

# Electric Vehicle Charger Protection

Prevent costly damage to your facility.



As the demand for larger energy sources grows, so does the risk of electrical incidents. From faulty wiring and electrical surges to overheating batteries, these fire risks create an environment ripe for ignition – threatening valuable assets, compromising insurance premiums, and putting personnel at risk.

Targeting the hazard at source is therefore crucial. This is where Ardent's direct fire suppression system comes in.

# Why Ardent direct fire suppression systems?

In enclosed Electric Vehicle chargers, it can be difficult to detect a fire before the damage is already done. When every second counts, our direct fire suppression system delivers rapid fire detection and suppression, right where it's needed most - minimising damage to your assets within a matter of seconds.



## Clean and safe agents

Our clean agent is non-corrosive, non-conductive, and marries outstanding extinguishing performance with a remarkably low residue. This is an ideal solution for special hazards fire protection, without causing damage to your equipment.



## No Mains Power required

Our direct systems operate independently of any mains electricity source, ensuring round-the-clock, uninterrupted protection for your high-value assets. However, power is essential for: beacon operation, shunt-trip circuit breaker operation and IPS charging and transfer. An internal battery system disconnects mains power to the charger and activates the alert beacon.



## Cost-effective solutions

Our systems minimise potential cabinet and infrastructure downtime and can be quickly reinstated after deployment, delivering exceptional value without compromising on safety. Meanwhile, clear installation and maintenance instructions ensure these systems continue to facilitate the highest standards.



## Complete peace of mind

Backed by over 30 years of experience and trusted by operators, manufacturers, and people across the world to protect their people and assets, Ardent takes care of all aspects of fire protection so you have complete piece of mind that your facility is safe.

# EV Charger Protection



# How does the system work?

## **Pressure gauge confirms readiness**

The pressure gauge located on the cylinder valve will be visible in the green segment to confirm the pressure of the system is adequate and ready for normal use.

## **Detects high temperatures, fast**

Flexible detection tubing is routed around the high-risk areas and is connected to the fire suppression system.

## **Activates the system**

Pressured with nitrogen gas, the tubing is designed to rupture when exposed to high temperatures, initiating the release of the suppression agent.

## **Suppresses in seconds**

By targeting the heart of the fire at the point of rupture, the suppression agent gets to work in a matter of seconds. It evaporates cleanly after deployment, without leaving residue, and automatically suppresses the source of heat.

## **Shuts down mains power to the charger**

As the suppression agent is released, the system shuts down the main power to the charger to reduce the potential for re-ignition.

## **Flashing beacon alerts operators**

The beacon is powered by an internal battery system and provides a continuous alert that the system has deployed.

# What can Ardent direct fire suppression systems protect?

- ✓ Electrical equipment enclosures
- ✓ Electric vehicle chargers
- ✓ Data processing enclosures
- ✓ Many other applications:  
Suitable for use with Kempower, Nidec, Zenobe and other EV chargers.

## Technical specification

### **Ardent direct fire suppression system**

<b>Fire detection method</b>	Linear heat detection tube
<b>Extinguishing agent</b>	F 5-1-12
<b>Cylinder capacity</b>	2 kg, 4 kg, 6 kg, 9 kg
<b>Optional features</b>	Shunt trip for mains power isolation Alert Beacon

For further technical specifications, operating instructions and assistance from the Ardent Team, please contact +44 1423 326740.



To find out how we can help  
you protect your people and  
equipment, call our team on  
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