



Features

- Provides the correct pressure to fully open a FIKE's Clean Agent containers utilising FIKE's fast acting rupture disc assembly

Description

The GIAB consists of the Gas Cartridge Actuator (GCA) and the Gas Interface Actuator Board (GIAB).

The GIAB interfaces the Fire Alarm Control Panels (FACP) Agent Release Module and Agent Termination Board (ATB) to the Gas Cartridge Actuator (GCA).

The Gas Cartridge Actuator (GCA) provides the necessary pressure to fully open all Fike's Clean Agent containers utilizing a Fike fast acting rupture disc assembly.

The GCA consists of a;

1. Stainless steel body containing two (2) sets of bridge wires; and a
2. Charge of smokeless powder.

Operation of the GCA occurs when an electric current is sent through the bridge wires causing the smokeless powder to ignite. This practice, in turn, generates the necessary pressure to open the rupture disc and discharge the agent in the Clean Agent container.

The GCA is designed to operate in all Fike Clean Agent system containers with 1" & 2½" valves and also containers with 3" valves with single disc pack. This device is designed to operate by two (2) methods of actuation:

1. 27VDC input from the Agent Termination Board supplied via the GIAB
2. Input from an (optional) independent Manual Actuator.

OPERATION

Under normal operating conditions the monitored output of the ATB sees the 10KΩ monitoring resistor in series with the GCA (approximately 0.75Ω) and current limiting firing resistors (2R2) and communicates this normal condition back to the (FACP).

If the ATB receives a "release agent" command, 27VDC is applied to the input of the GIAB and then by way of the current limiting resistors to the GCA.

The resulting current fires or open circuits the GCA firing bridge. This open circuit is seen at the output of the ATB as a fault, or in this case the GCA fired condition, and is reported to the FACP as such.

Item Numbers

4200-9901	Gas Interface and Actuator
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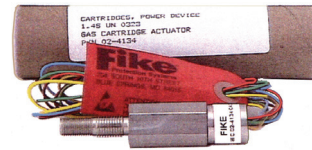


Figure 1: Actuator and Packaging

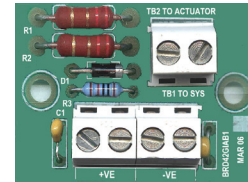


Figure 2: Gas Interface Actuator Board

The system will then remain in fault or agent released condition until the GCA and agent have been replaced and / or the ATB monitoring has been restored.

SHELF LIFE

The G.C.A. is a sealed device utilizing a glass seal and epoxy plug on the wire end and a mylar seal on the discharge end. This extends the actuator's continuous service and shelf life to 10 years before it requires replacement.

SHIPPING CLASIFICATION

The GCA "WILL NOT" detonate any explosive materials or products. It has a U.S. Department of Transportation classification of

- Class: 1.4
- Compatibility Group: "S"
- Shipping Number: UN0323

This classification allows this device to be shipped on any type of carrier, such as commercial airlines, as well as all forms of land earners "without" special handling permits and/ or licensing.

Note: The GCA is not an explosive device and cannot be used as a detonator.

For further details see MAN2981 Install Guide

Specifications

Operating voltage	27VDC
Quiescent current	1.5A @ 27VDC (Min)
IP Rating	IP40
Temperature range For HDC-227ea Systems For ECARO-25 Systems	0°C to + 54.4°C 0°C to + 49°C
Humidity	0-95% Non condensing
Operating time	10mS
Construction	ABS
Conduit access	20mm