Basic components » Series KSM100 » KSM 100-4-PN

**Product KSM 100-4-PN**

**Measurements (mm):** [70x105x180]

**Description:**
Open programmable safe PLC for machinery and plant construction. The module can be enhanced up to 130 safe I/O's and up to 10 axes.

The 4-PN supplies 25 safe I/O's, 14 safe inputs and 3 safe cut off channels as well as a memory card slot for easy program and configuration changes. option: fieldbus interface can be integrated.

The continuous function chart oriented programming trans SafePLC allows an easy and comfortable implementation of safety related tasks. The firmware of modules offers an extensive library for standard functions for safe signal preprocessing of safety related sensors and actions as well as for practical technology functions especially for safe motion of drives.

The spectrum of the module reaches from conventional safe logic processing through simple safe speed monitoring tasks of single axes up to complex safety-related monitoring tasks in multiple axes processing.

**PROFINET**

The PROFINET communication device uses to exchange our safety data between KSM modular device and non-safe control systems. The configuration of the non-safe data via SafePLC of modular devices. The device must be parameterized as a PROFINET slave device.

- 25 safe I/O's configurable as input or output, 14 safe inputs, 3 safe cut off channels, thereof 1 safe relay output and 10 messaging outputs in the basic module.
- Expandable up to 130 safe I/O's and/or 12 safe axes via a bus interface (connection to an head-end).
- Integrated fieldbus interface (PROFINET).
- 24V control programming with SafePLC Software.
- Comprehensive library with pre-configured safety-related sensors and actions.
- Complete speed- and position-oriented safety functions for safe motion according to EN 61800-5-2.
- Dimensional functions for safe speed- and range / zone monitoring possible.
- Parameter administration for expansion modules in the basic module.
- Cross-circuit monitoring.
- Comprehensive diagnostics integrated in firmware.
- Coded status display using a 7-segment display and LED is mounted on the front side.
- Quick-release button in front side.

**Technical data**

**Safety characteristics**
- In accordance to EN 10849
- SIL 2
- Architecture Class 1
- SIL 3
- SIL 4
- Proof-test-interval 20 years = max. period of application

**General data**
- Max. number of extension modules: 2
- Interface for extension modules: 1 (bus connector compact assembly / KSM 01 bus extension module, pre-configurable assembly)
- Safe digital input lines: 10 (incl. 5 DO)
- Safe digital output lines: 20
- Safe analog in: 2
- Safe relay output: 4
- Standard output lines: 10
- Pulse output lines (protection close detection): 8
- Type of connectors: Pluggable terminals

**Data interface**
- 100MBit/s in full-duplex mode
- PROFINET

**Electrical data**
- Supply voltage: 24 VDC/24V
- Tolerance: ±10%
- Power Consumption: Max. 20 W
- Rated data static in: 24 VDC 20 mA, typical in accordance to EN61513-2
- Rated data static out: 4 DO 250 mA
- Rated data current: 20 A
- Pulse output lines (protection close detection): Max. 300 VA
- Max. fuse on supply voltage: Max. 5 A

**Environmental data**
- Temperature: 0° up to 50°C (operational temp., -10° up to 70°C) storage temp.
- Protection rating: IP 54
- Ambient data: 3 in accordance to EN 60 730
- EMI: According to EN 50121 and EN 61000-6-2

**Mechanical data**
- Rated input current: 100 A
- Weight: 1.330 kg
- Mounting: Snap-on mounting on standard head rail
- Max. terminal (pre-configuration): 1.5 mm²

**Order information:**
KSM 100-4-PN Modulator Series Basic Module + 40 I/O with PROFINET

**For more information please visit our website:** www.kollmorgen.com