

## Overview

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JBE-2125 is an addressable input/output module designed to operate on a loop of intelligent fire detection and alarm devices with the JBE loop protocol.

Each module provides one output to the fire detection system and one feedback input. The module receives activation commands from the JBE fire panel and activates its output accordingly. The feedback input can be used to monitor, from the panel, electric contact to confirm the effect of the output activation.

The output can be used as an electrically isolated relay or as a 24-V active output. In order to be able to provide an active (24V) output, the module needs to be connected to a 24V field bus.

The JBE-2125 has a fault detection feature which notifies the control panel when the input wiring is disconnected and when the output wiring has an open or short circuit. The fault detection function is only available in the active output mode.

Convenient LEDs provide local information of the input and output status to support installation inspection and troubleshooting.

## Technical data

Category	EN 54-18
Working voltage	16-30 V (JBE protocol pulse amplitude)
Connection	2-wire JBE communication bus, no polarity
Wiring	Twisted pair, max. wiring gauge 2.5 mm <sup>2</sup>
Quiescent current	≤0.25 mA @24 V
Activation current	≤1 mA @24 V
Output	Maximum 1 A @24V
Clean contact rating	2 A/30 V DC
Input EOL Resistor	10 kΩ
Output EOL Resistor	10 kΩ
Working temperature	0 to +40°C

Storage temperature	-20 to +50°C
Environment Humidity	≤ 95% RH (no condensation nor icing)
Addressing method	Soft addressing with tool JBE-AT1, non-volatile
Address range	1-200
LED Indication (Active output mode)	<p><u>Healthy</u>: “Input” and “Output” LED flashes</p> <p><u>Output Activation</u>: “Output” LED is constantly on</p> <p><u>Feedback</u>: “Input” is constantly on.</p> <p><u>Input Fault</u>: “Input” is off and “Output” flashes.</p> <p><u>Output or 24V Fault</u>: “Input” and “Output are off</p>
LED Indication (Relay Output mode)	<p><u>Healthy</u>: “Input” LED flashes, “Output” LED off</p> <p><u>Fault</u>: “Input” and “Output” LED off</p>
Dimensions	(LxWxH) 85×85x41 mm
Weight	0.1 kg (including base)
IP rating	IP40

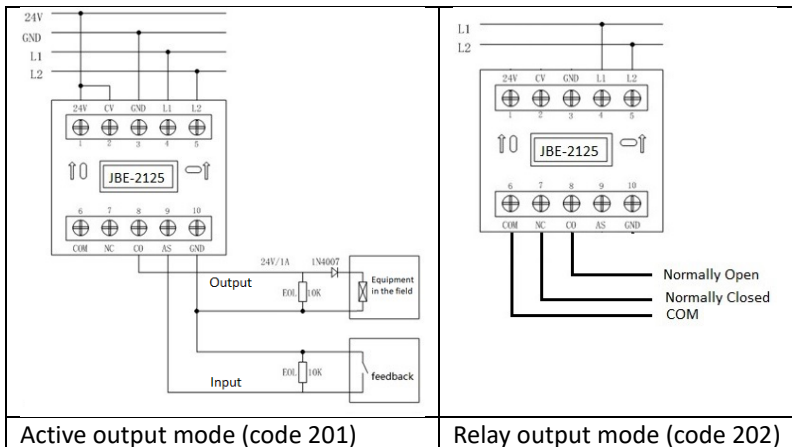
### Installation

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1. Secure the base to the wall (surface or flush mounted).
2. Determine if the installation requires an active (24V) or passive (relay contact) output.
3. Connect the wiring to the base according to the desired application

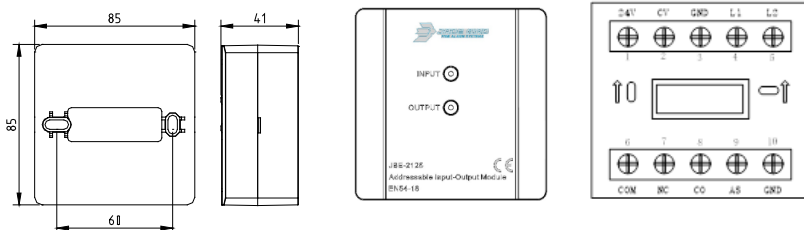
Terminals	Connection type
1&3	Power line 24V, GND
2	24V input. Connect to contact 1 when needed.
4&5	Bus loop: L1, L2 (no polarity)
8&10	CO, GND, used when need to 24V output, connect to equipment in the field. EOL resistor is needed
9&10	AS+, GND, connect equipment in the field to monitor feedback contacts. EOL resistor is needed
6&7&8	COM (Common), NC (Normally Closed), CO (Normally Open) are the relay connections when used in Relay output mode.

See below typical installation wiring diagrams



4. Program an unused loop address (1 to 200) to the module using the JBE-AT1 tool.
5. Using the JBE-AT1 tool, program:
  - a) 201 to set the active output mode
  - b) 202 to set the Relay output mode.
6. Insert the module into its base and push firmly.
7. Register the module into the fire panel's configuration.
8. Test wiring integrity after installation.

### Mechanical outline



all dimensions in mm

### Regulatory information


<b>0370</b>
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<b>20</b> DoP-0370-CPR-3806-1
<b>EN 54-18:2005+AC:2007</b> JBE-2125 <i>Input/Output device intended for use in fire detection and fire alarm systems installed in and around buildings</i> Technical file: see TF-JBE-2125-10 provided by the manufacturer.

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