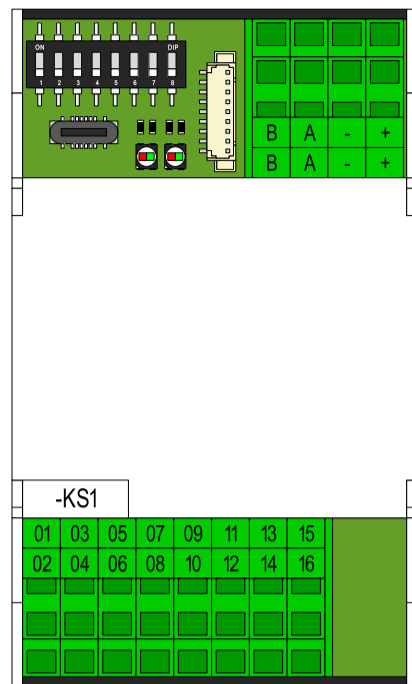


## Image



## Connection data

|   |          |                            |
|---|----------|----------------------------|
| + | DC24V[+] | Power supply DC24V[+]      |
| + | DC24V[+] | Power supply DC24V[+]      |
| - | DC24V[-] | Power supply DC24V[-]      |
| - | DC24V[-] | Power supply DC24V[-]      |
| A | RS485[A] | Communication bus RS485[A] |
| A | RS485[A] | Communication bus RS485[A] |
| B | RS485[B] | Communication bus RS485[B] |
| B | RS485[B] | Communication bus RS485[B] |

|    |          |                               |
|----|----------|-------------------------------|
| 01 | EX_01[+] | Load cell 01 power supply [+] |
| 02 | EX_01[-] | Load cell 01 power supply [-] |
| 03 | SI_01[-] | Load cell 01 output [-]       |
| 04 | SI_01[+] | Load cell 01 output [+]       |
| 05 | EX_02[+] | Load cell 02 power supply [+] |
| 06 | EX_02[-] | Load cell 02 power supply [-] |
| 07 | SI_02[-] | Load cell 02 output [-]       |
| 08 | SI_02[+] | Load cell 02 output [+]       |
| 09 | EX_03[+] | Load cell 03 power supply [+] |
| 10 | EX_03[-] | Load cell 03 power supply [-] |
| 11 | SI_03[-] | Load cell 03 output [-]       |
| 12 | SI_03[+] | Load cell 03 output [+]       |
| 13 | EX_04[+] | Load cell 04 power supply [+] |
| 14 | EX_04[-] | Load cell 04 power supply [-] |
| 15 | SI_04[-] | Load cell 04 output [-]       |
| 16 | SI_04[+] | Load cell 04 output [+]       |

## Commercial data

|                      |                                 |
|----------------------|---------------------------------|
| Product code         | 20801990                        |
| Product description  | Smartswitch 57-0276b[00] Weight |
| Packing unit         | 1                               |
| Weight               | 0.096[kg]                       |
| Custom tariff number | 8537.10.91                      |
| Country of origin    | NL (Netherlands)                |

## Dimensions

|        |            |
|--------|------------|
| Width  | 53.60 [mm] |
| Height | 89.60 [mm] |
| Depth  | 62.20 [mm] |

## Standards and regulations

|      |  |
|------|--|
| EMC  | Conformance with EMC directive 2014/30/EU  |
| RoHS | Conformance with RoHS directive 2011/65/EU |
| WEEE | Conformance with WEEE directive 2002/96/EC |

## Connection data, details

|   |          |  |
|---|----------|--|
| + | DC24V[+] | Terminal power supply DC24V of Smartswitch, polarity [PLUS].<br>The free [PLUS][+] terminal can be used to supply power to a continuous Smartswitch. |
| + |          |  |
| - | DC24V[-] | Terminal power supply DC24V of Smartswitch, polarity [MIN].<br>The free [MIN][-] terminal can be used to supply power to a continuous Smartswitch.   |
| - |          |  |
| A | RS485[A] | Terminal RS485 communication bus, signal line [A].   |
| A |          |  |
| B | RS485[B] | Terminal RS485 communication bus, signal line [B].   |
| B |          |  |

|    |              |   |
|----|--------------|---|
| 01 | LOAD CELL 01 | Power supply and analog input for load cell 01. |
| 02 |              |   |
| 03 |              |   |
| 04 |              |   |

|    |              |   |
|----|--------------|---|
| 05 | LOAD CELL 02 | Power supply and analog input for load cell 02. |
| 06 |              |   |
| 07 |              |   |
| 08 |              |   |

|    |              |   |
|----|--------------|---|
| 09 | LOAD CELL 03 | Power supply and analog input for load cell 03. |
| 10 |              |   |
| 11 |              |   |
| 12 |              |   |

|    |              |   |
|----|--------------|---|
| 13 | LOAD CELL 04 | Power supply and analog input for load cell 04. |
| 14 |              |   |
| 15 |              |   |
| 16 |              |   |

### Ambient conditions

|  |               |               |
|--|---------------|---------------|
| Degree of protection                     | IP20          |               |
| Ambient temperature (operation)          | -10...50 [°C] | 14...122 [°F] |
| Ambient temperature (storage/transport)  | -20...50 [°C] | -4...122 [°F] |
| Permissible humidity (operation)         | 20...85 [%]   |               |
| Permissible humidity (storage/transport) | 20...85 [%]   |               |

### Terminal data

|                                       |           |
|---------------------------------------|-----------|
| Conductor cross section solid min.    | 0.2 [mm²] |
| Conductor cross section solid max.    | 2.5 [mm²] |
| Conductor cross section flexible min. | 0.2 [mm²] |
| Conductor cross section flexible max. | 2.5 [mm²] |
| Conductor cross section AWG min.      | 24        |
| Conductor cross section AWG max.      | 14        |

### General

|               |   |
|---------------|---|
| Mounting type | DIN rail mounting according to EN 60715 |
|---------------|---|

### Supply voltage

|                               |                                 |
|-------------------------------|---------------------------------|
| Power supply                  | DC24V                           |
| Current consumption typically | ≤ 50 [mA], at DC24V, at 25 [°C] |

### Data interface

|                          |                                     |
|--------------------------|-------------------------------------|
| Interface 1              | RS485                               |
| Connection method        | Spring-cage connection              |
| Transmission medium      | 2-wire Twisted-Pair + signal ground |
| Transmission length max. | 1200 [m] <b>1</b>                   |
| Transmission speed       | 115.2 [kBit/s]                      |

|                          |                              |
|--------------------------|------------------------------|
| Interface 2              | USB 2.0 full-speed interface |
| Connection method        | USB-C                        |
| Transmission medium      | USB-C cable                  |
| Transmission length max. | 3 [m]                        |
| Transmission speed       | 12 [Mbit/s]                  |

### Calibration weight measurements

|                      |                               |
|----------------------|-------------------------------|
| Software application | CompactiMa Test Assistent.exe |
|----------------------|-------------------------------|

### Notification

| Location | LED status         | Status Smartswitch control   |
|----------|--------------------|--|
| PCB [1]  | Green continuously | Smartswitch connection with controller is active. Smartswitch control is inactive.   |
|          | Green blinking     | Smartswitch connection with controller is active. Smartswitch control is active. Smartswitch control alarm status is inactive. |
|          | Red continuously   | Smartswitch connection with controller is inactive. Smartswitch control is inactive.   |
|          | Red blinking       | Smartswitch connection with controller is active. Smartswitch control is active. Smartswitch control alarm status is active.   |

| Location | LED status     | Status bus communication                            |
|----------|----------------|---|
| PCB [2]  | Green blinking | Smartswitch is receiving data over the bus [Rx].    |
|          | Red blinking   | Smartswitch is transmitting data over the bus [Tx]. |

### Remarks

|          |  |
|----------|--|
| <b>1</b> | <b>Transmission length max.</b><br>The transmission length max. (i.e. Maximum length of the RS485 BUS-cable in the installation) of 1200 [m], only applies when a suitable RS485 Bus-cable type is utilized in the installation.<br><br>General specification for RS485 BUS-cable:<br>• Suitable for bus systems based on RS485,<br>• Twisted pair(s),<br>• Shielded,<br>• Characteristic impedance 120 [Ohm].<br><br>Recommended cable types:<br>32002810 Buskabel UNITRONIC BUS LD 2x2x0.22 100 [m]<br>32002811 Buskabel UNITRONIC BUS LD 2x2x0.22 300 [m]<br>32002812 Buskabel UNITRONIC BUS LD 2x2x0.22 500 [m]<br><br>32002820 Buskabel UNITRONIC BUS LD 3x2x0.22 100 [m] |
|----------|--|

### Schematic

