



E-CELL GUARD

The world's first automatic fire protection system for electric vehicle

If an electric vehicle catches fire, there are serious consequences for people and the environment. People and buildings must be protected as a top priority in the event of fire.

The main hazards of fires in electric vehicles in closed and open spaces are:

Smoke and extreme heat

Toxic smoke and heat poses a risk to human life, contaminate the surroundings, make firefighting difficult and cause considerable clean-up costs.

Uncontrollable fire

Isolating the fire is particularly important for fire prevention in enclosed public or private buildings of any kind.

Water damage

The standard firefighting approach for cars with combustion engines is still to use large amounts of water and possibly other additives to make tackling the fire even possible in the first place. The water used to extinguish the fire has to be disposed of subsequently at great expense.

Detect heat or smoke, trigger the alarm, activate the protection system, alert the fire brigade – all this happens automatically and without human intervention. Within seconds.

Surrounding cars, people and objects are protected and the risk to the building structure, for example in a fire in a multi-storey car park, is minimised.

Ecell-guard – system of three components

PHASE 1 WARNING SYSTEM

- early detection through multiple sensors and FAS (Fire Alarm System)
- optical and acoustic warning signals are activated

PHASE 2 AUTOMATIC TRIGGER

- automatic deployment of the containment blanket over the vehicle
- not dependent on mains power
- completely mechanical
- low maintenance and reliable

PHASE 3 CONTAINMENT BLANKET

- containment blanket isolates the fire within seconds
- protecting building structure and objects
- immediately limits smoke & heat development
- heat resistant up to 1000°C and peaks up to 1300 °C



PRODUCT INFORMATION

TEMPERATURE RESISTANCE
UP TO 1000°C, BRIEFLY UP TO 1,300°C

THE FIRE PROTECTION BLANKET

CERTIFIED FOR COMBAT SUITABILITY
OF BATTERY FIRES (KIWA Institute)

COMPLIES WITH LVS 1071 STANDARD
(Latvia Standard)

MINIMUM DIMENSIONS PARKING SPOT	HEIGHT: 2 m WIDTH: 2.5 m LENGTH: 5 m
CONSTRUCTION DIMENSIONS STAINLESS STEEL WALL CASSETTE	HEIGHT: 0.39 m DEPTH: 0.45 m LENGTH: 2.48 m
CASSETTE WEIGHT WITH FIRE PROTECTION BLANKET	APPROX. 146 kg
POSSIBLE CONNECTIONS TO THE FAS (FIRE ALARM SYSTEM)	FOR UP TO 30 PLACES
CERTIFICATES	VdS certification for all components of the Fire Alarm System (FAS) (FAS; DETECTORS; SIGNALING EQUIPMENT; ETC.)
ELECTRICAL DATA	230 V connection 16 A fuse (for buffer battery) mains power fail-safe
OTHER FEATURES	<ul style="list-style-type: none"> • Automatic release of the pull-out mechanism (Ejection) • Pre-programmed times for warning messages and tripping signal • Multiple triggering for system parking spaces in underground and multi-storey car parks freely programmable • Spacers for correct positioning of the vehicle

SCOPE OF DELIVERY

1x Wall cassette with fire protection ceiling and deflection set
1x Fire alarm system (FAS - parking space 1-30) with buffer battery
2x Fire alarm sensors
1x Acoustic warning signal generator
1x Optical Flash Light
1x Connection set (relay & distribution box with small parts)
1x Assembly set

