



## MATERIAL FACT SHEET

### 500472 FR-A860-00680-E1-60

#### General Data

|                     |                                        |
|---------------------|----------------------------------------|
| Product Hierarchy   | IAK24108                               |
|                     | INVERTER                               |
|                     | FR-A860                                |
| 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\\_1A/EUR/en/p/000000000000500472](https://mitsubishi-electric-eshop.mee.com/mee/FA_1A/EUR/en/p/000000000000500472)

#### FA-Inverter: Inverter

|                               |                           |
|-------------------------------|---------------------------|
| Series                        | FR-A SERIES               |
| Type                          | FR-A800-E INVERTER        |
| Minimum Rated Voltage (V)     | 525                       |
| Min. Permissible Voltage (V)  | 472                       |
| Maximum Rated Voltage (V)     | 600                       |
| Max. Permissible Voltage (V)  | 660                       |
| Current Type                  | AC                        |
| Phases                        | 3                         |
| Rated Output Current ND (A)   | 55                        |
| Rated Motor Capacity ND (kW)  | 37                        |
| Rated Motor Capacity HD (kW)  | 30                        |
| Frequency Range (Hz)          | 0,2-590                   |
| Control Method                | VECTOR CONTROL            |
| Motor Type                    | INDUCTION MOTOR, PM MOTOR |
| Integrated EMC Filter         | YES                       |
| Safe Torque Off (STO)         | YES                       |
| Regenerative (4Q)             | NO                        |
| Integrated DC Choke           | NO                        |
| 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 BASIC    |
| Built-In Network (2)          | MODBUS/TCP                |
| Leakage Current (mA)          | -                         |
| Power Loss SLD (W)            | 980                       |
| Power Loss LD (W)             | 880                       |
| Power Loss ND (W)             | 770                       |
| Power Loss HD (W)             | 560                       |
| Standby Power Consumption (W) | -                         |
| Protection Class              | IP00                      |

#### Product Dimensions & Weight

|             |     |
|-------------|-----|
| Width (mm)  | 435 |
| Height (mm) | 550 |
| Depth (mm)  | 250 |
| Weight (kg) | 36  |

**Logistic Dimensions & Gross Weight**

|                   |         |
|-------------------|---------|
| Length (cm)       | 61,0    |
| Width (cm)        | 57,0    |
| Height (cm)       | 39,0    |
| Gross Weight (kg) | 41,000  |
| Volume (cdm)      | 135,603 |

**Stock Data**

|                              |     |
|------------------------------|-----|
| Planned Delivery Time (Days) | 212 |
|------------------------------|-----|

**Life Cycle**

|             |                |
|-------------|----------------|
| Sales Start | 09.03.2020     |
| 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**

|                            |              |
|----------------------------|--------------|
| Dangerous Goods Class      | NO           |
| Dangerous Goods Identifier | NO           |
| RoHS Compliance            | NOT IN SCOPE |
| WEEE                       | B2B          |

**Conformity**

|                    |               |
|--------------------|---------------|
| CE                 | NON-COMPLIANT |
| UL/cUL             | COMPLIANT     |
| EAC                | COMPLIANT     |
| Shipping Approvals | NON-COMPLIANT |
| UKCA               | NON-COMPLIANT |

**Documentation & Media Data**

|                            |                                                                                                                                                                                                                                                                                                           |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Manual URL Indicator       | <a href="https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=bltdae25c2bd5f2f94&amp;q=FR-A860-00680-E1-60&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=bltdae25c2bd5f2f94&amp;q=FR-A860-00680-E1-60&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-A860-00680-E1-60&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blt8050dd1408c11cc2&amp;q=FR-A860-00680-E1-60&amp;doc-lang=en</a> |

**Spare parts**

| Material               | Description                              | Quantity | Unit |
|------------------------|------------------------------------------|----------|------|
| <a href="#">283435</a> | FR-A840-00930-01800-2-60 DM              | 3        | PC   |
| <a href="#">283450</a> | FR-A840-00470-01800-2-60 FAN             | 3        | PC   |
| <a href="#">283439</a> | FR-A840-00930-01800-2-60 THYRISTORMODULE | 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   |
| <a href="#">591470</a> | FR-A870 CABLE ALL BKO-CA1972H01          | 1        | PC   |
| 591471                 | FR-A870 CABLE ALL BKO-CA1972H02          | 1        | PC   |
| <a href="#">283484</a> | FR-A840-00770-2-60 OR BIGGER CBL MA-CPU  | 1        | PC   |
| <a href="#">283469</a> | FR-A840-00930-2-60 DCCT                  | 1        | PC   |
| 591486                 | FR-A870 COVER INTERFACE ALL              | 1        | PC   |
| 591485                 | FR-A870 COVER CA PCB PRINT ALL           | 1        | PC   |
| <a href="#">283709</a> | FR-A840-00930-01800-2-60 COVER FAN       | 3        | PC   |
| <a href="#">283710</a> | FR-A840-00930-01800-2-60 COVER TERMINAL  | 1        | PC   |
| <a href="#">283462</a> | FR-A840-00930-01800-2-60 INRUSH RES.     | 1        | PC   |
| 591494                 | FR-A870 GROUND WIRE ETH ALL              | 1        | PC   |
| <a href="#">676513</a> | FR-A840-00930-01800 BREAKING IGBT        | 1        | PC   |