



BACring. The powerful control system
for smoke dampers

Technical Datasheet DPH-Fire Safety-E90 Enclosure

VERSION 1.14

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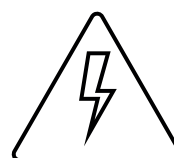


Safety Instructions and Warranty Conditions

WARNING: DANGER TO LIFE!



Before working on the device, it must be disconnected from the power supply (unplug the mains plug). Work on the device may only be carried out by a qualified electrician.

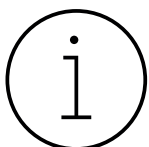


Warranty Conditions



Installation and commissioning must be performed by a qualified electrician! Please read the technical data sheet before installation.

Information



The individual modules are built and tested in accordance with applicable standards and laws and left the factory in perfect condition. To maintain this condition and ensure safe operation, the instructions contained in the user manual must be observed.

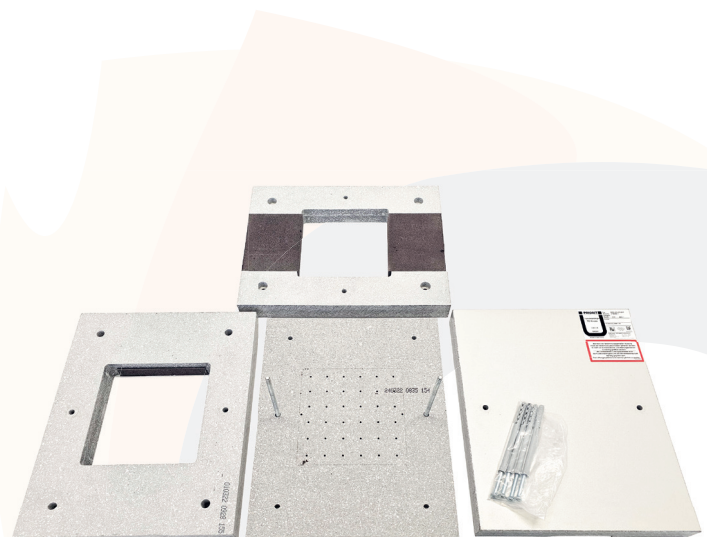
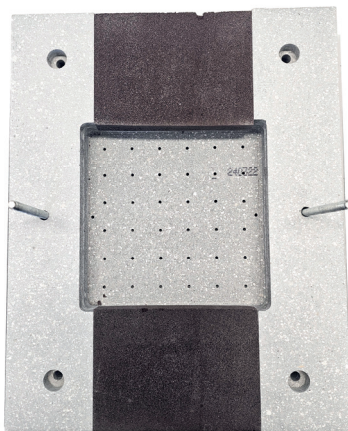
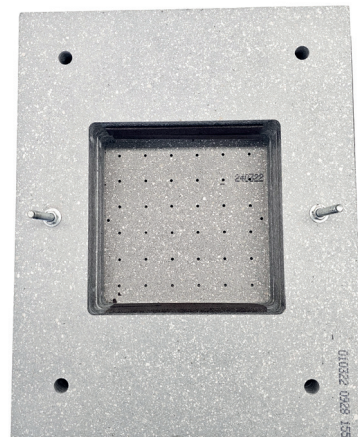


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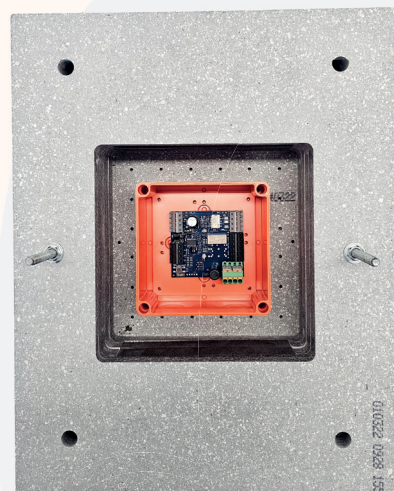
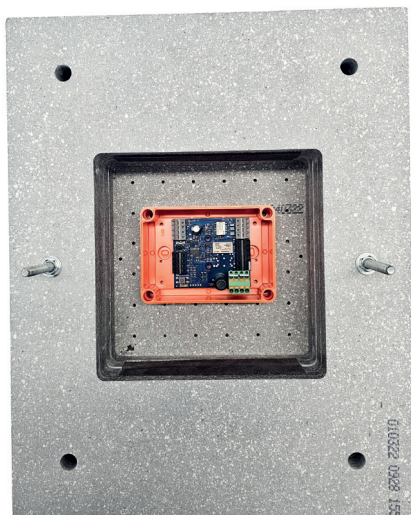
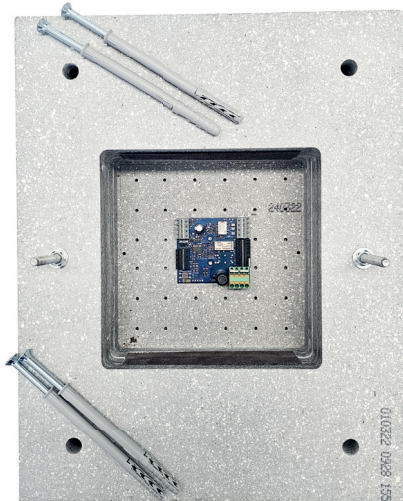


Views



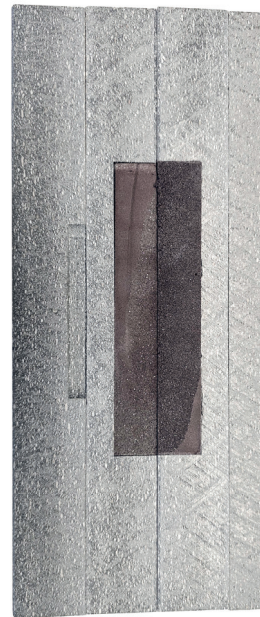
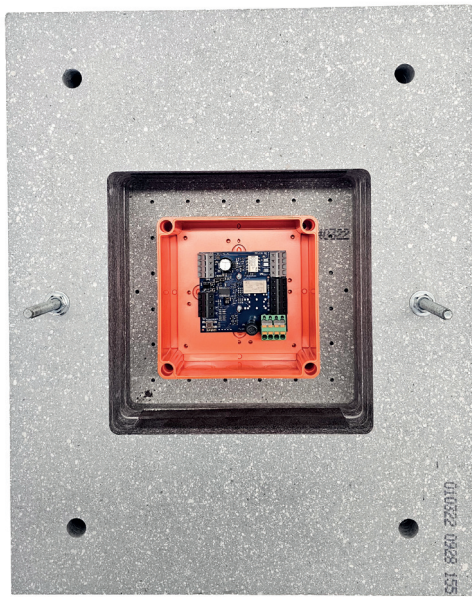


Views





Views





Description

The DPH-Fire Safety-E90 enclosure is designed for the safe installation of BACring fieldbus modules in locations where increased system protection is required.

It reliably protects the installed fieldbus modules against thermal and mechanical stress. BACring fieldbus modules installed in the DPH-Fire Safety-E90 enclosure achieve, in this configuration, a proven functional integrity of up to 90 minutes in accordance with DIN EN 1363-1:2020-05. This has been verified by fire tests in which several BACring fieldbus modules were operated under real temperature profiles according to the standard temperature–time curve (ETK) and were able to maintain their functionality within the enclosure for the required period.

The enclosure allows optional installation of:

- BACring fieldbus modules in a Spelsberg enclosure, or
- the BACring PCB without housing, mounted directly and subsequently enclosed with mineral wool.

Compatible BACring Fieldbus Modules

The following modules can be installed in the DPH-Fire Safety-E90 enclosure:

- DPM-M1E – Fieldbus module with additional motor current monitoring
- DPM-M2 – Fieldbus module for two motorized fire protection and smoke extraction dampers
- DPM-I2O2 – Fieldbus module for ventilation feedback signals and switching functions

Installation Variants

1. Installation in the Spelsberg Enclosure

BACring fieldbus modules can be installed in the DPH using the following Spelsberg enclosures:

- TK PS 1309-6-tm
- TK PS 1313-7-tm
- TK PS 1811-9-tm

Advantages of this variant:

- Mechanical protection of the electronics
- Optimal cable routing
- No additional filling with mineral wool required
- High stability and easy installation



Installation Variants

2. Installation of the BACring PCB Without Enclosure

The modules can also be installed without a housing, i.e. as a bare PCB.
In this case, the following applies:

- The PCB must be mechanically secured.
- The internal volume must be completely filled with mineral wool.
- A continuous layer of mineral wool must be present between the PCB and the cover plate.
- Mineral wool must not exert harmful pressure on components.
- Free air cavities must be avoided.

Cable Entry

Cables must be routed exclusively through the designated cable glands.

- Bus cables must be routed separately from mains cables.
- Shield connections must be correctly terminated.
- The enclosure must be operated in the closed state.

Intended Use

The enclosure is suitable for:

- BACring fieldbus modules in safetyrelevant installations
- AHU system, fire protection, and smoke extraction systems
- Fire brigade control panels (Switch zones, signaling, feedback)
- Integrated control and protection functions



Technical Data

Description	Article code	Dimensions (mm) (HxWxD)	Function
Base plate	HF.PD.101 50	440 x 350 x 22	Lower support plate for wall mounting
Base frame	HF.PD.101 51	440 x 350 x 42	Frame for accommodating the clamping frame
Clamping frame	HF.PD.101 52	440 x 350 x 42	Secures mineral wool and modules inside the enclosure
Cover plate	HF.PD.101 53	440 x 350 x 42	Front closing cover

Additionally included:

- Threaded rods and safety nuts
- Cable glands (top & bottom)
- Mounting material for wall installation