

Data sheet

IM 053EC - EtherCAT slave (053-1EC01)

Technical data

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| Order no. | 053-1EC01 |
| Type | IM 053EC - EtherCAT slave |
| Module ID | - |
| General information | |
| Note | - |
| Features | 2-Port Switch RJ45 100BaseTX full duplex Up to 64 peripheral modules Supports the application profile: CoE, EoE, FoE Supports FMM (Free Module Mapping) Various diagnostics functions Integrated DC 24V power supply for power and electronic section supply of the periphery modules Operation Modes (FreeRun, SyncManager-Event, Distributed Clock) Supports HotConnect, Easy Maintenance Web server integrated Status LEDs |
| Technical data power supply | |
| 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^2t | 0.14 A ² s |
| Max. current drain at backplane bus | 3 A |
| Max. current drain load supply | 10 A |
| Power loss | 3 W |
| Status information, alarms, diagnostics | |
| 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 | yellow LED |
| Group error display | red SF LED |
| Channel error display | none |
| Hardware configuration | |
| Racks, max. | 1 |
| Modules per rack, max. | 64 |
| Number of digital modules, max. | 64 |
| Number of analog modules, max. | 64 |
| Communication | |
| Fieldbus | EtherCAT |
| Type of interface | Ethernet 100 MBit |

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|----------------------------------|------------|
| Connector | 2 x RJ45 |
| Topology | Line |
| 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. | 1024 Byte |
| Address range outputs, max. | 1024 Byte |
| Number of TxPDOs, max. | - |
| Number of RxPDOs, max. | - |
| Supported profile | - |
| Supported transfer cycle | - |
| Cyclic data size per node | - |
| Max. Number of nodes | - |
| Supported communication method | - |
| Supported command "Cyclic" | - |
| Supported command "Event driven" | - |
| Supported command "Message" | - |

Datasizes

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|------------------|----|
| Input bytes | 20 |
| Output bytes | - |
| Parameter bytes | 3 |
| Diagnostic bytes | - |

Housing

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

Mechanical data

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|------------------------------|----------------------------|
| 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

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

Certifications

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|-------------------------|-----|
| UL certification | yes |
| KC certification | yes |
| UKCA certification | yes |
| ChinaRoHS certification | yes |