



*ONLINE TRAINING*

# Practice 3 Solution

## Clima in Z38



Edition 1

2010

## Practice 3: Solution

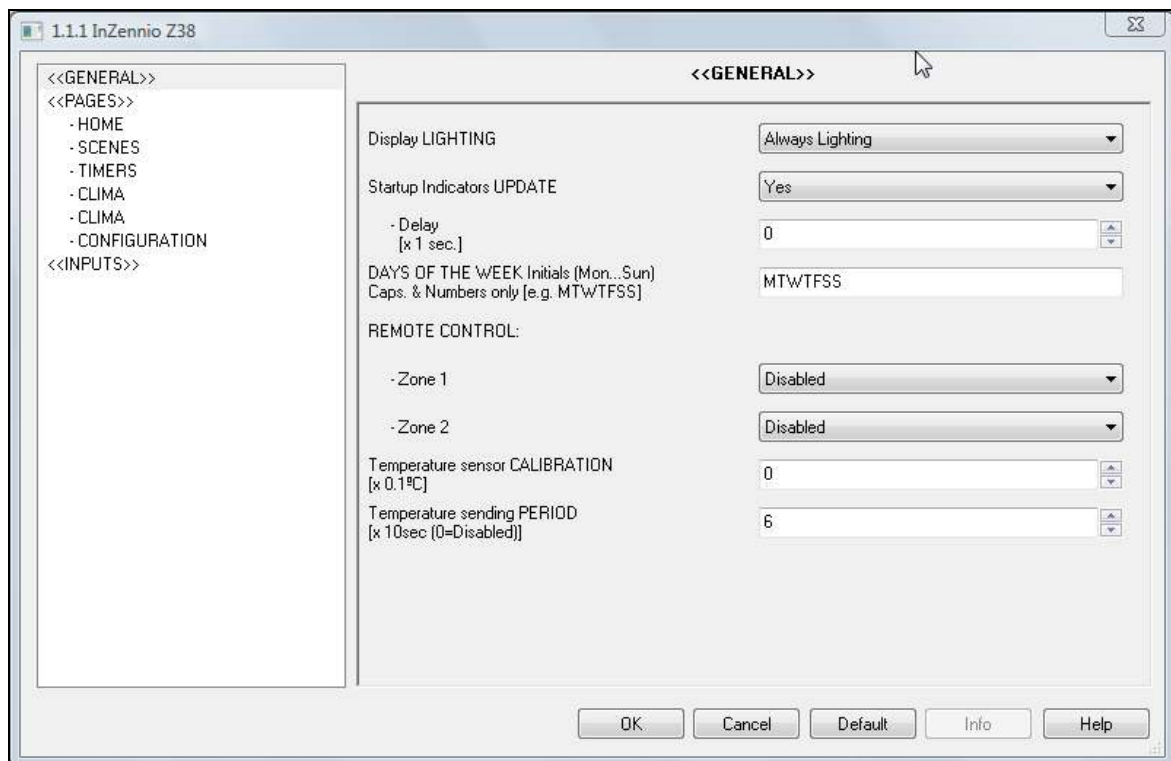
Open the **Practice 3** (2010 Training – Practice 3).

### Z38

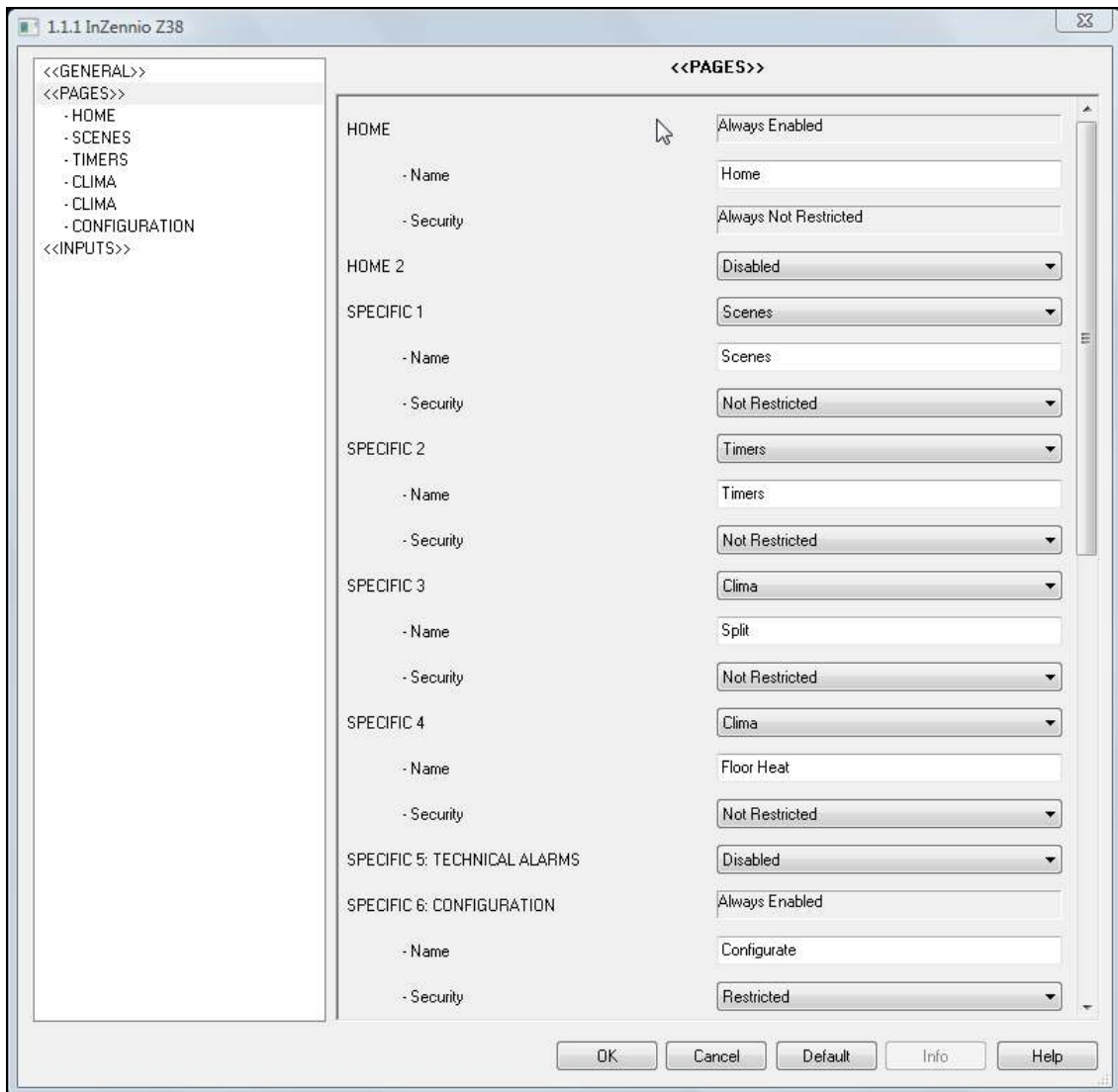
Select the edition of parameters in **touch panel Z38**.

In **General** tab, select:

- **Display Lighting:** Always Lighting
- **Startup Indicators Update:** Yes
  - ✓ Delay: 0
- **Days of the Week:** MTWTFSS
- **Remote control**
  - ✓ Zone 1 and Zone 2. Disabled
- **Temperature sensor Calibration:** 0
- **Temperature sending Period:** 6



In **Pages** tab, select:



• **Home: Always Enabled**

- ✓ Name: Home
- ✓ Security: Always Not Restricted

• **Home 2: Disabled**

• **Specific 1: Scenes**

- ✓ Name: Scenes
- ✓ Security: Not Restricted

• **Specific 2: Timers**

- ✓ Name: Timers

✓ Security: Not Restricted

• **Specific 3: Clima**

✓ Name: Split

✓ Security: Not Restricted

• **Specific 4: Clima**

✓ Name: Floor Heat

✓ Security: Not Restricted

• **Specific 5 Technical alarms: Disabled**

• **Specific 6 Configuration: Always Enabled**

✓ Name: Configurat.

✓ Security: Restricted

And we go on configuring every page we have previously enabled:



In **Home 1** select:

• **Box 1: Shutter Control**

✓ Name: Channel 1

✓ Icon: (38) Up/Down Shutter

✓ Indicator: Percentage

• **Box 2: Light Control**

✓ Name: Channel 2

✓ Type: On/Off+Light dimming (4bits)

✓ Icon: (7) On/Off Light

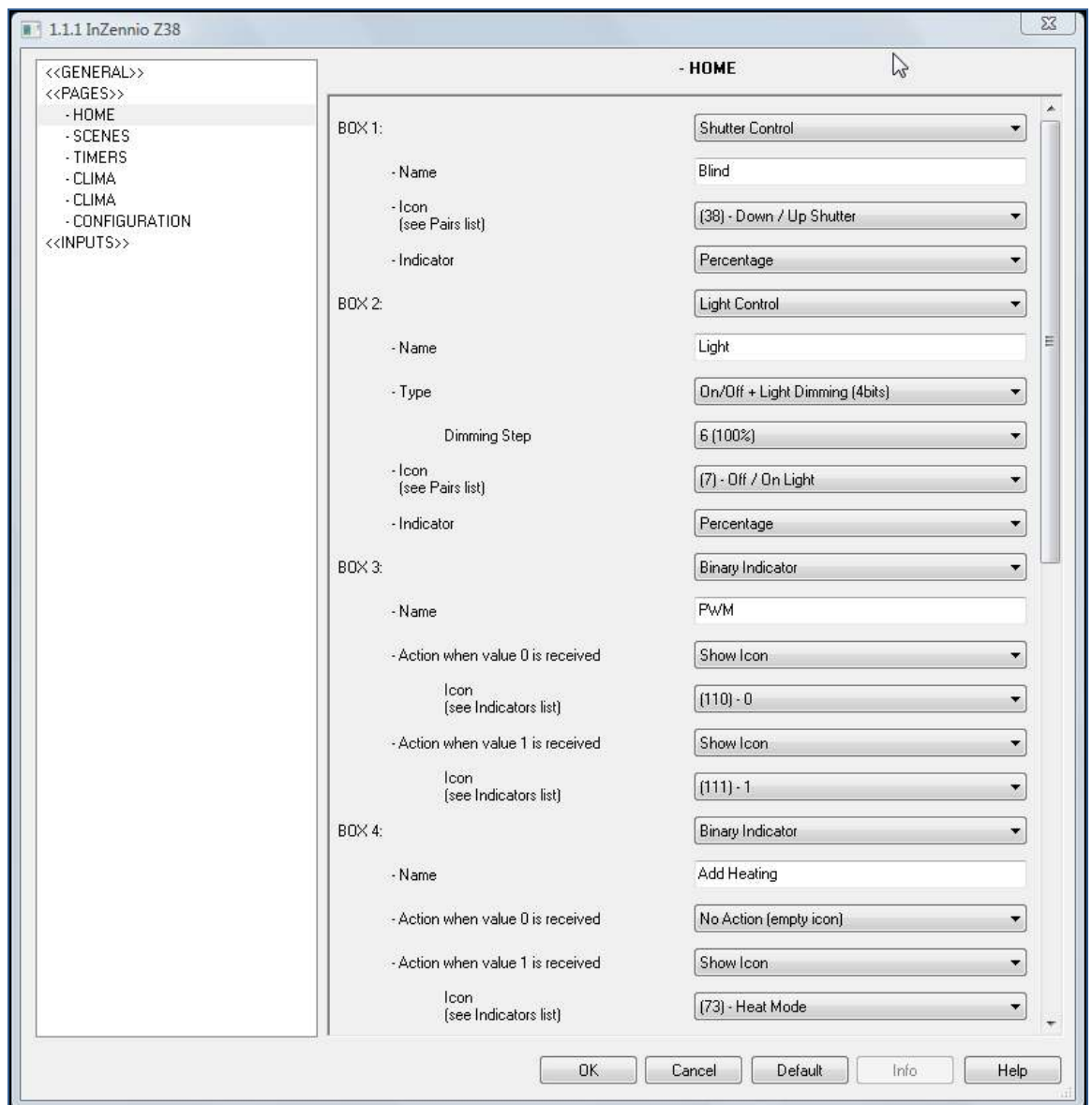
✓ Indicator: Percentage

• **Box 3** : Binary Indicator

- ✓ Name: PWM
- ✓ Action when value 0 is received: Show Icon
  - Icono:(110) 0
- ✓ Action when value 1 is received: Show Icon
  - Icon:(111) 1

• **Box 4** : Binary Indicator

- ✓ Name: Add. heating
- ✓ Action when value 0 is received: No Action
- ✓ Action when value 1 is received: Show Icon
  - Icon:(73) Heat Mode



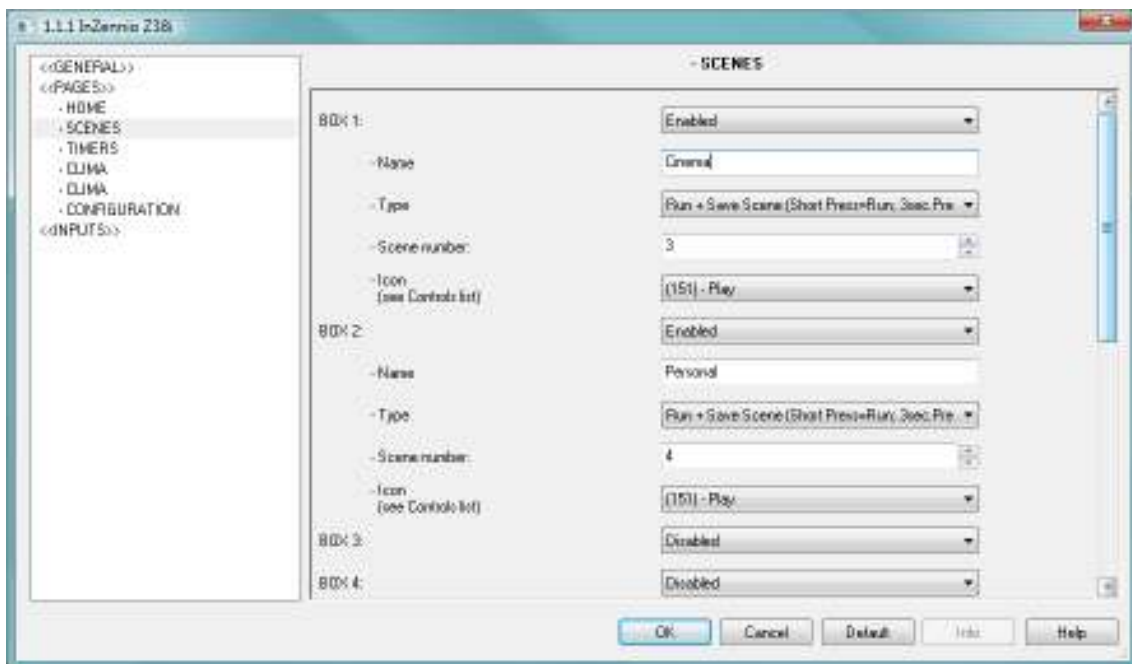
In **Scenes** tab select:

• **Box 1:** Enabled

- ✓ Name: Cinema
- ✓ Type: Run +Save Scene
- ✓ Scene number: 3
- ✓ Icon: (151) Play

• **Box 2:** Enabled

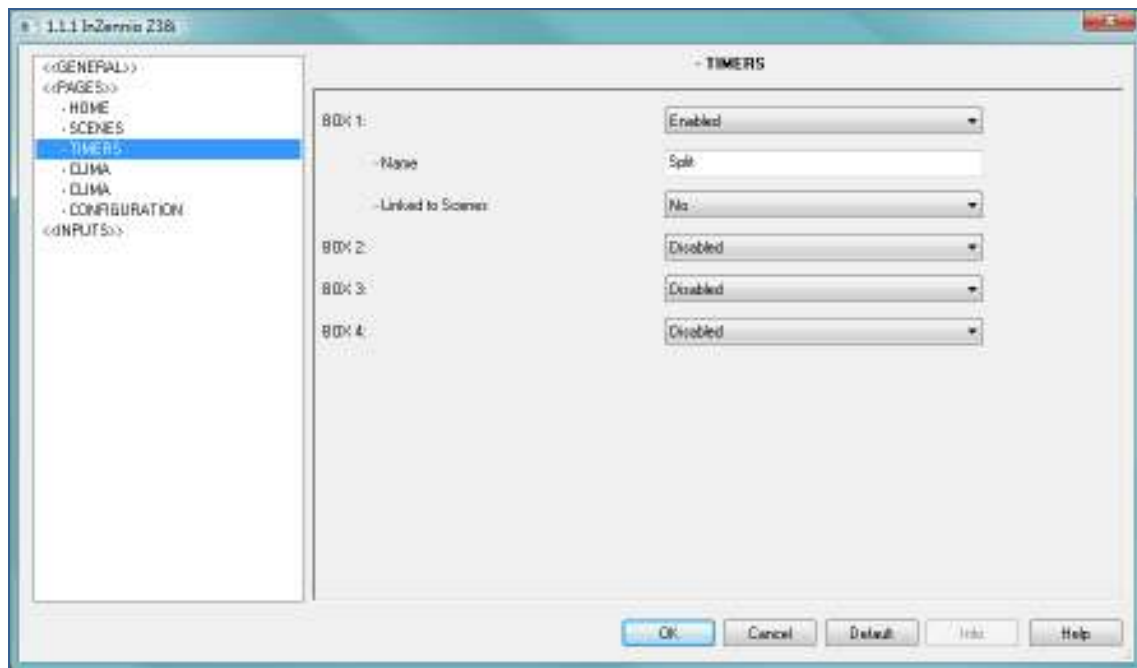
- ✓ Name: Personal
- ✓ Type: Run +Save Scene
- ✓ Scene number: 4
- ✓ Icon: (151) Play



In **Timers** tab select:

• **Box 1:** Enabled

- ✓ Name: Split
- ✓ Linked to Scenes: No

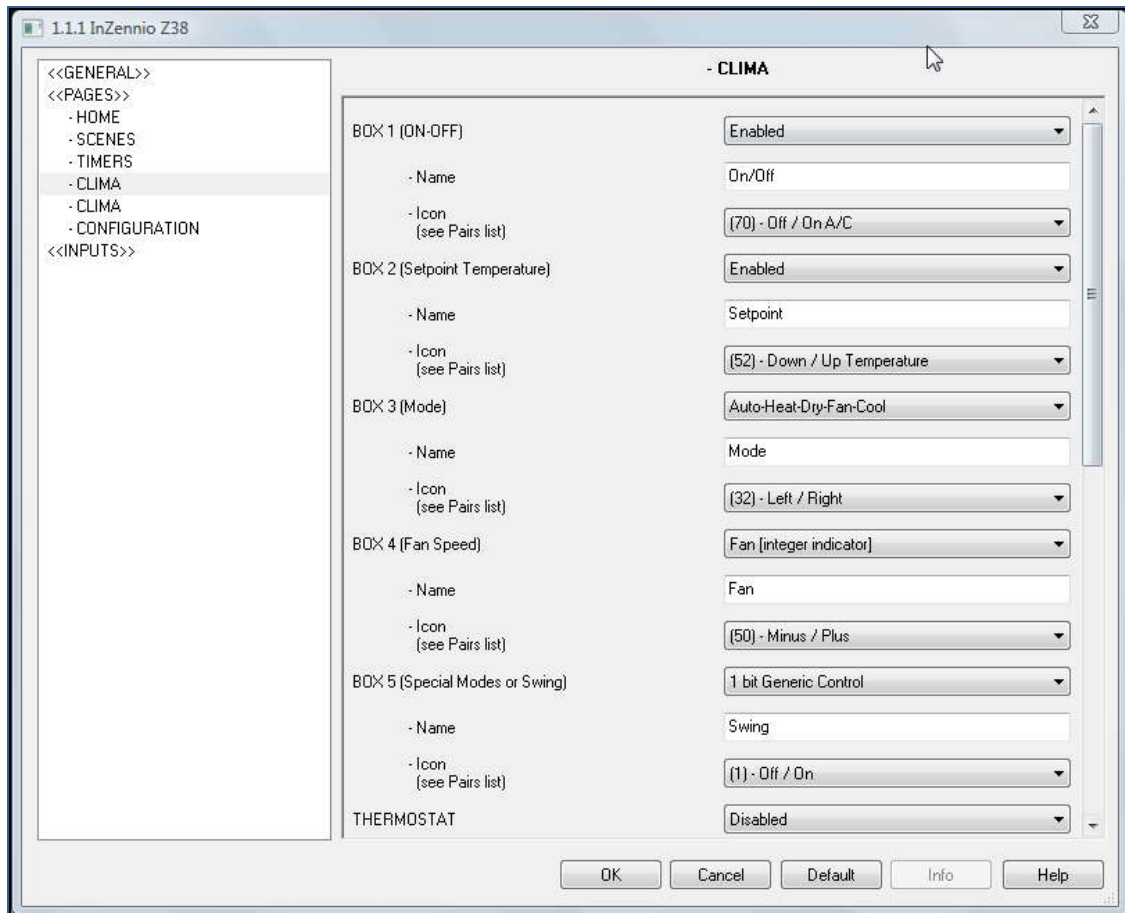


In **Clima 3** tab select the options relative to Split:

- **Box 1 (On/Off):** Enabled
  - ✓ Name: On/Off
  - ✓ Icon: (70) Off/On AC
- **Box 2 (Setpoint Temperature):** Enabled
  - ✓ Name: Setpoint
  - ✓ Icon: (52) Down/Up Temperature
- **Box 3 (Modo):** Auto-Heat-Dry-Fan-Cool
  - ✓ Name: Mode
  - ✓ Icon: (32) Left/Right
- **Box 4 (Fan Speed):** Fan (integer indicator)
  - ✓ Name: Fan
  - ✓ Icon: (50) Minus/Plus
- **Box 5 (Special Modes or Swing) :** 1 bit Generic Control
  - ✓ Name: Swing
  - ✓ Icon: (1) Off/On



## • **Thermostat:** Disabled



In **Clima 4** tab select the options relative to Floor Heating:

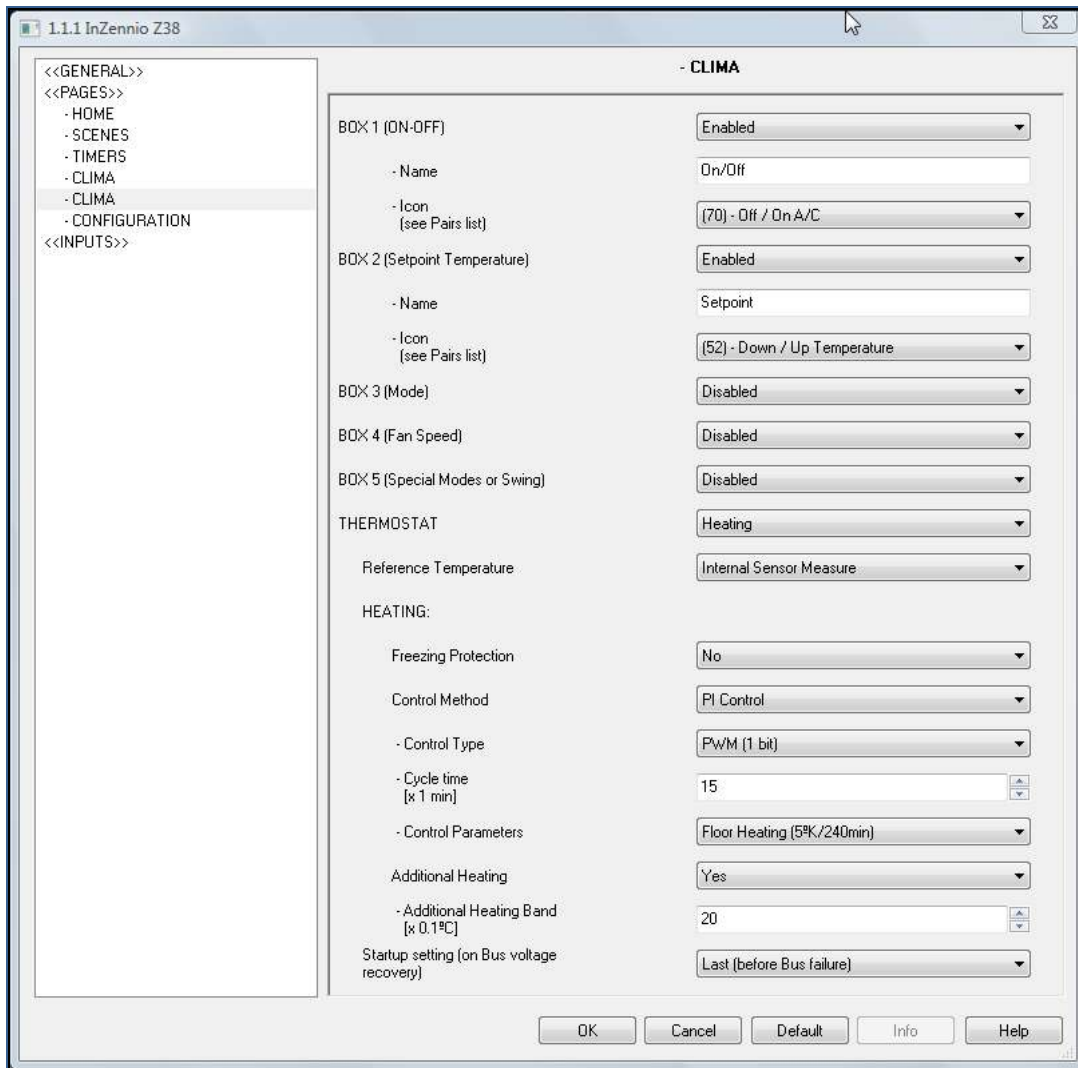
- **Box 1 (On/Off):** Enabled
  - ✓ Nombre: On/Off
  - ✓ Icono: (70) Apagar/Encender Aire
- **Box 2 (Setpoint Temperature):** Enabled
  - ✓ Nombre: Temperatura
  - ✓ Icono: (52) Bajar/Subir Temperatura
- **Box 3 (Modo):** Disabled
- **Box 4 (Fan Speed):** Disabled
- **Box 5 (Special Modes or Swing):** Disabled
- **Thermostat:** Heating

- ✓ Reference Temperature: internal Sensor Measure

### **HEATING**

- ✓ Freezing Protection: No
- ✓ Control Method: PI Control
  - Control Type: PWM (1 bit)
  - Cycle Time:15
  - Control Parameters. Floor Heating (5°K/240min)
- ✓ Additional Heating: Yes
  - Additional heating Band:20
- ✓ Startup setting: Last (before Bus failure)



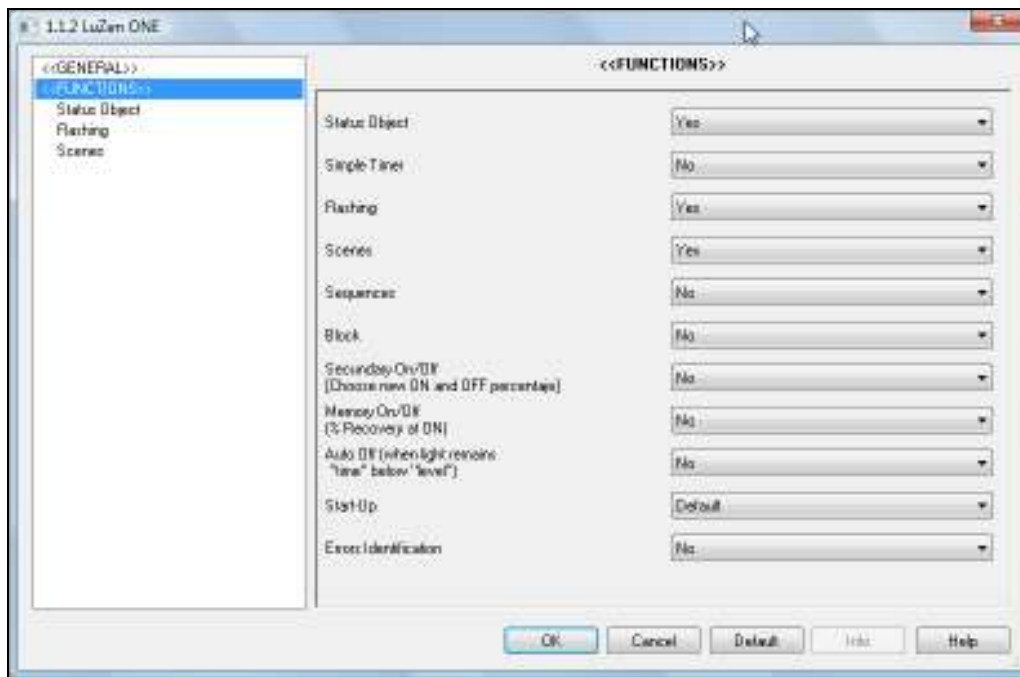


## Luzen ONE

Select the edition of parameters in **Luzen ONE** to configure the dimmer.

In **Functions** tab select:

- **Status Object, Flashing and Scenes:** Yes
- The rest are No and Default.



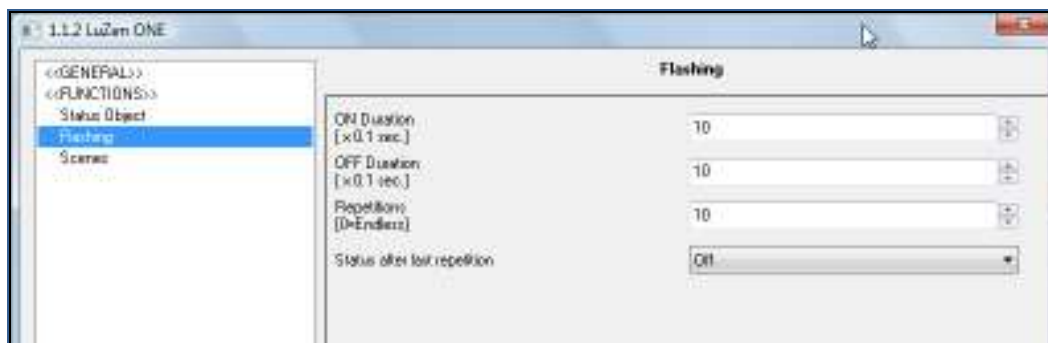
In **Status Object** tab select:

- **1 bit (On/Off):** No
- **1 byte (percentage):** Yes



In **Flashing** tab select:

- **ON Duration, OFF Duration and Repetitions:** 10
- **Status after last repetition:** Off

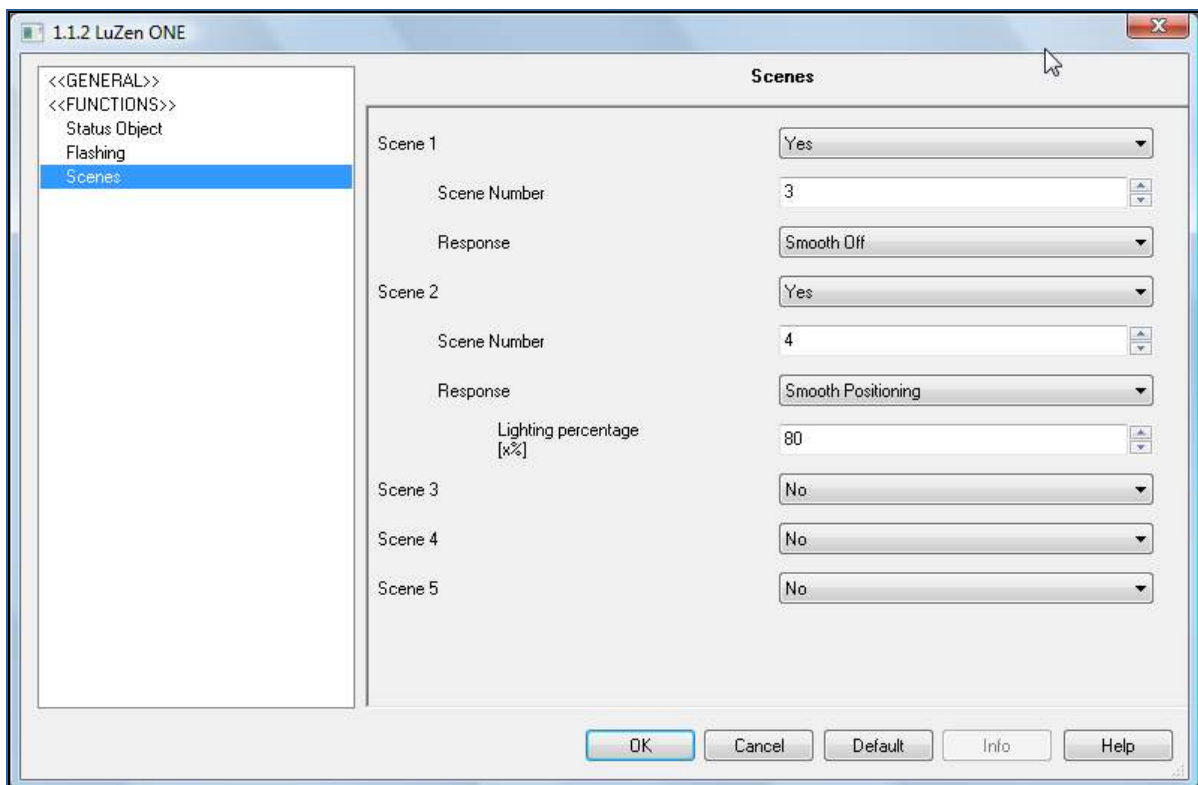


In **Scenes** tab select:

- **Scene 1:** Yes
  - ✓ Scene Number: 3
  - ✓ Response: Smooth Off
  
- **Scene 2:** Yes
  - ✓ Scene Number: 4
  - ✓ Response: Smooth Positioning
    - Lighting percentage: 80



**Important:** Do not use scene numbers 1 and 2, as they are used by the IRSC to make the Split work regarding the additional heating value

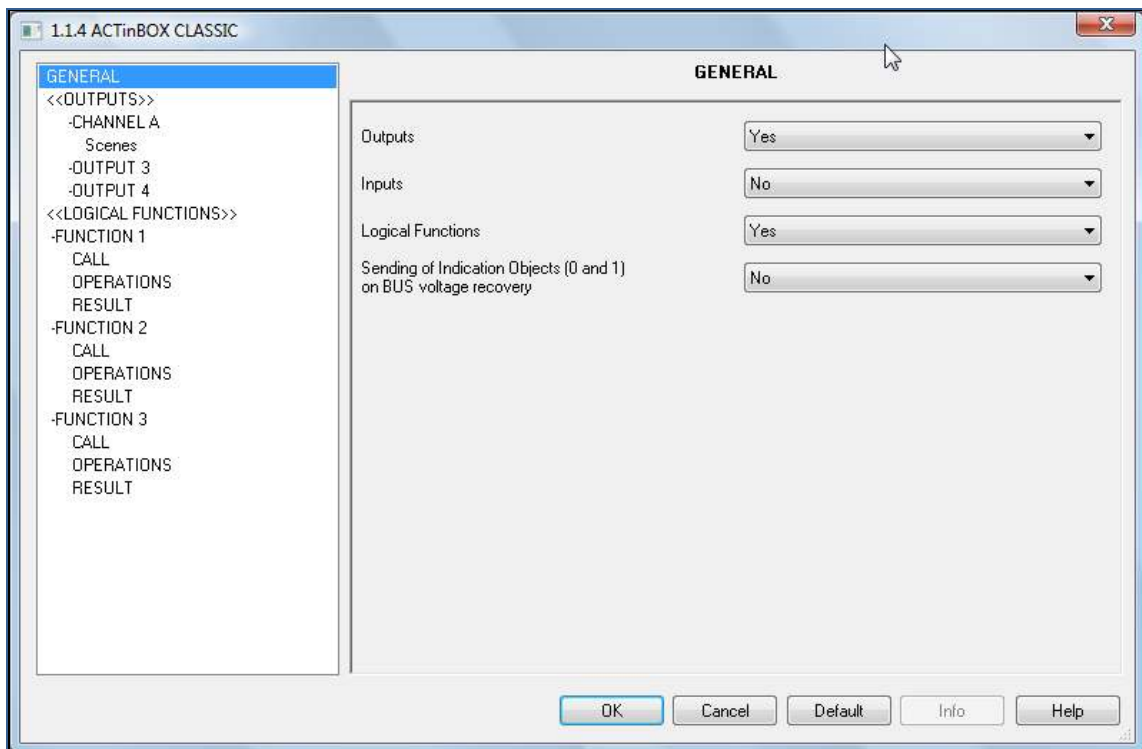


## ACTinBOX Classic

Select the edition of parameters in **ACTinBOX Classic** to configure the shutter channel and the functions to control the scenes.

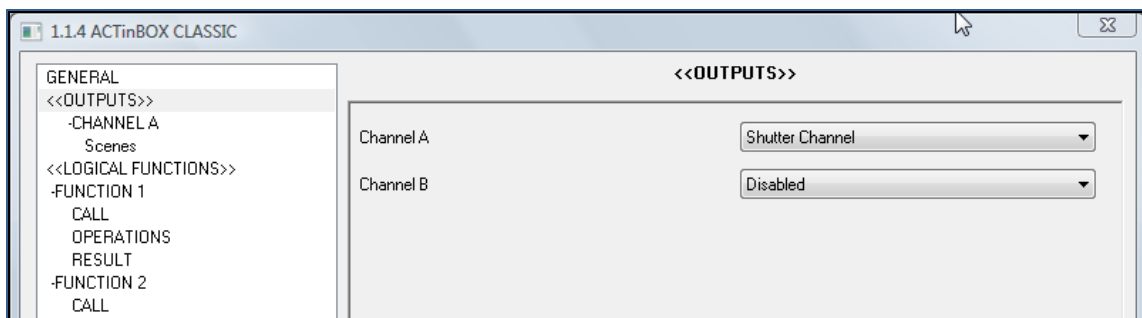
In **General** tab select:

- **Outputs and Logical Functions:** Yes
- **Inputs and Sending of Indication Objects:** No



In **Outputs** tab select:

- **Channel A:** Shutter Channel
- **Channel B:** Disabled



In **Channel A** tab select:

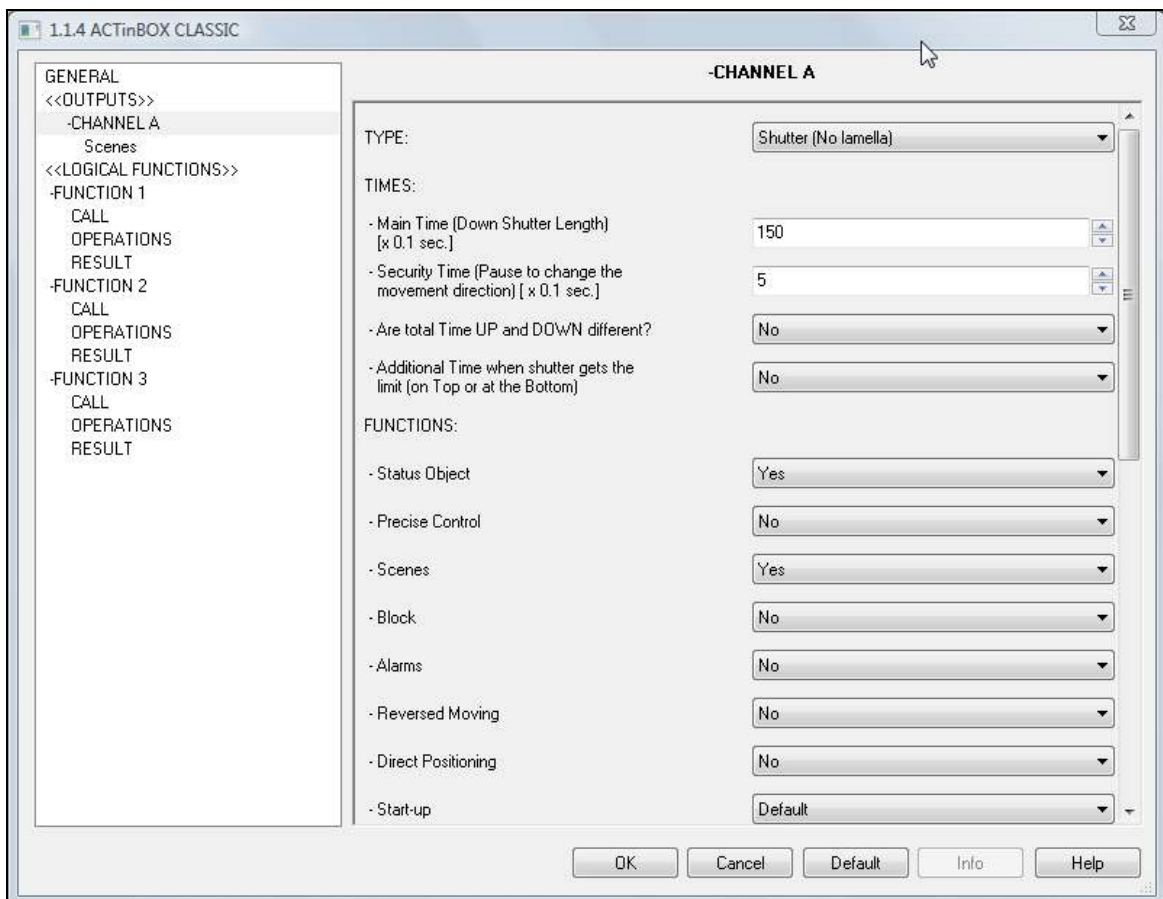
- **Type:** Shutter (No lamella)

### **TIMES**

- **Main Time:** 150
- **Security Time:** 5
- **Are total Time UP and DOWN different?** : No
- **Additional Time when shutter gets the limit:** No

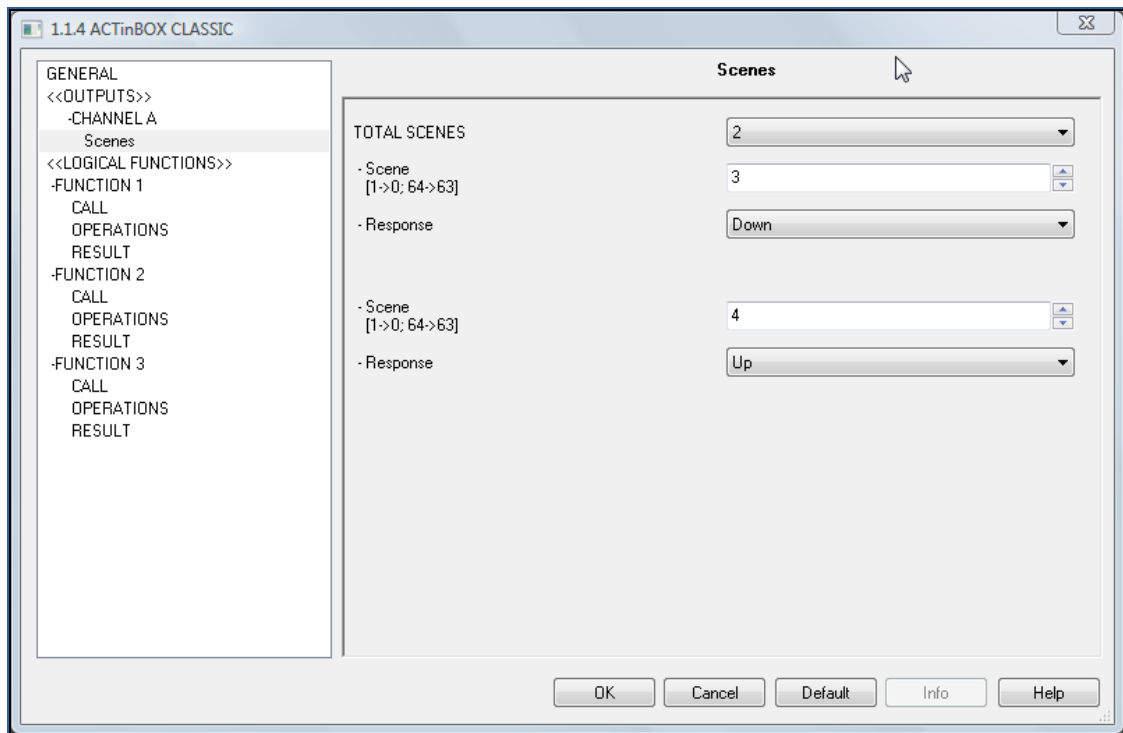
### **FUNCTIONS**

- **Status Object and Scenes:** Yes
- The rest are No and Default



In the **Scenes** tab select:

- **Total Scenes: 2**
  - ✓ Scene:3
    - Response: Down
  - ✓ Scene: 4
    - Response: Up

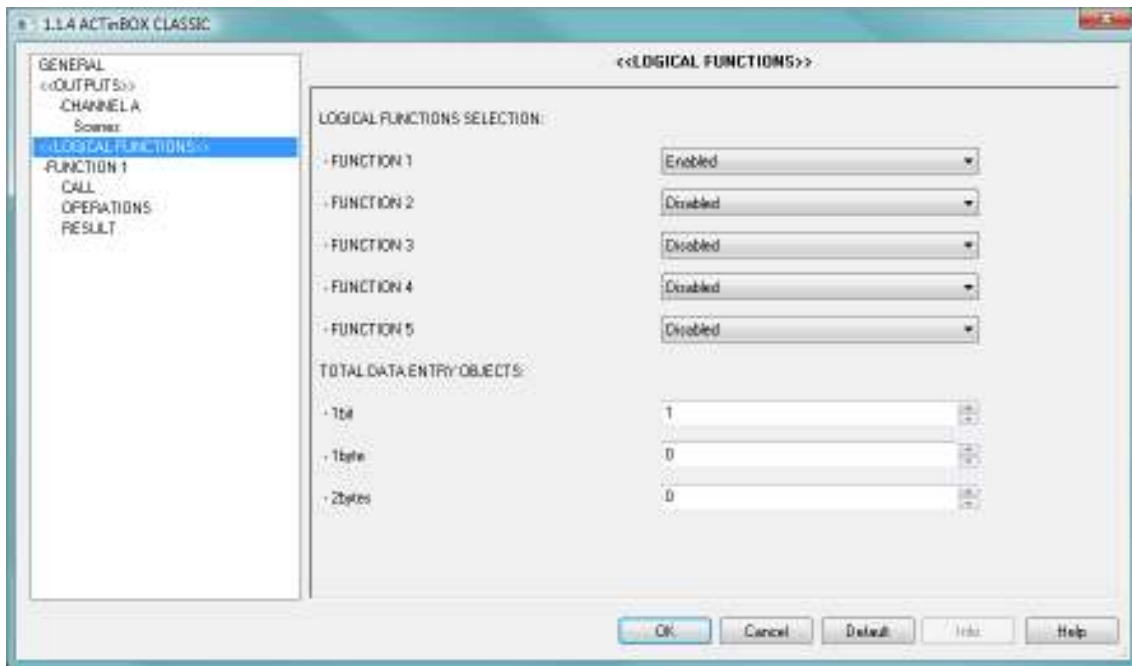


In the **Logical Functions** tab select:

- **Function 1:** Enabled
- Function 2, 3, 4 and 5: Disabled

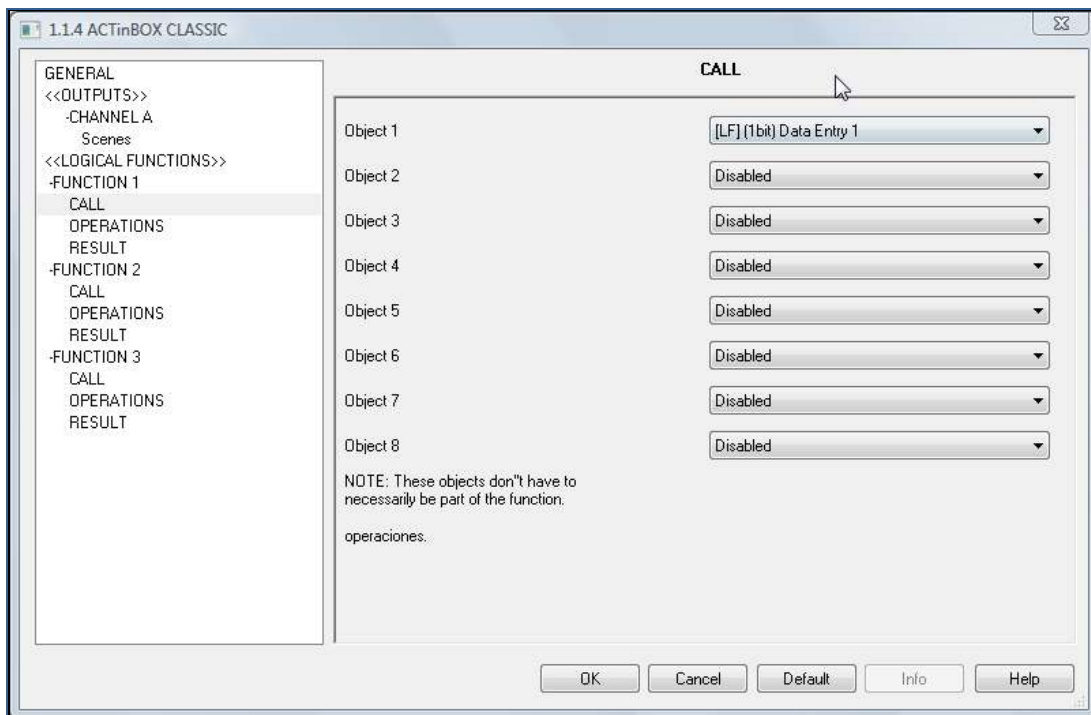
### **Total Data Entry Objects**

- **1bit:** 1
- **1byte:** 0
- **2bytes:** 0



In **Call** tab of every function, select the object used as data entry:

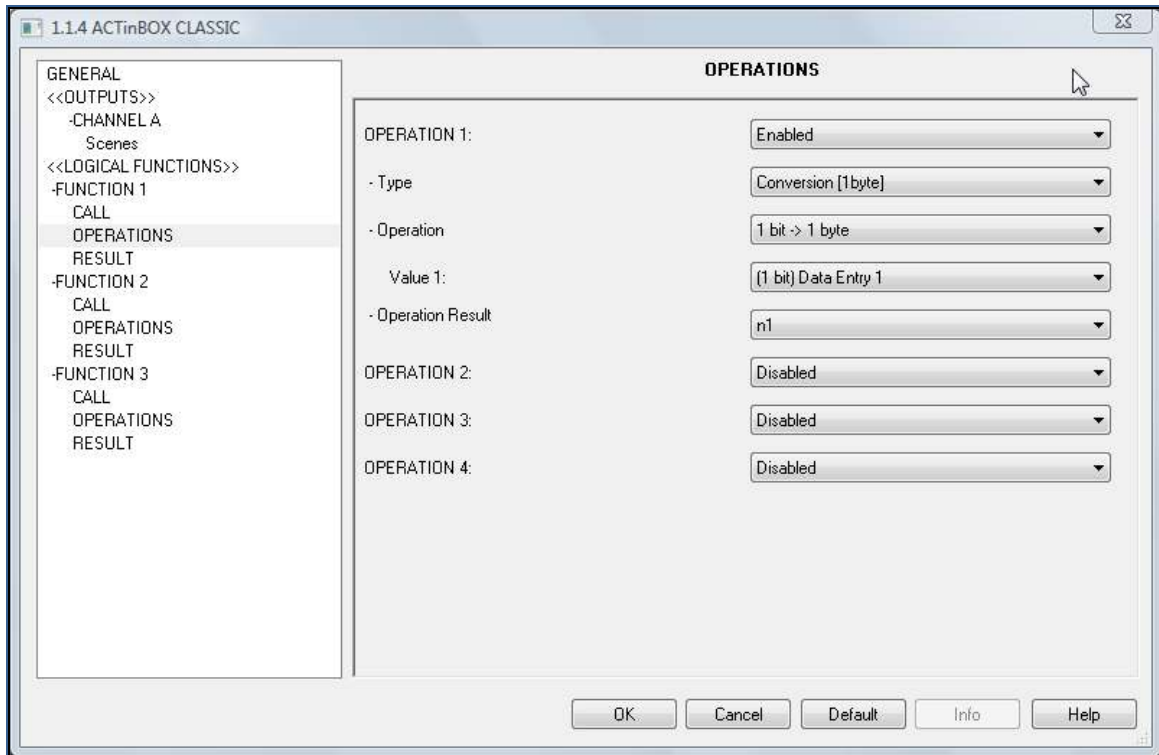
- **Object 1 in Function 1 Call:** (1bit) Data Entry 1



In **Operations** tab of **Function 1** select:

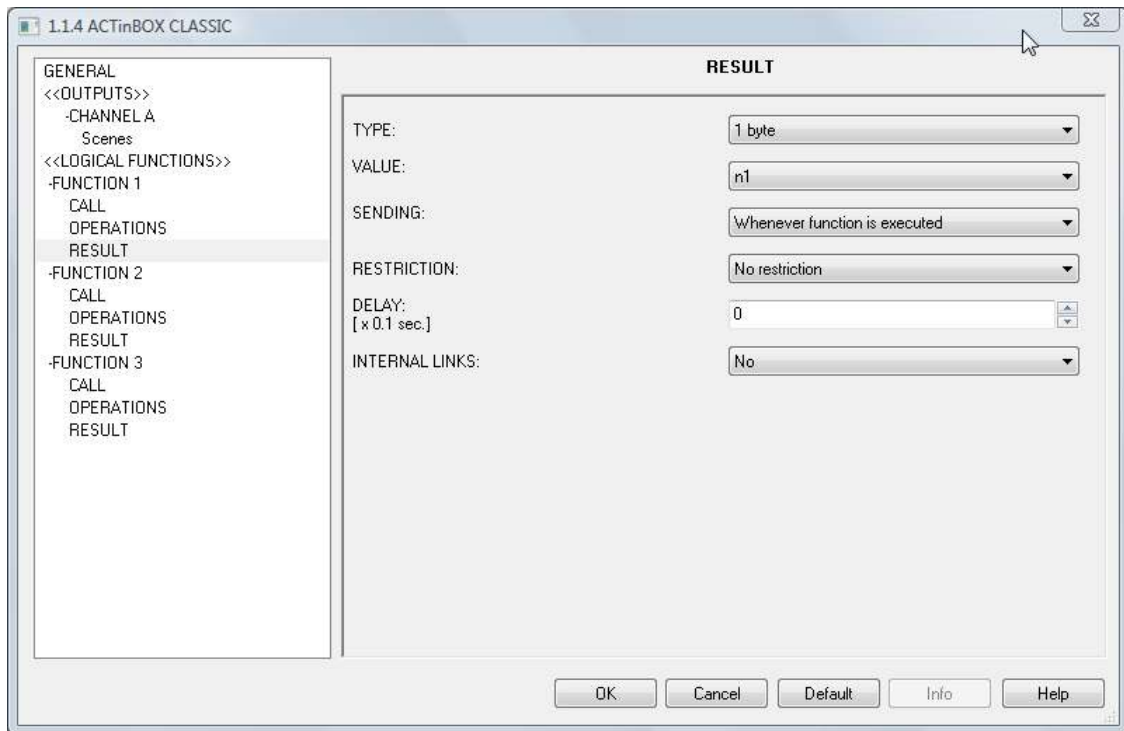
- **Operation 1:** Enabled
  - ✓ Type: Conversion (1 byte)

- ✓ Operation: 1bit -> 1byte
  - Value 1: (1 bit) Data Entry 1
- ✓ Operation Result: n1
- Rest of Operations disabled.



In **Result** tab of **Function 1** select:

- **Type:** 1 byte
- **Value:** n1
- **Sending:** Whenever function is executed
- **Restriction:** No restriction
- **Delay:** 0
- **Internal Links:** no

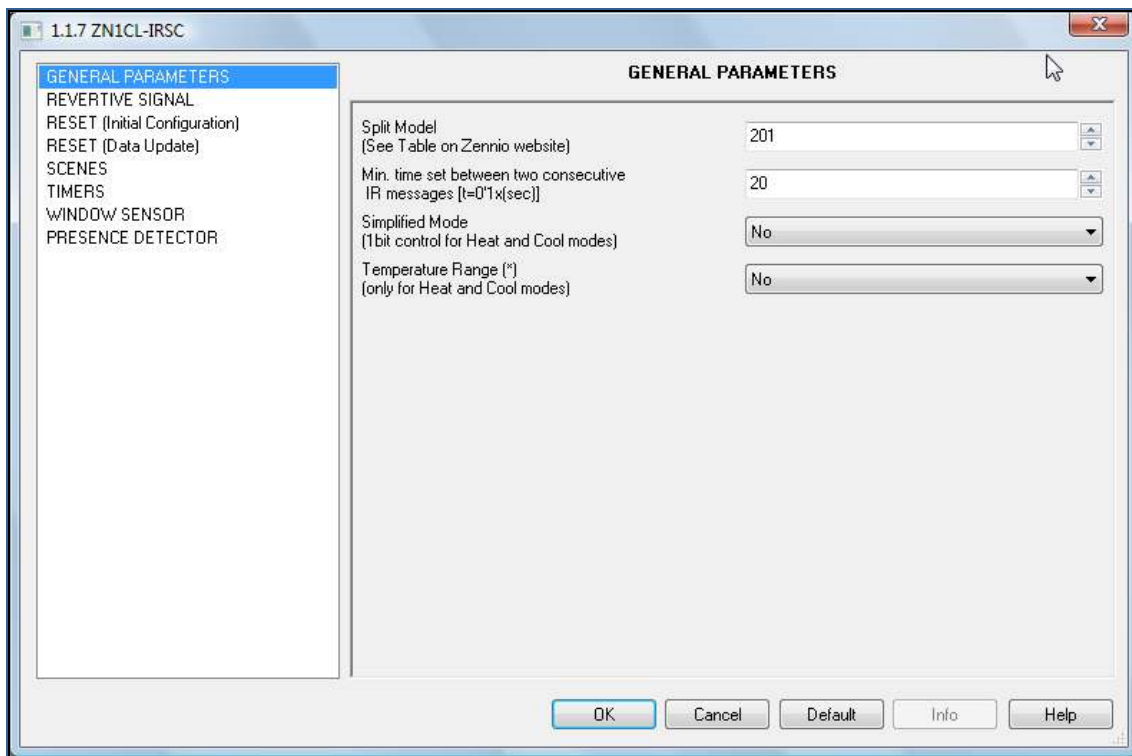


## IRSC Plus

Select the edition of parameters in **IRSC Plus** to configure the IR interface to control the Split

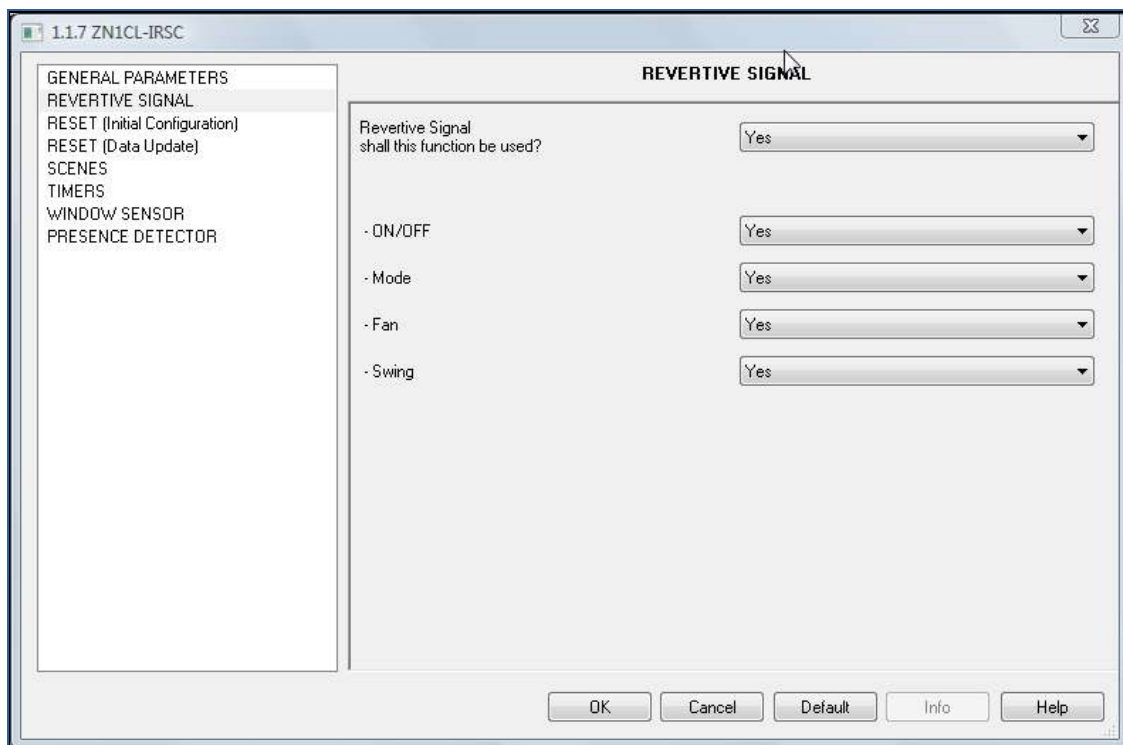
In **General** tab select:

- **Split Model:** 201
- **Min time set between two consecutive IR messages:** 20
- **Simplified Mode:** No
- **Temperature Range:** No



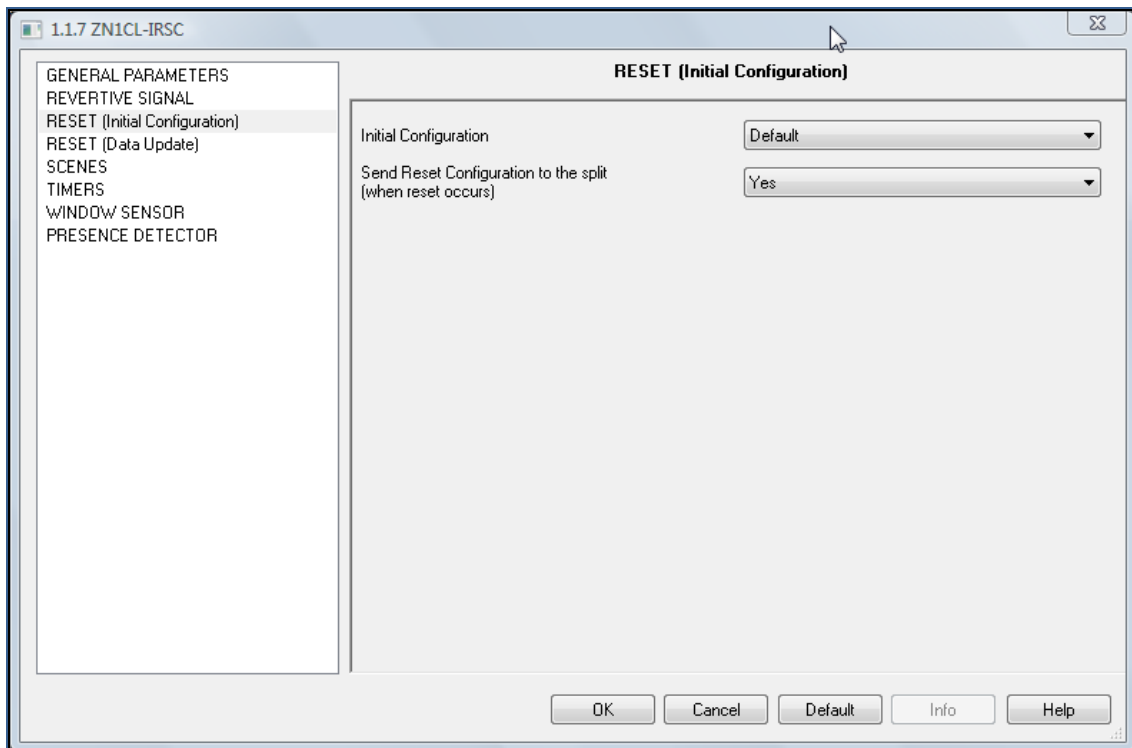
In **Revertive Signal** tab select:

- **Revertive Signal shall this function be used?** :Yes
- **On/Off, Mode, Fan and Swing:** Yes



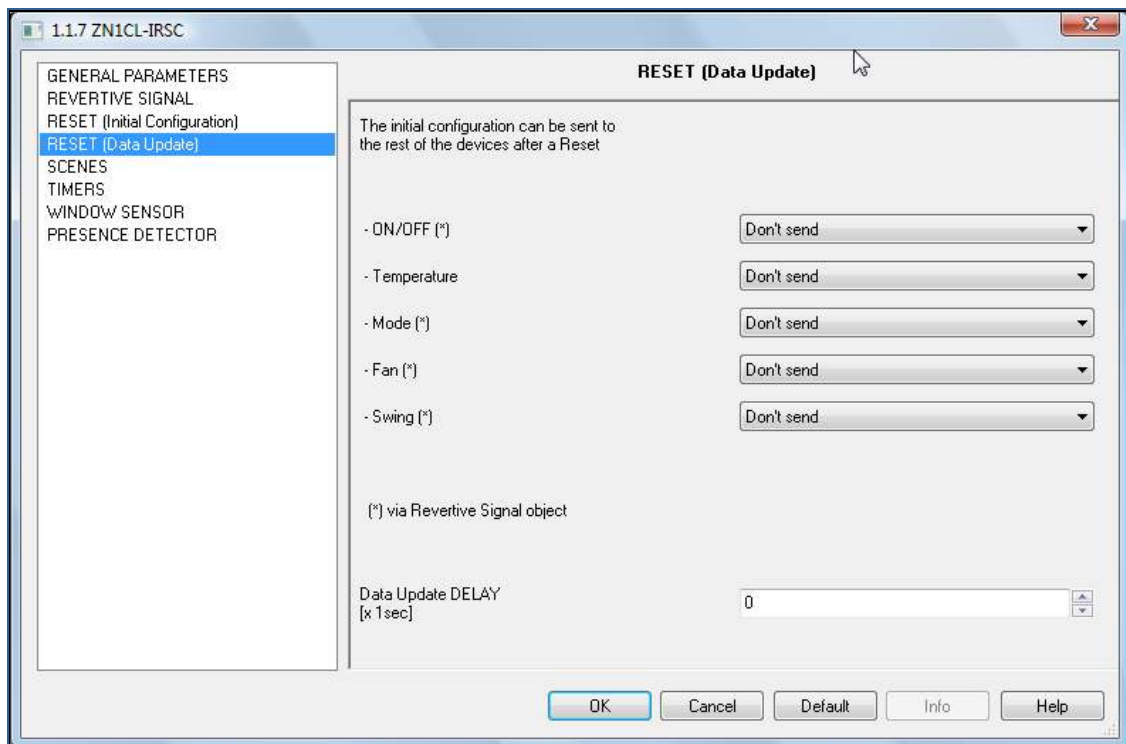
In **Reset (Initial configuration)** tab select:

- **Initial configuration:** Default
- **Send Reset configuration to the split:** Yes



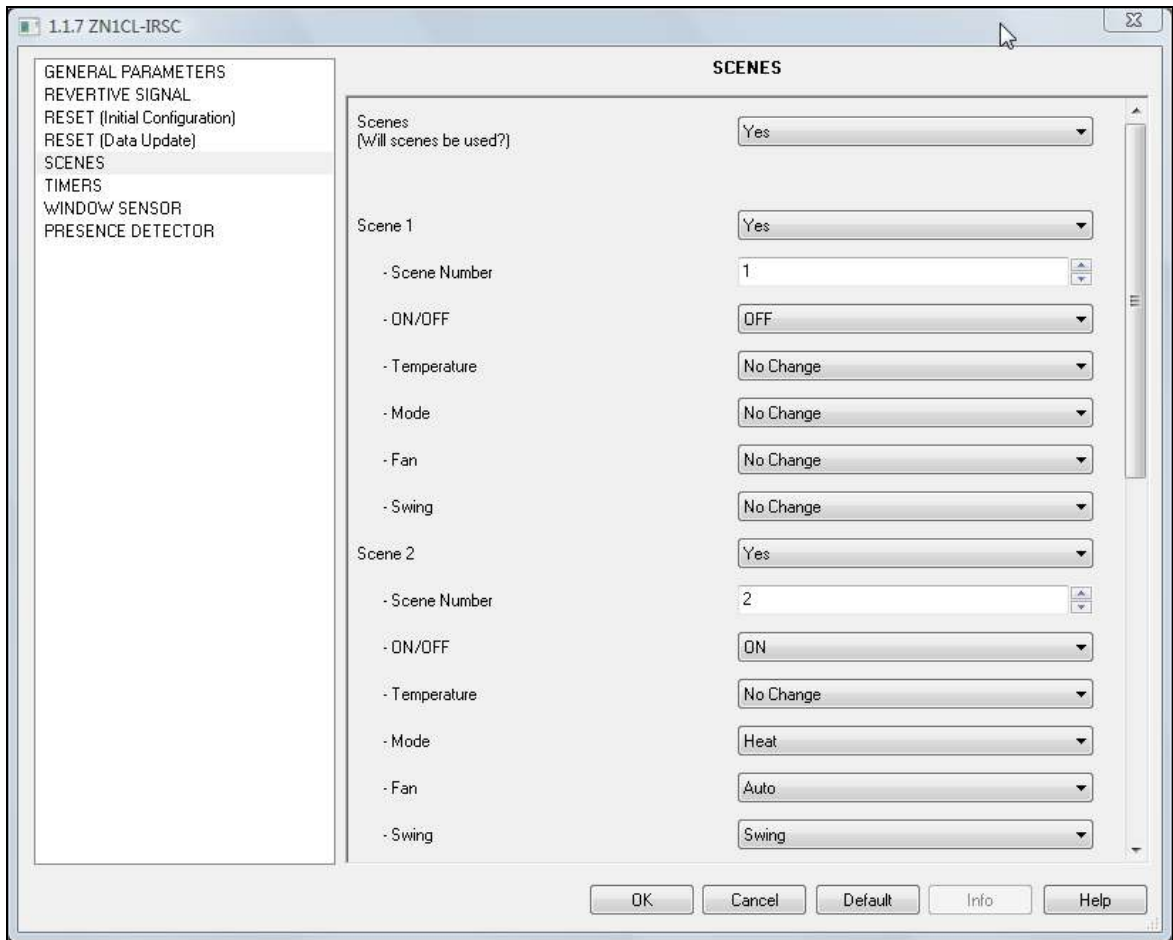
In **Reset (Data Update)** tab select:

- All the parameters: Don't send



In **Scenes** tab select:

- **Scenes:** Yes
- **Scene 1:** Yes
  - ✓ Scene Number: 1
  - ✓ On/Off: Off
  - ✓ Temperature, Mode, Fan and Swing: No change
- **Scene 2:** Yes
  - ✓ scene Number: 2
  - ✓ On/Off: On
  - ✓ Temperature: No change
  - ✓ Mode: Heat
  - ✓ Fan: Auto
  - ✓ Swing: Swing



**Important:** These Scenes are used to turn On/Off the split regarding the additional heating value. As their values come from a conversion bit -> byte, their scene numbers must be 1 (when sending 0) and 2 (when sending 1), so use different scene numbers for the other needed scenes.

## Group Addresses

The **group addresses** and the communication objects that are linked in them are:

GROUP ADDRESS	NAME	OBJECT	PHYSICAL ADDRESS	DESCRIPTION
3/0/1	Light On/Off	1	1.1.2	Controlling the dimmer on/off
		8	1.1.1	
3/0/2	Light Dimming	2	1.1.2	Controlling the dimmer with smooth direct positioning
		44	1.1.1	
3/0/3	Light Status	6	1.1.2	Showing the dimmer status with a percentage
		68	1.1.1	
3/1/0	Move	32	1.1.4	Moving the shutter up and down
		6	1.1.1	
3/1/1	Stop	30	1.1.1	Stopping or Stepping up/down the shutter
		34	1.1.4	
3/1/2	Blind Position	66	1.1.1	Showing the shutter position with a percentage
		36	1.1.4	
3/2/0	Scenes	139	1.1.4	Setting a scene
		40	1.1.4	
		20	1.1.7	
		9	1.1.2	
		2	1.1.1	
3/3/0	Control Value + Updating Box3 in Z38i	24	1.1.1	Controlling of radiant floor heating valve by means of a PI-PWM Temperature control.
		102	1.1.4	
		189	1.1.1	
3/3/1	Additional Heating + Updating Box4 in Z38i	24	1.1.1	Sending a telegram to the bus for switching on the additional heating source. This telegram is used as data input in a logical function for activating Scenes.
		102	1.1.4	
		189	1.1.1	
3/3/2	Setpoint	125	1.1.1	Sending of the setpoint temperature to

GROUP ADDRESS	NAME	OBJECT	PHYSICAL ADDRESS	DESCRIPTION
		148	1.1.1	the Split Clima page.
		2	1.1.7	
3/3/5	<b>Timer On/Off</b>	105	1.1.1	Turning on/off the Floor heating thermostatic control
3/4/0	<b>Split - ON/OFF</b>	0	1.1.7	Sending a telegram for switching on/off the Split machine
		103	1.1.1	
		104	1.1.1	
3/4/1	<b>Split - Setpoint</b>	2	1.1.7	Sending of the setpoint temperature to the Split
		124	1.1.1	
3/4/2	<b>Split - Mode</b>	120	1.1.1	Sending the operating mode to the Split
		18	1.1.7	
3/4/3	<b>Split - Fan</b>	108	1.1.1	Sending the fan speed to the Split
		4	1.1.7	
3/4/4	<b>Split - Swing</b>	112	1.1.1	Sending the swing mode to the split
		6	1.1.7	
3/4/5	<b>Split - ON/OFF Status</b>	128	1.1.1	Showing the ON/OFF status of the split machine
		1	1.1.7	
3/4/6	<b>Split - Mode Status</b>	144	1.1.1	Showing the mode status of the Split machine
		19	1.1.7	
3/4/7	<b>Split - Fan Status</b>	132	1.1.1	Showing the fan speed status of the Split machine
		5	1.1.7	
3/4/8	<b>Split - Swing Status</b>	136	1.1.1	Showing the swing status of the Split machine
		7	1.1.7	