# **SpaceLogic** Sensors
## SXWS Sensor Touchscreen Covers



*Note: A subset of models shown.*

### Product Description

SXWS sensors are a family of living space sensors for use with MP and RP Series IP controllers that use the EcoStruxure Building Operation software user interface. These sensors use an RJ-45 sensor bus that provides communication and power from the controller. SXWS living space sensors are modular and are ordered in two parts: the sensor base and the cover. Four communicating sensor base models are available that can be paired with any one of 14 touchscreen covers.

All SXWSCDxxxxxx touchscreen covers display current time, temperature, relative humidity percentage (if equipped), $CO_2$ ppm (if equipped), as well as heating, cooling and Eco mode status. The touchscreen is configurable through EcoStruxure Building Operation software to add buttons for temperature set-point, override, temperature scale, fan speed, lighting control, blind control, lighting and blind scenes, heating mode, cooling mode, and Auto HVAC mode.

SXWSCDxxxxxx touchscreen covers are available in Medium matte white housings or Optimum glass panel housings available in white or black. Optimum glass panel housings are available with capacitive buttons for one-touch light and blind control located below the touchscreen.

All SXWSCDxxxxxx touchscreen covers are available with a passive infrared (PIR) occupancy sensor. The system may be configured in EcoStruxure Building Operation software to override comfort settings to occupied status when occupancy is detected during scheduled unoccupied periods.

### Features

- Medium matte white housing or optimum glass panel housing available in white or black
- Full color, 61mm (2.4 in.), 240 x 320 pixel, capacitive touchscreen display
- Displays sensor readings, time, network status
- Light and blind control with setpoint adjust
- Stoplight feature for visual indication at user-configurable $CO_2$ threshold levels (touchscreen models only)
- Configurable preset scenes for light and blind control
- Temperature setpoint
- Override
- Display timeout
- Display lockout
- HVAC mode adjustment
- Passive Infrared (PIR) motion/occupancy sensor (optional)

### Applicable Documentation

| Title | Description |
|---|---|
| SXWS Living Space Sensor Base | Installation instructions for all base variants |
| SXWS Living Space Sensor Blank Cover | Installation instructions for blank cover without occupancy sensor |
| SXWS Living Space Sensor Button and Occupancy Covers | Installation instructions for 3-button covers with and without occupancy sensors and blank cover with occupancy sensor |
| SXWS Living Space LCD Temperature Sensor | LCD temperature sensor base and cover installation instructions |
| SXWS Living Space Resistive Temperature Sensor | Non-communicating temperature sensor installation instructions |

USA: +1 888-444-1311
Europe: +46 10 478 2000
Asia: +65 6484 7877
www.schneider-electric.com

Life Is On Schneider Electric

© 2023 Schneider Electric. All rights reserved. All trademarks are owned by Schneider Electric Industries SAS or its affiliated companies.
Schneider Electric · 800 Federal Street, Andover, MA 01810 USA

March 2023
Z207552-0H nk

## Available Products

### SXWS Sensor Bases

| Model Number | Description | Temp | RH | $CO_2$ | Cover | IP Controller System Bus (Communicating) |
|---|---|---|---|---|---|---|
| SXWSBTXXXSXX | Sensor Base, Temperature | X | | | Not Included | X |
| SXWSBTHXXSXX | Sensor Base, Temperature, Humidity | X | X | | Not Included | X |
| SXWSBTXCXSXX | Sensor Base, Temperature, $CO_2$ | X | | X | Not Included | X |
| SXWSBTHCXSXX | Sensor Base, Temp, Humidity, $CO_2$ | X | X | X | Not Included | X |

### Covers for Use with Sensor Bases

| Model Number | 61mm (2.4") Color Touchscreen with Light & Blind Control | Override | Setpoint | Off-Touchscreen Light & Blind Control Buttons | Off-Touchscreen Light Control Buttons | Occupancy Sensor (PIR) | Housing Finish |
|---|---|---|---|---|---|---|---|
| SXWSCDXSELXX | X | X | X | | | | Medium, White |
| SXWSCDPSELXX | X | X | X | | | X | Medium, White |
| SXWSCDXSELXW | X | X | X | | | | Optimum, White |
| SXWSCDPSELXW | X | X | X | | | X | Optimum, White |
| SXWSCDXSELXB | X | X | X | | | | Optimum, Black |
| SXWSCDPSELXB | X | X | X | | | X | Optimum, Black |
| SXWSC2XSELXW | X | X | X | | X | | Optimum, White |
| SXWSC4XSELXW | X | X | X | X | | | Optimum, White |
| SXWSC2PSELXW | X | X | X | | X | X | Optimum, White |
| SXWSC4PSELXW | X | X | X | X | | X | Optimum, White |
| SXWSC2XSELXB | X | X | X | | X | | Optimum, Black |
| SXWSC4XSELXB | X | X | X | X | | | Optimum, Black |
| SXWSC2PSELXB | X | X | X | | X | X | Optimum, Black |
| SXWSC4PSELXB | X | X | X | X | | X | Optimum, Black |

USA: +1 888-444-1311
Europe: +46 10 478 2000
Asia: +65 6484 7877
www.schneider-electric.com

Life Is On Schneider Electric

© 2023 Schneider Electric. All rights reserved. All trademarks are owned by Schneider Electric Industries SAS or its affiliated companies.
Schneider Electric · 800 Federal Street, Andover, MA 01810 USA

March 2023
Z207552-0H nk

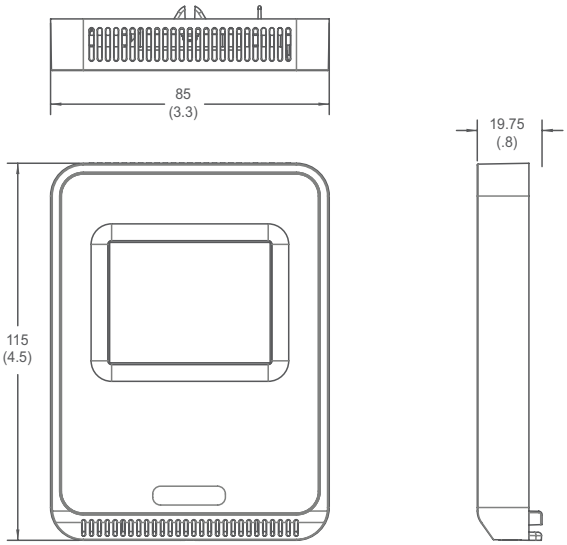
## Specifications

| **Touchscreen** | |
|---|---|
| Display | 61 mm (2.4”), color, capacitive overlay |
| Pixel count | 240 x 320 |
| Backlight | Yes |
| Setpoint | Temperature, Humidity or Fan Speed (setpoint type and allowable span set in EcoStruxure Building Operation software) |
| Override | Overrides unoccupied mode (duration and comfort parameters configured in EcoStruxure Building Operation software) |
| Timeout | Configurable through EcoStruxure Building Operation software |
| Lockout | Configurable through EcoStruxure Building Operation software |
| **Light and Blind Control** | |
| Number of light control zones | 1 manually controlled<br>4 configurable in scenes |
| Number of blind control zones | 1 manually controlled<br>12 configurable in scenes |
| User interface | Any SXWS cover with touchscreen |
| Communication | Sensor Bus on RP-x models with light/blind modules |
| Preconfigured scenes | Configurable via EcoStruxure Building Operation software |
| Light control | On/off/dimming |
| Blind control | Blind open /close/adjust<br>Louver open/close/adjust |

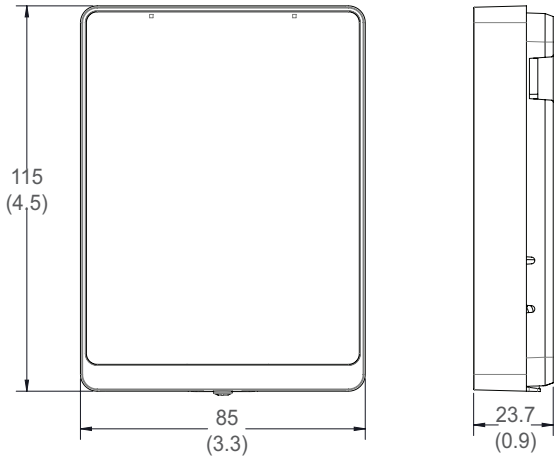
| **Occupancy Version** | |
|---|---|
| Occupancy sensor | Passive infrared |
| Lateral detection angle | 140° |
| Horizontal detection angle | ±15° |
| Detection range | 4-6 m (13-20 ft.) angle dependent<br>(see detection pattern diagram, page 3) |
| **Operating Environment** | |
| Operating temperature | 0 to 50 °C (32 to 122 °F) |
| Operating humidity range | 0 to 95% RH, non-condensing |
| Housing material | High impact ABS plastic<br>Flammability rating UL 94 V-0 |
| Mounting location | Not suitable for wet locations.<br>For indoor use only. |
| Input power | Supplied by SXWS sensor base |
| **Regulatory Information** | |
| Agency approvals | UL 916<br>European conformance CE:<br>EN61000-6-3<br>EN61000 Series - industrial immunity std.<br>FCC Part 15 Class B, REACH, RoHS, Green Premium, RCM (Australia), ICES-003 (Canada), EAC (Russia) |

## Dimensions mm (in.)

### SXWS Base Cover




### Optimum Housing




USA: +1 888-444-1311
Europe: +46 10 478 2000
Asia: +65 6484 7877
www.schneider-electric.com

Life Is On Schneider Electric

© 2023 Schneider Electric. All rights reserved. All trademarks are owned by Schneider Electric Industries SAS or its affiliated companies.
Schneider Electric · 800 Federal Street, Andover, MA 01810 USA

March 2023
Z207552-0H nk

## Precautions

- This product is not intended for life or safety applications.
- Do not install this product in hazardous or classified locations.
- Read and understand the instructions before installing the product.
- Turn off all power supplying equipment before working on it.
- The installer is responsible for conformance to all applicable codes.

If this product is used in a manner not specified by the manufacturer, the protection provided by the product may be impaired. No responsibility is assumed by the manufacturer for any consequences arising out of the use of this material.

## Installation

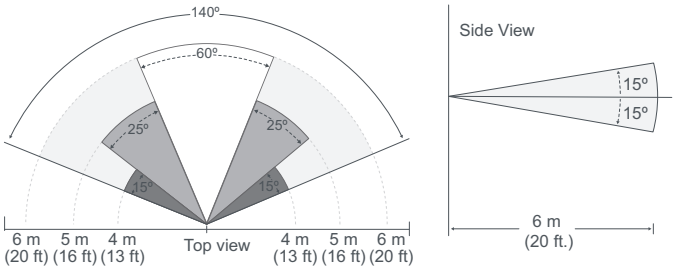
1. With sensor base fully installed, align top of cover to mounting tabs on top of sensor base. Swing cover downward until it latches at the bottom.

2. Install locking screw to secure cover in closed position.

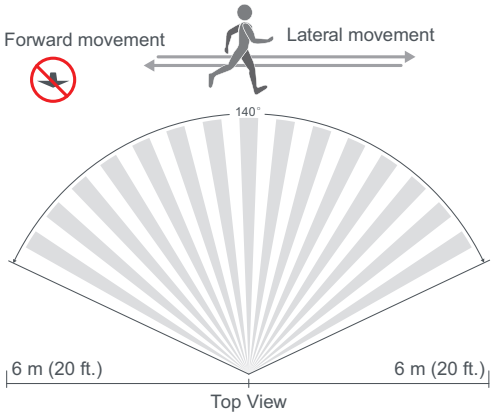


## Typical PIR Lens Detection Pattern

A typical detection pattern for the PIR cover is illustrated below.




## Fresnel Lens Beam and Detection Field




## PIR Installation Considerations

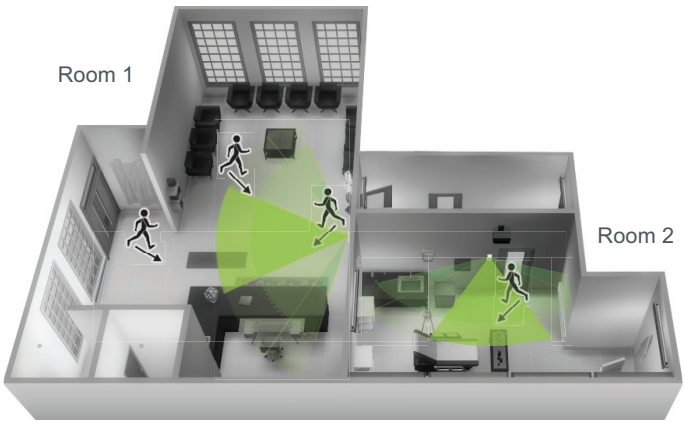
Install the SXWS room unit with occupancy sensor as close to a door as possible (but not blocked by the door) or in an area with high occupant movement.

The unit should be installed 1.35 m (4.5 ft.) above the floor surface to ensure the maximum detection range is achieved. Ensure that occupants will cross the lens beam in a perpendicular path within the prescribed detection zone.

### Recommended Installation Example

Room 1 shows one SXWS room unit with occupancy sensor installed beside a door in the middle of the room. Occupant traffic is high in several areas of the room. Occupant movement typically flows lateral to the PIR, maximizing detection and within the PIR detection range of 6 m (20 ft.) at 140°, and 5 m (16 ft.) between 15° to 30° laterally.

Room 2 shows one SXWS room unit with occupancy sensor installed adjacent to the door. Occupant traffic is high and ensures the occupant will almost always cross the PIR detection path laterally and within the detection range.




USA: +1 888-444-1311
Europe: +46 10 478 2000
Asia: +65 6484 7877
www.schneider-electric.com

Life Is On Schneider Electric

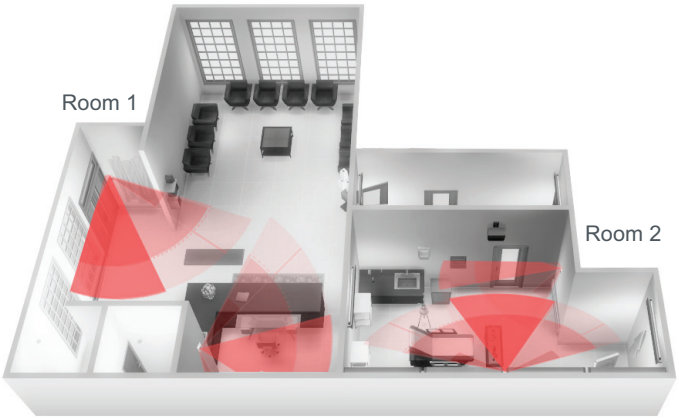
© 2023 Schneider Electric. All rights reserved. All trademarks are owned by Schneider Electric Industries SAS or its affiliated companies.
Schneider Electric · 800 Federal Street, Andover, MA 01810 USA

March 2023
Z207552-0H nk

## Non-recommended Installation Example

Room 1 shows one SXWS room unit with occupancy sensor installed near the entrance, and a second installed beside the reception area. The unit installed at the entrance behind the door may be blocked. For the unit installed beside the reception area, occupant traffic could fall outside the detection zone.

Room 2 shows one SXWS room unit with occupancy sensor installed in a low traffic area near the door, and a second installed on the wall directly opposite the door. The unit installed near the door could be blocked by the opened door, restricting PIR detection. The unit installed opposite the door could fall outside the specified detection zone and most occupant movement may not fall within lateral crossing patterns for PIR detection.




## Features

Touchscreen covers connect to a sensor base and provide an attractive user interface. The cover/base unit communicates sensor readings back to the Schneider Electric IP controller via the Sensor Bus. The display provides local sensor status and allows the user to adjust comfort settings within the parameters set in EcoStruxure Building Operation software. The display and touchscreen can be configured through EcoStruxure Building Operation software to be active at specific times. For example, to minimize unintended usage, the touchscreen functionality may be disabled in public areas during business hours and fully functional during closed hours, allowing employee-only use. Display duration may also be configured in EcoStruxure Building Operation software ranging from always on to only on for a few seconds after a touch.

USA: +1 888-444-1311
Europe: +46 10 478 2000
Asia: +65 6484 7877
www.schneider-electric.com

Life Is On Schneider Electric

© 2023 Schneider Electric. All rights reserved. All trademarks are owned by Schneider Electric Industries SAS or its affiliated companies.
Schneider Electric · 800 Federal Street, Andover, MA 01810 USA

March 2023
Z207552-0H nk

## Touchscreen Operation

### Default View

The touchscreen user interface displays applicable sensor outputs (Temp, RH, $CO_2$ values), heating/cooling status, time, Eco mode, $CO_2$ stoplight (if active), and menu button. The front screen and menu screen are configurable to allow control of primary functions.




The default setting for the front screen includes the Temperature Setpoint Adjustment button and integrator's submenu.



The default setting for the menu screen includes buttons for the Fan Speed, Fahrenheit/Celsius mode, Unoccupied mode and HVAC modes. This is also compatible with Heat/Cool/Eco modes, as the related icons are displayed but not the color.

Note: During firmware updates, the display may appear to be off. Please allow five minutes for this process to complete before disconnecting the sensor. This may also occur when the sensor is first connected to a controller.

For detailed information on the use of light and blind control, see F-28297, *SXWS TouchScreen Covers Light & Blind Control User Guide* available on the Schneider Electric website at www.se.com.

### Configurable Buttons

- **Temperature Setpoint Adjustment**
- **Fahrenheit/Celsius Mode**
- **Energy Saving Scene**
- **Lighting Menu or Toggle Switch**
- **HVAC Modes**
- **Perimeter Scene**
- **Blinds Menu or Toggle Switch**
- **Integrator's Submenu**
- **Meeting Scene**
- **Moments or Scenes Menu**
- **Occupied Scene**
- **Projector Scene**
- **Fan Speed**
- **Vacant Scene**
- **Occupied Mode**

USA: +1 888-444-1311
Europe: +46 10 478 2000
Asia: +65 6484 7877
www.schneider-electric.com

Life Is On Schneider Electric

© 2023 Schneider Electric. All rights reserved. All trademarks are owned by Schneider Electric Industries SAS or its affiliated companies.
Schneider Electric · 800 Federal Street, Andover, MA 01810 USA

March 2023
Z207552-0H nk

## Touchscreen Operation (cont.)

### Front Screen Icon Configuration



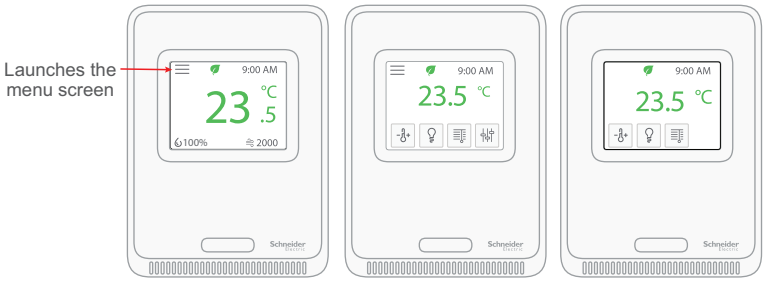

1 button
In EBO, the user chooses one of the eight primary functions to populate the first position on the activated menu.

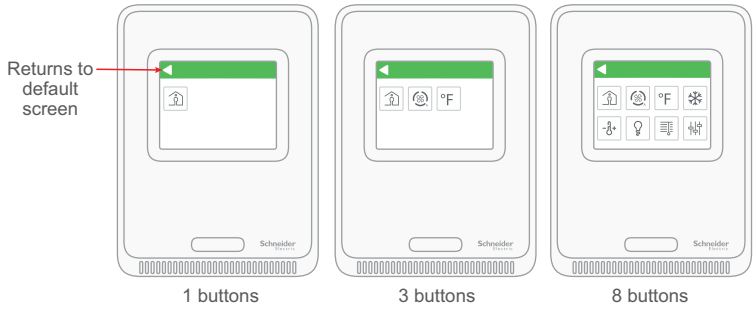
2 buttons

3 buttons

4 buttons

### Menu Screen Configuration




1 buttons

3 buttons

8 buttons

USA: +1 888-444-1311
Europe: +46 10 478 2000
Asia: +65 6484 7877
www.schneider-electric.com

Life Is On Schneider Electric

© 2023 Schneider Electric. All rights reserved. All trademarks are owned by Schneider Electric Industries SAS or its affiliated companies.
Schneider Electric · 800 Federal Street, Andover, MA 01810 USA

March 2023
Z207552-0H nk

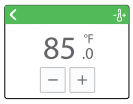
# Touchscreen Operation (cont.)

## Icon Button Functions

### Temperature Setpoint Adjustment

Press the thermometer icon to access the setpoint change menu.

Submenu Only

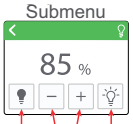



Press the arrow or wait 3 seconds to confirm and send a choice.

### Lighting Menu or Toggle Switch

Press the lightbulb icon to access the lighting menu.

Submenu




Full OFF Full ON

Dimmer: Percentage switches by predefined increments when + or - buttons are pressed.

Single-press option: This single button is toggle-able.

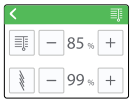
Turn light off

Turn light on

### Blinds Menu or Toggle Switch

Press the blinds icon to access the blinds menu.

Submenu




Note: Blind angle adjustment is included in the blinds submenu.

Single-press option: This single button is toggle-able (as an option for single-press open/close).

Close (100%)

Open (0%)

Close (0 = 100% angled up) (100 = 100% angled down)

Open (50%)

### Moments or Scenes Menu

Press the settings icon to access the scenes menu.

Submenu



Single-press option: Any of these 'moments'/ 'scenes' are made available as a single-press function appearing outside the Moments menu contained on the Front menu.

Activate projector scene

Example: Turn projector on, close blinds & dim lights to 20%.

### Occupied Mode

Press the Occupied Mode icon to toggle the occupancy status.

You can invert the display of the icon via configuration in EBO software.

Single Press Only

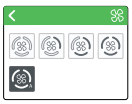
Call for change in schedule

Shows the temporary state or call for end of special state

### Fan Speed

Press the fan icon to access the fan speed menu.

Submenu Only



Other permutations:




### Fahrenheit/Celsius Switch

Toggle to change temperature units.

Single Press Only

°F Changes units to Fahrenheit when pressed.

°C Changes units to Celsius when pressed.

### HVAC Modes

Press the snowflake/ heat icon to access the HVAC mode menu.

Submenu Only



Changes mode to Cooling mode.

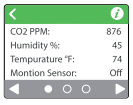
Changes mode to Heating mode.

Changes mode to Automatic or shows automatic state.

### Integrator's Submenu

Press this icon to access the integrator's menu. Defaults to the right-most button on the home screen.

Submenu Only




USA: +1 888-444-1311
Europe: +46 10 478 2000
Asia: +65 6484 7877
www.schneider-electric.com

Life Is On Schneider Electric

© 2023 Schneider Electric. All rights reserved. All trademarks are owned by Schneider Electric Industries SAS or its affiliated companies.
Schneider Electric · 800 Federal Street, Andover, MA 01810 USA

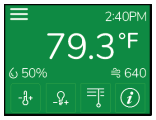
March 2023
Z207552-0H nk

## Touchscreen Operation (cont.)

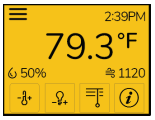
### $CO_2$ Stoplight Feature

The CO2 Stoplight feature is set up and maintained within EBO software (versions 5.0 and later).

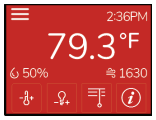
With CO2 Stoplight enabled, the background color of the main screen changes with the CO2 level in the room, providing a visual indicator of CO2 levels to the room occupants. The thresholds at which the colors change on the main screen are user configurable in EBO.




Green*
$CO_2$ <1000 ppm




Yellow*
$CO_2$ = 1000-1499 ppm




Red*
$CO_2$ = 1500-10,000 ppm

*Possible to adjust $CO_2$ thresholds by changing the yellow and red limits.

## Touchscreen with Off-Screen Light and Blind Control Operation

**Two-Button Models**
Two-button models include fixed light on and off with dimming buttons.



Lights OFF/
Dimmer down



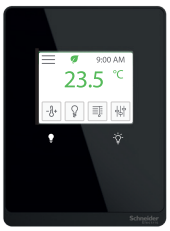
Lights ON/
Dimmer up



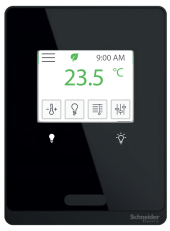

SXWSC2XSELXW




SXWSC2PSELXW
with Occupancy Sensor




SXWSC2XSELXB




SXWSC2PSELXB
with Occupancy Sensor

**Four-Button Models**
Four-button models include the lighting buttons described above plus fixed blind open and close with adjustment buttons.



Close blinds/
Adjust close



Open blinds/
Adjust open



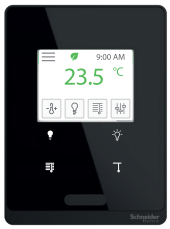

SXWSC4XSELXW




SXWSC4PSELXW
with Occupancy Sensor




SXWSC4XSELXB




SXWSC4PSELXB
with Occupancy Sensor

## Off-Screen Lighting Button Operation

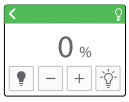
### Light On Button



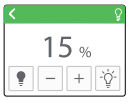
**Short Tap**
Display changes to lighting submenu with status. Lights in room go to 100%.




**Long Tap**
Display changes to lighting submenu with status. Lighting percentage increases until button is released. Display provides level indication.




*Starting state display example*

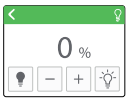



*Button released*

### Light Off Button



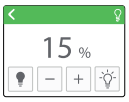
**Short Tap**
Display changes to lighting submenu with status. Lights in room go to 0%.




**Long Tap**
Display changes to lighting submenu with status. Lighting percentage decreases until button is released. Display provides level indication.




*Starting state display example*




*Button released*

USA: +1 888-444-1311
Europe: +46 10 478 2000
Asia: +65 6484 7877
www.schneider-electric.com

Life Is On Schneider Electric

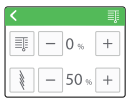
© 2023 Schneider Electric. All rights reserved. All trademarks are owned by Schneider Electric Industries SAS or its affiliated companies.
Schneider Electric · 800 Federal Street, Andover, MA 01810 USA

March 2023
Z207552-0H nk

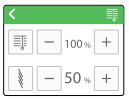
## Off-Screen Blinds Button Operation

### Open Blinds Button

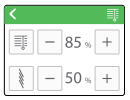
**Short Tap**
Display changes to Blinds submenu with status. Blinds in room go to 0%.




**Long Tap**
Display changes to Blinds submenu with status. Blinds percentage decreases until button is released. Display provides level indication.



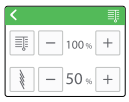
*Starting state display example*



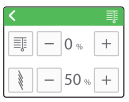
*Button released*

### Close Blinds Button

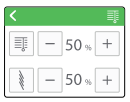
**Short Tap**
Display changes to Blinds submenu with status. Blinds in room go to 100%.




**Long Tap**
Display changes to Blinds submenu with status. Blinds percentage increases until button is released. Display provides level indication.



*Starting state display example*



*Button released*

## China RoHS Compliance Information

### Environment-Friendly Use Period (EFUP) Table

| 部件名称 | 有害物质 - Hazardous Substances | | | | | |
|---|---|---|---|---|---|---|
| Part Name | 铅 (Pb) | 汞 (Hg) | 镉 (Cd) | 六价铬 (Cr (VI)) | 多溴联苯 (PBB) | 多溴二苯醚 (PBDE) |
| 电子件 Electronic | X | O | O | O | O | O |

本表格依据SJ/T11364的规定编制。
O: 表示该有害物质在该部件所有均质材料中的含量均在GB/T 26572规定的限量要求以下。
X: 表示该有害物质至少在该部件的某一均质材料中的含量超出GB/T 26572规定的限量要求。
（企业可在此处，根据实际情况对上表中打 "X" 的技术原因进行进一步说明。）

This table is made according to SJ/T 11364.
O: indicates that the concentration of hazardous substance in all of the homogeneous materials for this part is below the limit as stipulated in GB/T 26572.
X: indicates that concentration of hazardous substance in at least one of the homogeneous materials used for this part is above the limit as stipulated in GB/T 26572

Z000057-0B

USA: +1 888-444-1311
Europe: +46 10 478 2000
Asia: +65 6484 7877
www.schneider-electric.com

Life Is On Schneider Electric

© 2023 Schneider Electric. All rights reserved. All trademarks are owned by Schneider Electric Industries SAS or its affiliated companies.
Schneider Electric · 800 Federal Street, Andover, MA 01810 USA

March 2023
Z207552-0H nk