



## MATERIAL FACT SHEET

### 307164 FR-AF840-01160-60

#### General Data

|                     |                          |
|---------------------|--------------------------|
| Product Hierarchy   | IAK243                   |
|                     | INVERTER                 |
|                     | FR-AF840 up to 01800     |
| 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/000000000000307164](https://mitsubishi-electric-eshop.mee.com/mee/FA_IA/EUR/en/p/000000000000307164)

#### FA-Inverter: Inverter

|                               |                             |
|-------------------------------|-----------------------------|
| Series                        | FR-A/F800 SERIES            |
| Type                          | BASE UNIT FOR INV A840/F840 |
| 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 ND (A)   | 86                          |
| Rated Motor Capacity ND (kW)  | 45                          |
| Rated Motor Capacity HD (kW)  | 37                          |
| Frequency Range (Hz)          | -                           |
| 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                          |
| Display                       | FR-DU08                     |
| Display Type                  | 5 DIGITS LED                |
| 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                         |
| RS-485                        | 2                           |
| USB                           | 2                           |
| Leakage Current (mA)          | 35(DELTA) / 2(STAR)         |
| Power Loss SLD (W)            | 1340                        |
| Power Loss LD (W)             | 1220                        |
| Power Loss ND (W)             | 1020                        |
| Power Loss HD (W)             | 860                         |
| Standby Power Consumption (W) | 28                          |
| Protection Class              | IP00                        |

#### Product Dimensions & Weight

|             |     |
|-------------|-----|
| Width (mm)  | 435 |
| Height (mm) | 550 |
| Depth (mm)  | 250 |
| Weight (kg) | 41  |

**Logistic Dimensions & Gross Weight**

|                   |         |
|-------------------|---------|
| Length (cm)       | 56,0    |
| Width (cm)        | 58,0    |
| Height (cm)       | 40,0    |
| Gross Weight (kg) | 42,000  |
| Volume (cdm)      | 129,920 |

**Stock Data**

|                              |     |
|------------------------------|-----|
| Planned Delivery Time (Days) | 100 |
|------------------------------|-----|

**Life Cycle**

|             |                            |
|-------------|----------------------------|
| Sales Start | 15.02.2017                 |
| Predecessor | 169829 / FR-AF740-01160-EC |

**Additional Product Information**

|                            |                  |
|----------------------------|------------------|
| Binding Tariff Information | DEBTI-51859/20-1 |
| BTI validity date          | 17.10.2024       |
| Battery included           | NO               |

**Export Data**

|                                          |            |
|------------------------------------------|------------|
| Legal Control (Dual Use List)            | Not Listed |
| Country of Origin                        | China (CN) |
| Preference Status (Supplier Declaration) | Non EU     |

**Environmental**

|                            |           |
|----------------------------|-----------|
| REACH Limit Exceeded       | NO        |
| 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-AF840-01160-60&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=bltdae25c2bd5f2ff94&amp;q=FR-AF840-01160-60&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-AF840-01160-60&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blt8050dd1408c11cc2&amp;q=FR-AF840-01160-60&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-AF840-01160-60&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blt26ecc97a31a841c1&amp;q=FR-AF840-01160-60&amp;doc-lang=en</a> |

**Product Packaging**

|                   |        |
|-------------------|--------|
| Cardboard (g)     | 4908,8 |
| Other paper (g)   | 0      |
| Aluminum (g)      | 0      |
| Steel (g)         | 0      |
| Styrofoam (g)     | 0      |
| Other plastic (g) | 155    |
| Wood (g)          | 0      |
| Glass (g)         | 0      |
| Others (g)        | 0      |

**Spare parts**

| Material               | Description                              | Quantity | Unit |
|------------------------|------------------------------------------|----------|------|
| <a href="#">282906</a> | FR-A840-00930-01800-2-60 PCB AUX         | 1        | PC   |
| <a href="#">282932</a> | FR-A840/842/846-ALL TERMINAL BLOCK A80TA | 1        | PC   |
| 282941                 | FR-A840-77A-116A BALANCE RESISTOR        | 6        | PC   |
| <a href="#">283435</a> | FR-A840-00930-01800-2-60 DM              | 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="#">283450</a> | FR-A840-00470-01800-2-60 FAN             | 3        | PC   |
| <a href="#">283450</a> | FR-A840-00470-01800-2-60 FAN             | 3        | PC   |
| <a href="#">283462</a> | FR-A840-00930-01800-2-60 INRUSH RES.     | 1        | PC   |
| <a href="#">283470</a> | FR-A840-01160-2-60 DCCT                  | 1        | PC   |
| <a href="#">283484</a> | FR-A840-00770-2-60 OR BIGGER CBL MA-CPU  | 1        | PC   |

| Material               | Description                             | Quantity | Unit |
|------------------------|-----------------------------------------|----------|------|
| <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="#">690519</a> | FR-A840-00930-E2-60 COVER LOWER FR.     | 1        | PC   |
| <a href="#">676513</a> | FR-A840-00930-01800 BREAKING IGBT       | 1        | PC   |

#### Compatible products

| Material               | Description / Price List Text / Classification                                                                              |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <a href="#">307200</a> | FR-CA80-01-2-60<br>Control Card for FR-A840-00770 -01800<br>Class 100100402: FA-Inverter: Internal Option                   |
| <a href="#">307202</a> | FR-CA80-01-E2-60<br>Control Card for FR-A840-00770 -01800 Ethernet Version<br>Class 100100402: FA-Inverter: Internal Option |
| <a href="#">307204</a> | FR-CF80-01-2-60<br>Control Card for FR-F840-00770 -12120<br>Class 100100402: FA-Inverter: Internal Option                   |
| <a href="#">307205</a> | FR-CF80-01-E2-60<br>Control Card for FR-F840-00770 -12120 Ethernet Version<br>Class 100100402: FA-Inverter: Internal Option |