



## MATERIAL FACT SHEET

### 280497 FX5U-80MT/ESS

#### General Data

|                     |                          |
|---------------------|--------------------------|
| Product Hierarchy   | IAD21701                 |
|                     | Compact PLC              |
|                     | FX5U CPU                 |
| 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/000000000000280497](https://mitsubishi-electric-eshop.mee.com/mee/FA_IA/EUR/en/p/000000000000280497)

#### FA-COM PLC: Main Unit

|                               |                    |
|-------------------------------|--------------------|
| Series                        | MELSEC IQ-F SERIES |
| Type                          | FX5U               |
| Power Supply (V)              | 100-240            |
| Current Type                  | AC                 |
| Program Memory                | 64K STEPS          |
| Program Memory Unit           | FLASH              |
| Integrated Digital Inputs     | 40                 |
| Integrated Digital Outputs    | 40                 |
| Integrated Analogue Inputs    | 2                  |
| Output Type                   | TRANSISTOR         |
| Output Logic                  | SOURCE             |
| Local I/O Points              | 256                |
| Local + Remote I/O Points     | 512                |
| Expandable                    | YES                |
| Cycle Time LD (ns)            | 34                 |
| Cycle Time MOV (ns)           | 34                 |
| Ethernet Port                 | 1                  |
| RS-485                        | 1                  |
| Power Consumption (W)         | 45                 |
| Buffer Battery                | OPTION             |
| Protection Class              | IP10               |
| Min. Ambient Temperature (°C) | 0                  |
| Max. Ambient Temperature (°C) | 55                 |

#### Product Dimensions & Weight

|             |     |
|-------------|-----|
| Width (mm)  | 285 |
| Height (mm) | 90  |
| Depth (mm)  | 83  |
| Weight (kg) | 1,2 |

#### Logistic Dimensions & Gross Weight

|                   |       |
|-------------------|-------|
| Length (cm)       | 35,0  |
| Width (cm)        | 12,0  |
| Height (cm)       | 11,0  |
| Gross Weight (kg) | 1,350 |
| Volume (cdm)      | 4,620 |

#### Stock Data

|                              |    |
|------------------------------|----|
| Planned Delivery Time (Days) | 58 |
|------------------------------|----|

#### Life Cycle

|             |                |
|-------------|----------------|
| Sales Start | 14.01.2015     |
| Predecessor | No Predecessor |

#### Additional Product Information

|                            |                  |
|----------------------------|------------------|
| Binding Tariff Information | DEBTI-10856/21-1 |
| BTI validity date          | 10.10.2024       |

|                  |    |
|------------------|----|
| 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       | NO        |
| Dangerous Goods Class      | NO        |
| Dangerous Goods Identifier | NO        |
| RoHS Compliance            | COMPLIANT |
| WEEE                       | B2B       |

## Conformity

|                    |                             |
|--------------------|-----------------------------|
| CE                 | COMPLIANT                   |
| UL/cUL             | COMPLIANT                   |
| EAC                | COMPLIANT                   |
| Shipping Approvals | ABS,BV,DNV GL,KR,LR,NK,RINA |
| 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=FX5U-80MT/ESS&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=bltdae25c2bd5f2ff94&amp;q=FX5U-80MT/ESS&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=FX5U-80MT/ESS&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blt8050dd1408c11cc2&amp;q=FX5U-80MT/ESS&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=FX5U-80MT/ESS&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blt26ecc97a31a841c1&amp;q=FX5U-80MT/ESS&amp;doc-lang=en</a> |

## Product Packaging

|                   |     |
|-------------------|-----|
| Cardboard (g)     | 242 |
| Other paper (g)   | 0   |
| Aluminum (g)      | 0   |
| Steel (g)         | 0   |
| Styrofoam (g)     | 0   |
| Other plastic (g) | 1   |
| Wood (g)          | 0   |
| Glass (g)         | 0   |
| Others (g)        | 0   |

## Spare parts

| Material               | Description                             | Quantity | Unit |
|------------------------|-----------------------------------------|----------|------|
| <a href="#">302366</a> | FX5U-64/80Mx /ES/ESS PCB POWER          | 1        | PC   |
| <a href="#">302375</a> | FX5U-80MT /ESS PCB I/O                  | 1        | PC   |
| <a href="#">302376</a> | FX5U-32/64/80Mx /ES/ESS PCB I/F         | 1        | PC   |
| <a href="#">302377</a> | FX5U-32/80Ex/Mx /ES/ESS TERMINAL BLOCK  | 1        | PC   |
| <a href="#">302378</a> | FX5U-80Mx /ES/ESS TERMINAL BLOCK        | 1        | PC   |
| <a href="#">302381</a> | FX5U-64/80Mx /ES/ESS FUSE               | 1        | PC   |
| <a href="#">302390</a> | FX5U-80MT /ESS COVER MAIN               | 1        | PC   |
| <a href="#">302393</a> | FX5U-80Mx /ES/ESS COVER BOTTOM          | 1        | PC   |
| <a href="#">302394</a> | FX5U-32/64/80Ex/Mx /ES/ESS COVER EXT    | 1        | PC   |
| <a href="#">302395</a> | FX5U-32/64/80Mx /ES/ESS COVER TOP       | 1        | PC   |
| <a href="#">302396</a> | FX5U-32/64/80Mx /ES/ESS COVER I/F       | 1        | PC   |
| <a href="#">302399</a> | FX5U-80Mx /ES/ESS COVER TERMINAL        | 1        | PC   |
| <a href="#">302400</a> | FX5U-32/64/80Mx /ES/ESS COVER CONNECTOR | 1        | PC   |
| <a href="#">165286</a> | FX3U-32BL                               | 1        | PC   |

## Compatible products

| Material               | Description / Price List Text / Classification                                                             |
|------------------------|------------------------------------------------------------------------------------------------------------|
| <a href="#">165286</a> | FX3U-32BL<br>PLC, FX3U/C Battery<br>Class 100100112: FA-COM PLC: Spare Part                                |
| <a href="#">165286</a> | FX3U-32BL<br>PLC, FX3U/C Battery<br>Class 100101303: FA-OTHERS: Battery                                    |
| <a href="#">169507</a> | FX3U-1PSU-5V<br>PLC, FX Series Power supply module for 5V bus<br>Class 100100111: FA-COM PLC: Other Option |

| Material               | Description / Price List Text / Classification                                                                                               |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">278166</a> | SC-E5EW-S45M<br>Ethernet cable; CC-Link IE; category 5e; dbl. shielded/STP; straight; indoor;45m<br>Class 100100214: FA-MOD PLC: Cable       |
| <a href="#">280509</a> | FX5-1PSU-5V<br>FX5;Power Supply Unit 5VDC Bus<br>Class 100100111: FA-COM PLC: Other Option                                                   |
| <a href="#">280510</a> | FX5-CNV-BUS<br>FX5;FX3 Bus Conversion Unit<br>Class 100100111: FA-COM PLC: Other Option                                                      |
| <a href="#">280511</a> | FX5-232-BD<br>FX5;Serial Communication Board;RS-232<br>Class 100100107: FA-COM PLC: Serial Com Module                                        |
| <a href="#">280512</a> | FX5-485-BD<br>FX5;Serial Communication Board;RS-485<br>Class 100100107: FA-COM PLC: Serial Com Module                                        |
| <a href="#">280515</a> | FX5-422-BD-GOT<br>FX5;Serial Communication Board;RS-422;Communication to GOT only<br>Class 100100107: FA-COM PLC: Serial Com Module          |
| <a href="#">283557</a> | FX5-CNV-IFC<br>FX5UC;FX5U Bus Converter<br>Class 100100111: FA-COM PLC: Other Option                                                         |
| <a href="#">283558</a> | FX5-CNV-BUSC<br>FX5UC;FX3 Bus Conversion Unit<br>Class 100100111: FA-COM PLC: Other Option                                                   |
| <a href="#">284378</a> | GX Works3 V01-2L0C-E<br>PLC Programming-S/W for Melsec iQ-R/iQ- F; engl;USB;2 PC´s<br>Class 100101201: FA-Software: Software PLC             |
| <a href="#">284379</a> | GX Works3 V01-5L0C-E<br>PLC Programming-S/W for Melsec iQ-R/iQ- F; engl; USB; 5 PC´s<br>Class 100101201: FA-Software: Software PLC           |
| <a href="#">284966</a> | NZ1MEM-2GBSD<br>SD Memory Card; 2 GByte<br>Class 100100215: FA-MOD PLC: Other Option                                                         |
| <a href="#">284967</a> | NZ1MEM-4GBSD<br>SD Memory Card; 4 GByte<br>Class 100100215: FA-MOD PLC: Other Option                                                         |
| <a href="#">284968</a> | NZ1MEM-8GBSD<br>SD Memory Card; 8 GByte<br>Class 100100215: FA-MOD PLC: Other Option                                                         |
| <a href="#">284969</a> | NZ1MEM-16GBSD<br>SD Memory Card; 16 GByte<br>Class 100100215: FA-MOD PLC: Other Option                                                       |
| <a href="#">286227</a> | iQ Works V02-2L0C-E<br>iQ Works V2.0;incl Navigator,GX Works,GT Works,MT Works;engl;USB;2 PC´s<br>Class 100101201: FA-Software: Software PLC |
| <a href="#">286228</a> | iQ Works V02-5L0C-E<br>iQ Works V2.0;incl Navigator,GX Works,GT Works,MT Works;engl;USB;5 PC´s<br>Class 100101201: FA-Software: Software PLC |
| 291807                 | SC-E5EW-S1M-MV<br>Ethernet cable; CC-Link IE; category 5e; dbl. shielded/STP; straight; indoor; 1m<br>Class 100100214: FA-MOD PLC: Cable     |
| 291808                 | SC-E5EW-S3M-MV<br>Ethernet cable; CC-Link IE; category 5e; dbl. shielded/STP; straight; indoor; 3m<br>Class 100100214: FA-MOD PLC: Cable     |
| <a href="#">294586</a> | FX5-C1PS-5V<br>FX5UC;Power Supply Unit 5VDC Bus<br>Class 100100111: FA-COM PLC: Other Option                                                 |
| <a href="#">295425</a> | SC-E5EW-S05M<br>Ethernet cable; CC-Link IE; category 5e; dbl. shielded/STP; straight;indoor;0.5m<br>Class 100100214: FA-MOD PLC: Cable       |
| <a href="#">295426</a> | SC-E5EW-S1M<br>Ethernet cable; CC-Link IE; category 5e; dbl. shielded/STP; straight; indoor; 1m<br>Class 100100214: FA-MOD PLC: Cable        |
| <a href="#">295427</a> | SC-E5EW-S3M<br>Ethernet cable; CC-Link IE; category 5e; dbl. shielded/STP; straight; indoor; 2m<br>Class 100100214: FA-MOD PLC: Cable        |
| <a href="#">297455</a> | FX5-CNV-IF<br>FX5;FX5UC Bus converter<br>Class 100100111: FA-COM PLC: Other Option                                                           |

| Material               | Description / Price List Text / Classification                                                                                                            |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">297456</a> | FX5-CNV-BC<br>FX5;Bus Extension cable connector<br>Class 100100111: FA-COM PLC: Other Option                                                              |
| <a href="#">297457</a> | FX5-30EC<br>FX5;Bus Extension cable (0,3m)<br>Class 100100110: FA-COM PLC: Cable                                                                          |
| <a href="#">297458</a> | FX5-65EC<br>FX5;Bus Extension cable (0,65m)<br>Class 100100110: FA-COM PLC: Cable                                                                         |
| <a href="#">303426</a> | iQ Works V02-15L0C-E<br>iQ Works V2.0;incl Navigator,GX Works,GT Works,MT Works;engl;USB;15 PC´s<br>Class 100101201: FA-Software: Software PLC            |
| <a href="#">304614</a> | GX Works3 V01-2L0C-G<br>PLC Programming SW; Melsec iQ-R/iQ- F only (no GXW2/GX Dev); USB; 2 PCs; German<br>Class 100101201: FA-Software: Software PLC     |
| <a href="#">304645</a> | GX Works3 V01-5L0C-G<br>PLC Programming SW; Melsec iQ-R/iQ- F only (no GXW2/GX Dev); USB; 5 PCs; German<br>Class 100101201: FA-Software: Software PLC     |
| <a href="#">308856</a> | GX Works3 V01-2L0C-IT<br>PLC Programming-S/W for Melsec iQ-R/iQ- F;engl;USB;2 PC´s; Italian<br>Class 100101201: FA-Software: Software PLC                 |
| <a href="#">338821</a> | iQ Works V02-2L0C-G<br>iQ Works V2.0;incl Navigator,GX Works,GT Works,MT Works;German;USB;2 PC´s<br>Class 100101201: FA-Software: Software PLC            |
| <a href="#">339022</a> | iQ Works V02-5L0C-G<br>iQ Works V2.0;incl Navigator,GX Works,GT Works,MT Works;German;USB;5 PC´s<br>Class 100101201: FA-Software: Software PLC            |
| <a href="#">340984</a> | Transcend SDHC card 16GB Class 10<br>SDHC memory card 16GB; Class 10; R: 30MB/s; W: 15MB/s<br>Class 100100304: FA-HMI: Other Option                       |
| <a href="#">401853</a> | iQ Works V02-2L0C-IT<br>iQ Works V2.0;incl Navigator,GX Works,GT Works,MT Works;Italian;USB;2 PCs<br>Class 100101201: FA-Software: Software PLC           |
| <a href="#">413182</a> | SC-E5EW-S10M<br>Ethernet cable; CC-Link IE; category 5e; dbl. shielded/STP; straight; indoor;10m<br>Class 100100214: FA-MOD PLC: Cable                    |
| <a href="#">413183</a> | SC-E5EW-S25M<br>Ethernet cable; CC-Link IE; category 5e; dbl. shielded/STP; straight; indoor;25m<br>Class 100100214: FA-MOD PLC: Cable                    |
| <a href="#">413184</a> | SC-E5EW-S5M<br>Ethernet cable; CC-Link IE; category 5e; dbl. shielded/STP; straight; indoor; 5m<br>Class 100100214: FA-MOD PLC: Cable                     |
| <a href="#">486376</a> | SC-E5EW-S2M<br>Ethernet cable; CC-Link IE; category 5e; dbl. shielded/STP; straight; indoor; 2m<br>Class 100100214: FA-MOD PLC: Cable                     |
| <a href="#">486377</a> | SC-E5EW-S4M<br>Ethernet cable; CC-Link IE; category 5e; dbl. shielded/STP; straight; indoor; 4m<br>Class 100100214: FA-MOD PLC: Cable                     |
| <a href="#">487403</a> | SC-E5EW-S15M<br>Ethernet cable; CC-Link IE; category 5e; dbl. shielded/STP; straight; indoor;15m<br>Class 100100214: FA-MOD PLC: Cable                    |
| <a href="#">487404</a> | SC-E5EW-S20M<br>Ethernet cable; CC-Link IE; category 5e; dbl. shielded/STP; straight; indoor;20m<br>Class 100100214: FA-MOD PLC: Cable                    |
| <a href="#">491761</a> | Verbatim microSDHC Card 16GB Class 10<br>MicroSDHC memory card 16GB; Class 10; R/W: 10MB/s; adapter included<br>Class 100100215: FA-MOD PLC: Other Option |
| <a href="#">557483</a> | SC-E5EW-S100M<br>Ethernet cable; CC-Link IE; category 5e; dbl. shielded/STP; straight;indoor;100m<br>Class 100100214: FA-MOD PLC: Cable                   |
| 612154                 | FX5-CNV-BUS-BS<br>FX5;FX3 Bus Conversion Unit; coated<br>Class 100100111: FA-COM PLC: Other Option                                                        |
| 612156                 | FX5-CNV-IFC-BS<br>FX5UC;FX5U Bus Converter; coated<br>Class 100100111: FA-COM PLC: Other Option                                                           |
| <a href="#">612268</a> | Transcend SDHC Card 8GB Class 4<br>SDHC memory card 8GB; Class 4; R: 18MB/s; W: 6MB/s<br>Class 100100304: FA-HMI: Other Option                            |