



## MATERIAL FACT SHEET

### 217399 FR-D720-0.1K

#### General Data

|                     |                                     |
|---------------------|-------------------------------------|
| Product Hierarchy   | IAK23701                            |
|                     | INVERTER                            |
|                     | FR-D720                             |
| Ext. Material Group | 10 STANDARD ITEM                    |
| ABC Indicator       | B (Limited Availability from Stock) |

e-shop: [https://mitsubishi-electric-eshop.mee.com/mee/FA\\_IA/EUR/en/p/000000000000217399](https://mitsubishi-electric-eshop.mee.com/mee/FA_IA/EUR/en/p/000000000000217399)

#### FA-Inverter: Inverter

|                               |                              |
|-------------------------------|------------------------------|
| Series                        | FR-D700 SERIES               |
| Type                          | FR-D700 COMPACT INVERTER     |
| Minimum Rated Voltage (V)     | 200                          |
| Min. Permissible Voltage (V)  | 170                          |
| Maximum Rated Voltage (V)     | 240                          |
| Max. Permissible Voltage (V)  | 264                          |
| Current Type                  | AC                           |
| Phases                        | 3                            |
| Rated Output Current ND (A)   | 0,8                          |
| Rated Motor Capacity ND (kW)  | 0,1                          |
| Frequency Range (Hz)          | -                            |
| Control Method                | MAGNETIC FLUX VECTOR CONTROL |
| Control Method (2)            | SOFT-PWM/HIGH FREQUENCY PWM  |
| Control Method (3)            | V/F CONTROL                  |
| Motor Type                    | INDUCTION MOTOR              |
| Brake Chopper ED (%)          | 30                           |
| 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                  | NO                           |
| Integrated Digital Inputs     | 5                            |
| Digital Outputs (Transistor)  | 1                            |
| Digital Outputs (Relay)       | 1                            |
| Integrated Analogue Inputs    | 2                            |
| Integrated Analogue Outputs   | 1                            |
| IO Type of Terminal Block     | SPRING CLAMP                 |
| Expandable                    | NO                           |
| RS-485                        | 1                            |
| USB                           | NO                           |
| Ethernet Port                 | NO                           |
| Built-In Network              | MODBUS-RTU                   |
| Leakage Current (mA)          | 1                            |
| Power Loss ND (W)             | 14                           |
| Standby Power Consumption (W) | 5,5-10,5                     |
| Protection Class              | IP20                         |

#### Product Dimensions & Weight

|             |      |
|-------------|------|
| Width (mm)  | 68   |
| Height (mm) | 128  |
| Depth (mm)  | 80,5 |
| Weight (kg) | 0,5  |

#### Logistic Dimensions & Gross Weight

|             |      |
|-------------|------|
| Length (cm) | 22,5 |
|-------------|------|

|                   |       |
|-------------------|-------|
| Width (cm)        | 18,0  |
| Height (cm)       | 10,0  |
| Gross Weight (kg) | 0,800 |
| Volume (cdm)      | 4,050 |

Stock Data

|                              |     |
|------------------------------|-----|
| Planned Delivery Time (Days) | 128 |
|------------------------------|-----|

Life Cycle

|             |                |
|-------------|----------------|
| Sales Start | 22.10.2008     |
| Predecessor | No Predecessor |

Additional Product Information

|                          |                              |
|--------------------------|------------------------------|
| Difference to Standard 1 | WITHOUT SAFETY STOP FUNCTION |
| 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="#">12060-00-3</a> |
| REACH Substance CAS Number (2) | <a href="#">127-19-5</a>   |
| REACH Substance CAS Number (3) | <a href="#">13560-89-9</a> |
| REACH Substance CAS Number (4) | <a href="#">15571-58-1</a> |
| REACH Substance CAS Number (5) | <a href="#">541-02-6</a>   |
| REACH Substance CAS Number (6) | <a href="#">556-67-2</a>   |
| REACH Substance CAS Number (7) | <a href="#">7439-92-1</a>  |
| 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-D720-0.1K&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=bltdae25c2bd5f2ff94&amp;q=FR-D720-0.1K&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-D720-0.1K&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blt8050dd1408c11cc2&amp;q=FR-D720-0.1K&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-D720-0.1K&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blt26ecc97a31a841c1&amp;q=FR-D720-0.1K&amp;doc-lang=en</a> |

Product Packaging

|                   |     |
|-------------------|-----|
| Cardboard (g)     | 200 |
| 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 |
|----------|--------------------------------|----------|------|
| 221882   | FR-D720S front cover 0,2-0,75K | 1        | PC   |

Compatible products

| Material              | Description / Price List Text / Classification                                                                |
|-----------------------|---------------------------------------------------------------------------------------------------------------|
| <a href="#">70727</a> | FR-A5 CBL 1<br>Cable for connecting Inverter and Programming panel; 1m<br>Class 100100405: FA-Inverter: Cable |

| Material               | Description / Price List Text / Classification                                                                                                                     |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">70728</a>  | FR-A5 CBL 2,5<br>Cable for connecting Inverter and Programming panel; 2,5m<br>Class 100100405: FA-Inverter: Cable                                                  |
| <a href="#">70729</a>  | FR-A5 CBL 5<br>Cable for connecting Inverter and Programming panel; 5m<br>Class 100100405: FA-Inverter: Cable                                                      |
| <a href="#">88426</a>  | SC-FR-PC CONNECTION CABLE PC>INVERTER<br>Programming Cable RS 232>RS485/422; 5m<br>Class 100100405: FA-Inverter: Cable                                             |
| <a href="#">130832</a> | FR-UDA02<br>DIN-Rail Adaptor for FR-D720S-1,5k; FR-D740-0,4k-3,7k<br>Class 100100403: FA-Inverter: External Option                                                 |
| <a href="#">157514</a> | FR-DU07<br>Parameter Unit for inverter type FR-A700-NA<br>Class 100100403: FA-Inverter: External Option                                                            |
| <a href="#">157515</a> | FR-ADP<br>Adaptor Module for Operator Panel FR-DU07<br>Class 100100403: FA-Inverter: External Option                                                               |
| <a href="#">166134</a> | FR-PU07<br>Programming panel with LCD-Display for all units of FR-700 series<br>Class 100100403: FA-Inverter: External Option                                      |
| <a href="#">209052</a> | FR-PU07BB-L<br>Programming Panel with Copy Function; batterypowered; all FR-700 units; w/o bat.<br>Class 100100403: FA-Inverter: External Option                   |
| <a href="#">209735</a> | FFR-SI-4.5A-SS1<br>Sinusfilter for 200/230/400V Inverters;max. 4,5A;FT=4-16kHz;(W*H*D) 125*180*75mm<br>Class 100100404: FA-Inverter: Filter                        |
| <a href="#">209755</a> | FFR-DT-10A-SS1<br>du/dt Filter for 400V Inverters; max. 10A; FT=2-16kHz; (W*H*D) 100*120*65mm<br>Class 100100404: FA-Inverter: Filter                              |
| <a href="#">214795</a> | FR-PA07<br>Simple Parameter Unit for mounting on enclosure surface; for all FR-E700<br>Class 100100403: FA-Inverter: External Option                               |
| <a href="#">238357</a> | FFR-HEL-0.4K-E<br>DC Link choke for 200V Inverter; 0,4kW; 17mH; 2,1A<br>Class 100100406: FA-Inverter: Choke                                                        |
| <a href="#">254682</a> | NF32-SV 3P 5A<br>Circuit breaker 3pole. In = 5A; Icu = Ics = 2,5kA at AC 440V<br>Class 100100901: FA-MCCB: Moulded-Case Circuit Breaker                            |
| <a href="#">254741</a> | NF63-SV 3P 5A<br>Circuit breaker 3pole. In = 5A; Icu = Ics = 7,5kA at AC 440V<br>Class 100100901: FA-MCCB: Moulded-Case Circuit Breaker                            |
| <a href="#">275503</a> | FR Configurator-M+FR-Configurator2<br>FR-Configurator for 700 series; multi I + FR-Configurator2 for 800 series<br>Class 100101203: FA-Software: Software Inverter |
| <a href="#">279140</a> | S-T10 AC24V 1A<br>Magnetic contactor. 4kW; 1NO; Us = AC 24V, 50Hz<br>Class 100101001: FA-MC: Magnetic Contactor                                                    |
| <a href="#">279141</a> | S-T10 AC48V 1A<br>Magnetic contactor. 4kW; 1NO; Us = AC 48V, 50Hz<br>Class 100101001: FA-MC: Magnetic Contactor                                                    |
| <a href="#">279143</a> | S-T10 AC200V 1A<br>Magnetic contactor. 4kW; 1NO; Us = AC 200V, 50Hz<br>Class 100101001: FA-MC: Magnetic Contactor                                                  |
| <a href="#">279195</a> | S-T10 AC400V 1A<br>Magnetic contactor. 4kW; 1NO; Us = AC 400V, 50Hz<br>Class 100101001: FA-MC: Magnetic Contactor                                                  |
| <a href="#">279197</a> | S-T10 AC24V 1B<br>Magnetic contactor. 4kW; 1NC; Us = AC 24V, 50Hz<br>Class 100101001: FA-MC: Magnetic Contactor                                                    |
| <a href="#">279199</a> | S-T10 AC100V 1B<br>Magnetic contactor. 4kW; 1NC; Us = AC 100V, 50Hz<br>Class 100101001: FA-MC: Magnetic Contactor                                                  |
| <a href="#">279200</a> | S-T10 AC200V 1B<br>Magnetic contactor. 4kW; 1NC; Us = AC 200V, 50Hz<br>Class 100101001: FA-MC: Magnetic Contactor                                                  |