

iSMA-B-SP

User Manual

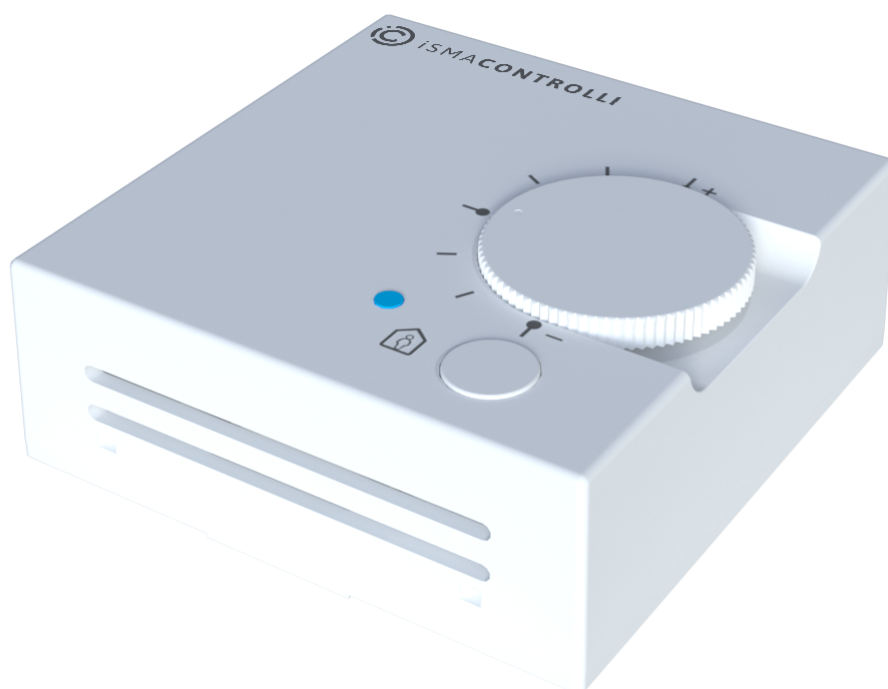


Table of Contents

1	Introduction	3
1.1	Revision History.....	3
2	Technical Specification	4
3	Dimensions	5
4	Connections.....	6
4.1	Internal Connections	6
4.2	Terminals.....	6
4.3	Front	7
4.4	Connection to iSMA-B-FCU	7
5	Thermistor Table	8
5.1	10K3A1 Thermistor	8

1 Introduction

The iSMA-B-SP is wall panel with a potentiometer and one function button; additionally, the panel has a built-in temperature sensor:

- temperature sensor;
- resistance potentiometer;
- push button;
- LED diode.

This device is ready to use with iSMA-B-FCU controllers without a need of any configuration. Connected to the FCU controller, the panel allows to change the basic parameters such as temperature setpoint or FCU controller's working mode. The actual status of this last parameter is indicated by the built-in LED diode. In effect, these two devices create a cost-effective solution for comfort and energy saving.

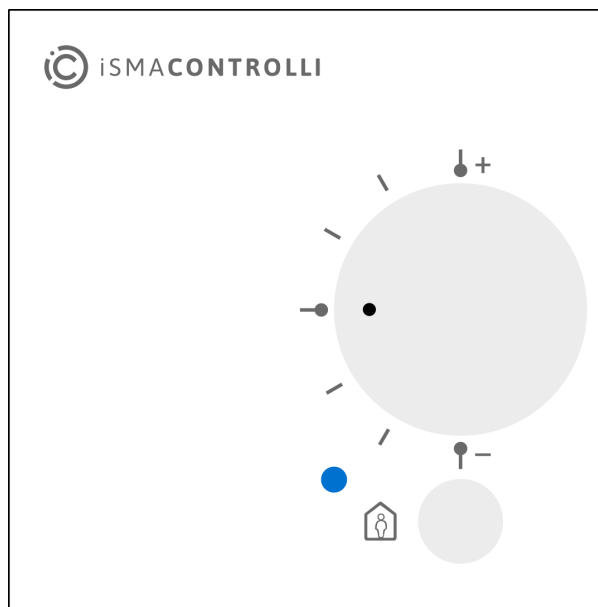


Figure 1. SP panel

1.1 Revision History

Rev.	Date	Description
1.0	4 Apr 2017	First edition
1.1	25 May 2022	Rebranded

Table 1. Revision history

2 Technical Specification

Temperature Sensor	Resistance thermistor	NTC 10k3A1
Potentiometer	Potentiometer	Range 0-10 k Ω
Push Button	Push button	Monostable, normal open, max. 50 mA
LED Diode	Blue LED diode	5 mA (diode without resistor, for more than 3 V external resistor required)
Dimensions	Width	71 mm
	Length	71 mm
	Height	27 mm

Table 2. Technical specification

3 Dimensions

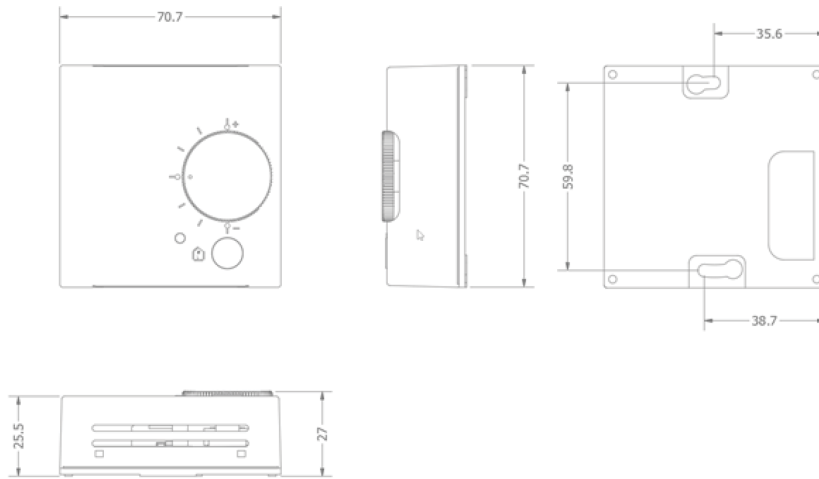


Figure 2. iSMA-B-SP dimensions

4 Connections

4.1 Internal Connections

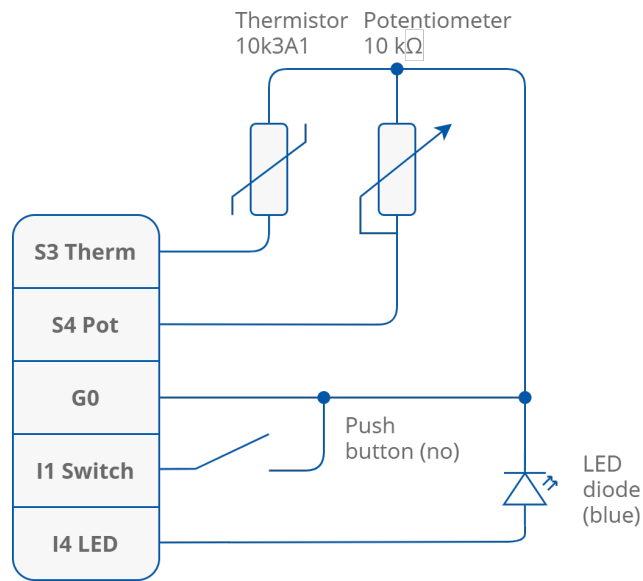


Figure 3. Internal connections

4.2 Terminals

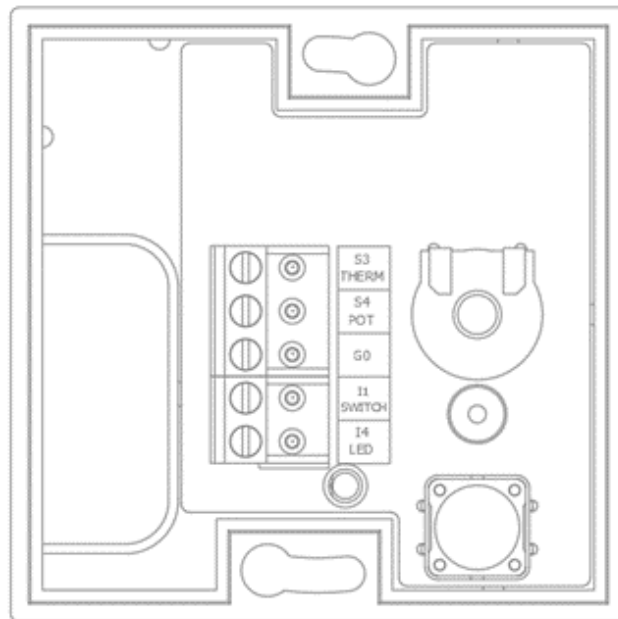


Figure 4. Terminals

4.3 Front

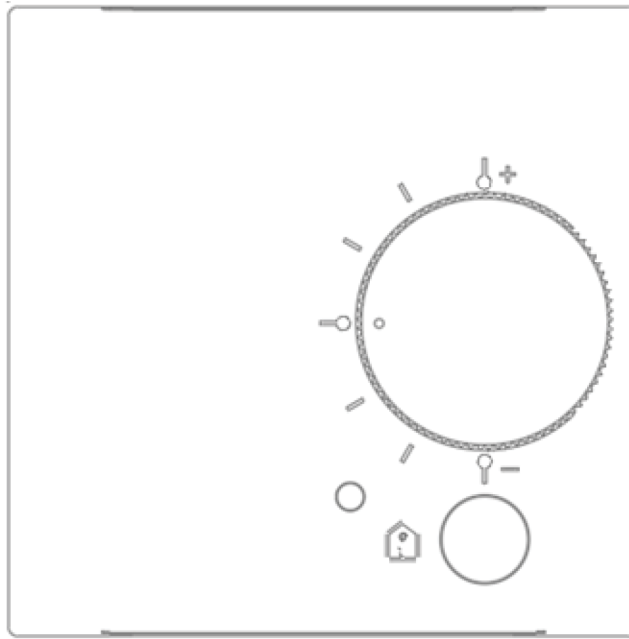


Figure 5. Front view

4.4 Connection to iSMA-B-FCU

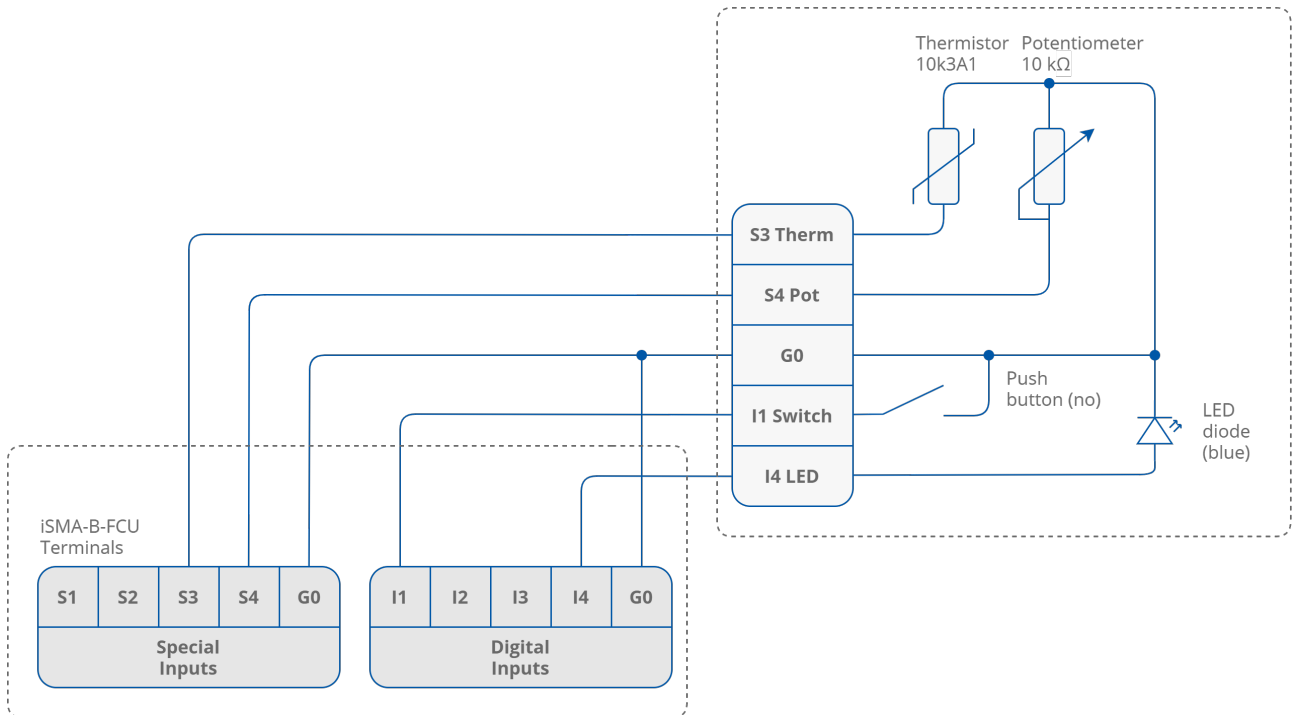


Figure 6. Connection diagram to FCU controllers

5 Thermistor Table

5.1 10K3A1 Thermistor

No.	1
Sensor	10K3A1
β coefficient	3975K
Manufacturers	Aquatrol, Cylon, Honeywell, Johnson, Satchwell, Seachange
$^{\circ}\text{C}$	Ω
-50	667828
-45	491749
-40	335671
-35	241840
-30	176683
-25	131251
-20	96974
-15	72895
-10	55298
-5	42314
0	32650
5	25396
10	19904
15	15714
20	12494
25	10000
30	8056
35	6530
40	5325
45	4367

No.	1
50	3601
55	2985
60	2487
65	2082
70	1751
75	1480
80	1256
85	1070
90	916
95	787
100	678
105	587
110	510
115	444
120	388
125	340

Table 3. 10K3A1 thermistor