



MATERIAL FACT SHEET

412463 FR-A840-06100-E2-60R2R

General Data

Product Hierarchy	IAK24103
	INVERTER
	FR-A840 from 2160
Ext. Material Group	10 STANDARD ITEM
ABC Indicator	C (Non-Stock Material / Make-to-Order)

e-shop: https://mitsubishi-electric-eshop.mee.com/mee/FA_IA/EUR/en/p/000000000000412463

FA-Inverter: Inverter

Series	FR-A800 PLUS SERIES
Type	FR-A800-R2R (FOR ROLL TO ROLL)
Minimum Rated Voltage (V)	380
Min. Permissible Voltage (V)	323
Maximum Rated Voltage (V)	500
Max. Permissible Voltage (V)	550
Current Type	AC
Phases	3
Rated Output Current SLD (A)	610
Rated Output Current LD (A)	547
Rated Output Current ND (A)	481
Rated Output Current HD (A)	432
Rated Motor Capacity ND (kW)	250
Rated Motor Capacity HD (kW)	220
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)	SOFT-PWM/HIGH FREQUENCY PWM
Control Method (5)	V/F CONTROL
Control Method (6)	VECTOR CONTROL (WITH FR-A8AP)
Motor Type	INDUCTION MOTOR, PM MOTOR
Integrated EMC Filter	YES
Safe Torque Off (STO)	YES
Regenerative (4Q)	NO
Integrated DC Choke	NO
Display	FR-DU08
Display Type	5 DIGITS LED (12 SEGMENT)
PLC Function	YES
Program Memory	6K
Program Memory Unit	STEPS
Integrated Digital Inputs	12
Digital Outputs (Transistor)	5
Digital Outputs (Relay)	2
Integrated Analogue Inputs	3
Integrated Analogue Outputs	2
IO Type of Terminal Block	SPRING CLAMP
Expandable	YES
USB	1+1 MINI
Ethernet Port	1
Built-In Network	CC-LINK IE FIELD NETWORK
Built-In Network (2)	CC-LINK IE FIELD NETWORK BASIC
Built-In Network (3)	MODBUS/TCP
Leakage Current (mA)	35(DELTA) / 2(STAR)
Power Loss SLD (W)	6650
Power Loss LD (W)	5850
Power Loss ND (W)	5100
Power Loss HD (W)	4500

Standby Power Consumption (W)	125
Protection Class	IP20

Product Dimensions & Weight

Width (mm)	680
Height (mm)	1010
Depth (mm)	380
Weight (kg)	166

Logistic Dimensions & Gross Weight

Length (cm)	0,0
Width (cm)	0,0
Height (cm)	0,0
Gross Weight (kg)	181,170
Volume (cdm)	0,000

Stock Data

Planned Delivery Time (Days)	156
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Life Cycle

Sales Start	07.01.2019
Predecessor	296484 / FR-A840-06100-2-60R2R

Additional Product Information

Difference to Standard 1	ROLL TO ROLL CONTROL
Binding Tariff Information	DEBTI-21865/22-1
BTI validity date	01.01.2026
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-A840-06100-E2-60R2R&doc-lang=en
Certificates URL Indicator	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blt8050dd1408c11cc2&q=FR-A840-06100-E2-60R2R&doc-lang=en
CAD URL Indicator	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blt26ecc97a31a841c1&q=FR-A840-06100-E2-60R2R&doc-lang=en
Network configuration file URL	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blte8cf990c7c524b4e&q=FR-A840-06100-E2-60R2R&doc-lang=en

Product Packaging

Cardboard (g)	21000
Other paper (g)	0
Aluminum (g)	0
Steel (g)	15
Styrofoam (g)	0
Other plastic (g)	120
Wood (g)	0
Glass (g)	0
Others (g)	400

Spare parts

Material	Description	Quantity	Unit
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Material	Description	Quantity	Unit
282892	FR-A840-04320-06830-2-60 PCB MA	1	PC
282925	FR-A840-04320-2-60 PCB POWER	1	PC
282928	FR-A840-03250-12120/CC2 DM	12	PC
282929	FR-A840-04320-12120/CC2 FUSE HOLDER	2	PC
282930	FR-A840-04320-12120/CC2 FUSE	2	PC
282932	FR-A840/842/846-ALL TERMINAL BLOCK A80TA	1	PC
282940	FR-A840/842/CC2-ALL CASE CPU	1	PC
282942	FR-A840-03250-12120 BALANCE RESISTOR	16	PC
283444	FR-A840-03250-12120-2-60 IGBT CM450DY207	12	PC
283466	FR-A840-05470-06830-2-60/CC2 INRUSH RES.	1	PC
283479	FR-A840-06100-2-60 DCCT	3	PC
283484	FR-A840-00770-2-60 OR BIGGER CBL MA-CPU	1	PC
286226	FR-DU08	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
88426	SC-FR-PC CONNECTION CABLE PC>INVERTER Programming Cable RS 232>RS485/422; 5m Class 100100405: FA-Inverter: Cable
104665	FN 3359-600-99 f. A-160-220K/F-220-280K Radio Noise Filter for FR-A&F-04810-06100; C2 100m; C4 100m Class 100100404: FA-Inverter: Filter
157515	FR-ADP Adaptor Module for Operator Panel FR-DU07 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
209749	FFR-SI-683A-SS1 Sinusfilter for 400V Inverters; max. 683A; FT=2-16kHz; (W*H*D) 620*745*max.550mm Class 100100404: FA-Inverter: Filter
209763	FFR-DT-610A-SS1 du/dt Filter for 400V Inverters; max. 610A; FT=2-16kHz; (W*H*D) 240*325*230mm 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
262948	A8NDPV1 Profibus DPV1 with Dsub Interface for FR-A/F800 Class 100100402: FA-Inverter: Internal Option
262949	A8NPRT_2P Profinet 2port Interface for FR-A/F800 with Drive Profile Class 100100402: FA-Inverter: Internal Option
262950	A8NEIP_2P EtherNet/IP 2port Interface for FR-A/F800 Class 100100402: FA-Inverter: Internal Option
269426	FR-A8AX 16-Bit-Digital-Input; BCD/Binary-Code; 24V DC; 5mA for FR-F/A800 Class 100100402: FA-Inverter: Internal Option
269427	FR-A8AY Digital-/Analog Output; Output load: 24V DC; 0,1A for FR-F/A800 Class 100100402: FA-Inverter: Internal Option
269428	FR-A8AR Relay output; 3 additional output relays for FR-A/F800 Class 100100402: FA-Inverter: Internal Option

Material	Description / Price List Text / Classification
269431	FR-A8NC CC-Link Interface for FR-A/F800 Class 100100402: FA-Inverter: Internal Option
269432	FR-A8ND DeviceNet Interface for FR-A/F800 Class 100100402: FA-Inverter: Internal Option
270294	FR-HC2-H280K KIT Harmonic Converter 280kW for Power Factor correction; 400V Class; KIT Class 100100403: FA-Inverter: External Option
273102	FR-A8NCE CC-Link IE Field Interface for FR-A/F800 Class 100100402: FA-Inverter: Internal Option
273312	FR-HEL-H280K DC Link choke for 400V Inverter with 280kW Motor Class 100100406: FA-Inverter: Choke
274514	FR-A8NP ProfibusDP Interface for FR-A/F800 with FR-A/F700 PPO types Class 100100402: FA-Inverter: Internal Option
274526	FR-A8TAT Adapter for control terminal of A/F700 to A/F800 Class 100100402: FA-Inverter: Internal Option
275503	FR Configurator-M+FR-Configurator2 FR-Configurator for 700 series; multi I + FR-Configurator2 for 800 series Class 100101203: FA-Software: Software Inverter
283940	FR-A8AZ Analog Input/ output, Thermistor interface Class 100100402: FA-Inverter: Internal Option
284809	A8NECT_2P Ethercat 2port Interface for FR-A/F800 Class 100100402: FA-Inverter: Internal Option
290115	FR-A8NCN Control Net Interface for FR-A800 series Class 100100402: FA-Inverter: Internal Option
290116	FR-A8TR Screw Terminal Block for FR-A/F800 Class 100100402: FA-Inverter: Internal Option
294939	FR-D-Sub9-A8NP-01 D-Sub9 Connection Adapter for FR-A8NP + Cover Class 100100402: FA-Inverter: Internal Option
296613	FR-LU08-01 Clear text LCD Parameter unit for all units of 800 Series (IP55) Class 100100403: FA-Inverter: External Option
307170	FR-A8ERS-60 Optioncard to change Ethernet board to serial communication Class 100100402: FA-Inverter: Internal Option
403133	FR-A8AVP Phase detection option board of FR-A/F800 Class 100100402: FA-Inverter: Internal Option
403134	FR-A8VPB-H Phase detection transformer box for FR-A8AVP Class 100100403: FA-Inverter: External Option
487882	FR-A8NCG Plug-in Option for CC-Link IE TSN Communication Function Class 100100402: FA-Inverter: Internal Option
594984	S-N600AB AC200V 2A2B Magnetic contactor. 330kW; 2NO + 2NC; Us = AC 200V, 50Hz; Non-Reversing Class 100101001: FA-MC: Magnetic Contactor
596891	RHF-5P 315-400-50-00-S High efficient double-stage passive harmonic filter for THDi <5%;400V;50Hz;315kW Class 100100404: FA-Inverter: Filter
596908	RHF-8P 315-400-50-00-S High efficient double-stage passive harmonic filter for THDi <8%;400V;50Hz;315kW Class 100100404: FA-Inverter: Filter