



## MATERIAL FACT SHEET

### 500100 FR-E840-0170EPB-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\\_I/A/EUR/en/p/000000000000500100](https://mitsubishi-electric-eshop.mee.com/mee/FA_I/A/EUR/en/p/000000000000500100)

#### FA-Inverter: Inverter

|                               |                                |
|-------------------------------|--------------------------------|
| Series                        | FR-E800 SERIES                 |
| Type                          | FR-E800-ETH 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)   | 23                             |
| Rated Output Current ND (A)   | 17                             |
| Rated Motor Capacity LD (kW)  | 11                             |
| Rated Motor Capacity ND (kW)  | 7,5                            |
| 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     | 2                              |
| Digital Outputs (Transistor)  | 0                              |
| Digital Outputs (Relay)       | 1                              |
| Integrated Analogue Inputs    | 2                              |
| Integrated Analogue Outputs   | 0                              |
| IO Type of Terminal Block     | SPRING CLAMP                   |
| Expandable                    | YES                            |
| RS-485                        | NO                             |
| USB                           | 1 (MINI B)                     |
| Ethernet Port                 | 2                              |
| Built-In Network              | CC-LINK IE FIELD BASIC         |
| Built-In Network (2)          | CC-LINK IE TSN                 |
| Built-In Network (3)          | MODBUS/TCP                     |
| Built-In Network (4)          | PROFINET                       |
| Leakage Current (mA)          | 1,2                            |
| Power Loss LD (W)             | 300                            |
| Power Loss ND (W)             | 198                            |
| Standby Power Consumption (W) | -                              |
| Protection Class              | IP20                           |

**Product Dimensions & Weight**

|             |     |
|-------------|-----|
| Width (mm)  | 220 |
| Height (mm) | 150 |
| Depth (mm)  | 147 |
| Weight (kg) | 2,4 |

**Logistic Dimensions & Gross Weight**

|                   |        |
|-------------------|--------|
| Length (cm)       | 25,5   |
| Width (cm)        | 22,5   |
| Height (cm)       | 23,5   |
| Gross Weight (kg) | 2,804  |
| Volume (cdm)      | 13,483 |

**Stock Data**

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

**Life Cycle**

|             |                            |
|-------------|----------------------------|
| Sales Start | 09.11.2020                 |
| Predecessor | 316588 / FR-E740-170SC-ENE |

**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-E840-0170EPB-60&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=bltdae25c2bd5f2ff94&amp;q=FR-E840-0170EPB-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-E840-0170EPB-60&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blt8050dd1408c11cc2&amp;q=FR-E840-0170EPB-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-E840-0170EPB-60&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blt26ecc97a31a841c1&amp;q=FR-E840-0170EPB-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-E840-0170EPB-60&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blte8cf990c7c524b4e&amp;q=FR-E840-0170EPB-60&amp;doc-lang=en</a> |

**Product Packaging**

|                   |     |
|-------------------|-----|
| Cardboard (g)     | 500 |
| 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 |
|------------------------|--------------------------------------|----------|------|
| <a href="#">600707</a> | FR-E840-0016-0170EPB-60 PCB CPU      | 1        | PC   |
| <a href="#">600472</a> | FR-E840-0170-4-7.5K PCB MA           | 1        | PC   |
| <a href="#">606267</a> | FR-E840-0.4K-7.5KEPA-60 PCB TERMINAL | 1        | PC   |
| <a href="#">611137</a> | FR-E840-0120-0170 FAN                | 1        | PC   |
| <a href="#">611139</a> | FR-E800-(SC)EPA(B) UNIT DU           | 1        | PC   |
| <a href="#">611141</a> | FR-E800-5,5K-7,5K CBL CA             | 1        | PC   |

| Material               | Description                     | Quantity | Unit |
|------------------------|---------------------------------|----------|------|
| <a href="#">591470</a> | FR-A870 CABLE ALL BKO-CA1972H01 | 1        | PC   |
| <a href="#">611144</a> | FR-E800 COVER TOP ALL           | 1        | PC   |
| <a href="#">611142</a> | FR-E840-0120-0170 COVER FAN     | 1        | PC   |

#### Compatible products

| Material               | Description / Price List Text / Classification                                                                                                 |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">703132</a> | EM-AMF 7.5KW 330V 150HZ<br>PM Motor; 7.5kW; Flange type; 3000r/min; 330V<br>Class 100100410: FA-Inverter: Motor                                |
| <a href="#">703133</a> | EM-AMFW 7.5KW 330V 150HZ<br>PM Motor; 7.5kW; Flange type; IP65; 3000r/min; 330V<br>Class 100100410: FA-Inverter: Motor                         |
| <a href="#">703134</a> | EM-AMFB 7.5KW 330V 150HZ<br>PM Motor; 7.5kW; Flange type; With brake; 3000r/min; 330V<br>Class 100100410: FA-Inverter: Motor                   |
| <a href="#">703135</a> | EM-AMFBW 7.5KW 330V 150HZ<br>PM Motor; 7.5kW; Flange type; With brake; IP65; 3000r/min; 330V<br>Class 100100410: FA-Inverter: Motor            |
| <a href="#">703136</a> | EM-AMFK 7.5KW 330V 150HZ<br>PM Motor; 7.5kW; Flange type; With key; 3000r/min; 330V<br>Class 100100410: FA-Inverter: Motor                     |
| <a href="#">703137</a> | EM-AMFKW 7.5KW 330V 150HZ<br>PM Motor; 7.5kW; Flange type; With key; IP65; 3000r/min; 330V<br>Class 100100410: FA-Inverter: Motor              |
| <a href="#">703138</a> | EM-AMFBK 7.5KW 330V 150HZ<br>PM Motor; 7.5kW; Flange type; With brake; With key; 3000r/min; 330V<br>Class 100100410: FA-Inverter: Motor        |
| <a href="#">703139</a> | EM-AMFBKW 7.5KW 330V 150HZ<br>PM Motor; 7.5kW; Flange type; With brake; With key; IP65; 3000r/min; 330V<br>Class 100100410: FA-Inverter: Motor |