# **Kidde Fire Systems Component Description**



Effective: September 2024 K-85-5514 Rev AD

# **Supervisory Pressure Switches**

#### **FEATURES**

 Both Normally Open and Normally Closed Configuration with One Unit For Approvals, see the "Compatibility" table.

#### **DESCRIPTION**

Cylinder supervisory pressure switches are intended to detect a fall in pressure in a Kidde Fire Systems clean agent or Nitrogen filled driver cylinder. The cylinder supervisory pressure switch can be wired for either normally open or normally closed operation, depending on installation requirements.

## **OPERATION**

When the pressure in the cylinder drops from the standard charge pressure to below the pressure trip setting, the switch operates. If wired in the NC (open-under-pressure) configuration the resulting pressure drop will cause the contacts to close. When connected to a monitored circuit of a suppression control panel the switching will result in an alarm or trouble condition.

Note: For Kidde Fire Systems ADS<sup>™</sup> systems with Fluoroketone Fire Suppression Agents, Kidde Fire Systems recommends using two different supervisory pressure switches. Use 85-111540-001 or 85-111540-100 (ATEX) on the Nitrogen Drivers to monitor the Nitrogen pressure. Use 06-118262-001 or 06-118537-001 (ATEX) on the

agent cylinder to monitor the agent pressure.

#### INSTALLATION

The supervisory pressure switch can be installed on a fully charged cylinder, without loss of pressure, provided the unit is handled with care and only by trained service personnel.

Disconnect all supply circuits before wiring the supervisory switch. Remove the protective cap from the pressure connection. Do not apply thread compound to the threads. Install the switch with an 1-1/16 inch openended wrench while holding the pressure connection with a 7/16 inch open-end wrench. Tighten hand-tight, plus one-quarter turn.

Leak check using a leak detector or bubbling solution. Secure switch body with wrench when connecting electrical conduit. Isolate the assembly from shock, vibration and areas subject to wide-ranging or rapid temperature fluctuations.



# **SPECIFICATIONS**

**Table 1: Standard Pressure Switch Settings** 

Setting:	See Table 3
Electrical rating:	5 Amps, 250 Vac
Wire color coding:	Blue = Normally Open Black = Normally Closed Violet = Common
System operating temperature range:	32 to 130°F (0 to 54°C)
Pressure connection:	0.25 in. SAE 45° flare female with valve core deflector
Wetted materials:	EPR, Brass Copper
Lead length:	36 in. ± 2 in. (914 mm ± 50 mm)

# **Table 2: ATEX Pressure Switch Settings**

Setting:	See Table 3
Electrical rating:	5 Amps, 250 Vac
Wire color coding:	Blue = Normally Open Red = Normally Closed Brown = Common Green = Ground (Earth)
System operating temperature range:	32 to 130°F (0 to 54°C)
Classification	NEAM 4X, 7, and 9; IP66
Pressure connection:	0.25 in. SAE 45° flare female with valve core deflector
Wetted materials:	EPR, Brass Copper
Lead length:	36 in. ± 2 in. (914 mm ± 50 mm)

### **ORDER INFORMATION**

Table 3. Supervisory Pressure Switch Specifications

Switch	Part Numbers	Band Color	Pressure Trip Setting	Compatible with
	85-111540-001 85-111540-100 (ATEX)	Blue	1540 psig (106.2 bar)	ADS™ Systems Nitrogen Drivers Nitrogen Pilot Cylinders Nitrogen Siren Drivers
	06-118262-001 06-118537-001 (ATEX)	Silver	288 psig (19.9 bar)	ECS™ 360 psi Agent Cylinders
	45-118500-001 45-500537-001 (ATEX)	Orange	435 psig (30.0 bar)	ECS-500™ psi Agent Cylinders

<sup>\*</sup> For 3" Valves sold before May 1, 2013, use P/N 06-118263-001 for the standard supervisory pressure switch and 06-118398-001 for ATEX approved supervisory pressure switch.

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K-85-5514

Effective: September 2024

# **COMPATIBILITY**

Series	DIOM P/N	Approvals
Kidde Fire Systems ECS-500™ System	06-237585-001	UL, ULC, FM
Kidde Fire Systems ECS-500™ Marine System	06-237589-001	UL, ULC, USCG
Kidde Fire Systems ADS™ for use with Fluoroketone Fire Suppression Agents	06-237256-001	UL, ULC, FM
Kidde Fire Systems ADS™ Marine for use with Fluoroketone Fire Suppression Agents	06-237257-001	UL, ULC, USCG
Kidde Fire Systems ADS™ with HFC-227ea Agent	06-236068-001	UL, ULC, FM
Kidde Fire Systems ADS™ Marine with HFC-227ea Agent	06-236595-001	UL, ULC, USCG
Kidde Fire Systems ECS™ 360 for use with Fluoroketone Fire Suppression Agents	06-236553-001	UL, ULC, FM
Kidde Fire Systems ECS™ 360 Marine for use with Fluoroketone Fire Suppression Agents	06-236559-001	UL, ULC, USCG
Kidde Fire Systems ECS™ 360 with HFC-227ea Agent	06-236115-001	UL, ULC, FM
Kidde Fire Systems Modular ECS™ 360 with HFC-227ea Agent	06-236116-001	UL, ULC, FM
Kidde Fire Systems ECS™ 360 Marine with HFC-227ea Agent	06-236225-001	UL, USCG
Natura™ Inert Gas System*	06-237619-001	UL, FM

<sup>\*</sup>For Natura Inert Gas Systems, the supervisory pressure switch can only be used on Nitrogen Pilot and Siren Drivers. It cannot be used for the Nature agent cylinder.

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