Smart Dupline®
Remote Voltage Input
Type BDA-INVOL-U

CARLO GAVAZZI

- Input voltage module for building automation
- 1 opto-isolated voltage input 90 to 265 VAC
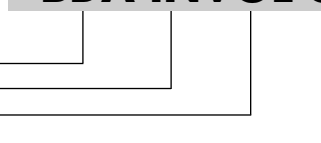- Powered via Dupline® bus
- Compact housing

Product Description

BDA-INVOL-U is an opto-isolated voltage input for 90 to 265 VAC.
It is suitable in all those applications where there is the need to detect a voltage higher than 90Vac.
This voltage input module is part of the smart-house concept for building automation applications and can be used in all the functions supported by the smart-house controller.
It is fully programmable via the SH tool.

Ordering Key

BDA INVOL U

Decentral module
Input
Voltage
Smart Dupline®

Type Selection

Voltage input	Bus Supplied
90 to 265 VAC	**BDA-INVOL-U**

Input Specifications

Inputs	90 to 265 VAC
ON	≥ 90 VAC
OFF	≤ 60 VAC
Dielectric voltage	
Input - Dupline®	≥ 4 kVAC (rms)

Supply Specifications

Power supply	Supplied by Dupline® bus

Dupline® Specifications

Voltage	8.2 V
Maximum Dupline® voltage	10 V
Minimum Dupline® voltage	5.5 V
Maximum Dupline® current	1.4 mA

General Specifications

Address assignments / channel programming	If it is used with the 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-CTRLX-230, the channels have to be programmed by the BGP-COD-BAT.

Environment	
Degree of Protection	IP 20
Pollution degree	3 (IEC 60664)
Operating temperature	-20° to +50°C (-4° to 122°F)
Storage temperature	-50° to +70°C (-58° to 158°F)
Humidity (non-condensing)	20 to 80% RH
Housing	
Dimensions	39 x 26 x 17 mm
Material	Noryl GFN 1, Black
Weight	15 g
CE Marking	Yes

Specifications are subject to change without notice (17.12.13)

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General Specifications (cont.)

EMC

Immunity	EN 61000-6-2
- Electrostatic discharge	EN 61000-4-2
- Radiated radiofrequency	EN 61000-4-3
- Burst immunity	EN 61000-4-4
- Surge	EN 61000-4-5
- Conducted radio frequency	EN 61000-4-6
- Power frequency magnetic fields	EN 61000-4-8
- Voltage dips, variations, interruptions	EN 61000-4-11

EMC (cont.)

Emission	EN 61000-6-3
- Conducted and radiated emissions	
- Conducted emissions	CISPR 22 (EN55022), cl. B
- Radiated emissions	CISPR 16-2-1 (EN55016-2-1)
	CISPR 16-2-3 (EN55016-2-3)

Mode of Operation

The BDA-INVOL-U is fully programmable via the SH tool: the input can be individually associated to one or more functions supported by the smart-house system.

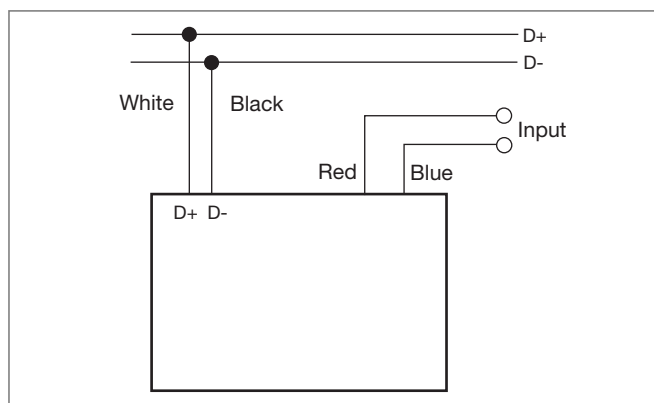**BDA-INVOL-U connected to the SH2WEB24 Coding/Addressing**
If the input module is connected to the SH2WEB24 controller, no addressing is needed since the module is provided with a specific identification number (SIN): the user has only to insert the SIN in the SH tool when creating the system configuration. This module has 1 input channel.

BDA-INVOL-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® channels using the BGP-COD-BAT: this module has 1 input channel.

Wiring Diagrams

Bus:	White	= Dupline® signal, D+
	Black	= Dupline® negative, D-
Input:	Red	= Voltage input
	Blue	= Voltage input
Bus wires:	2 x 0,75 mm²,	
	250 V isolation, single core, 150 mm	
Input wires:	2 x 1,5 mm²,	
	250 V isolation, single core, 150 mm	

Dimensions (mm)

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