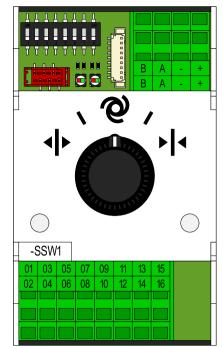
## Image



Smartswitch 13-5092b[02]\_5 20800020

## Connection data

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

| 01 | VCOM   | Common relay outputs                     |
|----|--------|--|
| 02 | VCOM   | Common relay outputs                     |
| 03 | VCOM   | Common relay outputs                     |
| 04 | VCOM   | Common limit switches                    |
| 05 | OUT_OP | Output relay 1 [contactor device open]   |
| 06 | LS_OP  | Input limit switch opened                |
| 07 | OUT_CL | Output relais 2 [contactor device close] |
| 08 | LS_CL  | Input limit switch closed                |
| 09 | OUT_EM | Output [contactor device emergency]      |
| 10 | LS_EM  | Input limit switches emergency           |
| 11 | IN_D1  | Input digital 1                          |
| 12 | NA     | Not available                            |
| 13 | NA     | Not available                            |
| 14 | NA     | Not available                            |
| 15 | GND    | GND measurements [IN_D1], [IN_D2]        |
| 16 | NA     | Not available                            |

## Commercial data

| Product code         | 20800020                                    |
|----------------------|---|
| Product desription   | Smartswitch 13-5092b[02]_5 Ventilation side |
| Packing unit         | 1   |
| Weight               | 0.121[kg]                                   |
| Custom tariff number | 8537.10.91                                  |
| Country of origin    | NL (Netherlands)                            |

### Dimensions

| Width  | 53.60 [mm] |
|--------|------------|
| Height | 89.60 [mm] |
| Depth  | 81.00 [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

| + | D004///-1     | Terminal power supply DC24V of Smartswitch, polartity [PLUS]. The free [PLUS] [+] terminal can be used to supply power to a conterminous Smartswitch.   |
|---|---------------|---|
| + | DC24V [+]     | The tree [PLOS][+] terminal can be used to supply power to a conterminous Smartswitch.  |
| - | DC24V [-]     | Terminal power supply DC24V of Smartswitch, polarity [MN]. The free [MN] [-] terminal can be used to supply power to a conterminous Smartswitch.  |
| - | DO24V [-]     | The free from the control according to the control of the control |
| Α | RS485 [A]     | Terminal RS485 communication bus, signal line [A].  |
| Α | 110400[A]     |   |
| В | RS485 [B]     | Terminal RS485 communication bus, signal line [B].  |
| В | [מ] ניטוייטיו |   |

| 01 |      | Terminal P-contacts of relays. Connect desired voltage type that has to be switched; DC24V [+], or AC24V [P]. |
|----|------|---|
| 02 | VCOM | Someon domest reliage type that had to be officered, 252 Tr [+], or 7.62 Tr [+],                              |
| 03 |      |   |
| 04 | VCOM | Terminal common for limit switches.   |

| 06 | LS_OP | Input for limit switch contact [NC], that detects that the driving mechanism of a side ventilation motor is situated in the fully opened position.  Limit switch contacts are powered from a terminal [VCOM]. |
|----|-------|---|
|----|-------|---|

| 08 | Input for limit switch contact [NC], that detects that the driving mechanism of a side ventilation motor is situated in the fully closed position. |
|----|--|

| 05 | OUT_OP | Relay contact for switching the power stage [OPEN] of a side ventilation motor. The relay contact switches what is provided on the terminal(s) [VCOM]. |
|----|--------|--|

| 07 OUT_CL Relay contact for switching the power stage [CLOSE] of a side ventilation motor The relay contact switches what is provided on the terminal(s) [VCOM]. |
|--|
|--|

| 09 | OUT_EM | Output for switching the power stage [EMERGENCY] of a side ventilation motor. What is provided on the terminal(s) [VCOM] is directed through connected emergency switch contact(s) to this output. |
|----|--------|--|
|----|--------|--|

| 11 | IN_D1 | Digital input for dry contact [NC], that when opened will raise an alarm [PKZM] in the control.  An alarm is raised, the control stays active. |
|----|-------|--|
| 15 | GND   | When not used interconnect [11] and [15].  |

| \        | Project name: | 20800020DSH010 |            | e side         |            |        |      |
|----------|---------------|----------------|------------|----------------|------------|--------|------|
|          | Product code: | 20800020       |            |                |            |        |      |
| APIDDEP  |               | Initial date:  | 01/01/2019 | Author:        | MBL        |        |      |
| AVAIDUEN |               |                |            | Revision date: | 01/01/2019 | Page:1 | of 2 |

## Ambient conditions

| Degree of protection                     | IP20       |            |
|--|------------|------------|
| Ambient temperature (operation)          | -1050 [°C] | 14122 [°F] |
| Ambient temperature (storage/transport)  | -2050 [°C] | -4122 [°F] |
| Permissible humidity (operation)         | 2085 [%]   |            |
| Permissible humidity (storage/transport) | 2085 [%]   |            |

### 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 | 500 [m]                             |
| Transmission speed  | 115.2 [kBit/s]                      |

## Relay output

| Number of outputs       | 2                       |
|-------------------------|-------------------------|
| Contact configuration   | Normally open contact   |
| Switching voltage max.  | 24 [V], AC/DC           |
| Switching current max.  | 1[A], bij 24 [V], AC/DC |
| Service life electrical | 10^5 operations         |

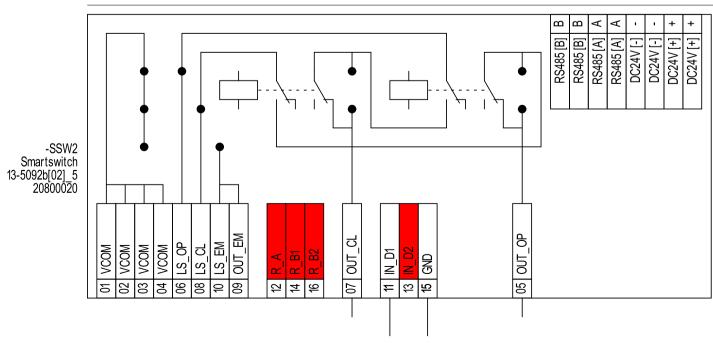
## Notification

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

| Location          | LED status                     | Status device control  |
|-------------------|--------------------------------|--|
|                   | Green continuously             | The control [open] is currently active. The connected device is being opened.  |
|                   | Green blinking<br>(5x)         | The limit switch contact [open] is activated. The connected device has reached the end position of the [open] control.   |
|                   | Green blinking<br>(persistant) | The emergency contact has been activated during the [open] control. The connected device has exceeded the limit switch contact [open] position, and is in the status malfunction.    |
| Rotary switch [1] | Red continuously               | The control [close] is currently active. The connected device is being closed.   |
|                   | Red blinking<br>(5x)           | The limit switch contact [closed] is activated. The connected device has reached the end position of the [close] control.  |
|                   | Red blinking<br>(persistant)   | The emergency contact has been activated during the [close] control. The connected device has exceeded the limit switch contact [closed] position, and is in the status malfunction. |

#### Schematic



| RIDDER | Project name: | 20800020DSH010 044 Smartswitch 13-5092b[02]_5 Ventilatie side |  |                |            |         |      |
|--------|---------------|---|--|----------------|------------|---------|------|
|        | Product code: | 20800020  |  |                |            |         |      |
|        |               |   |  | Initial date:  | 01/01/2019 | Author: | MBL  |
|        |               |   |  | Revision date: | 01/01/2019 | Page:2  | of 2 |