## CleanSwitch Lock

Contact-free switch with digital input
for standard and integration for Feller, Hager, Gira and Jung switch systems

## Translation of the original instructions

## General


$x=$ Feller, $y=$ Hager, $z=$ Gira $/$ Jung


Feller / Hager

(1) Front cover
(2) Cover frame

(3) Screws
(4) Mounting frame

Gira / Jung

(5) Sensor housing
(6) Print module

## 1 Safety instructions

The device may only be installed and commissioned by trained and qualified personnel.
The device may only be opened and repaired by the manufacturer.
The device may only be connected to a protection low-voltage system with safe electrical separation.
Always consider the safety functions of your application as a whole, never just in relation to one individual section of the system.
The installer is responsible for carrying out a risk assessment and installing the detector and the system correctly.
Avoid touching any electronic components.

## 2 Mounting

Standard example


| 1 | Feller / Hager |
| :--- | :--- |

3 Configuration

## Factory settings



## DIP switches

| 1-3 Optical feedback |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Green/red |  | Red/Red |
|  | Red/green |  | Blue/Blue |
|  | Blue/green |  | -/Green |
|  | Green/green |  | -/Blue |

4 ON Toggle mode
4 OFF Pulse mode


4 Electric connections and operating principles


Stripping length min. 8.5 mm (solid wire or flexible wire)


| Lock input | Activation | Mode | Relay output | LED |
| :---: | :---: | :---: | :---: | :---: |
| OFF | - | Pulse/ Toggle | OFF | refer to chapter 3 |
| OFF | ${ }^{\prime \prime \prime}$ | Pulse | ON - Pulse (0.3 s) | refer to chapter 3 |
|  |  | Toggle | ON |  |
| ON | - | Pulse | OFF | red* |
|  |  | Toggle | if ON switches OFF |  |
| ON |  | Pulse/ <br> Toggle | OFF | Flashing red 3 times* |

*Note: When the lock input is active, the sensor lights or flashes red 3 times, independent of the setting of the DIP switches (chapter 3).


| Technology | Microwave Doppler Radar |  |
| :---: | :---: | :---: |
| Frequency | 24.125 GHz |  |
| Detection range | $0.1-0.5 \mathrm{~m}$ |  |
| Detection mode | Pulse mode: The sensor detects during hand movement Toggle mode: First movement on/second movement off |  |
| Detection speed | Min: 5 Hz or $\pm 3 \mathrm{~cm} / \mathrm{s}$ Max: 200 Hz or $\pm 1.2 \mathrm{~m} / \mathrm{s}$ |  |
| Supply voltage / Input | $\begin{aligned} & 12-24 \mathrm{VAC} \pm 10 \%(50-60 \mathrm{~Hz}) \\ & 12-24 \mathrm{VDC}+20 \% /-10 \% \end{aligned}$ |  |
| Max. power consumption | < 1 W (with optical feedback) |  |
| Output | Relay with NO contact (potential-free) <br> Max. switching voltage/switching current (DC): 1 A up to $30 \mathrm{~V}, 0.5 \mathrm{~A}$ up to 60 V <br> Max. switching voltage/switching current (AC): 1 A up to 50 V <br> Max. switching capacity: 30 W (DC)/50 VA (AC) |  |
| Output hold time | "Relay hold time": 0.3 s "LED hold time": 2 s |  |
| Storage/operating temperature | -20 to $+60^{\circ} \mathrm{C}$ |  |
| Protection class | Standard | IP65 (fixed with 4 screws, smooth surface) |
|  | Feller / Hager / Gira / Jung | IP20 |
| Dimensions (mm) | Standard / Feller | $88 \times 88 \times 38 \mathrm{~mm}(\mathrm{~L} \times \mathrm{W} \times \mathrm{D})$ |
|  | Hager | $92 \times 92 \times 38 \mathrm{~mm}(\mathrm{~L} \times \mathrm{W} \times \mathrm{D})$ |
|  | Gira / Jung | $80 \times 80 \times 42 \mathrm{~mm}(\mathrm{~L} \times \mathrm{W} \times \mathrm{D})$ |
| Weight | 55 g |  |
| Materials | Standard / Feller | ASA / PC |
|  | Hager / Gira / Jung | Duroplast / ASA / PC |

Note: According to the VAH List, CleanSwitch is resistant to surface disinfectants in hospitals.

## 7 EU Declaration of Conformity

C See attachment
8 WEEE


Devices with this symbol must be treated separately during disposal. This must be done in accordance with the laws of the respective countries for environmentally sound disposal, processing and recycling of electrical and electronic equipment.

## 9 FCC approval

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This device meets the requirements of Part 15 of the FCC regulations and the RSS-210 standard of Industry Canada.
Warning: Changes or modifications made to this device may void the FCC authorisation to operate this device.

10 Contact
BBC Bircher Smart Access, BBC Bircher AG, Wiesengasse 20, CH-8222 Beringen, www.bircher.com
Made in China / Designed in Switzerland

