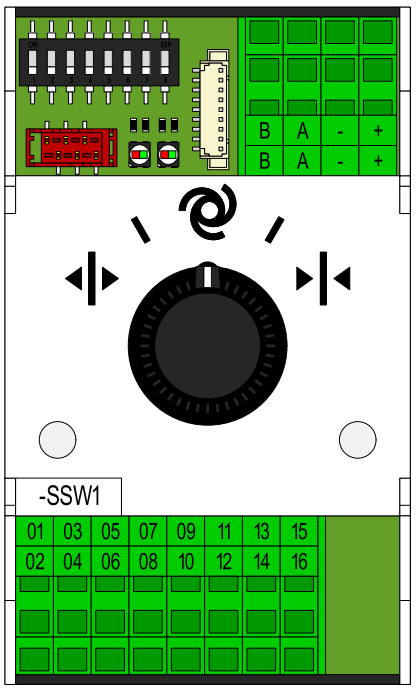
Image

Smartswitch
11-5092b[02]_5
20800000



Commercial data

Product code	20800000
Product description	Smartswitch 11-5092b[02]_5 Ventilation top
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

+	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	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

Connection data, details

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

01	VCOM	Terminal P-contacts of relays. Connect desired voltage type that has to be switched; DC24V [+], or AC24V [P].
02		
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 top ventilation motor is situated in the fully opened position. Limit switch contacts are powered from a terminal [VCOM].

08	LS_CL	Input for limit switch contact [NC], that detects that the driving mechanism of a top ventilation motor is situated in the fully closed position. Limit switch contacts are powered from a terminal [VCOM].

10	LS_EM	Input for emergency switch contact [NC], that detects that the driving mechanism of a top ventilation motor has exceeded the position defined by a limit switch. Multiple emergency switch contacts are to be connected in series with each other. Emergency switch contacts are powered from a terminal [VCOM].

05	OUT_OP	Relay contact for switching the power stage [OPEN] of a top 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 top 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 top 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. When not used interconnect [11] and [15].
15	GND	

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	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

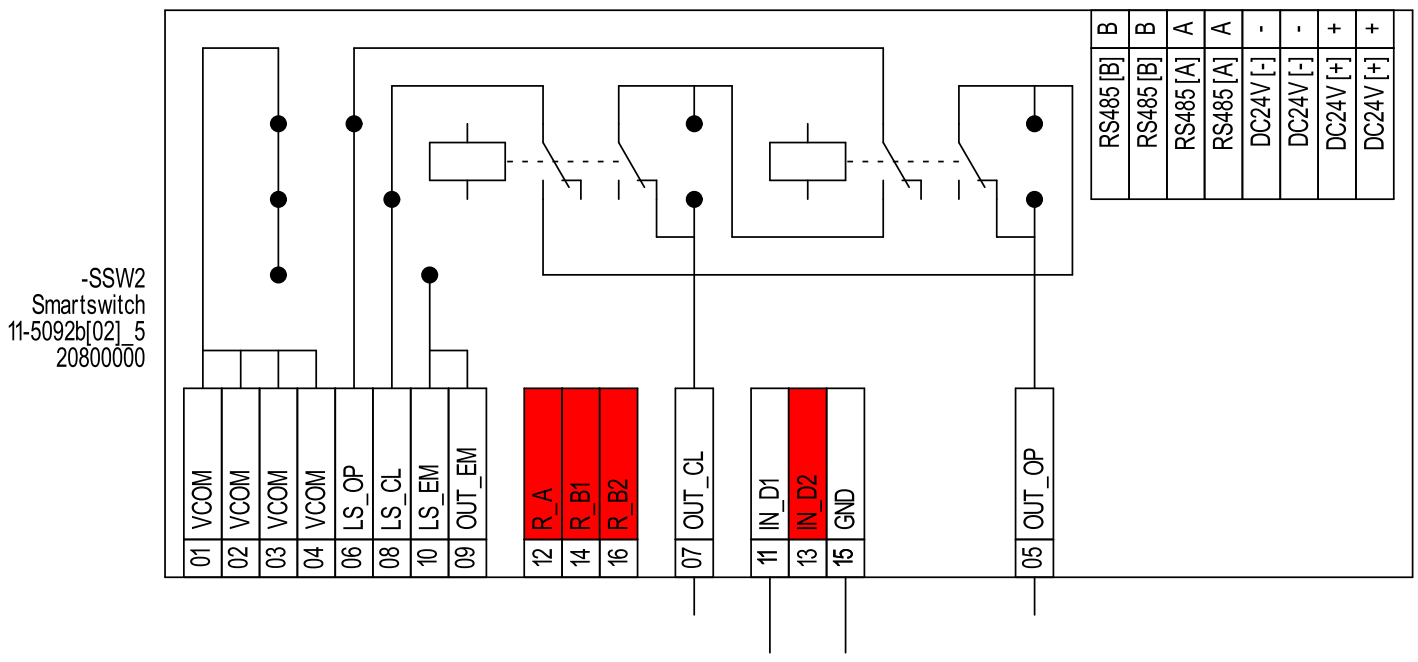
Notification

Location	LED status	Status Smartswitch control
PCB [1]	Green continuously	Smartswitch connection with touchscreen controller is active. Smartswitch control is inactive.
	Green blinking	Smartswitch connection with touchscreen controller is active. Smartswitch control is active. Smartswitch control alarm status is inactive.
	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
Rotary switch [1]	Green continuously	The control [open] is currently active. The connected device is being opened.
	Green blinking (5x)	The limit switch contact [open] is activated. The connected device has reached the end position of the [open] control.
	Green blinking (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.
	Red continuously	The control [close] is currently active. The connected device is being closed.
	Red blinking (5x)	The limit switch contact [closed] is activated. The connected device has reached the end position of the [close] control.
	Red blinking (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



Project name:	20800000DSH010 044 Smartswitch 11-5092b[02]_5 Ventilation top			
Product code:	20800000			
			Initial date: 01/01/2019	Author: MBL
			Revision date: 01/01/2019	Page:2 of 2