SBB2I

Fire damper input module

Benefits

- Ready-to-use junction box housing with transparent lid for fast and easy decentralized installation
- One input module can monitor one fire damper
- Fast and easy wiring to the main controller via the Dupline® bus (free topology and long distance capability)
- Up to 60 fire damper modules can be connected to one Dupline® network
- The system can be interfaced to the BMS via BACnet or Modbus

Description

The SBB2I is a 2-input module designed to monitor the blade position of up to two fire dampers.
It is also possible to use the inputs as standard digital inputs for any type of application.
The module is implemented in a robust junction box for a decentralized installation close to the fire dampers.
The module is part of the smart building products range.
Several modules can be connected to the same Dupline® 2-wire bus and thus the wiring to the controller can be significantly simplified.

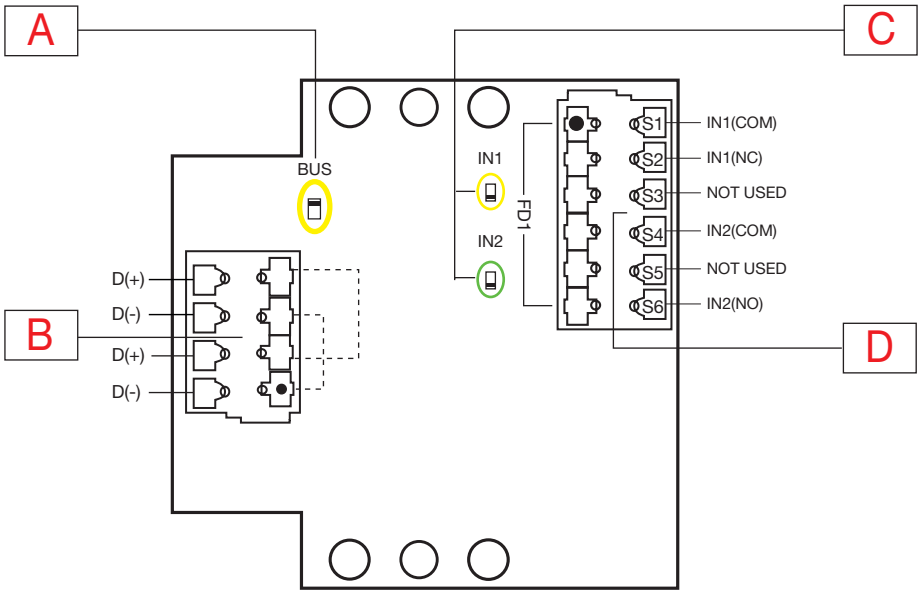
Applications

- Monitoring of fire dampers

Main features

- 2 x contact inputs (voltage free)
- Smart Dupline® protocol
- Powered by the bus

Structure

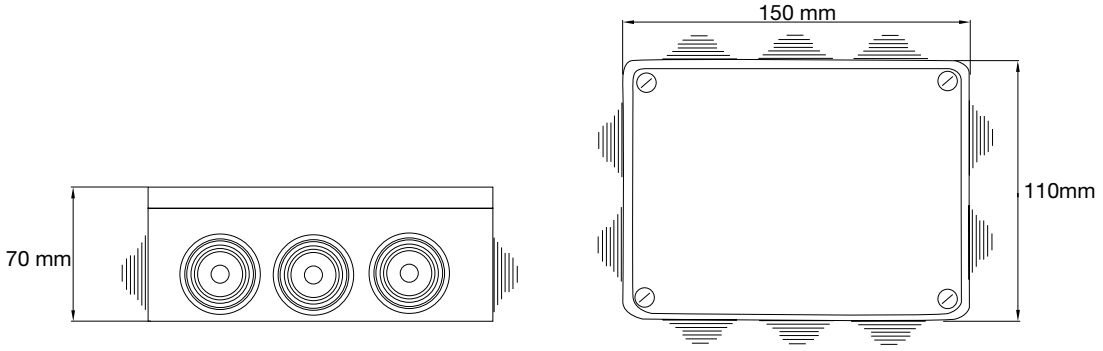


Element	Component	Function
A	Yellow LED	Power supply and Dupline® bus status ON: Supply ON and Dupline® bus OK OFF: No cummunication is present on the Dupline® bus
B	Dupline® terminals	Dupline® terminals connection
C	Yellow LED (IN1) Green LED (IN2)	Input contact status ON: Input closed OFF: Input open
D	Input terminals	Fire damper terminals connection

Features

General

Housing	Standard junction box with transparent lid. 10 knockout openings for M12 or M16 cable.
Material	Box (PC/ABS) / Transparent lid (PC) Halogen free
Dimensions (HxWxD)	150 x 110 x 70 mm
Weight	400 g
Protection grade	IP55
Pollution degree	2 (IEC 60664-1. Par. 4.6.2)
Dielectric strength	Dupline® to input: no insulation



Environmental

Operating temperature	0° to 50°C (-4°F to 122°F)
Storage temperature	-50° to 85°C (-58°F to 185°F)
Humidity (not condensing)	20 to 90%

Compatibility and conformity

Electromagnetic compatibility (EMC) - immunity	EN 61000-6-2
Electromagnetic compatibility (EMC) - emissions	EN 61000-6-3
Approvals	CE

Power Supply

Power Supply	Supplied by bus

Dupline®

Voltage	8.2 V
Maximum Dupline® voltage	10 V
Minimum Dupline® voltage	5.5 V
Maximum Dupline® current	4 mA

Input specifications

Number of inputs	2
Type	Voltage-free contact
Input current	< 100 µA
Max. resistance of the close contact	200 Ω
Cable length	< 3 m

Terminal block

Dupline® bus	4 x spring terminals
Contact inputs	6 x spring terminals
Cross-section area	Max. 2.5 mm^2

Mode of operation

The SBB2I monitors the contact status giving the indication of the damper blade position.
The module is programmable by using the UWP 3.0 configuration tool and the inputs can be individually set as NO or NC, according to the specifications of the fire damper unit.
Please refer to the UWP 3.0 Tool manual for further details about the configuration.

Connection Diagrams

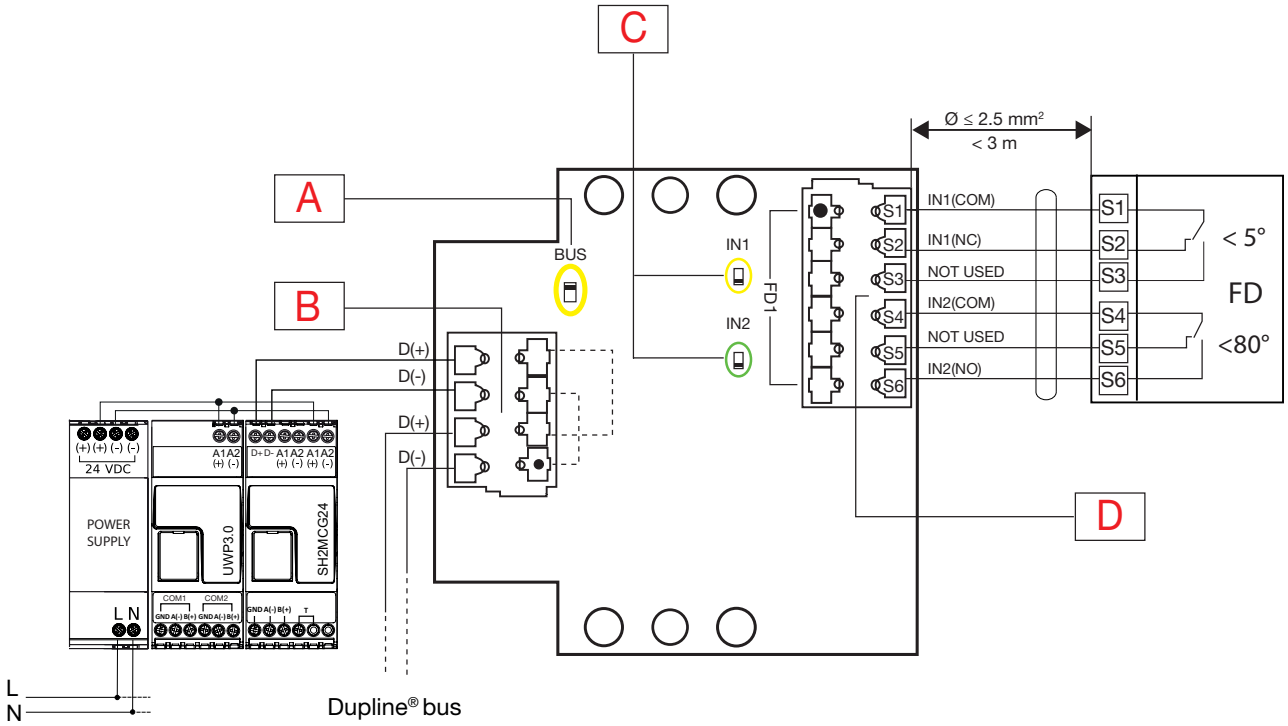


Fig. 1 *Example of a fire damper connection*

The terminals S1 & S2 (NC) are used to monitor the contact for the CLOSED position of the fire damper blade.
The terminals S4 & S6 (NO) are used to monitor the contact for the OPEN position of the fire damper blade.
The terminals S3 and S5 are available for connecting the unused wires.

References

Further reading

Information	Document	Where to find it
UWP3.0 installation guide	System manual	www.productselection.net/MANUALS/UK/uwp3.0_system.pdf
UWP3.0 software manual	UWP3.0 tool manual	www.productselection.net/MANUALS/UK/uwp3.0_tool.pdf

Order code

SBB2I

CARLO GAVAZZI compatible components

Purpose	Component name/code	Notes
Controller	UWP 3.0	
Bus generator	SH2MCG24 /SBP2MCG324	