

## **CONTROL PANEL SLIDETRONIC II**



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Primarily designed to control gravitational fire closures produced by Somati system s.r.o. The panel can be also used to control hinged fire closures together with electromagnetic anchors and closers.

### 1. CONTROL PANEL SLIDETRONIC II







### 2. CONFIGURATION

Project Slidetronic II solves control of magnets (brakes) of fire gates. Power of control circuits can be backed up by an additional battery module, which can keep gate in open position in case of power failure.

#### 3. INSTALLATION AND SETUP

Before the initial startup, mechanical part of gate installation has to be fully completed to avoid mechanical damage of the gate during magnet/brake release. Before first activation connect only:

- power cable
- cable of magnet/brake
- terminals EPS (10 and 11) NC contact (during the contact disconnection, the panel is in alarm)
- if Slidetronic II is equipped with a battery module, connect the battery to control panel, the battery is delivered in disconnected status there is an insulator between the battery contact, which has to be removed (see the Picture 2: Battery Module)
- check if the resistance 4.7 k $\Omega$  is connected to the terminals 1, 2 (if the resistance is not connected, the panel is in alarm)

Control panel Slidetronic II is standardly equipped with a keyboard with "Start / Stop" buttons and also "Reset" button, which causes reset of the panel in case of alarm raised by local sensors. Gate can be stopped by the STOP button at any time.

When opening the control panel, be careful to avoid damage of printed cable placed between the keyboard and PCB.

When you activate the EPS – contact between 10 and 11 is disconnected and panel is in alarm. In case of connection of the contacts, the panel is automatically in standby mode.

In case of power failure, voltage is kept approximately 1 hour and then the power supply is disconnected in 8, 9 and the panel goes into standby mode.

IF ANY FUSES IN THE SWITCHBOARD ARE BLOWN, THEY CAN BE REPLACED ONLY ONCE. IF THEY ARE BLOWN AGAIN, THEIR REPLACEMENT IS NOT PERMITTED.

IF THE PROCEDURE STATED IN THE TECHNICAL DOCUMENTATION IS NOT RESPECTED, IT MAY LEAD TO THE LOSS OF WARRANTY.

IN THE EVENT OF MALFUNCTION, AT FIRST, IT IS NECESSARY TO DETECT THE POSSIBLE CAUSE OF THE MALFUNCTION AND REPAIR IT. AFTER THE MALFUNCTION IS REPAIRED, IT IS POSSIBLE TO REPLACE THE BLOWN FUSE.

IT IS FORBIDDEN TO MANIPULATE WITH THE CIRCUITS OF THE SWITCHBOARD AND CHANGE THEIR CONNECTIONS. IF THIS CONDITION IS NOT COMPLIED, IT IS NO LONGER POSSIBLE TO APPLY THE SWITCHBOARD WARRANTY.



THE SWITCHBOARD CANNOT BE OPENED BY A PERSON WITHOUT AN APPROPRIATE TRAINING AND QUALIFICATION ACCORDING TO THE DECREE NO. 50/1978, § 6.

Operating temperature of the Slidetronic II switchboard is from  $+10^{\circ}$ C to  $+35^{\circ}$ C. If the ambient temperature is lower than  $+10^{\circ}$ C or higher than  $+35^{\circ}$ C, the switchboard cannot be used! Temperatures above  $+25^{\circ}$ C and under  $+15^{\circ}$ C, cause shortening of battery life. Exceptionally, the Slidetronic II switchboard can be operated at lower temperatures, maximally to  $-5^{\circ}$ C, on condition that the input power is permanently connected to provide minimal warming of the control circuits.

### 4. FUNCTIONS OF THE CONTROL PANEL SLIDETRONIC II

LED switch plate:

LED ७ (green LED) = network (voltage 230 V)

- On = network is connected
- Flashing = no network (if the battery is connected)
- Off = stopped activity (no voltage 230 V and no battery)

LED **⊥** (red LED) = movement of gate

- On = gate is not moving
- Flashing = gate is closing

LED ℍ (yellow LED) = battery status

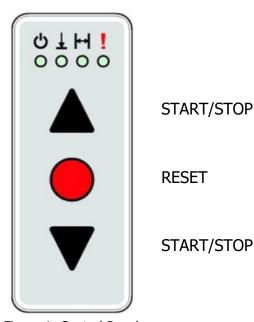
- On = charged over 3,9 V
- Flashing = battery is charging
- Off = discharged or no battery

LED ! (red LED) error (!)

- 1 flash = alarm of detectors
- 2 flash = alarm of EPS

If the two alarms are activated at the same time, they are displayed sequentially i.e. one flash – pause – two flashes.

Note: If the battery is in the device and there is a power failure, the standby mode is activated. Voltage of the battery falls below 3.3 V, the unit goes into standby mode, turns off all relays, disconnects the detectors, reduces its own consumption and repeatedly after 35 s., the LEDs gradually flash on the swich plate from left to right.







### 5. DESCRIPTION OF INTERNAL TERMINAL

Input side:

```
    1 - detectors 0 V - closed 4,7 kΩ loop for connection of detectors between 1 and 2
    2 - detectors +24 V - closed 4,7 kΩ loop for connection of detectors between 1 and 2
    10,11 - EPS - potential-free contact NC
    11,12 - START/STOP potential-free buttons - NO contact (external button)
```

Output side:

### 6. DESCRIPTION OF SETTINGS OF DIP SWITCH FUNCTIONS

Controls:

DIP output for warning light 1 ON = flashing only during alarm OFF = flashing always when movement is detected ON = time of brake release is set by trimmer T2 0–130 s.DIP 2 OFF = brake release has no time limit DIP 3 ON = time of brake activation is set by trimmer T2x3 = 0-390 s. (DIP 3 isvalid for new devices from 2015, older devices are without the function) OFF = brake activation has no time limit DIP no function **Trimmer** T1 time of pre-flashing 0-13 s. (from program version V2.3 it is 0-51 s.)

After pressing the START button, siren is activated at first and after passage of the set time, the gate starts closing.

Trimmer T2 time of release 0 - 130 s.

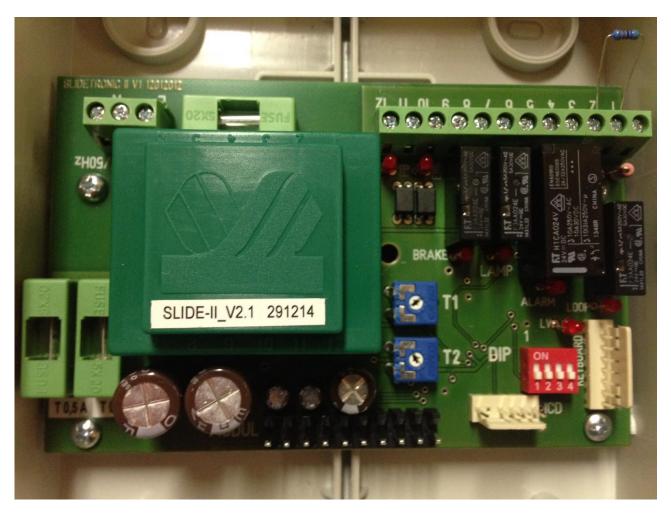
It is an adjustable time during which, after pressing START button, the brake is released. After passage of the set time the brake is activated again (by recovery of voltage in terminals 8, 9). Time T2 is normally set the way that after complete closure of gate, release of brake lasts another 10 seconds and then is activated again.

By setting of time T2 there is automatically set time of brake activation on triple value of brake release (in case DIP 3 = ON).



Description of DIP 3 function—time of brake activation:

- After power reboot or pressing keyboard button, the brake is activated for the time 3 x T2, then is released again.
- After returning from alarm, EPS activates the brake and after the time 3 x T2 it also releases the brake.
- After pressing keyboard button or external button for release, brake is released permanently if DIP2 is OFF, in case DIP2 is ON, brake is released for T2, then is activated for time 3 x T2, and after that is released permanently.



Changes are valid for devices from 2015, which has label SLIDE-II\_V2.1, older devices (without label SLIDE-II\_V2.1) do not have DIP 3 function.





# 7. DESCRIPTION OF FUNCTION WITH INDIVIDUAL SYSTEMS OF GATES SOMATI SYSTEM

### A. System of electromagnet

In case of fire, the central unit of fire alarm system or local detectors send a signal into the control panel which releases electromagnet holding the gate in open position. After the magnet is released the gate is closed gravitationally (using an inclined rail). After alarm of local detectors and the reactivation of the system, it is necessary to RESET the control panel (Figure 1: Control Panel) pressing the RESET button. If there is not installed a backup power, the gate also closes in case of power failure. During normal operation, the leaf can be opened manually with recessed handles and closed by pressing START-STOP buttons on the control panel (Picture 1: Control Panel). By pressing the START-STOP buttons once again, the voltage 24V on magnet is restored and gate stays in open position (due to the magnet). When opening the fire closure, please, take extra care to avoid mechanical damage of the magnet and its function – especially, when the gate is almost closed to the end position (max. opening), it is necessary to reduce the speed of closing (to minimize the impact on the electromagnet).

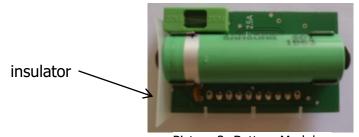
### **B.** System of electromagnetic brake:

In case of fire, the central unit of fire alarm system or local detectors send a signal into the control panel which releases electromagnetic brake holding the gate in open position. After the el. brake is released the gate is closed using counterweight system. After alarm of local detectors and the reactivation of the system, it is necessary to RESET the control panel (Figure 1: Control Panel) pressing the RESET button. If there is not installed a backup power, the gate also closes in case of power failure. During normal operation, the leaf can be opened manually with recessed handles and closed by pressing START-STOP buttons on the control panel (Picture 1: Control Panel). By pressing the START-STOP buttons once again, the gate stops. The advantage of the system is that it enables to stop the gate in any position and also to regulate the closing speed directly on electromagnetic brake.



### 8. RECOMMENDED EXTERNAL DEVICES

- light and acoustic signalization, siren + warning light FLASHNI mark., FL/RL/T/D, 24 V DC, 1 W
- electromagnetic brake LINNIG SB 3.3.0, 24 V DC, 2,2 W
- electromagnet MEC@Fire M05411D, 24 V DC, 1,6 W
- base of detector SS with the resistor 470 Ohm, mark. B401R, optical smoke detector mark.2351E or thermo-differential detector 58 °C mark.5351E, SYSTEM SENZOR
- UPS backup power is not part of the set (additional batteries can be purchased). Battery Lion 3.7 V/2200 mAh when transported or disconnected for a long time, it has to be removed from power. When it is inserted again, polarity has to be kept otherwise the fuse on the module is interrupted. Time of the backup function of the battery, fully charged and in good condition, is about 1 hour assuming own consumption and usage of brake (24 V 0.1 A) or warning light (24 V 0.08 A). New battery can reach 2 hours. Fully charged battery requires approx. 10 hours of charging.



Picture 2: Battery Module

### 9. ELECTRICAL AND DIMENSION DATA

Voltage 230 V/50 Hz
Power input 10 VA
Output brake max. 24 V/0,1 A
Output alarm max. 24 V/0,1 A
Relay alarm 60 V/3 A

Output detectors 24 V

Backup battery 3,2 V/2,2 Ah Backup time about 1 hod.

Protection IP 54

Panel size H: 20 cm; W: 14 cm; D: 8 cm

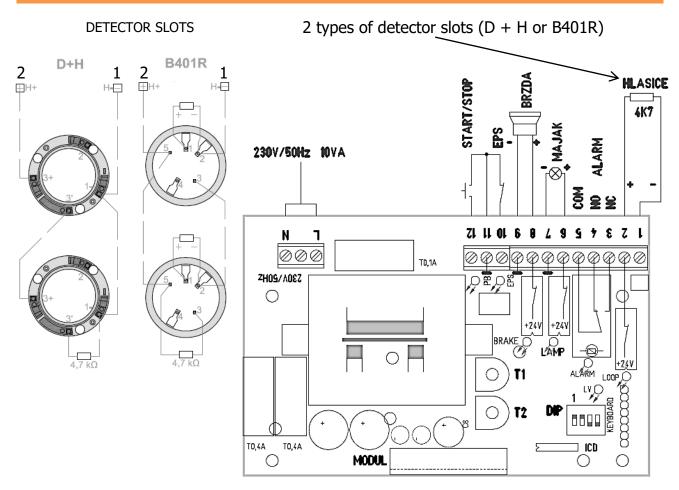
Working temperature from -15 to +35 °C (lower temperatures cause reduction of backup time)

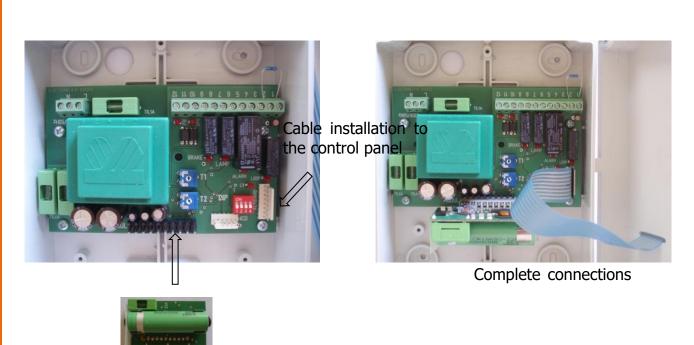
Grommets (3 pieces) supplied in the package have to be drilled according to the dimensions. Standardly the grommets are not drilled. They have to be drilled according to the location of cables (from the top or the bottom).





### 10. DIAGRAMS







Installation of the Battery Module



### 11. DECLARATION OF CONFORMITY

EC DECLARATION OF CNFORMITY Vypracoval: JRC Strana 1 (selkem 1) Zakázka č: Dno: 24.4.2009



### EC DECLARATION OF CONFORMITY

The manufacturer: SOMATI, s.r.o., Jihlavská 510/2c, 564 41 Troubsko IČ 253 38 323

Product:

SLIDETRONIC

control unit for fire doors

way of appraisal conformity:

Tests were done in laboratory nr. 1063 TESTCOM, acreditated ČIA, they issue protocols

3.4.2006, protocol nr. EB1367-2, electrical safety

18.4.2006, protocol nr.10/06 electromagnetical compatibility

List of used technical standards:

Decree nr. 17/2003 Sb. Low voltage devices, (73/23/ES)

Decree nr. 18/2003 sb. Electromagnetical compatibility (89/336/ES)

ČSN-EN60950-1:2003.

CSN-EN50130-4;1999, modification A1:1999, modification A2:2003,

CSN-EN61000-6-3:2002

ČSN-EN61000-4-2:1997, modification A1:1999, modification Z1:2001

ČSN-EN61000-4-3 ed. 2:2003

ČSN-EN61000-4-4:1997

CSN-EN61000-4-5:1997, modification Z1:2001

CSN-EN61000-4-6:1997, modification Z1:2001

CSN-EN61000-4-11:1996

ČSN-EN55011:1999, modification A1:2001, modification A2:2003

We hereby declare that the speliced product is in conformity with theese standards

Troubsko 24.4,2009

ing, Jiří Ruč, SOMATI s.r.o.

