



# HONEYWELL ELECTRICAL CABINET SUPPRESSION SYSTEM

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Available in 3 kit sizes

ECS-250/ECS-252

ECS-500/ECS-502

ECS-1000/ECS-1002

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**Honeywell**

**HONEYWELL IS BUILDING A SMARTER, SAFER, AND MORE SUSTAINABLE WORLD. THAT'S THE POWER OF CONNECTED. THAT'S THE POWER OF HONEYWELL.**

**WE ARE HONEYWELL**

With a history dating back to 1885 Honeywell is a Fortune 100 company that invents and manufactures technologies to address some of the world's toughest challenges linked to global macro-trends such as energy efficiency, clean energy generation, safety and security, globalization and customer productivity. A recognized world leader in energy savings and comfort control with approximately 132,000 employees worldwide, including more than 22,000 engineers and scientists, we have an unrelenting focus on performance, quality, delivery, value and technology in everything we make and do.



Honeywell's ability to continually improve comes from successfully achieving two seemingly competing tasks at once – productivity and growth. Our global processes – or Enablers – are Honeywell's core internal business processes that drive efficiency and service quality. Enablers bring world-class products and services to market faster and more cost-effectively for our customers.

 Honeywell Aerospace	 Honeywell Building Technology (HBT)	 Safety and Productivity Solutions (SPS)	 Performance Materials and Technologies
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**WHY HONEYWELL?**

From our innovative approach to product design and delivery to technically advanced manufacturing and installation capabilities, our aim is to apply our many years of experience in building environments of all sizes.



Honeywell Operating Systems (HOS) and Velocity Product Development processes (VPD) drive continuous sustainable improvement in our manufacturing processes and product design & development cycles that helps us deliver quality products faster to the market.

 We provide customer-centric solutions which are <b>easy to use</b> and install for different types of users	 Our products have <b>modern and smart</b> designs that meet functionality, quality, safety and reliability	 We have a wide <b>distribution/channel partner network</b> backed by a strong sales team	 We invest in our <b>technology centers</b> , where people and technology work together on innovative solutions to deliver unmatched value to our customers
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**WHY ARE WE DIFFERENT?**

At Honeywell, we can draw on more than 25 years of combined expertise in the field of management and control solutions for air, water, gas, electricity and energy utilities for any size and type of application:

With more than 30,000 patents or patents pending worldwide, we generate innovative, world-class results. Our teams typically have members from every level of the organisation focused on improving processes to first understanding our customers' needs, then meeting – and even exceeding – their expectations.

 Fortune 100 Company	 131,000 Employees Worldwide	 22,000 Engineers and Scientists
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# NOT JUST FIRE DETECTION & ROOM FLOODING SYSTEM...

- 13% of non-home structure fires are due to electrical distribution and components
- 21% of property damage is the reason of electrical cabinet fires



## CAUSES OF FIRE

- Short-circuits, overloading or overheating of components
- Defective electrical connections
- Electrical malfunctioning
- Electrical surges
- Fatigue/Life time of electrical wires
- Incorrect installation
- Faulty equipment

## CONSEQUENCES OF ELECTRICAL CABINET FIRES

- Damage to equipment and surrounding areas
- Operations interruption/downtime
- Possible loss of clients
- Financial loss
- Business & Asset safety risk



### A Complete Pre-Engineered system

- Designed to protect Electrical Enclosures and Circuitry
- Pre-Engineered Electrical Cabinet Suppression System kit



### Reliability

- UL Listed Clean Agent & Heat Detection Tube
- Dual Valve Outlet- Ensures substantial savings yet protecting large size cabinets



### Fully Automatic

- Automatically detects and suppresses fire
- No external power or Human intervention required



### Fast Detection

- Get installed directly inside the electrical cabinets- Closer to where a fire can start

## KEY BENEFITS:

- Reduces even the most critical Electrical Fire risks
- Complete protection from combustion from short circuits, overloading or overheating in an electrical cabinet
- Protects Electrical Panels circuitry
- Avoids work stoppage & business downtime
- Protects business & property assets
- Leaves out no residue & environmental friendly

PROPERTIES	CO2	FK-5-1-12
NFPA Standard	NFPA-12- Lethal for Humans & Animals. Strongly not recommended in manned area	NFPA 2001- Clean agent. No residue - safe for electronics
Reaction	Non-reactive	Non-reactive / Non-corrosive
Discharge Time	30 Sec	10 Sec
Pressure Rating	Medium Pressure (60 bar)	Low pressure (13.5-16 bar)



# SYSTEM OVERVIEW

## THE SOLUTION

Honeywell ECS system uses the detection & suppression tubing system which is installed throughout the enclosure and connected to the cylinder valve. The tubing is charged with dry nitrogen to pressurize it inside the cylinder

The system uses heat-sensitive pneumatic polymer tubing that reliably detects and releases the extinguishing agent through Heat Detection Tube. Multiple temperature rated tubing options (110 or 180 degree celsius) protect a variety of hazards and equipments. Optional dual-outlet valves allow more versatility to protect larger hazards than a single valve system



**Cylinder with  
FK Agent**



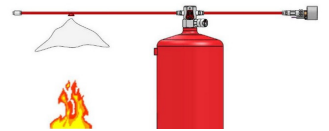
**Heat Detection  
Tube**



**Pressure  
Switch**



**End of Line  
Adaptor**

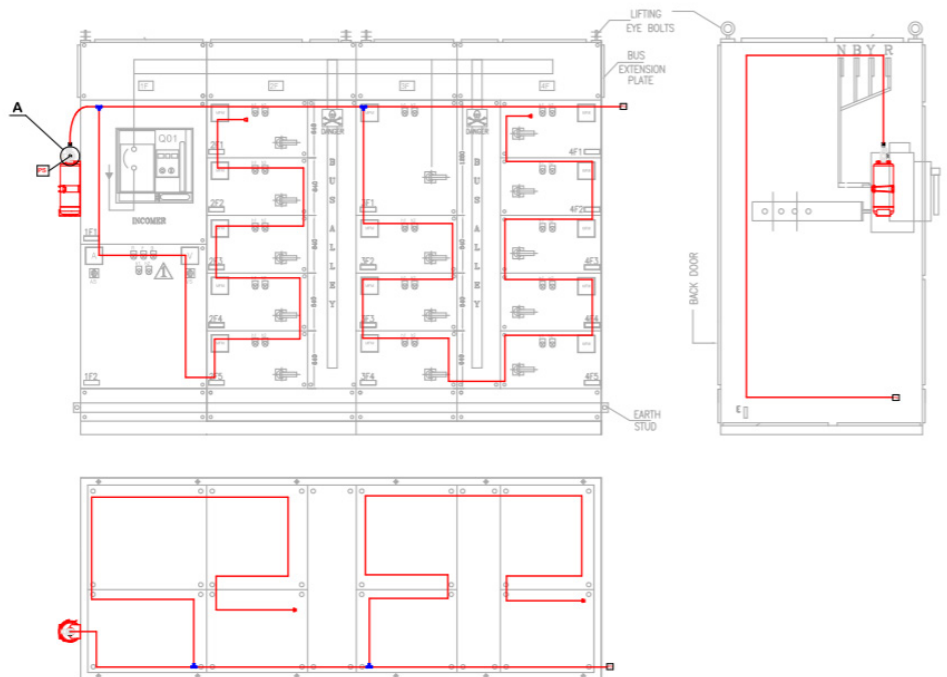


**Dual  
Outlet Value**

Cylinder with clean agent is connected to one end of the heat detection tube, the tube is laid inside the cabinet & enclosure. On detecting a temperature of 110°C or above heat detection tube de-pressurizes itself to the atmospheric pressure & ruptures it at the source of fire/heat.

The clean agent from the cylinder system flows through the Heat Detection Tube & get released from the ruptured hole. The fire is quickly suppressed just moments after it began, hence minimizing damage and downtime

This most innovative technology makes this system fully automatic. It requires no power & human intervention specially applicable for "micro-environments" where the fire hazard likely to be in the enclosed space



# THE ELECTRICAL CABINET SUPPRESSION KIT COMES IN 3 SIZES

The cylinder assembly is filled with  
FK-5-1-12 and pre-pressurized  
to 195/240psi (13.5/16 Bar).

## ECS-250/ECS-252

DESCRIPTION	DETAILS
Type of System	Direct Low Pressure With <b>FK-5-1-12</b>
Operating Pressure	195/240psig (13.5/16Bar) at 70°F (21°C)
Storage & Operating Temperature Range	0°F to 130°F (-17.8°C to 54.4°C)

DESCRIPTION	QUANTITY
Cylinder valve Assy	1
FK-5-1-12	2.5Lbs / 1.13Kgs
Cylinder Mounting Bracket	1
EOL Adapter with Gauge	1
Rubber Grommets	4
Plastic Loop Clamps	25
Chemical Formula	CF3CF2C(O)CF(CF3)2
OZONE Depletion Potential	0.0
Global Warming Potential	1
Atmospheric Lifetime (Years)	0.014 (5 days)
SNAP	Yes



## ECS-500/ECS-502

DESCRIPTION	DETAILS
Type of System	Direct Low Pressure With <b>FK-5-1-12</b>
Operating Pressure	195/240psig (13.5/16Bar) at 70°F (21°C)
Storage & Operating Temperature Range	0°F to 130°F (-17.8°C to 54.4°C)

DESCRIPTION	QUANTITY
Cylinder valve Assy	1
FK-5-1-12	5Lbs / 2.27Kgs
Cylinder Mounting Bracket	1
EOL Adapter with Gauge	1
Rubber Grommets	4
Plastic Loop Clamps	25
Chemical Formula	CF3CF2C(O)CF(CF3)2
OZONE Depletion Potential	0.0
Global Warming Potential	1
Atmospheric Lifetime (Years)	0.014 (5 days)
SNAP	Yes



## ECS-1000/ECS-1002

DESCRIPTION	DETAILS
Type of System	Direct Low Pressure With <b>FK-5-1-12</b>
Operating Pressure	195/240psig (13.5/16Bar) at 70°F (21°C)
Storage & Operating Temperature Range	0°F to 130°F (-17.8°C to 54.4°C)

DESCRIPTION	QUANTITY
Cylinder valve Assy	1
FK-5-1-12	10lbs/4.54kgs
Cylinder Mounting Bracket	1
EOL Adapter with Gauge	1
Rubber Grommets	4
Plastic Loop Clamps	25
Chemical Formula	CF3CF2C(O)CF(CF3)2
OZONE Depletion Potential	0.0
Global Warming Potential	1
Atmospheric Lifetime (Years)	0.014 (5 days)
SNAP	Yes



### SYSTEM DESIGN IS BASED ON NFPA 2001 GUIDELINE

#### NBC 2016

- Clause 3.4.6.3

Substation/Transformers

Electrical MV main distribution panel and lift panels shall be provided with CO2/inert gas/  
Clean gas flooding system for all panel compartments with a cylinder located beside the panel.

#### For more information

<https://honeywellbuildings.in>

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