



MATERIAL FACT SHEET

318072 FR-F846-02160-E2-60L2

General Data

Product Hierarchy	IAK24500
	INVERTER
	FR-F846 IP55
Ext. Material Group	10 STANDARD ITEM
ABC Indicator	A (Available from Stock)

e-shop: https://mitsubishi-electric-eshop.mee.com/mee/FA_IA/EUR/en/p/000000000000318072

FA-Inverter: Inverter

Series	FR-F800 SERIES
Type	FR-F846-E2 INVERTER
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 LD (A)	180
Rated Motor Capacity LD (kW)	90
Frequency Range (Hz)	0,2-590
Control Method	MAGNETIC FLUX VECTOR CONTROL
Control Method (2)	PM SENSORLESS VECTOR CONTROL
Control Method (3)	SOFT-PWM/HIGH FREQUENCY PWM
Control Method (4)	V/F CONTROL
Motor Type	INDUCTION MOTOR, PM MOTOR
Integrated EMC Filter	YES
Safe Torque Off (STO)	YES
Regenerative (4Q)	NO
Integrated DC Choke	YES
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	BACNET/IP
Built-In Network (2)	CC-LINK IE FIELD NETWORK BASIC
Built-In Network (3)	MELSOFT/FA
Built-In Network (4)	MODBUS/TCP
Built-In Network (5)	SLMP
Built-In Network (6)	iQSS
Leakage Current (mA)	2
Power Loss SLD (W)	2520
Standby Power Consumption (W)	46
Protection Class	IP55

Product Dimensions & Weight

Width (mm)	420
Height (mm)	1360

Depth (mm)	456,6
Weight (kg)	150

Logistic Dimensions & Gross Weight

Length (cm)	150,0
Width (cm)	55,0
Height (cm)	67,0
Gross Weight (kg)	195,000
Volume (cdm)	552,750

Stock Data

Planned Delivery Time (Days)	296
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Life Cycle

Sales Start	01.03.2018
Predecessor	No Predecessor

Additional Product Information

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

REACH Limit Exceeded	YES
REACH Substance CAS Number	12626-81-2
REACH Substance CAS Number (2)	127-19-5
REACH Substance CAS Number (3)	1317-36-8
REACH Substance CAS Number (4)	13560-89-9
REACH Substance CAS Number (5)	15571-58-1
REACH Substance CAS Number (6)	540-97-6
REACH Substance CAS Number (7)	541-02-6
REACH Substance CAS Number (8)	556-67-2
REACH Substance CAS Number (9)	7439-92-1
Dangerous Goods Class	NO
Dangerous Goods Identifier	NO
RoHS Compliance	COMPLIANT
WEEE	B2B

Conformity

CE	COMPLIANT
UL/cUL	COMPLIANT
EAC	COMPLIANT
Shipping Approvals	DNV,ABS
UKCA	COMPLIANT

Documentation & Media Data

Manual URL Indicator	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=bltdae25c2bd5f2ff94&q=FR-F846-02160-E2-60L2&doc-lang=en
Certificates URL Indicator	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blt8050dd1408c11cc2&q=FR-F846-02160-E2-60L2&doc-lang=en
CAD URL Indicator	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blt26ecc97a31a841c1&q=FR-F846-02160-E2-60L2&doc-lang=en
Network configuration file URL	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blte8cf990c7c524b4e&q=FR-F846-02160-E2-60L2&doc-lang=en

Product Packaging

Cardboard (g)	17500
Other paper (g)	0
Aluminum (g)	0
Steel (g)	15
Styrofoam (g)	0
Other plastic (g)	150
Wood (g)	0
Glass (g)	0
Others (g)	0

Spare parts

Material	Description	Quantity	Unit
498581	FR-F846-E2 PCB CPU	1	PC
487412	FR-A846-01800-03610-55K-132K PCB MA	1	PC
282925	FR-A840-04320-2-60 PCB POWER	1	PC
498461	FR-F846-00620-03610 FAN	3	PC
283450	FR-A840-00470-01800-2-60 FAN	2	PC
283444	FR-A840-03250-12120-2-60 IGBT CM450DY207	3	PC
282932	FR-A840/842/846-ALL TERMINAL BLOCK A80TA	1	PC
282933	FR-A840-00170-00250/A846-ALL CBL MA-CPU	1	PC
283472	FR-A840-02160-2-60 DCCT	3	PC
282942	FR-A840-03250-12120 BALANCE RESISTOR	8	PC
282943	FR-A842-07700-08660 / CC2 ALL THERMISTOR	1	PC
283715	FR-A846-2-60C2 ALL RJ45 ADAPTER 846ADP	1	PC