

**Data sheet**  
**IM 053EC (053-1EC00)**
**Technical data**

|                                                |                                                    |
|------------------------------------------------|----------------------------------------------------|
| <b>Order no.</b>                               | <b>053-1EC00</b>                                   |
| Type                                           | IM 053EC                                           |
| Module ID                                      | -                                                  |
| <b>General information</b>                     |                                                    |
| Note                                           | -                                                  |
| Features                                       | RJ45 jack 100BaseTX<br>Up to 64 peripheral modules |
| <b>Technical data power supply</b>             |                                                    |
| Power supply (rated value)                     | DC 24 V                                            |
| Power supply (permitted range)                 | DC 20.4...28.8 V                                   |
| Reverse polarity protection                    | yes                                                |
| Current consumption (no-load operation)        | 95 mA                                              |
| Current consumption (rated value)              | 0.95 A                                             |
| Inrush current                                 | 3.9 A                                              |
| $I_{\Delta t}$                                 | 0.14 A <sup>2</sup> s                              |
| Max. current drain at backplane bus            | 3 A                                                |
| Max. current drain load supply                 | 10 A                                               |
| Power loss                                     | 3 W                                                |
| <b>Status information, alarms, diagnostics</b> |                                                    |
| Status display                                 | yes                                                |
| Interrupts                                     | yes, parameterizable                               |
| Process alarm                                  | yes, parameterizable                               |
| Diagnostic interrupt                           | yes, parameterizable                               |
| Diagnostic functions                           | yes, parameterizable                               |
| Diagnostics information read-out               | possible                                           |
| Supply voltage display                         | green LED                                          |
| Service Indicator                              | -                                                  |
| Group error display                            | red SF LED                                         |
| Channel error display                          | none                                               |
| <b>Hardware configuration</b>                  |                                                    |
| Racks, max.                                    | 1                                                  |
| Modules per rack, max.                         | 64                                                 |
| Number of digital modules, max.                | 64                                                 |
| Number of analog modules, max.                 | 64                                                 |
| <b>Communication</b>                           |                                                    |
| Fieldbus                                       | EtherCAT                                           |
| Type of interface                              | Ethernet 100 MBit                                  |
| Connector                                      | 2 x RJ45                                           |
| Topology                                       | -                                                  |
| Electrically isolated                          | yes                                                |
| Number of participants, max.                   | 65535                                              |

|                             |            |
|-----------------------------|------------|
| Node addresses              | -          |
| Transmission speed, min.    | 100 Mbit/s |
| Transmission speed, max.    | 100 Mbit/s |
| Address range inputs, max.  | 512 Byte   |
| Address range outputs, max. | 512 Byte   |
| Number of TxPDOs, max.      | -          |
| Number of RxPDOs, max.      | -          |

#### Datasizes

|                  |   |
|------------------|---|
| Input bytes      | 8 |
| Output bytes     | - |
| Parameter bytes  | - |
| Diagnostic bytes | - |

#### Housing

|          |                    |
|----------|--------------------|
| Material | PPE / PPE GF10     |
| Mounting | Profile rail 35 mm |

#### Mechanical data

|                              |                            |
|------------------------------|----------------------------|
| Dimensions (WxHxD)           | 48.5 mm x 109 mm x 76.5 mm |
| Net weight                   | 160 g                      |
| Weight including accessories | 160 g                      |
| Gross weight                 | 175 g                      |

#### Environmental conditions

|                       |                 |
|-----------------------|-----------------|
| Operating temperature | 0 °C to 60 °C   |
| Storage temperature   | -25 °C to 70 °C |

#### Certifications

|                  |     |
|------------------|-----|
| UL certification | yes |
| KC certification | yes |