



MATERIAL FACT SHEET

504770 FR-E840-0170SCEPB-60

General Data

Price List Text (EN)	Inverter; Pn: 7,5-11kW;3x380-480V;In max: 23A;(7,5kW;17A);PROFINET;SIL3;IP20
Price List Text (DE)	Umrichter; Pn: 7,5-11kW;3x380-480V;In max: 23A;(7,5kW;17A);PROFINET;SIL3;IP20
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/00000000000504770

FA-Inverter: Inverter

Series	FR-E800 SERIES
Type	FR-E800-ETH SAFETY CONTROL
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-DIGIT LED
PLC Function	YES
Program Memory	2K
Program Memory Unit	STEPS
Integrated Digital Inputs	0
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	CC LINK IE FIELD BASIC
Built-In Network (2)	CC-LINK IE TSN
Built-In Network (3)	MODBUS/TCP
Built-In Network (4)	PROFINET
Leakage Current (mA)	1,2
Power Loss LD (W)	300
Power Loss ND (W)	198
Standby Power Consumption (W)	-

Protection Class	IP20
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Product Dimensions & Weight

Width (mm)	220
Height (mm)	150
Depth (mm)	147
Weight (kg)	2,4

Logistic Dimensions & Gross Weight

Length (cm)	25,0
Width (cm)	23,0
Height (cm)	24,0
Gross Weight (kg)	2,840
Volume (cdm)	13,800

Stock Data

Planned Delivery Time (Days)	300
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Life Cycle

Sales Start	09.11.2020
Predecessor	No Predecessor

Export Data

Commodity Code	85044095
Legal Control (Dual Use List)	Not Listed
Country of Origin	China (CN)
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-E840-0170SCEPB-60&doc-lang=en
Certificates URL Indicator	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blt8050dd1408c11cc2&q=FR-E840-0170SCEPB-60&doc-lang=en
CAD URL Indicator	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blt26ecc97a31a841c1&q=FR-E840-0170SCEPB-60&doc-lang=en
Network configuration file URL	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blte8cf990c7c524b4e&q=FR-E840-0170SCEPB-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
611068	FR-E840 -SCEPB-60 PCB CPU	1	PC
600472	FR-E840-0170-4-7.5K PCB MA	1	PC
611135	FR-E840-SCEPB-60 PCB TA	1	PC
611137	FR-E840-0120-0170 FAN	1	PC
611139	FR-E800-(SC)EPA(B) UNIT DU	1	PC
611141	FR-E800-5,5K-7,5K CBL CA	1	PC

Material	Description	Quantity	Unit
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
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
87246	FR-BAL-B-7,5K Input Reactor 3ph; 400V; for 7,5kW 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
202426	FR-BU2-H7.5K Brake Unit without Brake Resistor for all Inverters with DC-Bus Terminals; 400V Class 100100407: FA-Inverter: Brake Option
209737	FFR-SI-18A-SS1 Sinusfilter for 200/230/400V Inverters; max. 18A; FT=4-16kHz; (W*H*D) 190*230*120mm Class 100100404: FA-Inverter: Filter
209756	FFR-DT-25A-SS1 du/dt Filter for 400V Inverters; max. 25A; FT=2-16kHz; (W*H*D) 125*140*80mm 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
238348	FFR-HEL-H7.5K-E DC Link choke for 400V Inverter; 7,5kW; 3,55mH; 14A Class 100100406: FA-Inverter: Choke
254689	NF32-SV 3P 30A Circuit breaker 3pole. In = 30A; Icu = Ics = 2,5kA at AC 440V Class 100100901: FA-MCCB: Moulded-Case Circuit Breaker
254761	NF63-SV 4P 30A Circuit breaker 4pole. In = 30A; 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 I + FR-Configurator2 for 800 series Class 100101203: FA-Software: Software Inverter
279244	S-T21 AC400V 2A2B Magnetic contactor. 11kW; 2NO + 2NC; Us = AC 400V, 50Hz Class 100101001: FA-MC: Magnetic Contactor
279244	S-T21 AC400V 2A2B Magnetic contactor. 11kW; 2NO + 2NC; Us = AC 400V, 50Hz Class 100101001: FA-MC: Magnetic Contactor
288440	MMP-T32LF 32A Motor prot. switch. 15kW; Ir=24,0 ~ 32,0A; Icu AC 400V=15kA Class 100101101: FA-MMS: Manual Motor Starter
312356	FFR-MSH-170-30A-SF1 Radio Noise Filter for FR-E740/E840-120/170; C1 20m, C2 100m Class 100100404: FA-Inverter: Filter
404037	FFR-MSH-170-30A-SB2-LL Radio Noise Filter for FR-E740/E840-120/170; C1 10m, C2 30m; Book size mounting 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