

### **TECHNICAL DOCUMENTATION**

#### **FEATURES**

- Actuator for one (1x) electric strike through a monostable relay
- Encrypted communication with the access control device during the opening of the door, either via serial communication or through a secure KNX object (depending on the access control device)
- Supports KNX Data Secure
- · Manual output operation with push button and LED status indicator
- · Auxiliary power supply required
- · Total data saving on power failure
- Integrated KNX BCU (TP1-256)
- Dimensions 67 x 90 x 36 mm (2 DIN units)
- DIN rail mounting (IEC 60715 TH35), with fixing clamp
- Conformity with CE, UKCA, RCM directives (marks on the right side)

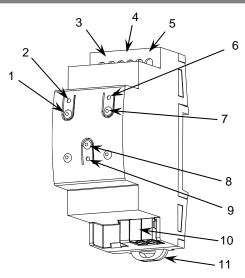


Figure 1: Securel v3

1. Pairing button 2.	Pairing LED	3. Auxiliary power supply	Electric strike     output	5. Encrypted communication	6. Output status LED
7. Output control button	8. Programm	ning/Test button	9. Programming/Test LE	ED 10. KNX connector	11. Fixing clamp

PROGRAMMING/TEST BUTTON: short button press to set programming mode. If this button is held while connecting the device to the auxiliary power supply, it enters the safe mode. If this button is held for more than 3 seconds, the device enters the test mode. In order to perform a KNX Secure factory reset, while the device is in safe mode, press the button for 10 seconds until the programming LED changes its state.

PROGRAMMING/TEST LED: programming mode indicator (red). When the device enters the safe mode, it blinks (red) every half second. The manual mode is indicated by the green color. During the start-up (after reset or power failure) and if the device is not in safe mode, it emits a red flash. PAIRING BUTTON: holding this button for more than three seconds will activate the pairing mode and delete the previous one in case the device was paired before.

PAIRING LED: the LED will flash in blue color while the device is unpaired. Once paired, the LED remains off.

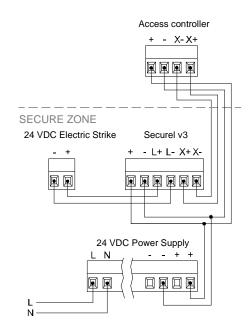
GENERAL S	SPECIFICATION	ONS				
CONCEPT			DESCRIPTION			
Type of device			Electric operation control device			
	Voltage (typical)		29 VDC SELV			
	Voltage range		21-31 VDC			
KNY cupply	Maximum consumption	Voltage	mA	mW		
KNX supply		29 VDC (typical)	2.8	81.2		
		24 VDC <sup>1</sup>	10	240		
	Connection type			Typical TP1 bus connector for 0.8 mm Ø rigid cable		
External power	er supply			24 VDC. Maximum consumption: 13 mA		
Operation ten	nperature		0 +55 °C	0 +55 °C		
Storage temp	erature		-20 +55 °C	-20 +55 °C		
Operation hur			5 95%	5 95%		
Storage humi	dity		5 95%	5 95%		
Complementa	ary characteristic	cs	Class B	Class B		
Protection class			III	III		
Operation type Device action type			Continuous operation			
			Type 1			
Electrical stress period			Long			
Degree of protection			IP20, clean environment			
Installation			Independent device to be mounted inside electrical panels with DIN rail (IEC 60715)			
Minimum clearances			Not required			
Response on external power supply failure			Data saving according to parameterization			
Response on	external power	supply restart	Data recovery according to para	Data recovery according to parameterization		
Operation indicator			The programming LED indicates programming mode (red) and test mode (green). The output LED indicates its status (green). The pairing LED will flash in blue while the device is unpaired.			
Weight			79 g			
PCB CTI inde	eX		175 V			
Housing mate	erial		PC FR V0 halogen free			
		ret cono conorio (KNV Eq				

<sup>&</sup>lt;sup>1</sup> Maximum consumption in the worst-case scenario (KNX Fan-In model).

EXTERNAL POWER SUPPLY SPECIFICATIONS AND CONNECTIONS				
CONCEPT	DESCRIPTION			
Voltage	24 VDC			
Current	13 mA			
Connection method	Screw terminal block (0.4 Nm max.)			
Cable cross-section	0.5-2.5 mm <sup>2</sup> (IEC) / 26-12 AWG (UL)			

OUTPUTS SPECIFICATIONS AND CONNECTIONS			
CONCEPT	DESCRIPTION		
Number of outputs	1		
Output type / Disconnection type	Potential-free output through monostable relay / Micro-disconnection		
Maximum load per output	1 electric strike		
Rated current per output	DC 1.5 A @ 24 VDC (36 W)		
Short-circuit protection	NO		
Overload protection	NO		
Over-voltage protection	NO		
Connection method	Screw terminal block (0.4 Nm max.)		
Cable cross-section	0.5-2.5 mm² (IEC) / 26-12 AWG (UL)		
Maximum response time	10 ms		
Mechanical lifetime (min. cycles)	20000000		
Electrical lifetime (min. cycles)	100000 @ 3 A / 50000 @ 5 A		

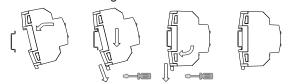
## SYSTEM CONNECTION DIAGRAM (ACCESS CONTROLLER, SECUREL V3, POWER SUPPLY AND ELECTRIC STRIKE)



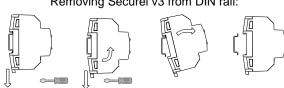
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- To program this device through the KNX bus, the auxiliary power supply must remain connected (24 VDC)
- This device is designed for standard electric strikes (normally-open circuit, i.e., the lock remains closed in the absence of current). When using fail-safe electric strikes (normally-closed circuit, i.e., the lock opens in the absence of current), a 24 VDC normally-closed relay between the fail-safe electric strike and the device must be installed.
- Please, use this device only to control one electric strike. Parallel or serial connection of two or more electric strikes is not allowed.
- The cable length between the power supply, Securel v3 and the electric strike should be 30 meters maximum.
- The cable length between the Securel v3 and the access controller (X+ | X-) should be 30 meters maximum.

### Attaching Securel v3 to DIN rail:



### Removing Securel v3 from DIN rail:





## SAFETY INSTRUCTIONS AND ADDITIONAL NOTES

- Installation should only be performed by qualified professionals according to the laws and regulations applicable in each country.
- Do not connect the mains voltage nor any other external voltage to any point of the KNX bus; it would represent a risk for the entire KNX system. The facility must have enough insulation between the mains (or auxiliary) voltage and the KNX bus or the wires of other accessories, in case of being installed.
- Once the device is installed (in the panel or box), it must not be accessible from outside.
- Keep the device away from water (condensation over the device included) and do not cover it with clothes, paper or any other material while in use.
- The WEEE logo means that this device contains electronic parts and it must be properly disposed of by following the instructions at https://www.zennio.com/en/legal/weee-regulation.
- This device contains software subject to specific licences. For details, please refer to https://zennio.com/licenses.