

APPROVAL REPORT

Project No.: 3044246
Class: 3010
Product: 10-2698 and 10-2699 Suppression Disconnect Switches for Use with FM Approved Fike IRM or ARM and Releasing Solenoid on FM Approved Fike Control Panels: SHP PRO, Cheetah XI, Cheetah XI50, CyberCat 1016, CyberCat 254 and CyberCat 50
Name of Report Holder: Fike Corporation
704 SW 10th. Street,
Blue Springs, Missouri 64013
Name of Manufacturer: Fike Corporation
Address of Manufacturer: 704 SW 10th. Street,
Blue Springs, Missouri 64013
Customer ID: 1000001396-1
Customer website www.fike.com

Prepared by



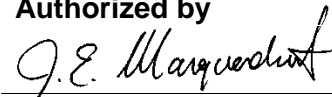
Henry Czarnecki
Senior Engineer

Reviewed by



David Waite
Technical Team Manager

Authorized by



James E. Marquedant
Group Manager

March 23, 2012

Date of Approval

1 INTRODUCTION

1.1 Fike Corporation requested Approval of the equipment listed in Section 1.4.1 for compliance with the FM Approvals standards listed in Section 1.3.

1.2 This report may be freely reproduced only in its entirety and without modification.

1.3 FM Approvals Standards

Title	Class Number	Date
Approval Standard for Fire Signaling Systems	3010	December 2010
National Fire Alarm Code	ANSI/NFPA 72	2002 Edition

1.4 **Listing:** The product will appear in the Approval Guide, an on-line resource of FM Approvals.

1.4.1 FM Listings:

Reference attached listing sheet.

2 DESCRIPTION

2.1 This report covers 10-2698 and 10-2699 Suppression Disconnect Switches for Use with FM Approved Fike IRM or ARM and Releasing Solenoid on FM Approved Fike Control Panels: SHP PRO, Cheetah XI, Cheetah XI50, CyberCat 1016, CyberCat 254 and CyberCat 50.

The Suppression Disconnect is a keyed switch that enables the operator to put the suppression release circuit to which the switch is connected in a "DISARMED" condition. It electrically isolates the connected release device from the associated control panel's releasing circuit and provides a supervisory contact to allow monitoring by a control panel. This allows the operator to work in the area protected by the suppression system without accidentally releasing the system.

The switch can be ordered with or without status LEDs (Green – ARMED and Red – DISARMED). The LED's provide positive indication of the status of the releasing circuit. LEDs require 24 VDC auxiliary power from the associated control panel for operation.

3 EXAMINATIONS AND TESTS

3.1 10-2698 and 10-2699 Suppression Disconnect Switch samples were submitted for examination and testing. The 10-2698 and 10-2699 Suppression Disconnect Switch samples were considered to be representative of production and were examined, tested, and compared to the manufacturer's drawings. Testing was conducted at Fike in Blue Springs Missouri. All data is on file at FM Approvals along with other documents and correspondence applicable to this program.

3.2 Not all possible anticipated system configurations can be tested. This Approval examination is considered to be a representative type approval configuration under worst case loading and operating conditions.

3.3 All testing and analysis considered appropriate was conducted and verified to be in compliance with the Standards defined in Section 1.3.

4 MARKING

See attached marking drawing.

5 REMARKS

5.1 Installations shall comply with the manufacturer's instructions.

5.2 Tampering and replacement with non-factory components may adversely affect the safe use of the system.

6 SURVEILLANCE AUDIT

The design and manufacturing facilities at the following location is visited on a routine basis. The facilities and quality control procedures in place have been found to be satisfactory to manufacture product identical to that tested and Approved. A Form 797 shall be submitted to FM Approvals for requesting any additional manufacturing facilities which are not listed below.

Design

Fike Corporation
704 SW 10th. Street,
Blue Springs, Missouri 64013
Fike Corporation

Manufacturing

Fike Corporation
704 SW 10th. Street,
Blue Springs, Missouri 64013
Fike Corporation

7 MANUFACTURERS RESPONSIBILITIES

7.1 Documentation that is applicable to this approval is on file at FM Approvals and listed in the Documentation File, Section 8, of this report. No changes of any nature shall be made unless notice of the proposed change has been given and written authorization obtained from FM Approvals. The Approved Product - Revision Report, FM Approvals Form 797, shall be forwarded to FM Approvals as notice of proposed changes.

7.2 The manufacturer supplied all the Control Drawings for the products. The manufacturer shall make additional copies available upon request.

8 DOCUMENTATION

See attached blueprint report.

9 CONCLUSION

- 9.1** The apparatus described in section 1.4.1 meets FM Approvals requirements. Since a duly signed Master Agreement is on file for this manufacturer, US Approval is effective the date of this report.

PROJECT DATA RECORD: 3044246

ATTACHMENTS: Label Drawing
Blueprint report
Listing sheet

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COMPONENT SPECIFICATION



NOTES:

1. LETTERING TO BE BLACK ON WHITE BACKGROUND.
2. MATERIAL TO BE .003 TO .005 THK. VINYL, PRESSURE SENSITIVE.
3. RECOMMENDED SIZE 2" LONG BY 1 1/2" HIGH.

FOR USE ON NAMEPLATES, IN LITERATURE, ADVERTISEMENTS, PACKAGING AND OTHER GRAPHICS.

- 1) The FM diamond mark is acceptable to Factory Mutual Research as an Approval mark when used with the word "Approved."
- 2) The FMRC Approval logomark has no minimum size requirement, but should always be large enough to be readily identifiable.
- 3) Color should be black on a light background or a reverse may be used on a dark background.

NOTE: These Approval marks are to be used only in conjunction with products or services that have been Approved by Factory Mutual Research Corporation. The Factory Mutual Research Approval marks should never be used in any manner (including advertising, sales or promotional purposes) that could suggest or imply Factory Mutual Research Approval or endorsement of a specific manufacturer or distributor. Nor should it be implied that Approval extends to a product or service not covered by written agreement with Factory Mutual Research. The Approval marks signify that products or services have met certain requirements as reported by the Factory Mutual Research Corporation.

C.P.	IN10-014			
USED ON	NEXT ASSY.			REMARKS
				Blue Springs, Missouri - U.S.A. PART: 02-1851 TITLE: LABEL, FACTORY MUTUAL SYSTEM APPROVED
B	ADDED TO NOTES	5/23/00	PB/KG/JT	SPECIFIED BY:
A	CHANGED LABEL AND DRAWING SIZE	3/17/00	JH/PK/LW	L. WANBAUGH
Q		7/9/92	NG/	DEPARTMENT
REV	DESCRIPTION	DATE	BY/APPR	NPD
				REV
				B
				SCALE
				NONE
				WT
				SHEET 1 OF 1

Blueprint Report

Fike Protection Systems (1000001396)

Class No 3010

Original Project I.D. 3044246

<u>Drawing No.</u>	<u>Revision Level</u>	<u>Drawing Title</u>	<u>Last Report</u>	<u>Electronic Drawing</u>
02-12320	NC	02-12320, Label, I.D., Adhesive, 10-2706	3044246	Yes (pdf)
02-12321	NC	02-12321, Label, I.D., Adhesive, 10-2705	3044246	Yes (pdf)
02-12322	NC	02-12322, Label, I.D., Adhesive, 10-2698	3044246	Yes (pdf)
02-12323	NC	02-12323, Label, I.D., Adhesive, 10-2699	3044246	Yes (pdf)
02-12324	C	02-12324 Label, Module Instruction, Solenoid Disconnect Switch	3044246	Yes (pdf)
02-12325	D	02-12325 Label, Module Instrcuton, ARM Disconnect Switch	3044246	Yes (pdf)
06-471	0	06-471	3044246	Yes (pdf)
06-472	1	06-472	3044246	Yes (pdf)
10-2698	A	10-2698 Assembly, ARM disconnect switch w/o LED's	3044246	Yes (pdf)
10-2699	B	10-2699 Assembly ARM Disconnect Switch w/LED's	3044246	Yes (pdf)
10-2705	A	10-2705 Solenoid Disconnect Switch w/o LED's	3044246	Yes (pdf)
10-2706	B	10-2706 Assembly, Solenoid Disconnect Switch w/LED's	3044246	Yes (pdf)



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[DATA TABLES](#)

[Listing Sheet Instruction](#)

[Listing Sheet Tutorial](#)

Title: Listing Sheet	Document No: F 625
Issue Date: 11/January/2012	Issue No: 1

LISTING INFORMATION

1. MANUFACTURER: Fike Corporation 704 SW 10 th . Street, Blue Springs, Missouri 640	2. MANUFACTURER CUSTOMER ID: <input type="text" value="1000001396-1"/>			
	3. PROJECT ID 3044246			
	4. MANUFACTURER'S WEB SITE: www//fike.com			
	5. DISTRIBUTOR / PRIVATE LABELER:			
9. LISTEE COMPANY NAME AND ADDRESS: (As it appears or should appear in the guide) Fike Corporation 704 SW 10 th . Street, Blue Springs, Missouri 640	6. PRIVATE LABELER CUSTOMER ID:			
	7. CLASS NUMBER: 3010			
	8. NUMBER OF PRODUCTS OR SERVICES: (Fill in number) See group manager/area director for instructions regarding this field			
	<table border="1"> <tr> <td style="width: 50px; text-align: center;">2</td> <td style="width: 150px;">Product(s)</td> <td style="width: 50px;"></td> <td style="width: 150px;">Service(s)</td> </tr> </table>	2	Product(s)	
2	Product(s)		Service(s)	
10. DISTRIBUTOR/ PL WEB SITE:				
11. FILE NAME: (Example: 3030527_CAD.doc) 3044246_hc				
12. EQUIPMENT CLASSIFICATION: (Division, Levels) <input checked="" type="checkbox"/> Electrical Signaling <input checked="" type="checkbox"/> Automatic Releases for Extinguishing Systems and Other Fire Protection Equipment				

NOTE: Provide listing below. Use **red font for additions**, ~~strikethroughs~~ for deletions.
 All tables must be embedded excel tables.
 If there are multiple products and/or certifications copy and paste sections 13 through 16 for each separate product and/or certification type.

13. TYPE OF CERTIFICATION: (Check only one)		14. TYPE OF LISTING: (Check all that apply)	
<input checked="" type="checkbox"/>	US		New Client/New Listing
	CANADA	<input checked="" type="checkbox"/>	Changes/Addition to Client's listing
	ATEX		Company Name or Address Change
	CPD		Reformatting
15. APPROVAL GUIDE PRODUCTS & LISTINGS:			
New Product Name(s):			
Product Type(s):			
PIN (Model/Part Number Listed in Guide)			
Searchable Part Number(s)			

16. LISTING TEXT & TABLES:
[Enter Listing Here](#)



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Title: Listing Sheet	Document No: F 625
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☑Electrical Signaling ☑Automatic Releases for Extinguishing Systems and Other Fire Protection Equipment

SHP Pro Programmable Fire Alarm Control P/N 10-063 with V1.00 firmware. Controller Part Number designation as follows:P/N 10-2452-1 for clean agent release mode/for clean agent and/or preaction sprinkler release mode/for industrial releasing mode i.e., inert gas, CO2, etc. Agent Release Module (ARM III) P/N 10-1832 is required for each Clean Agent Suppressant Container. Up to 6 ARMs can be supported by the SHP Pro. Impulse Releasing Module (IRM) P/N 10-2748 connects to the SHP Pro releasing circuit. Up to 6 IRMs can be supported by the SHP Pro. **Optional models 10-2698 and 10-2699 Suppression Disconnect Switches are used with FM Approved Fike IRM or ARM Releasing Solenoid. The switches are key actuated to "DISARM" the suppression release circuit condition. The switch isolates the connected release device from the control panel's releasing circuit and provides a supervisory contact. This permits authorized work in the area protected by the suppression system without accidentally releasing the system. The switches have optional status LEDs (Green – ARMED and Red – DISARMED). The LED's provide positive indication of the status of the releasing circuit. LED's require 24 VDC auxiliary power from the control panel for operation. A key-operated test switch, or a disconnect switch behind lockable cover, or a manually operated momentary abort switch is acceptable but not recommended by FM Approvals, for providing an intentional interruption of operation, but maybe permitted by other jurisdictional authorities. Two 12 V dc, up to 40 AH batteries wired in series provide the required 24 hours of secondary power. [See also LOCAL PROTECTIVE SIGNALING for details on the control.]**

Cheetah Xi Fire Alarm Control System (P/N 10-068). Programmable addressable system consisting of P/N 10-2542 Cheetah Xi Controller, within P/N 10-2541(R/G) enclosure with optional dead front 10-2519 (R/B/G), and power supply with transformers P/N 02-10881 (120 Vac) or P/N 02-10882 (240 Vac). Controller connects with p/ns 55-042 or 55-047 Supervised Control Module (SCM) to provide peer-to-peer digital communication protocol between the conventional notification appliance circuits and the CyberCat signaling line circuit. In addition, the SCM operates solenoids rated up to 2 Amps @ 24 V dc. In addition, Release Control Module p/ns 55-042 or 55-047 operates solenoids rated up to 2 Amps @ 24 V dc. **Optional models 10-2698 and 10-2699 Suppression Disconnect Switches are used with FM Approved Fike IRM or ARM Releasing Solenoid. The switches are key actuated to "DISARM" the suppression release circuit condition. The switch isolates the connected release device from the control panel's releasing circuit and provides a supervisory contact. This permits authorized work in the area protected by the suppression system without accidentally releasing the system. The switches have optional status LEDs (Green – ARMED and Red – DISARMED). The LED's provide positive indication of the status of the releasing circuit. LED's require 24 VDC auxiliary power from the control panel for operation. A key-operated test switch, or a disconnect switch behind lockable cover, or a manually operated momentary abort switch is acceptable but not recommended by FM Approvals, for providing an intentional interruption of operation, but maybe permitted by other jurisdictional authorities. For Approved combinations of solenoid and water control valves, refer to the Automatic Water Control Valve listings that follow. 24 V dc batteries rated 18-75 AH are available to provide 90 hours of emergency operation. (See further description under LOCAL PROTECTIVE SIGNALING).**

Cheetah Xi 50 Programmable Fire Alarm Control with V1.XX firmware connected to a Release Control Module p/ns 55-043 or 55-048 to allow for release of extinguishing agents. Agent Release Module (ARM III) P/N 10-1832 is connected to the Release Control Module to release the agents. Up to 6 ARMs, or 2 12 V solenoids, or 1 24 V solenoid can be supported by the Release Module. Impulse Releasing Module (IRM) P/N 10-2748 and NF-10-2748 connects to the Cheetah Xi 50 releasing circuit. Up to 6 IRMs can be supported by the Cheetah Xi 50 unit. **Optional models 10-2698 and 10-2699 Suppression Disconnect Switches are used with FM Approved Fike IRM or ARM Releasing Solenoid. The switches are key actuated to "DISARM" the suppression release circuit condition. The switch isolates the connected release device from the control panel's releasing circuit and provides a supervisory contact. This permits authorized work in the area protected by the suppression system without accidentally releasing the system. The switches have optional status LEDs (Green – ARMED and Red – DISARMED). The LED's provide positive indication of the status of the releasing circuit. LED's require 24 VDC auxiliary power from the control panel for operation. A key-operated test switch, or a disconnect switch behind lockable cover, or a manually operated momentary abort switch is acceptable but not recommended by FM Approvals, for providing an intentional interruption of operation, but maybe permitted by other jurisdictional authorities. [See also LOCAL PROTECTIVE SIGNALING for details on the control.]**

17. FOR PROJECT MANAGER USE ONLY:		18. FOR TTM/REVIEWER USE ONLY:	
		NOTE: UK Signature needed for ATEX and CPD	
PROJECT MANAGER: Henry Czarniecki	DATE: 2/6/2012	REVIEWED BY: 	DATE: 3/16/12
19. FOR PROJECT SPECIALIST USE ONLY:			



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Title: Listing Sheet	Document No: F 625
Issue Date: 11/January/2012	Issue No: 1

<i>(For Approvals only, use date from Approval Report)</i> APPROVAL DATE:	<i>(For delisted, reinstatement or 797s only)</i> EFFECTIVE DATE:
AGREEMENT RECEIVED DATE:	INITIALS AND DATE: