

Approval body for construction products
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and
Laender Governments



European Technical Assessment

ETA-23/0345
of 29 January 2024

English translation prepared by DIBt - Original version in German language

General Part

Technical Assessment Body issuing the
European Technical Assessment:

Deutsches Institut für Bautechnik

Trade name of the construction product

G-Ubivis XEA

Product family
to which the construction product belongs

Battery-powered hold-open system

Manufacturer

dormakaba Deutschland GmbH
DORMA Platz 1
58256 Ennepetal
DEUTSCHLAND

Manufacturing plant

dormakaba Deutschland GmbH
DORMA Platz 1
58256 Ennepetal
DEUTSCHLAND

This European Technical Assessment
contains

7 pages which form an integral part of this assessment

This European Technical Assessment is
issued in accordance with Regulation (EU)
No 305/2011, on the basis of

020094-00-1107

The European Technical Assessment is issued by the Technical Assessment Body in its official language. Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and shall be identified as such.

Communication of this European Technical Assessment, including transmission by electronic means, shall be in full. However, partial reproduction may only be made with the written consent of the issuing Technical Assessment Body. Any partial reproduction shall be identified as such.

This European Technical Assessment may be withdrawn by the issuing Technical Assessment Body, in particular pursuant to information by the Commission in accordance with Article 25(3) of Regulation (EU) No 305/2011.

Specific Part

1 Technical description of the product

This European technical approval applies for the battery-powered hold-open system "G-Ubivis XEA". It primarily consists of the following components¹ which are arranged in a common housing:

- release device

The release device is designed redundantly (two release channels). It processes the signals emitted by the smoke detector, monitors the power supply and the hold-open device and, if certain criteria are met, triggers the hold-open device.

- redundant, battery-powered energy supply, consisting of primary batteries and capacitors
- smoke detector with openings and connecting duct in the housing
- hold-open device

Essential non-moving parts of the hold-open device are designed redundantly. It keeps the energy required to close the closure in the stored state and releases the closure for closing when the release device gives the appropriate signal.

The holding force of the hold-open device (hold-open size) is adjusted according to the door closer size of the door closer to be connected.

Operating ambient conditions as specified by the manufacturer:

- Air temperature: -5°C bis $+45^{\circ}\text{C}$
- Humidity: 5% to 93% relative humidity (without condensation)
- Protection class: IP30

2 Specification of the intended use in accordance with the applicable European Assessment Document

The hold-open system is suitable for disabling the function of closing devices on fire doors, smoke control doors and other closures as single-leaf swing doors in inner walls complying with the requirement "self-closing". In the case of detected fire alarm or disturbance as well as operation of the release button the opened closures will be closed by the closing device automatically.

The verifications and assessment methods on which this European Technical Assessment is based lead to the assumption of a working life of the kit of at least 10 years. The indications given on the working life cannot be interpreted as a guarantee given by the producer, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

NOTE: Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this document.

¹ The documents describing the structure of the hold-open system in detail and the product specifications of components used are deposited with DIBt.

3 Performance of the hold-open system and references to the methods used for its assessment

3.1 Safety in case of fire (BWR 2)

Essential characteristic	Performance description	achieved performance
Response characteristic of the integrated smoke detector	EN 54-7 combined with EAD 020094-00-1107 <ul style="list-style-type: none"> - distance to the construction component above - distance to the upper edge of the smoke opening 	Passed $x \geq 1 \text{ cm}$ $y \leq 7 \text{ cm}$
Ability to release	<p>Release device</p> <ol style="list-style-type: none"> 1. Behaviour in the event of an alarm signal <ol style="list-style-type: none"> a) time between fire detection and release of the hold-open device b) time duration of the retention of the release signal c) distance at which the optical signals at 500 lx are still visible d) manner in which the operational readiness after responding of the release device is restored 2. Behaviour in the event of a disturbance or a failure of a component <ol style="list-style-type: none"> a) performance level according to EN 13849-1 b) time duration between the initiation of a failure and the release of the hold-open device and time of the error indication 3. Behaviour in the event of disturbance in the program flow of the processor <ul style="list-style-type: none"> - time between a simulated disturbance and the release of the hold-open device 4. Software <ul style="list-style-type: none"> - time interval at which the cyclical monitoring functions are tested - behaviour when there is no watchdog-signal after 8 seconds 5. Corrosion test <ul style="list-style-type: none"> - sulphur dioxide-(SO₂)-corrosion (test according to EN 54-7, clause 5.7.3.2 and test Kc according to EN 60068-2-42) 	<p>≤ 3 s</p> <p>not applicable</p> <p>6 m</p> <p>pressing the reset button or automatically reset if the fire parameter no longer exists</p> <p>pl d</p> <p>≤ 8 s</p> <p>≤ 3 s</p> <p>24 h</p> <p>release</p> <p>passed</p>

Essential characteristic	Performance description	achieved performance
	<p>First energy supply (Batteries)</p> <ol style="list-style-type: none"> 1. Lifetime calculation of the batteries 2. Behaviour in the event of interruption of the connecting cable to the battery <ol style="list-style-type: none"> a) time from the interruption to the release of the hold-open device b) self-test after re-establishing the connection and pressing the reset button c) Waiting time until an actuation of the reset button leads to the hold-open status 3. Behaviour in the event of short circuit in the connection line of the battery <ol style="list-style-type: none"> a) battery temperature b) time from the triggering of a short circuit to the release of the hold-open device c) self-test after elimination of the short circuit and pressing the reset button possibility for the hold-open device to go into the hold-open status if components are damaged 4. Monitoring of the battery voltage <ol style="list-style-type: none"> a) time between two queries about the current operating voltage b) the specified limit voltage for releasing is maintained c) possibility for the hold-open device to go into the hold-open status again if the threshold value for the release has fallen below 	<p>12 months</p> <p>≤ 5 s</p> <p>yes</p> <p>≥ 27 s</p> <p>25 °C</p> <p>≤ 10 s</p> <p>yes</p> <p>no</p> <p>≤ 8 s</p> <p>yes</p> <p>no</p>
	<p>Second energy supply (capacitors)</p> <ol style="list-style-type: none"> 1. Behaviour in the event of short circuit/technical fault <ol style="list-style-type: none"> a) cyclic check of the release channels b) time to the release of the hold-open device c) self-test after elimination of the short circuit and pressing the reset button possibility for the hold-open device to go into the hold-open status if components are damaged 2. Monitoring of the operational readiness <ol style="list-style-type: none"> a) fitness of the monitoring method b) cycle of monitoring c) behaviour when errors are detected 	<p>8 s</p> <p>≤ 10 s</p> <p>yes</p> <p>no</p> <p>yes</p> <p>once in 24 h release</p>

Essential characteristic	Performance description	achieved performance
Durability of the ability to release	Error of the electric magnet unit <ul style="list-style-type: none"> – ensuring of the redundancy of the hold-open device – verified release cycles 	passed 200.000
Behaviour in the event of fire	1. Behaviour of the hold-open system on the side of the door exposed to the fire 2. Behaviour of the hold-open system on the side of the door that is not exposed to the fire (heating plate test at a temperature of 380°C)	no negative impact no negative impact up to 90 minutes
Reaction to fire (according to EN 13501-1)	See following table	

Reaction to fire of the used materials

component	material	Class according to EN 13501-1
Mounting plate including accessories	aluminum alloy	A1
	steel	A1
	intumescent material	E
	ABSv0	NPD ² (UL94v0)
Sliding rail including accessories	steel	A1
	zinc alloy	A1
Carrier complete	aluminum alloy	A1
Smoke detection unit	FR4	NPD
	ABSv0 und ABSv1	NPD (UL94v0 and UL94v1)
Battery case including accessories	ABSv0	NPD (UL94v0)
	steel	A1
	intumescent material	A2-s1, d0
Front cover	steel	A1
	plexiglass XT	E
Battery pack	ABSv0	NPD (UL94v0)
	aluminum	A1
	steel	A1
	Glass fabric	NPD

3.2 Hygiene, health and the environment (BWR 3)

No performance assessed.

² NPD = no performance according to EN 13501-1 was determined

English translation prepared by DIBt

4 Assessment and verification of constancy of performance (AVCP) system applied, with reference to its legal base

In accordance with EAD No. 020094-00-1107, the applicable European legal act is: 1999/93/EG.

The system to be applied is: 1

5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited with Deutsches Institut für Bautechnik.

The manufacturer shall provide installation instructions and maintenance instructions for every hold-open system. The maintenance instructions shall clearly indicate which work is to be performed to ensure that the installed hold-open system continues to perform its task after long-term use.

The manufacturer shall provide instructions on processing, packaging, transport, storage and use, maintenance and repair of the hold-open system.

Issued in Berlin on 29 January 2024 by Deutsches Institut für Bautechnik

Christina Pritzkow
Head of Section

beglaubigt:
Biedermann