# ECS-500/ ECS-502

Pre-Engineered Automatic Electrical Cabinet Fire Suppression System

ECS-500/ECS-502 is a Pre-Engineered Automatic Electrical Cabinet Fire Suppression System kit with all important accessories. The cylinder assembly is filled with 5lbs/2.27kgs of clean agent (FK-5-1-12) and pre-pressurized to 195/240 psi (13.5/16 Bar) ECS-502 provides a dual valve outlet as against ECS-500 which has a single valve outlet port.



The Kit consists of the following items:

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

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

#### **AGENT**

#### **PART CODE - FK-5-1-12**

With zero ozone depletion potential, extremely low global warming potential and short atmospheric lifetime, UL Listed FK-5-1-12 Fluid is the first chemical halon replacement to offer a viable, long-term, sustainable technology for special hazards fire protection

DESCRIPTION	QUANTITY
Chemical Formula	CF3CF2C(0)CF(CF3)2
OZONE Depletion Potential	0.0
Global Warming Potential	1
Atmospheric Lifetime (Years)	0.014 (5 days)
SNAP	Yes

## **CYLINDER & VALVE ASSEMBLY**

All agent cylinders are steel pressure vessels designed to hold the agent under pressure until the agent is discharged. All containers are suitable for use at storage temperatures between 32°F to 130 °F (0 °C to 54.4 °C).



DESCRIPTION	PARTICULARS
Cylinder Material	Painted Steel
Operating Pressure	195/240psig (13.5/16Bar)
Cylinder Mounting Bracket	Painted Steel
Valve Material	Nickel Plated Brass
Primary Seals (membrane)	Special Polymer
Screw-in Connections	Brass with NBR seals
Secondary Seals	NBR, Hybrid seal metal nitrile
Top Connection	G 1/8"
Pressure Gauge Connection	1/8" NPT
Working Pressure	195/240psi (13.5/16Bar)
Leakage Rate	.0001 mbar l/s



The cylinder valve assembly is also available with a dual output valve option. This comes with 2 ball valves with open and close individual ports

# **END OF LINE ADAPTER WITH PRESSURE GAUGE**

## PRODUCT CODE - ECS-EOL

DESCRIPTION	PARTICULARS	
Gauge Range	0 – 400psi	
Connections	1. DLP Valve	
	2. End of Line	
Material	Nickel plated brass body	
	BUNA N Seals	
Threads Internal	M10 x 1	
Threads External	9/16-18 UNF	
Max. Pressure	800psi	



Includes: Check Valve, Pressure Gauge and fittings to connect the sensor tubing.

# **SENSOR TUBING**

# PRODUCT CODE - ECS-RST / ECS-BST

This UL listed tube is heat sensitive and when exposed to a fire condition opens at the point of exposure to activate and release the agent. The tubing is designed to rupture at its determined temperature 230-248°F (110 -120° C) or 338-356°F (170 -180°C)

PRODUCT CODE	ECS - RST	ECS - BST
Outside Diameter	ø 0.234" / 6mm	ø 0.234" / 6mm
Inside Diameter	ø 0.156" / 4mm	ø 0.156" / 4mm
Colour	Red RAL 3000	Black RAL 9005
Minimum bending radius	4"/100mm	5.9" / 150mm



## **PRESSURE SWITCH**

# Product Code - ECS-008 (O) / ECS-008(C)

For supplemental functionalities when the system actuates such as sounding an alarm, closing ventilator ducts or cutting power supply

PRODUCT CODE	ECS-008 (0) / ECS-008 (C)	
Switch Type	SPST	
Fixture	1/8" NPT	
Proof Pressure	400 psi	
Туре	Normally Open / Normally Closed	
Electrical Rating	120 / 240 VAC - 375 VA	



# **MASTER CONTROL UNIT**

## Part Code - ECS-MCU-100

Upon receiving notifications from the system pressure switch due to activation, the MCU provide outputs for activation of sounders or to third party devices which may be used for Notification.

Outputs	1. Low pressure (Fault)
	2. System activation (Fire)
Input	Pressure Switch
Notification	12V output for Sounder
Dimension	100x100x50mm (LxWxD)
Battery Backup	9V DC 1Ah
Main Power	230V AC, 1Ah



## **END OF LINE PLUG**

# Part Code - ECS-ELP

In case of multiple tube ends for a system, End of Line Plug is used to seal the far end of the sensor tube where End of Line adaptor is not required.

Tube Connection	6mm compression fitting
Length	1.13"/29mm
Hex Flats	SW 12
Charging Port	No



# **ACTUATORS**

For actuating the system other than activation in case of fire being detected by the sensor tube, we can have either a manual actuator for activating the system or we can have an electric solenoid actuator which can be triggered by a Fire Detection panel or a remote signal generator.

	MANUAL ACTUATOR	SOLENOID ACTUATOR
Part Code	ECS-EOL-MR	ECS-SA
Tube Connection	6mm quick connect fitting	6mm quick connect fitting
Length	4.95"/106mm	3.9"/100mm
Hex Flats	SW 12	9W / 24V
Gauge Scale	0 to 400psi	0 to 400psi
Charging Port	Yes	Yes





## **SENSOR TUBE FITTINGS**

	STRAIGHT COUPLING	ELBOW	TEE	TEE FITTING
Part Code	ECS-SC	ECS-E06	ECS-T06	ECS-T06T
Connections	0.25"/6mm	0.25" / 6mm	0.25"/6mm	0.25" / 6mm
				G 1/8 male
Length	0.195" / 5mm	0.195" / 5mm	0.195" / 5mm	0.195" / 5mm









## **RUBBER GROMMET**

# **PRODUCT CODE - ECS-RG6**

Fittings to protect sensor tubing from damage and wear while passing through a panel or internal partitions

Material	Nylon
Orifice Diameter	ø 0.25" / 6.3mm
Max. Panel Thickness	0.07"/1.8mm
Length	0.2"/5mm



## **LOOP CLAMPS**

## PRODUCT CODE - ECS-PLC-36

Used to secure the sensor tube from the walls of the panel or mounting surface

Material	Nylon
Dimensions	0.25" / 6.3mm Hole
Attachment	Screws (not included)



# **FILLING ADAPTER**

# **PRODUCT CODE - ECS-FA-100**

Used to pressurize the **Heat Detection Tube** 

#### **KEY FEATURES**

• Includes: quick coupling connector and threaded end-of-line connection



# For more information

https://honeywellbuildings.in Call: 1800-103-0339

Email: HBT-Indiabuildings@honeywell.com

# Honeywell HBT India Buildings

Unitech Trade Center, 5th Floor, Sector-43, Block C, Sushant Lok Phase - I, Gurugram - 122 002 Haryana India ECS-500/ECS-502
PRE-ENGINEERED
AUTOMATIC
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CABINET FIRE
SUPPRESSION
SYSTEM

