKO-CA1972H01	1	PC
611144	FR-E800 COVER TOP ALL	1	PC
611142	FR-E840-0120-0170 COVER FAN	1	PC

Compatible products

Material	Description / Price List Text / Classification
703132	EM-AMF 7.5KW 330V 150HZ PM Motor; 7.5kW; Flange type; 3000r/min; 330V Class 100100410: FA-Inverter: Motor
703133	EM-AMFW 7.5KW 330V 150HZ PM Motor; 7.5kW; Flange type; IP65; 3000r/min; 330V Class 100100410: FA-Inverter: Motor
703134	EM-AMFB 7.5KW 330V 150HZ PM Motor; 7.5kW; Flange type; With brake; 3000r/min; 330V Class 100100410: FA-Inverter: Motor
703135	EM-AMFBW 7.5KW 330V 150HZ PM Motor; 7.5kW; Flange type; With brake; IP65; 3000r/min; 330V Class 100100410: FA-Inverter: Motor
703136	EM-AMFK 7.5KW 330V 150HZ PM Motor; 7.5kW; Flange type; With key; 3000r/min; 330V Class 100100410: FA-Inverter: Motor
703137	EM-AMFKW 7.5KW 330V 150HZ PM Motor; 7.5kW; Flange type; With key; IP65; 3000r/min; 330V Class 100100410: FA-Inverter: Motor
703138	EM-AMFBK 7.5KW 330V 150HZ PM Motor; 7.5kW; Flange type; With brake; With key; 3000r/min; 330V Class 100100410: FA-Inverter: Motor
703139	EM-AMFBKW 7.5KW 330V 150HZ PM Motor; 7.5kW; Flange type; With brake; With key; IP65; 3000r/min; 330V Class 100100410: FA-Inverter: Motor