

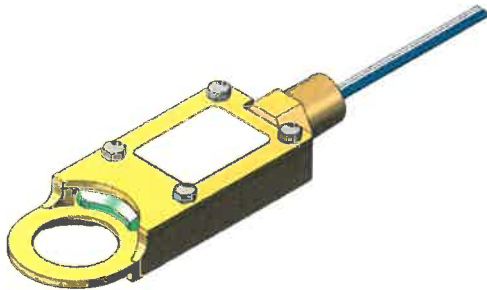
**Date:** December 28, 2015  
**To:** All Kidde® Fire Systems Distributors  
**From:** Mohammed Ateeq/Joseph Ciol, Clean Agent - Product Management  
**Subject:** Clean Agent Systems – New Electric Actuator Monitor

**NEW PRODUCT INFORMATION –  
PLEASE SHARE WITH YOUR SALES, DESIGN & SERVICE PERSONNELL**

Kidde Fire Systems is very pleased to introduce a group of new products to meet the need to monitor the placement of electric actuators on discharge control heads and directional valves, as required by NFPA 2001-2012<sup>1</sup>, UL 2166<sup>2</sup>, UL 2127<sup>3</sup> and FM 5600<sup>4</sup>. These requirements are effective as of January 1, 2016. All systems installed on and after this date must be able to monitor these electrical actuators to be compliant with code and agency requirements.

**Chemical Clean Agent Electric Actuator - Control Head Monitor (CHM)**

We have taken an approach that, we believe, is unique in the industry. After listening to your input, we have designed a device that is simple to install in new systems *AND* has the added benefit of easily retrofitting existing systems at a very reasonable price point. There is no need to switch out the existing electric actuator on discharge control heads.



The new Kidde CHM is compatible with the following electric actuators:

81-895630-000 Electric Control Head with Cable Operator  
82-486500-010 Stackable Explosion Proof Control Head\*  
WK-890181-000 Electric Control Head  
WK-897494-000 Electric Explosion Proof Control Head\*

\* Meets FM Hazardous location compliance Class I, Groups C and D; Class II Groups E, F and G; Class III

At your next service interval the CHM can be added and wired to your existing control unit. There is no longer the need to worry that an electric actuator may have been accidentally left off a discharge control head.

Our CHM is truly a supervised solution. It comes standard with 4 wires to ensure that not only are you supervising the placement of the electric actuator but that you are also supervising the complete circuit from panel to CHM to junction box for continuity (in accordance with UL 864 Standard for Control Units and Accessories for Fire Alarm Systems 9<sup>th</sup> Edition).

[www.kiddefiresystems.com](http://www.kiddefiresystems.com)

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Advancing fire protection.

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The CHM is also universal in use. It fits on all clean agent storage cylinder valves (1.5, 2.0 and 3.0 inch) the Advanced Delivery System (ADS) Nitrogen Drivers and the Nitrogen Pilot Cylinders for both HFC-227ea and 3M™ Novec™ 1230 Fire protection Fluid platforms. It comes standard for use in hazardous locations Class I groups C & D, Class II groups E, F & G and Class III and will be identified as such.

In order to maintain the cULus Listing and FM Approval of Clean Agent Suppression Systems starting January 1, 2016, all electric actuators must be installed with a placement monitor. To this end Kidde Fire Systems is offering Actuation Kits (see table 1) that will include the electric actuator along with the CHM.

Table 1

New P/N	Description	Old P/N	Old P/N Status
85-486500-010	Control Head Monitor	-	New
	Stackable Explosion proof (1.5 and 2 inch valves only)	82-486500-010	Discontinued
	Lever Operated Control Head (required per NFPA 2001)	WK-870652-000	Spare
85-890181-000	Control Head Monitor	-	New
	Electric Control Head	WK-890181-000	Discontinued*
85-897494-000	Control Head Monitor	-	New
	Electric Control Head Explosion Proof	WK-897494-000	Discontinued*
85-895630-000	Control Head Monitor	-	New
	Electric Control Head with Cable operated control head	81-895630-000	Discontinued*

\* The discontinuance of these products is effective for new Clean Agent platforms only. Electric Actuators used on our CO2 platform with the same part numbers will not be discontinued and can be purchased as normal or as spare parts.

To retrofit installed electric actuators, use the part number in table 2:

Table 2

New P/N	Description	Old P/N	Old P/N Status
85-100000-100	Control Head Monitor	-	New

The CHM is placed between the valve and electric actuator. See figure 1. The actuator is installed in the same manner as normal and there is no interference with the CHM. When installed, it does not sit completely snug against the valve. This play allows for easier attachment of a conduit.

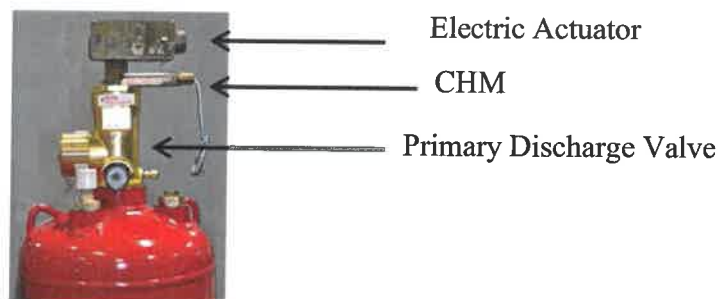


Figure 1

### **Inert Gas Electric Actuator - Monitoring**

For our Inert gas product platforms (Argonite and Nitrogen) the monitor is built into the system as it is sold today. The supervisory pressure switch will send a notification to the control panel that the system is impaired as soon as the actuator is removed from the valve. This removal process must be followed to properly test the actuator and is described in the Argonite and Nitrogen - Design, Installation, Operation & Maintenance manuals (DIOM).



Supplied with new monitor

### **Chemical Clean Agent and Inert Gas Directional Valve Control Head Monitor (DVCHM)**

We have taken the same approach with the directional valves sold for chemical clean agents and inert gas systems. The directional valves will be sold with a monitor system directly mounted to the valve.

The monitor is also easily retrofitted to existing installations. By simply removing two screws, attaching the bracket/switch assembly and wiring the device to the supervisory circuit, you can now have peace of mind that directional valves are properly monitored.

New part numbers for directional valves with placement monitor are shown in table 3:

Table 3

New P/N	Description	Old P/N	Old P/N Status
<b>Clean Agent</b>			
85-220030-001	3 Way Selector Valve 1/2"	90-220030-001	Discontinued
85-220030-100	3 Way Selector Valve 1/2" Explosion-Proof	90-220030-001	Discontinued
85-220030-002	3 Way Selector Valve 3/4"	90-220030-002	Discontinued
85-220030-200	3 Way Selector Valve 3/4" Explosion-Proof	90-220030-002	Discontinued
85-220030-003	3 Way Selector Valve 1"	90-220030-003	Discontinued
85-220030-300	3 Way Selector Valve 1" Explosion-Proof	90-220030-003	Discontinued
85-220031-001	3 Way Selector Valve 1 1/4"	90-220031-001	Discontinued
85-220031-100	3 Way Selector Valve 1 1/4" Explosion-Proof	90-220031-001	Discontinued
85-220031-002	3 Way Selector Valve 1 1/2"	90-220031-002	Discontinued
85-220031-200	3 Way Selector Valve 1 1/2" Explosion-Proof	90-220031-002	Discontinued
85-220031-003	3 Way Selector Valve 2"	90-220031-003	Discontinued
85-220031-300	3 Way Selector Valve 2" Explosion-Proof	90-220031-003	Discontinued
85-220032-001	3 Way Selector Valve 3"	90-220032-001	Discontinued
85-220032-100	3 Way Selector Valve 3" Explosion-Proof	90-220032-001	Discontinued
85-220032-002	3 Way Selector Valve 4"	90-220032-002	Discontinued
85-220032-200	3 Way Selector Valve 4" Explosion-Proof	90-220032-002	Discontinued
<b>Inert Gas</b>			
85-609800-001	2 Way Selector Valve 1/2"	38-609800-001	Discontinued
85-609800-002	2 Way Selector Valve 3/4"	38-609800-002	Discontinued
85-609800-003	2 Way Selector Valve 1"	38-609800-003	Discontinued
85-609800-004	2 Way Selector Valve 1 1/4"	38-609800-004	Discontinued
85-609800-005	2 Way Selector Valve 1 1/2"	38-609800-005	Discontinued
85-609800-006	2 Way Selector Valve 2"	38-609800-006	Discontinued

To retrofit installed directional valves, use the appropriate bracket/switch assembly shown in table 4:

Table 4

New P/N	Description	Old P/N	Old P/N Status
85-220000-001	Retrofit Kit - Clean Agent Selector Valves, Standard switch	-	New
85-220000-100	Retrofit Kit - Clean Agent Selector Valves, Explosion proof switch	-	New

New P/N	Description	Old P/N	Old P/N Status
85-220000-002	Retrofit Kit - Inert Gas Selector Valves, Standard switch	-	New

### **Product Availability**

The new directional valve part numbers and retrofit kits referenced in tables 3 and 4 are in the price list effective January 4, 2016.

Orders placed prior to January 1, 2016 but which will be shipping after this date, must include the Control Head Monitor p/n 85-100000-100. A Customer Service Representative will contact you to add this item to your order.

The new Actuation Kits with CHM will be available as follows:

Table 5

New P/N	Description	Price List Update & Order Acceptance
85-486500-010	Stackable Explosion proof with Control Head Monitor (1.5 & 2 in. valves only)	Jan. 4, 2016
85-890181-000	Electric Control Head with Cable operated control head and Control Head Monitor	Jan. 4, 2016
85-897494-000	Electric Control Head Explosion Proof with Control Head Monitor	Jan. 4, 2016
85-895630-000	Electric Control Head with Cable operated control head and Control Head Monitor	Jan. 4, 2016

To retrofit existing electric control heads the CHM retrofit kit will be available as follows:

Table 6

New P/N	Description	Price List Update & Order Acceptance
85-100000-100	Control Head Monitor	Jan. 4, 2016

### **Legacy Brands**

Chemetron Fire Systems Chemical Clean Agent Systems can only be used to replace legacy systems installed prior to January 1, 2016. New installations will not comply with the placement monitor requirement.

Fenwal Protection Systems series 9300 Top Discharge Cylinders fall under the same design requirements as the Kidde cylinders and therefore retrofits can be accomplished in the same manner. New installations will not comply with the placement monitor requirement. Fenwal Sphere and Bottom Discharge platforms use electro-explosive actuators which, given that they can be tested without physical removal of the squib from the valve, are not required to be monitored for placement as per NFPA 2001-2012<sup>5</sup>.

### **Control Unit Interface**

The CHM and DVCHM are compatible with all Kidde panels – the conventional AEGIS™, the Single Loop ARIES™ and the Multi-Loop ARIES NETLink™ and their respective variants. The CHM and DVCHM provide a SPST Normally Closed contact that should be wired to the supervisory circuit on an AEGIS or via a SmartOne Addressable Input (AI) Module configured as a Supervisory Input to an ARIES or ARIES NETLink panel. It is acceptable for multiple CHM's and DVCHM's to be wired to the same supervisory circuit.

### **Tools**

The installation of the CHM and DVCHM on electric actuators and directional valves is simple. Nevertheless, we have created a slide show to serve as a guide to aid better understanding of the process before the next Technical Training school. The guide can be downloaded from the Distributor Extranet.

New and revised datasheets for the CHM, DVCHM, Control Heads and Directional Valves are on the Extranet.

The following 2016 price lists have been revised and can be obtained from the extranet:

- Kidde Full Line Distributor (ADS, ECS, IG sections)
- Kidde Engineered Systems Distributor (ADS, ECS, IG sections)
- Legacy Chemetron Systems
- Legacy Fenwal Systems

We are also in the process of revising the Kidde QuickCalc BOM-Generator Tool such that the Agent Wizard appropriately selects the CHM and DVCHM for Clean Agent Systems and expect to make this revised tool available in January 2016.

**Significant Opportunity with Installed Base**

As mentioned, the CHM and DVCHM have the benefit of easily retrofitting existing systems at a very reasonable price point without the need to switch out the existing discharge control head electric actuator or directional valve.

**With over half-million Clean Agent systems in the installed base, this ability to retrofit provides you a significant revenue opportunity as you help safeguard existing service customers and a new opening with which to approach previous service customers.**

**In Summary:**

The Kidde Fire Systems Chemical Clean Agent CHM is a stand-alone unit which is:

- Easy to install
- Easy to retrofit (new revenue from existing, ability to approach previous customers)
- Universal in use (can be used on all KFS electric actuated systems)
- True supervision (four wire)
- Extremely robust (explosion proof rating)

The Kidde Fire Systems Clean Agent DVCHM is a stand-alone unit which is:

- Already installed on new units
- Easy to retrofit (new revenue from existing, ability to approach previous customers)
- True supervision (four wire)
- Extremely robust (optional explosion proof rating for chemical clean agents)

As always, we appreciate your business and should you have any questions please contact us at:

Regional Sales Managers:	<a href="#">Domestic Click here</a> or <a href="#">International click here</a>
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<sup>1</sup> NFPA 2001-2012 Standard on Clean Agent Fire Extinguishing Systems Sections 4.3.4.1 to 4.3.4.2

<sup>2</sup> UL 2166-29 May 2015 Standard for Halocarbon Clean Agent Extinguishing System Units Section 9.6, 9.7, 61.2k, 61.3

<sup>3</sup> UL 2127-30 Sept. 2014 Standard for Inert Gas Clean Agent Extinguishing System Units Section 9.6, 9.7, 59.2j, 59.3

<sup>4</sup> FM 5600- April 2013 Approval Standard for Clean Agent Extinguishing Systems Section 3.2.14.4

<sup>5</sup> NFPA 2001-2012 Standard on Clean Agent Fire Extinguishing Systems Annex A.4.3.4.1