



SM15K - Interface modules

| Models | Description |
|---------------|---------------------------------|
| INT MOD CON | Isolated contacts interface |
| INT MOD SER | Multi-protocol serial interface |
| INT MOD DIG | Digital I/O interface |
| INT MOD SIM-2 | Simulation interface SM15K |
| INT MOD M/S-2 | Master/Slave interface SM15K |
| INT MOD ANA | Isolated analog interface |

General Features

- Plug and play for the SM15K series power supplies
- Multiple interfaces possible per power supply
- Isolated from the output voltage
Working voltage 1000V
- Floating with respect to earth

Features INT MOD CON

Isolated contacts

- 4 relays with make-and-break contacts
- Additional (floating) Interlock with 24V enable system
- Programmable via Ethernet

Features INT MOD SER

Serial controller interface

- Multi protocol RS232, RS485, RS422, USB
- Web based configuration
- Speeds up to 115.2 kbps

Features INT MOD DIG

Digital (user) I/O

- 8 inputs Logic high = 2.5 ... 30V, Logic low = 0V
- 8 Open Drain outputs 0 - 30V, max. 200mA
- Programmable via Ethernet or sequences

Features INT MOD SIM-2

Simulation Interface SM15K

- Under development.

Features INT MOD M/S-2

Master Slave Interface SM15K

- Under development.

Features INT MOD ANA

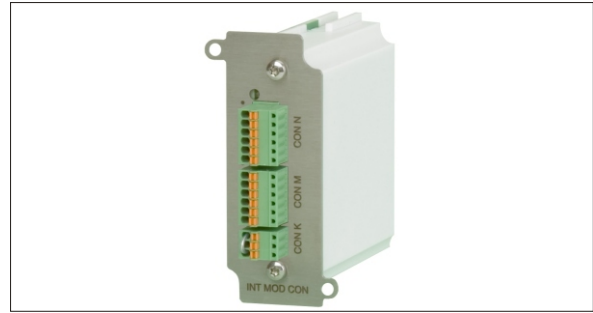
Analog controller interface

- Under development.

Isolated Contacts

Typical Applications

- Trigger an external safety alarm
- Interact in automated processes
- Switch the output On/Off with a remote 24Vdc signal
- Using a floating signal for triggering the Interlock function



Specifications

| | |
|--|---|
| Relay contacts 1... 4 Contact voltage Contact current Maximum switching capacity | 60 V 2 A 60 W |
| Floating Interlock Open circuit voltage | 5 V |
| Floating Enable Nominal input voltage Input voltage range Input impedance | 24VDC 15 - 30VDC 12kOhm |
| Insulation prog. connectors - internal circuits prog. connectors - earth | 1000 VDC Reinforced isolation acc. EN60950-1 / EN61010-1 max. 60VDC |
| Safety | EN 60950 / EN 61010 |
| Operating Temperature | - 20 to + 50 °C |
| Humidity | max. 95% RH, non condensing, up to 40 °C max. 75% RH, non condensing, up to 50 °C |
| Storage temperature | - 40 to + 85 °C |
| Mounting | Pluggable, SM15K interface slots 1, 2, 3 and 4. See paragraph 'Hardware Installation' in this manual. Maximum 4 per unit. |
| Programming connector | Relay 1 & 2, via a 6 pole push wire or so-called push in connector. Relay 3 & 4, via a 6 pole push wire / push in connector. Interlock and Enable via a 3 pole push wire / push in connector. For all 3 connectors there's a contra header supplied. |
| Weight | 0.14 kg |

Serial interface (multi-protocol)

Typical Applications

- RS232 Programming
- Balanced RS422 Programming
- USB Programming
- Balanced RS485 Bi-directional Programming



Specifications

| | |
|---|--|
| Communication speeds (bps) | 2400, 4800, 9600, 19200, 38400, 57600, 115200 |
| Insulation prog. connectors - internal circuits prog. connectors - earth | 1000 VDC Reinforced isolation acc. EN60950-1 / EN61010-1 max. 60VDC |
| Safety | EN 60950 / EN 61010 |
| Operating Temperature | - 20 to + 50 °C |
| Humidity | max. 95% RH, non condensing, up to 40 °C max. 75% RH, non condensing, up to 50 °C |
| Storage temperature | - 40 to + 85 °C |

| | |
|------------------------------|---|
| Mounting | Pluggable, SM15K interface slots 1, 2, 3 and 4. See paragraph 'Hardware Installation' in this manual. Maximum 4 per unit. |
| Programming connector | RS422 & RS485 wires via push wire or so-called push in connector (contra header supplied) RS232 via 9 pole D-connector (female), USB socket type B. |
| Weight | 0.14 kg |

Digital User I/O

Typical Applications

- Hardware triggering of sequences
- Interaction with other equipment
- Stand-alone automation
- Safety or Alarm indications



Specifications

| | |
|---|---|
| Logic inputs 1... 8 Input range Input impedance Load current +5V | 2 - 30V Rin = 22kOhm 100mA |
| Logic outputs 1 ... 8 Output type Output impedance | Open Drain (True = 0V, False = open) 7 Ohm (max 30V/200mA) |
| Insulation prog. connectors - internal circuits prog. connectors - earth | 1000 VDC Reinforced isolation acc. EN60950-1 / EN61010-1 max. 60VDC |
| Safety | EN 60950 / EN 61010 |
| Operating Temperature | - 20 to + 50 °C |
| Humidity | max. 95% RH, non condensing, up to 40 °C max. 75% RH, non condensing, up to 50 °C |
| Storage temperature | - 40 to + 85 °C |
| Mounting | Pluggable, SM15K interface slots 1, 2, 3 and 4. See paragraph 'Hardware Installation' in this manual. Maximum 4 per unit. |
| Programming connector | User Outputs via 15 pole D-connector High Density (female), User Inputs via 15 pole D-connector High Density (female). |
| Weight | 0.14 kg |