### Specifications are subject to change without notice 17.12.2013

## Smart Dupline® Input Module Type BDD-INCON4-U

## **Product Description**

The BDD-INCON4 is an input module to be connected to voltage free outputs or NPN transistor outputs. It allows a flexible installation and connection concept to third party devices (e.g.

building automation installations. It is part of the smarthouse concept and it can be used with all the functions supported by the smarthouse controller.

### · Input module for building automation applications

- 4-contact or NPN transistor inputs
- LED indications for supply and Dupline<sup>®</sup> bus
- Red LED: programmable function status
- 3-wire system with Dupline<sup>®</sup> and supply of module through external power supply
- Open PCB with terminal connection

# alarm arming devices) in

Decentral module Input module NPN Number of inputs

Smart Dupline®

**Ordering Key** 

### **Type Selection**

Inputs	Contact input	LEDs	Bus Supplied
4	Voltage free, NPN	3	BDD-INCON4-U

## **Input Specifications**

Inputs Open loop voltage Open loop voltage	4 contacts or NPN-transistor External supply: 8.0 VDC Bus supply: 5.3-7.6 VDC	
Short-circuit current	≤ 100 µA	
Input voltage signal "1"	≤ 1 V	
Input voltage signal "0"	≥ 1.6 V	
Contact resistance	< 1 kΩ	
Cable length	< 3 m	

## **Dupline®** Specifications

Voltage	8.2 V
Maximum Dupline <sup>®</sup> voltage	10 V
Minimum Dupline <sup>®</sup> voltage	5.5 V
Maximum Dupline <sup>®</sup> current	2 mA

## **Supply Specifications**

Power supply DC types	Overvoltage cat III (IEC 60664)	
Rated operational voltage (VDD <sub>in</sub> )	10-30VDC (ripple included)	
Ripple	≤ 3 V	
Reverse polarity protection	Yes	
Current consumption	$\leq$ 15 mA + Load on DC+	
Max Load on DC+	≤ 250 mA	
Inrush current	≤ 1A	
Power dissipation	≤ 0.5 W	
Transient protection voltage	800 V	
Dielectric voltage Supply - Dupline <sup>®</sup> bus Supply - Inputs	None None	



**BDD INCO N 4 U** 





### **CARLO GAVAZZI**

### **General Specifications**

Address assignments /		Weight	50 g
channel programming	If it is used with the	CE Marking	Yes
	SH2WEB24 the address assignment is automatic: the controller recognises the module through the SIN (Specific Identification Number) that has to be inserted in the SH tool. If it is used with the BH8- CTRL-230, the channels have to be programmed by the BGP-COD-BAT	EMC Immunity - Electrostatic discharge - Radiated radiofrequency - Burst immunity - Surge - Conducted radio frequency - Power frequency magnetic fields - Voltage dips, variations, interruptions Emission - Conducted and radiated emissions - Conducted emissions - Radiated emissions	EN 61000-6-2 EN 61000-4-2 EN 61000-4-3 EN 61000-4-4 EN 61000-4-5 EN 61000-4-6 EN 61000-4-8
LED's Indication Supply ON Dupline® carrier Armed Environment Operating temperature Storage temperature Humidity (non-condensing)	1, green 1, yellow 1, red -20° to +50°C (-4° to 122°F) -50° to +85°C (-58° to 185°F) 20 to 80%		EN 61000-4-11 EN 61000-6-3 CISPR 22 (EN55022), cl. B CISPR 16-2-1 (EN55016-2-1) CISPR 16-2-3 (EN55016-2-3)
Dimensions	107 x 50 x 110 mm		

### **Mode of Operation**

The BDD-INCON4 is fully programmable via the SH Tool: each input can be individually associated to one or more functions supported by the smart-house system.

#### BDD-INCON4 connected to the SH2WEB24 Coding/Addressing

If the input module is connected to the SH2WEB24 controller, no addressing is needed since the module is provided with a specific identification number (SIN): the user has only to insert the SIN number in the configuration tool when creating the system configuration. The red LED is also configurable via the SH Tool: the user can associate it to any function as a feedback led. Used channel: 4 input channels, 1 output channel

BDD-INCON4-U connected to the BH8-CTRLX-230 Coding/Addressing If the input module is connected to the BH8-CTRLX-230 controller, the user has to program the Dupline<sup>®</sup> channels using the BGP-COD-BAT: this module has 4 input and 1 output (red LED) channels.

### **LED** indication

The three LEDs are illuminated only if the input module is supplied with an external power supply.

#### Green LED: power status ON: power supply ON OFF: power supply OFF Yellow LED: Dupline<sup>®</sup> status

ON: Dupline<sup>®</sup> bus connected OFF: Dupline<sup>®</sup> bus not connected or faulty

### Red LED: feedback led

Programmable by the user.

## Wiring Diagrams

