

Data sheet

SM 151 (151-6PL00)

Technical data

| Order no. | 151-6PL00 |
|---|--------------------------------|
| Туре | SM 151 |
| General information | |
| Note | - |
| Features | PROFIBUS-DP slave 32 inputs |
| Technical data power supply | |
| Power supply (rated value) | DC 24 V |
| Power supply (permitted range) | DC 20.428.8 V |
| Reverse polarity protection | ✓ |
| Current consumption (no-load operation) | - |
| Current consumption (rated value) | 55 mA |
| Inrush current | 40 A |
| ²t | 0.15 A ² s |
| Technical data digital inputs | |
| Number of inputs | 32 |
| Cable length, shielded | 1000 m |
| Cable length, unshielded | 600 m |
| Rated load voltage | DC 24 V |
| Reverse polarity protection of rated load voltage | |
| Current consumption from load voltage L+ (without load) | • |
| Rated value | DC 24 V |
| Input voltage for signal "0" | DC 05 V |
| Input voltage for signal "1" | DC 1528.8 V |
| Input voltage hysteresis | - |
| Frequency range | - |
| Input resistance | - |
| Input current for signal "1" | 7 mA |
| Connection of Two-Wire-BEROs possible | ✓ |
| Max. permissible BERO quiescent current | 1.5 mA |
| Input delay of "0" to "1" | 3 ms |
| Input delay of "1" to "0" | 3 ms |
| Number of simultaneously utilizable inputs horizontal configuration | 32 |
| Number of simultaneously utilizable inputs vertical configuration | 32 |
| Input characteristic curve | IEC 61131-2, type 1 |
| Initial data size | 4 Byte |
| Status information, alarms, diagnostics | |
| Status display | green LED per channel |
| Interrupts | no |



| Process alarm | no A YASKAWA COMPANY |
|---|--|
| Diagnostic interrupt | no |
| Diagnostic functions | no |
| Diagnostics information read-out | possible |
| Supply voltage display | yes |
| Group error display | red SF LED |
| Channel error display | none |
| | |
| Isolation | |
| Between channels | * |
| Between channels of groups to | * |
| Between channels and backplane bus | • |
| Between channels and power supply | • |
| Max. potential difference between circuits | * |
| Max. potential difference between inputs (Ucm) | * |
| Max. potential difference between Mana and Mintern (Uiso) | |
| Max. potential difference between inputs and Mana (Ucm) | * |
| Max. potential difference between inputs and Mintern (Uiso) | - |
| Max. potential difference between Mintern and outputs | - |
| Insulation tested with | DC 500 V |
| Hardware configuration | |
| Racks, max. | - |
| Modules per rack, max. | - |
| Number of digital modules, max. | - |
| Number of analog modules, max. | - |
| Communication | |
| Fieldbus | PROFIBUS-DP to EN 50170 |
| Type of interface | RS485 |
| Connector | Sub-D, 9-pin, female |
| Topology | Linear bus with bus termination at both ends |
| Electrically isolated | ✓ |
| Number of participants, max. | 125 |
| Node addresses | 1 - 99 |
| Transmission speed, min. | 9.6 kbit/s |
| Transmission speed, max. | 12 Mbit/s |
| Address range inputs, max. | 4 Byte |
| Address range outputs, max. | 0 Byte |
| Number of TxPDOs, max. | - |
| Number of RxPDOs, max. | - |
| Datasizes | |
| Input bytes | 4 |
| Output bytes | 0 |
| Parameter bytes | 7 + 5 |
| Diagnostic bytes | 0 |
| Housing | |
| Material | PPE / PA 6.6 |
| waterial | 11 E / 1 A 0.0 |



| Mounting | Profile rail 35 mm | A YASKAWA COMPANY | |
|--------------------------|--------------------------|-------------------|--|
| Mechanical data | | | |
| Dimensions (WxHxD) | 152.4 mm x 76 mm x 48 mm | | |
| Weight | 260 g | | |
| Environmental conditions | | | |
| Operating temperature | 0 °C to 60 °C | | |
| Storage temperature | -25 °C to 70 °C | | |
| Certifications | | | |
| UL508 certification | yes | | |