



## MATERIAL FACT SHEET

### 500112 FR-E840-0040-4-60

#### General Data

|                     |                          |
|---------------------|--------------------------|
| Product Hierarchy   | IAK24802                 |
|                     | INVERTER                 |
|                     | FR-E840                  |
| 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/000000000000500112](https://mitsubishi-electric-eshop.mee.com/mee/FA_IA/EUR/en/p/000000000000500112)

#### FA-Inverter: Inverter

|                               |                                |
|-------------------------------|--------------------------------|
| Series                        | FR-E800 SERIES                 |
| Type                          | FR-E800 RS485 INVERTER         |
| Minimum Rated Voltage (V)     | 380                            |
| Min. Permissible Voltage (V)  | 323                            |
| Maximum Rated Voltage (V)     | 480                            |
| Max. Permissible Voltage (V)  | 528                            |
| Current Type                  | AC                             |
| Phases                        | 3                              |
| Rated Output Current LD (A)   | 5,5                            |
| Rated Output Current ND (A)   | 4                              |
| Rated Motor Capacity LD (kW)  | 2,2                            |
| Rated Motor Capacity ND (kW)  | 1,5                            |
| 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)            | V/F CONTROL                    |
| Motor Type                    | INDUCTION MOTOR, PM MOTOR      |
| Brake Chopper ED (%)          | 100                            |
| Integrated EMC Filter         | NO                             |
| Safe Torque Off (STO)         | YES                            |
| Regenerative (4Q)             | NO                             |
| Integrated DC Choke           | NO                             |
| Display                       | BUILT-IN                       |
| Display Type                  | 4 DIGITS LED                   |
| PLC Function                  | YES                            |
| Program Memory                | 2K                             |
| Program Memory Unit           | STEPS                          |
| Integrated Digital Inputs     | 7                              |
| Digital Outputs (Transistor)  | 2                              |
| Digital Outputs (Relay)       | 1                              |
| Integrated Analogue Inputs    | 2                              |
| Integrated Analogue Outputs   | 1                              |
| IO Type of Terminal Block     | SPRING CLAMP                   |
| Expandable                    | YES                            |
| RS-485                        | 1                              |
| USB                           | 1 (MINI B)                     |
| Ethernet Port                 | NO                             |
| Built-In Network              | MODBUS-RTU                     |
| Leakage Current (mA)          | 1,2                            |
| Power Loss LD (W)             | 84                             |
| Power Loss ND (W)             | 58                             |
| Standby Power Consumption (W) | -                              |
| Protection Class              | IP20                           |

#### Product Dimensions & Weight

|             |     |
|-------------|-----|
| Width (mm)  | 108 |
| Height (mm) | 128 |

|             |     |
|-------------|-----|
| Depth (mm)  | 135 |
| Weight (kg) | 1,4 |

### Logistic Dimensions & Gross Weight

|                   |       |
|-------------------|-------|
| Length (cm)       | 20,5  |
| Width (cm)        | 12,5  |
| Height (cm)       | 20,0  |
| Gross Weight (kg) | 1,619 |
| Volume (cdm)      | 5,125 |

### Stock Data

|                              |    |
|------------------------------|----|
| Planned Delivery Time (Days) | 79 |
|------------------------------|----|

### Life Cycle

|             |                           |
|-------------|---------------------------|
| Sales Start | 09.11.2020                |
| Predecessor | 240982 / FR-E740-040SC-E6 |

### Additional Product Information

|                  |    |
|------------------|----|
| Battery included | NO |
|------------------|----|

### Export Data

|                                          |            |
|------------------------------------------|------------|
| Legal Control (Dual Use List)            | Not Listed |
| Country of Origin                        | China (CN) |
| 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           | <a href="https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=bltdae25c2bd5f2ff94&amp;q=FR-E840-0040-4-60&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=bltdae25c2bd5f2ff94&amp;q=FR-E840-0040-4-60&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-E840-0040-4-60&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blt8050dd1408c11cc2&amp;q=FR-E840-0040-4-60&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-E840-0040-4-60&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blt26ecc97a31a841c1&amp;q=FR-E840-0040-4-60&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-E840-0040-4-60&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blte8cf990c7c524b4e&amp;q=FR-E840-0040-4-60&amp;doc-lang=en</a> |

### Product Packaging

|                   |     |
|-------------------|-----|
| Cardboard (g)     | 215 |
| Other paper (g)   | 17  |
| Aluminum (g)      | 0   |
| Steel (g)         | 0   |
| Styrofoam (g)     | 0   |
| Other plastic (g) | 5   |
| Wood (g)          | 0   |
| Glass (g)         | 0   |
| Others (g)        | 0   |

### Spare parts

| Material               | Description                         | Quantity | Unit |
|------------------------|-------------------------------------|----------|------|
| <a href="#">600706</a> | FR-E840-0.4K-7.5K 1-60/0-60 PCB CPU | 1        | PC   |
| <a href="#">600476</a> | FR-E840-0040-4-1.5K PCB MA          | 1        | PC   |
| 611071                 | FR-E840-0040EPA(B)-60 PCB GA        | 1        | PC   |
| <a href="#">611134</a> | FR-E840-4(5)-60 PCB TA              | 1        | PC   |
| <a href="#">611136</a> | FR-E840-0040-0095 FAN               | 1        | PC   |
| <a href="#">611138</a> | FR-E800 UNIT DU                     | 1        | PC   |
| <a href="#">611140</a> | FR-E800-3,7K CBL CA                 | 1        | PC   |
| <a href="#">591470</a> | FR-A870 CABLE ALL BKO-CA1972H01     | 1        | PC   |
| <a href="#">611143</a> | FR-E840-0040-0095 COVER FAN         | 1        | PC   |

| Material               | Description           | Quantity | Unit |
|------------------------|-----------------------|----------|------|
| <a href="#">611144</a> | FR-E800 COVER TOP ALL | 1        | PC   |

#### Compatible products

| Material               | Description / Price List Text / Classification                                                                                                     |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">703088</a> | EM-AMF 1.5KW 340V 150HZ<br>PM Motor; 1.5kW; Flange type; 3000r/min<br>Class 100100410: FA-Inverter: Motor                                          |
| <a href="#">703089</a> | EM-AMFW 1.5KW 340V 150HZ<br>PM Motor; 1.5kW; Flange type; IP65; 3000r/min<br>Class 100100410: FA-Inverter: Motor                                   |
| <a href="#">703090</a> | EM-AMFT 1.5KW 340V 150HZ<br>PM Motor; 1.5kW; Flange type; Terminal Block; 3000r/min<br>Class 100100410: FA-Inverter: Motor                         |
| <a href="#">703091</a> | EM-AMFB 1.5KW 340V 150HZ<br>PM Motor; 1.5kW; Flange type; With brake; 3000r/min<br>Class 100100410: FA-Inverter: Motor                             |
| <a href="#">703092</a> | EM-AMFBW 1.5KW 340V 150HZ<br>PM Motor; 1.5kW; Flange type; With brake; IP65; 3000r/min<br>Class 100100410: FA-Inverter: Motor                      |
| <a href="#">703093</a> | EM-AMFBT 1.5KW 340V 150HZ<br>PM Motor; 1.5kW; Flange type; Terminal Block; With brake; 3000r/min<br>Class 100100410: FA-Inverter: Motor            |
| <a href="#">703094</a> | EM-AMFK 1.5KW 340V 150HZ<br>PM Motor; 1.5kW; Flange type; With key; 3000r/min<br>Class 100100410: FA-Inverter: Motor                               |
| <a href="#">703095</a> | EM-AMFKW 1.5KW 340V 150HZ<br>PM Motor; 1.5kW; Flange type; With key; IP65; 3000r/min<br>Class 100100410: FA-Inverter: Motor                        |
| <a href="#">703096</a> | EM-AMFKT 1.5KW 340V 150HZ<br>PM Motor; 1.5kW; Flange type; Terminal Block; With key; 3000r/min<br>Class 100100410: FA-Inverter: Motor              |
| <a href="#">703097</a> | EM-AMFBK 1.5KW 340V 150HZ<br>PM Motor; 1.5kW; Flange type; With brake; With key; 3000r/min<br>Class 100100410: FA-Inverter: Motor                  |
| <a href="#">703098</a> | EM-AMFBKW 1.5KW 340V 150HZ<br>PM Motor; 1.5kW; Flange type; With brake; With key; IP65; 3000r/min<br>Class 100100410: FA-Inverter: Motor           |
| <a href="#">703099</a> | EM-AMFBKT 1.5KW 340V 150HZ<br>PM Motor; 1.5kW; Flange type; Terminal Block; With brake; With key; 3000r/min<br>Class 100100410: FA-Inverter: Motor |