



## MATERIAL FACT SHEET

### 325719 FR-CS82S-100-60

#### General Data

|                     |                          |
|---------------------|--------------------------|
| Product Hierarchy   | IAK24601                 |
|                     | INVERTER                 |
|                     | FR-CS82                  |
| 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/000000000000325719](https://mitsubishi-electric-eshop.mee.com/mee/FA_I/A/EUR/en/p/000000000000325719)

#### FA-Inverter: Inverter

|                               |                               |
|-------------------------------|-------------------------------|
| Series                        | FR-CS80 SERIES                |
| Type                          | FR-CS82 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                        | 1                             |
| Rated Output Current ND (A)   | 10                            |
| Rated Motor Capacity ND (kW)  | 2,2                           |
| Frequency Range (Hz)          | 0,2–400                       |
| Control Method                | ADVANCED MAGN. FLUX VEC. CTRL |
| Motor Type                    | INDUCTION MOTOR               |
| Integrated EMC Filter         | NO                            |
| Safe Torque Off (STO)         | NO                            |
| Regenerative (4Q)             | NO                            |
| Integrated DC Choke           | NO                            |
| Display                       | FR-LU08                       |
| Display Type                  | 4 DIGITS LED                  |
| PLC Function                  | NO                            |
| Integrated Digital Inputs     | 5                             |
| Digital Outputs (Transistor)  | 1                             |
| Digital Outputs (Relay)       | 0                             |
| Integrated Analogue Inputs    | 2                             |
| Integrated Analogue Outputs   | 0                             |
| IO Type of Terminal Block     | SPRING CLAMP                  |
| Expandable                    | YES                           |
| RS-485                        | 1                             |
| USB                           | NO                            |
| Ethernet Port                 | NO                            |
| Built-In Network              | MODBUS-RTU                    |
| Leakage Current (mA)          | 1                             |
| Power Loss ND (W)             | 95                            |
| Standby Power Consumption (W) | -                             |
| Protection Class              | IP20                          |

#### Product Dimensions & Weight

|             |     |
|-------------|-----|
| Width (mm)  | 108 |
| Height (mm) | 128 |
| Depth (mm)  | 160 |
| Weight (kg) | 1,4 |

#### Logistic Dimensions & Gross Weight

|                   |       |
|-------------------|-------|
| Length (cm)       | 23,5  |
| Width (cm)        | 14,0  |
| Height (cm)       | 19,5  |
| Gross Weight (kg) | 1,670 |

|              |       |
|--------------|-------|
| Volume (cdm) | 6,416 |
|--------------|-------|

## Stock Data

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

## Life Cycle

|             |                |
|-------------|----------------|
| Sales Start | 01.04.2018     |
| Predecessor | No Predecessor |

## 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

|                            |           |
|----------------------------|-----------|
| 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-CS82S-100-60&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=bltdae25c2bd5f2ff94&amp;q=FR-CS82S-100-60&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-CS82S-100-60&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blt8050dd1408c11cc2&amp;q=FR-CS82S-100-60&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-CS82S-100-60&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blt26ecc97a31a841c1&amp;q=FR-CS82S-100-60&amp;doc-lang=en</a> |

## Product Packaging

|                   |       |
|-------------------|-------|
| Cardboard (g)     | 388,6 |
| Other paper (g)   | 0     |
| Aluminum (g)      | 0     |
| Steel (g)         | 0     |
| Styrofoam (g)     | 0     |
| Other plastic (g) | 2,2   |
| Wood (g)          | 0     |
| Glass (g)         | 0     |
| Others (g)        | 0     |

## Compatible products

| Material              | Description / Price List Text / Classification                                                                         |
|-----------------------|------------------------------------------------------------------------------------------------------------------------|
| <a href="#">14253</a> | FR-BLF<br>Large ferrite<br>Class 100100404: FA-Inverter: Filter                                                        |
| <a href="#">50461</a> | FR-BSF01<br>Small ferrite<br>Class 100100402: FA-Inverter: Internal Option                                             |
| <a href="#">70727</a> | FR-A5 CBL 1<br>Cable for connecting Inverter and Programming panel; 1m<br>Class 100100405: FA-Inverter: Cable          |
| <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 |

| Material               | Description / Price List Text / Classification                                                                                                                     |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <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="#">130833</a> | FR-UDA01<br>DIN-Rail Adaptor for FR-D720S-0,2k-0,75k<br>Class 100100403: FA-Inverter: External Option                                                              |
| <a href="#">136031</a> | FR-BIF<br>Radio noise filter for the 200V class inverter<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="#">167612</a> | FR-RJ45-HUB10<br>Distribution Module for RJ45; 10 way<br>Class 100100403: FA-Inverter: External Option                                                             |
| <a href="#">167613</a> | FR-RJ45-HUB4<br>Distribution Module for RJ45; 4 way<br>Class 100100403: FA-Inverter: External Option                                                               |
| <a href="#">167614</a> | FR-RJ45-TR<br>Terminal Resistor Plug RJ45<br>Class 100100403: FA-Inverter: External Option                                                                         |
| <a href="#">202421</a> | FR-BU2-3.7K<br>Brake Unit 200V; no CE Mark<br>Class 100100407: FA-Inverter: Brake Option                                                                           |
| <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="#">254689</a> | NF32-SV 3P 30A<br>Circuit breaker 3pole. In = 30A; Icu = Ics = 2,5kA at AC 440V<br>Class 100100901: FA-MCCB: Moulded-Case Circuit Breaker                          |
| <a href="#">254749</a> | NF63-SV 3P 40A<br>Circuit breaker 3pole. In = 40A; Icu = Ics = 7,5kA at AC 440V<br>Class 100100901: FA-MCCB: Moulded-Case Circuit Breaker                          |
| <a href="#">254785</a> | NF63-HV 3P 40A<br>Circuit breaker 3pole. In = 40A; Icu / Ics = 10 / 8kA at AC 440V<br>Class 100100901: FA-MCCB: Moulded-Case Circuit Breaker                       |
| <a href="#">274525</a> | FR-LU08<br>Clear text LCD Parameter unit for all units of 800 Series<br>Class 100100403: FA-Inverter: External Option                                              |
| <a href="#">275503</a> | FR Configurator-M+FR-Configurator2<br>FR-Configurator for 700 series; multi l + 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="#">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="#">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="#">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="#">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                                                    |

| Material               | Description / Price List Text / Classification                                                                                               |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| <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="#">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                            |
| <a href="#">279200</a> | S-T10 AC200V 1B<br>Magnetic contactor. 4kW; 1NC; Us = AC 200V, 50Hz<br>Class 100101001: FA-MC: Magnetic Contactor                            |
| <a href="#">288436</a> | MMP-T32LF 10A<br>Motor prot. switch. 4,0kW; Ir=6,0 ~ 10,0A; Icu AC 400V=15kA<br>Class 100101101: FA-MMS: Manual Motor Starter                |
| <a href="#">334867</a> | FFR-C-CS-100-26A-SF1<br>Radio Noise Filter for FR-CS82S-100-60; C1: 20m, C2: 35m<br>Class 100100404: FA-Inverter: Filter                     |
| <a href="#">334874</a> | FFR-C-CS-100-26A-SF1-LL<br>Radio Noise Filter for FR-CS82S-100-60; C1: 10m<br>Class 100100404: FA-Inverter: Filter                           |
| <a href="#">475731</a> | NF32-SVF 3P 30A<br>Circuit breaker F 3pole. In = 30A; Icu = Ics = 2,5kA at AC 440V<br>Class 100100901: FA-MCCB: Moulded-Case Circuit Breaker |