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MATERIAL FACT SHEET

412451 FR-A840-00620-E2-60R2R

General Data

Product Hierarchy	IAK24101
	INVERTER
	FR-A840 from 00023 to 00620
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/000000000000412451

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)	62
Rated Output Current LD (A)	57
Rated Output Current ND (A)	44
Rated Output Current HD (A)	38
Rated Motor Capacity ND (kW)	22
Rated Motor Capacity HD (kW)	18,5
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)	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)	740
Power Loss LD (W)	675
Power Loss ND (W)	520
Power Loss HD (W)	450

Standby Power Consumption (W)	20
Protection Class	IP00

Product Dimensions & Weight

Width (mm)	250
Height (mm)	400
Depth (mm)	190
Weight (kg)	15

Logistic Dimensions & Gross Weight

Length (cm)	0,0
Width (cm)	0,0
Height (cm)	0,0
Gross Weight (kg)	16,830
Volume (cdm)	0,000

Stock Data

Planned Delivery Time (Days)	352

Life Cycle

Sales Start	07.01.2019
Predecessor	296472 / FR-A840-00620-2-60R2R

Additional Product Information

Difference to Standard 1	ROLL TO ROLL CONTROL
Binding Tariff Information	DEBTI-21865/22-1
BTI validity date	01.01.2026

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-A840-00620-E2-60R2R&doc-lang=en
Certificates URL Indicator	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blt8050dd1408c11cc2&q=FR-A840-00620-E2-60R2R&doc-lang=en
CAD URL Indicator	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blt26ecc97a31a841c1&q=FR-A840-00620-E2-60R2R&doc-lang=en
Network configuration file URL	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blte8cf990c7c524b4e&q=FR-A840-00620-E2-60R2R&doc-lang=en

Product Packaging

Cardboard (g)	2700
Other paper (g)	0
Aluminum (g)	0
Steel (g)	0
Styrofoam (g)	0
Other plastic (g)	20
Wood (g)	0
Glass (g)	0
Others (g)	0

Spare parts

Material	Description	Quantity	Unit
282886	FR-A840-00470-00620-2-60 PCB MA	1	PC

Material	Description	Quantity	Unit
282896	FR-A840-00470-00770-2-60 PCB GA	1	PC
282932	FR-A840/842/846-ALL TERMINAL BLOCK A80TA	1	PC
283438	FR-A840-00470-00770-2-60 THYRISTORMODULE	1	PC
283450	FR-A840-00470-01800-2-60 FAN	2	PC
283460	FR-A840-00470-00620-2-60 INRUSH RES.	1	PC
283467	FR-A840-00620-2-60 DCCT	1	PC
283483	FR-A840-00470-00620-2-60 CBL MA-CPU	2	PC
283587	FR-A840-00620-2-60 CAPACITOR	4	PC
283694	FR-A840-00470/00620-2-60 CHASSIS	1	PC
283695	FR-A840-00470/00620-2-60 CASE	1	PC
283697	FR-A840-00470/00620-2-60 COVER LOWER FR.	1	PC
283698	FR-A840-00470/00620-2-60 COVER WIRING	1	PC
283699	FR-A840-00470/00620-2-60 COVER FAN	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
87247	FR-BAL-B-22K Input Reactor 3ph; 400 V; for 22kW Class 100100406: FA-Inverter: Choke
127947	BU-UFS 22 Brake Unit 400V; Contin. Braking Current 22A; 10sec peak current 34A Class 100100407: FA-Inverter: Brake Option
127948	BU-UFS 40 Brake Unit 400V; Contin. Braking Current 34A; 10sec peak current 55A Class 100100407: FA-Inverter: Brake Option
127950	BU-UFS 110 Brake Unit 400V; Contin. Braking Current 44A; 10sec peak current 138A Class 100100407: FA-Inverter: Brake Option
129629	RUFC22 (PACK OF 1) Brake Resistor for BU-UFS22; 2kW; 1x24 Ohm Class 100100407: FA-Inverter: Brake Option
129630	RUFC40 (PACK OF 2) Brake Resistor Set for BU-UFS40; 2kW; 2x6,8 Ohm Class 100100407: FA-Inverter: Brake Option
129631	RUFC110 (PACK OF 4) Break Resistor Set for BU-UFS110; 2kW; 4x6,8 Ohm Class 100100407: FA-Inverter: Brake 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
193680	FFR-BS-00620-75A-SF100 Radio Noise Fiter for FR-A&F-00470-00620; C1 20m; C2 100m Class 100100404: FA-Inverter: Filter
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

Material	Description / Price List Text / Classification
221540	USB-CAB-5M USB 2.0 connection cabel, plug USB A to plug USB B (mini), 5m Class 100100303: FA-HMI: Cable
238367	FFR-HEL-22K-E DC Link choke for 200V Inverter; 22kW; 0,3mH; 95A Class 100100406: FA-Inverter: Choke
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
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
269429	FR-A8AP Incremental Encoder Feedback for FR-A800 Class 100100402: FA-Inverter: Internal Option
269430	FR-A8AL Incremental encoder feedback terminal block for FR-A800 Class 100100402: FA-Inverter: Internal Option
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
273102	FR-A8NCE CC-Link IE Field Interface for FR-A/F800 Class 100100402: FA-Inverter: Internal Option
274514	FR-A8NP ProfibusDP Interface for FR-A/F800 with FR-A/F700 PPO types Class 100100402: FA-Inverter: Internal Option
274525	FR-LU08 Clear text LCD Parameter unit for all units of 800 Series Class 100100403: FA-Inverter: External 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 l + FR-Configurator2 for 800 series Class 100101203: FA-Software: Software Inverter
277883	FR-A8CN04 Heatsink Protrusion Attachment for FR-F/A840-00470/00620; for FR-A820-00770/0125 Class 100100403: FA-Inverter: External Option
283939	FR-A8APR Resolver interface/orientation control/Resolver feedback control/vector control Class 100100402: FA-Inverter: Internal Option
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

Material	Description / Price List Text / Classification
285244	FR-A8TP Incremental Encoder Feedback Terminal Block for FR-A800 Class 100100402: FA-Inverter: Internal Option
289335	FR-A8NS SSCNet Interface for FR-A800 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
297422	FR-A8APS Absolute Encoder Feedback for FR-A800 (EnDat) Class 100100402: FA-Inverter: Internal Option
298153	FR-A8NCA CANopen Interface for FR-A800 Class 100100402: FA-Inverter: Internal Option
298656	S-T35 AC100V Magnetic contactor. 18,5kW; 2NO + 2NC; Us = AC 100V, 50Hz Class 100101001: FA-MC: Magnetic Contactor
298656	S-T35 AC100V Magnetic contactor. 18,5kW; 2NO + 2NC; Us = AC 100V, 50Hz Class 100101001: FA-MC: Magnetic Contactor
298657	S-T35 AC200V Magnetic contactor. 18,5kW; 2NO + 2NC; Us = AC 200V, 50Hz Class 100101001: FA-MC: Magnetic Contactor
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
298658	S-T35 AC24V Magnetic contactor. 18,5kW; 2NO + 2NC; Us = AC 24V, 50Hz Class 100101001: FA-MC: Magnetic Contactor
298659	S-T35 AC300V Magnetic contactor. 18,5kW; 2NO + 2NC; Us = AC 300V, 50Hz Class 100101001: FA-MC: Magnetic Contactor
298659	S-T35 AC300V Magnetic contactor. 18,5kW; 2NO + 2NC; Us = AC 300V, 50Hz Class 100101001: FA-MC: Magnetic Contactor
298660	S-T35 AC400V Magnetic contactor. 18,5kW; 2NO + 2NC; Us = AC 400V, 50Hz Class 100101001: FA-MC: Magnetic Contactor
298660	S-T35 AC400V Magnetic contactor. 18,5kW; 2NO + 2NC; Us = AC 400V, 50Hz Class 100101001: FA-MC: Magnetic Contactor
298661	S-T35 AC48V Magnetic contactor. 18,5kW; 2NO + 2NC; Us = AC 48V, 50Hz Class 100101001: FA-MC: Magnetic Contactor
298661	S-T35 AC48V Magnetic contactor. 18,5kW; 2NO + 2NC; Us = AC 48V, 50Hz Class 100101001: FA-MC: Magnetic Contactor
298662	S-T35 AC500V Magnetic contactor. 18,5kW; 2NO + 2NC; Us = AC 500V, 50Hz Class 100101001: FA-MC: Magnetic Contactor
298662	S-T35 AC500V Magnetic contactor. 18,5kW; 2NO + 2NC; Us = AC 500V, 50Hz Class 100101001: FA-MC: Magnetic Contactor
307170	FR-A8ERS-60 Optioncard to change Ethernet board to serial communication Class 100100402: FA-Inverter: Internal Option
307170	FR-A8ERS-60 Optioncard to change Ethernet board to serial communication Class 100100402: FA-Inverter: Internal Option
403614	FR-A8APA SinCos Encoder Feedback for FR-A800 Class 100100402: FA-Inverter: Internal Option

Material	Description / Price List Text / Classification
591577	RHF-5P 22-400-50-20-C High efficient double-stage passive harmonic filter for THDi <5%;400V;50Hz;22kW Class 100100404: FA-Inverter: Filter
591597	RHF-8P 22-400-50-20-C High efficient double-stage passive harmonic filter for THDi <8%;400V;50Hz;22kW Class 100100404: FA-Inverter: Filter