KILLARK Hazardous Location Controls FXCS Series Factory Sealed Controls Overview

Applications, Features, Listings, and Electrical Ratings

Features

- Eliminates external sealing requirements
- Lower installation cost
- NEMA 3 weatherproof
- Color coded wiring
- More wiring space for easier field installation
- Stainless steel captive screws for cover assembly
- Ground boss for grounding in the splice box
- Cast conduit hubs 1/2", 3/4" and 1" NPT either dead end or feed through standard in both single and two-gang assemblies
- Pushbutton, selector switches and pilot light bodies are copper-free aluminum
- Operating shaft in both pushbuttons and selector switches are stainless steel
- Miniature and standard size pushbuttons. (miniature 3/4" overall diameter, standard 1 3/8" overall diameter)

Applications

Factory sealed pushbutton stations, selector switches and pilot lights are used to prevent the igniting of external hazardous atmospheres by the enclosed arcing devices in such areas as:

- Hazardous locations due to the presence of flammable gases or vapors, combustible dusts or easily ignitable fibers or flyings
- Installations at petroleum refineries, chemical and petrochemical plants and other processing or storage facilities where similar hazards exist
- Use in conjunction with magnetic starters or contactors for remote control of motors

Listings

- UL Listed; File E53360
- Class I, Div. 1 & 2, Groups C, D
- Class II, Div. 1 & 2, Groups E, F, G
- Class III
- NEMA 3, 7 (C, D) 9 (E, F, G)
- CSA Certified; File LR11714
- Class I, Zones 1 & 2, Groups IIB, IIA

Factory sealed devices eliminate the need for external sealing. The difference is the use of a sealing plate between the arcing device and the junction box. The sealing plate confines ignited gases, vapors, flames, or dust to the arcing device chamber, preventing them from traveling through the conduit system. Accurately ground flanges on both sides of the sealing plate provide flame-tight joints. Factory poured seals around the wiring pigtails ensure safe sealing.

Contact Specifications

All contacts are break before make. Replacement contacts are not available for any of our Killark hazardous duty controls.

AC Ratings				
Current	***120 VAC***	***240 VAC***	***480 VAC***	***600 VAC***
Inrush	60	30	15	12
Breaking	6	3	1.5	1.2
Carrying	10	10	10	10

DC Ratings (Max. Amps)		
Current	***125 VDC***	***250 VDC***
Inrush	0.55	0.275
Breaking	0.55	0.275
Carrying	2.50	2.5

FXCS Specifications	
Dielectric Strength	2.5 kV (1 minute)
Electrical Endurance	5 million operations at rated load
Operating Frequency	3,000 per hour
Mechanical Endurance	Momentary: 5 x 10^6 Push-pull and selector: 2 x 10^6
LED Consumption	4-6 mA at 110 to 130 VAC/VDC
Wire Leads	6.5 inches, 18 AWG
Operating Temperature	-4 to 104°F [-20 to 40°C]
Device Bodies and Covers Materials	Copper-free Aluminum
Cover Bolts Material	1/4-20 x 1.10 inch Stainless Steel
Cover Tightening	After tightly attaching cover to device box, check with a 0.0015 inch feeler gauge; it should enter gap more than 1/8 inch.

KILLARK FXB Series Factory Sealed Splice/Device Boxes for FXCS Series Cover Assemblies

FXB-2
Dead End

FXB-5
Feed Through

FXB-8
Double Gang Dead End

FXB-11
Double Gang Feed Through

Features

Splice Boxes
The FXB series of splice boxes are designed for use with the FXCS series cover sub-assemblies.

Listings

- UL Listed; File E53360
- Class I, Div. 1 & 2, Groups C, D
- Class II, Div. 1 & 2, Groups E, F, G
- Class III
- NEMA 3, 7 (C, D) 9 (E, F, G)
- CSA Certified; File LR11714
- Class I, Zones 1 & 2, Groups IIB, IIA

FXB Splice/Device Box Selection and Dimensions

Part Number	Price	Drawing Link	Description	NPT Hub Size (inches)
FXB-1	$70.00	PDF	Single gang / Dead-end	1/2
FXB-2	$66.00	PDF	Single gang / Dead-end	3/4
FXB-3	$79.00	PDF	Single gang / Dead-end	1
FXB-4	$71.00	PDF	Single gang / Feed-through	1/2
FXB-5	$73.00	PDF	Single gang / Feed-through	3/4
FXB-6	$94.00	PDF	Single gang / Feed-through	1
FXB-7	$160.00	PDF	Double gang / Dead-end	1/2
FXB-8	$137.00	PDF	Double gang / Dead-end	3/4
FXB-9	$136.00	PDF	Double gang / Dead-end	1
FXB-10	$138.00	PDF	Double gang / Feed-through	1/2
FXB-11	$140.00	PDF	Double gang / Feed-through	3/4
FXB-12	$138.00	PDF	Double gang / Feed-through	1

KILLARK FXCS Series Factory Sealed Control Station Cover Assemblies

Single Pushbutton

Double Pushbutton

Pilot Light

Features

These pushbutton assemblies include the cover and the pushbutton device. An FXB splice/device box is required.

Listings

- UL Listed; File E53360
- Class I, Div. 1 & 2, Groups C, D
- Class II, Div. 1 & 2, Groups E, F, G
- Class III
- NEMA 3, 7 (C, D) 9 (E, F, G)
- CSA Certified; File LR11714
- Class I, Zones 1 & 2, Groups IIB, IIA

FXCS Momentary Contact Single Pushbutton

Part Number (cover included)	Price	Drawing Link	Description	Diagram	Pushbutton Color	Legend Plate Marking*
FXCS-0B1	$306.00	PDF	1 N.O. momentary operator		Green	"START"
FXCS-0B2	$306.00	PDF	1 N.C. momentary operator		Red	"STOP"
FXCS-0B3	$340.00	PDF	1 N.O. / 1 N.C. momentary operator		Black	Blank plate

FXCS Momentary Contact Double Pushbutton

Part Number (cover included)	Price	Drawing Link	Description	Diagram	Button Color	Legend Plate Marking*
FXCS-0B4	$388.00	PDF	Green operator has 1 N.O. momentary contact and red operator has 1 N.C. momentary contact		Green / Red	"START STOP"
FXCS-0B4U	$417.00	PDF	Each operator has 1 N.O. and 1 N.C. momentary contact		Green / Red	"START STOP"
FXCS-0B5	$388.00	PDF	Each operator has 1 N.O. momentary contact		Green / Green	"START START"
FXCS-0B7	$417.00	PDF	Each operator has 1 N.O. and 1 N.C. momentary contact		Black / Black	Two blank plates

FXCS Pilot Light

Part Number (cover included)	Price	Drawing Link	Description	Diagram	LED Voltage	Lens Color	Legend Plate Marking*
FXCS-0B24ALD	$515.00	PDF	Single pilot light		110 VAC/VDC	Amber	Blank plate
FXCS-0B24CLD	$353.00	PDF	Single pilot light		110 VAC/VDC	Clear	Blank plate
FXCS-0B24GLD	$364.00	PDF	Single pilot light		110 VAC/VDC	Green	Blank plate
FXCS-0B24RLD	$353.00	PDF	Single pilot light		110 VAC/VDC	Red	Blank plate

*** We also offer a large selection of optional legend plates. See accessories later in this section.**

KILLARK FXCS Series Factory Sealed Control Station Cover Assemblies

Double Pilot Light

Pilot Light / Pushbutton

Pilot Light / Two Mini Pushbutton

Maintained Pushbutton

Listings

- UL Listed; File E53360
- Class I, Div. 1 & 2, Groups C, D
- Class II, Div. 1 & 2, Groups E, F, G
- Class III
- NEMA 3, 7 (C, D) 9 (E, F, G)
- CSA Certified; File LR11714
- Class I, Zones 1 & 2, Groups IIB, IIA

FXCS Double Pilot Light

Part Number (cover included)	Price	Drawing Link	Description	Diagram	LED Voltage	Lens Colors	Legend Plate Marking*
FXCS-0B30ALD	$788.00	PDF	Two pilot lights		110 VAC/VDC	Amber / Amber	Two blank plates
FXCS-0B30CLD	$561.00	PDF	Two pilot lights		110 VAC/VDC	Clear / Clear	Two blank plates
FXCS-0B30GLD	$482.00	PDF	Two pilot lights		110 VAC/VDC	Green / Green	Two blank plates
FXCS-0B30RLD	$561.00	PDF	Two pilot lights		110 VAC/VDC	Red / Red	Two blank plates
FXCS-0B30RLD-GLD	$475.00	PDF	Two pilot lights		110 VAC/VDC	Red / Green	Two blank plates

FXCS Momentary Contact Pushbutton and Pilot Light

Part Number (cover included)	Price	Drawing Link	Description	Diagram	LED Voltage	Pushbutton Color	Lens Color	Legend Plate Marking*
FXCS-0B13-CD	Retired	PDF	1 N.C. momentary operator and pilot light		110 VAC/VDC	Red	Clear	Pushbutton: "STOP" Pilot light: Blank plate
FXCS-0B13-OD	$411.00	PDF	1 N.O. momentary operator and pilot light		110 VAC/VDC	Green	Red	Pushbutton: "START" Pilot light: Blank plate
FXCS-0B13-UD	$417.00	PDF	1 N.O. / 1 N.C. momentary operator and pilot light		110 VAC/VDC	Black	Red	Two blank plates

FXCS Two Mini Momentary Contact Pushbuttons and Pilot Light

Part Number (cover included)	Price	Drawing Link	Description	Diagram	LED Voltage	Pushbutton Colors	Lens Color	Legend Plate Marking*
FXCS-0A15D	$543.00	PDF	Mini red operator with 1 N.C. momentary contact and mini green operator with 1 N.O. momentary contact, and pilot light		110 VAC/VDC	Green Red	Red	N.O. Pushbutton: "START" N.C. Pushbutton: "STOP" Pilot light: Blank plate

FXCS Maintained Contact Push-Pull Mushroom Pushbutton

Part Number (cover included)	Price	Drawing Link	Description	Diagram	Pushbutton Color	Legend Plate Marking*
FXCS-0MMG3	$749.00	PDF	1 N.O. / 1 N.C. push-pull maintained		Green	Three 2-sided legend plates included: "START / STOP"; "EMERGENCY STOP / RESET"; Blank plate / "RESET"
FXCS-0MMR3	$699.00	PDF	1 N.O. / 1 N.C. push-pull maintained		Red	Three 2-sided legend plates included: "START / STOP"; "EMERGENCY STOP / RESET"; Blank plate / "RESET"
FXCS-0MMK3	$749.00	PDF	1 N.O. / 1 N.C. push-pull maintained		Black	Three 2-sided legend plates included: "START / STOP"; "EMERGENCY STOP / RESET"; Blank plate / "RESET"

*** We also offer a large selection of optional legend plates. See accessories later in this section.**

KILLARK FXCS Series Factory Sealed Control Station Cover Assemblies and Selector Switches

Selector Switch

Key-Operated Selector Switch

Listings

- UL Listed; File E53360
- Class I, Div. 1 & 2, Groups C, D
- Class II, Div. 1 & 2, Groups E, F, G
- Class III
- NEMA 3, 7 (C, D) 9 (E, F, G)
- CSA Certified; File LR11714
- Class I, Zones 1 & 2, Groups IIB, IIA

FXCS Two-Position Maintained Contact Selector Switches

Part Number (cover included)	Price	Drawing Link	Description	Left Position Left Contact	Left Position Right Contact	Right Position Left Contact	Right Position Right Contact	Knob Color	Legend Plate Marking*
FXCS-0S2A1	$418.00	PDF	1 N.O. / 1 N.C.					Black	"OFF ON""
FXCS-0S2A5	$393.00	PDF	2 N.O. / 2 N.C.					Black	"OFF ON""

FXCS Two-Position Key-Operated Maintained Contact Selector Switches

Part Number (cover included)	Price	Drawing Link	Description	Left Position Left Contact	Left Position Right Contact	Right Position Left Contact	Right Position Right Contact	Key Removal	Legend Plate Marking*
FXCS-0K2A1A	$631.00	PDF	1 N.O. / 1 N.C.					Any position	"OFF ON"
FXCS-0K2A5A	$667.00	PDF	2 N.O. / 2 N.C.					Any position	"OFF ON"

FXCS Three-Position Maintained Contact Selector Switches

Part Number (cover included)	Price	Drawing Link	Description	Left Position Left Contact	Left Position Right Contact	Center Position Left Contact	Center Position Right Contact	Right Position Left Contact	Right Position Right Contact	Knob Color	Legend Plate Marking*
FXCS-0S3C4	$421.00	PDF	1 N.O. / 1 N.C.							Black	"HAND OFF AUTO"
FXCS-0S3C5	$402.00	PDF	2 N.O. / 2 N.C.							Black	"HAND OFF AUTO"

FXCS Three-Position Key-Operated Maintained Contact Selector Switches

Part Number (cover included)	Price	Drawing Link	Description	Left Position Left Contact	Left Position Right Contact	Center Position Left Contact	Center Position Right Contact	Right Position Left Contact	Right Position Right Contact	Key Removal	Legend Plate Marking*
FXCS-0K3C4A	$535.00	PDF	1 N.O. / 1 N.C.							Any position	"HAND OFF AUTO"
FXCS-0K3C5A	$485.00	PDF	2 N.O. / 2 N.C.							Any position	"HAND OFF AUTO"

*** We also offer a large selection of optional legend plates. See accessories later in this section.**

KILLARK FXCS Series Factory Sealed Control Station Cover Assemblies and Selector Switches - Continued

Selector Switch

Key-Operated Selector Switch

FXCS Two-Position Spring Return Selector Switch

Part Number (cover included)	Price	Drawing Link	Description	Left Position Left Contact	Left Position Right Contact	Right Position Left Contact	Right Position Right Contact	Legend Plate Marking*
FXCS-0S2L3F	$496.00	PDF	1 N.O. / 1 N.C., spring return from right					"OFF" / "ON""

FXCS Two-Position Key-Operated Spring Return Selector Switches

Part Number (cover included)	Price	Drawing Link	Description	Left Position Left Contact	Left Position Right Contact	Right Position Left Contact	Right Position Right Contact	Key Removal	Legend Plate Marking*
FXCS-0K2L3F22A	$669.00	PDF	1 N.O. / 1 N.C., spring return from right					left position only	"OFF" / "ON""

FXCS Three-Position Spring Return Selector Switches

Part Number (cover included)	Price	Drawing Link	Description	Left Position Left Contact	Left Position Right Contact	Center Position Left Contact	Center Position Right Contact	Right Position Left Contact	Right Position Right Contact	Knob Color	Legend Plate Marking*
FXCS-0S3M6G	$411.00	PDF	2 N.O., spring return to center from left or right							Black	"HAND OFF AUTO"
FXCS-0S3L6G	$411.00	PDF	2 N.O., spring return to center from right, maintained in center and left							Black	"HAND OFF AUTO"
FXCS-0S3R6G	$411.00	PDF	2 N.O., spring return to center from left, maintained in center and right							Black	"HAND OFF AUTO"

FXCS Three-Position Key-Operated Spring Return Selector Switches

Part Number (cover included)	Price	Drawing Link	Description	Left Position Left Contact	Left Position Right Contact	Center Position Left Contact	Center Position Right Contact	Right Position Left Contact	Right Position Right Contact	Key Removal	Legend Plate Marking*
FXCS-0K3M6G32A	$613.00	PDF	2 N.O., spring return to center from left or right							center position only	"HAND OFF AUTO"
FXCS-0K3L6G32A	$613.00	PDF	2 N.O., spring return to center from right, maintained in center and left							center position only	"HAND OFF AUTO"
FXCS-0K3R6G32A	$581.00	PDF	2 N.O., spring return to center from left, maintained in center and right							center position only	"HAND OFF AUTO"

*** We also offer a large selection of optional legend plates. See accessories later in this section.**

KILLARK SWB/XCS Series Control Stations Overview - External Sealing Required

Listings

- UL Listed; File E53360
- Class I, Div. 1 & 2, Groups C, D
- Class II, Div. 1 & 2, Groups E, F, G
- Class III
- NEMA 7 (C, D) 9 (E, F, G)
- CSA Certified; File LR11714
- Class I, Zones 1 & 2, Groups IIB, IIA

Applications

- Hazardous locations due to the presence of flammable gases or vapors, combustible dusts or easily ignitable fibers or flyings
- Installations at petroleum refineries, chemical and petrochemical plants and other processing or storage facilities where similar hazards exist
- Use in conjunction with magnetic starters or contactors for remote control of motors

Features

- Device bodies and covers are cast copper-free Aluminum alloy and provide a wide assortment for custom assemblies
- Cast conduit hubs, 3/4", either dead end or feed through standard in both single and two-gang device bodies
- Ground flange joint between bolted cover and box provide required flame path
- Pushbutton, selector switches and pilot light bodies are copper-free aluminum
- Operating shaft in both pushbuttons and selector switches are stainless steel
- Open space between gangs for easy wiring from one cover to another
- Miniature and standard size pushbuttons. (miniature 3/4" overall diameter, standard 1 3/8" overall diameter)
- Internal ground screw

Contact Specifications

All contacts are break before make. Replacement contacts are not available for any of our Killark hazardous duty controls.

AC Ratings				
Current	***120 VAC***	***240 VAC***	***480 VAC***	***600 VAC***
Inrush	60	30	15	12
Breaking	6	3	1.5	1.2
Carrying	10	10	10	10

DC Ratings (Max. Amps)		
Current	***125 VDC***	***250 VDC***
Inrush	0.55	0.275
Breaking	0.55	0.275
Carrying	2.50	2.5

XCS Specifications	
Dielectric Strength	2.5 kV (1 minute)
Electrical Endurance	5 million operations at rated load
Operating Frequency	3,000 per hour
Mechanical Endurance	Momentary: 5 x 10^6 Push-pull and selector: 2 x 10^6
LED Consumption	4-6 mA at 110 to 130 VAC/VDC
Electrical Connections	14 to 20 AWG max., solid or stranded
Terminal Torque	1.8 Nm (15.75 in-lbs)
Lamp Connections	9 inch leads, 18 AWG
Operating Temperature	-4 to 104°F (-20 to 40°C)
Device Bodies and Covers Materials	Copper-free Aluminum
Cover Bolts Material	1/4-20 x 7/8 inch Stainless Steel
Bolt Tightening Torque	After tightly attaching cover to device box, check with a 0.0015 inch feeler gauge; it should not enter the flame path joint more than 1/8 inch.