



## MATERIAL FACT SHEET

### 318068 FR-F846-00770-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/000000000000318068](https://mitsubishi-electric-eshop.mee.com/mee/FA_IA/EUR/en/p/000000000000318068)

#### 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)   | 70                             |
| Rated Motor Capacity LD (kW)  | 37                             |
| 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)            | 930                            |
| Standby Power Consumption (W) | 26                             |
| Protection Class              | IP55                           |

#### Product Dimensions & Weight

|             |     |
|-------------|-----|
| Width (mm)  | 345 |
| Height (mm) | 790 |

|             |     |
|-------------|-----|
| Depth (mm)  | 357 |
| Weight (kg) | 60  |

### Logistic Dimensions & Gross Weight

|                   |         |
|-------------------|---------|
| Length (cm)       | 48,0    |
| Width (cm)        | 85,5    |
| Height (cm)       | 57,5    |
| Gross Weight (kg) | 70,000  |
| Volume (cdm)      | 235,980 |

### Stock Data

|                              |     |
|------------------------------|-----|
| Planned Delivery Time (Days) | 296 |
|------------------------------|-----|

### Life Cycle

|             |                |
|-------------|----------------|
| Sales Start | 01.06.2018     |
| 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      | <a href="#">12626-81-2</a> |
| REACH Substance CAS Number (2)  | <a href="#">127-19-5</a>   |
| REACH Substance CAS Number (3)  | <a href="#">1317-36-8</a>  |
| REACH Substance CAS Number (4)  | <a href="#">13560-89-9</a> |
| REACH Substance CAS Number (5)  | <a href="#">15571-58-1</a> |
| REACH Substance CAS Number (6)  | <a href="#">25155-23-1</a> |
| REACH Substance CAS Number (7)  | <a href="#">7439-92-1</a>  |
| REACH Substance CAS Number (8)  | <a href="#">80-05-7</a>    |
| REACH Substance CAS Number (9)  | <a href="#">84-61-7</a>    |
| REACH Substance CAS Number (10) | <a href="#">872-50-4</a>   |
| 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           | <a href="https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=bltdae25c2bd5f2ff94&amp;q=FR-F846-00770-E2-60L2&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=bltdae25c2bd5f2ff94&amp;q=FR-F846-00770-E2-60L2&amp;doc-lang=en</a> |
| Certificates URL Indicator     | <a href="https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blt8050dd1408c11cc2&amp;q=FR-F846-00770-E2-60L2&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blt8050dd1408c11cc2&amp;q=FR-F846-00770-E2-60L2&amp;doc-lang=en</a> |
| CAD URL Indicator              | <a href="https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blt26ecc97a31a841c1&amp;q=FR-F846-00770-E2-60L2&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blt26ecc97a31a841c1&amp;q=FR-F846-00770-E2-60L2&amp;doc-lang=en</a> |
| Network configuration file URL | <a href="https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blte8cf990c7c524b4e&amp;q=FR-F846-00770-E2-60L2&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blte8cf990c7c524b4e&amp;q=FR-F846-00770-E2-60L2&amp;doc-lang=en</a> |

### Product Packaging

|                   |      |
|-------------------|------|
| Cardboard (g)     | 1400 |
| 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 |
|------------------------|------------------------------------------|----------|------|
| 498581                 | FR-F846-E2 PCB CPU                       | 1        | PC   |
| <a href="#">283587</a> | FR-A840-00620-2-60 CAPACITOR             | 4        | PC   |
| <a href="#">498461</a> | FR-F846-00620-03610 FAN                  | 2        | PC   |
| <a href="#">282931</a> | FR-A840-00083-00126 and FR-A846-ALL FAN  | 1        | PC   |
| <a href="#">283442</a> | FR-A840-00930-01160-2-60 IGBT 2MBI200VB  | 3        | PC   |
| <a href="#">282932</a> | FR-A840/842/846-ALL TERMINAL BLOCK A80TA | 1        | PC   |
| 282933                 | FR-A840-00170-00250/A846-ALL CBL MA-CPU  | 1        | PC   |
| <a href="#">283468</a> | FR-A840-00770-2-60 DCCT                  | 1        | PC   |
| 282941                 | FR-A840-77A-116A BALANCE RESISTOR        | 4        | PC   |
| <a href="#">283715</a> | FR-A846-2-60C2 ALL RJ45 ADAPTER 846ADP   | 1        | PC   |