

iSMA-B-SP

User Manual



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1 Introduction

1.1 About Simple Panel

Simple panel is a device designed to work with room temperature controllers. This device is fully passive and does not require any power supply. This device contains the following parts:

- Temperature Sensor,
- Resistance potentiometer,
- Push button,
- LED diode.

1.2 Revision history

Rev	Date	Description
1.0	2017.04.04	First edition

Table 1 Revision history

1.3 Technical specifications

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

Table 2 Technical specification

2 Dimensions

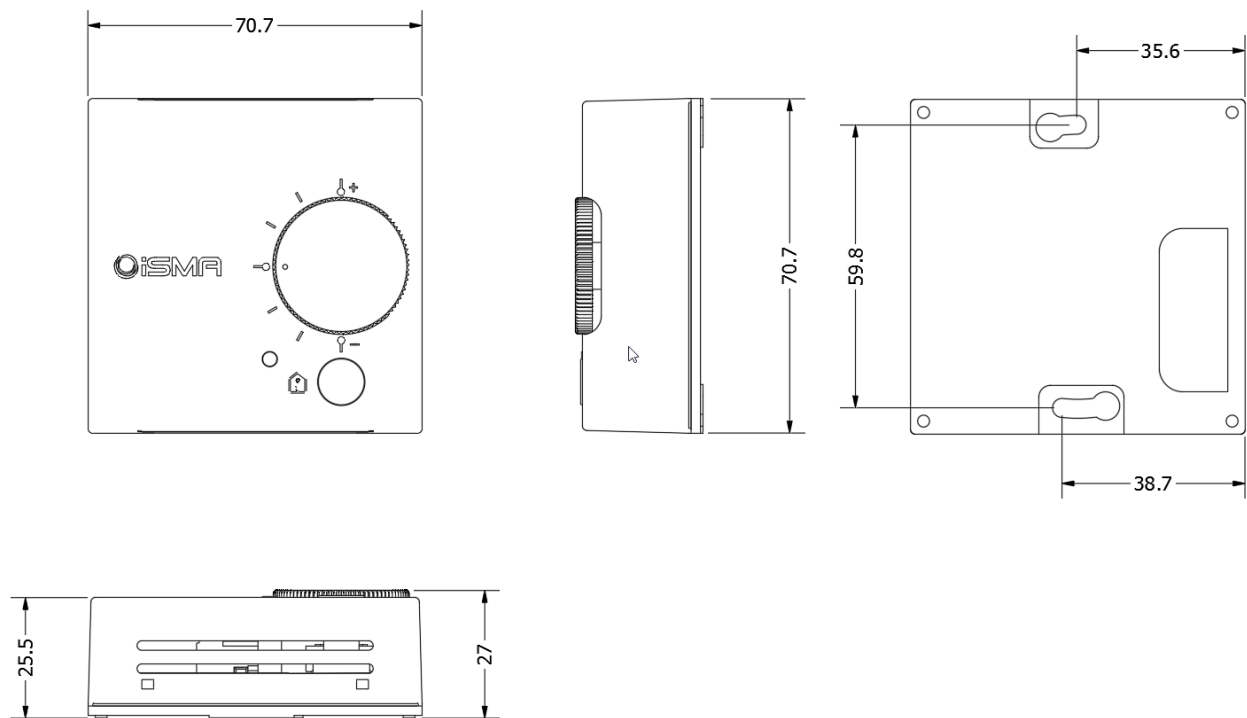


Figure 1 Simple panel dimension

3 Internal schema and electrical connection

3.1 Internal diagram

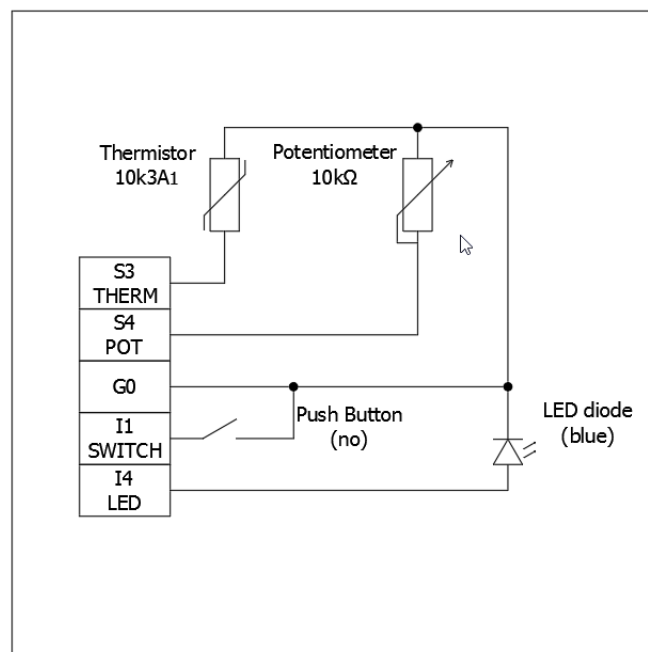


Figure 2 Simple panel – internal connection schema

3.2 Terminals

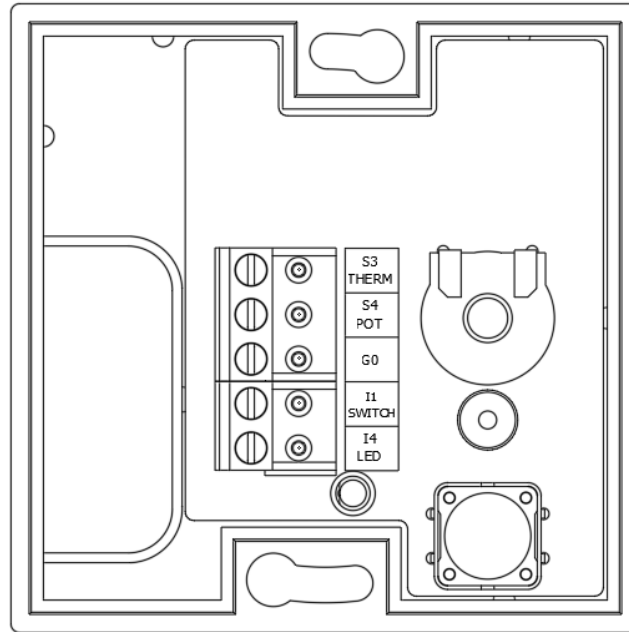


Figure 3 Simple Panel – internal view

3.3 Front view

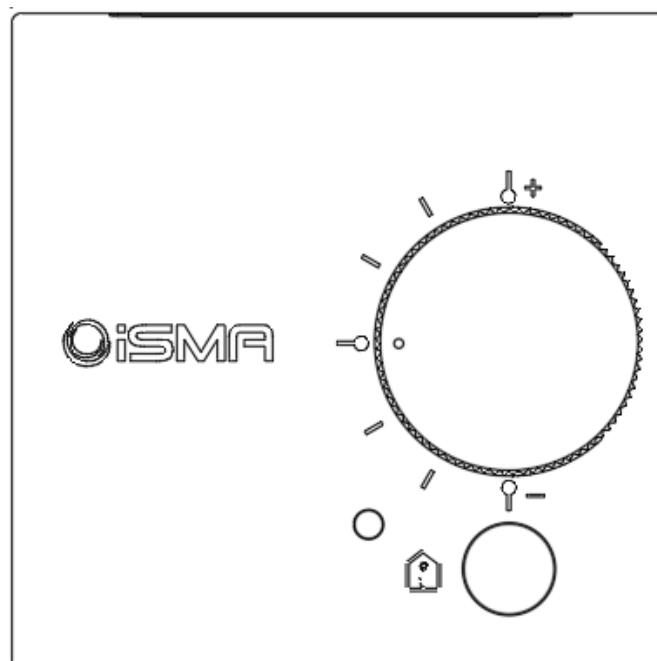


Figure 4 Simple Panel – front panel view

3.4 Connection to iSMA-B-FCU controllers

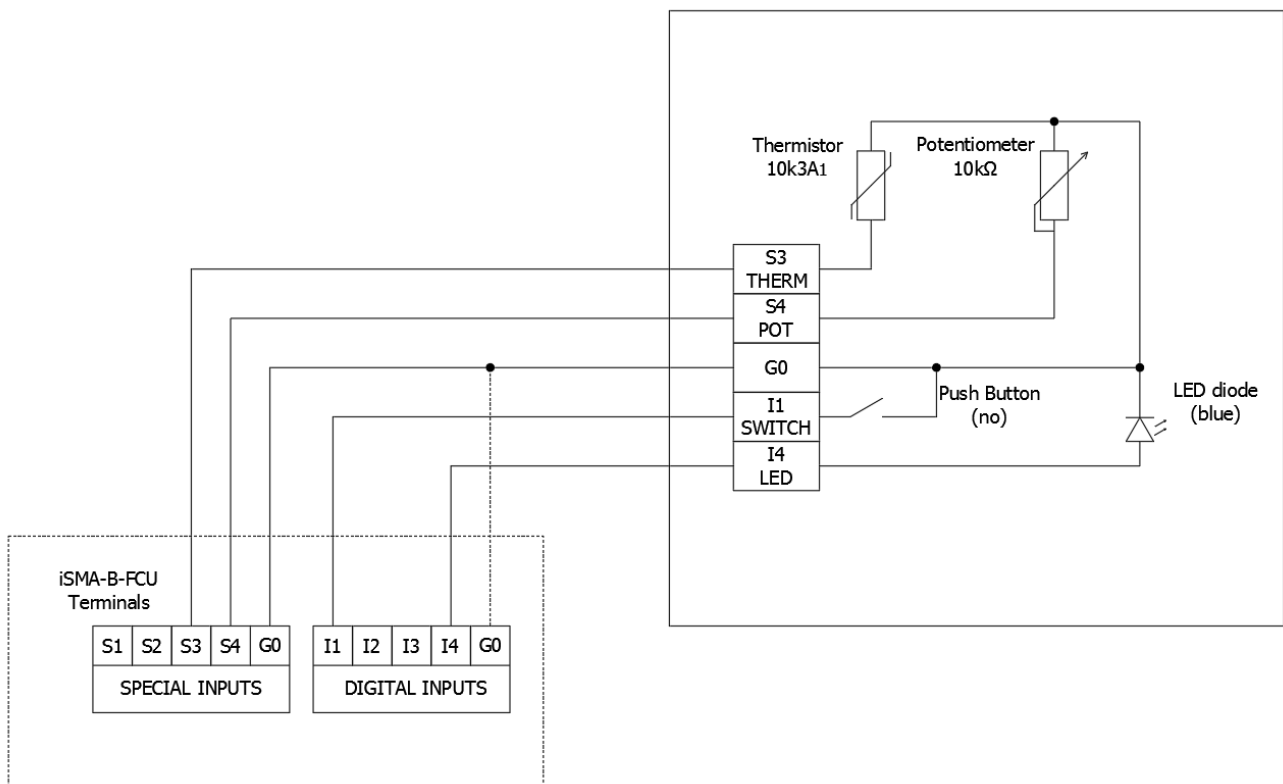


Figure 5 Diagram of connection to the iSMA-B-FCU controller

4 Built-in thermistor table

Sensor	10K3A1	β coefficient	3975K
Manufacturers		Aquatrol, Cylon, Honeywell, Johnson, Satchwell, Seachange	
$^{\circ}\text{C}$	Ω	$^{\circ}\text{C}$	Ω
-50	667828	40	5325
-45	491749	45	4367
-40	335671	50	3601
-35	241840	55	2985
-30	176683	60	2487
-25	131251	65	2082
-20	96974	70	1751
-15	72895	75	1480
-10	55298	80	1256
-5	42314	85	1070
0	32650	90	916
5	25396	95	787
10	19904	100	678
15	15714	105	587
20	12494	110	510
25	10000	115	444
30	8056	120	388
35	6530	125	340