

## Data sheet

IM 053DP - PROFIBUS DP slave (053-1DP00)

### Technical data

|  |  |
|--|--|
| <b>Order no.</b>                               | <b>053-1DP00</b>   |
| Type   | IM 053DP - PROFIBUS DP slave   |
| Module ID                                      | -  |
| <b>General information</b>                     |  |
| Note   | -  |
| Features                                       | DP-V0, DP-V1<br>244 byte input and 244 byte output data<br>244 byte parameter data<br>Various diagnostics functions<br>Integrated DC 24V power supply for power and electronic section supply of the periphery modules<br>Status LEDs<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)        | 90 mA  |
| Current consumption (rated value)              | 0.95 A   |
| Inrush current                                 | 3.9 A  |
| $I^2t$   | 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 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                                       | PROFIBUS-DP to EN 50170  |
| Type of interface                              | RS485 isolated   |
| Connector                                      | Sub-D, 9-pin, female   |
| Topology                                       | Linear bus with bus termination at both ends   |

|                                  |            |
|----------------------------------|------------|
| Electrically isolated            | yes        |
| Number of participants, max.     | 125        |
| Node addresses                   | 1 - 125    |
| Transmission speed, min.         | 9.6 kbit/s |
| Transmission speed, max.         | 12 Mbit/s  |
| Address range inputs, max.       | 244 Byte   |
| Address range outputs, max.      | 244 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

|                  |   |
|------------------|---|
| Input bytes      | - |
| 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                 | 177.5 g                    |

## Environmental conditions

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

## Certifications

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